Attachment H

**Proposal # 2001-** L-207 (Office Use Only)

## PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Fish Screen on San Joaquin River Diversion

Applicant Name: Patterson Irrigation District

Contact Name: John Sweigard, General Manager

Mailing Address: P.O. Box 685 Patterson, CA 95363

Telephone: (209) 892-6233

Fax: (209) 892-4013

Email: patwater@evansinet.com

**Amount of funding requested: $** 175,000

Some entities charge different costs dependent on the source of the funds. If it is different for state or federal funds list below.

State cost NA Federal cost NA

**Cost share partners?** x **Yes** ___ **No**

Identify partners and amount contributed by each Patterson Irrigation District - In Kind Services - $25,000

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

- ☐ Natural Flow Regimes
- ☐ Nonnative Invasive Species
- ☐ Channel Dynamics/Sediment Transport
- ☐ Flood Management
- ☐ Shallow Water Tidal/ Marsh Habitat
- ☐ Contaminants
- ☐ Beyond the Riparian Corridor
- ☐ Local Watershed Stewardship
- ☐ Environmental Education
- ☐ Special Status Species Surveys and Studies
- ☐ Fishery Monitoring, Assessment and Research
- ☒ Fish Screens

What county or counties is the project located in? Stanislaus

**What CALFED ecozone is the project located in? See attached list and indicate number. Be as specific as possible** 12.1

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

- ☐ State agency
- ☐ Public/Non-profit joint venture
- ☒ Local government/district
- ☐ University
- ☐ Other: _____
- ☐ Federal agency
- ☐ Non-profit
- ☐ Tribes
- ☐ Private party

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

- ☒ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☐ Winter-run chinook salmon
- ☐ Spring-run chinook salmon
- ☒ Late-fall run chinook salmon
- ☐ Fall-run chinook salmon
- ☐ Delta smelt
- ☐ Longfin smelt
- ☒ Splittail
- ☒ Steelhead trout
- ☐ Green sturgeon
- ☒ Striped bass
- ☒ White Sturgeon
- ☐ All chinook species
- ☐ Waterfowl and Shorebirds
- ☐ All anadromous salmonids
- ☐ Migratory birds
- ☒ American shad
- ☐ Other listed T/E species: _____

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

- ☐ Research/Monitoring
- ☐ Watershed Planning
- ☐ Pilot/Demo Project
- ☐ Education
- ☒ Full-scale Implementation

Is this a next-phase of an ongoing project? Yes ____ No x

Have you received funding from CALFED before? Yes ____ No x

If yes, list project title and CALFED number_____

Have you received funding from CVPIA before? Yes ____ No x

If yes, list CVPIA program providing funding, project title and CVPIA number (if applicable):

_____

**By signing below, the applicant declares the following:**

- The truthfulness of all representations in their proposal;
- 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
- 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.

John Sweigard, General Manager

Printed name of applicant

John Sweigard

Signature of applicant

# EXECUTIVE SUMMARY

*Title of Project:* **Patterson Irrigation District Positive Barrier Fish Screen on San Joaquin River Diversion**

*Amount Requested:* **$175,000**

*Applicant:* **Patterson Irrigation District**
**P.O. Box 685**
**Patterson, CA 95363**

**John Sweigard, General Manager**
**Phone: (209) 892-6233**
**Fax: (209) 892-4013**
**E-mail: patwater@evansinet.com**

*Participants/Collaborators:* **Patterson Irrigation District and Montgomery Watson**

Patterson Irrigation District Board of Directors and Manager are applying for CALFED grant funds to conduct a feasibility study to implement design, construction, and completion of a positive barrier fish screen on the district's San Joaquin River Pumping Plant. Patterson Irrigation District is a willing participant in conducting this feasibility study and has contracted Montgomery Watson to determine the most effective fish screen design. The feasibility study will look at various ways of eliminating the impacts on the San Joaquin River Chinook salmon species.

With current scientific knowledge presently available and best professional judgement regarding anadromous fish restoration, there is relatively little uncertainty associated with this project. All previous screens that have been installed on similar facilities provide protection of the fishery. The expected outcome is that the San Joaquin River fishery and the pre-1914 righted water supply for Patterson Irrigation District will be will be protected and preserved for the agricultural community. This study is applicable to the following CALFED ERP Goals: Goal 1: At Risk Species; Goal 2: Ecosystem Processes and Biotic Communities; and Goal 4: Habitats.

The grant obtained with this application will be used for the feasibility study to determine what type of facility will be best suited for the pumping plant location. The existing structure will be included as one alternative. At least three alternatives for screening and pumping the water from the San Joaquin River will be examined. The full use of alternative water supplies will be included as an option, although past feasibility studies in this area using only alternative water supplies have indicated that alternative supplies were insufficient to meet the district's needs. Different types of screening devices will be examined as alternatives. All alternatives will be examined fully. The feasibility study will present a recommended alternative and location on the river. The district will determine a direction for the project.

This study will also include limited geo-tech and topographic data to ensure that the selected alternative can be constructed. The cost of the facility will be included in the study. Also included with the feasibility study will be the environmental investigation up to the point of preparing a draft biological assessment.

The next phase of the project will be to complete the final design and final Environmental Assessment/Initial Study (EA/IS) with Negative Declaration and Finding of No Significant Impact (FONSI). Once these two parts are completed, the plans and specifications will be used to advertise for construction and a construction contract will be awarded. The construction will include as-built drawings for use in the future operation of the project. The construction will be concluded and the testing and start-up part of the project will be conducted. This will include the preparation of an O&M Manual for the facilities.

# PROJECT DESCRIPTION

Patterson Irrigation District is unique because the size of the average landholding is small in comparison to most irrigation districts. The district has 425 landowner accounts that receive water, which averages about 30 acres per account. Therefore, numerous deliveries, which vary greatly in flow rate, are made. In addition, delivery system flow rate changes are required more often than most irrigation district operations. These facts and conditions provide for a labor and management intensive irrigation water delivery project.

The current delivery system is automated for demand control on the Main Canal. The existing pumping plant on the San Joaquin River has a capacity of 195 cfs, which, with supplemental supplies from other sources, meets the maximum demand of the 13,500 acres within the district boundary. This point of diversion has served as the water supply for the irrigation district for over 90 years. The pumping plant consists of six vertical turbine pumps and one horizontal centrifugal pump. Four of the vertical turbine pumps have 150 HP motors and two have 200 HP motors. The horizontal centrifugal pump has a 250 HP motor. The lift at the Main Pumping Plant is 35 feet. The Main Canal flow has four pump lifts after the initial lift from the San Joaquin River. The other four pumping plants have lifts of 11 to 14 feet each. The total lift of water is from river elevation of about 30.0 feet to 65 feet at the upper edge of the district service area.

The supplemental water supplies available to the district include a water rights settlement contract from the Delta Mendota Canal (CVP water) for a 6,000 AF delivery per year as well as a CVP water service contract from the Delta Mendota Canal (DMC) for 16,500 AF per year. These water supplies, which run parallel to the Main Canal, are delivered through a 42-inch pipeline from the DMC into the district area. The Delta Mendota Canal supply flows by gravity into the Main Canal. The combination of these water supplies meets the water demands of the landowners.

Water from the Delta Mendota Canal can be released into the Main Canal at delivery points between the pumping plants. This water supply is of higher quality than the district's pre-1914 righted San Joaquin River water supply. To improve the district's water quality at critical times during the water and crop years (such as early crop stages), the water supplies are blended.

The irrigation season generally starts about April 1 and ends in mid-October; however, the district cooperates with the landowners and usually can make water available earlier or later if necessary. Maintenance can be completed during scheduled downtime during the off-season. The district area consists of permanent tree crops (apricots) as well as row crops such as tomatoes, silage corn, alfalfa, and various fresh vegetable crops.

The existing problem with the district's San Joaquin River diversion is the potential for pumping potentially threatened fish species. Fish of all sizes may be pumped into the District's Main Canal. Although some of the warm water species will survive, the anadromous fish species may be lost. The positive barrier fish screen on the San Joaquin River Pumping Plant will provide a reliable water supply for the irrigation district while protecting the San Joaquin River fishery. The installation of screens, which will create approach velocities through the screen of 0.2 feet per second or less, will allow the fish to remain in the river water and continue on the journey to spawn or to the ocean. These velocities will allow fish to inhabit the area if they desire. There will also

be sweeping velocities to keep the fish moving through the area and not encourage long-term habitation.

The installation of screens that meet these criteria and are kept clean will allow the district to continue to divert the water required to supply the irrigation demands of the landowners. The irrigation district will be obligated to operate and maintain the screen and facilities in good operating condition under the terms of the grant fund contracts.

## Statement of the Problem

**Problem:** The Patterson Irrigation District Main Pumping Plant located on the banks of the San Joaquin River potentially disturbs river bank habitat, possibly reduces the amount of food supply, and likely removes some of the salmonoid out-migrants from the mainstream. With the installation of fish screens, these problems will be eliminated. The positive barrier fish screens will not allow any fish to enter the pump station area. Relevant studies that have been conducted in the past include *White River Fish Screen Project Planning and Design* (1997) and *M&T/Parrott Pumping Station and Fish Screen (1998).*

**Conceptual Model:** As explained in the feasibility study, an option of utilizing alternative water supplies will be examined, but is highly unlikely to be available in the quantity to replace the river diversion. The installation of fish screens on this type of facility is common. It is expected that fish screens will soon exist on most of the water diversions from the San Joaquin River through the Central Valley of California. Meeting the established criteria for fish screens will accomplish the biological needs of maintaining the fish in the river. The installed screens must have no spaces larger than the screen openings and a completely smooth surface to provide a safe habitat in the river for the fish. Keeping the screens clean will allow the irrigation district to continue diverting the water supply needed to meet the demands of the landowners.

With current scientific knowledge presently available and best professional judgement regarding anadromous fish restoration, there is relatively little uncertainty associated with this project. There have been numerous fish screens constructed along the San Joaquin River on similar facilities. All previous screens of this type of setting have been installed and provide protection of the fishery.

**Hypotheses being tested:** The restoration of anadromous fish in the San Joaquin River is dependent on actions such as the screening of fish from major diversions. To reestablish historic numbers of anadromous fish in the area is to protect the out-migrating juvenile fish, so that the number of fish returning to spawn is increased. This type of protection of all species will enhance the numbers in the stream.

It is a proven fact that fish are removed from present diversions in most situations of this type. Data for this diversion have never been collected, but the California Fish and Game agency has requested that this diversion be screened. The data will likely reflect increases in the number of fish returning to the spawning areas upstream of this facility.

This study addresses CALFED ERP Goal 1: At Risk Species; Goal 2: Ecosystem Processes and Biotic Communities; and Goal 4: Habitats. This project will also assist in meeting most CVPIA goals that relate to the Central Valley and fishery resources.

**Adaptive Management:** In the adaptive management approach, the fish screening is in the solution portion of the model in that it provides one of the means of meeting the goals of the problem. In our case, the goal is to increase the number of fish in the San Joaquin

River and tributaries. In order to meet our goals, the present water diversions that potentially impact the fish in the San Joaquin River have to be protected. The direction isn't to eliminate the diversion, as this would have devastating local and statewide economic and social impacts. The direction is to positively impact the fishery and maintain the economic and social viability of the area through irrigated agriculture.

In the case of water diversions, it is known that the positive barrier fish screens will allow water to be diverted so that the fish can safely remain in the river habitat. The screening of fish has been proven through testing of existing screens under numerous conditions. Testing of the diverted water has shown that no fish have been found in water that has flowed through a properly functioning screen. Each entity operating a fish screen has signed an obligation to operate and maintain it in good condition. This will include periodic inspections including underwater facilities.

**Educational Objectives:** The installation of fish screens on water diversions is a proven action. The educational objectives involve educating the local people and showing them that the water can be removed from the river without disturbing the fish or the river habitat. The knowledge can be given to all interested persons. However, education is not the main goal to be achieved with this action. The enhancement of the river fish habitat and an increase in the fish population are the goals. Without any doubt, this will be accomplished.

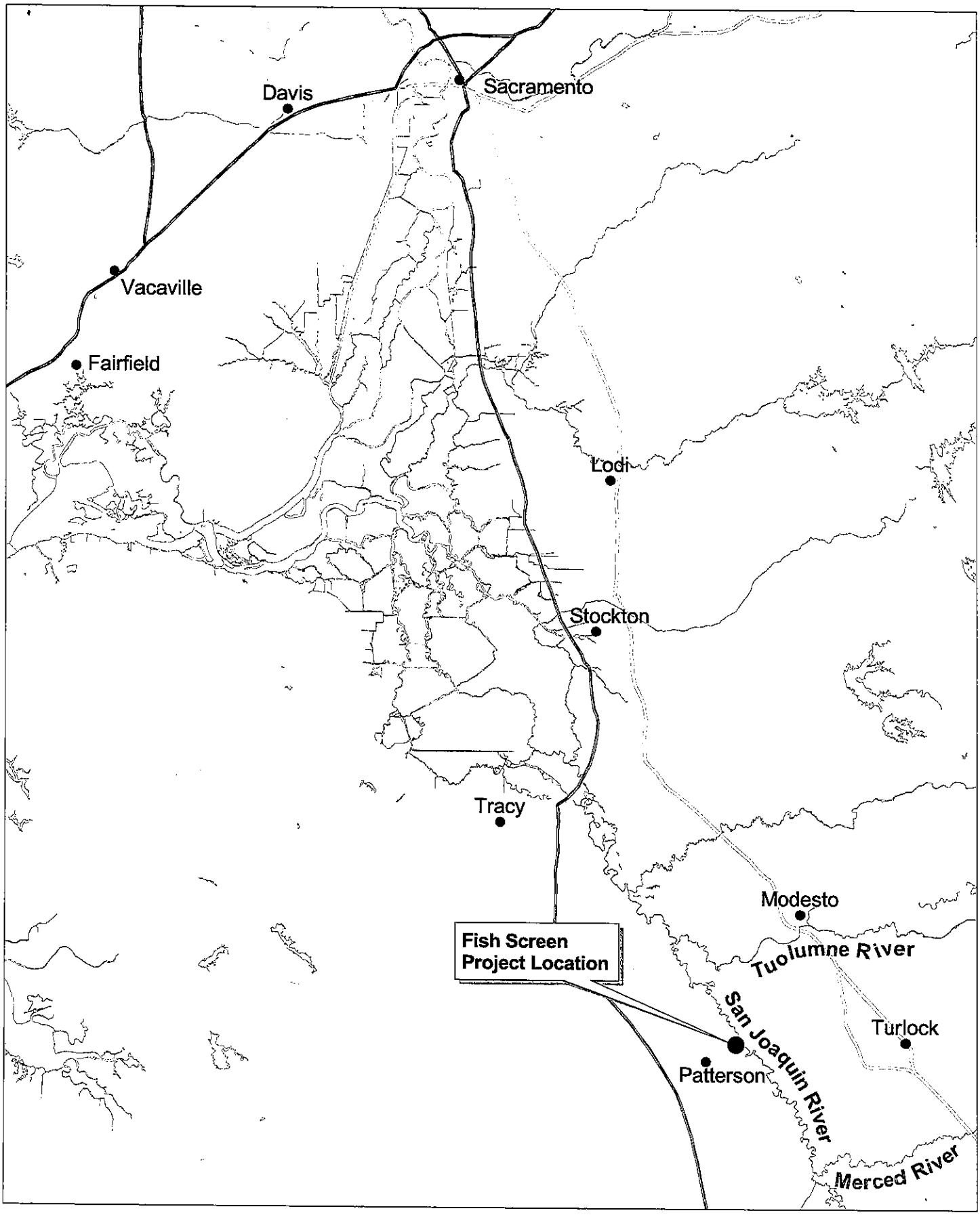
## Proposed Scope of Work

**Location and/or Geographic Boundaries of the Project:** The project and the Patterson Irrigation District boundary lie within Stanislaus County. The ecological management zone is 12.1 – the San Joaquin River from Vernalis to Merced. The general area is shown on the location map (**Figure 1**). The longitude and latitude of the project site are shown in **Figure 2**. The construction area is shown in the photographs in **Figure 3A, 3B, and 3C**. The boundaries of Patterson Irrigation District are indicated on **Figure 4**.

**Approach:** The approach to the feasibility study will be to visit the site and gather information from the irrigation district. A subcontract will be issued for topographic and geo-tech information that will be required to determine alternative fish screen structures and pumping plant. The option of utilizing alternative supplies and modifications of the distribution system that would be required will also be examined.

The environmental impacts of the project will be examined and included as a part of the feasibility study. The areas impacted will be surveyed for threatened or endangered species and plants. Any construction areas that require mitigation or specified times to complete the work will be documented. The overall goal of the environmental work will be to identify any potential fatal flaws from an environmental perspective. A fatal flaw is defined as an environmental issue that would cause substantial delays in the project or cause the project to be infeasible.

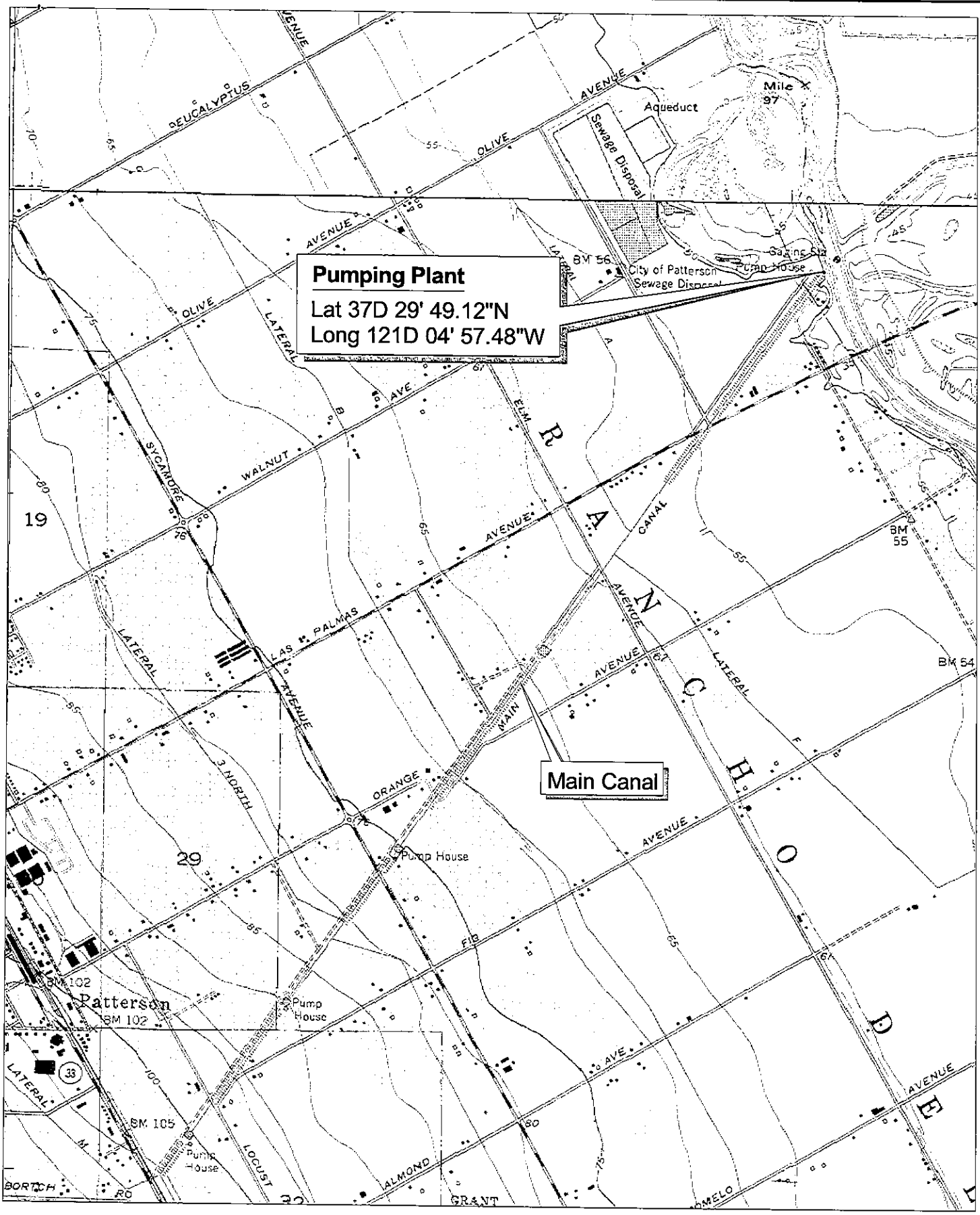
**Monitoring and Assessment Plans:** Monitoring and assessment plans will be done as a part of the feasibility and finalized in the design and construction phase. The facilities will be designed and constructed to allow a monitoring of the impacts on the fishery. The plans will be documented to show the improvements in the San Joaquin River fishery. The Patterson Irrigation District diversion is one of the largest on the San Joaquin River. Future data should show a marked improvement in the number of anadromous fish as a result of the installation of this fish screen.




N

8 0 8 16 Miles

**Figure 1: Patterson Irrigation District Fish Screen Project Location Map**




N

Scale = 1:24,000

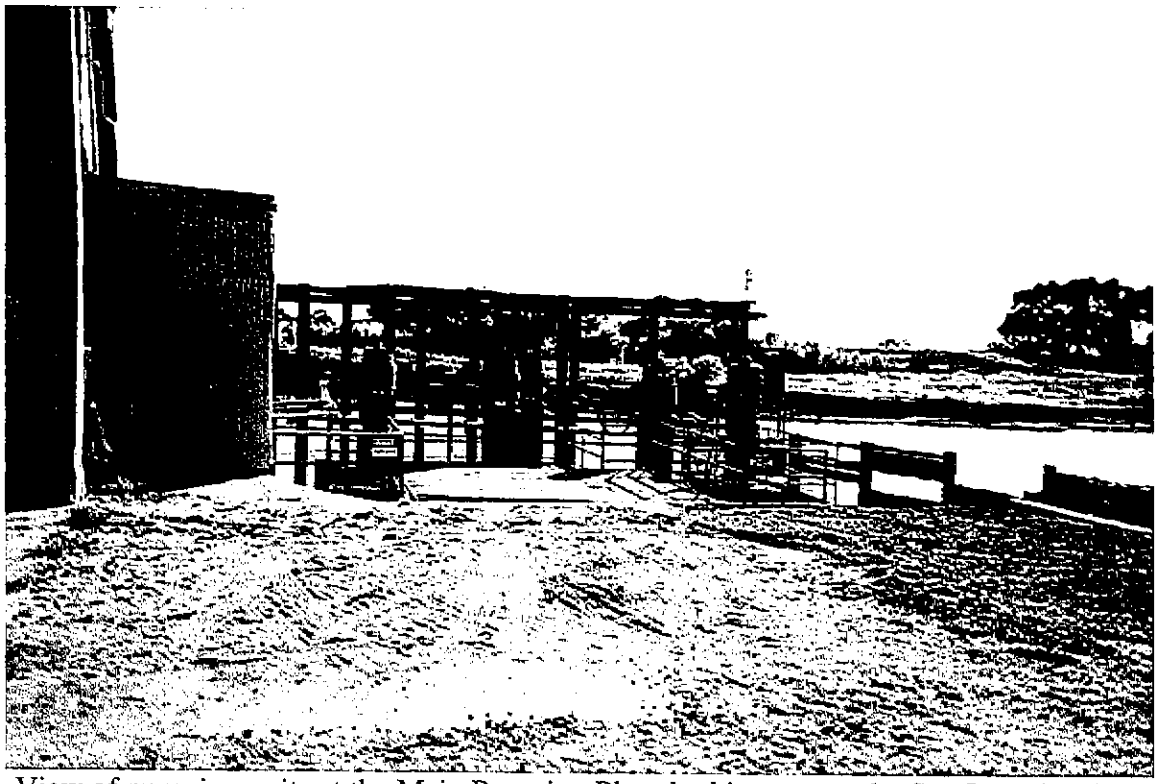
0 0.5 1 Miles

**Figure 2: Patterson Irrigation District Fish Screen Project Site Location**

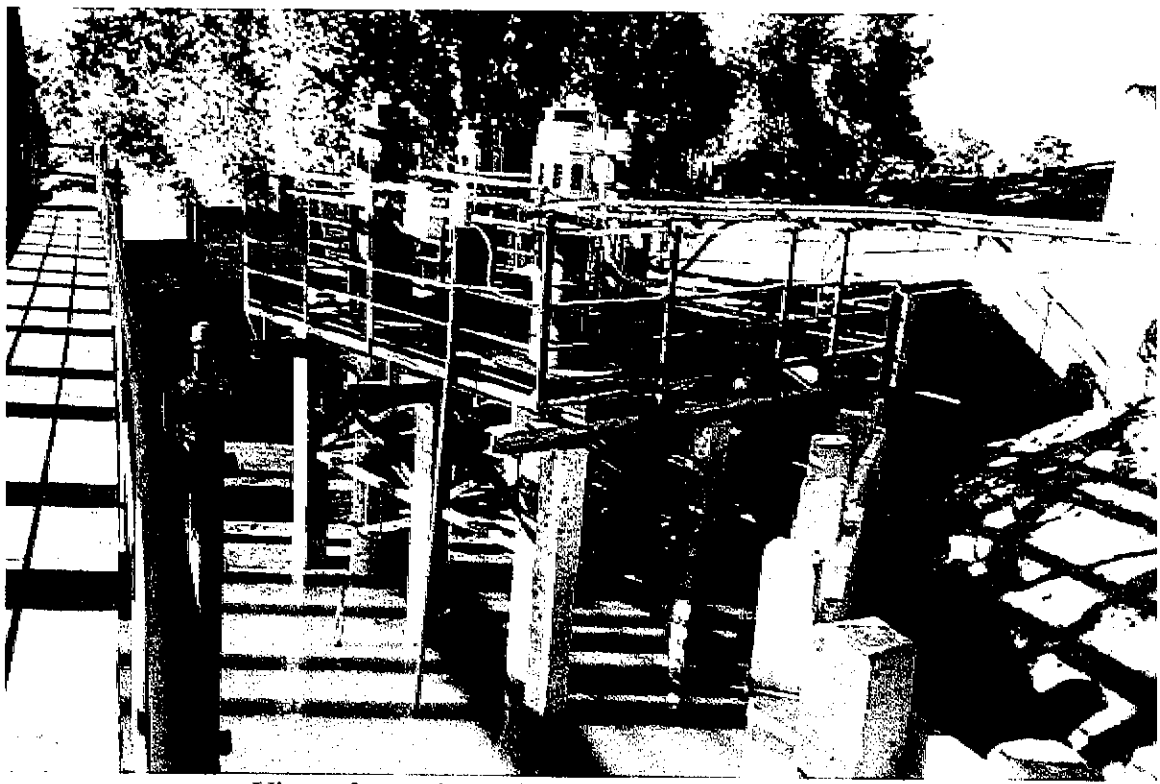
Upstream view of the San Joaquin River from the Main Pumping Plant

Downstream view of the San Joaquin River from the Main Pumping Plant

**Figure 3A: Photographs of the Patterson Irrigation District Fish Screen Project Site**



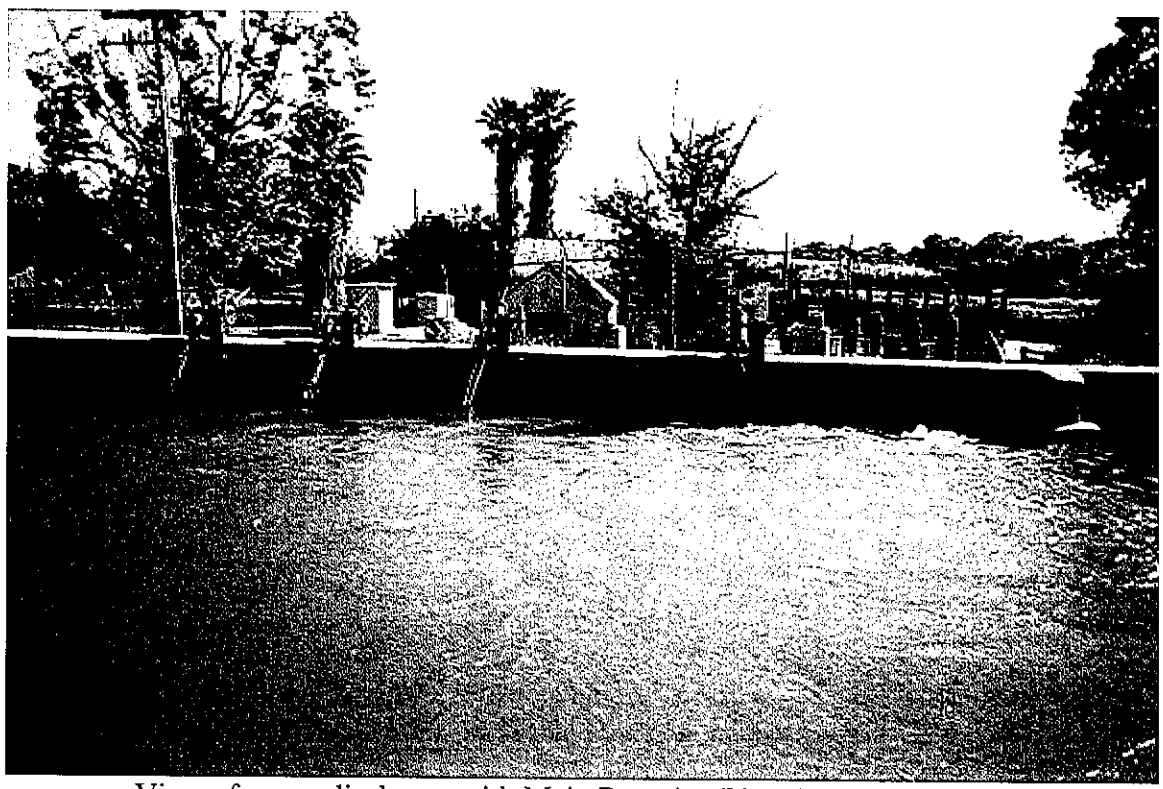
View of pumping units at the Main Pumping Plant looking across the San Joaquin River



View of pumping units from the San Joaquin River

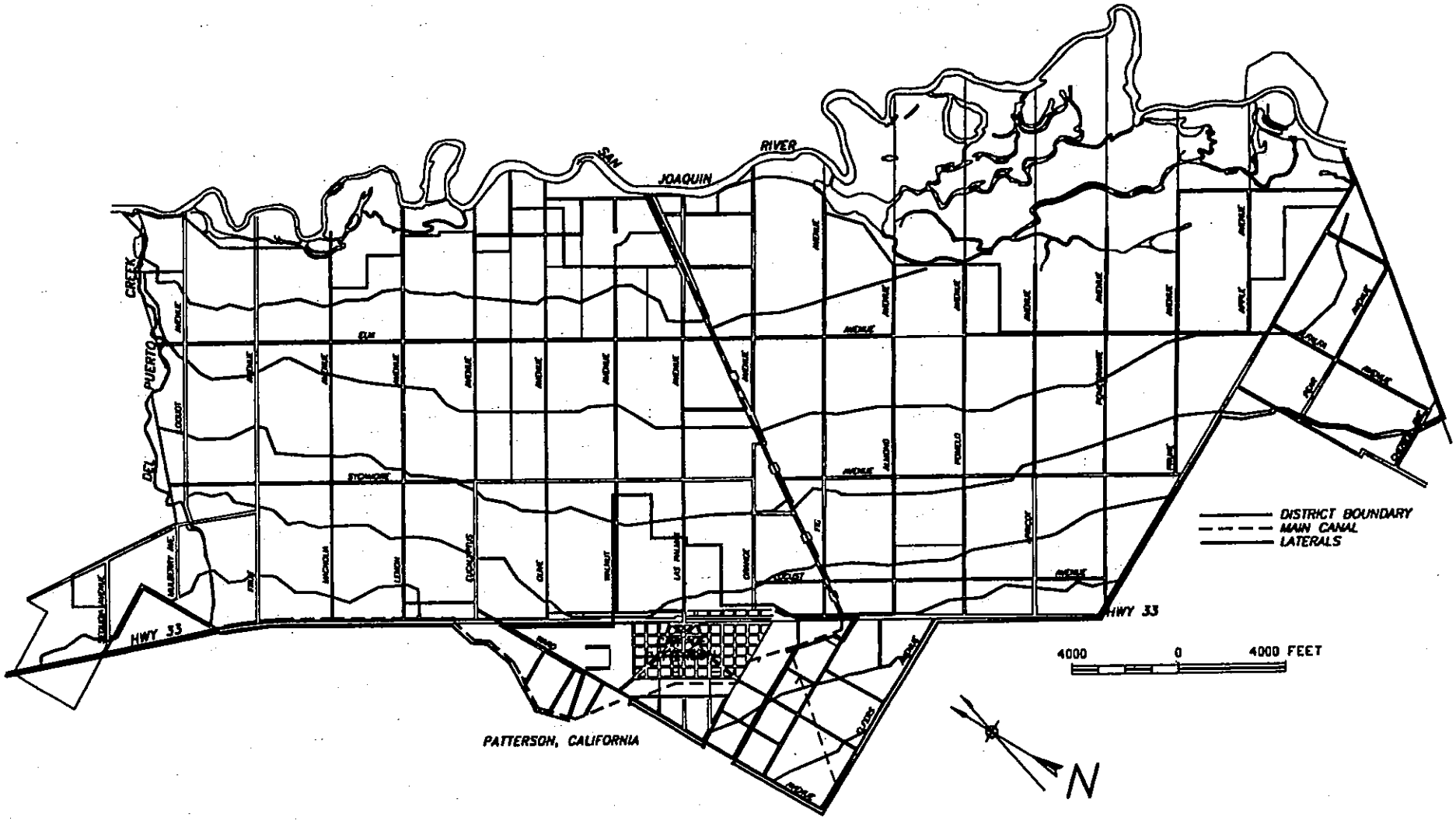
**Figure 3B: Photographs of the Patterson Irrigation District Fish Screen Project Site**

View of steel structure in front of Main Pumping Plant



View of pump discharge with Main Pumping Plant in the background

**Figure 3C: Photographs of the Patterson Irrigation District Fish Screen Project Site**




PATTERSON IRRIGATION DISTRICT

FIGURE 4: BOUNDARY MAP

**Data Handling and Storage:** The data will be maintained by Montgomery Watson during the construction and start-up phase and will be transferred to the irrigation district upon transfer of constructed facilities. The data will be available for the review of state and federal agencies upon request.

**Expected Products/Outcomes:** The Patterson Irrigation District has presented other significant actions and will likely, in conjunction with Montgomery Watson, make similar presentations on this fish screen project. The consultant will present all findings and features of the project for the benefit of individuals as requested. Staffs of the district and consultant are members of American Fisheries Society, American Society of Civil Engineers, and American Society of Agricultural Engineers and will likely make presentations to this type of professional societies.

**Work Schedule:** The feasibility study will begin shortly after the grant funds have been made available through a contract. In this proposal, it is considered that March-April 2001 would be a likely starting date. The feasibility study would be completed within nine months from the start.

The individual tasks and deliverables for the Patterson Irrigation District Fish Screen Feasibility Study are identified below. A summary of the tasks, start and finish dates, linkages, and other comments are included in **Table 1.**

**Table 1. Work Schedule**

| Year | Task | Task Description | Start/Finish Date | Linkage |
|---|---|---|---|---|
| Year 1 | 1.0 | Feasibility Study for Fish Screen | April '01 to Dec '01 | |
| | Subtask 1.1 | Project Management | April-Dec '01 | Linked to all tasks |
| | Subtask 1.2 | Site visit | April-May '01 | Linked task 1.2 |
| | Subtask 1.3 | Develop alternatives | May-July '01 | Linked task 1.3 & 1.5 |
| | Subtask 1.4 | Surveying/geo- tech | May-July '01 | Linked to 1.2 |
| | Subtask 1.5 | Pre-design | July-Sept '01 | Linked to 1.2 |
| | Subtask 1.6 | Environmental surveys | May-Aug '01 | Linked to 1.2 |
| | Subtask 1.7 | Preferred Plan | Sept-Nov '01 | Linked to 1.2 |
| | Subtask 1.8 | Final Report | Nov-Dec '01 | Linked to all tasks |

**Subtask 1.1** will be project management, which involves delegating tasks, ensuring progress and completion in a timely manner, and adhering to the specified budget. Timeframe is the duration of the project, April to December 2001.

**Subtask 1.2** will include a site visit and data collection from various records of Patterson Irrigation District. This will include a meeting with stakeholders in the area. Deliverables will be a field trip report for the site visit and noting the availability of water records and related data for the feasibility study. Timeframe is April to May 2001.

**Subtask 1.3** will be to determine alternatives for the positive barrier fish screen at the pumping plant on the San Joaquin River. Deliverable will be a listing of the alternatives examined for the fish screen and pumping plant in the feasibility report. Timeframe is May to July 2001.

**Subtask 1.4** will be gathering surveying and geo-tech data on the site for use in selecting the preferred alternative structure. Deliverable will be the topography and geo-tech report. Timeframe is May to July 2001.

**Subtask 1.5** will be to pre-design the alternatives to determine suitability and feasibility level cost estimates. Deliverable will be a section of the feasibility study. Timeframe is July to September 2001.

**Subtask 1.6** will be to examine the environmental impacts from the project and coordinate with construction schedules. This will include the fatal flaw analysis. Deliverable will be the draft biological assessment and related documentation. Timeframe is May to August 2001.

**Subtask 1.7** will be the selection of the preferred plan for the installation of fish screens on the pumping plant on the San Joaquin River. This preferred option will be presented in sufficient detail to proceed with further funding and stakeholder approval. Deliverable will be a feasibility report, which will be supplied to state and federal agencies for review and comment. Timeframe is September to November 2001.

**Subtask 1.8** will be the conclusion of the feasibility study and preparation of the Final Report. Deliverable will be the Final Report. Timeframe is November to December 2001.

**Feasibility:** The feasibility of this work has been shown in similar projects (*M&T/Parrott Pumping Station and Fish Screen*, 1998; *White River Fish Screen Project Planning and Design*, 1997), but an analysis will be made for the positive barrier fish screen at the Main Pumping Plant on the San Joaquin River operated by Patterson Irrigation District. In viewing the area, the fishery in the San Joaquin River can be protected and the water supply for the Patterson Irrigation District can continue to be diverted from the river. The feasibility study will provide necessary information to show the impacts of the project and how the facilities can be constructed if desired.

To proceed with the tasks described, several permits are necessary. **Table 2** lists the various agencies with applicable permit requirements.

**Table 2. Required Permits and Authorizations**

| Agency/Permit | Applicability | Requirements for Application |
|---|---|---|
| U.S. Army Corps of Engineers Section 404 Nationwide and Section 10 Individual Permits | Required when working in natural streams and rivers | • Site Plan and Section Drawings<br>• Location Map<br>• CVRWQCB Sect. 401 Water Quality Certification (may be done concurrently)<br>• COE Application 4345<br>• Environmental Documentation |
| Central Valley Regional Water Quality Control Board Section 401 Water Quality Certification | Required when working in natural streams and rivers if the construction area is less than 5 acres | • CEQA Certification<br>• Application Form and Fee<br>• Section 1600 Stream Alteration Agreement or note contact with CDFG<br>• Copy of COE Application 4345 |
| California Department of Fish and Game Section 1600 Stream Alteration Permit | Required when natural streambed is to be altered by construction | • Environmental Documentation<br>• Application Form and Fee<br>• Project Location Map<br>• Site Plan |
| State Historic Preservation Officer (SHPO) and National Historic Preservation Section 106 Coordination | Required for construction | • Archeological Inventory Survey and Report |
| California Endangered Species Act (CESA) Consultation | Required for construction | • State lead agency designated<br>• Threatened and endangered biological review |
| Endangered Species Act (ESA) Compliance | Required for construction | • Federal lead agency designated<br>• Site Visit<br>• Threatened and endangered biological review |

# APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN AND CVPIA PRIORITIES

## ERP Goals and CVPIA Priorities

This project will assist in meeting most of the CVPIA goals that relate to the Central Valley and the fishery resources. In reading through Title 34 of Public Law 102-575, this restoration action will assist in meeting most of the Central Valley San Joaquin River fishery restoration goals of Section 3406. This irrigation diversion preceded the CVP, but screening the diversion will assist other impacts of the CVP to be mitigated. The number of out-migrants has to be increased with the screening of this diversion. The surviving out-migrants will in turn produce additional adults to return to the river and spawn.

## Relationship to Other Ecosystem Restoration Projects

The restoration of this portion of the San Joaquin River has been related to the waterfowl and wildlife in the Merced River and refuge and areas in the Mendota Pool and Grasslands areas. The flows in the Merced River may have been supplemented from diversions in the upper reaches of that watershed to assist in meeting the restoration goals. In addition, the San Joaquin River below Friant Dam has flowed some additional water to restore habitat in and along the river. This and other related actions have been initiated in the last five years. These actions relate to the Vernalis Adaptive Management Plan that was implemented by the State Water Resources Control Board as a portion of the Bay Delta Water Rights hearings. There is a 31-day pulse flow from mid-April through mid-May. These flows improve the survivability of the juvenile salmon out-migrating through the San Joaquin River. Two fairly large parcels of land in the upper reaches of the Merced River have been purchased to provide a source of spawning gravel for the river as needed and to restore the river flow through an area that will provide prime spawning habitat. With these improvements in river flow and spawning conditions, the screening project at Patterson Irrigation District reaches a higher priority.

## Requests for Next-Phase Funding

The next phase of this project, if the Patterson Irrigation District Board of Directors chooses to pursue installation of fish screens, will be to secure funding to complete the final design and environmental review of the project. The amount of money can be quantified in the feasibility study for the completion of that phase of the project. The construction phase will be next with the start-up and testing the final stage. The Patterson Irrigation District will have to agree to long-term operation and maintenance of all facilities. This will include the screens, cleaning, monitoring, operations and maintenance. The construction will produce as-built drawings and the O&M manual.

## Previous Recipients of CALFED or CVPIA Funding

The applicant, Patterson Irrigation District, has never received CALFED funding for any project.

## System-Wide Ecosystem Benefits

The screening of the irrigation supply intake will complement other restoration projects that are underway or completed on the watersheds above this diversion. This is just one additional place on the river that will provide habitat and safe passage of the out-migrants.

# QUALIFICATIONS

## Montgomery Watson Engineers

**Dennis E. Dorratcague** is a Principal Engineer and the water resources director in Montgomery Watson's Northwest Region. He earned a B.S. from University of Notre Dame and his M.S. in Civil Engineering at Colorado State University. He is a Professional Civil Engineer in Washington, Oregon, Alaska, and California. He has been working in the field of hydrology and hydraulics since 1972, primarily concentrating on hydraulic structures and fisheries engineering. He has served as Technical Manager for the Banta-Carbona Irrigation District Fish Screen Feasibility Study and for the preliminary and final design for a fish screen, ladder, and tailrace barrier in Western Oregon. Mr. Dorratcague was also Project Manager for the development of the Feature Design Memorandum for the Surface Bypass Spillway Project; the hydraulic modeling, preliminary and final designs, and construction services of a fish screen on the White River in Western Washington; the preliminary and final design of a fish screen facility for Pacific Power and Light Company; and the Salmon Falls Fish Passage Project.

**Morton D. McMillen** is a Supervising Engineer who holds a B.S. in Civil Engineering from University of Idaho and an M.S. in Environmental Engineering and Science from Stanford, with an emphasis in water quality and treatment process design. He is a Professional Engineer in the state of Oregon. Mr. McMillen has a broad background in water resources and wastewater with project experience in water quality, hydrology/hydraulics, fisheries engineering, flood control, pump stations, and wastewater facilities design. While employed by the Army Corps of Engineers, he completed numerous fishery and flood control projects for existing dam projects on the Lower Snake River and Columbia River as well as two new flood control projects, Willow Creek Dam and Zintel Canyon Dam. Since joining Montgomery Watson, he has completed projects for Leaburg Dam in Oregon, the White River Hydroelectric Project in Washington, and The Dalles and Bonneville Dams on the Lower Columbia River. His main areas of expertise are in hydraulic design, fisheries engineering, and project management.

**Neil W. Schild** is a Principal Engineer with 39 years of experience in operation and maintenance of dams and water supply reservoirs and power generation projects. He earned a B.S. in Agricultural Engineering from Kansas State University and is a Professional Agricultural Engineer in California. During 20 years with the U.S. Bureau of Reclamation, he has proven his ability to provide reasonable and practicable solutions to even the most complex situations. His background includes design and construction of fish protection facilities, application of environmental regulations, management of water and land resources, transfer of water rights, water resource planning, project management, and administration of personnel. Mr. Schild was Project Manager for M&T Chico Ranch Fish Screen Facility, Gorrill Land Company Fish Screen and Ladders Project, and Banta-Carbona Irrigation District Fish Screen Feasibility Study.

**Clint W. Smith** is a Supervising Engineer with extensive experience in civil, environmental, and water resource engineering. He received a B.S. in Civil Engineering from Washington State University and is a Professional Civil Engineer in Washington, Oregon, and Idaho. His background includes the planning, analysis, and design of water intake facilities; fish transport, passage and screening facilities; municipal water, wastewater and storm drainage conveyance and treatment systems; and hydrologic and meteorological instrumentation data collection systems. He has served as Project Engineer on several major water resources projects including the Banta–Carbona Fish Screen Project on the San Joaquin River; Ducks Unlimited/M&T Chico Ranch Pump Station and Fish Screen Project; Walterville Fish Screen Facility; White River Fish Screen Project; and Naches Fish Screen Facilities. Mr. Smith has also served as Project Manager for the final design and construction of new fish screens at a hydropower diversion dam on the South Fork of the Rogue River, Oregon and for the design of a saltwater intake and fish screen in San Francisco Bay.

## Jones & Stokes Staff

Jones & Stokes will assist Montgomery Watson Engineers in preparing a reconnaissance-level environmental analysis of the Patterson Irrigation District Fish Screen Project.

**Douglas L. Brewer** is an Associate Principal and Senior Project Manager with 17 years of experience managing water quality, flood control, water supply, and water resource projects. Mr. Brewer received a B.S. from Humboldt State University in 1982. He has served on several major water resources projects of statewide significance including the Mono Lake Water Rights Decision EIR, Los Vaqueros Project EIR/EIS, and the Delta Wetlands Project EIR/EIS. He is responsible for reviewing and ensuring defensible environmental impact analyses, maintaining project schedules and budgets, and advising clients on CEQA, NEPA, and ESA compliance. Mr. Brewer has managed environmental documentation and biological assessments for several fish screen projects including the M&T /Parrott Fish Screen and Pump Station Project on Big Chico Creek and, most recently, the Banta-Carbona Fish Screen Project on the San Joaquin River. He is also actively involved in several CALFED restoration projects in the Central Delta.

**Jeff Lafer** has 10 years of experience in environmental analyses and project management for hydrologic and water quality resource investigations. Mr. Lafer received a B.S. in 1985 and an M.S. in 1992, both in environmental science, from Washington State University, Pullman. Mr. Lafer specializes in evaluating potential project-related impacts to water quality including 5 years specifically focused in the development of impact assessments for CEQA/NEPA compliance. He is responsible for conducting site assessments, developing monitoring programs, collecting and analyzing field data, contracting laboratory services, providing quality control and assurance oversight, and developing impact assessments and mitigation plans. Relevant project experience includes managing the preparation of joint CEQA/NEPA environmental documentation and a Section 7 biological assessment for the proposed fish screen project at the Banta-Carbona Irrigation District water intake on the San Joaquin River.

# COST

## Budget

The budget would be expended in the nine-month period beginning in April and ending about December 31, 2001. This means the money would be expended in the third and forth fiscal quarters in the federal system of FY '01 and first and second quarters of FY'02.

A detailed budget for this project is included as **Table 3**. The funds for the feasibility study will include tasks of accomplishing the surveying, geo-tech, environmental, alternative facilities, and supplies. The preferred alternative will receive additional attention for a specific action required and steps to be completed. This will provide information for estimating the cost of construction and testing and start-up of the facility. Other required documents will also be included in the analysis.

Patterson Irrigation District has selected Montgomery Watson to complete the feasibility study for the fish screen. Montgomery Watson has the experience in designing fish screens and knowledge of the area to complete the work within the time specified. Jones & Stokes will complete the environmental documentation for the feasibility study.

Montgomery Watson will allocate the costs as indicated on the budget included with the proposal. The estimation of cost includes the examination of options for the water supply including numerous types of screens and cleaning devices. They also have prior experience in completing these required reports for similar projects. Periodic progress reports will be made monthly. The validation of costs will be maintained. Coordination of the designs will be kept current with the Anadromous Fish Screen Program Technical Team composed of most federal and state agencies. The staff will always be available to discuss any concerns the agencies have with the project.

## Cost-Sharing

There will be cost sharing by other agencies and the stakeholders in Patterson Irrigation District and surrounding areas. The district staff will provide information and assistance when requested. There will be other contributions by the district. During the next phases of the project, the issue of cost sharing will be reevaluated. The district is willing to furnish in-kind services for the fish screen project.

Patterson Irrigation District will provide services through existing staff to provide data requested for the feasibility study. The district counsel will review contracts and legal documents concerning the project. The Board of Directors will spend time reviewing and directing decisions on actions for the feasibility study alternatives. The district will provide facilities for the stakeholders meeting to obtain input from the community and local governmental interests. Staff time and supplies are available for assistance in the feasibility study.

# LOCAL INVOLVEMENT

The local government agencies have shown strong support for the project. They view the fish screen project as a strong indicator of recovery of resources for the area. The district owns sufficient land in the area of the pumping plant to provide space and reasonable access for this phase of the project and future construction. The only thing close is the county-operated recreation area to the downstream side of the property, and any impact on the activity there will be minimal.

## PATTERSON IRRIGATION DISTRICT FY 2001 CAFED PROJECT PROPOSAL – Fish Screen on San Joaquin River

### Table 3. Patterson Irrigation District Fish Screen on San Joaquin River Annual and Total Budget

| Year | Task | Task Description | Direct Labor Hours | Subject to Overhead | | | | | | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Salary | Benefits | Travel | Staff Support & Supplies | Service Contracts | Overhead | |
| Year 1 | Subtask 1.1 | Project Management | | | | | | $10,000 | | $10,000 |
| | Subtask 1.2 | Site Visit | | | | | | $10,000 | | $10,000 |
| | Subtask 1.3 | Develop Alternatives | | | | | | $18,000 | | $18,000 |
| | Subtask 1.4 | Surveying/Geotech | | | | | | $30,000 | | $30,000 |
| | Subtask 1.5 | Pre-Design | | | | | | $40,000 | | $40,000 |
| | Subtask 1.6 | Environmental Surveys | | | | | | $16,000 | | $16,000 |
| | Subtask 1.7 | Preferred Plan | | | | | | $26,000 | | $26,000 |
| | Subtask 1.8 | Final Report | | | | | | $25,000 | | $25,000 |
| Total Cost Year 1 | | | | | | | | $175,000 | | $175,000 |
| **Total Project Cost** | | | | | | | | **$175,000** | | **$175,000** |

## COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

The district is willing to accept the standard terms and conditions for the state and federal contracting. The applicant has reviewed the terms and conditions and is agreeable to the language as presented. All of the bid bonds and required documents will be utilized when the construction contracts are awarded.

## LITERATURE CITED


Central Valley Anadromous Fish Annual Run-Size, Harvest and Population Estimates, 1967 through 1991, CDFG, August 1994 Revision.

Central Valley Project Improvement Act, Title 34 of PL 102-575, Sections 3402, 3406 and 3407. Approach and Focus for Implementing the CVPIA 1999-2004.

Department of California Fish and Game, Projects Upstream on Merced and San Joaquin Rivers, Personal knowledge of Fish and Game staff.

McMillen, M.D., and W. Porter, White River Fish Screen Project Planning and Design. Proceedings of Waterworks '97, 1997.

Schild, Neil W., M&T/Parrott Pumping Station and Fish Screen. Presented at Fish Passageway Workshop, Sacramento, California, March 26, 1998.

**Board of Directors**

John Barbaste
*President*
Steve Trinta
*Vice President*
John Azevedo
David Reichmuth
Alfred Scheuber

John Sweigard
*General Manager*

Joe Perry
*Secretary/Treasurer*

**948 Orange Avenue - P.O. Box 685 - Patterson, Ca. 95363**
**Office (209) 892-6233 - Fax (209) 892-4013**

May 12, 2000

Board of Supervisors
Stanislaus County
1100 "H" Street
Modesto, CA 95354

**Subject: Patterson ID Project Solicitation Application for Fish Screen Funding from Cal-Fed**

Dear Honorable Supervisors,

This is a notice of intent by Patterson Irrigation District (PID) to prepare and send a proposal to the Cal Fed group in Sacramento for funding of a feasibility study for installation of positive barrier fish screens at the District's main diversion point on the San Joaquin River. The PID Board of Directors (Board) have reached this decision in order to provide assurance that the valuable water resource for this area would be conserved and protected while the fishery resources in the San Joaquin River would likewise be preserved. This action to be examined will be for the betterment of our constituents within the PID and likewise in the surrounding areas.

The feasibility study would likely start when the requested funding is approved and a contract signed with the designated agency. This approval and contract would be early in 2001. The feasibility study would take about six months. This will include examination of alternative types of structures in front of the existing PID pumping plant on the San Joaquin River. There will be concerns of flood capacities in the river channel and preserving the present quantity of water PID is entitled to divert. PID is currently pumping a maximum diversion rate of 195 cfs under its pre-1914 water rights. This stage of the project would likely include public notification and involvement.

After the feasibility study is completed additional funding may, at the discretion of the Board, be requested from Cal Fed and other agencies that have grant funding which is available for the installation of positive barrier fish screens. The CA Fish and Game agency has visited with the Board about the potential situation of the fishery resource and diversion of unprotected flows from the San Joaquin River. This state agency as well as other state and federal agencies are in support of this project.

Once the additional grant funding is obtained final designs and environmental documentation will be completed and a construction contract will be awarded to construct the selected alternative fish screen project. Construction will be coordinated with the water demands of the irrigation district while also protecting the flood flow capacity of the San Joaquin River. Please be assured that any facility constructed will meet the current criteria for all state and federal agencies.

This study will in no way effect other water entitlements the PID has with water supplies delivered from the Delta Mendota Canal. That water supply will remain under separate entitlement(s).

If there are concerns about this project please contact Mr. John Sweigard, Patterson ID General Manager at (209) 892-6233.

Sincerely,

John Sweigard
General Manager

**Board of Directors**

John Barbaste
*President*
Steve Trinta
*Vice President*
John Azevedo
David Reichmuth
Alfred Scheuber

John Sweigard
*General Manager*

Joe Perry
*Secretary/Treasurer*

**948 Orange Avenue - P.O. Box 685 - Patterson, Ca. 95363**
**Office (209) 892-6233 - Fax (209) 892-4013**

May 12, 2000

Planning Department
Stanislaus County
1100 "H" Street
Modesto, CA 95354

**Subject: Patterson ID Project Solicitation Application for Fish Screen Funding from Cal-Fed**

To Whom It May Concern,

This is a notice of intent by Patterson Irrigation District (PID) to prepare and send a proposal to the Cal Fed group in Sacramento for funding of a feasibility study for installation of positive barrier fish screens at the District's main diversion point on the San Joaquin River. The PID Board of Directors (Board) have reached this decision in order to provide assurance that the valuable water resource for this area would be conserved and protected while the fishery resources in the San Joaquin River would likewise be preserved. This action to be examined will be for the betterment of our constituents within the PID and likewise in the surrounding areas.

The feasibility study would likely start when the requested funding is approved and a contract signed with the designated agency. This approval and contract would be early in 2001. The feasibility study would take about six months. This will include examination of alternative types of structures in front of the existing PID pumping plant on the San Joaquin River. There will be concerns of flood capacities in the river channel and preserving the present quantity of water PID is entitled to divert. PID is currently pumping a maximum diversion rate of 195 cfs under its pre-1914 water rights. This stage of the project would likely include public notification and involvement.

After the feasibility study is completed additional funding may, at the discretion of the Board, be requested from Cal Fed and other agencies that have grant funding which is available for the installation of positive barrier fish screens. The CA Fish and Game agency has visited with the Board about the potential situation of the fishery resource and diversion of unprotected flows from the San Joaquin River. This state agency as well as other state and federal agencies are in support of this project.

Once the additional grant funding is obtained final designs and environmental documentation will be completed and a construction contract will be awarded to construct the selected alternative fish screen project. Construction will be coordinated with the water demands of the irrigation district while also protecting the flood flow capacity of the San Joaquin River. Please be assured that any facility constructed will meet the current criteria for all state and federal agencies.

This study will in no way effect other water entitlements the PID has with water supplies delivered from the Delta Mendota Canal. That water supply will remain under separate entitlement(s).

If there are concerns about this project please contact Mr. John Sweigard, Patterson ID General Manager at (209) 892-6233.

Sincerely,

John Sweigard
General Manager

**Board of Directors**

John Barbaste
*President*
Steve Trinta
*Vice President*
John Azevedo
David Reichmuth
Alfred Scheuber

John Sweigard
*General Manager*

Joe Perry
*Secretary/Treasurer*

**948 Orange Avenue - P.O. Box 685 - Patterson, Ca. 95363**
**Office (209) 892-6233 - Fax (209) 892-4013**

May 12, 2000

Mr. Kevin Williams
Interim Director
Stanislaus County Parks & Rec.
3800 N. Cornucopia Way
Modesto, CA 95358

**Subject: Patterson ID Project Solicitation Application for Fish Screen Funding from Cal-Fed**

Dear Williams,

This is a notice of intent by Patterson Irrigation District (PID) to prepare and send a proposal to the Cal Fed group in Sacramento for funding of a feasibility study for installation of positive barrier fish screens at the District's main diversion point on the San Joaquin River. The PID Board of Directors (Board) have reached this decision in order to provide assurance that the valuable water resource for this area would be conserved and protected while the fishery resources in the San Joaquin River would likewise be preserved. This action to be examined will be for the betterment of our constituents within the PID and likewise in the surrounding areas.

The feasibility study would likely start when the requested funding is approved and a contract signed with the designated agency. This approval and contract would be early in 2001. The feasibility study would take about six months. This will include examination of alternative types of structures in front of the existing PID pumping plant on the San Joaquin River. There will be concerns of flood capacities in the river channel and preserving the present quantity of water PID is entitled to divert. PID is currently pumping a maximum diversion rate of 195 cfs under its pre-1914 water rights. This stage of the project would likely include public notification and involvement.

After the feasibility study is completed additional funding may, at the discretion of the Board, be requested from Cal Fed and other agencies that have grant funding which is available for the installation of positive barrier fish screens. The CA Fish and Game agency has visited with the Board about the potential situation of the fishery resource and diversion of unprotected flows from the San Joaquin River. This state agency as well as other state and federal agencies are in support of this project.

Once the additional grant funding is obtained final designs and environmental documentation will be completed and a construction contract will be awarded to construct the selected alternative fish screen project. Construction will be coordinated with the water demands of the irrigation district while also protecting the flood flow capacity of the San Joaquin River. Please be assured that any facility constructed will meet the current criteria for all state and federal agencies.

This study will in no way effect other water entitlements the PID has with water supplies delivered from the Delta Mendota Canal. That water supply will remain under separate entitlement(s).

If there are concerns about this project please contact Mr. John Sweigard, Patterson ID General Manager at (209) 892-6233.

Sincerely,

John Sweigard
General Manager

**Board of Directors**

John Barbaste
*President*
Steve Trinta
*Vice President*
John Azevedo
David Reichmuth
Alfred Scheuber

John Sweigard
*General Manager*

Joe Perry
*Secretary/Treasurer*

**948 Orange Avenue - P.O. Box 685 - Patterson, Ca. 95363**
**Office (209) 892-6233 - Fax (209) 892-4013**

May 12, 2000

Mr. Peter Carpenter
15372 Ash Avenue
Patterson, CA 95363

**Subject: Patterson ID Project Solicitation Application for Fish Screen Funding from Cal-Fed**

Dear Carpenter,

This letter is to notify you, a landowner adjacent to the possible project location, of the intent by Patterson Irrigation District (PID) to prepare and send a proposal to the Cal Fed group in Sacramento for funding of a feasibility study for installation of positive barrier fish screens at the District's main diversion point on the San Joaquin River. The PID Board of Directors (Board) have reached this decision in order to provide assurance that the valuable water resource for this area would be conserved and protected while the fishery resources in the San Joaquin River would likewise be preserved. This action to be examined will be for the betterment of our constituents within the PID and likewise in the surrounding areas.

The feasibility study would likely start when the requested funding is approved and a contract signed with the designated agency. This approval and contract would be early in 2001. The feasibility study would take about six months. This will include examination of alternative types of structures in front of the existing PID pumping plant on the San Joaquin River. There will be concerns of flood capacities in the river channel and preserving the present quantity of water PID is entitled to divert. PID is currently pumping a maximum diversion rate of 195 cfs under its pre-1914 water rights. This stage of the project would likely include public notification and involvement.

After the feasibility study is completed additional funding may, at the discretion of the Board, be requested from Cal Fed and other agencies that have grant funding which is available for the installation of positive barrier fish screens. The CA Fish and Game agency has visited with the Board about the potential situation of the fishery resource and diversion of unprotected flows from the San Joaquin River. This state agency as well as other state and federal agencies are in support of this project.

Once the additional grant funding is obtained final designs and environmental documentation will be completed and a construction contract will be awarded to construct the selected alternative fish screen project. Construction will be coordinated with the water demands of the irrigation district while also protecting the flood flow capacity of the San Joaquin River. Please be assured that any facility constructed will meet the current criteria for all state and federal agencies.

This study will in no way effect other water entitlements the PID has with water supplies delivered from the Delta Mendota Canal. That water supply will remain under separate entitlement(s).

If there are concerns about this project please contact Mr. John Sweigard, Patterson ID General Manager at (209) 892-6233.

Sincerely,

John Sweigard
General Manager

**Board of Directors**

John Barbaste
*President*
Steve Trinta
*Vice President*
John Azevedo
David Reichmuth
Alfred Scheuber

John Sweigard
*General Manager*

Joe Perry
*Secretary/Treasurer*

**948 Orange Avenue - P.O. Box 685 - Patterson, Ca. 95363**
**Office (209) 892-6233 - Fax (209) 892-4013**

May 8, 2000

Mr. George Lambert
City of Patterson
PO Box 667
Patterson, Ca 95363

**Subject: Patterson ID Project Solicitation Application for Fish Screen Funding from Cal-Fed**

Dear Mr. Lambert,

This is a notice of intent by Patterson Irrigation District (PID) to prepare and send a proposal to the Cal Fed group in Sacramento for funding of a feasibility study for installation of positive barrier fish screens at the District's main diversion point on the San Joaquin River. The PID Board of Directors (Board) have reached this decision in order to provide assurance that the valuable water resource for this area would be conserved and protected while the fishery resources in the San Joaquin River would likewise be preserved. This action to be examined will be for the betterment of our constituents within the PID and likewise in the surrounding areas.

The feasibility study would likely start when the requested funding is approved and a contract signed with the designated agency. This approval and contract would be early in 2001. The feasibility study would take about six months. This will include examination of alternative types of structures in front of the existing PID pumping plant on the San Joaquin River. There will be concerns of flood capacities in the river channel and preserving the present quantity of water PID is entitled to divert. PID is currently pumping a maximum diversion rate of 195 cfs under its pre-1914 water rights. This stage of the project would likely include public notification and involvement.

After the feasibility study is completed additional funding may, at the discretion of the Board, be requested from Cal Fed and other agencies that have grant funding which is available for the installation of positive barrier fish screens. The CA Fish and Game agency has visited with the Board about the potential situation of the fishery resource and diversion of unprotected flows from the San Joaquin River. This state agency as well as other state and federal agencies are in support of this project.

Once the additional grant funding is obtained final designs and environmental documentation will be completed and a construction contract will be awarded to construct the selected alternative fish screen project. Construction will be coordinated with the water demands of the irrigation district while also protecting the flood flow capacity of the San Joaquin River. Please be assured that any facility constructed will meet the current criteria for all state and federal agencies.

This study will in no way effect other water entitlements the PID has with water supplies delivered from the Delta Mendota Canal. That water supply will remain under separate entitlement(s).

If there are concerns about this project please contact Mr. John Sweigard, Patterson ID General Manager at (209) 892-6233.

Sincerely,

John Sweigard
General Manager

# City of Patterson

33 South Del Puerto Avenue
P.O. Box 667
Patterson, California 95363
(209) 892-2041 FAX (209) 892-6119


May 8, 2000

Mr. John Barbaste, President
Board of Directors
Patterson Irrigation District
P.O. Box 685
Patterson, CA 95363

Subject: Patterson ID Project Solicitation Application for Fish Screen Funding from Cal-Fed

Dear Mr. Barbaste:

On behalf of the City of Patterson, I am writing this letter to support the Patterson Irrigation District's funding request for a feasibility study for installation of positive barrier fish screens at the District's main diversion point on the San Joaquin River. The potential installation of fish screens is one of many solutions to the ecological improvements to the San Joaquin River. This river is an important resource within Stanislaus County and the Central Valley and is a major source of irrigation water for farm lands within the Patterson area. The City supports efforts to improve water quality in the river and the ecological balance of this body of water.

We sincerely hope the District is successful in receiving the requested grant funds and look forward to the follow up projects including design and construction of the fish screens.

Sincerely,

George T. Lambert
City Manager

# Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. **Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both?**

   CEQA/NEPA
   **YES** _____ **NO** _____

2. **If you answered yes to # 1, identify the lead governmental agency for CEQA/NEPA compliance.**

   Bureau of Reclamation
   **Lead Agency** - NEPA

   Patterson Irrigation District
   Lead Agency - CEQA

3. **If you answered no to # 1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.**

4. **If CEQA/NEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.**

   Included with this request for funding of a feasibility study is the start of CEQA/NEPA documents up to a draft biological assessment. The design phase will include the final EA/IS and likely a Neg. Dec. and FONSI

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

   **YES** _____ **NO** x

   **If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access needs and permission for access with 30 days of notification of approval.**

6. **Please indicate what permits or other approvals may be required for the activities contained in your proposal. Check all boxes that apply.**

| | | |
|---|---|---|
| **LOCAL** | | |
| **Conditional use permit** | ___ | |
| **Variance** | ___ | |
| **Subdivision Map Act approval** | ___ | |
| **Grading permit** | ___ | |
| **General plan amendment** | ___ | |
| **Specific plan approval** | ___ | |
| **Rezone** | | ___ |
| **Williamson Act Contract cancellation** | ___ | |
| **Other** obtain any required permits **(please specify)** | | |
| **None required** | ___ | |
| **STATE** | | |
| **CESA Compliance** | x | **(CDFG)** |
| **Streambed alteration permit** | x | **(CDFG)** |
| **CWA § 401 certification** | x | **(RWQCB)** |
| **Coastal development permit** | ___ | **(Coastal Commission/BCDC)** |
| **Reclamation Board approval** | ___ | |
| **Notification** | ___ | **(DPC, BCDC)** |
| **Other** _____ **(please specify)** | | |
| **None required** | ___ | |
| **FEDERAL** | | |
| **ESA Consultation** | x | **(USFWS)** |
| **Rivers & Harbors Act permit** | ___ | **(ACOE)** |
| **CWA § 404 permit** | x | **(ACOE)** |
| **Other** _____ **(please specify)** | | |
| **None required** | ___ | |

DPC = Delta Protection Commission
CWA = Clean Water Act
CESA = California Endangered Species Act
USFWS = U.S. Fish and Wildlife Service
ACOE = U.S. Army Corps of Engineers

ESA = Endangered Species Act
CDFG = California Department of Fish and Game
RWQCB = Regional Water Quality Control Board
BCDC= Bay Conservation and Development Comm.

# Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. **Do the actions in the proposal involve physical changes to the land(i.e. grading, planting vegetation, or breeching levees) or restrictions in land use (i.e. conservation easement or placement of land in a wildlife refuge)?**

   x
   **YES** _____ **NO** _____

2. **If NO to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only).**

3. **If YES to # 1, what is the proposed land use change or restriction under the proposal?**
   Construction of the fish screen facility and pump station for the Patterson Irrigation District will require some grading of the bank of the San Joaquin River.

4. **If YES to # 1, is the land currently under a Williamson Act contract?**

   **YES** _____ **NO** x

5. **If YES to # 1, answer the following:**

   **Current land use** Pumping Plant
   **Current zoning** Agricultural
   **Current general plan designation** Agricultural

6. **If YES to #1, is the land classified as Prime Farmland, Farmland of Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?**

   **YES** _____ **NO** x **DON'T KNOW** _____

7. **If YES to # 1, how many acres of land will be subject to physical change or land use restrictions under the proposal?**
   _____

8. **If YES to # 1, is the property currently being commercially farmed or grazed?**

   **YES** _____ **NO** x

9. **If YES to #8, what are** **the number of employees/acre**_____
   **the total number of employees** _____

10. **Will the applicant acquire any interest in land under the proposal (fee title or a conservation easement)?**

_____ YES

x NO

11. **What entity/organization will hold the interest?**_____

12. **If YES to # 10, answer the following:**

**Total number of acres to be acquired under proposal** _____
**Number of acres to be acquired in fee** _____
**Number of acres to be subject to conservation easement** _____

13. **For all proposals involving physical changes to the land or restriction in land use, describe what entity or organization will:**

| | |
|---|---|
| **manage the property** | Patterson Irrigation District |
| **provide operations and maintenance services** | Patterson Irrigation District |
| **conduct monitoring** | Patterson Irrigation District |

14. **For land acquisitions (fee title or easements), will existing water rights also be acquired?**

_____ YES

NA

_____ NO

15. **Does the applicant propose any modifications to the water right or change in the delivery of the water?**

_____ YES

x NO

16. **If YES to # 15, describe**_____

STATE OF CALIFORNIA

# NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95)

COMPANY NAME

Patterson Irrigation District

The company named above (herinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (cancer), age (over 40), marital status, denial of family care leave and denial of pregnancy disability leave.

## CERTIFICATION

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME

John Sweigard

| DATE EXECUTED | EXECUTED IN THE COUNTY OF |
|---|---|
| May 12, 2000 | Stanislaus |

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

General Manager

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Patterson Irrigation District

Agreement No.:_____

Exhibit:_____

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS**

STATE OF CALIFORNIA )
)ss
COUNTY OF Stanislaus )

_____, being first duly sworn, deposes and says
(name)

that he or she is Patterson Irrigation District of
(position title)

_____,
(the bidder)

the party making the foregoing bid; that the bid is not made in the interest of, or on behalf of , any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false sham bid; and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

By_____
(Person signing for bidder)

DATED:_____

Subscribed and sworn to before me on

_____

(Notarial Seal)

_____
(Notary Public)

DWR 4208 (New 4/90, Master Current 3/99)

TO BE COMPLETED BY SUCCESSFUL CONSTRUCTION CONTRACTOR

STATE OF CALIFORNIA

THE RESOURCES AGENCY

DEPARTMENT OF WATER RESOURCES

# BIDDER'S BOND

We _____

_____

_____

_____, as PRINCIPAL, and

_____

_____

_____

_____

as SURETY, are held and firmly bound unto the State of California in the penal sum of TEN PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal above named submitted by said Principal to the State of California, acting by and through the Department of Water Resources, for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, to the Director of the Department to which said bid was submitted, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

In no case shall the liability of the surety here under exceed the sum of $_____.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That whereas the Principal has submitted the above-mentioned bid to the State of California, as aforesaid, for certain construction specifically described as follows, for which bids are to be opened at

_____, California, on _____.
(Insert name of city where bids will be opened) (Insert date of bid opening)

for _____

_____

_____

_____

Copy here the exact description of work, including location, as it appears on the proposal)

NOW, THEREFORE, If the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files two bonds with the Department, one to guarantee faithful performance and the other to guarantee payment for labor materials, as required by law, then this obligation shall be null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on this _____

day of _____, 19 ____.

_____ [Seal]

_____ [Seal]

_____ [Seal]
Principal

_____ [Seal]

_____ [Seal]

_____ [Seal]
Surety

Address _____

NOTE: Signatures of those executing for the surety must be properly acknowledged.

DWR 4021 (Rev. 3/94)

TO BE COMPLETED BY SUCCESSFUL CONSTRUCTION CONTRACTOR

# APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

| | | |
|---|---|---|
| 2. DATE SUBMITTED May 15, 2000 | Applicant Identifier | |
| 3. DATE RECEIVED BY STATE | State Application Identifier | |
| 4. DATE RECEIVED BY FEDERAL AGENCY | Federal Identifier | |

**1. TYPE OF SUBMISSION:**

Application: ☐ Construction ☒ Non-Construction

Preapplication: ☐ Construction ☐ Non-Construction

**5. APPLICANT INFORMATION**

Legal Name: Patterson Irrigation district

Organizational Unit: General Manager

Address *(give city, county, State, and zip code)*: 948 Orange Ave. or P.O. box 685 Patterson, Ca 95363

Name and telephone number of person to be contacted on matters involving this application *(give area code)*: John Sweigard, (209) 892-6233

**6. EMPLOYER IDENTIFICATION NUMBER *(EIN)*:** 94-2161321

**7. TYPE OF APPLICANT:** *(enter appropriate letter in box)* 6

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) _____

**8. TYPE OF APPLICATION:**

☒ New ☐ Continuation ☐ Revision

If 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:** Bureau Of Reclamation

**10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:** ☐☐-☐☐☐

TITLE:

**11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:**

Feasibility study to Protect fishery in San Joaquin River and waterway supply for Patterson Irrigation District

**12. AREAS AFFECTED BY PROJECT** *(Cities, Counties, States, etc.)*:

Patterson, CA; Stanislaus

**13. PROPOSED PROJECT** Fish Screen

Start Date: 4/01 Ending Date: 12/01

**14. CONGRESSIONAL DISTRICTS OF:** 18th, Gary Condit

a. Applicant: Patterson Irrigation Dist.

b. Project: Fish Screen

**15. ESTIMATED FUNDING:**

| | |
|---|---|
| a. Federal | $ 175,000 .00 |
| b. Applicant | $ 25,000 .00 |
| c. State | $ .00 |
| d. Local | $ .00 |
| e. Other | $ .00 |
| f. Program Income | $ .00 |
| g. TOTAL | $ 200,000 .00 |

**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. ☒ PROGRAM IS NOT COVERED BY E. O. 12372
☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

**17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?**

☐ Yes If "Yes," attach an explanation. ☒ No

**18. 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.**

| | | |
|---|---|---|
| a. Type Name of Authorized Representative: John Sweigard | b. Title: General Manager | c. Telephone Number: (916) 892-6233 |
| d. Signature of Authorized Representative: John Sweigard | | e. Date Signed: May 12, 2000 |

## INSTRUCTIONS FOR THE SF-424

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: |
|---|---|
| 1. | Self-explanatory. |
| 2. | Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable). |
| 3. | State use only (if applicable). |
| 4. | If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank. |
| 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. |
| 6. | Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service. |
| 7. | Enter the appropriate letter in the space provided. |
| 8. | Check appropriate box and enter appropriate letter(s) in the space(s) provided:<br>-- "New" means a new assistance award.<br>-- "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.<br>-- "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. |

| Item: | Entry: |
|---|---|
| 12. | List only the largest political entities affected (e.g., State, counties, cities). |
| 13. | Self-explanatory. |
| 14. | List the applicant's Congressional District and any District(s) affected by the program or project. |
| 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 *only* 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. |
| 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. |
| 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. |
| 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.) |

# 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. Feasibility Study | | $ | $ | $ 175,000 | $ 25,000 | $ 200,000 |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. TOTALS | | $ | $ | $ 175,000 | $ 25,000 | $ 200,000 |

## SECTION B - BUDGET CATEGORIES

| 6. Object Class Categories | GRANT PROGRAM, FUNCTION OR ACTIVITY | | | | Total |
|---|---|---|---|---|---|
| | (1) Feasibility | (2) | (3) | (4) | (5) |
| a. Personnel | $ | $ | $ | $ | $ |
| b. Fringe Benefits | | | | | |
| c. Travel | | | | | |
| d. Equipment | | | | | |
| e. Supplies | | | | | |
| f. Contractual | $ 175,000 | | | | $ 175,000 |
| g. Construction | | | | | |
| h. Other | | | | | |
| i. Total Direct Charges (sum of 6a - 6h) | $ 175,000 | | | | $ 175,000 |
| j. Indirect Charges | $ 25,000 | | | | $ 25,000 |
| k. TOTALS (sum of 6i and 6j) | $ 200,000 | $ | $ | $ | $ 200,000 |
| 7. Program Income | $ | $ | $ | $ | |

Authorized for Local Reproduction

## SECTION C - NON-FEDERAL RESOURCES

| (a) Grant Program | (b) Applicant | (c) State | (d) Other Sources | (e) TOTALS |
|---|---|---|---|---|
| 8. Feasibility Study | $ 25,000* | $ | $ | $ 25,000 |
| 9. | | | | |
| 10. | | | | |
| 11. | | | | |
| 12. TOTALS (sum of lines 8 and 11) | $ 25,000 | $ | $ | $ 25,000 |

* In-kind Services: space, staff time, legal, data collection

## SECTION D - FORECASTED CASH NEEDS

| | Total for 1st Year | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|---|---|---|---|---|---|
| 13. Federal | $ 125,000 | $ | $ | $ 45,000 | $ 80,000 |
| 14. Nonfederal | | | | | |
| 15. TOTAL (sum of lines 13 and 14) | $ 125,000 | $ | $ | $ 45,000 | $ 80,000 |

## 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. Feasibility Study | $ 125,000 | $ 50,000 | $ | $ |
| 17. | | | | |
| 18. | | | | |
| 19. | | | | |
| 20. TOTALS (sum of lines 16-19) | $ 125,000 | $ 50,000 | $ | $ |

## SECTION F - OTHER BUDGET INFORMATION (Attach additional Sheets if Necessary)

| | |
|---|---|
| 21. Direct Charges: | 22. Indirect Charges |
| 23. Remarks | |

Authorized for Local Reproduction

## INSTRUCTIONS FOR THE SF-424A

Public reporting burden for this collection of information is estimated to average 180 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 *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 Column (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.

**Line 6a-i** - Show the totals of Lines 6a to 6h 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

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 periods (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.

OMB Approval No. 0348-0040

# 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.

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

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project 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. §§4728-4763) 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.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

| SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL | TITLE |
|---|---|
| | GENERAL MANAGER |
| APPLICANT ORGANIZATION | DATE SUBMITTED |
| PATTERSON IRRIGATION DISTRICT | MAY 12, 2000 |

OMB Approval No. 0348-0041

# BUDGET INFORMATION - Construction Programs

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

| COST CLASSIFICATION | a. Total Cost | b. Costs Not Allowable for Participation | c. Total Allowable Costs (Columns a-b) |
|---|---|---|---|
| 1. Administrative and legal expenses | $ .00 | $ .00 | $ .00 |
| 2. Land, structures, rights-of-way, appraisals, etc. | $ .00 | $ .00 | $ .00 |
| 3. Relocation expenses and payments | $ .00 | $ .00 | $ .00 |
| 4. Architectural and engineering fees | $ .00 | $ .00 | $ .00 |
| 5. Other architectural and engineering fees | $ .00 | $ .00 | $ .00 |
| 6. Project inspection fees | $ .00 | $ .00 | $ .00 |
| 7. Site work | $ .00 | $ .00 | $ .00 |
| 8. Demolition and removal | $ .00 | $ .00 | $ .00 |
| 9. Construction | $ .00 | $ .00 | $ .00 |
| 10. Equipment | $ .00 | $ .00 | $ .00 |
| 11. Miscellaneous | $ .00 | $ .00 | $ .00 |
| 12. SUBTOTAL *(sum of lines 1-11)* | $ .00 | $ .00 | $ .00 |
| 13. Contingencies | $ .00 | $ .00 | $ .00 |
| 14. SUBTOTAL | $ .00 | $ .00 | $ .00 |
| 15. Project (program) income | $ .00 | $ .00 | $ .00 |
| 16. TOTAL PROJECT COSTS *(subtract #15 from #14)* | $ .00 | $ .00 | $ .00 |

FEDERAL FUNDING

| | | |
|---|---|---|
| 17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter the resulting Federal share. | Enter eligible costs from line 16c Multiply X _____% | $ .00 |

## INSTRUCTIONS FOR THE SF-424C

Public reporting burden for this collection of information is estimated to average 180 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 (0348-0041), 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 sheet is to be used for the following types of applications: (1) "New" (means a new [previously unfunded] assistance award); (2) "Continuation" (means funding in a succeeding budget period which stemmed from a prior agreement to fund); and (3) "Revised" (means any changes in the Federal Government's financial obligations or contingent liability from an existing obligation). If there is no change in the award amount, there is no need to complete this form. Certain Federal agencies may require only an explanatory letter to effect minor (no cost) changes. If you have questions, please contact the Federal agency.

*Column* a. - If this is an application for a "New" project, enter the total estimated cost of each of the items listed on lines 1 through 16 (as applicable) under "COST CLASSIFICATION."

If this application entails a change to an existing award, enter the eligible amounts *approved under the previous award* for the items under "COST CLASSIFICATION."

*Column* b. - If this is an application for a "New" project, enter that portion of the cost of each item in Column a. which is *not* allowable for Federal assistance. Contact the Federal agency for assistance in determining the allowability of specific costs.

If this application entails a change to an existing award, enter the adjustment [+ or (-)] to the previously approved costs (from column a.) reflected in this application.

*Column*. - This is the net of lines 1 through 16 in columns "a." and "b."

---

Line 1 - Enter estimated amounts needed to cover administrative expenses. Do not include costs which are related to the normal functions of government. Allowable legal costs are generally only those associated with the purchases of land which is allowable for Federal participation and certain services in support of construction of the project.

Line 2 - Enter estimated site and right(s)-of-way acquisition costs (this includes purchase, lease, and/or easements).

Line 3 - Enter estimated costs related to relocation advisory assistance, replacement housing, relocation payments to displaced persons and businesses, etc.

Line 4 - Enter estimated basic engineering fees related to construction (this includes start-up services and preparation of project performance work plan).

Line 5 - Enter estimated engineering costs, such as surveys, tests, soil borings, etc.

Line 6 - Enter estimated engineering inspection costs.

Line 7 - Enter estimated costs of site preparation and restoration which are not included in the basic construction contract.

Line 9 - Enter estimated cost of the construction contract.

Line 10 - Enter estimated cost of office, shop, laboratory, safety equipment, etc. to be used at the facility, if such costs are not included in the construction contract.

Line 11 - Enter estimated miscellaneous costs.

Line 12 - Total of items 1 through 11.

Line 13 - Enter estimated contingency costs. (Consult the Federal agency for the percentage of the estimated construction cost to use.)

Line 14 - Enter the total of lines 12 and 13.

Line 15 - Enter estimated program income to be earned during the grant period, e.g., salvaged materials, etc.

Line 16 - Subtract line 15 from line 14.

Line 17 - This block is for the computation of the Federal share. Multiply the total allowable project costs from line 16, column "c." by the Federal percentage share (this may be up to 100 percent; consult Federal agency for Federal percentage share) and enter the product on line 17.

OMB Approval No. 0348-0042

# ASSURANCES - CONSTRUCTION PROGRAMS

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

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

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

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

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property aquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.

4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.

5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.

6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 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).

9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 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.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.

14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

| SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL | TITLE<br>GENERAL MANAGER |
|---|---|
| APPLICANT ORGANIZATION<br>PATTERSON IRRIGATION DISTRICT | DATE SUBMITTED<br>MAY 12, 2000 |