

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

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| <input checked="" type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input checked="" type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input checked="" type="checkbox"/> Other: <u>Hallwood Irrigation Company,</u>
a Mutual Water Company |

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

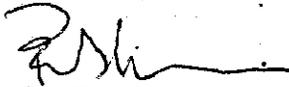
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|--|---|
| <input checked="" type="checkbox"/> Planning | <input type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

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

CORDUA IRRIGATION DISTRICT

Printed name of applicant



Signature of applicant

by PAUL R. MINASIAN

** The Hallwood Irrigation Company and Department of Fish & Game have indicated a willingness to cooperate in regard to the study and are in the process of providing for a Memorandum of Understanding in regard to their pursuit of these mutual goals, but no entity or organization has been formed on the parties' behalf at this time. The Department of Fish & Game hopes to be able to fund this study from its own budget effective July 1, 1999, but it is uncertain if this will occur.

APPLICATION TO CAL FED BAY-DELTA PROGRAM

**CONSIDERATION OF FEASIBILITY OF MODIFICATION OF
DEPARTMENT OF FISH & GAME FISH SCREEN
LOCATED IN THE CORDUA IRRIGATION DISTRICT AND
HALLWOOD WATER COMPANY MAIN CANAL,
DIVERTING WATER FROM THE
YUBA RIVER AT DAGUERRE DAM**

Participants and Collaborators: The Department of Fish & Game, Cordua Irrigation District, and Hallwood Water Company propose to jointly study the feasibility and alternatives to modifications, relocation, reconstruction and reconfiguration of the existing Department of Fish & Game fish screen in the Hallwood-Cordua main canal. The address, phone number, fax and e-mail of primary contacts are as follows:

<p><u>Primary Contact:</u></p> <p>Cordua Irrigation District Post Office Box 1111 Marysville, California 95901 (530) 743-6264 facsimile (530) 743-7409 E-mail: minasian@syix.com</p>	<p>John Nelson Department of Fish & Game 1701 Nimbus Road Rancho Cordova, California 95670 (916) 358-2900</p> <p>Hallwood Irrigation Company c/o Donald E. Huckins, Esq. 439 Center Yuba City, California 95992 (530) 673-8426</p>
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All of the Participants and Collaborators are Public Agencies, except Hallwood Irrigation Company, which is a quasi-public agency, being a California Mutual Water Company.

EXECUTIVE SUMMARY

The Project involves the existing Department of Fish & Game fish screen located in the Cordua Irrigation District and Hallwood Irrigation Company main canal leaving northerly from the Yuba River in the vicinity of Daguerre Dam. The object of the feasibility study would be to determine the feasibility and alternatives to upgrade the existing Department of Fish & Game fish screen to meet more modern standards in regard to and criteria for fish screens, including without excluding others the approach velocities, sweeping or bypass characteristics, and to determine the feasibility of providing for automation of the cleaning function and the construction and installation of a bypass facility to bypass juvenile fish back into the Yuba River without extensive predation upon their return to the river. The program involves the cooperative effort of the owners of the water conveyance canal and users of the water, and the Department of Fish & Game which has owned, operated and maintained this screen since approximately 1976. This Application is being made in light of the possibility that the Department of Fish & Game may not have the funds available to provide for the feasibility report, and consideration of alternatives. All local entities involved in the matter are participating and support the investigation of feasible alternatives and their identification preliminary to attempting to determine sources of funding for the Department of Fish & Game's modification, reconstruction and reconfiguration of the screen.

PROJECT DESCRIPTION

Proposed Scope of Work. The work will be divided into attempting to determine the most appropriate location for a screen to protect it from flood damage, inundation and inoperability due to damage from flooding on the Yuba River which is severe. It is believed that this location will be within the existing canal. The second phase will be to attempt to determine the alternative locations and configurations that are available for a continuous and

automated screen which provides for the passage of the water required by the irrigators and consumers from the canal. This will involve rating the advantages or disadvantages of various locations and configurations, and alternatives for the location of the reconfigured and reconstructed screen, the approximate dimensions of the civil works that would have to be installed to maintain water supply and to provide for the operation of the screen and the operation and effective delivery of water. There are extensive problems with vehicular access and utility access to the potential configuration of a screen and bypass. When alternative designs and sites are located, configuration, determination of physical access and utility access will ensue.

Location and/or Geographic Boundaries of the Project. The location or geographic boundaries of the project are shown upon the attached map.

ECOLOGICAL/BIOLOGICAL BENEFITS

Ecological/Biological Objectives. The ecological and biological benefits are well-established. The Anadromous Fish Restoration Program ("AFRP") identifies the improvement of the functioning of the Department of Fish & Game's screens as an important objective for restoration of anadromous fish in California. Presently the screen is not operated throughout the full migration period of juvenile salmon upon the Yuba River because of the difficulties of access and the unavailability of electrical power.

System-Wide Ecosystem Benefits. Reducing the costs to the Department of Fish & Game of attempting to operate this facility without the availability of electrical power, providing a facility which can be modified to include more current standards for approach velocities, sweeping velocities and bypass and return facilities that will return juvenile fish back to the Yuba River without holding periods will improve the survivability of anadromous fish, including both fall run and potentially spring run chinook salmon.

TECHNICAL FEASIBILITY AND TIMING

Before implementing an environmental impact report, this feasibility report will allow the Department of Fish & Game, Cordua Irrigation District and Hallwood Irrigation Company to provide for an examination of alternatives and provide cost estimates preparatory to determining the best alternatives to improve the functioning of the existing fish screen.

MONITORING AND DATA COLLECTION METHODOLOGY

There is substantial existing information in regard to the fish accumulated at the screen by the Department of Fish & Game. Utilizing the existing data collected to approximate the benefits of various alternatives, configurations or reconfiguration of a modified or reconstructed screen would allow through the feasibility report for a determination.

LOCAL INVOLVEMENT

Yuba County Water Agency, United States Fish & Wildlife Service, National Marine Fishery Service, the Department of Fish & Game, and a number of interested citizens participate in fishery monitoring groups working on periodic problems on the Yuba River. The undertaking of a feasibility study in regard to the feasibility and alternatives for modification of the existing Department of Fish & Game screen has been raised repeatedly and is a project which all parties encourage. Hallwood Irrigation Company and Cordua Irrigation District are the sold owners of the ditch and provide and deliver water to all parties consuming water through the facility.

COST

Budget. We estimate the cost to be approximately \$150,000.

Task 1. Determining modifications of canal which would be necessary to provide

sufficient space to install a reconfigured screen with sufficient surface area and flow characteristics to meet a more modern approach velocity, sweeping velocity and bypass goals: \$65,000 service contract.

Task 2. Determination of best configuration of fish screen design in light of alternative locations for a fish screen in light of the physical restrictions of the area of the canal, including access to utilities, access for personnel to operate or maintain the facilities: \$65,000 service contract.

Task 3. Project management and calculation of fishery benefits. Cost estimates of civil works and costs of fish screen and appurtenances and contingencies of alternatives; \$20,000 service contract.

Task	Direct Labor Hours	Direct Salary and Benefits	Service Contracts	Material & Acquisition Costs	Misc. and other Direct Costs	Overhead and Indirect Costs	Total Cost
Task 1			\$65,000			none	
Task 2			\$65,000				
Task 3			\$15,000				
Project Mgm't Task			\$5,000				\$150,000

Applicant Qualifications. The Department of Fish & Game as owner of the fish screen, the Cordua Irrigation District and Hallwood Irrigation Company as owner of the canal and users of the water through the canal, have agreed jointly to cooperate to attempt to explore the feasibility of providing a modern, efficient facility protected from flood damage and extensive operation, maintenance and reconstruction costs. It is hoped that Department of Fish

& Game will have monies in its July 1, 1999 budget to fund this feasibility study for these Collaborating Parties. If it does not, however, this grant is imperative. It is the goal that if such a facility can be constructed and funded, that thereafter the water purveyors would provide the day-to-day inspection and monitoring of the facility, and would make non-monetary contributions to the construction and reconfiguration of the facility through aiding in gaining utility access and more reliable vehicular access to the site. The link to CalFed priority species and habits is that the 1999 PSP requests proposals in regard to fish passage and fish screens, and specifically mentions fish screen projects on the Yuba River on page 17 of the Ecosystem Restoration Projects and Programs Solicitation Package.

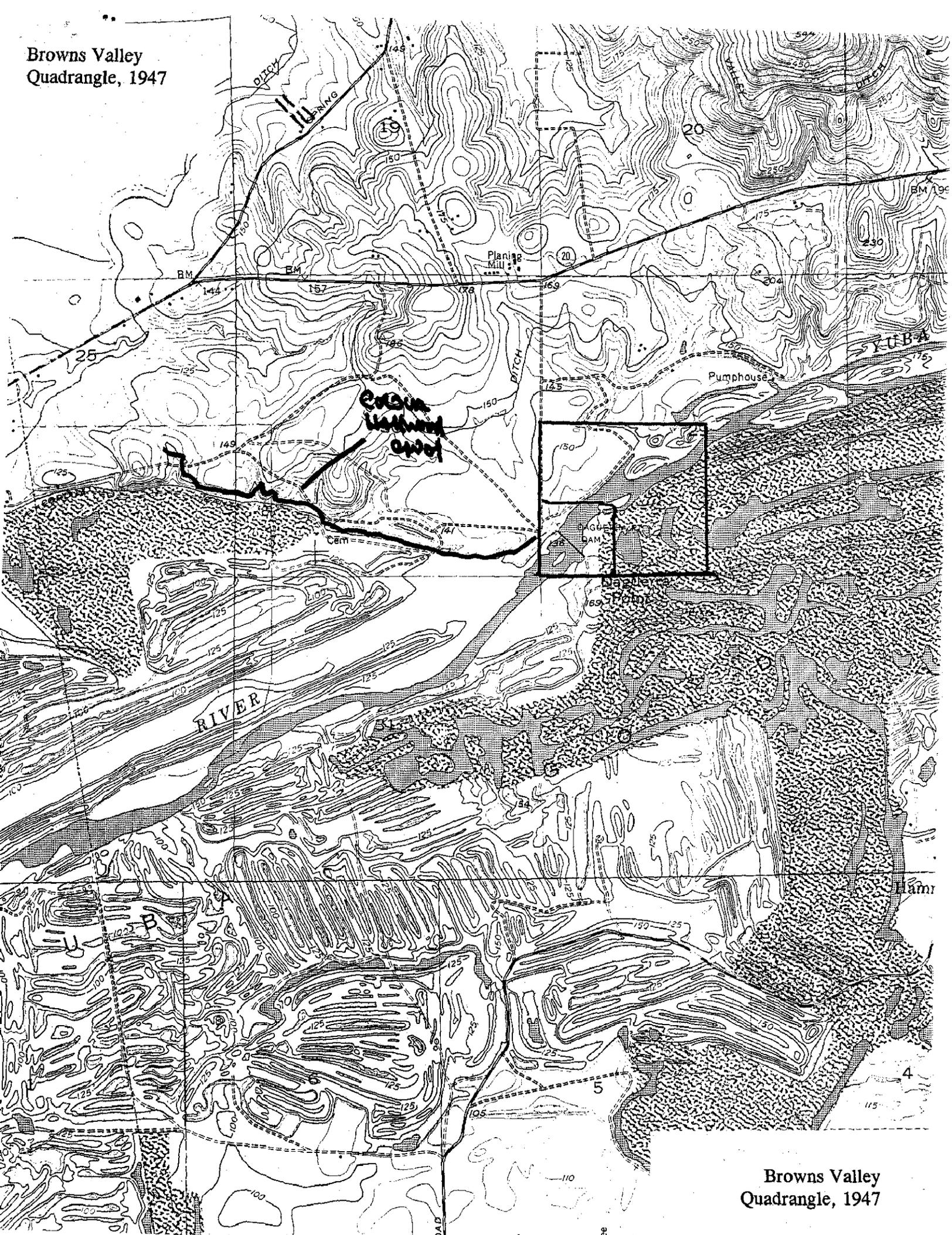
Dated: 4-15-99

CORDUA IRRIGATION DISTRICT,
on behalf of itself, DEPARTMENT OF FISH & GAME,
and HALLWOOD IRRIGATION COMPANY

By: 

PAUL R. MINASIAN

Browns Valley
Quadrangle, 1947



Browns Valley
Quadrangle, 1947