

Delta Lake Irrigation District, Hidalgo and Willacy Counties

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Project Type: Water Conservation Improvements for Delta Lake Irrigation District, Hidalgo and Willacy Counties, Texas.

Project Description: The project sponsor requests financial assistance to the construction four conservation projects that were selected as priority from a list of 11 major and 37 minor projects. The Reservoir Renovation project consists of building a by-pass canal, control structures, and radial gates to allow the J-Canal to be supplied directly from the main canal. In water short years, this would allow the larger portion of Delta Lake to be unused and salvage approximately 5,000 to 7,000 acre-feet of evaporation loss. The Main Canal Seepage Recovery project would construct a surface and subsurface drain collection system and return pump to collect 5 cfs of water that seeps from the main canal. The capital cost of such a recovery system may be 5 to 10 times more economically viable than concrete lining the main canal. The Flow Measurement and Telemetry project consists of installing meters or providing metering of all turnouts and installation of flow measurement telemetry devices on the main canal and all canals with capacities greater than 30 cfs. The telemetry system would improve the timing of water delivery to farms and reduce spillage and operation costs. Pipeline and Canal Lining projects would renovate or replace existing open channel laterals and small canals and buried mortar joint concrete pipe with new gasket joint PVC or RCP pipe or slip-for lining of laterals. A preliminary estimate of the quantity of water that could be salvaged from each of the priority projects is 22,800 acre-feet per year. The District has 174,776 ac-ft of authorized water rights and has the largest amount of irrigated agriculture of the 28 irrigation districts in the Lower Rio Grande Valley (LRGV).

Estimated Cost: \$7,120,000

Project Sponsor: The project sponsor is the Texas Water Development Board and the Delta Lake Irrigation District. The district is an irrigation district and is a political subdivision of the State of Texas,

organized under and by virtue of Article 16, Section 59 of the Constitution of the State of Texas. The district is operated under Chapter 49 and 55 of the Texas water Code. The district is located in Hidalgo and Willacy Counties, Texas, and is one of the few irrigation districts in the Lower Rio Grande Valley that is primarily rural. The district has approximately 250 miles of lined or partially lined canals, 42 miles of unlined canals, and 122 miles of unlined laterals.

Project Consultant: Al Blair, P. E.; Axiom/Blair Engineering; 3922 Steck Ave. Suite B119 Austin, Texas 78759; tel # (512) 349-0117 Fax: (512) 349-0385; a.w.blair@worldnet.att.net

Population Benefited: The population of Hidalgo and Willacy Counties is 581,087.

International Treaties: The United States is in compliance with the 1944 Treaty relating to the Utilization of the Waters of the Rio Grande between Mexico and the United States.

Available Studies: The district is presently preparing, through its consulting engineer, a Project Plan following US Bureau of Reclamation (USBOR) guidelines and funded by the TWDB SECO funds. The consultant is currently 100% complete with the Project Plan. After submittal and approval of the Project Plan, the consultant will begin preparation of the Project Report, which will include technical alternative analysis, defined construction costs, O&M costs, and environmental information. The consultant estimates that the Project Report will be complete within sixty days after approval of the Project Plan. An environmental summary along with appropriate agency consultation will be prepared during the Project Report phase of the project. The district has received a commitment for funding through the TWDB for the project design and will begin this phase upon completion of the Project Plan.

Environmental and Human Health:

The proposed project will help alleviate one of the most pressing problems facing entities that rely on the Rio Grande to meet the water needs for a fast growing population without detrimental effect to the social and economic fabric of the area. The project should help accomplish this by allowing the more efficient delivery of water to both agricultural and municipal users. Potential cultural and social impacts of the project will be addressed in the environmental summary as well as coordination with the required agencies and it is anticipated that the project will be categorically excluded from further environmental review.

Technical Feasibility: The Project Report will include an analysis of alternative methodologies and reasons for selection of the final process of rehabilitation. Design standards will meet all applicable regulatory requirements.

Financial Criteria: The district has received funding assistance from the TWDB to complete the Project Plan, Project Report, and final design as per USBOR guidelines. These requirements would enable the district to apply for federal funds should they become available through the USBOR. Those funds are not currently appropriated.

The North American Development Bank's (NADB) Water Conservation Investment Fund (WCIF) currently offers up to fifty percent of the project cost as grant funding. The remaining fifty percent of the project costs must come from district sources. Loan funding is available through the TWDB to match grant funds available from the WCIF. The NADB also has loan sources to match the grant. As a part of its project and financial analysis, the district will investigate and implement where necessary, adequate user fees and other measures to ensure that the district is financially able to meet all debt and operational obligations.

The district's Board of Directors and employees are committed to the conservation of water. The district has implemented metering of all irrigation deliveries and has invested approximately \$400,000 per year in replacing small open lateral with buried pipelines, The district has an annual operating budget of \$3.0 million.

Public Participation: Board meetings are conducted regularly and can be formatted to meet public meeting requirements of the Border Environmental Cooperation Commission (BECC). A steering committee of user representatives could include Board members as well as additional members which represent a cross-section of affected users of the district facilities. Potential outreach to the community could include education through the existing billing systems as well as open meetings of the Board.

DELTA LAKE IRRIGATION DISTRICT

<i>Do you want the TWDB to proceed on your behalf in submitting a Step 1 application to the BECC?</i>	<i>If yes, need information to complete summary.</i> Yes	<i>If no, are they going to apply on their own?</i>		
<i>Is the project you are seeking funding for the same as that being studied under SECO?</i>	<i>If yes, is it all or a portion? Specifics</i> Yes	<i>If no, need a description.</i>		
<i>Does your district have access to matching funds for the NADB grant?</i>	<i>Cash? How much?</i> \$400,000 /year	<i>Loan? How much?</i> \$3.5 to \$6 million	Amount of funds available for matching would be a factor of grant percentage and total available funds. Any loan amount would require a bond election whose passing would be predicated on the above factors.	District has perpetual tax fund of approximately \$400,000 per year. This could service a \$3.5 million loan for 10 years or a \$6 million loan for 20 years.
<i>What is the status of the project?</i>	<i>Project Plan?</i> Project Plan complete, not submitted	<i>Project Report?</i> <i>Projected completion in 60 days</i>	<i>Plans and specs when?</i> By August 31, 2003	