

Hidalgo County Irrigation District No. 6

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Project Type: Water Conservation Improvements for Hidalgo County Irrigation District No 6 "Mission"

Project Description: Hidalgo County Irrigation District No. 6 (Hidalgo Co. ID No. 6) requests financial assistance to renovate the existing concrete lining of approximately 10.2 miles of the Irrigation District's Mission Main Canal between Relift Pump Station No. 2 and Relift Pump Station No. 4. The current lining was installed in 1930 and is significantly deteriorated in some segments. The rehabilitation will be done with either urethane liner or concrete with a fiberglass add-mixture, depending upon the outcome of a cost-benefit analysis. The project would also involve replacement of the existing slide gate structure on the main canal with radial gate bays and remote reporting of the gate settings and water levels in the canal. Hidalgo Co. ID No. 6 is committed to conservation of water and the energy required for water conveyance, as demonstrated by a number of efficiency maximization projects previously undertaken, including replacement and upgrading of canal pumps and lift stations since 1985, establishment of a computer database for accounting and water allocation, and construction of a regulating reservoir in 2001 between Pump Station No. 1 on the Rio Grande and Re-lift Pump Stations No. 2.

Estimated Cost: \$3,000,000

Project Sponsor: The project sponsor is the Texas Water Development Board and Hidalgo Co. ID No. 6. The Irrigation District is a political subdivision of the State of Texas, organized under Article XVI, Section 59 of the Texas Constitution, and operates under the provisions of Chapters 49 and 58 of the Texas Water Code. Extending northward about 12.5 miles from U.S. Highway 281, Hidalgo Co. ID No. 6 serves an area covering approximately 18,900 acres in the western part of Hidalgo County, including the eastern portion of the City of Mission. A map is provided. The conveyance system is made up of about 31.2 miles of main canals and 88.6 miles of laterals. The Irrigation District operates one primarily pump station on the Rio Grande and three secondary

re-lift pump stations. The district's ruling body is a Board of Directors consisting of elected user representatives. It holds a State of Texas Certificate of Adjudication (No. 23-828) which authorizes the diversion of 5,816 acre-feet of Rio Grande water per annum for multi-use and 34,913 acre-feet of Rio Grande water for Class A irrigation.

Population Benefited: The population of Hidalgo County is 559,922.

Hidalgo Co. ID No. 6 serves agricultural users and provides raw water to La Joya Water Supply, La Frontera Power Generation Plant, and Bates Electric Power Generation Plant.

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 and a Project Report following US Bureau of Reclamation (USBOR) guidelines and funded by the TWDB State Energy Conservation Office funds. The Project Plan is 90% complete. After approval of the Project Plan, the consultant will prepare 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 60 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 Report.

Environmental and Human Health:

The proposed project will significantly increase the efficiency of use of Rio Grande water, helping to alleviate the problem of limited availability of water in the Rio Grande necessary for healthy stream ecology and municipal, agricultural, and industrial water supplies. The proposed canal lining project is expected to salvage approximately 3,500 acre-feet per year. It will help to ensure availability of adequate water supplies to municipal and industrial as well as agricultural users. Potential cultural and social impacts of the project will be addressed in the environmental summary as well as coordination with the required agencies. Although no wetlands are known to exist as a result of seeps or spills along the 12-mile reach of the Main Canal project area, visual inspections will be conducted to identify such areas if they occur. The currently commissioned engineering studies will

estimated the quantity of water and energy anticipated to be conserved.

Technical Feasibility: The Project Report will identify and prioritize canal segments relative to the quantity of water lost to seepage and the potential the project has for improving delivery efficiency, quantitatively rank each reach of the existing main canal for renovation, determine the most practical type of renovation, evaluate potential check structure locations for suitability, estimate the quantity of water and energy anticipated to be saved by the project, and provide a project schedule and budget. Design standards will meet all applicable regulatory requirements. The projects will not create a need for additional operation and maintenance or additional personnel.

Financial Criteria: The district has received a commitment of 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 U.S. federal funds should they become available through the USBOR. Those funds have yet to be appropriated.

Hidalgo Co. ID No. 6, which has an annual operating budget of approximately \$2 million, has indicated that the District is prepared to commit up to \$1.5 million in district funds to the project. Loan funding is available from the TWDB to match grant funds available from the North American Development Bank's Water Conservation Investment Fund (WCIF). As a part of its project and financial analysis, the district will investigate and implement adequate user fees and other measures, as necessary, to ensure that the district is financially able to meet all debt and operational obligations.

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 persons affected directly, and indirectly by the district's operations. Potential methods of outreach to the community could include education through the existing billing systems as well as open meetings of the Board.

HIDALGO COUNTY IRRIGATION DISTRICT # 6 (MISSION)

Do you want the TWDB to proceed on your behalf in submitting a Step 1 application to the BECC?	If yes, need information to complete summary. Yes	If no, are they going to apply on their own?	
Is the project you are seeking funding for the same as that being studied under SECO?	If yes, is it all or a portion? Specifics. Yes; specifics from SECO proposal	If no, need a description.	
Does your district have access to matching funds for the NADB grant?	Cash? How much? \$1.5 million	Loan? How much?	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.
What is the status of the project?	Project Plan? Working on Project Plan	Project Report?	Plans and specs when?