



**NORTH AMERICAN DEVELOPMENT BANK
FACT SHEET**

DELTA LAKE IRRIGATION DISTRICT, TEXAS

Project: Water Conservation Improvement Project

Cost: US\$7,120,000

Sponsor Delta Lake Irrigation District

Location: The irrigation district is located in the Nueces-Rio Grande basin northeast of Edinburg, Texas, in Hidalgo and Willacy Counties. Included within the boundaries of the district are the cities of Hargill, La Sara, Monte Alto and part of the city of Raymondville.

Background: The Delta Lake Irrigation District has the second largest area of the 28 districts in the Rio Grande Valley, with 3,999 irrigation accounts and 70,000 acres in irrigation. In addition, the District system provides water to the cities of Raymondville, Hargill, La Sara, Monte Alto, and Lyford, including rural homeowners, as well as to four other irrigation districts.

The Rio Grande is the only source of water for the District. Water is pumped into a main canal where it flows by gravity approximately 32 miles to the southeast corner of Delta Lake, which is divided by a roadway into a large East Reservoir and a smaller West Reservoir. Water is distributed to land from the canal during the irrigation season or to a pumping plant that lifts surplus water to Delta Lake for storage. When needed for irrigation, water is released from the lake and flows back to the main canal for distribution. The District's water supply system consists of 250 miles of lined or partially lined canals, 42 miles of unlined canal and 122 miles of unlined laterals. The District reports an estimated water delivery efficiency of approximately 63%.

Under the current system, raw water is transported to the northern and eastern portions of the District, including the cities of Raymondville and Lyford, via Delta Lake. It has been estimated that in a dry summer month, over 1,700 acre-feet of water need to be placed in the East Reservoir to deliver about 400 acre-feet at the northeast corner. This is a loss rate of approximately 77 percent, mostly from evaporation. If current drought conditions continue and expected future decreases in water supplies occur, the delivery of raw water through Delta Lake will not be possible.

Description: The project consists of four main components:

1. Reservoir renovation, consisting of construction of a 17,000 linear foot bypass canal along the eastern edge of Delta Lake
2. A 3-mile pilot seepage recovery system for the main canal,
3. Installation of a flow measurement and telemetry system at 20 water diversion points to control and monitor deliveries, and
4. Replacement of approximately 16.8 miles of open channel laterals with pipes.

BECC Certification: September 25, 2003

NADB Funding: Water Conservation Investment Fund (WCIF):
Grant: US\$3,560,000

These funds will be applied towards the construction costs.

Other Funding Sources: Additional grant funding will be provided by State of Texas through an agreement with the State Energy Conservation Office (SECO), as well as by the North Alamo Water Supply Corporation through a grant from the Texas Water Development Board's Disaster Contingency Fund. The District will cover the rest of the costs with its own resources, as well as provide in-kind services.

Benefits: Implementing this project will reduce water losses from evaporation and seepage, improve water management, increase operational efficiency, and conserve energy. Water savings from all four components are estimated at 13,808 acre-feet a year and energy savings at 741,614 kWh/year.

For more information, contact Juan Antonio Flores,
North American Development Bank, 210-231-8000.