



**NORTH AMERICAN DEVELOPMENT BANK
FACT SHEET
SOMERTON, ARIZONA**

- Project:** Replacement of the Wastewater Treatment Facility
- Cost:** US\$7,883,729
- Sponsor:** City of Somerton, Arizona
- Location:** Somerton is located in the southwest corner of the state of Arizona, in southwest Yuma County. It is approximately 180 miles east of San Diego, California, 10 miles southeast of the city of Yuma, and 10 miles north of the U.S.-Mexico border.
- Background:** The City of Somerton’s Public Works Department is responsible for managing the city’s wastewater system and currently provides service to 2,106 accounts.
- The existing wastewater treatment facility was constructed in the 1950s and later upgraded in the early 1980s with the installation of an aeration system and a chlorine contact tank. Because there is no preliminary treatment facility, benthic solids have accumulated in the lagoons, reducing effective system capacity by approximately 36%. Effluent quality is of particular importance in Somerton, where treated effluent is released into the Yuma Main Irrigation Drain, which ultimately conveys water to Mexico where it is used for cropland irrigation.
- Description:** The project entails the construction of a new wastewater treatment facility using Sequencing Batch Reactor (SBR) technology, to replace the existing lagoon system. This activated sludge treatment process was found to be the most cost-effective solution that will allow the treatment of projected future flows, while assuring that the effluent meets the National Pollutant Discharge Elimination System (NPDES) requirements.
- The proposed SBR facility will be constructed at the existing treatment plant site and will consist of a pair of 20-foot-tall tanks, each representing a complete mix “reactor” in which all steps of the biological treatment process (equalization, aeration, nitrification, denitrification, and sedimentation) occur sequentially. The new plant will have the capacity to treat 800,000 gallons per day of wastewater. It will also provide the added advantage of process redundancy, as one tank can provide treatment while the other is off-line.

BECC Certification: June 18, 2003

NADB Funding: Border Environment Infrastructure Fund (BEIF):
Construction Grant Assistance: US\$3,139,960
Transition Grant Assistance: US\$ 802,320
Total: US\$3,942,280

The construction assistance will be applied to the project's total construction cost, while the transition assistance will be used to reduce the overall impact of increased debt service payments on the city's ratepayers as a result of the project.

Institutional Strengthening Development Program (IDP)

The Bank is also funding a water, wastewater, solid waste, and impact fee study.

Other Funding Sources:

The remainder of the construction costs will be covered by a loan and equity funds from the City. In addition, the Border Environment Cooperation Commission (BECC) is providing a grant through its Project Development Assistance Program (PDAP) for design.

Benefits:

The new plant will improve water quality in the Yuma Main Irrigation Drain, as well as in the underlying groundwater aquifer, by guaranteeing that the effluent discharged complies with U.S. standards for wastewater treatment and its subsequent reuse for irrigation in Mexico. In addition, the new process will eliminate the foul odors generated by the existing lagoons, as well as reduce the public health and safety risks associated with the disinfectants currently used in the treatment process, for plant staff and farm workers.

For more information, contact Juan Antonio Flores,
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