

Alternate Water Source and Route Benefit Ascarate Park

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BACKGROUND

The Franklin Canal conveys water from the Rio Grande through many of El Paso's urban neighborhoods on its way to irrigate thousands of acres in agricultural production and landscape use. Recent studies indicate a great potential for water savings by lining this canal (Sheng and King, 2003). El Paso County and El Paso County Water Improvement District No. 1 are interested in the feasibility of rerouting canal diversions and filling Ascarate Lake with salvaged water conserved by lining a portion of the Franklin Canal. Ascarate Lake is used for recreation purposes, but the lake has occasionally been closed due to contamination. Inflow from the Franklin Canal not only would provide an alternate water source, but may also improve water quality.



Unlined Franklin Canal
above Ascarate Lake, El Paso, TX

OBJECTIVES

- Evaluate the feasibility of rerouting water from EPCWID No. 1's Franklin Canal to Ascarate Lake.
- Analyze potential water savings from canal lining and provide EPCWID No. 1 with sufficient information necessary to evaluate planning and management of the alternate canal route to facilitate water delivery.

FINDINGS

- Canal delivery efficiency ponding tests and flow measurements were conducted and these confirmed potential water savings by lining the Franklin Canal that could provide an alternate source of water for Ascarate Lake.



GPS survey at Ascarate Lake

- A Global Positioning System (GPS) survey showed that sufficient elevation difference exists to allow gravity feed of water by pipeline from the Franklin Canal to Ascarate Lake. However, the elevation difference between Ascarate Wasteway and Ascarate Lake is not sufficient for direct inflow without modification of the Ascarate Wasteway.
- There is also potential for this water to be utilized for additional purposes. For example, water flow into the lake could serve as an alternate source for irrigation of Ascarate Golf Course and the surrounding parks, which currently use ground water. Water rights would need to be negotiated.
- The data and information developed through this study are helping El

Paso County Parks and Health Departments and EPCWID No.1 evaluate a water supply and management alternative for Ascarate Lake. Results from this study indicate that lining the Franklin Canal and providing Ascarate Lake with conserved water are feasible. These changes have the potential to conserve water, improve lake water quality, enhance the quality of life in the neighborhoods along which the canal passes, increase recreational use opportunities, and preserve the canal's importance as a historical landmark.



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