

**Cost Estimate Summary
Water Supply Project Option
September 2023 Prices
Pharr - New Brackish Groundwater Desalination**

**Cost based on ENR CCI 13485.67 for September 2023 and
a PPI of 278.502 for September 2023**

<i>Item</i>	<i>Estimated Costs for Facilities</i>
Intake Pump Stations (0 MGD)	\$1,768,000
Transmission Pipeline (24 in. dia., 2.4 miles)	\$4,540,000
Well Fields (Wells, Pumps, and Piping)	\$17,902,000
Water Treatment Plant (5 MGD)	\$49,489,000
Integration, Relocations, Backup Generator & Other	\$44,000
TOTAL COST OF FACILITIES	\$73,743,000
- Planning (3%)	\$2,212,000
- Design (7%)	\$5,162,000
- Construction Engineering (1%)	\$737,000
Legal Assistance (2%)	\$1,475,000
Fiscal Services (2%)	\$1,475,000
Pipeline Contingency (15%)	\$681,000
All Other Facilities Contingency (20%)	\$13,841,000
Environmental & Archaeology Studies and Mitigation	\$488,000
Land Acquisition and Surveying (79 acres)	\$581,000
Interest During Construction (3.5% for 1.5 years with a 0.5% ROI)	<u>\$4,893,000</u>
TOTAL COST OF PROJECT	\$105,288,000
ANNUAL COST	
Debt Service (3.5 percent, 20 years)	\$7,405,000
Reservoir Debt Service (3.5 percent, 40 years)	\$0
Operation and Maintenance	
Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)	\$225,000
Intakes and Pump Stations (2.5% of Cost of Facilities)	\$44,000
Dam and Reservoir (1.5% of Cost of Facilities)	\$0
Water Treatment Plant	\$9,639,000
Advanced Water Treatment Facility	\$0
Pumping Energy Costs (1372775 kW-hr @ 0.09 \$/kW-hr)	\$124,000
Purchase of Water (acft/yr @ \$/acft)	<u>\$0</u>
TOTAL ANNUAL COST	\$17,437,000
Available Project Yield (acft/yr)	5,600
Annual Cost of Water (\$ per acft), based on PF=1	\$3,114
Annual Cost of Water After Debt Service (\$ per acft), based on PF=1	\$1,791
Annual Cost of Water (\$ per 1,000 gallons), based on PF=1	\$9.55
Annual Cost of Water After Debt Service (\$ per 1,000 gallons), based on PF=1	\$5.50
<i>Note: One or more cost element has been calculated externally</i>	
<i>J Burke</i>	<i>7/27/2025</i>