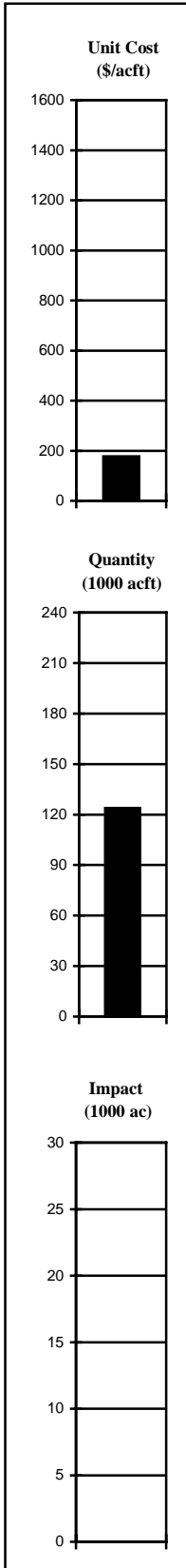


**SOUTH CENTRAL TEXAS REGION WATER SUPPLY OPTIONS**  
**OPTION DATA SHEET**  
**August 2000**



**OPTION NUMBER:** L-10  
**OPTION NAME:** Demand Reduction (Water Conservation)

**OPTION DESCRIPTION:** Municipal and irrigation water conservation practices and programs to reduce per capita water use in cities in addition to reductions already incorporated into the Texas Water Development Board's (TWDB) advanced water conservation case being used in the South Central Texas regional municipal water demand projections, and to reduce the quantity of water used per acre irrigated in addition to the TWDB Series 3 irrigation water demand projections being used in the South Central Texas regional water demand projections.

**TIME NEEDED TO IMPLEMENT:**  1-5 yr.  5-15 yr.  > 15 yr.

<i><b>COST, QUANTITY OF WATER, AND LAND IMPACTED/Municipal use</b></i>		
<b>UNIT COST OF WATER:</b>	\$399 per acft <sup>1</sup>	
<b>QUANTITY OF WATER:</b>	44,100 acft/yr <sup>2</sup>	Municipal Use
<b>LAND IMPACTED:</b>	N/A	acres <sup>3</sup>

<i><b>COST, QUANTITY OF WATER, AND LAND IMPACTED/Irrigation use</b></i>		
<b>UNIT COST OF WATER:</b>	\$55 per acft	
<b>QUANTITY OF WATER:</b>	79,831 acft/yr	Irrigation Use
<b>LAND IMPACTED:</b>	N/A	

**FACTORS AFFECTING COST, QUANTITY, AND LAND IMPACTED**

<sup>1</sup>**COST:** Additional municipal demand reductions of can result from (1) public information and education; (2) conservation incentives; (3) conservation pricing; (4) leak detection and repair; (5) efficient lawn watering; and (6) retrofit of plumbing fixtures. Costs are for plumbing retrofit, and public information. Costs of irrigation demand reductions are for instillation of low energy precision application systems and furrow diking for irrigated acreage.

<sup>2</sup>**QUANTITY OF WATER:** Degree and rate of implementation of items (1) through (6); number of acres irrigated and equipped with low energy precision irrigation equipment.

<sup>3</sup>**LAND IMPACTED:** Does not require any land for municipal program; irrigation land receives only the quantity need. Conservation is from efficient application, with reduced deep percolation and reduced evaporation losses.

**ENVIRONMENTAL ISSUES:** Through reductions in water demand, avoids water supply development that may affect terrestrial and aquatic habitat. Some reduction in return flows to receiving streams.

**SIGNIFICANT ISSUES AFFECTING FEASIBILITY:** Willingness of home and commercial decision-makers to implement conservation measures. In the case of irrigated agriculture, profitability of irrigation farming to support investments in irrigation equipment.

**ADDITIONAL FACTORS:** Willingness and ability of irrigation farmers to adopt and use low energy precision irrigation equipment.

**OTHER WATER SUPPLY OPTIONS DIRECTLY AFFECTED:** None.