

# BRACKISH GROUNDWATER & SEAWATER DESALINATION

## REQUEST

**Support** capital funding for developing new drought-proof water supplies by means of seawater desalination.

**Support** continued federal funding for research for seawater and brackish water desalination technologies.

The 2002 State Water Plan, *Water for Texas – 2002*, projects that available supplies will no longer be sufficient to meet water supply demands as early as 2010 if no new supplies are developed with the associated infrastructure to treat and deliver the water. Through the state and regional water planning process, the regional water planning groups identified water management strategies to meet the anticipated needs. These strategies include additional surface water and groundwater supplies, conservation, reuse, desalination, and others.

Among the many sources of water that Texans will rely upon in the future for human consumption only seawater has the unique potential to provide an uninterrupted and limitless supply during times of drought. Droughts are a recurring theme in Texas and often have devastating effects upon the state's economy and environment.

Desalination along the Gulf Coast, where nationally and internationally critical seaports and industrial complexes are located, will support economic growth in these areas and will create opportunities for the sale or lease of downstream water rights in the state's rivers upstream to alternative locations, benefiting inland cities and water users.

Desalination of brackish groundwater has developed along the south Texas Gulf Coast with construction of the largest brackish groundwater desalination water plant in Texas, providing over 40% of the Brownsville area's annual water supply needs. An even larger brackish groundwater desalination plant is now under construction for the City of El Paso. New technology has made this type of process a cost effective treatment method and a viable solution for water supply issues affecting rapidly growing urban areas in more arid regions of the country. However, the rising cost of energy to operate these facilities is an ever-growing concern; financial assistance is needed to develop energy- saving technologies to ensure development of proven alternatives to conventional water supplies.

By the end of Fiscal Year 2007, Texas would have invested in excess of \$4 million on planning and preliminary engineering works for developing large-scale seawater desalination facilities at three potential sites along the Gulf Coast. An infusion of financial assistance to defray a portion of the estimated \$500 million capital cost for the projected facilities, would allow for design and construction efforts to begin in 2008. Seawater is the only alternative water supply that is essentially unlimited and should be utilized for our future needs.