

Water Conservation/ Water Reuse/ Desalination

BACKGROUND

Water is precious and essential for sustaining life – both human and aquatic – and for growing and sustaining the economy of Texas as well as other areas of the United States.

Meeting Texas' water needs, as established in the 2007 State Water Plan (Water for Texas) is going to involve advancing a variety of water management strategies. These strategies include traditional approaches, such as reservoirs and water transportation infrastructure systems, as well as emerging sustainable water management strategies. The emerging sustainable strategies can be characterized as being "green" as they involve processes that ensure we are being good stewards of our water resources. The timely implementation of these strategies to meet Texas' water needs is certainly consistent with the objectives of the economic stimulus initiative which seeks to create jobs and advance science and technology in a manner that creates long term benefits.



◆ **SUPPORT:** Streamlining of federal programs and increased federal funding for research, development, and implementation of innovative and sustainable methods of enhancing water supplies, including reuse, conservation and desalination.

◆ **SUPPORT:** Additional funding and broadening of the Bureau of Reclamation's Title XVI Program and agricultural water conservation projects.



◆ **SUPPORT:** Additional funding for the Environmental Protection Agency's Research Grant Program, State Revolving Funds program, and the Alliance for Water Efficiency.

◆ **SUPPORT:** Full funding of the USGS Cooperation Water Program (CWP) to gather quantity and quality data critical to the development of science and technology essential for a successful water reuse program.



◆ **SUPPORT:** The SECURE Water Act (S.2156) as a model innovative and comprehensive approach to sustainable water management.

◆ **SUPPORT:** Capital funding for developing new drought-proof water supplies through seawater, brackish groundwater, and brackish surface water desalination, including research on desalination technologies.

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REUSE

Water reuse in Texas is one of the most significant water management strategies, and is anticipated to provide an additional 1,300,000 acre-feet/year of water to meet the state's water needs between now and the year 2060. The key challenges for implementing projects to provide this quantity of water include: public education, science and technology, and funding. The 2007 Texas Water Plan indicates that it will cost about \$4 billion dollars to implement the targeted amount of reuse water. Of major value to advancing water reuse in Texas and other areas of the United States is providing funding support to the U.S. Bureau of Reclamation's Title XVI Program, the U.S. Environmental Protection Agency's Research Grant Program and State Revolving Fund Program, and the U.S. Geological Survey program to gather water quantity and quality data. Water reuse is recognized as a water management strategy that involves practicing water conservation, and its use represents being a good steward of our water resources.

CONSERVATION

Water conservation in Texas is also a major water management strategy, and is anticipated to achieve about 2 million acre-feet/year of water savings in 2060. Increased funding of EPA's Water Sense Program, Alliance for Water Efficiency, and State Revolving Funds is needed to accelerate efforts to reduce water demand as a resource management strategy. The BOR special project funding for agricultural water conservation efforts is needed to free up water to help meet future demands in the state. In addition, the Texas Agriculture Water Conservation Demonstration Initiative of the Farm Security and Rural Investment Act of 2007 provides the Texas Water Development Board with funds to give farmers and ranchers the tools to reach peak efficiencies in on-farm water conservation. Similarly, continued support is needed for the USDA's Environmental Quality Incentives Program, which provides incentives for water quality and water conservation projects.

DESALINATION

The 2007 Texas Water Plan indicates that desalination is anticipated to provide 300,000 acre-feet/year of new water supply by 2060. The current updating of the Texas Water Plan shows desalination of brackish surface water, brackish groundwater, and seawater are receiving further consideration. It is anticipated that the updated plan will significantly increase the quantities of water that will be provided by desalination. Additionally, efforts are being pursued to manage saline water sources, which are adding salt to Texas' fresh waterbodies. Achieving effective saline water management to protect and enhance fresh water supplies will also significantly enhance our ability to meet the state's water needs. Reaching our goals of providing water by desalination and saline water management practices requires federal funding for research on desalination, concentrated brine disposal, and for implementation of desalination projects. Of particular value to advancing desalination would be support for H.R. 3452.

