

# Water Reuse in Texas



DESIGN OF DISTRIBUTED NET-ZERO WATER SYSTEMS  
UNIVERSITY OF MIAMI  
MAY 29, 2014

**Texas Water**   
**Development Board**

# Disclaimer

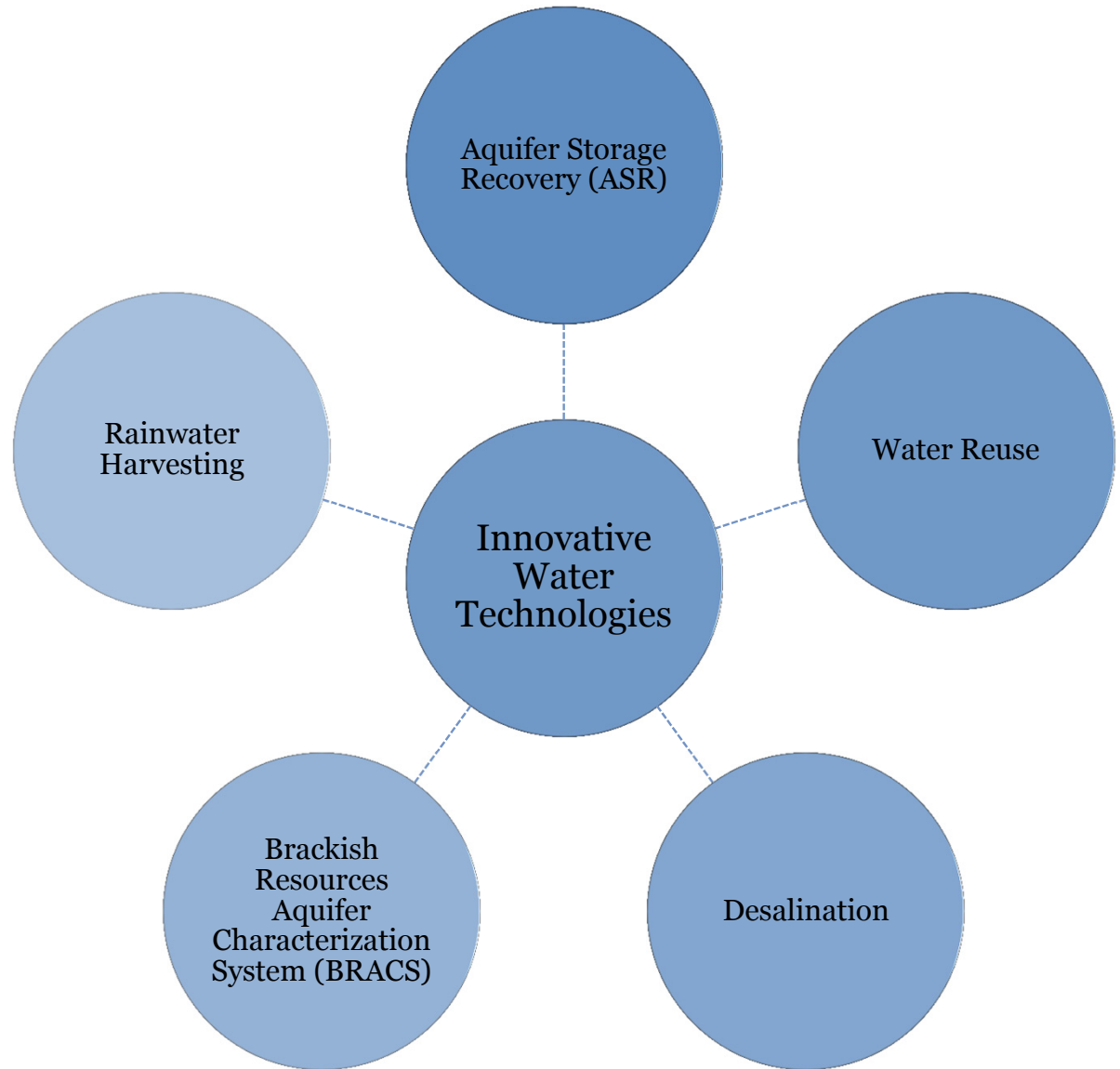


The statements contained in this presentation are my current views and opinions and are not intended to reflect the positions of, or information from, the Texas Water Development Board, nor is it an indication of any official policy position of the Board.



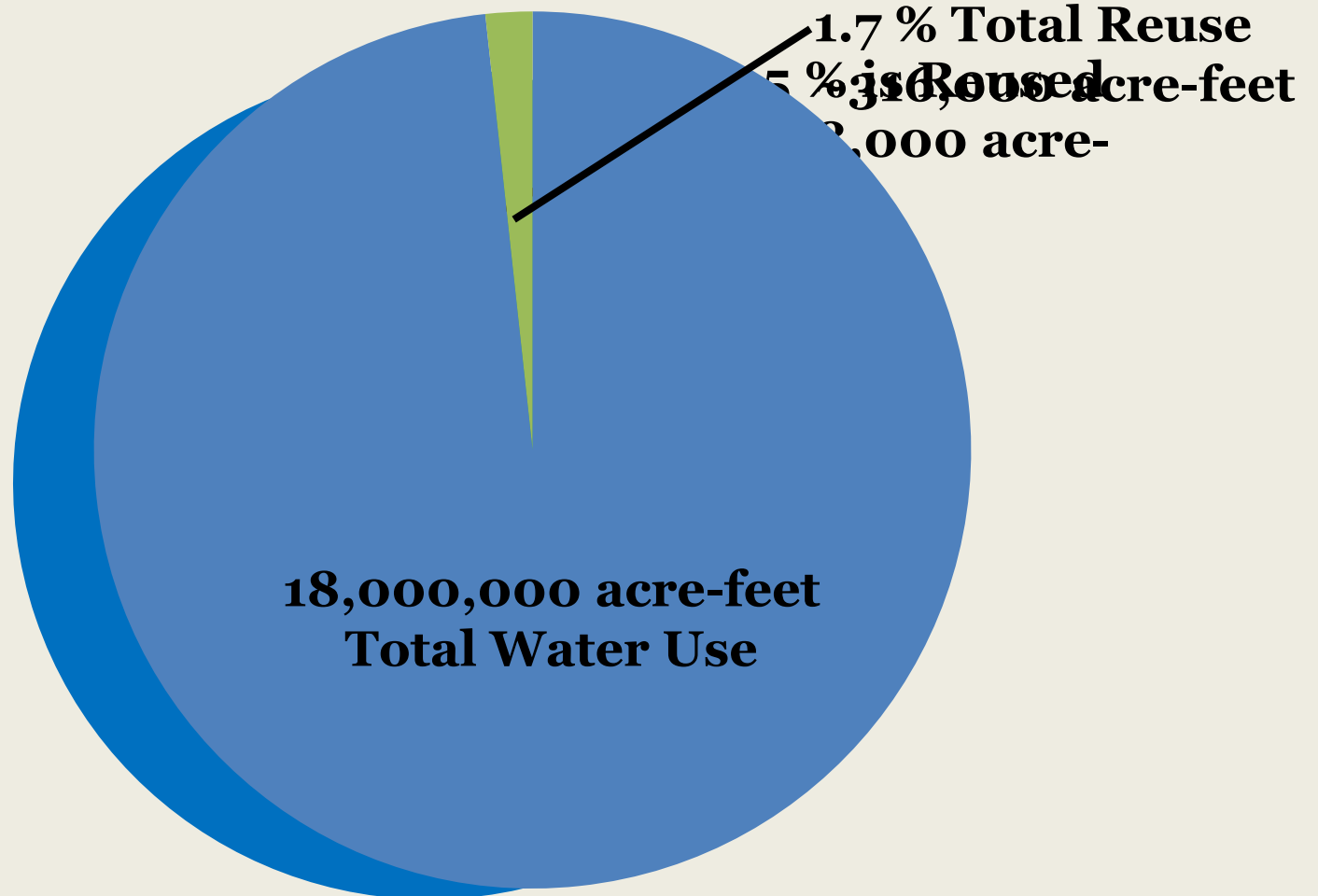
## Mission

*To research, develop, and disseminate information to advance the development of innovative water management strategies in Texas*

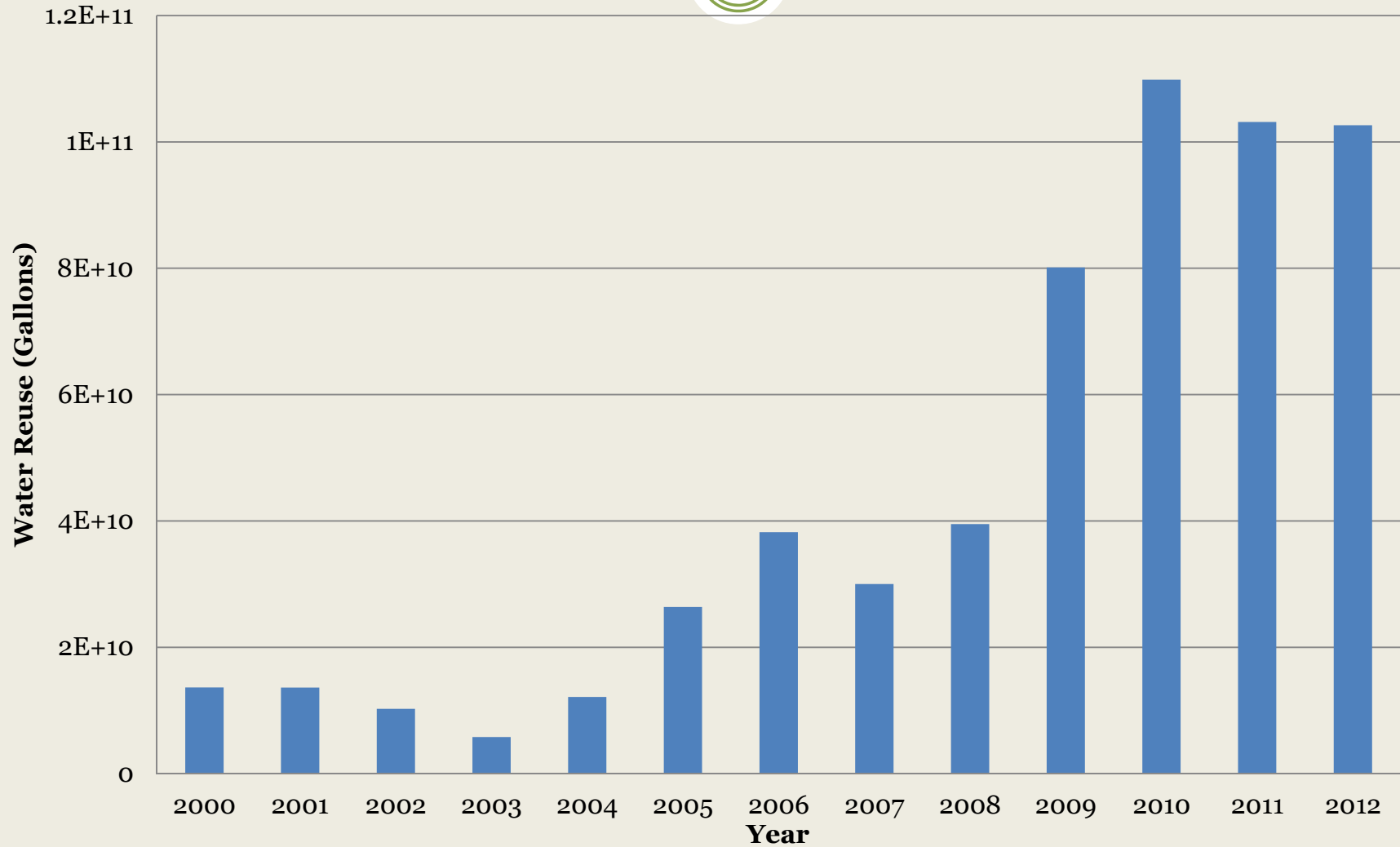




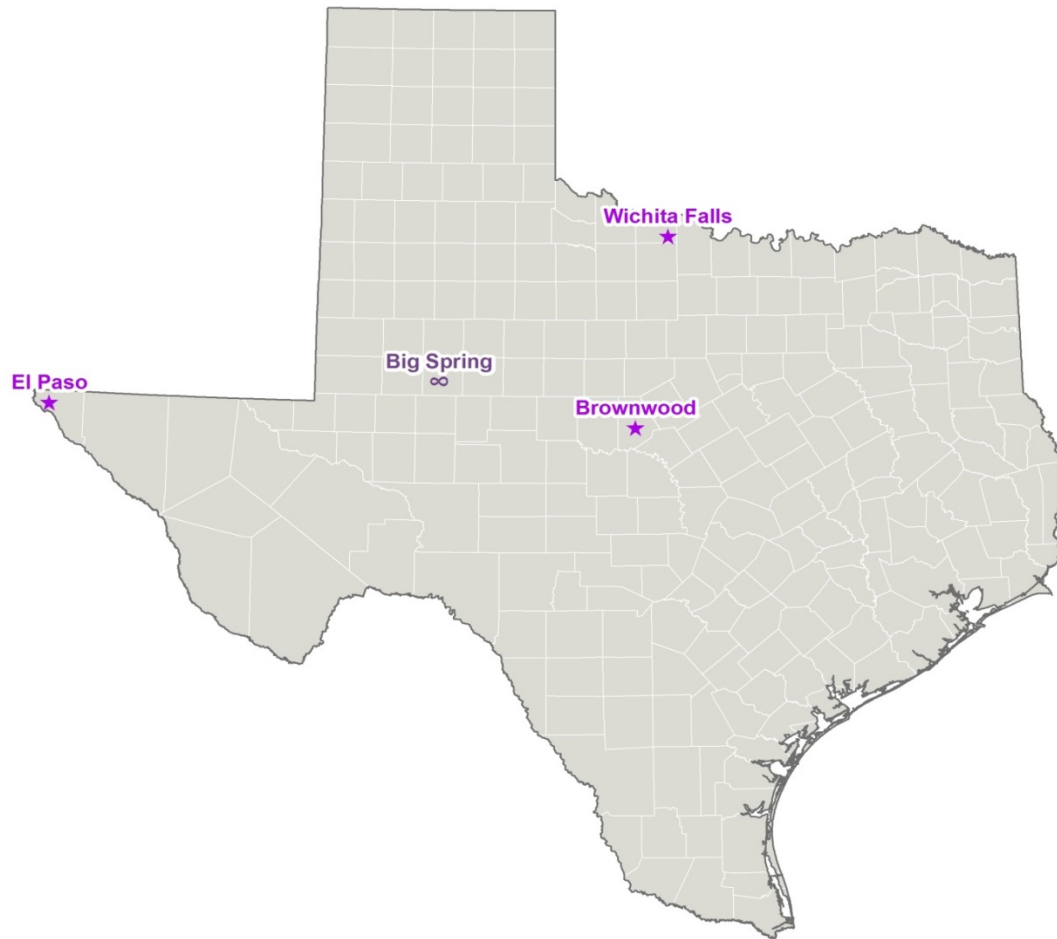
# Reported Water Consumption



# History of Water Reuse



# Direct Potable Water Reuse Existing and Proposed Facilities



# Proposed Facilities



- Wichita Falls
  - TCEQ requested additional 30 day verification testing
- Brownwood
  - Waiting for City council approval
- El Paso
  - In conceptual stage and rapidly advancing to design phase

# Water Reuse Research Projects



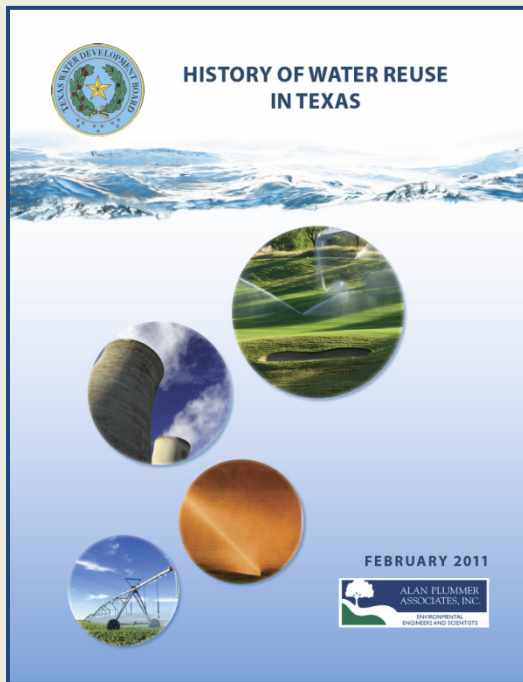
<b>Projects</b>	<b>Status</b>	<b>Completion Date</b>	<b>TWDB Funding Amount</b>
Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards	Ongoing	-	\$300,000
Evaluating the Potential for Direct Potable Reuse in Texas	Ongoing	-	\$100,000
Advancing Water Reuse in Texas	Complete	2011	\$224,498
Stormwater Harvesting in Texas	Complete	2010	\$99,670
Developing a baseline GIS Database and Tools to Identify Water Reuse Potential in Texas	Complete	2008	\$70,000
Ship Channel Wastewater Reclamation and Reuse Feasibility Study	Complete	2005	\$360,827
Recycled Water Implementation Plan - Dallas Water Utilites	Complete	2005	\$348,634
WRMWD Water Reuse and Conservation Study	Complete	2004	\$90,000
McCallen-Edinbury Reuse Feasibility Study	Complete	1997	\$63,750
Lakeway Area Reclaimed Water Regional Use Utility Feasibility Study	Complete	1995	\$30,000
Northshore Regional Wastewater Reuse Water Supply and Flood Control Planning Study	Complete	1994	\$111,500
Wastewater Reuse Feasibility Project -City of Sweetwater	Complete	1993	\$32,000
Feasibility Study for the Implementation of a Water Reuse Project in Fairfield Village	Complete	1991	\$30,000
Water Reclamation Research Project - City of Abilene	Complete	1988	\$173,881
<b>Total</b>			<b>\$2,034,760</b>



# Water Reuse Reports



## History of Water Reuse in Texas



## State of Technology of Water Reuse



## Water Reuse Research Agenda



# Evaluating the Potential for Direct Potable Reuse



- Contaminants of Concern
- Source control
- Treatment technologies
- Environmental buffers
- Sample pilot protocols
- Regulatory summary
- Public awareness and outreach



# Testing Water Quality in a Municipal Wastewater Effluent Treated to Drinking Water Standards



<b>Budget Items</b>	<b>TWDB Funds</b>
Construction	\$10,253,700
Engineering	\$912,500
Special Services	\$546,100
Fiscal Services	\$138,000
Other	\$119,700
Total	\$11,970,000

