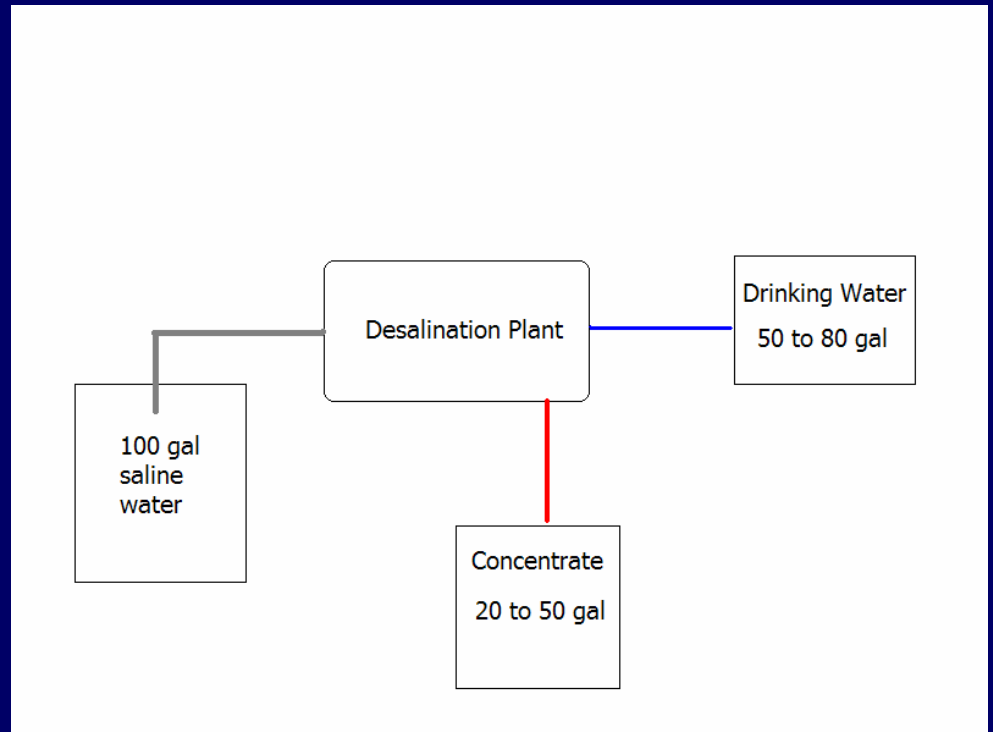
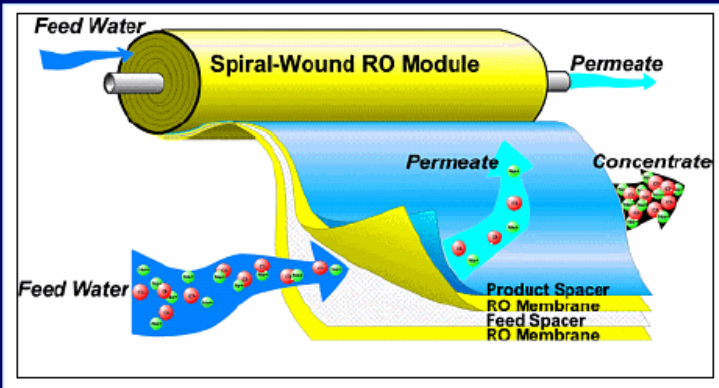



Creating "New" Water: Exploring the Options

E. G. Rod Pittman
Chairman
Texas Water Development Board

The mechanics of desalination

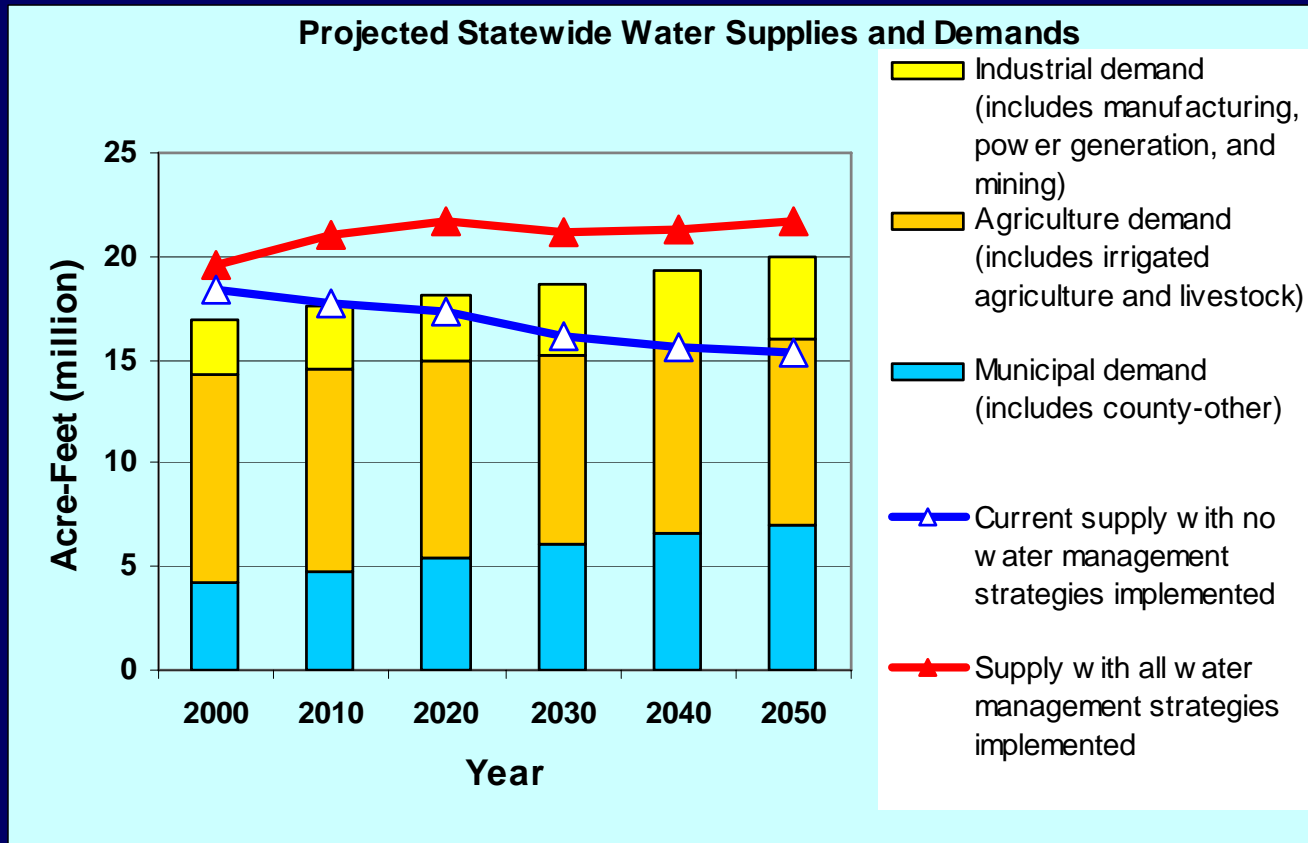




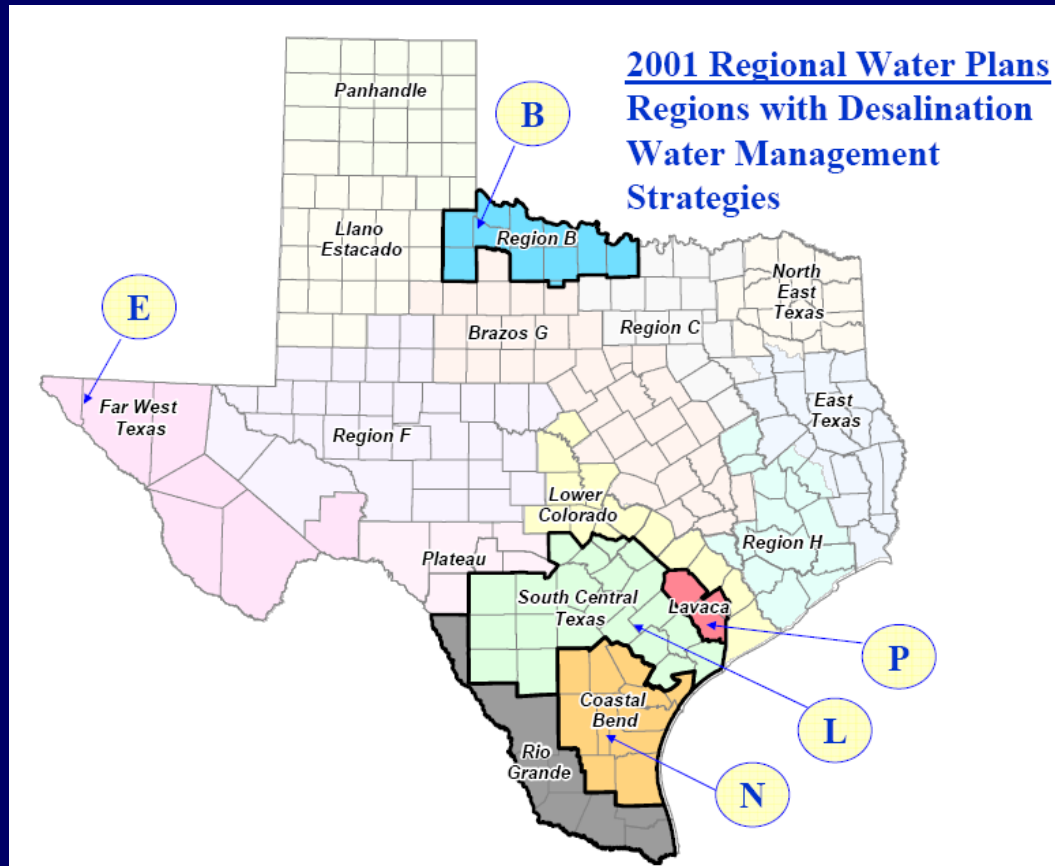
Desalination in Texas

- Why desalination?
 - Availability
 - Technology improvements
 - Why now?
 - Develop the supply before it is critically needed
 - Drought-proofing regional water supply systems
-

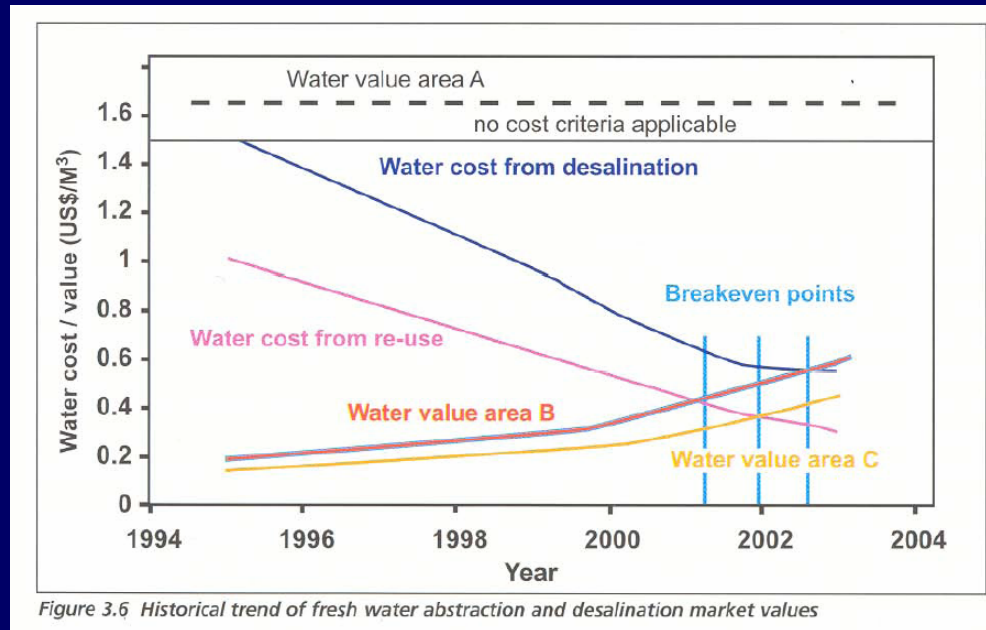
Water For Texas - 2002



2001 Regional Water Plans



The Economic of Desalination



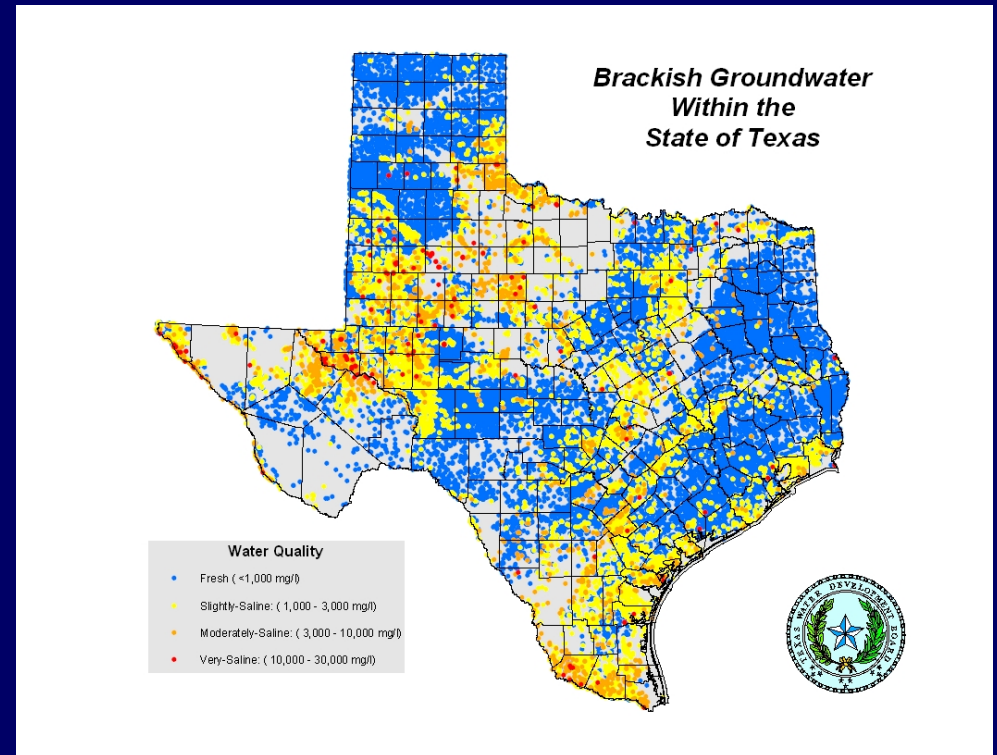
C. Sommariva-Desalination Management and Economics

“It has been estimated that for the same capital investment spent on seawater reverse-osmosis desalination in 1980, 27 times more water can be produced by today’s systems.”

Tom Pankratz-Desalination Trends-2004 TWDB Desalination Report, Vol. 2

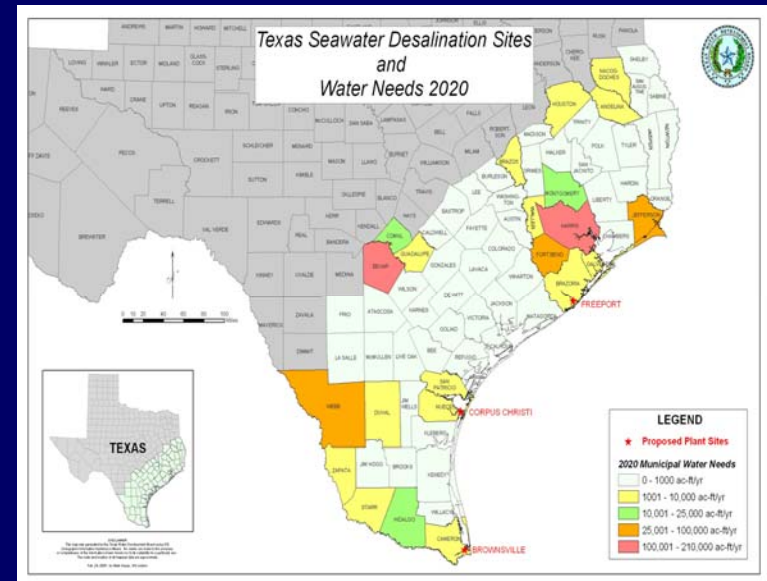
Availability-brackish groundwater

- As much as 2.7 billion acre-feet
- Salinity below 10,000 milligrams per liter



Seawater Availability-Gulf of Mexico

- 367 miles of coastline
- Availability of sites
- Proximity to demand centers





Press Release - April 29, 2002
OFFICE OF THE GOVERNOR

SAN ANTONIO - Gov. Rick Perry today called for the **construction of the state's first large-scale ocean water desalination plant** as one step toward securing an abundant water supply to meet Texas' future needs.....



78th Texas Legislature

- HB 1370, directing TWDB to:
 - “undertake or participate in research, feasibility and facility planning studies, investigations, and surveys as it considers *necessary to further the development of cost-effective water supplies from seawater desalination* in the state.”
-



Progress to-date

- Seawater Desalination Projects- Feasibility Studies

 - Research Studies and Projects
 - Please Pass the Salt
 - Feasibility Study of Product Water Desalination
 - Development of Permitting and Decision Model for Desalination Projects in Texas
 - Capacitive Deionization Technology
-



Other activities

□ Stakeholder Workshops

- Use of Public-Private Partnerships for Water Infrastructure Seminar
 - Desalination Workshops to discuss progress reports and technology updates
-



2004 Biennial Report on Desalination

□ The Future of Desalination in Texas

- Volume 1- Biennial Report on Seawater Desalination, recommends that:
 - Continue advancing toward implementation of a large-scale demonstration seawater desalination facility in Texas
 - Fund pilot plants at each of the 3 proposed sites
 - Volume 2 – Technical Papers, Case Studies and Desalination Technology Resources
-



2004 Biennial Report on Desalination

Regarding the use of brackish groundwater

- TWDB Legislative Appropriations
Request includes \$600,000 for
developing demonstration brackish
desalination projects for small to medium
size communities
-



<http://www.twdb.state.tx.us/Desalination/Desal/Index.asp>