Texas Water Development Board
Critical Missions

- Water Data
- Water Planning
- Project Financing
  - Water Supply
  - Water Infrastructure
  - Wastewater
Why Regional Water Planning in Texas?

- Statewide drought of 1995-1996
- Sixth drought in the last 50 years in Texas
- Illustrate State’s vulnerability to major drought
- Over 300 Texas community water supply systems were threatened due to drought.
Why Regional Water Planning in Texas?

- Six State Water Plans developed by TWDB from 1957-1997
- Recognition, that, due to absence of local participation and thus, local support for previous State Water Plans, there was a very limited level of implementation.
Why Regional Water Planning in Texas?

- In 1997, the Texas Legislature passed Senate Bill 1, probably the most significant water legislation in Texas history.
- A major element of Senate Bill 1 was the change in water planning process from a top-down effort to a bottom-up, regional water planning process.
Implementation of Senate Bill 1
The Three R’s

- Regions
- Representatives
- Rules
16 Planning Regions
Eleven Interest Groups
Criteria for Selecting Representatives:

- Support from represented interests in the region
- Willingness of the individual to serve
- Water knowledge
- Regional water planning experience
- Commitment to water planning process
- Broad geographic representation within the region
Membership Statistics

- 5,069 nominations received with 1,748 individuals nominated
- 316 (voting) + 166 (non-voting) = 482 (total) for 1st round
Regional Planning Process

- 50-year planning period
- Project population and water demand
- Existing supply
- Evaluate need for additional water
- Recommend strategies
Incentives

A proposed project must address a need in a manner that is consistent with an approved Regional Water Plan to be considered for:

- TWDB funding
- TCEQ Surface Water Right Permit
Statewide Projected Population Growth

 Millions of Texans

- 2000: 20.8
- 2010: 24.9
- 2020: 29.1
- 2030: 33.1
- 2040: 36.9
- 2050: 41.1
- 2060: 45.6
Projected Demand

Demand for water (millions of acre-feet)

- 2000: 17.0
- 2010: 18.3
- 2020: 19.0
- 2030: 19.6
- 2040: 20.1
- 2050: 20.8
- 2060: 21.6
Strategies: Process

- Regions identified **4,500 strategies**.
- Evaluated strategies based on:
  - Water quantity and reliability
  - Financial Costs
  - Impacts to environment and agriculture
  - Impacts to water quality
  - Other factors such as regulatory requirements, time required to implement, etc.
Water Volume from Recommended Water Management Strategies

<table>
<thead>
<tr>
<th>Year</th>
<th>New Supplies (millions of acre-feet)</th>
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<tbody>
<tr>
<td>2010</td>
<td>3.5</td>
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<tr>
<td>2020</td>
<td>5.0</td>
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<td>2050</td>
<td>8.0</td>
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<tr>
<td>2060</td>
<td>8.9</td>
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Recommended Major and Minor Reservoirs

Major and minor reservoirs recommended in the regional water plans to meet needs:
- Recommended major reservoir
- Recommended minor reservoir
Costs

Total capital costs: $30.7 billion
Costs of Not Implementing Plan

- Businesses and workers: 9.1 billion in 2010 and $98.4 billion in 2060
- Lost local and state taxes: $466 million in 2010 and $5.4 billion in 2060
- About 80% of the state’s population will not have enough water by 2060 in drought of record
TWDB Policy Recommendations to the Legislature
Positive Outcomes of the Regional Planning Process

- Active and consistent Planning Group member participation during the process.

- Several examples of interregional and intraregional cooperation and coordination, as well as environmental and development interests that have not had a history of working together.
Positive Outcomes of the Regional Planning Process

- Significant increase in public knowledge and understanding of water resources issues
- Some Water Management Strategies are already beginning (or progressing to) implementation.
Lessons Learned
“The State’s Perspectives”

- Decentralization of planning process requires more effort and resources
- Need for strong statutory guidance to be used throughout the planning process
- Need to establish firm but adequate timelines for completing regional plans
Lessons Learned

“The State’s Perspective”

- Need for strong, detailed, administrative guidance in order to allow for evaluation of inter-regional conflicts and to roll up Regional Water Plans into State Water Plans.

- First round of planning required significant education of Planning Groups – Water Planning 101.

- Second round of planning was much better than the first … now the challenge is implementation.