

State Water Planning: We Get By with a Little Help from our Lonestar Friends

June 28, 2018

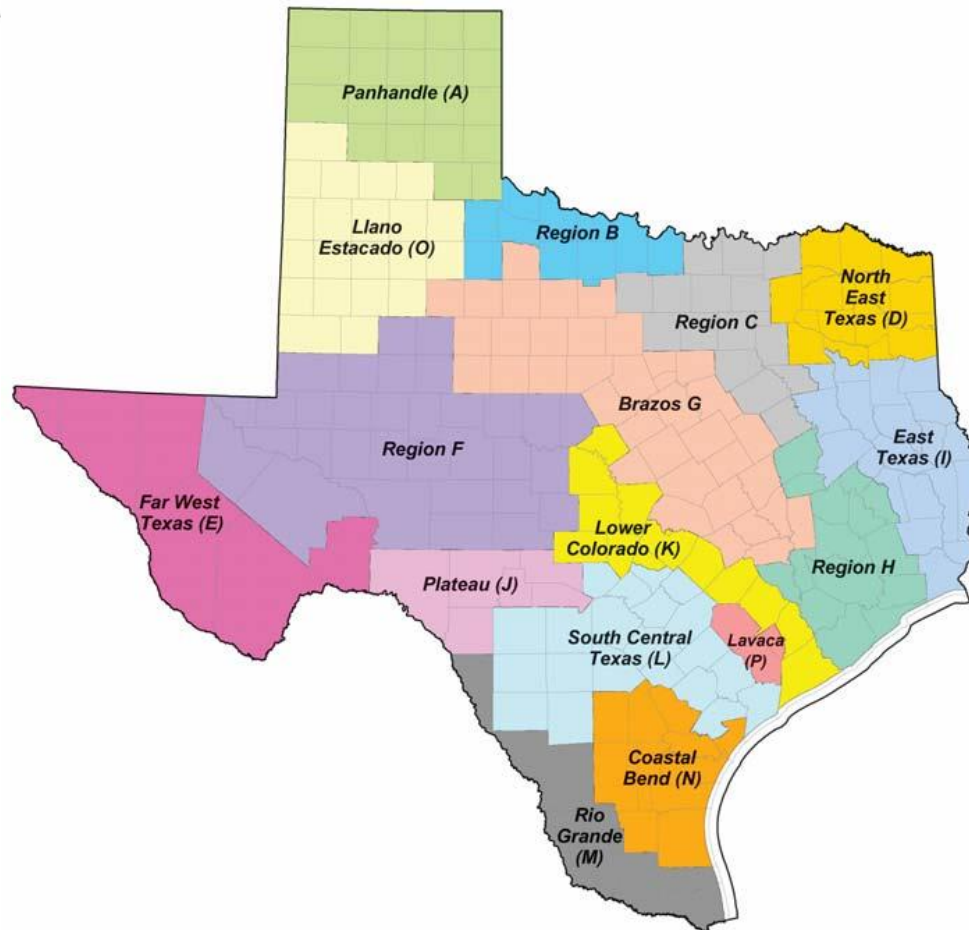


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Texas Water Planning: Legislative Response to Drought

- History
 - 1950-1957 Drought of Record
 - 1957: Creation of the Texas Water Development Board (TWDB) through the water planning act of 1957
 - 1997 SB 1 established a new water planning process based in a “bottom-up” consensus-driven approach
- Meet drought of record water needs
- 50 year planning horizon, 5-year planning cycle
- 6 water use categories which are planned for: municipal, manufacturing, irrigation, steam electric power generation, mining, and livestock

16 Regional Water Planning Areas



Required Voting Members

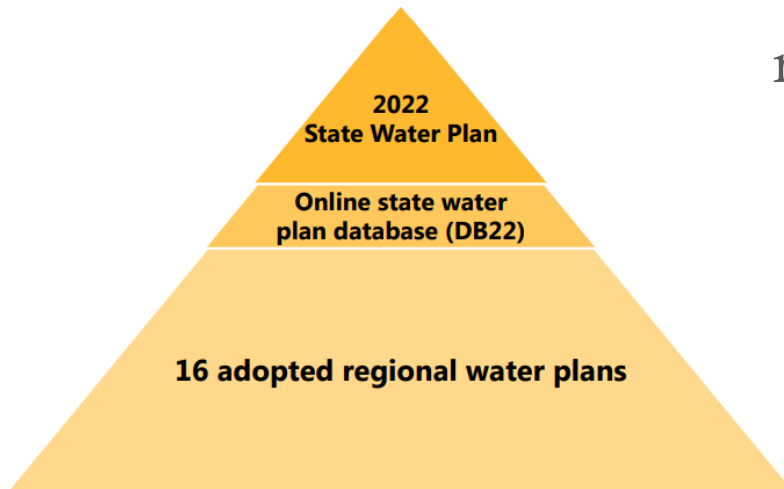
- Public
- Counties
- Municipalities
- Industry
- Agriculture
- Environment
- Small Business
- Electric-generating utilities
- River authorities
- Water Districts
- Water Utilities
- Groundwater Mgmt. Areas

Non-Voting Members

- Staff member of the Texas Water Development Board
- Staff member of the Texas Parks and Wildlife Department
- Staff member of the Texas Department of Agriculture
- Staff member of the State Soil & Water Conservation Board
- Liaison from each adjacent RWPG
- Representatives of entities located in another RWPA which holds surface water rights to 1000+ AF, supplies 1000+ AF to the region, or receives 1000+ AF from the region

Bottom-up Approach

Bottom Up Approach



This bottom-up process was set up to encourage involvement by those directly responsible for providing water and affected by water supply.

This process has resulted in greater public participation, public education, and public awareness, underscoring the benefits of directly involving the local and regional decision makers as well as the public in the water planning process.

Key Responsibilities of Planning Group Members

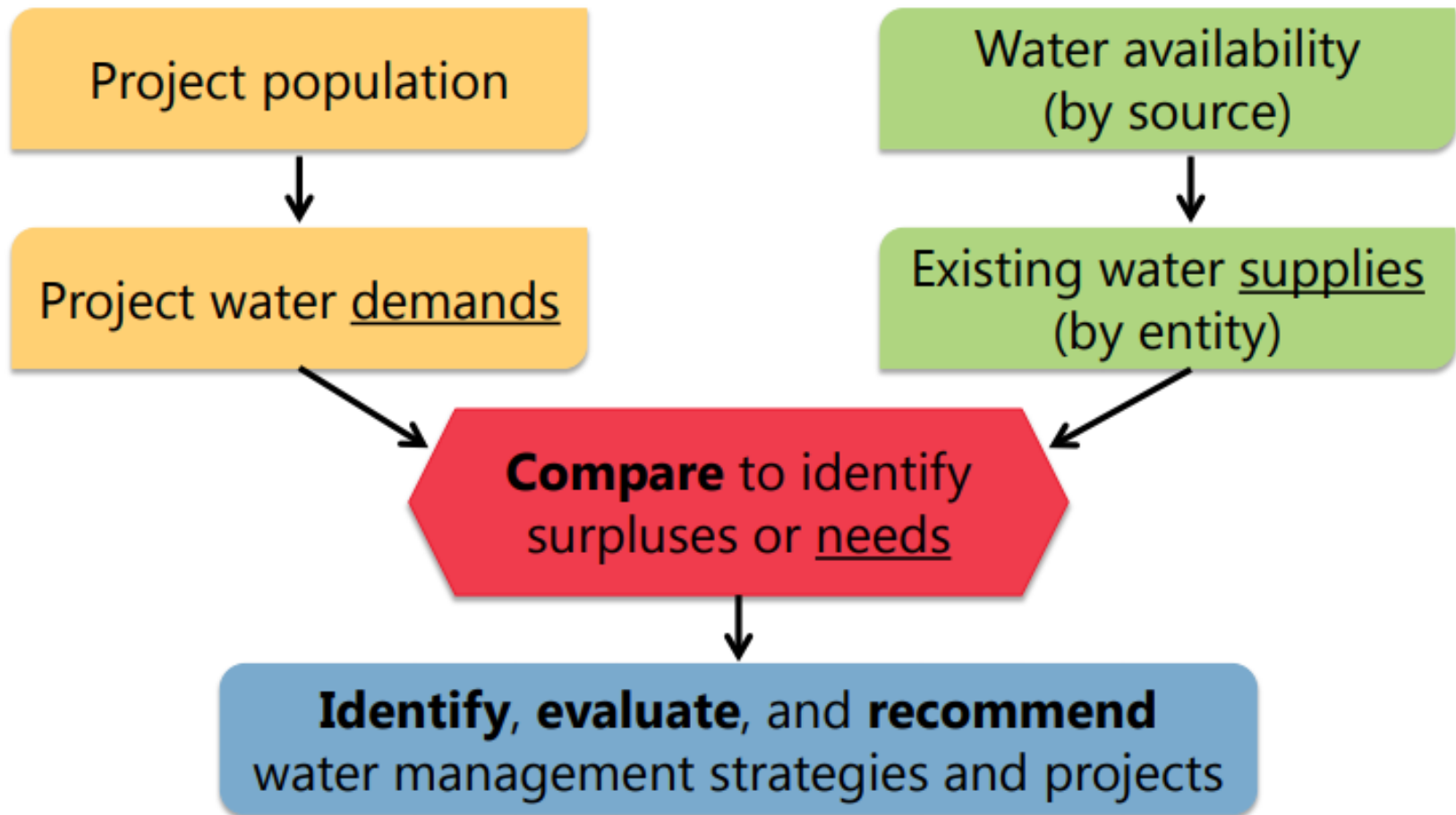
- 💧 Represent interest category and region
- 💧 Develop a plan that serves region and state
- 💧 Consider local water plans
- 💧 Ensure adoption of a regional water plan by the statutory deadline that meets all requirements

*RWPGs are not regulatory entities and the information and policy recommendations presented in plans are not enforceable by the WRPGs

Water User Groups in the 2016 Regional Water Plans

Demand Category	Number of WUGs
<i>Municipal WUGs</i>	
Cities & Utilities	1,364
County-Other	254
<i>Non-municipal WUGs</i>	
Manufacturing	183
Mining	228
Steam-Electric Power	85
Irrigation	241
Livestock	254
Total number of WUGs	2,609

Water Planning Basics



How is the planning process funded?



Regional Water Planning Considerations

- 1. Water conservation plans**
- 2. Drought management and drought contingency plans**
- 3. Information compiled by the TWDB from water loss audits performed by retail public utilities**
- 4. Publicly available plans for major agricultural, municipal, manufacturing and commercial water users**
- 5. Local and regional water management plans.**
- 6. Water availability requirements promulgated by a county commissioners court**
- 7. The Texas Clean Rivers Program**
- 8. The U.S. Clean Water Act**
- 9. Water management plans.**
- 10. Other planning goals including, but not limited to, regionalization of water and wastewater services where appropriate**
- 11. Approved groundwater conservation district management plans and other plans submitted under Texas Water Code § 16.054 (relating to Local Water Planning).**
- 12. Approved groundwater regulatory plans**
- 13. Potential impacts on public health, safety, or welfare**
- 14. Any other information available from existing local or regional water planning studies**
- 15. Input from the public prior to and during the regional water planning process**

Regional Water Plan Content and Deliverables

2016 Regional Water Plan

Prepared by:

Region H Water Planning Group

With assistance from:

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TIPE Reg. No. F-2344

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11/13/2015

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Project Manager, Freese and Nichols, Inc



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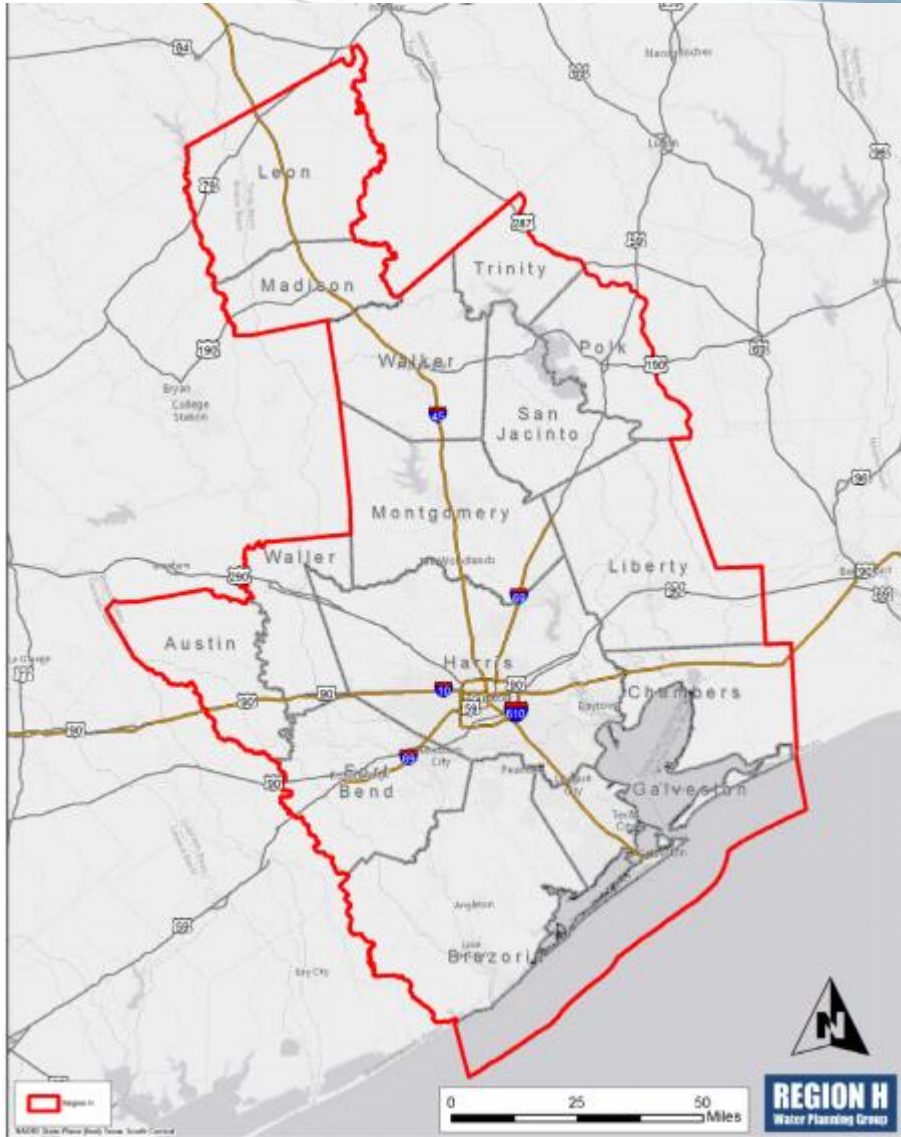
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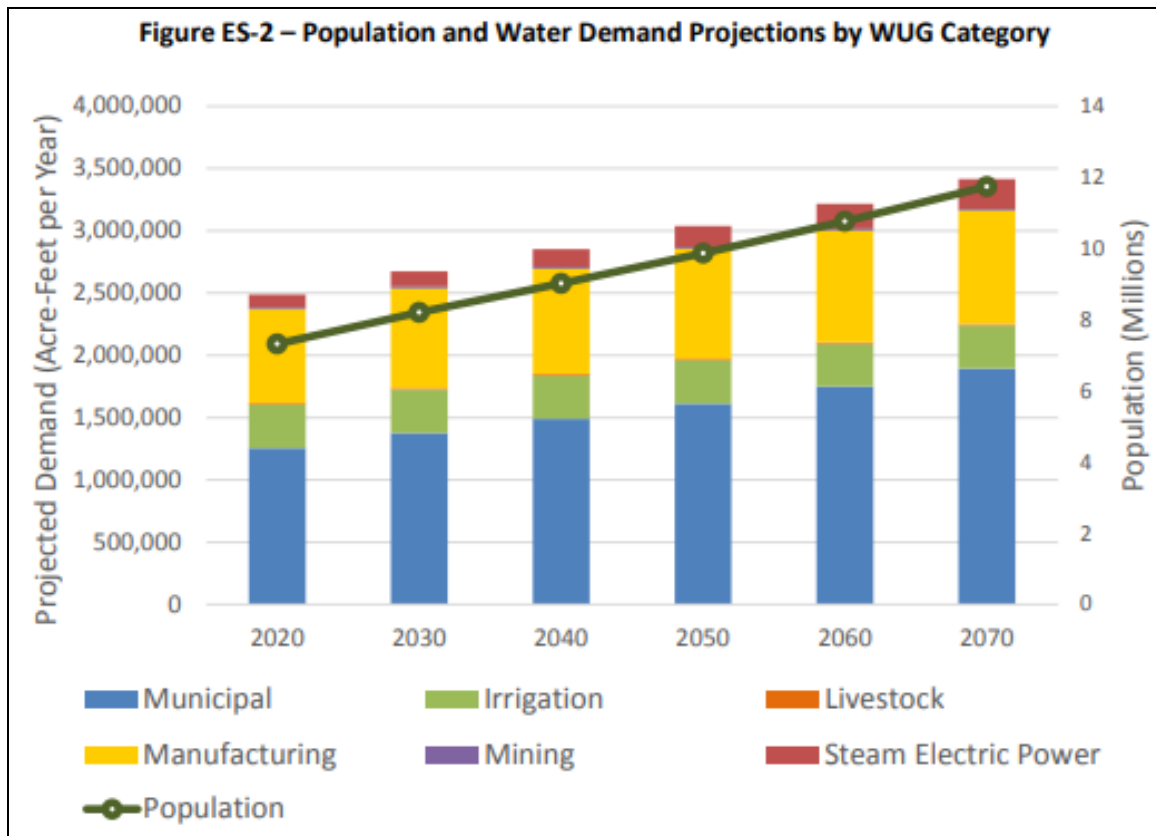
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November 2015

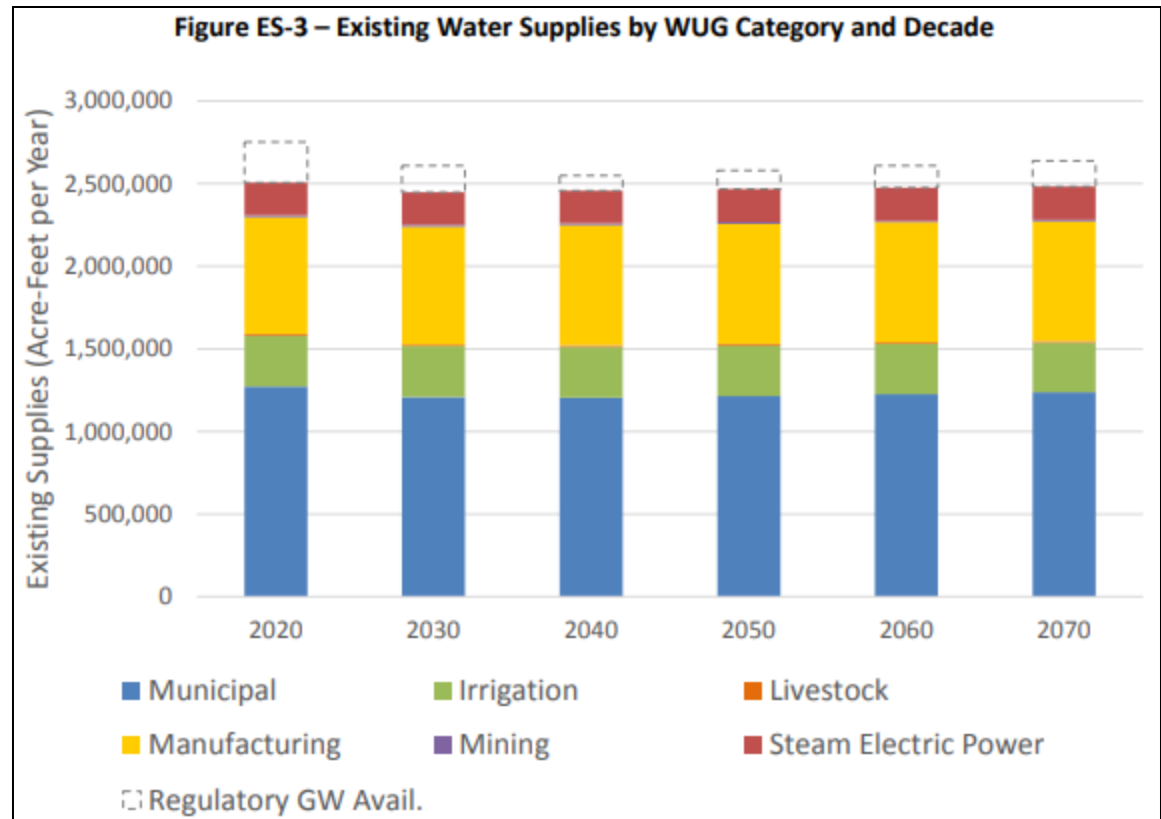


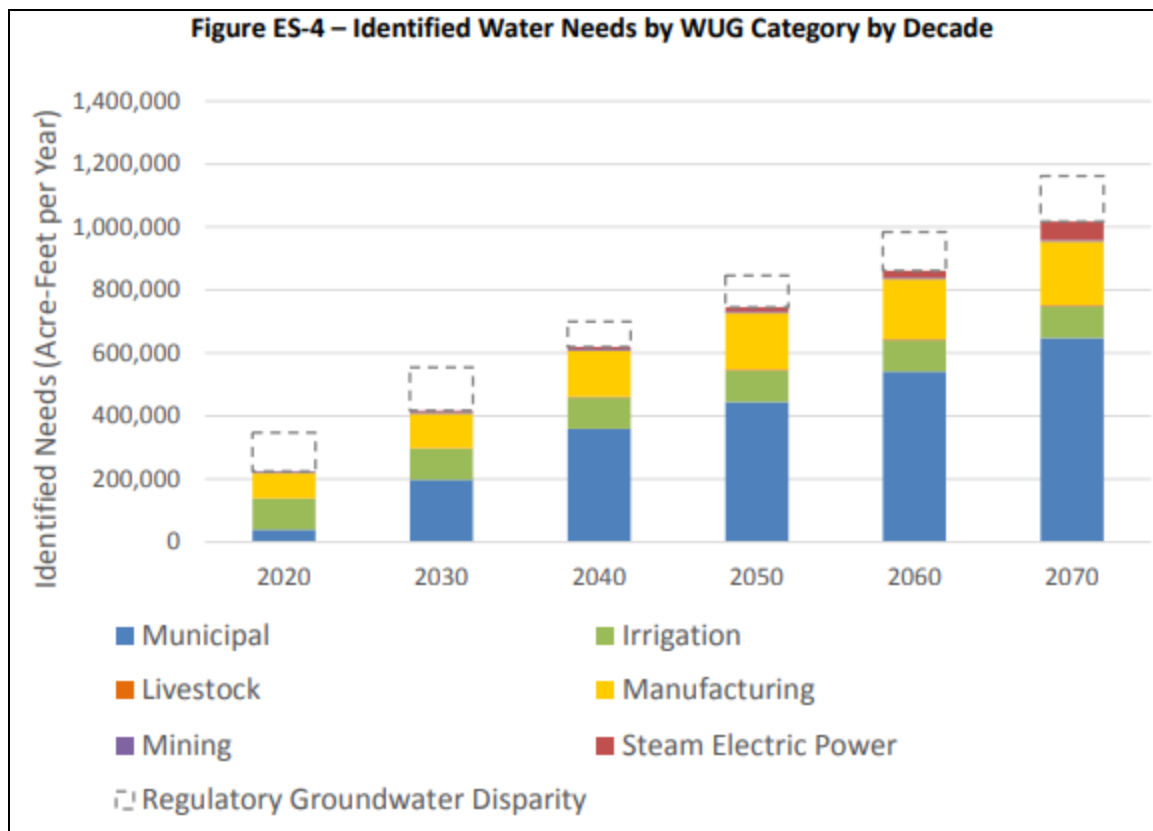
1. Description of the Regional Water Planning area



2. Projected population and water demands – quantification of projected pop. And water demand for all identified WUGs over a 50 year planning horizon

3. Water supply analysis- evaluation and quantification of existing water supplies and source availability





4. Identification of Water Needs- compare existing water supplies and projected water demands to identify supply needs*

***a need is a potential shortage where a water demand cannot be met with existing supplies**

**5. Water
Management
Strategies-
identification and
evaluation of
potential feasible
WMSs and
recommendations of
WMSs and WMSPs**

Groundwater Reduction Plans

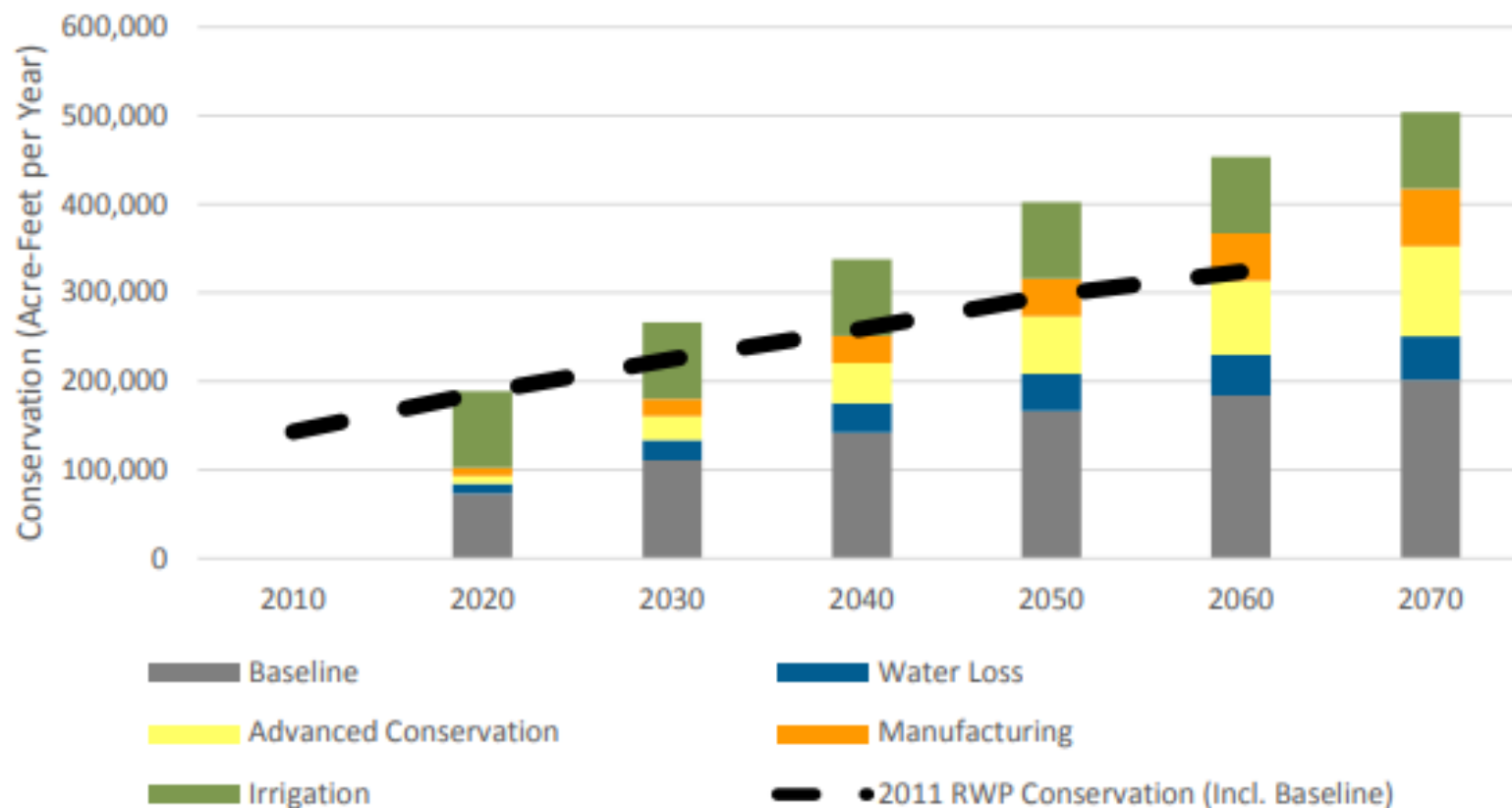
CHCRWA GRP
City of Houston GRP
City of Missouri City GRP
City of Richmond GRP
City of Rosenberg GRP
City of Sugar Land GRP
Fort Bend County MUD 25 GRP
Fort Bend County WC&ID No. 2 GRP
NFBWA GRP
NHCRWA GRP
Panorama Village and Shenandoah Joint GRP
Porter SUD Joint GRP
River Plantation and East Plantation Joint GRP
SJRA GRP
WHCRWA GRP

Reuse

City of Conroe Reuse
City of Houston Reuse
City of Pearland Reuse
GCWA Reclaimed Water from COH
Grand Lakes Reclaimed Water System

WMSs – including Conservation

Figure ES-6 – Total Region H 2016 RWP Conservation vs 2011 RWP



Wait, there's more

**6. Impacts of the Regional Water Plan-
evaluation of impacts of the RWP and
description of how the plan is consistent with
long-term protection of the state's water,
agriculture, and natural resources**

**7. Drought Response information, activities,
and recommendations**

Table ES-5 – Recommended Unique Stream Segments

Stream Segment	County
Armand Bayou	Harris
Austin Bayou	Brazoria
Bastrop Bayou	Brazoria
Big Creek	Fort Bend
Big Creek	San Jacinto
Cedar Creek Lake	Brazoria
Menard Creek	Liberty and Polk
Oyster Bayou	Chambers

8. Recommendations regarding any regulatory, administrative, or legislative changes relevant to the regional water planning process; recommendations regarding unique stream segments and unique reservoir sites

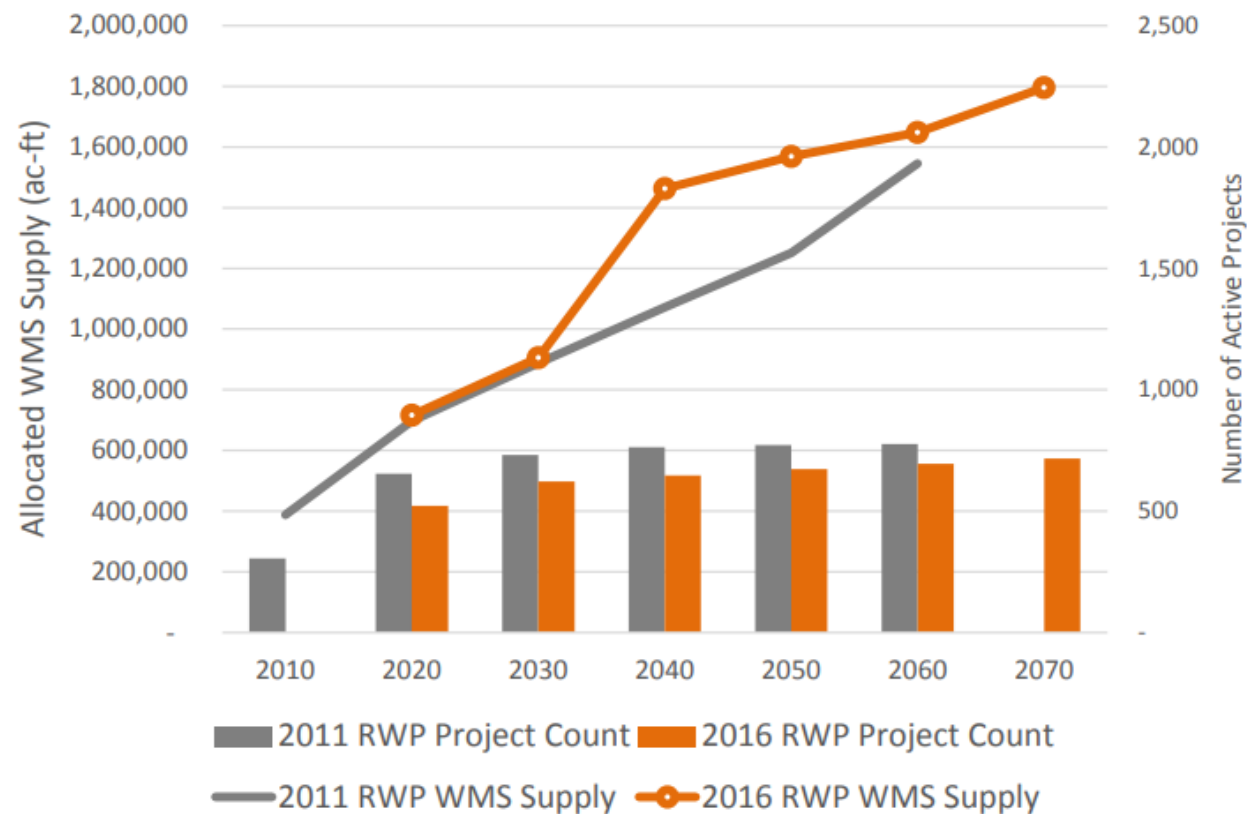
Getting closer

9. Infrastructure financing analysis (assessment of how sponsors of recommended WMSs propose to finance recommended WMSs and projects).

10. Public participation and plan adoption (adoption of the plan, ensuring the required level of public participation in this process, and submittal of the adopted plan to the TWDB for approval by the deadline disseminated by the TWDB).

11. Implementation and comparison to the previous RWP (status of implementation of the region's previously recommended WMSs and WMSPs and summary of how the RWP differs from the previously adopted RWP)

Figure ES-7 – WMS Supply and Active Projects by Decade



And finally...

12. Prioritization of the recommended WMSPs.



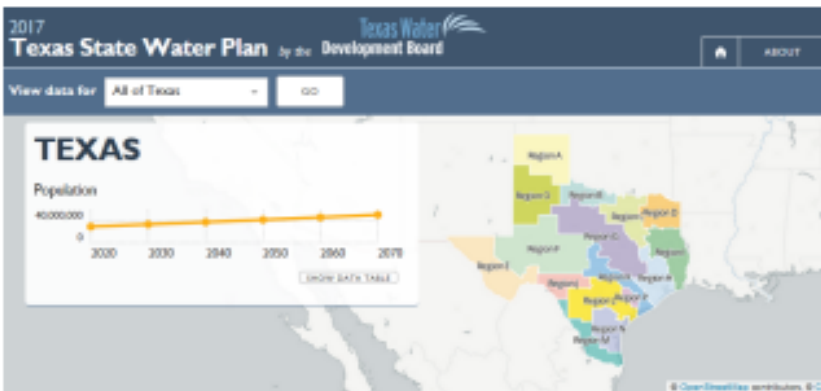
How is the environment considered?



How are conservation strategies promoted or funded by the TWDB?

The TWDB supports conservation efforts and will continue to make an effort to disseminate relevant conservation information to planning groups for their consideration. TWDB rules (31 TAC § 357.34(g)) **require that RWPGs consider water conservation practices, including best management practices, for each identified water need**. If water conservation strategies are not recommended to meet an identified need, the planning group shall document the reason in the regional water plan. RWPGs are required to meet the planning requirements in statute, rule, and by contract and, in doing so, the decision whether to recommend conservation strategies is the responsibility of the planning group.

The State Water Plan is Online and Interactive

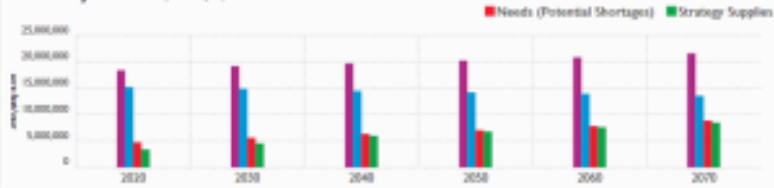


Development of the state water plan is central to the mission of the Texas Water Development Board. Based on 16 regional water plans, the plan addresses the needs of all water user groups in the state – municipal, irrigation, manufacturing, livestock, mining, and steam-electric power – during a repeat of the drought of record that the state suffered in the 1950s. The regional and state water plans consider a 50-year planning horizon: 2020 through 2070.

This website lets water users statewide take an up-close look at data in the 2017 State Water Plan and how water needs change over time by showing:

- projected water demands,
- existing water supplies,
- the relative severity and projected water needs (potential shortages),
- the water management strategies recommended to address potential shortages, and
- recommended capital projects and their sponsors.

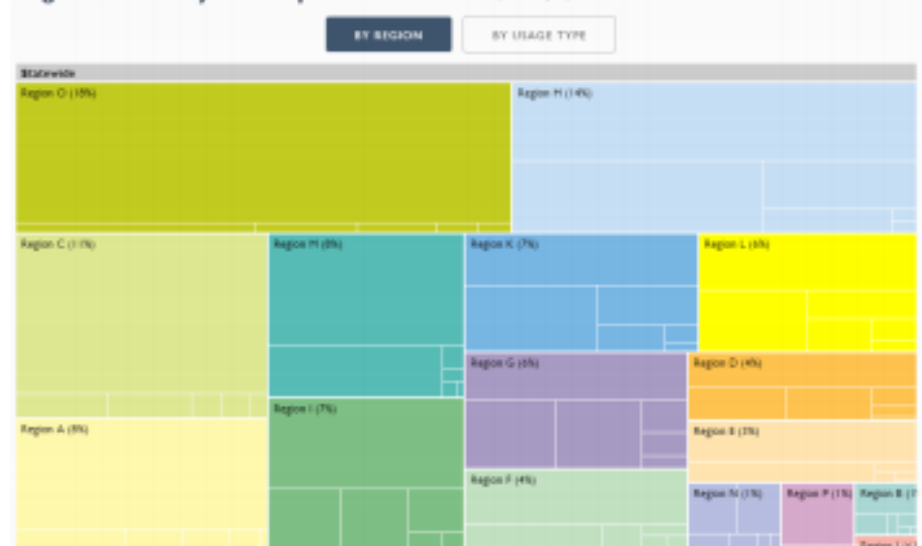
Totals by Decade (ac-ft/year)



Needs (Potential Shortages) by Usage Type (ac-ft/year)



Regional Summary Treemap - 2040 - Demands (ac-ft/year)



<http://texasstatewaterplan.org>

Questions



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