

Water Supply

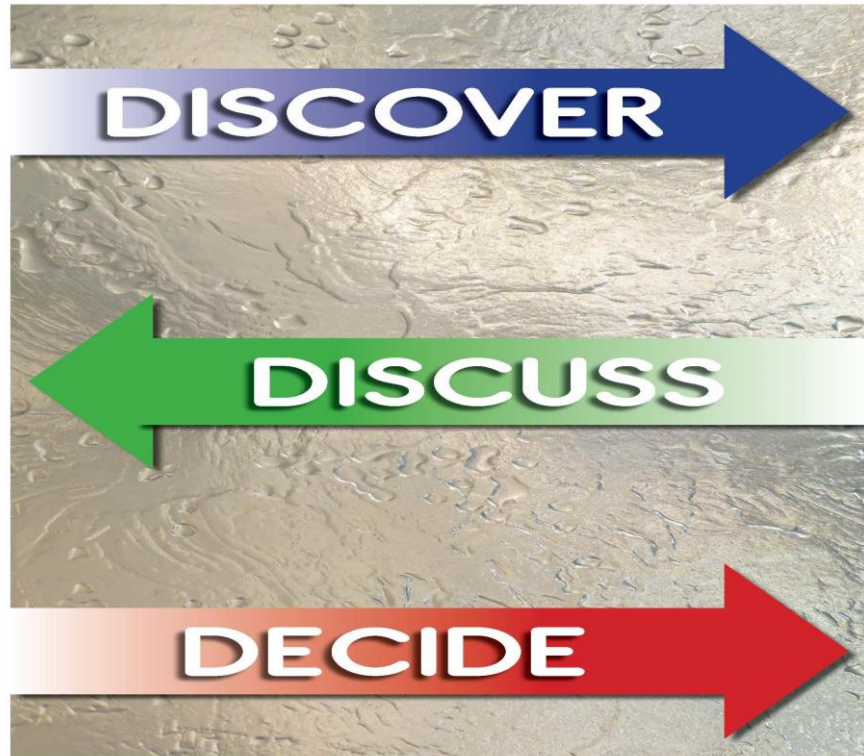
Discovery – Texas Water Planning



Council Presentation
May 10, 2016



Discover, Discuss, Decide





Presentation Schedule

Date	Topic
May 10, 2016	Discovery – Texas Water Planning
May 24, 2016	Discovery - Demands
June 14, 2016	Discussion - Demands Discovery - Current Supplies
June 28, 2016	Discovery - Future Supplies
July 12, 2016	Discussion- Future Supplies
July 26, 2016	Decide – Adopt Water Management Plan



Action on Resolution 030200

- Section 1: The Water Management Plan will integrate water management strategies of surface, reuse, conservation, aquifer storage, and desalination to sustain the economic prosperity of the Coastal Bend Region.

 - Section 2: That the Water Management Plan will include the following **strategic** elements:
 - A. Implementing conservation program;
 - B. Targeting the development of drought-resistant water reuse supplies;
 - C. Developing local and regional industry desalination water supplies;
 - D. Working towards improved environmental flows regime; and
 - E. Adding new water every 5 to 10 years
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Action on Resolution 030200

- Section 3: That the Water Management Plan will include the following **future** elements:
 - A. Extend supply and reduce demand;
 - B. Amend UDC for residential landscaping using drought tolerant criteria;
 - C. Implement line loss and leak detection program;
 - D. Evaluate wastewater treatment consolidation plan;
 - E. Complete Water Supply Strategic Plan;
 - F. Plan industrial desalination facility construction;
 - G. Completion of Variable Salinity Desalination Pilot Project;
 - H. Lessen utility rate spikes.

 - Section 4: That the Water Management Plan will be developed and presented to City Council for review and adoption. Upon adoption of the plan, staff will implement the Water Supply Strategic Plan in a deliberate and phased manner to insure a reliable, diverse and sustainable water supply for the Coastal Bend Region.
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State Water Plan

- 1957 – Texas Water Development Board Created
- State Water Plan Shall:
 - Provide for orderly development, management and conservation of water resources.
 - Preparation for and response to drought conditions
- 1997 – Senate Bill 1 mandated Regional Planning Process
 - State Water Plan will incorporate the Regional Water Plans



Basic Planning Parameters

- Develop Water Supply plan to meet:
 - Drought of Record needs
 - 50-year planning horizon
 - 5-year planning cycle
 - Categories of water use
 - Municipal
 - Manufacturing
 - Irrigation
 - Mining
 - Livestock
 - Steam-electric power

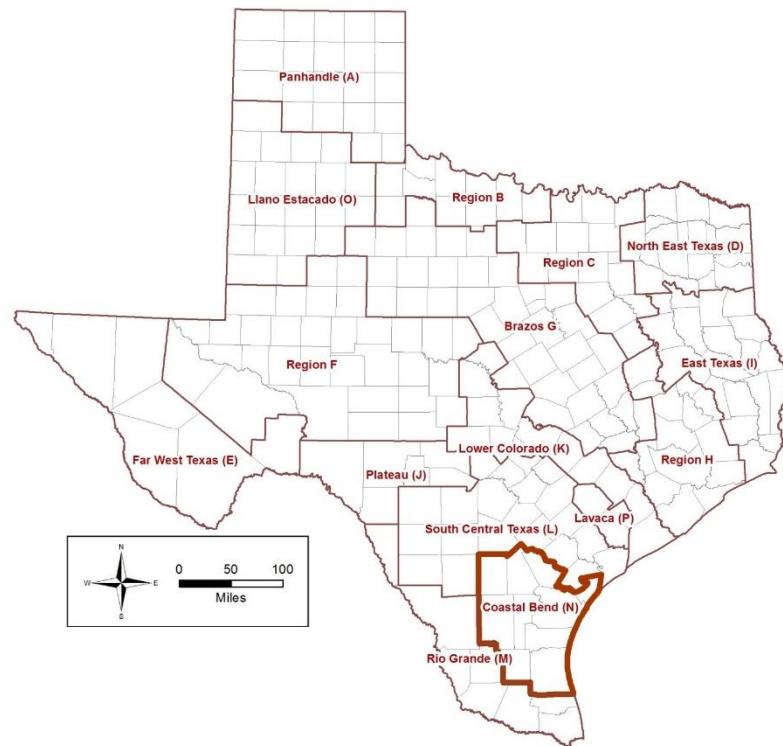


Regional Planning Process

- Regional Planning Areas
- Regional Planning Groups
- Regional Water Plans for each Area



Regional Planning Areas



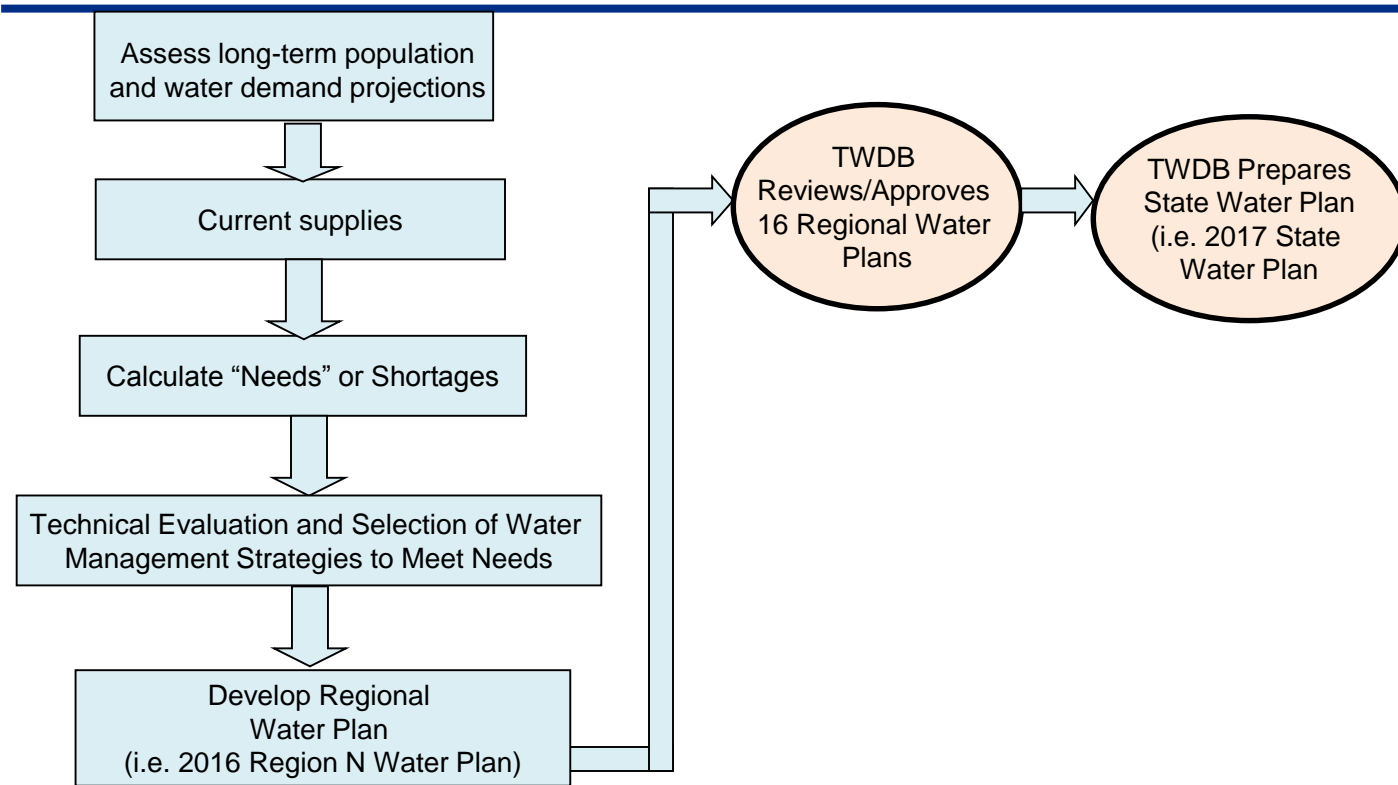


Region N Planning Group

- The Coastal Bend Regional Water Planning Group (CBRWPG) has 21 voting members.
- Diverse stakeholder representation:
 - Agriculture
 - Counties
 - Electric Generating Utilities
 - Environmental
 - Groundwater Management Areas
 - Industries
 - Municipalities
 - Public
 - River Authorities
 - Small Business
 - Water Districts
 - Water Utilities
 - Other
- Serve without pay
- Are responsible for the development of the Coastal Bend Water Plan
- 3 members have served since inception in the late 1990's
- Nueces River Authority is the administrative agency



Regional Water Plan

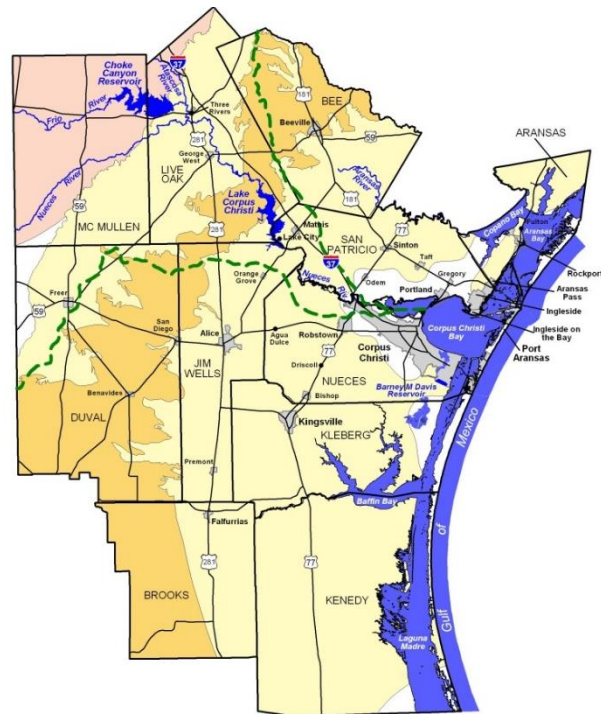




Region N Planning Area

Region N Plan Components

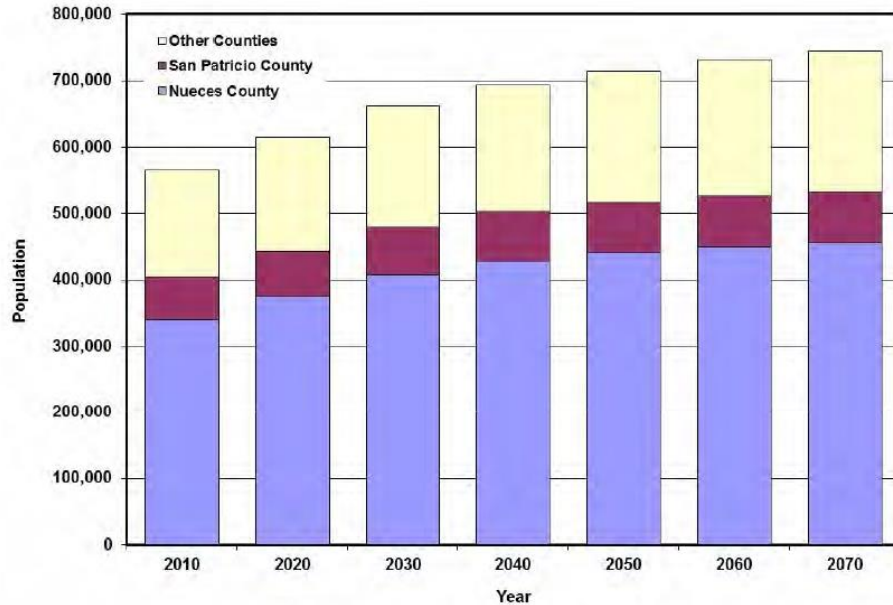
- 6 categories of water users
- 46 municipal water user groups
- 4 wholesale water providers
- Majority of water from LCC/CCR/Texana/MRP2 System



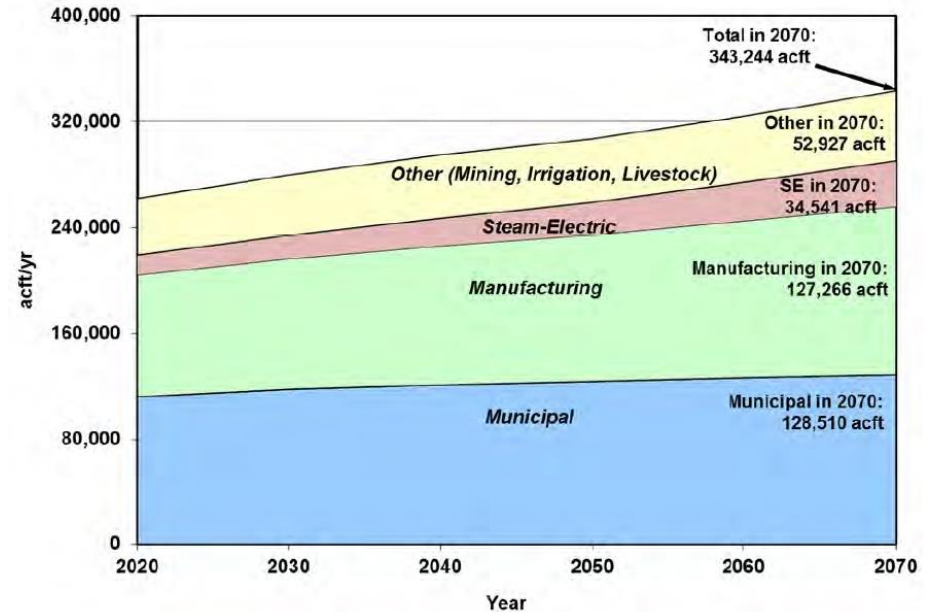


Demand Projections

Population Projections

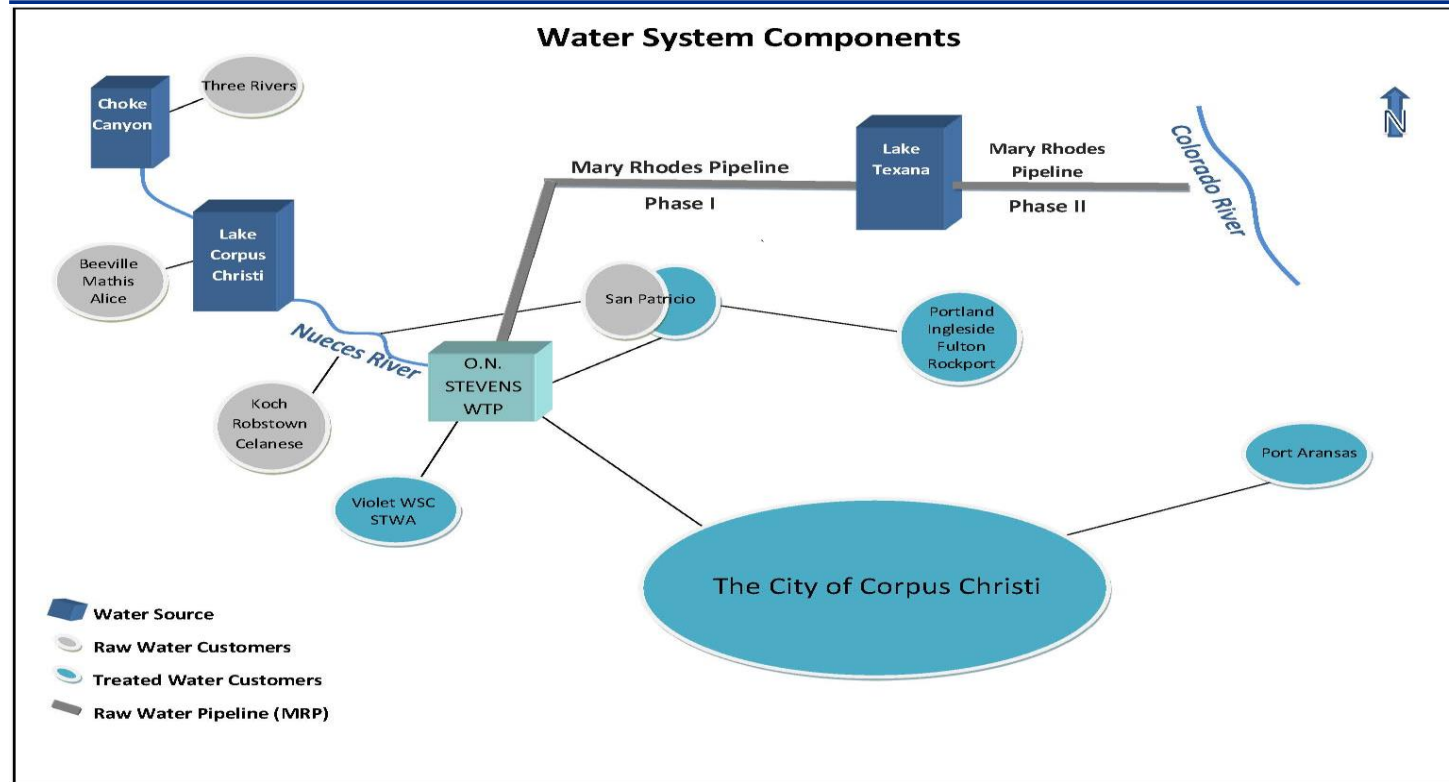


Demand Projections



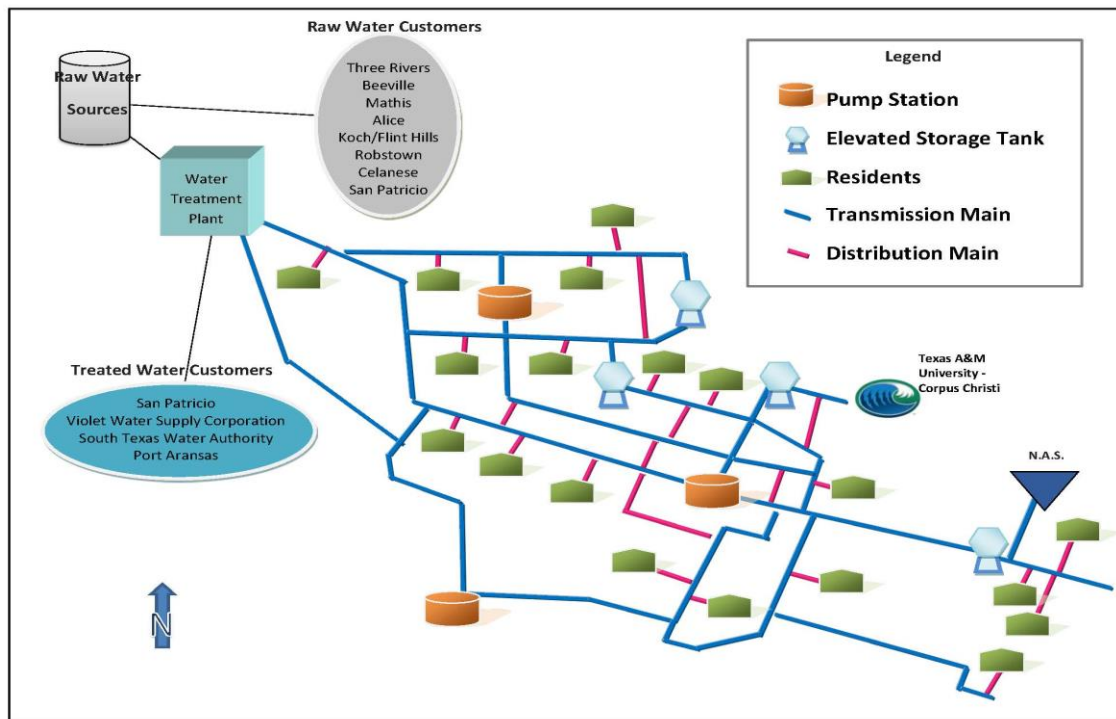


Current Supplies





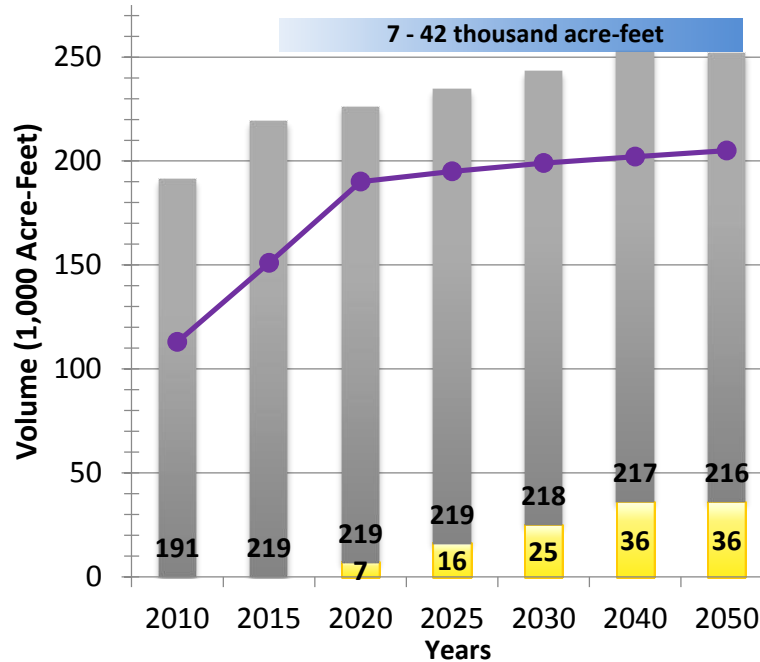
Current Supplies



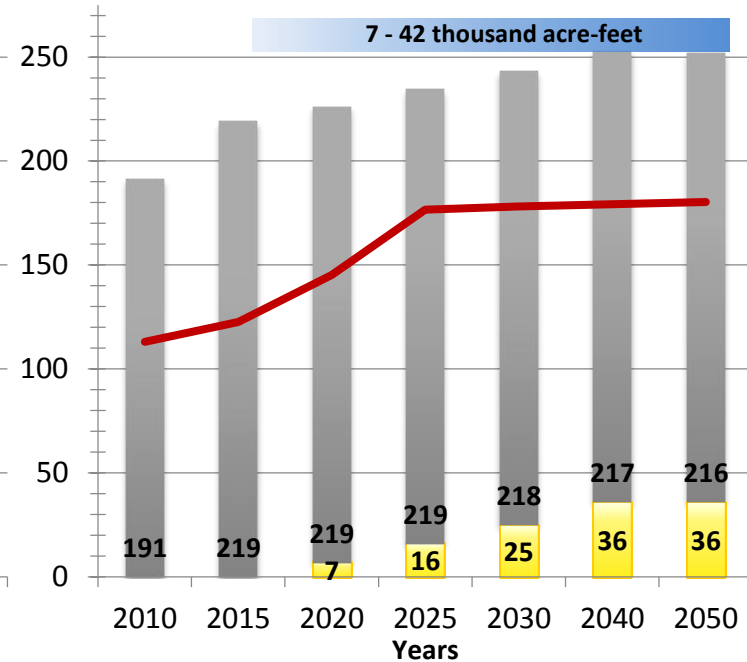


Prepare Plan

Last Year's Demand Projection



Current Demand Projection:



Desalination*

Industrial Reuse*

Surface Water

Current Demand Projection

Last Year's Demand Projection



Utility Bill Breakdown

	Raw Water	Treatment	Transmission	Distribution	Stormwater
Cost (\$/1000 Gallons)	0.95	1.39	0.69		
Inside City Limits					
Residential and Commercial	•	•	•	•	•
Outside City Limits					
Residential and Commercial	•	•	•	•	
Industrial customers	•	•	•		
Port Aransas & Violet Water Supply Corporation	•	•	•		
San Patricio Municipal Water District	•	•			
South Texas Water Authority	•	•			
Raw Water Customers	•				



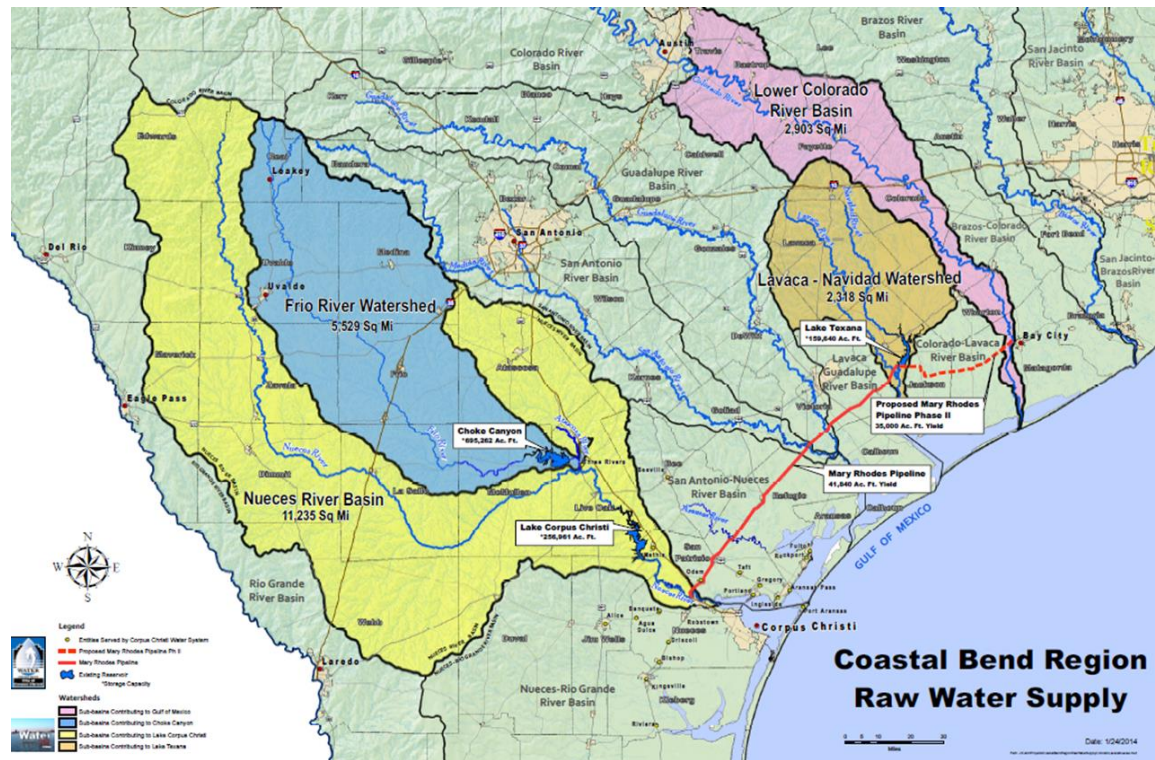
Questions?



Backup



Water System Components





The map illustrates the water infrastructure of the Coastal Bend Regional Water Planning Group. It shows a network of pipelines, including the Beoville Pipeline, Alice Pipeline, and various SPWWD and RINCON pipelines. Water treatment plants (WTPs) are marked with black squares, and intake sites are marked with blue dots. The map also shows the Gulf Coast Aquifer, Live Oak, and various counties like Duval, Alachua, and Volusia. A legend in the bottom right corner defines the symbols for raw water pipelines, treated water pipelines, intake sites, and water treatment plants. A scale bar and north arrow are also present.