

Water Supply

Discovery – Demands



Council Presentation
July 19, 2016



Discover, Discuss, Decide



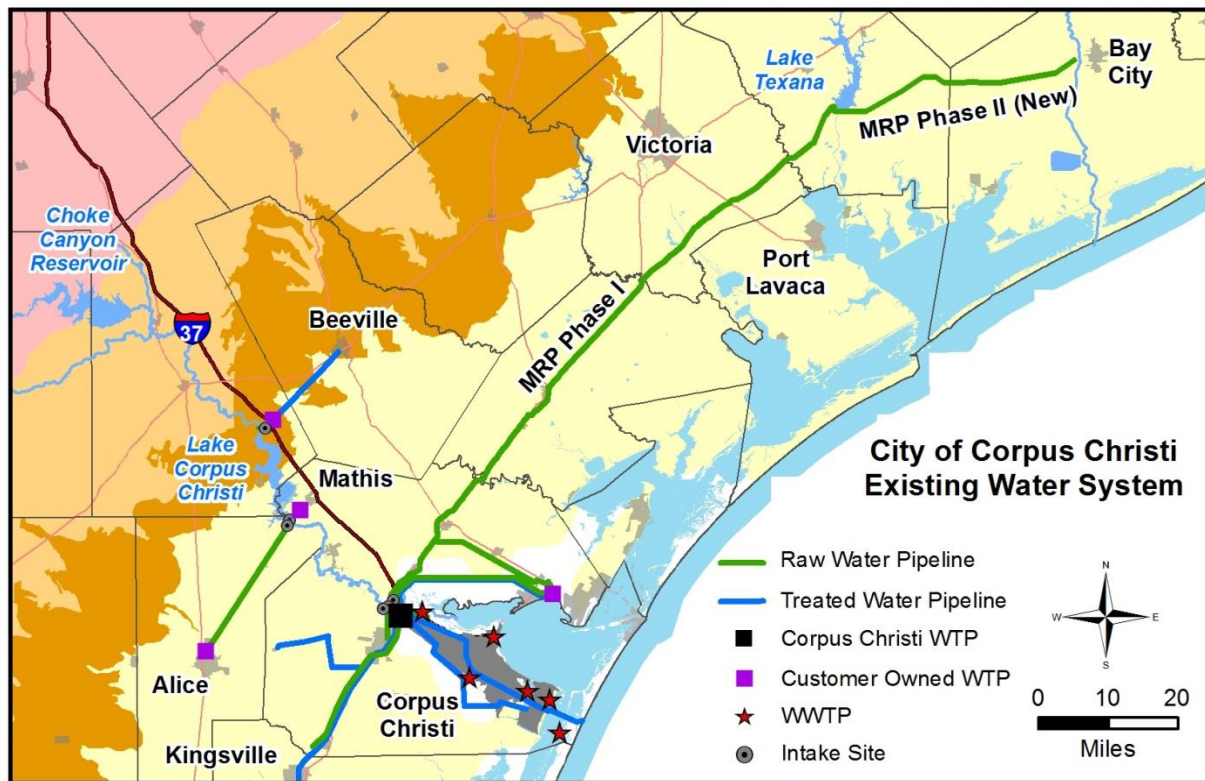


Presentation Schedule

Date	Topic
May 10, 2016	Discovery – Texas Water Planning
July 19, 2016	Discovery - Demands
August 30, 2016	Discussion - Demands Discovery - Current Supplies
September 20, 2016	Discovery - Future Supplies
October 18, 2016	Discussion- Future Supplies
November 15, 2016	Decide – Adopt Water Management Plan



Regional Water Supply System



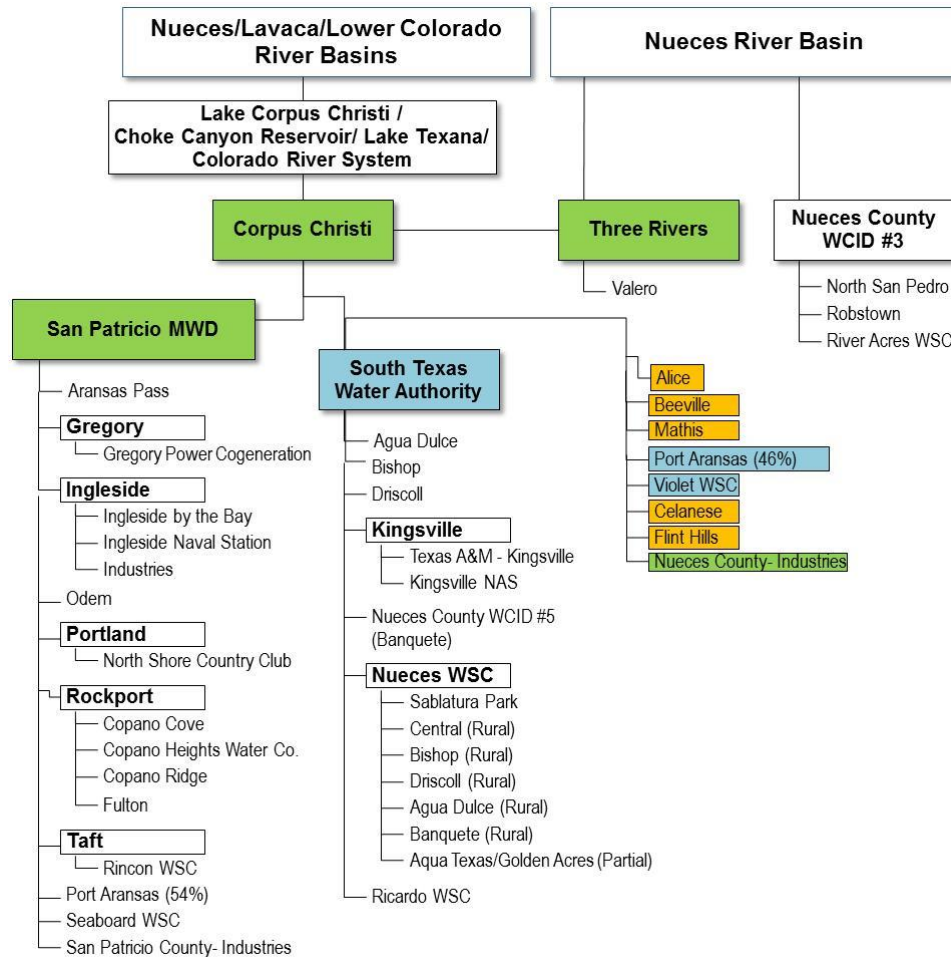


City of Corpus Christi Water Supply Relationships

Treated

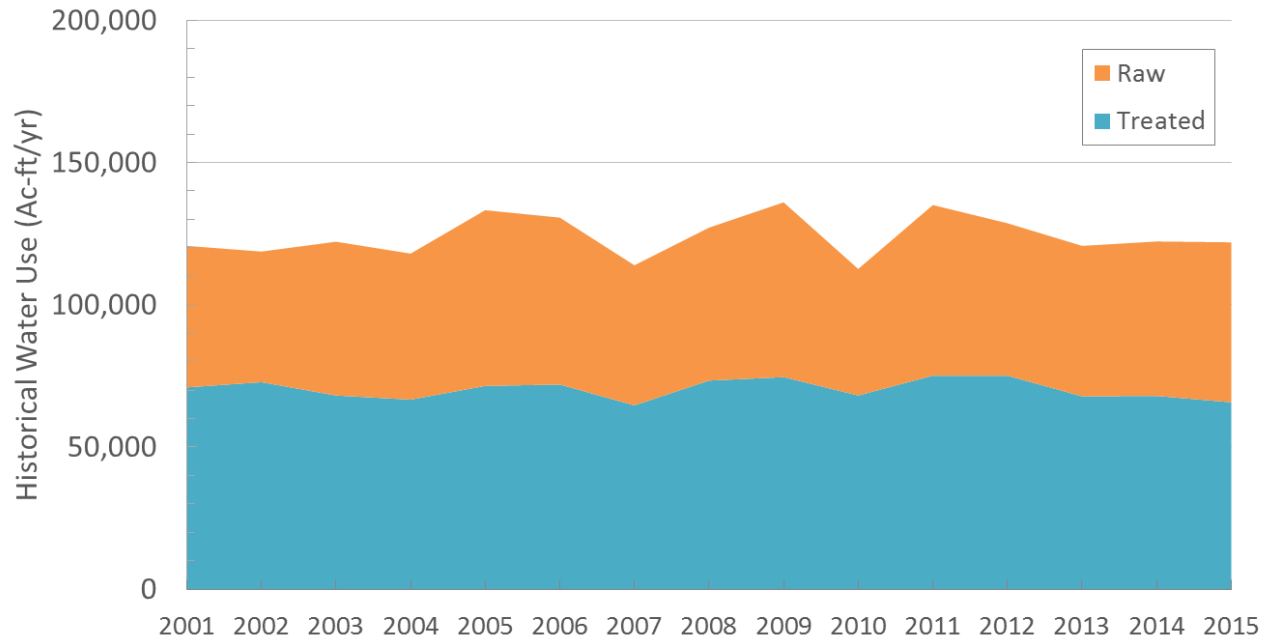
Raw

Treated & Raw



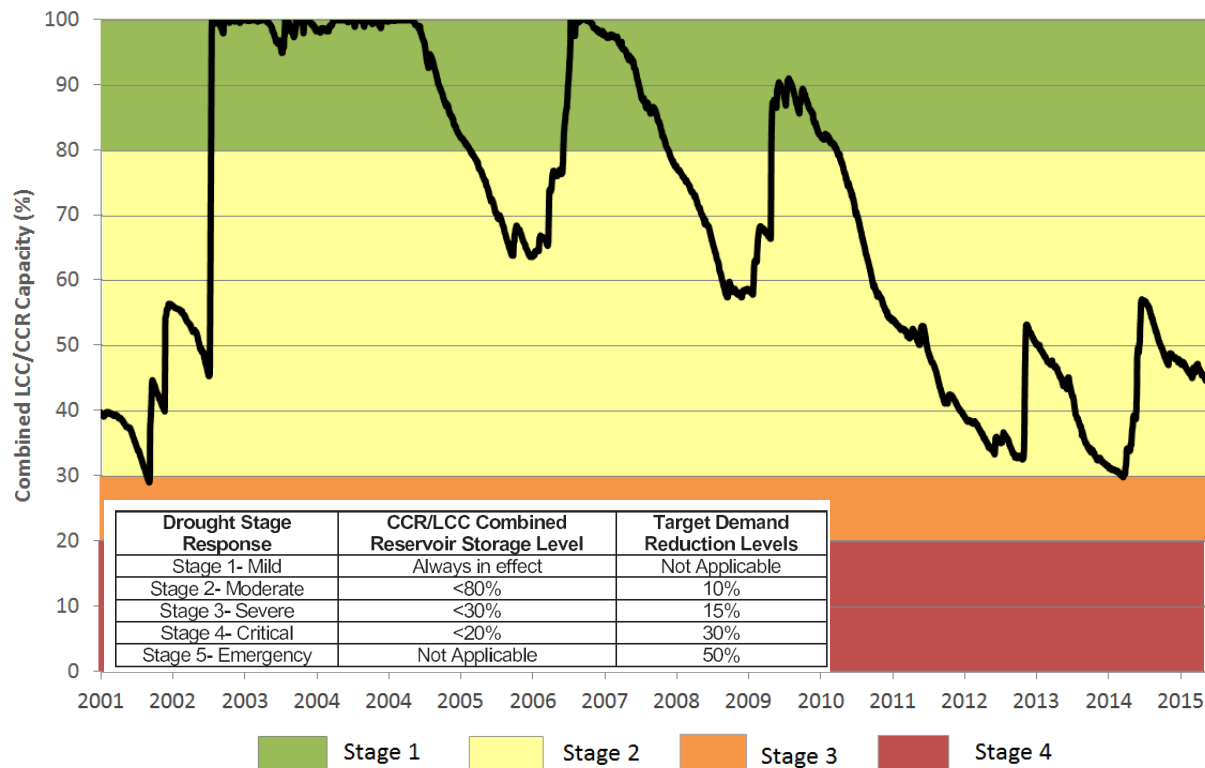


Historical Water Use





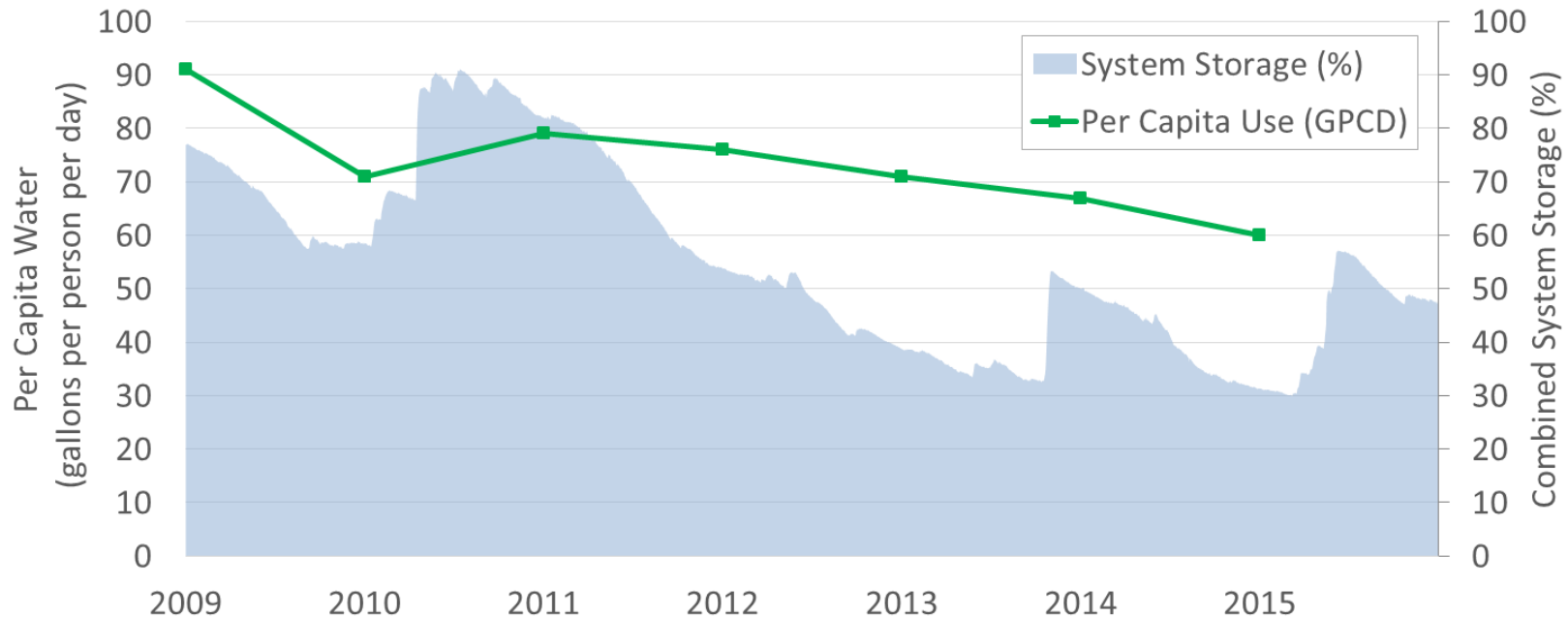
Drought Preparedness





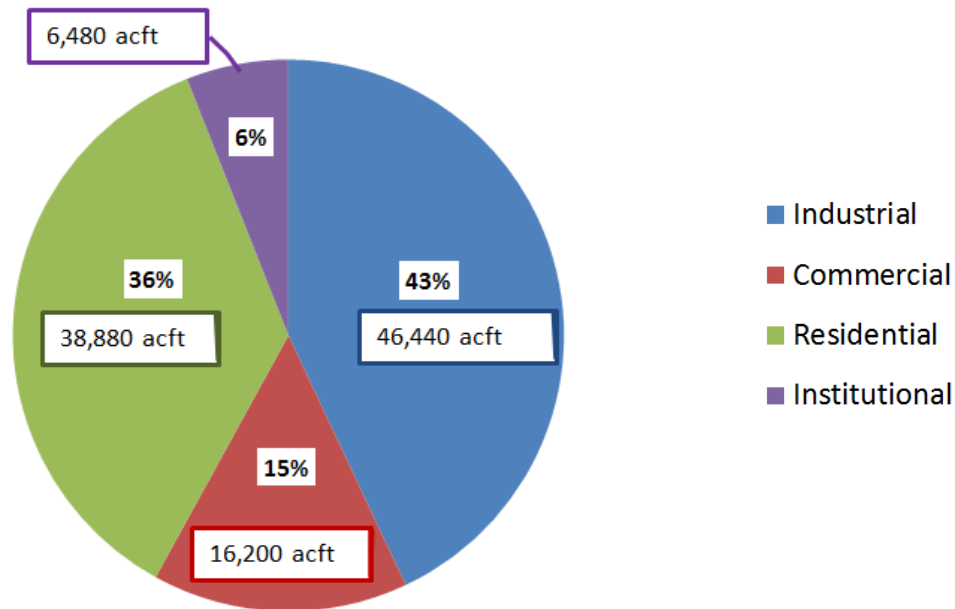
Recent Drought Management and System Response

Residential Per Capita Water Use and Combined System Storage





Recent Water Demands

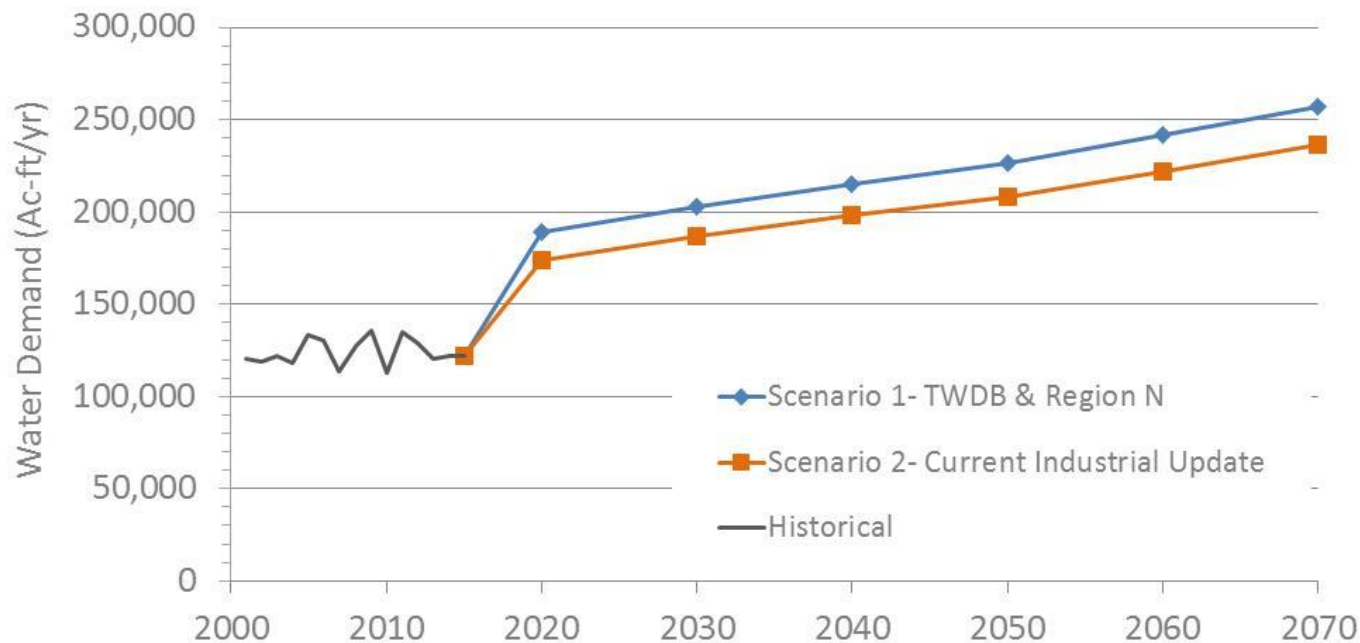


Total 2014 Demand = 108,000 acft

Corpus Christi Water Use by Customer Class (2014)

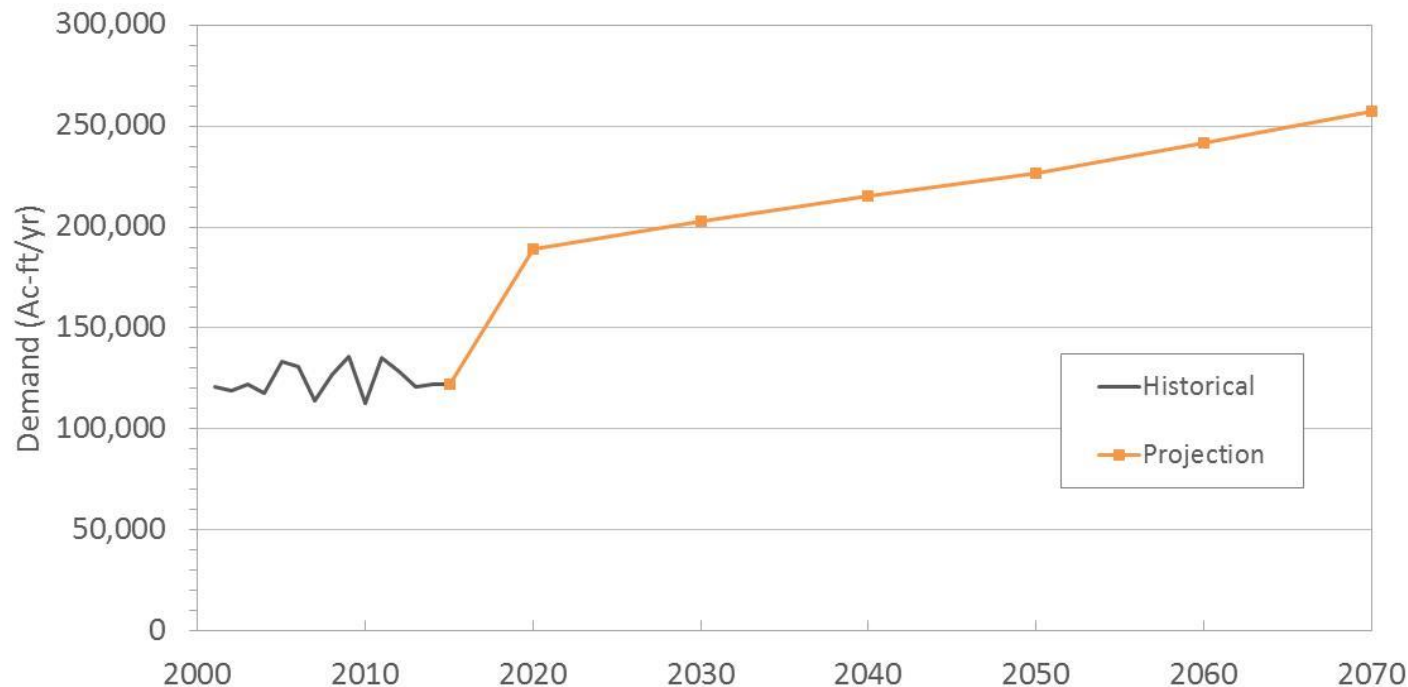


Summary- Range of Water Demands



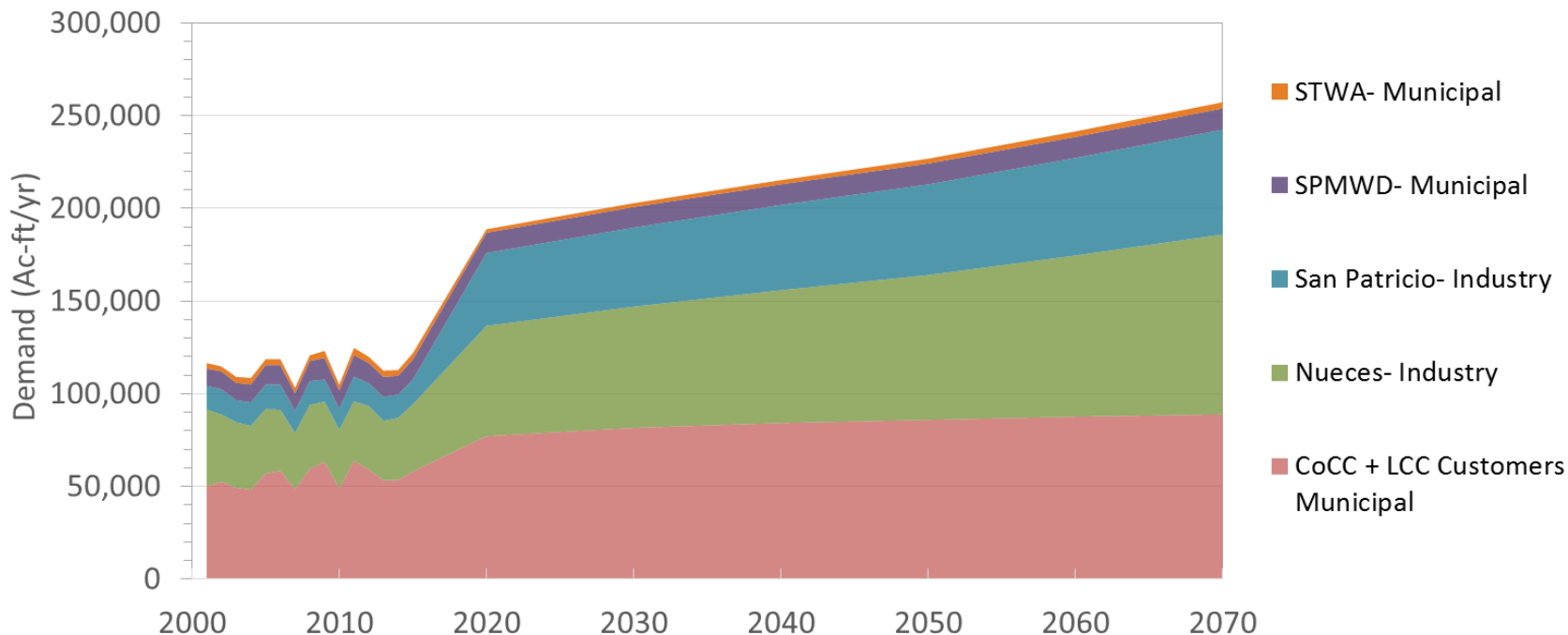


Long-term Projected Demand Scenario 1- TWDB and Region N Water Plan



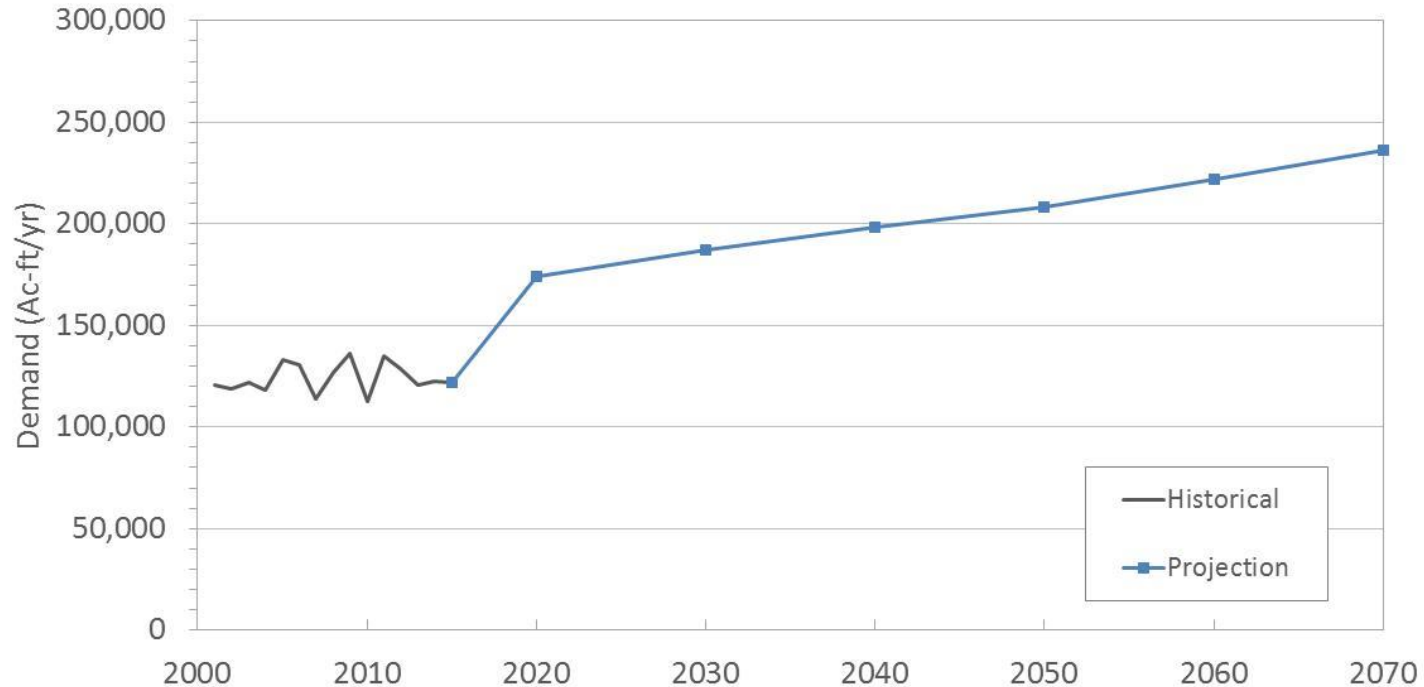


Long-term Projected Demand **Scenario 1-** TWDB and Region N Regional Water Plan



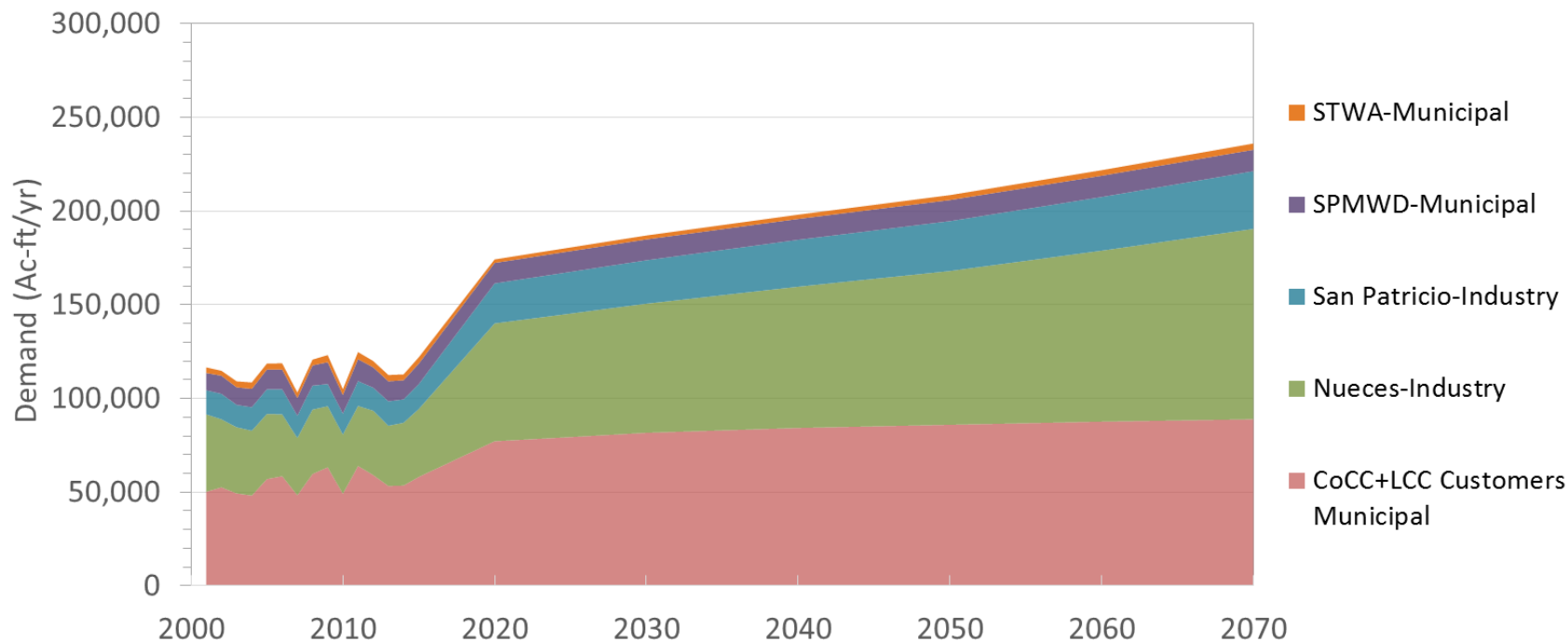


Long-term Projected Demand **Scenario 2-** Snapshot Based on Current Industrial Trends



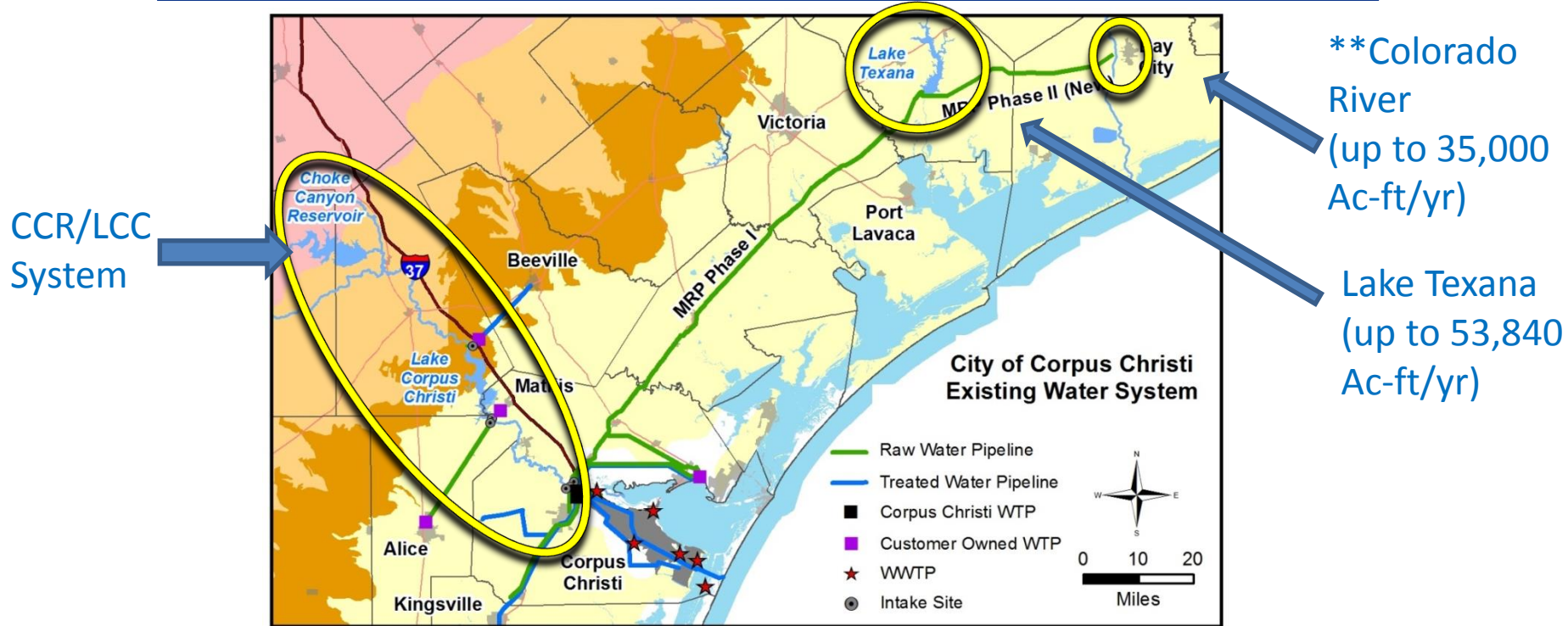


Long-term Projected Demand **Scenario 2-** Snapshot Based on Current Industrial Trends



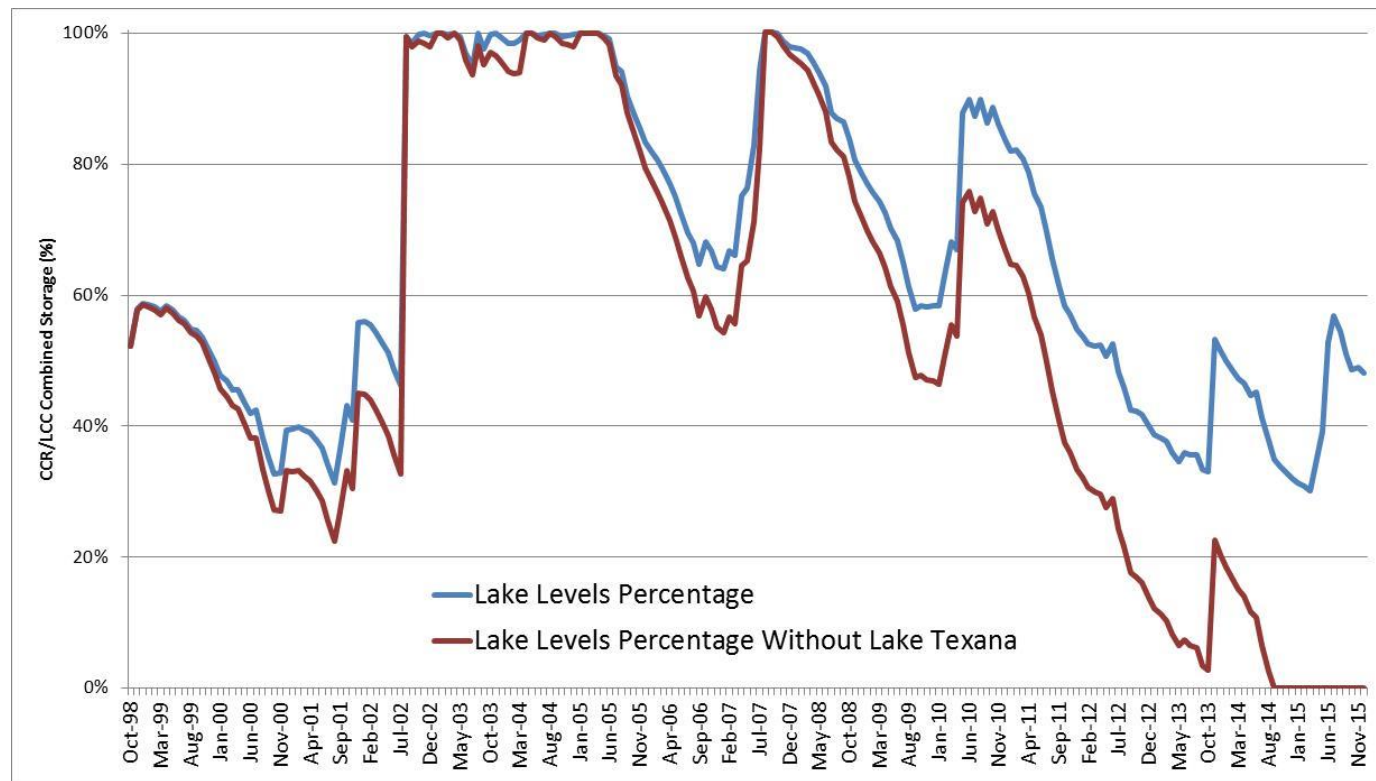


Existing Water Supply





Forward Water Supply Planning has Shaped our Current Supplies





What is Firm Yield?



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- Maximum supply from reservoir system during the drought of record with *no reserve* storage during the worst month



What is Safe Yield?

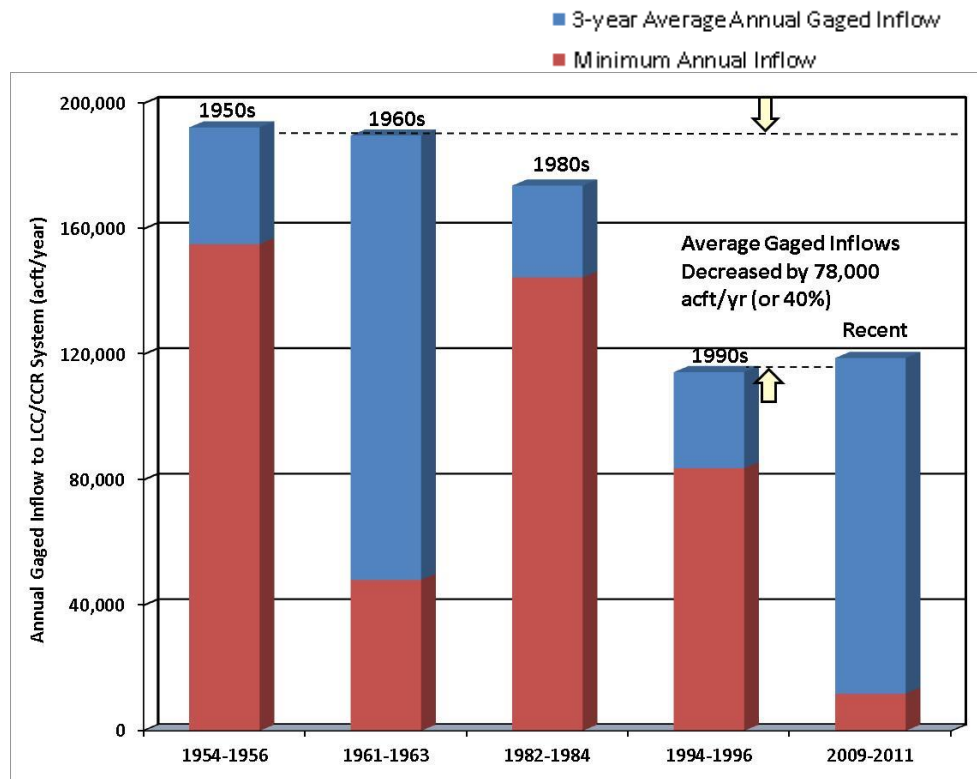


Photo by Jeff Stapper, Texas AgriLife Extension

- Amount of supply from reservoir system so that a *reserve amount* remains in storage during the modeled critical drought
- Provision for climate and growth uncertainty
- Region N Plan yield assumes 1 year reserve in storage (125,000 ac-ft)



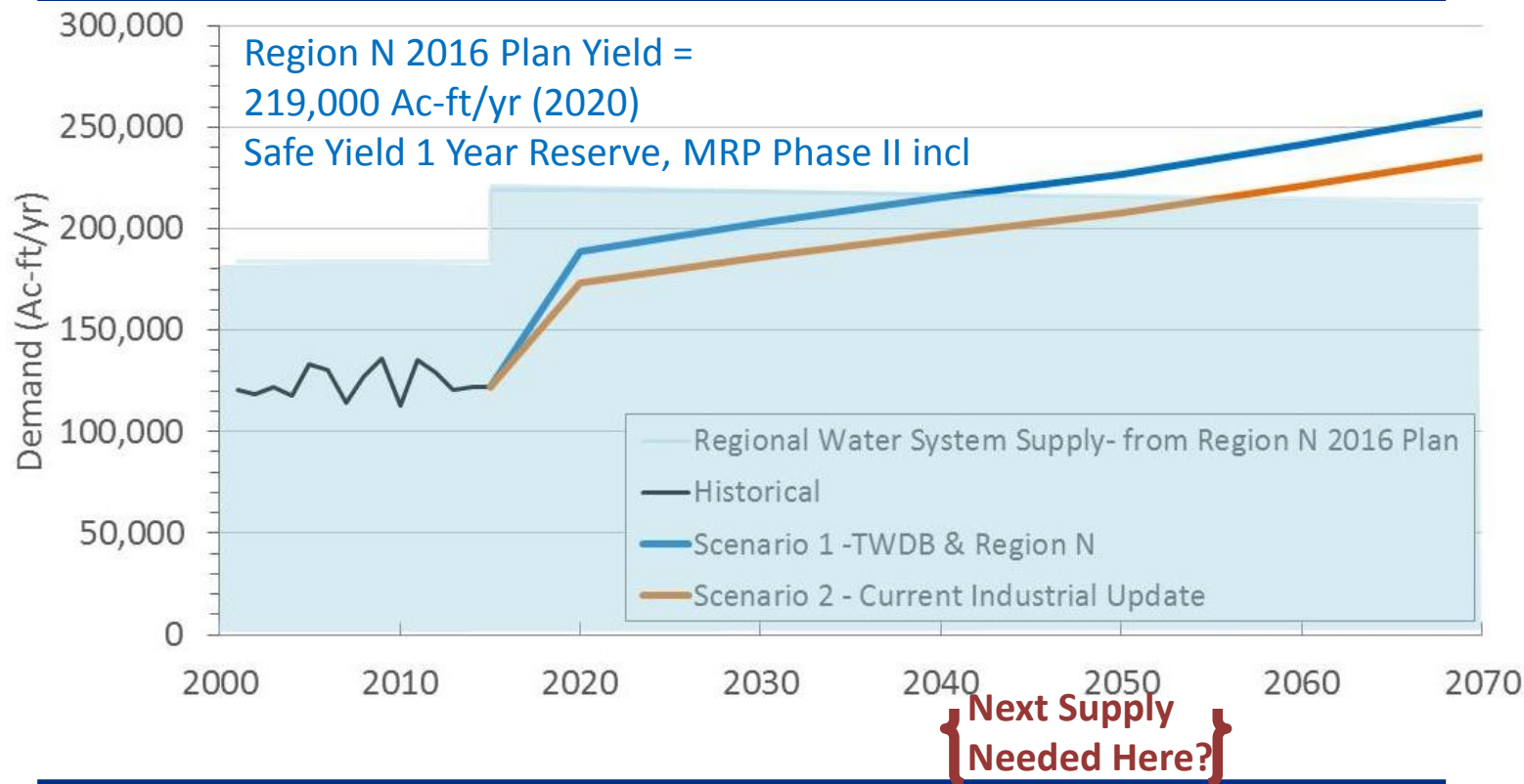
Why Safe Yield?





Example of How Existing Supplies Address Future Demands

Supplies Subject to Change Based on Pending Model Update





Discussion & Demand Related Topics for Next City Council Presentation

- Alternative demand projection need (i.e. 1% annual growth)
- Identify preferred demand projection for planning purposes
- Process and schedule for revisiting demand projections
- Others?

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