

Regional Water Planning and Data Visualization in Texas

Katie Dahlberg, Data Analyst

Texas Water Development Board

Interstate Council on Water Policy Annual Meeting

October 6, 2020

Agenda

- Texas Water Development Board
- Water Use Data
- Regional and State Water Plans
- Planning Data Dashboards
- Interactive Dashboard Demo



Texas Water Development Board

Lead the state's efforts in ensuring a secure water future
for Texas and its citizens

Water Use Survey



- Annual
- Online
- 7,000+ surveys
- 80% response rate
- Water use database
- QA/QC



- Municipal: public water systems
- Industrial: 10 million+ gallon water use
 - Manufacturing
 - Mining
- Steam-electric power

Annual Estimates (non-survey)



Population



Gallons Per Capita Daily (GPCD)



Oil and gas (fracking)



Livestock



Irrigation

Population and Water Demand Projections

50-year projections

- 2020 – 2070
- Based on trends in annual estimates

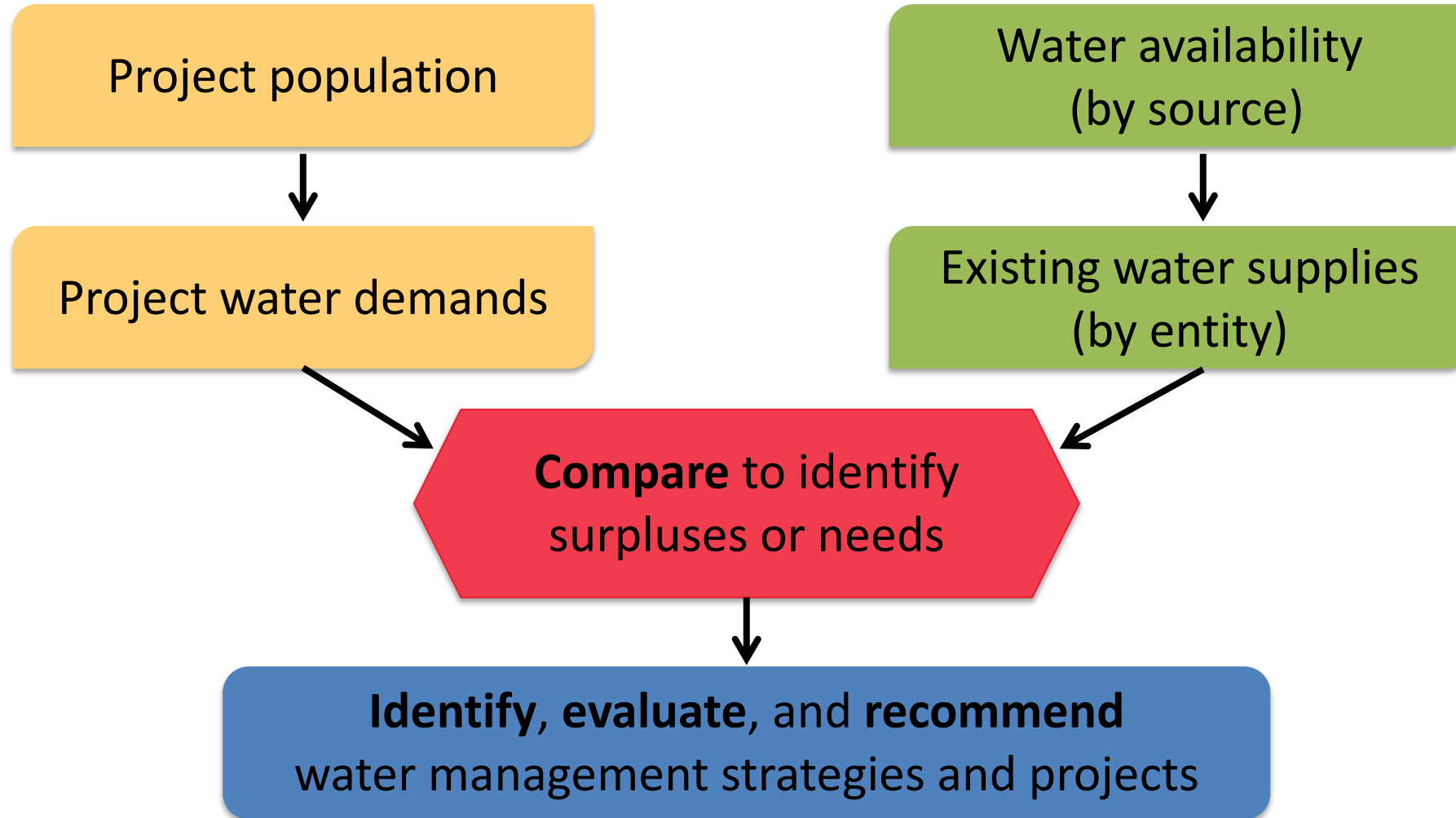
Population projections

- GPCD
- Passive water efficiency savings
- Municipal demand projections

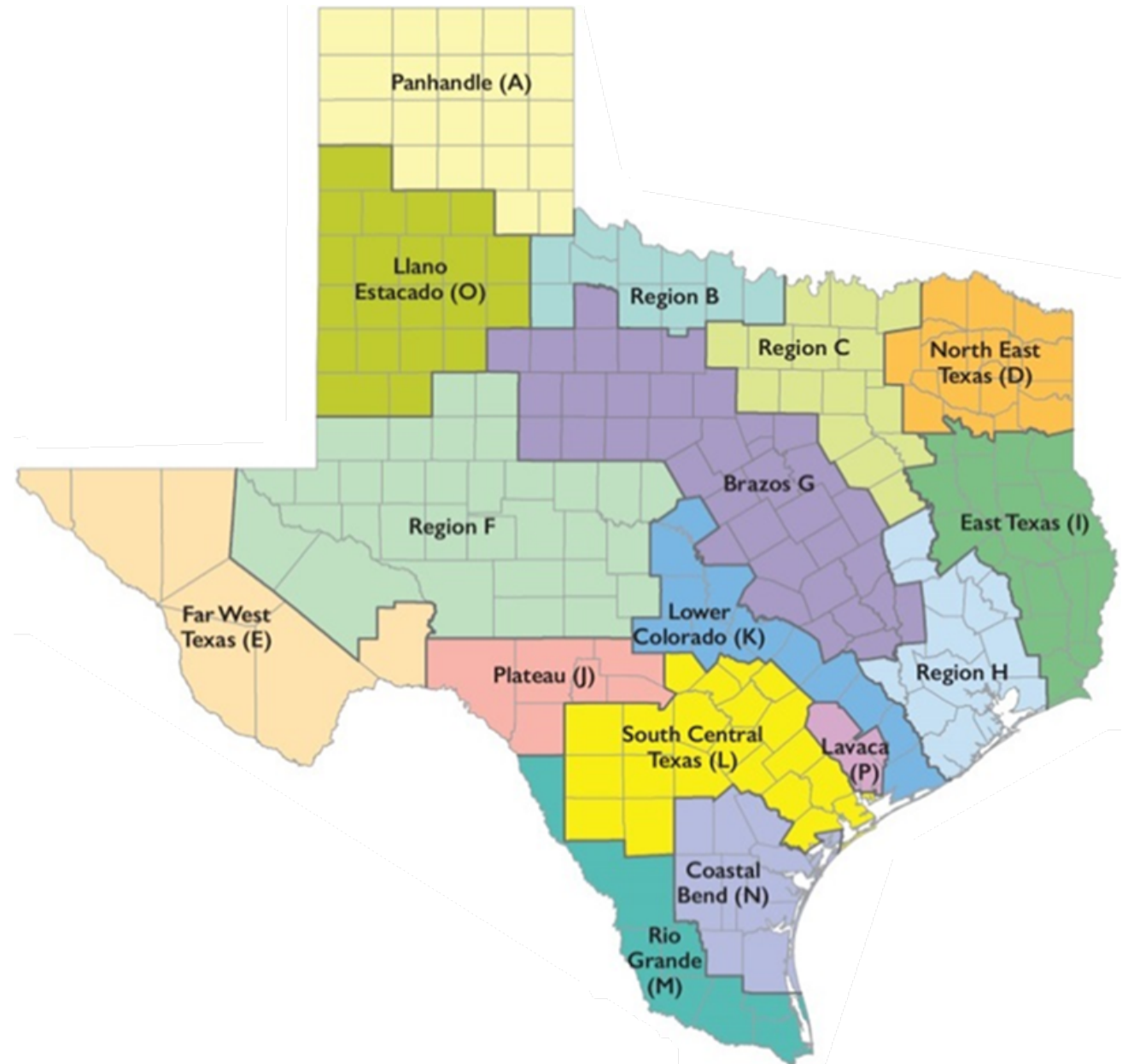
Non-municipal demand projections

- Irrigation
- Livestock
- Manufacturing
- Mining
- Steam-electric power

Regional Water Planning



16 Regional Water Planning Areas



State Water Plan

16 Regional Water Plans

Bottom-up approach

Address future water needs

Based on historical water use

Currently working on 2021 Regional Water Plans &
2022 State Water Plan

Water Planning Databases



Estimates

Annual survey + estimates data

Population

Municipal and non-municipal water use



Projections

50-year projections / 5-year cycle

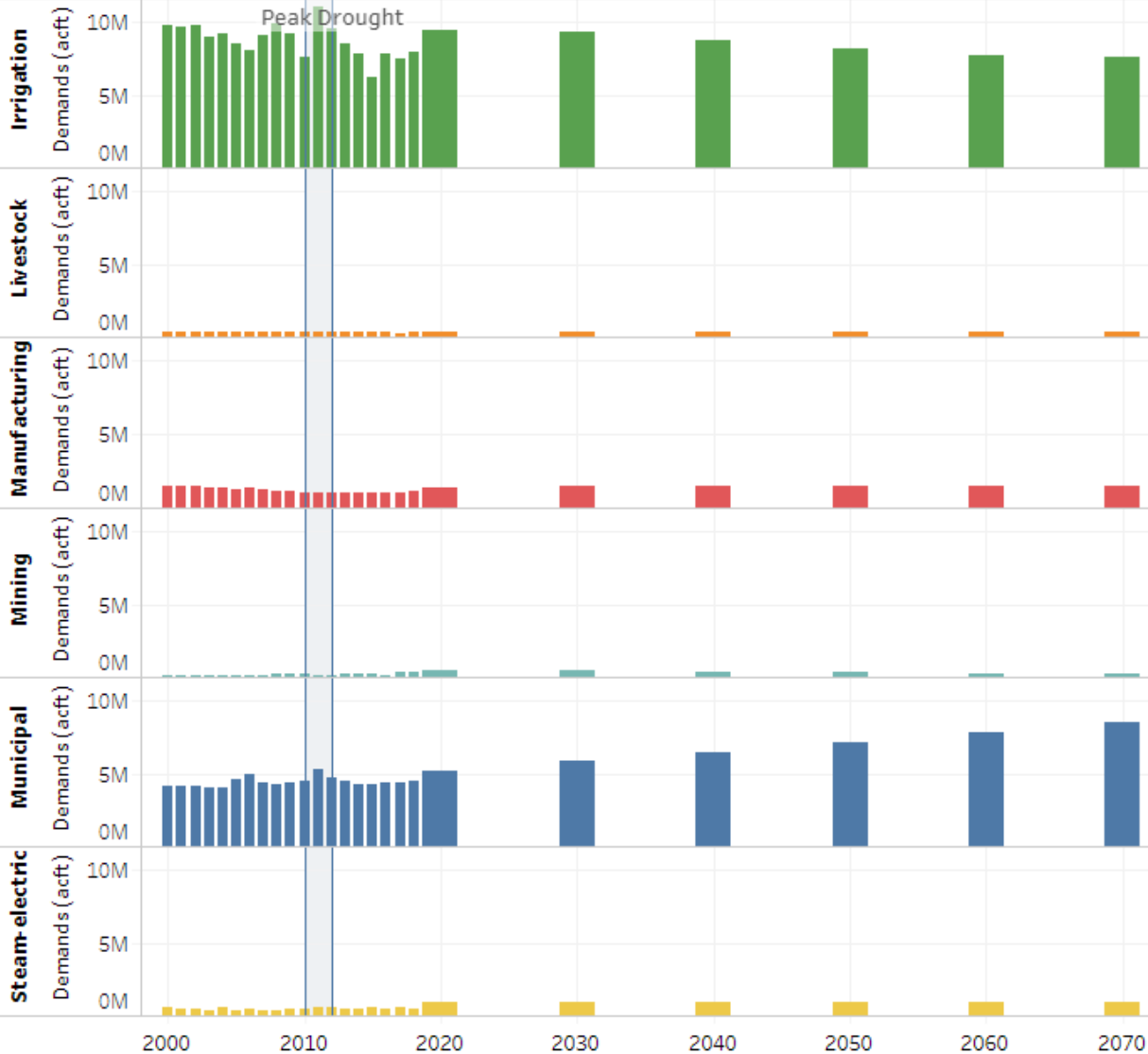
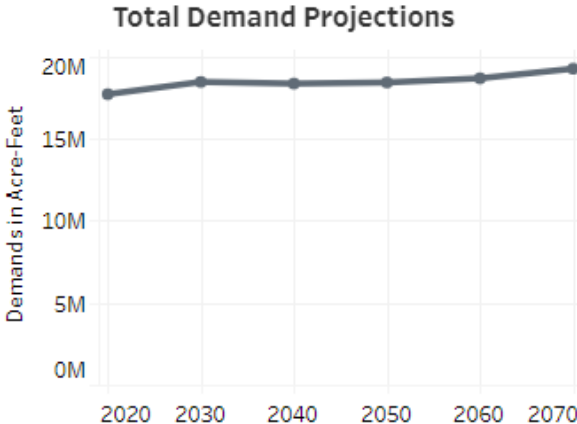
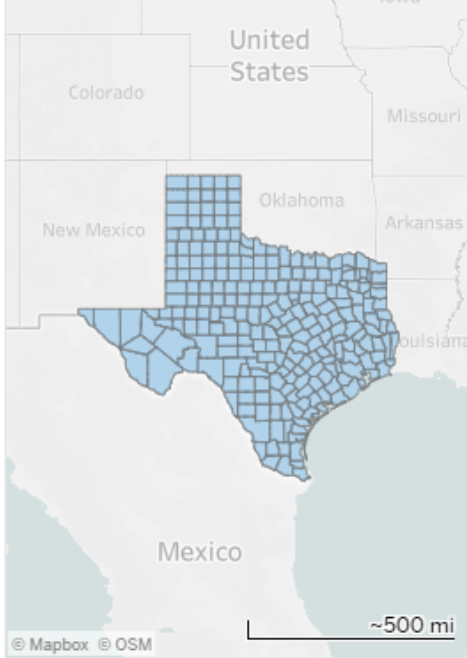
Population

Municipal and non-municipal demand

Planning Data Dashboard


Water Use Estimates and Demand Projections for All Counties in Region All







Select
Region:
☒ (All)
☐ A
☐ B
☐ C
☐ D
☐ E
☐ F
☐ G
☐ H
☐ I
☐ J
☐ K
☐ L
☐ M
☐ N
☐ O
☐ P



TWDB Water Planning

www.twdb.texas.gov



Connect with us:      

Home Board Financial Assistance **Water Planning** Groundwater Surface Water Flood Conservation Innovative Water GIS Data

STATE WATER PLAN	REGIONAL WATER PLANNING	PLANNING DATA	WATER USE SURVEY
Interactive State Water Plan	2021 Draft Regional Water Plans	Regional Water Planning Database	Online Water Use Survey
2017 State Water Plan	Planning Group Meeting Schedule	Planning Data Dashboard	Printable Water Use Survey
2012 State Water Plan	Planning Group Information	Population & Water Demand Projections	Historical Water Use Estimates
2007 State Water Plan	5th Planning Cycle Information (2017-2021)	Socio-Economic Impact Analysis	Historical Groundwater Pumpage
2002 State Water Plan			

Questions?

Please contact Katie Dahlberg at

katie.dahlberg@twdb.texas.gov

www.twdb.texas.gov

Stay connected:

