

Desalination

***House Natural Resources Committee
October 18, 2022***

Erika Mancha

Director, Conservation & Innovative Water Technologies, Office of Water Science and Conservation

Matt Nelson

Deputy Executive Administrator, Office of Planning

2022 Biennial Report on Seawater and Brackish Groundwater Desalination in Texas

House Natural Resources Committee

Erika Mancha

Director, Conservation & Innovative Water Technologies, Office of Water Science and Conservation

Desalination Program



The Future of Desalination in Texas
2020 Biennial Report on Seawater and
Brackish Groundwater Desalination in Texas

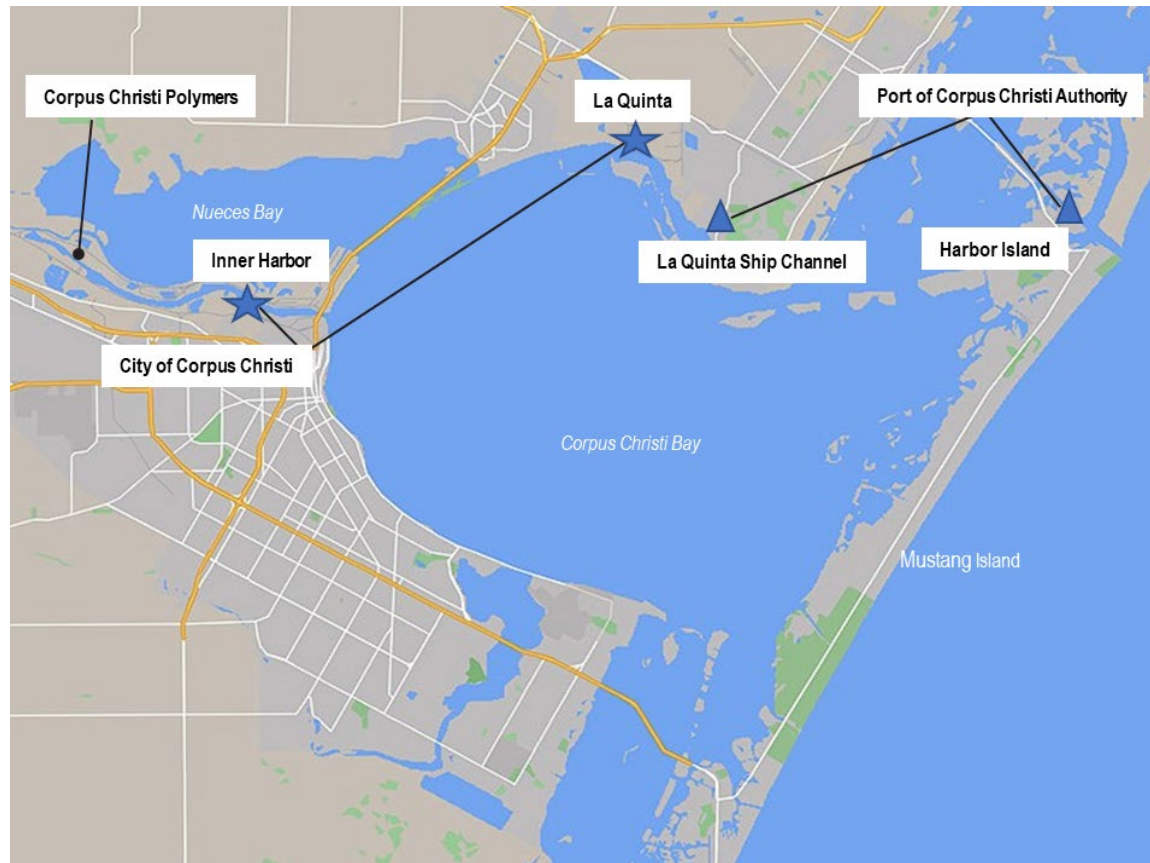


87th Texas Legislative Session

Texas Water
Development Board

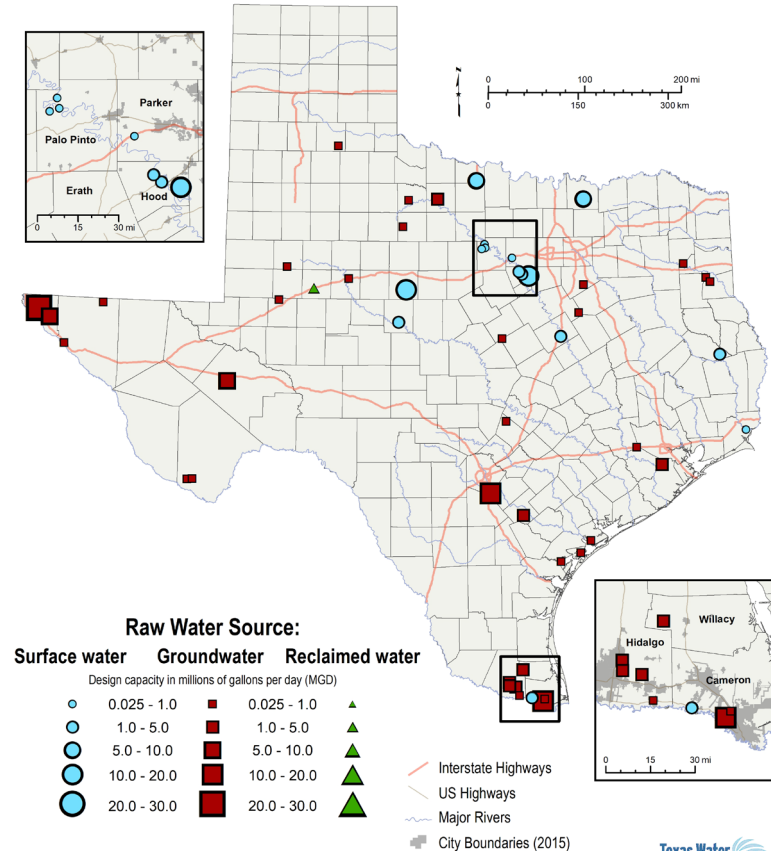
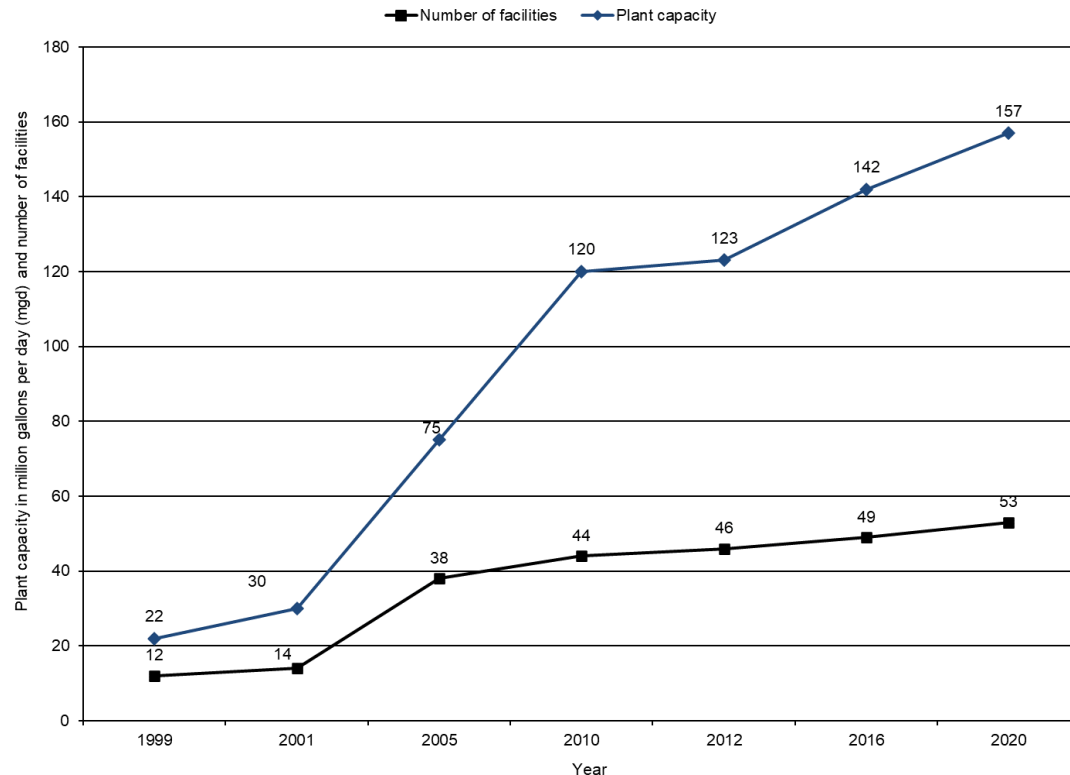
Seawater Desalination

- No active seawater desalination plants
- Two entities pursuing water rights and discharge permits



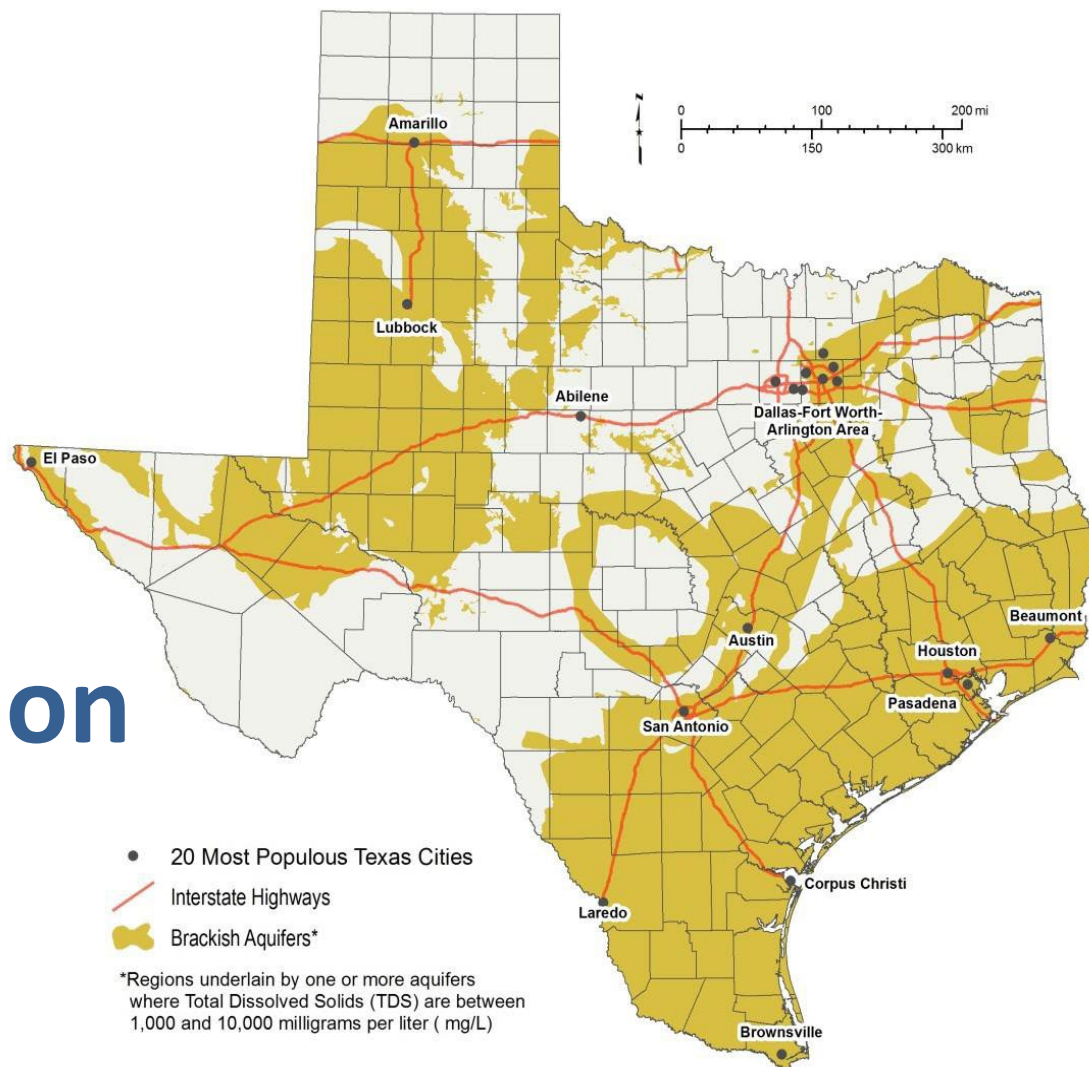
Brackish Desalination

Public Water Supply Desalination Plant Capacities

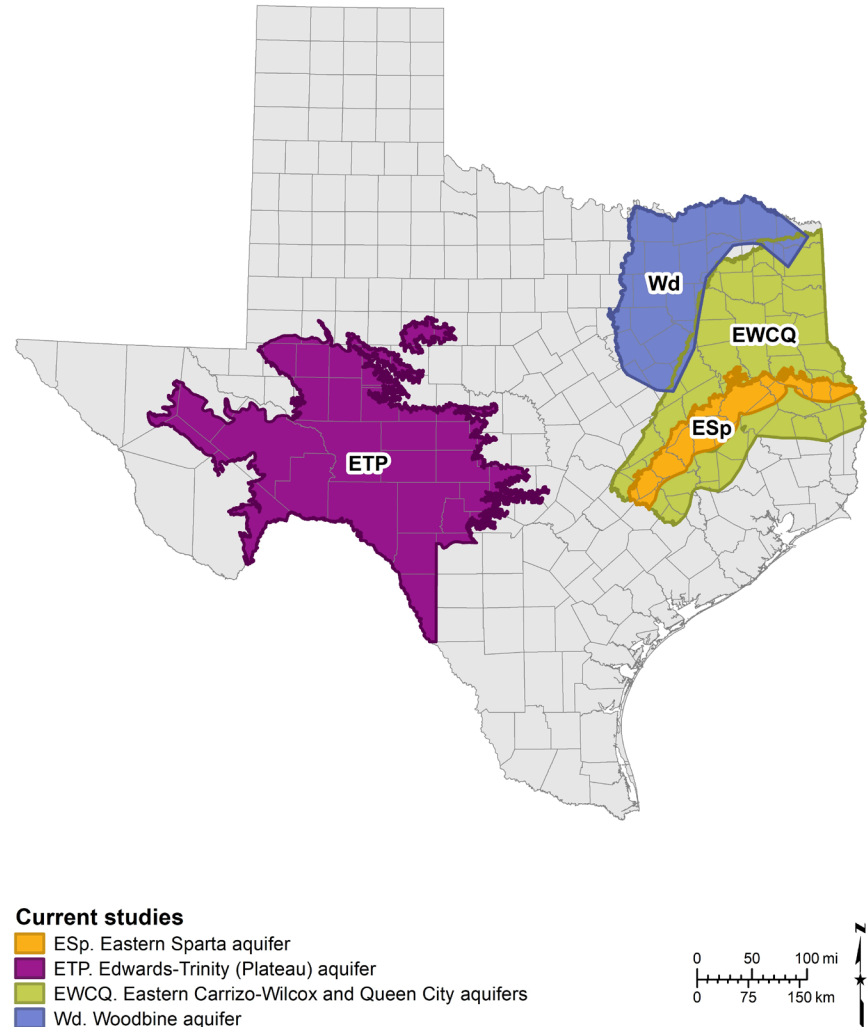
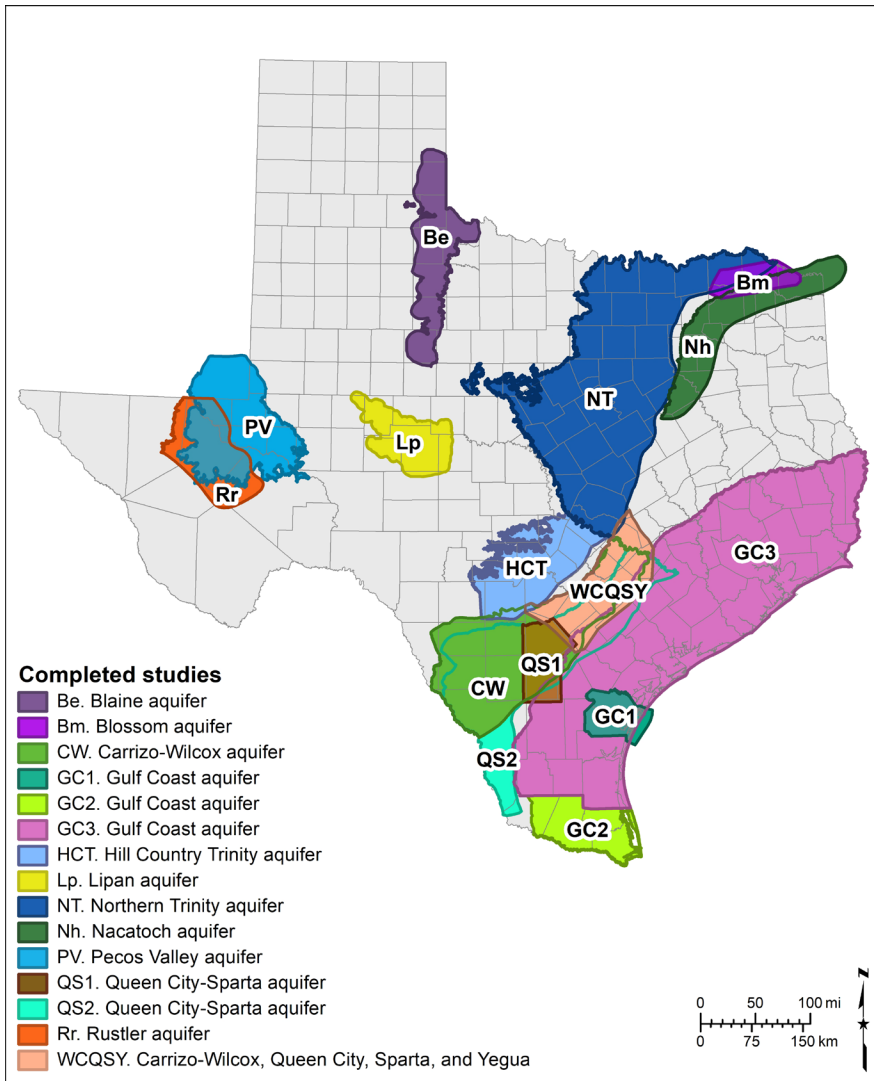


Texas Water
Development Board 02/26/2021

Brackish Resources Aquifer Characterization System



BRACS Completed and Current Studies



BRACS Technical Studies

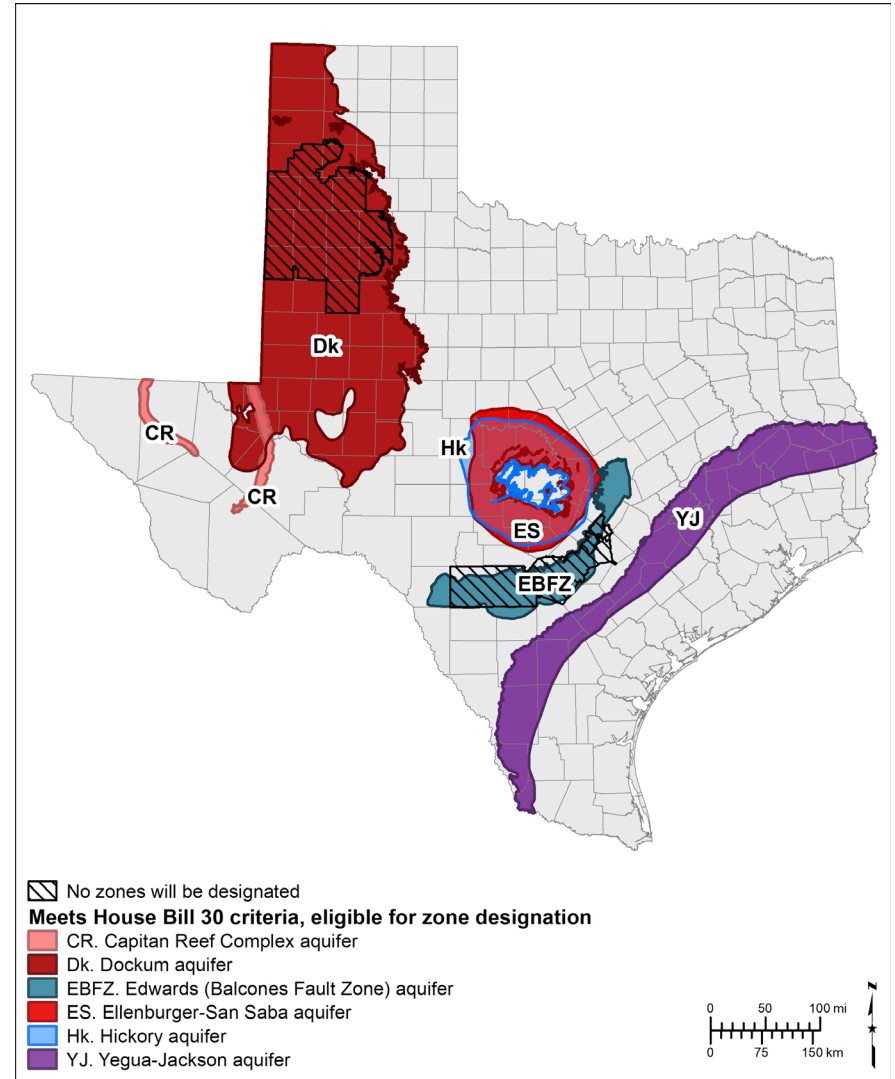
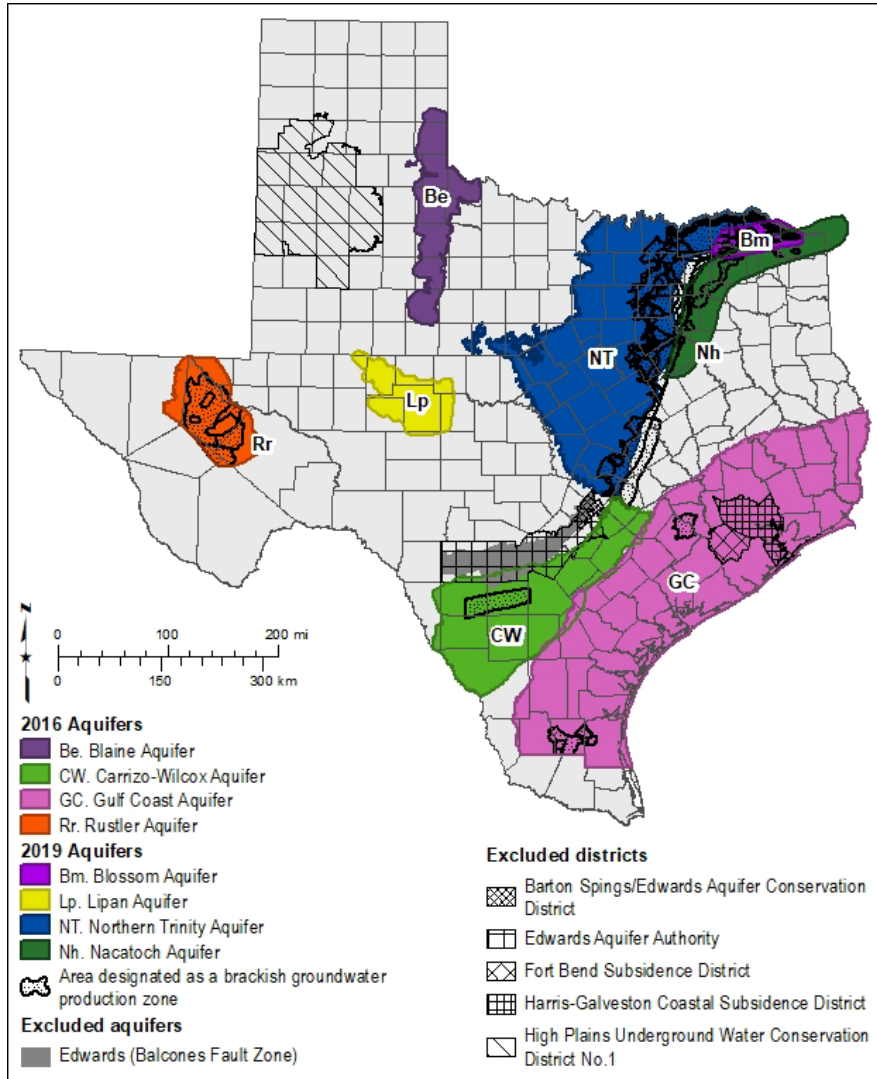
- **Recent Completed Technical Studies:**

1. Entering well log data into the BRACS database
2. Using seismic information for BRACS studies
3. Testing and analysis of cores to determine key aquifer properties
4. Providing guidance on drilling/logging brackish monitoring wells
5. Assessing comingling of brackish groundwater
6. Developing mapping procedures to map injection well injectate
7. Logging and sampling saline wells
8. Simulating well logs to determine key aquifer properties

- **Upcoming Technical Studies – RFQ posted in June 2022**

1. Acquiring and reprocessing 2D seismic data to map brackish aquifers
2. Calibrating of geophysical well logs
3. Testing and analysis of cores to determine key aquifer properties
4. Simulating well logs to determine key aquifer properties
5. Logging and sampling new brackish water wells

BRACS Zone Designations & Future Studies



Desalination Projects in the 2022 State Water Plan

House Natural Resources Committee

Matt Nelson

Deputy Executive Administrator, Office of Planning

Recommended Desalination Strategy Projects in the 2022 State Water Plan

Seawater desalination: 7

Groundwater desalination: 39

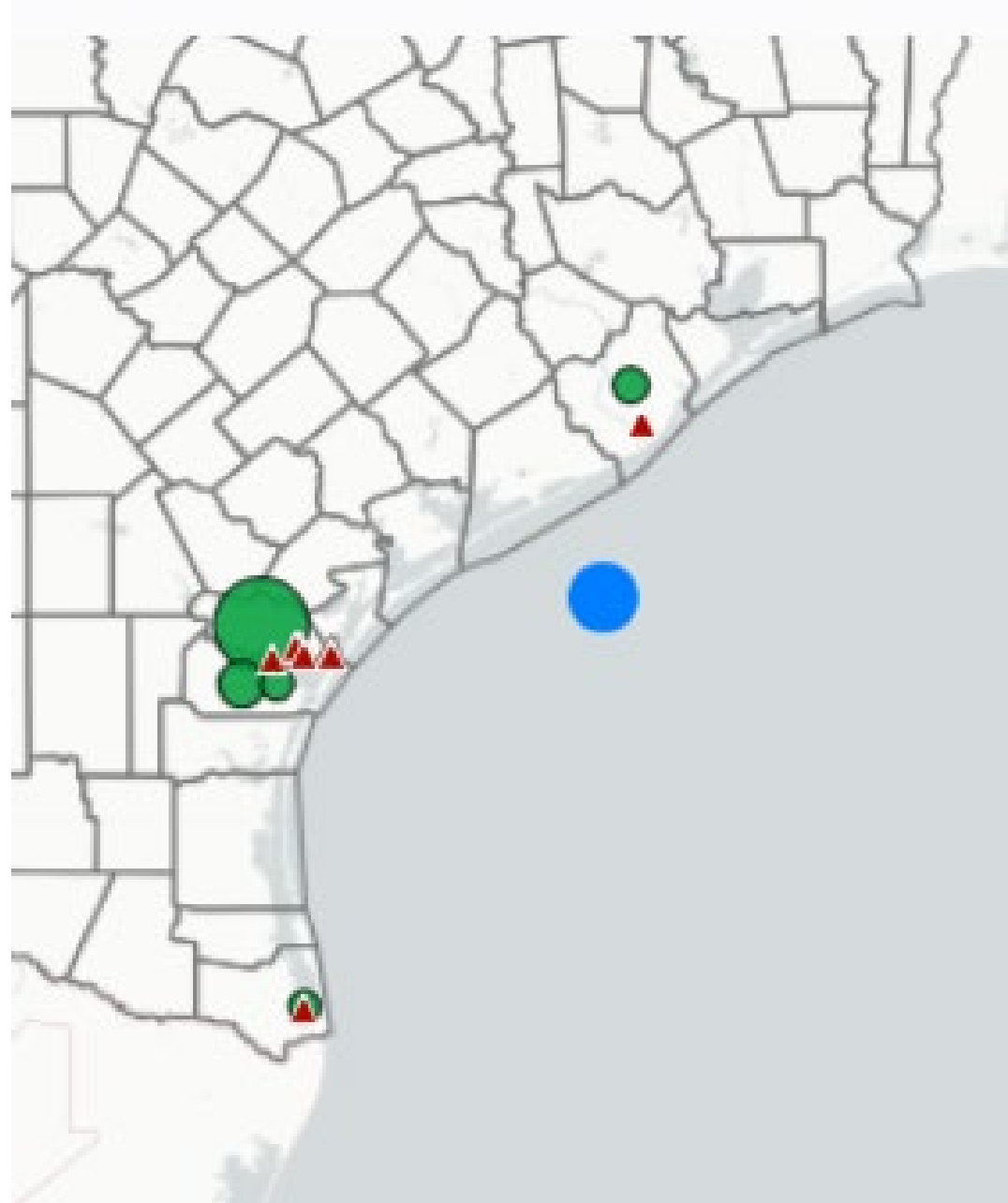
Surface water desalination: 10

Recommended Seawater Desalination Projects

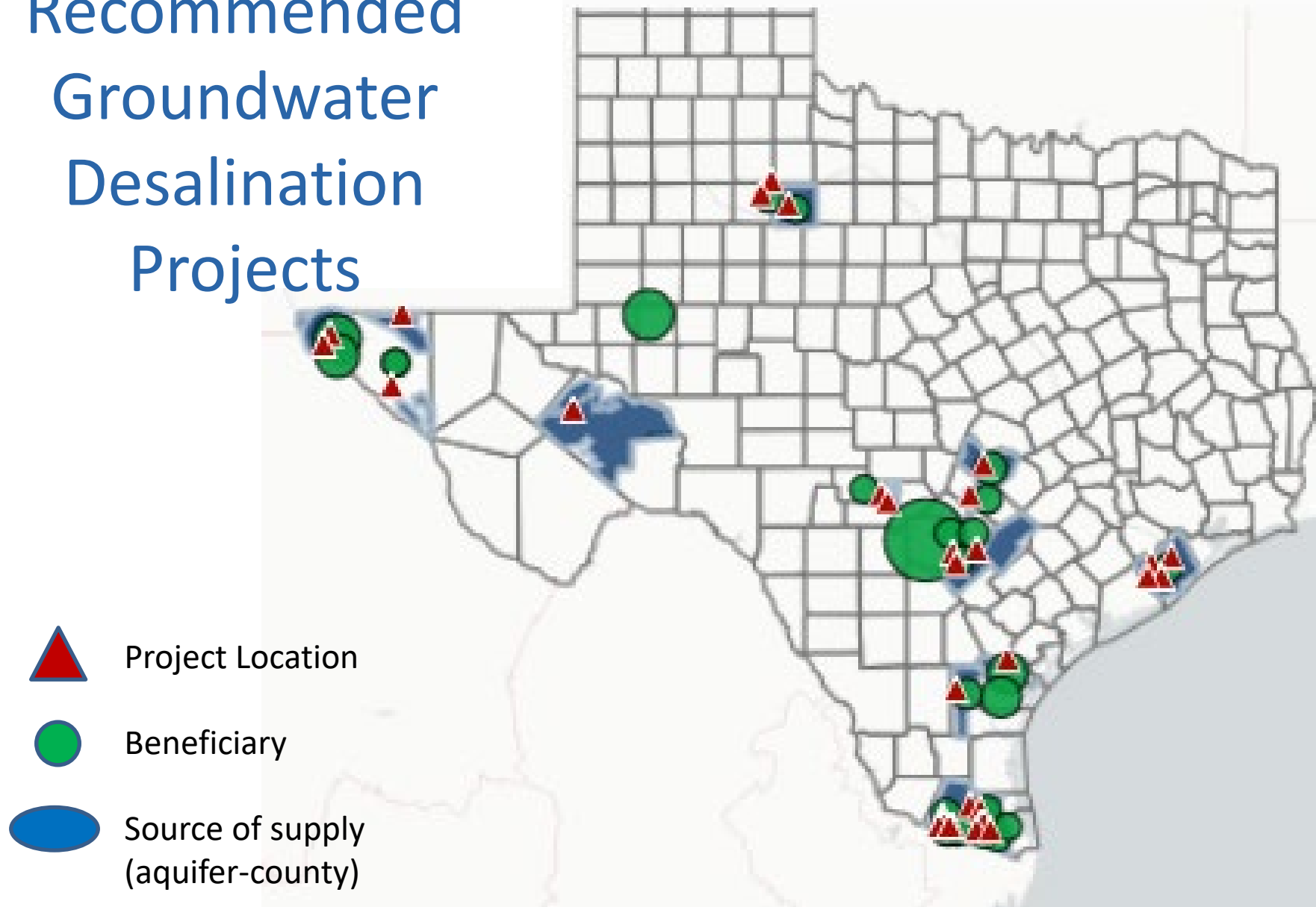
 Project Location

 Beneficiary

 Source of supply
(Gulf of Mexico)



Recommended Groundwater Desalination Projects



Questions

Bryan McMath, Governmental Relations Director

Bryan.McMath@twdb.texas.gov

(512) 851-9988

Claire Boyer, Governmental Relations Liaison

Claire.Boyer@twdb.texas.gov

(512) 317-2311