

# Desalination

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

Erika Mancha

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

Matt Nelson

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# *2022 Biennial Report on Seawater and Brackish Groundwater Desalination in Texas*

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# Desalination Program



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

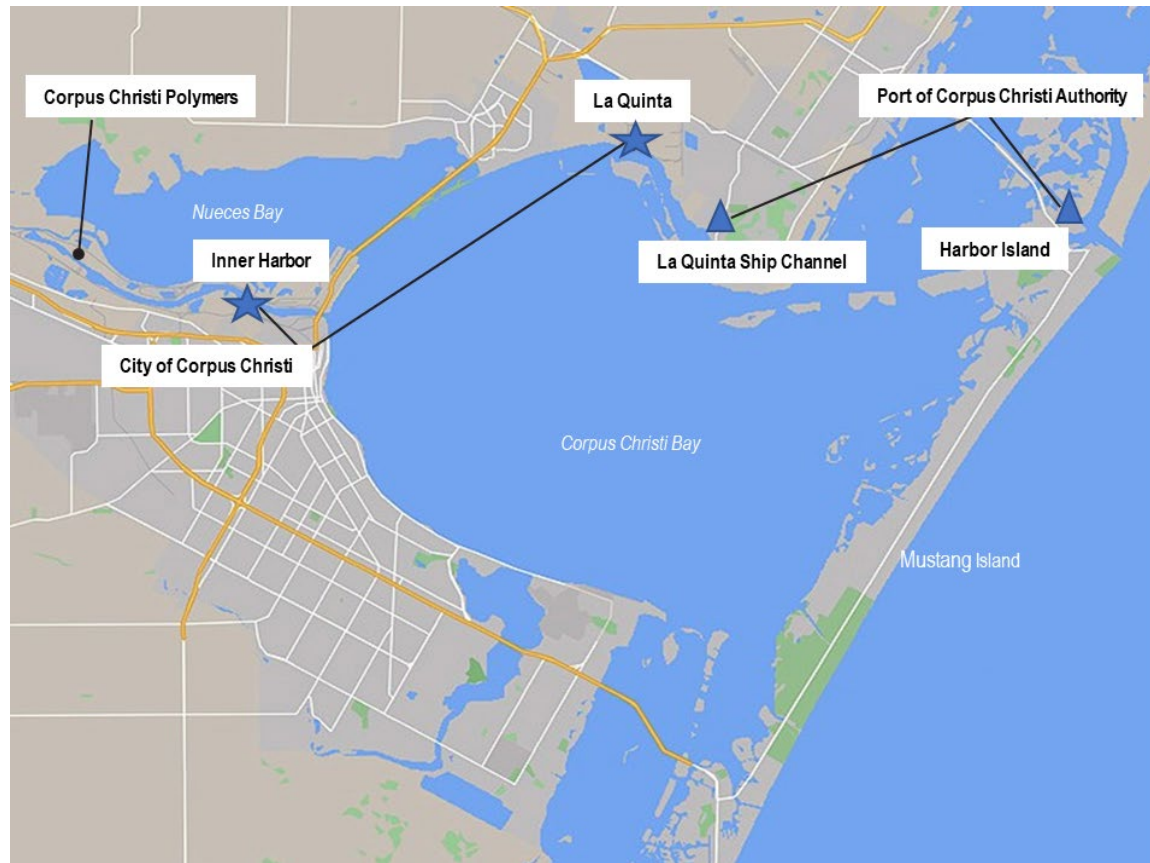


87th Texas Legislative Session



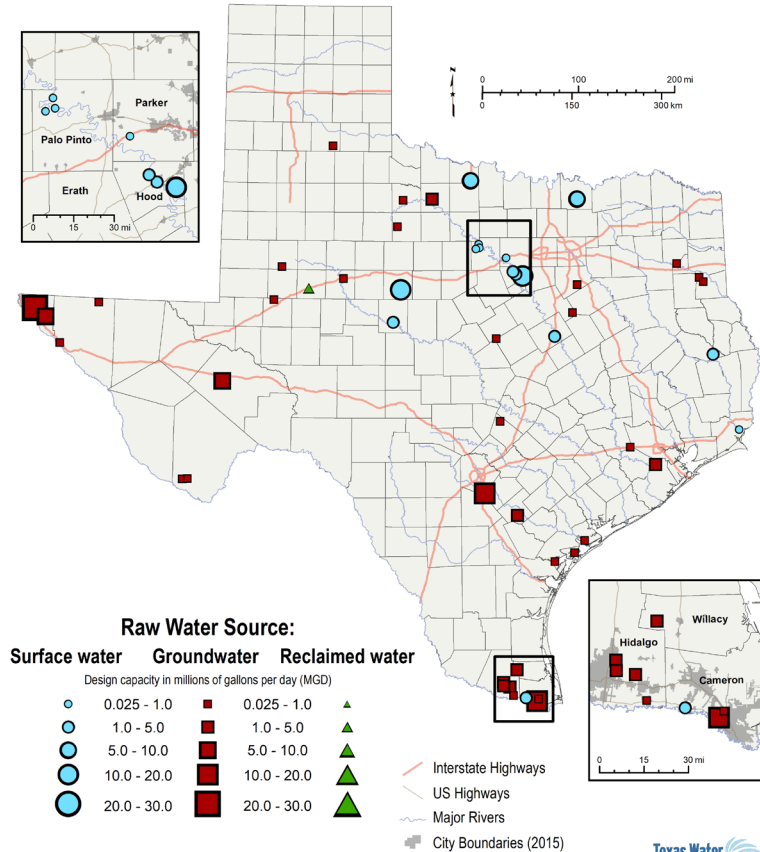
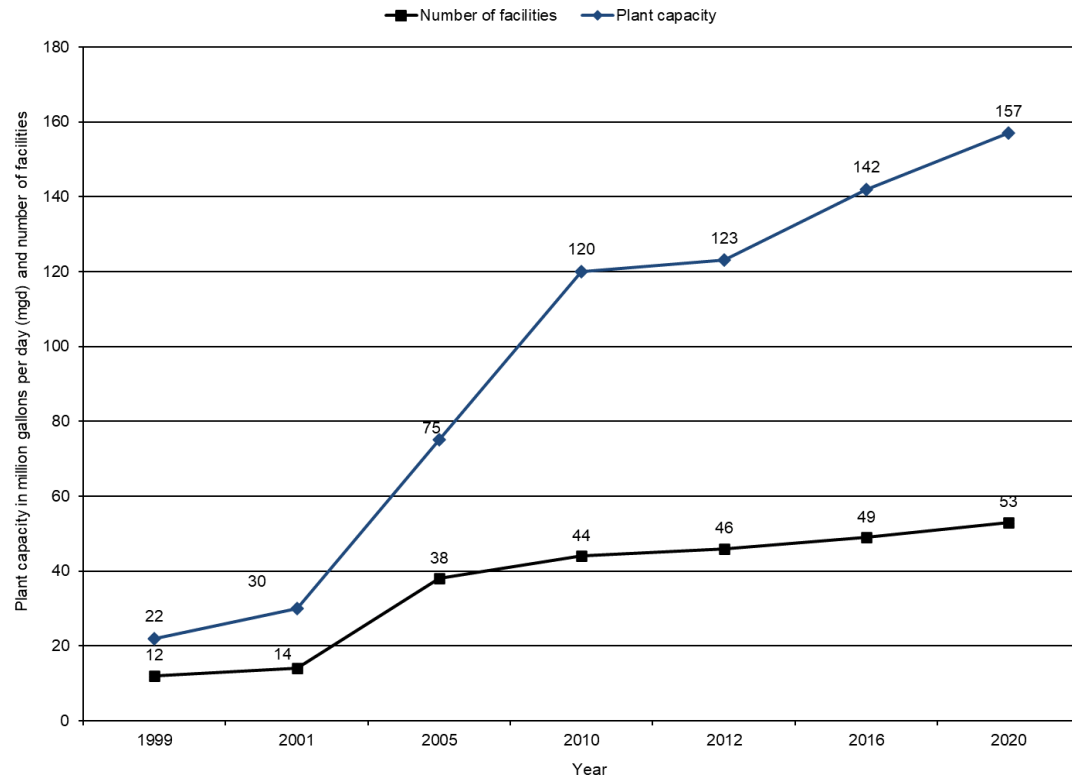
# Seawater Desalination

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



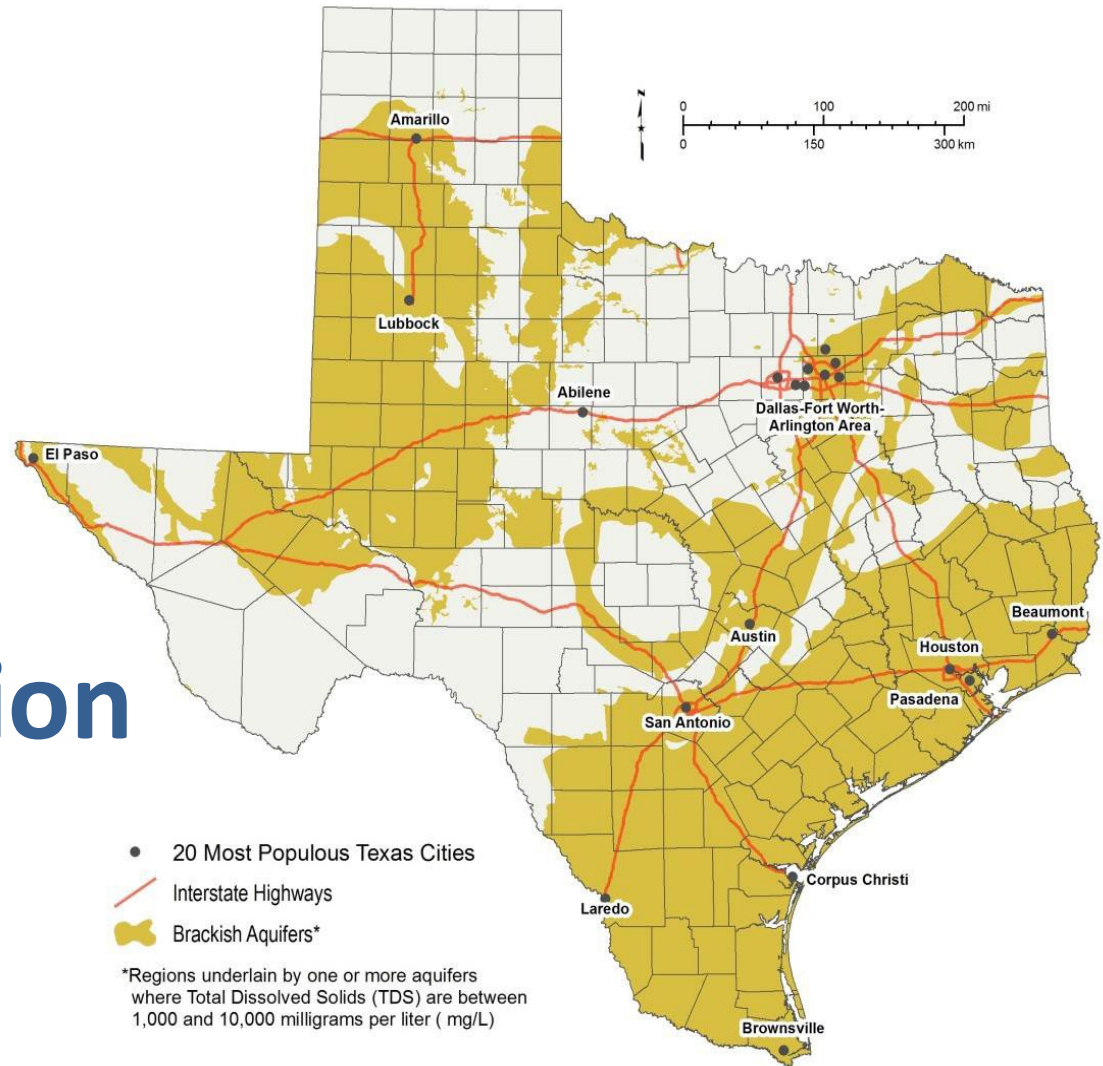
# Brackish Desalination

## Public Water Supply Desalination Plant Capacities

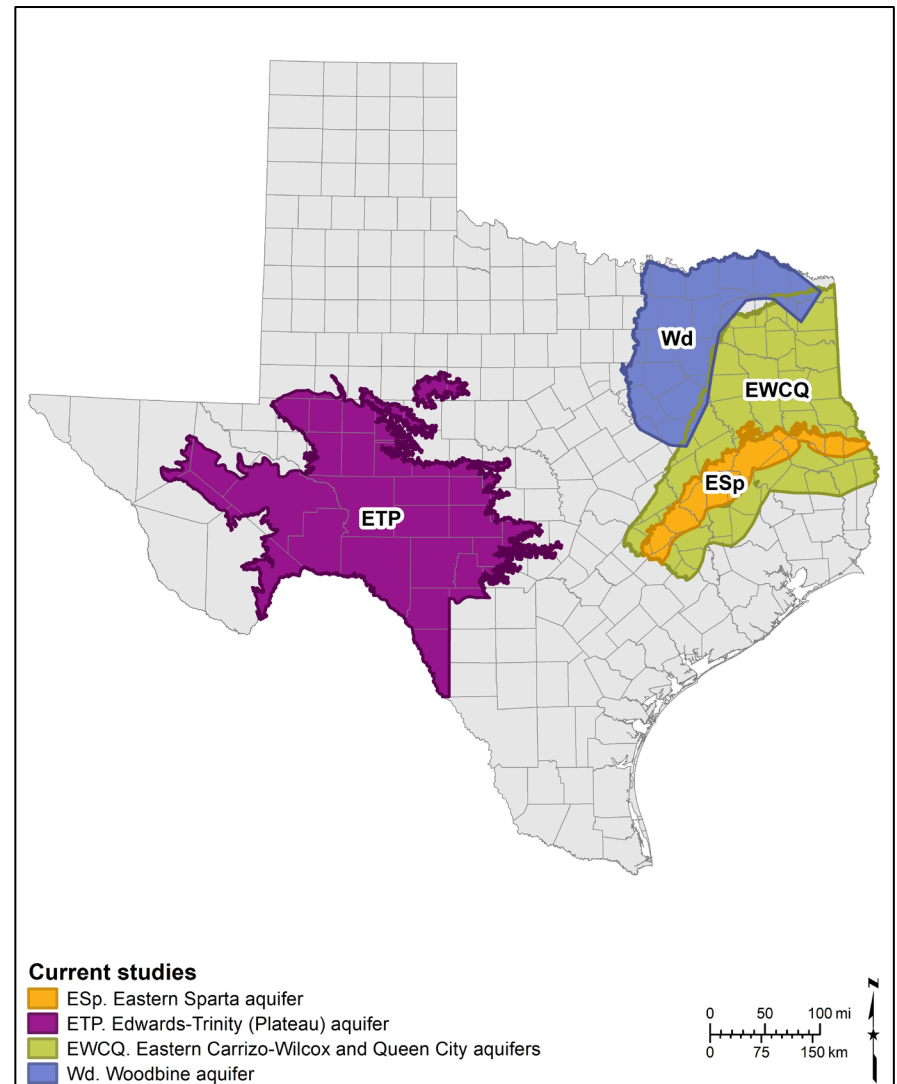
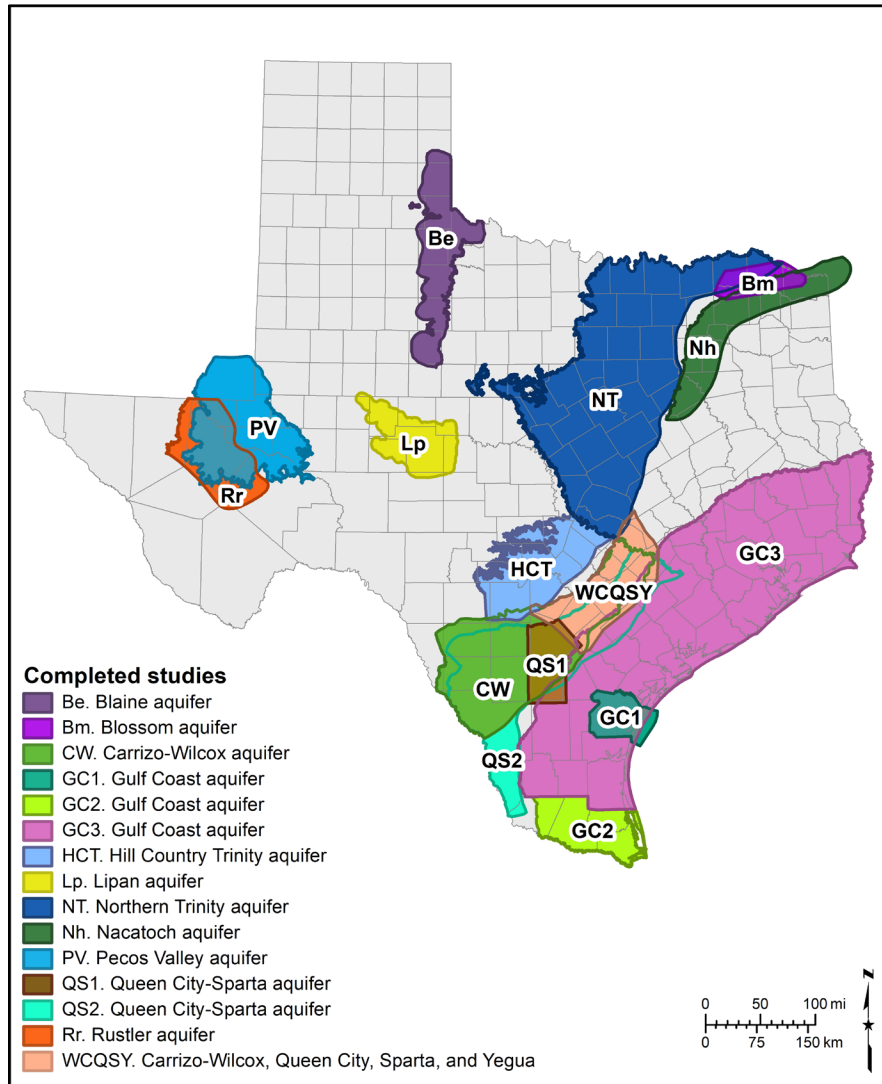




# Brackish Resources Aquifer Characterization System



# 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

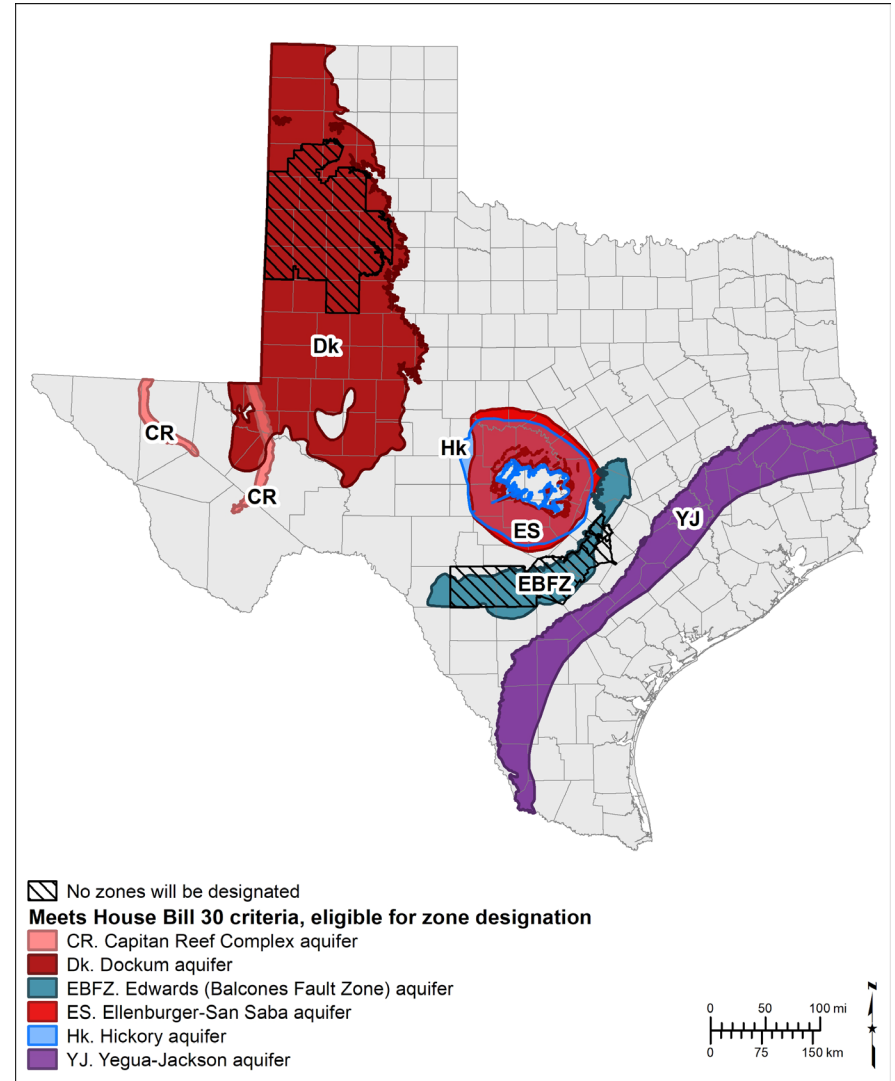
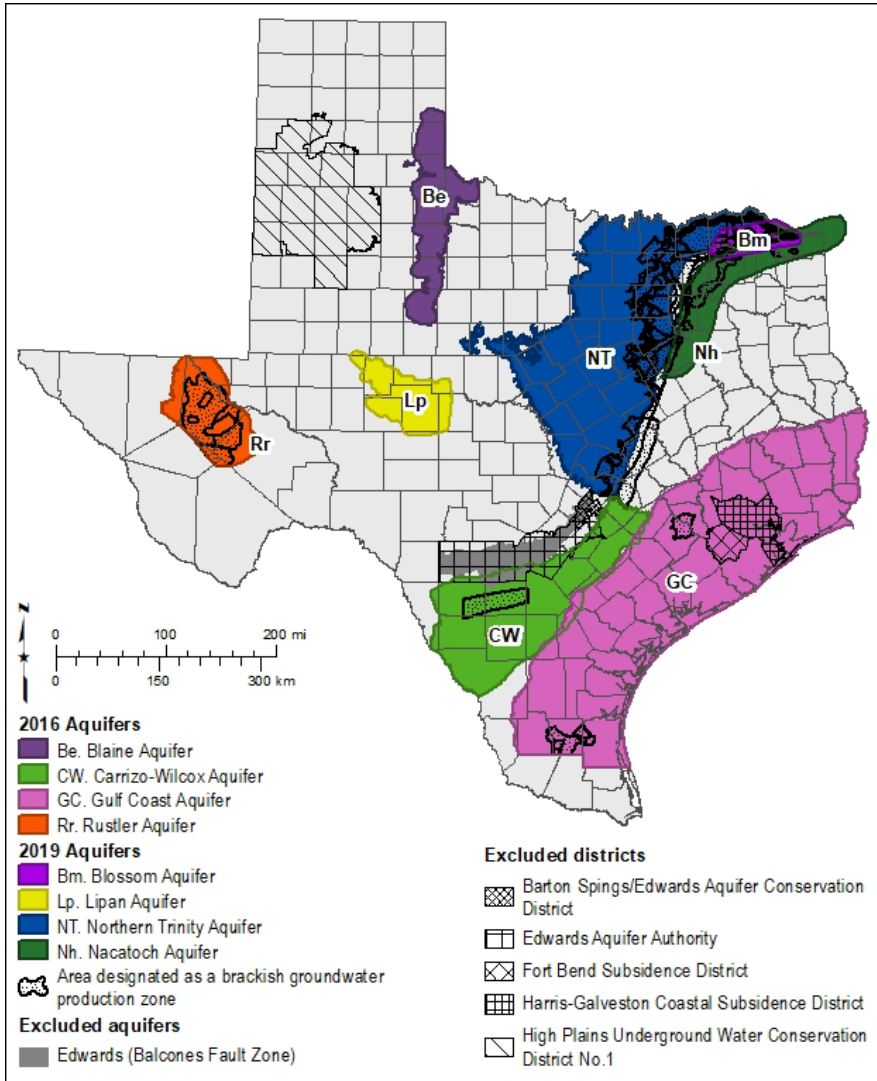
- **Upcoming Technical Studies – RFQ posted in June 2022**

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*

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# Recommended Desalination Strategy Projects in the 2022 State Water Plan

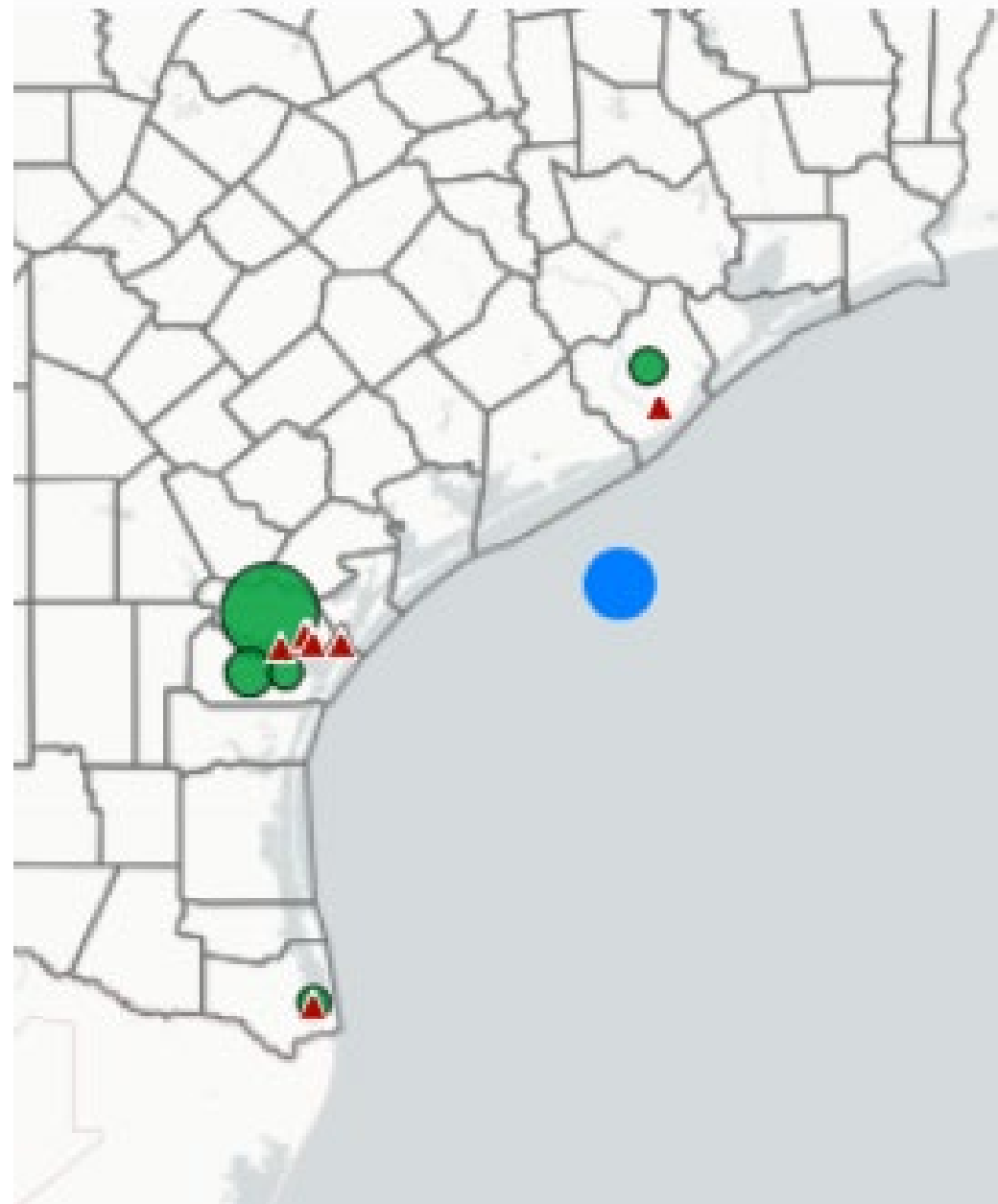
Seawater desalination: 7

Groundwater desalination: 39

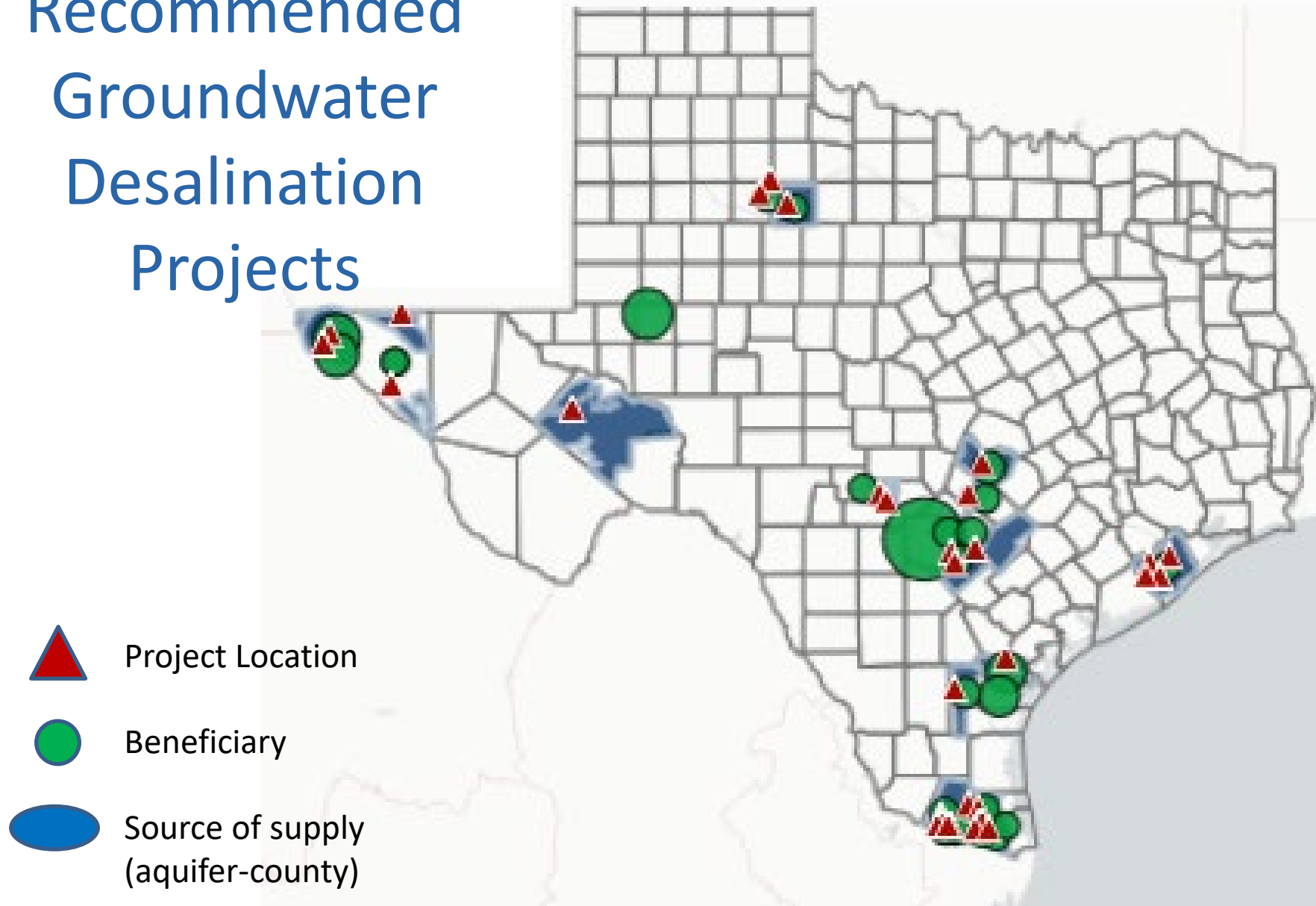
Surface water desalination: 10

# Recommended Seawater Desalination Projects

-  Project Location
-  Beneficiary
-  Source of supply  
(Gulf of Mexico)



# Recommended Groundwater Desalination Projects





# Questions

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