



Brazos River Authority

Water Management Strategies & System Update

Bell County Water Symposium, November 16, 2022

Presented by

David Collinsworth – General Manager & CEO

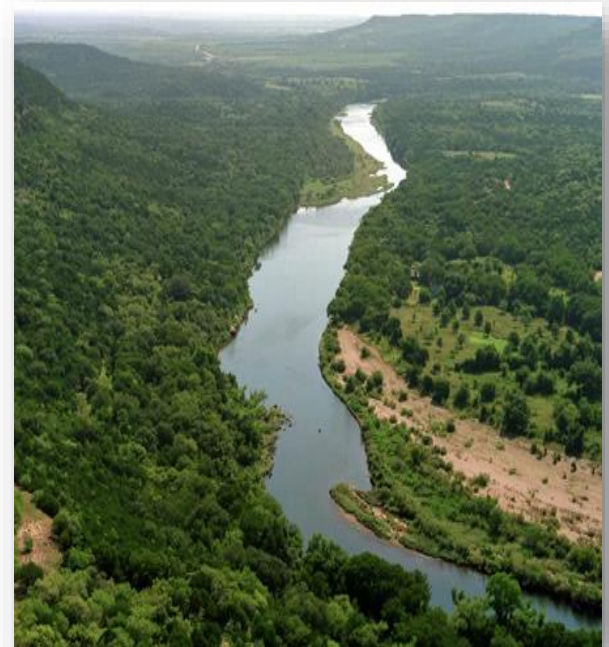
Brad Brunett, Regional Manager – Central & Lower Basins



Our Mission

**To develop, manage, and protect
the water resources of the Brazos River basin**

- **Oldest river authority in Texas**
- **Created by the Texas Legislature in 1929**
- **First entity of its kind in the nation**
- **Self-funded (not appropriated), do not levy taxes**
- **21 member Board appointed by Governor**
- **Territory:**
 - **Extends from the Texas-New Mexico state line west of Lubbock to the Gulf of Mexico near Freeport**
 - **More than 42,000 square miles**
 - **All or part of 76 counties**





Our Business

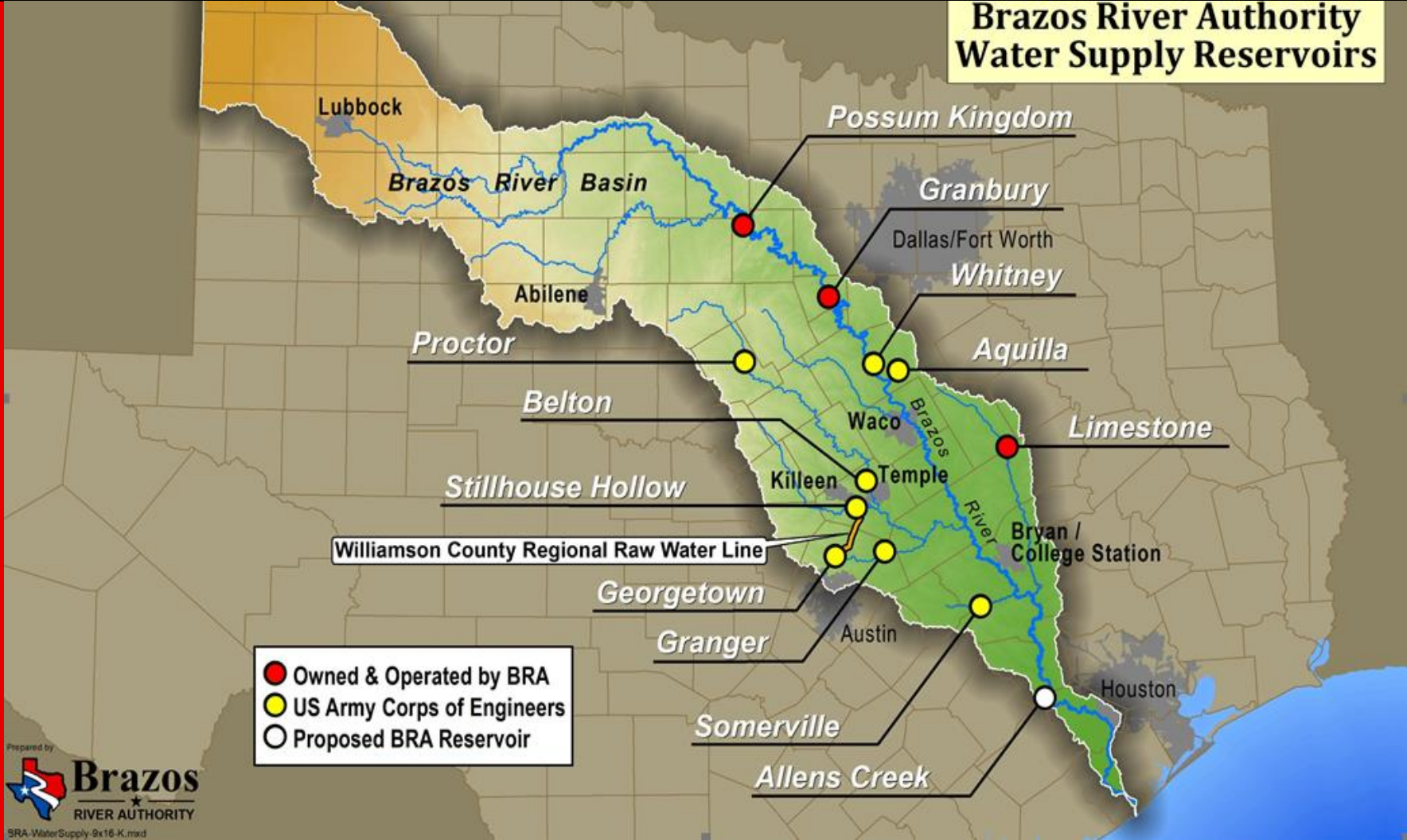
- Raw Water Supply
- Water & Wastewater Treatment
- Water Quality & Environmental Stewardship



Brazos River Authority Water Supply Reservoirs



Brazos River Authority



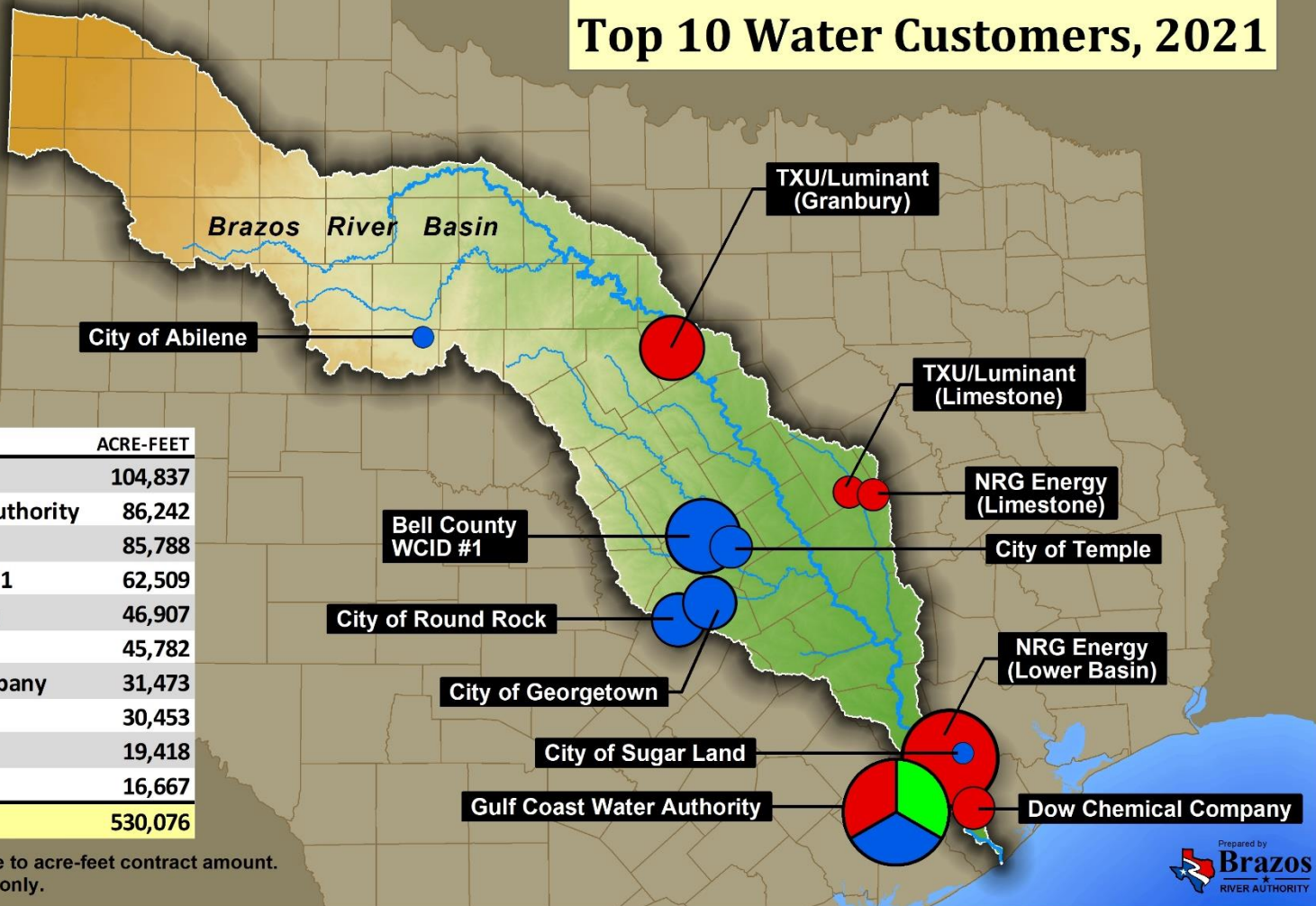


Top 10 Water Customers, 2021

Use Type

- Municipal
- Industrial
- Irrigation

| CUSTOMER | ACRE-FEET |
|----------------------------|----------------|
| NRG Energy | 104,837 |
| Gulf Coast Water Authority | 86,242 |
| TXU/Luminant | 85,788 |
| Bell County WCID # 1 | 62,509 |
| City of Georgetown | 46,907 |
| City of Round Rock | 45,782 |
| Dow Chemical Company | 31,473 |
| City of Temple | 30,453 |
| City of Abilene | 19,418 |
| City of Sugar Land | 16,667 |
| TOTAL | 530,076 |



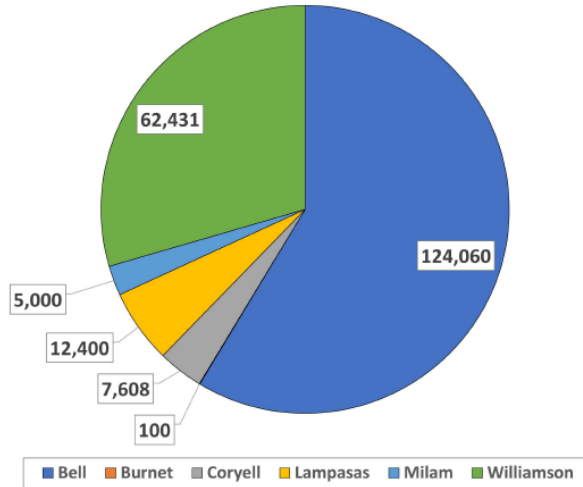
Circle size is proportionate to acre-feet contract amount.
Map is for general display only.



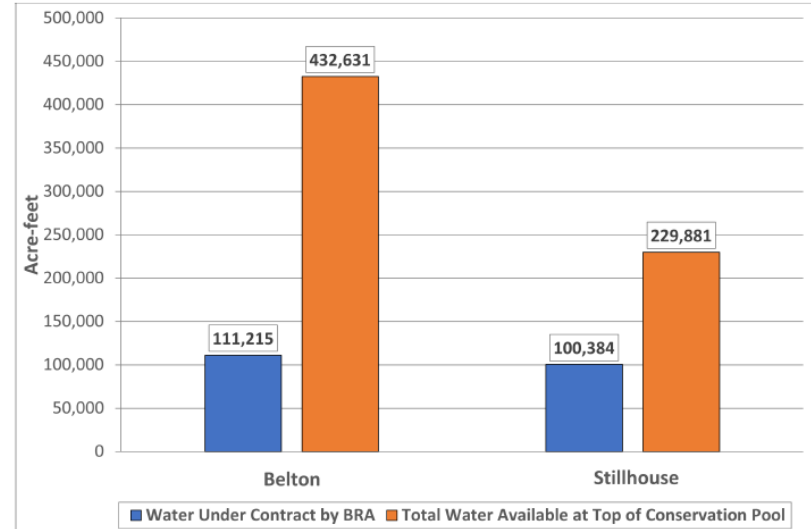
Serving Water Commitments



Current BRA Water Contracts by County for Belton and Stillhouse Hollow Lakes (Acre-Feet)



Water Under Contract vs. Total Available Water for Belton and Stillhouse Hollow Lakes



Brazos Basin Population Growth

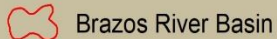
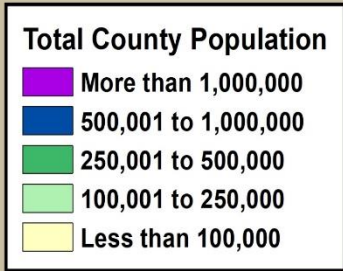
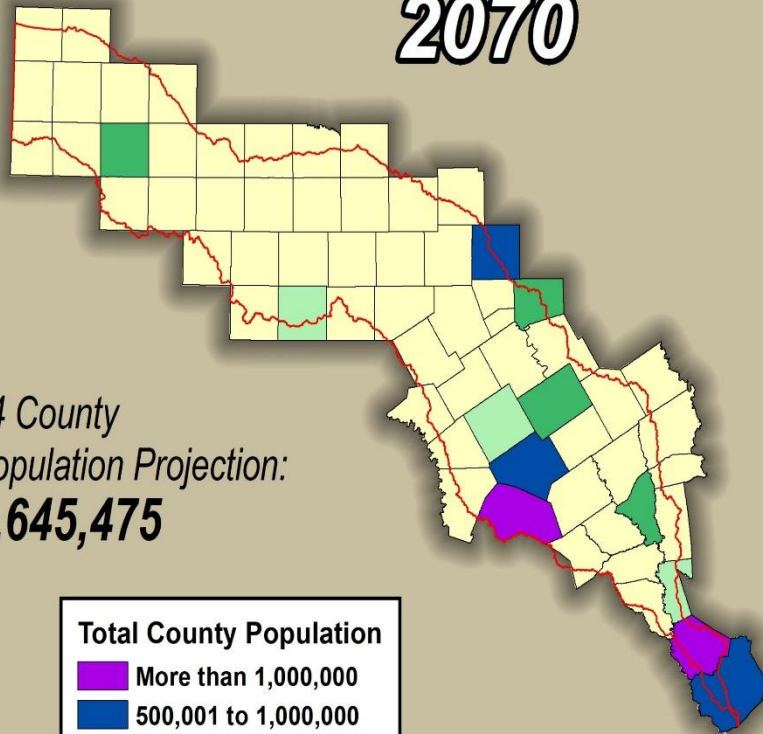
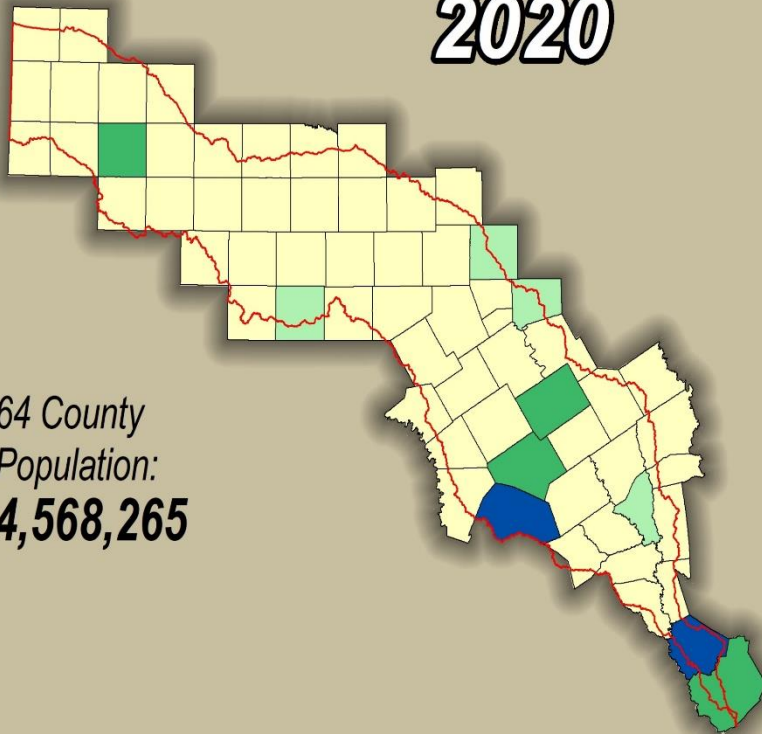
Projected Increase: 4,077,210

2020

2070

64 County
Population:
4,568,265

64 County
Population Projection:
8,645,475



Prepared by



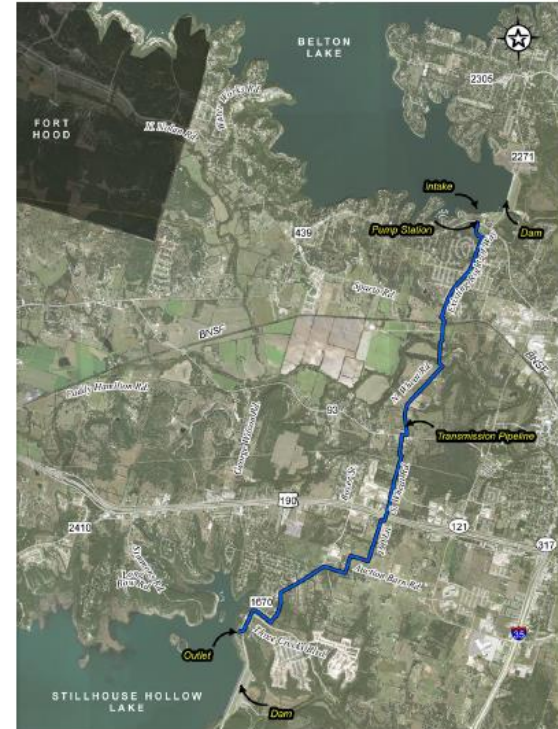
IGCR\Population\CountyPop2020to2070-9x16-2021-SWP2022.mxd



Belhouse Drought Preparedness Project Overview



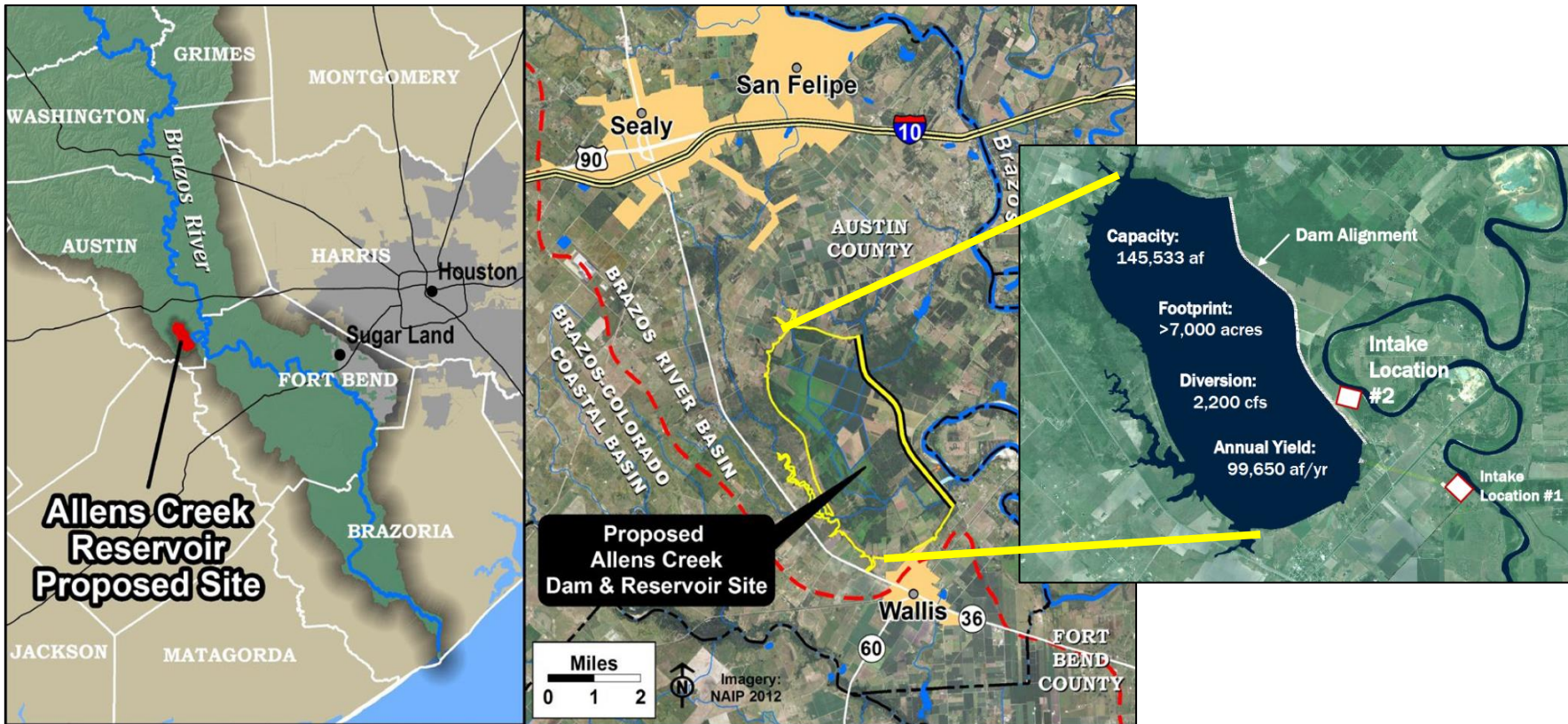
- **Purpose:**
 - Improve reliability and resiliency of regional water supplies
 - Improve drought preparedness
 - Prepare region for continued growth and development
- **Key Details:**
 - Construct a water intake at Belton Lake
 - Build a water pipeline between Belton Lake and Stillhouse Hollow Lake
 - Construct an outlet at Stillhouse Hollow Lake
 - Pipeline will only be used during dry times to meet consumer need
- **Anticipated Construction Start: 2025**





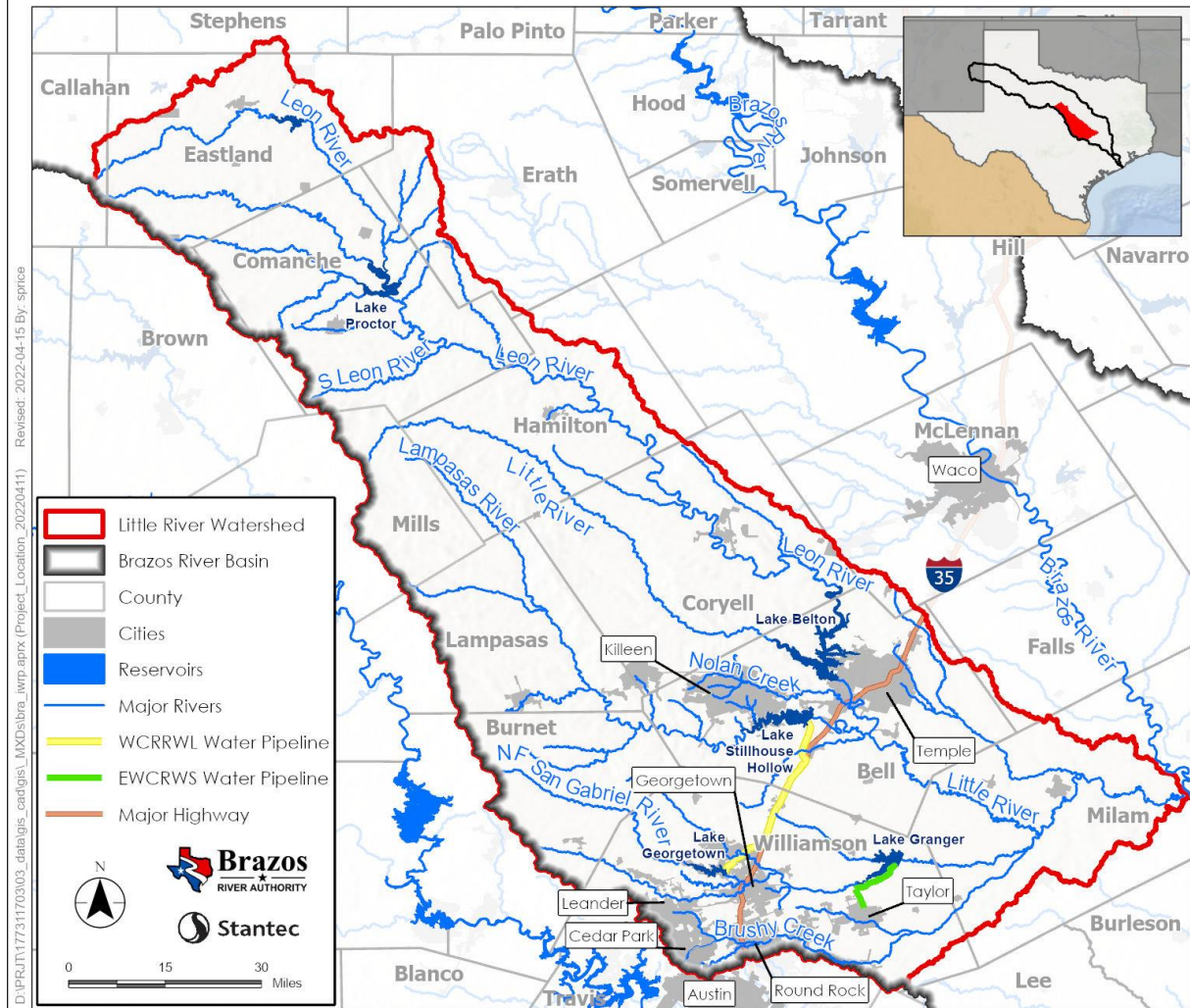
Allens Creek Reservoir

[The Brazos River Authority](#) > [About Us](#) > [Reservoirs](#) > [Allens Creek Reservoir \(proposed\)](#) > [Frequently Asked Questions](#)



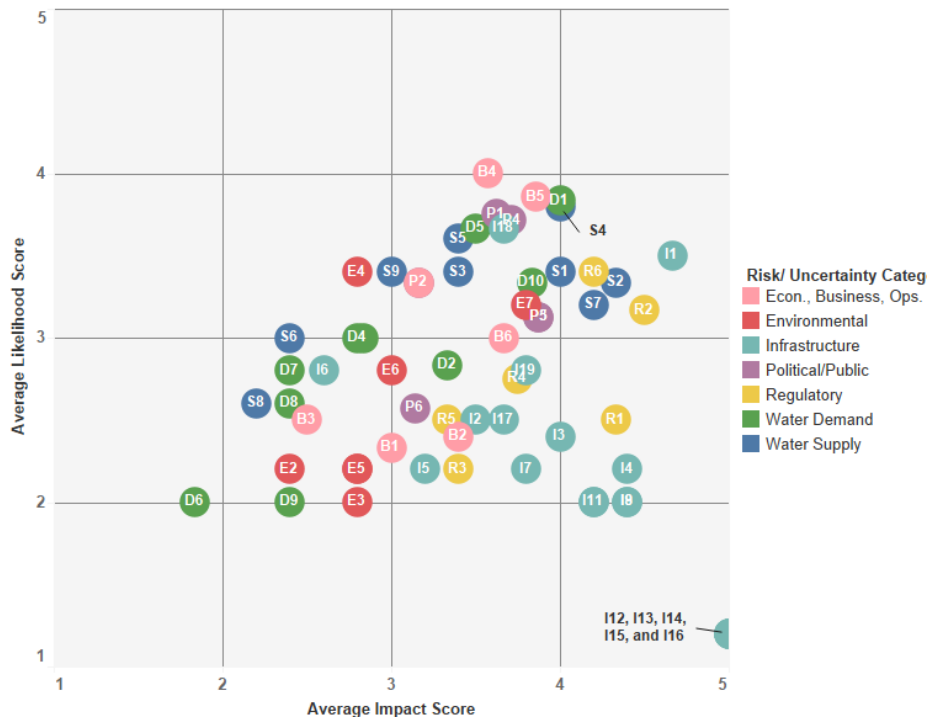
BRA Little River System

The BRA has a high priority need for **decision making and action** in order to **ensure a reliable water supply** to customers in the **Little River Watershed (Phase 1)** and the entire **Brazos River Basin (Phase 2)**.



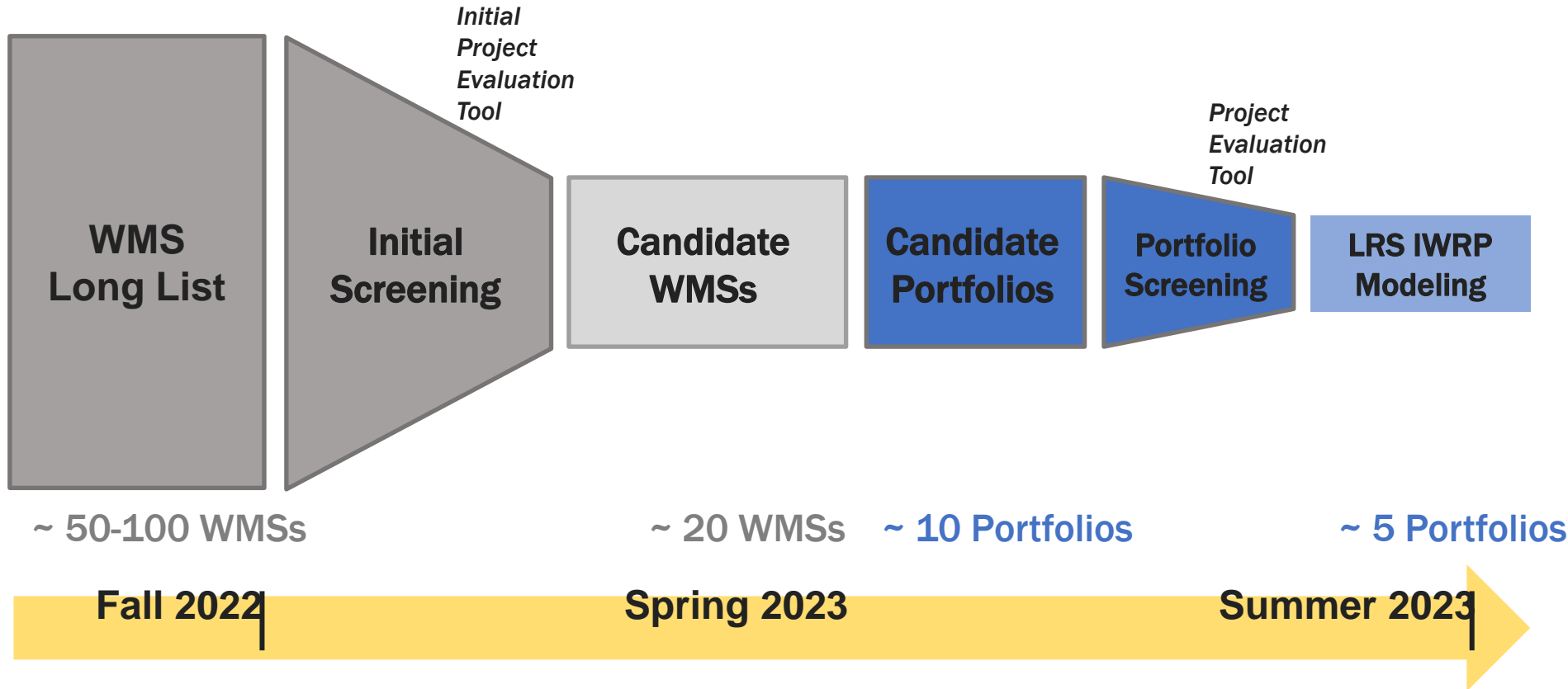


Subtask 1.2 Identify and Prioritize Issues, Risks and Uncertainties

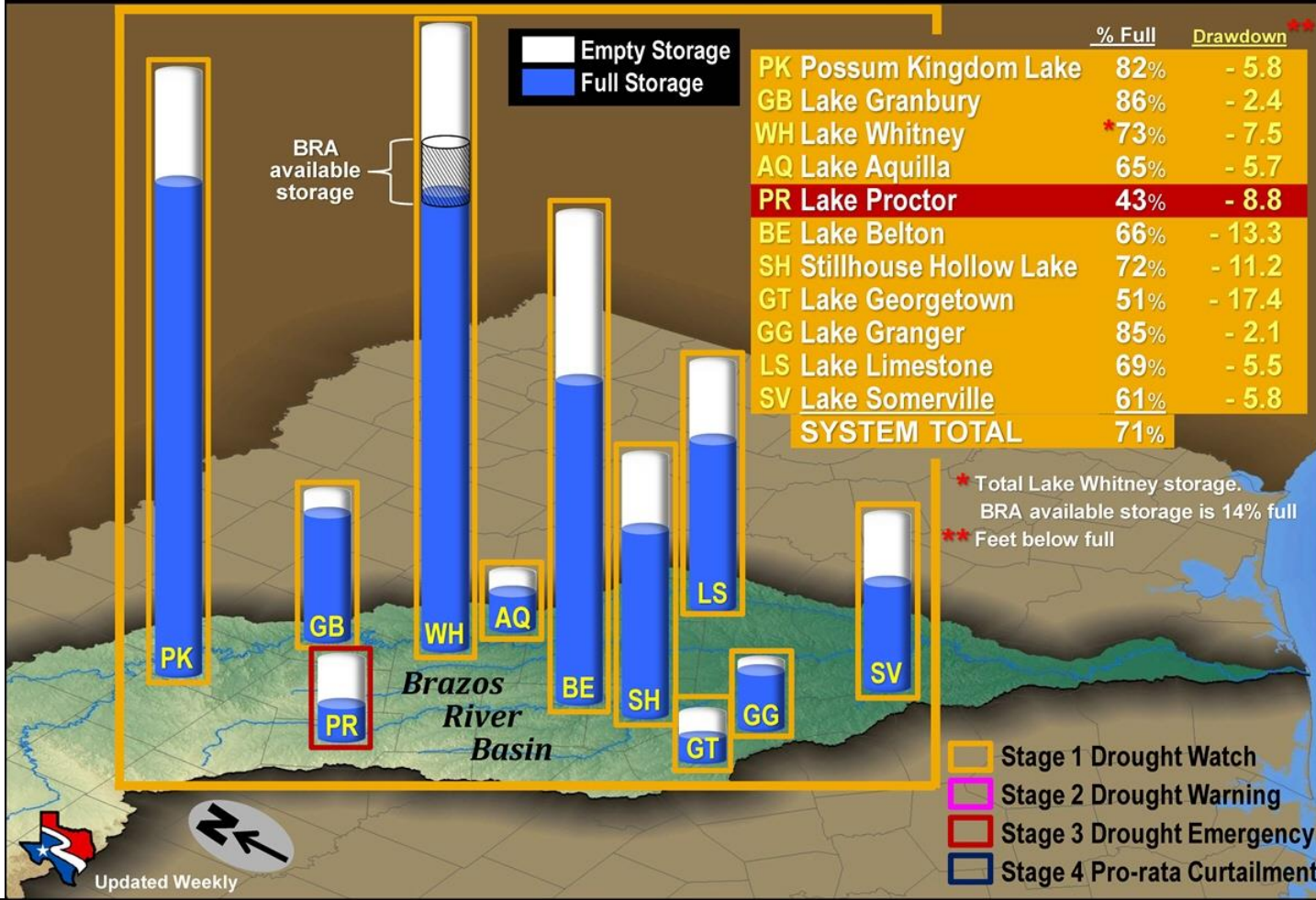


| Driver | Description |
|---|--|
| <i>Dry Climate and Hydrology</i> | Droughts that are more frequent, intense, and/or severe than the historical record, exacerbated by long-term climate variability |
| <i>High Water Demand</i> | Population growth and water use changes that increase water demands within the LRW |
| <i>Key Facility Constraints</i> | Year-or-longer outages or capacity constraints for key BRA LRS facilities |
| <i>Declining Groundwater Sustainability</i> | Physical or administrative changes that could impact groundwater supplies in the LRW |
| <i>Cost of Future Water Supply Projects</i> | Significant uncertainty around cost of purchasing new water supplies and developing new water supply projects |
| <i>Regulatory and Stakeholder Issues</i> | Factors outside BRA's control that could delay or prevent a water supply project from being implemented |

Water Management Strategy Evaluation Approach



Combined Storage of Authority System is Below Stage 1 Drought Watch Storage Trigger

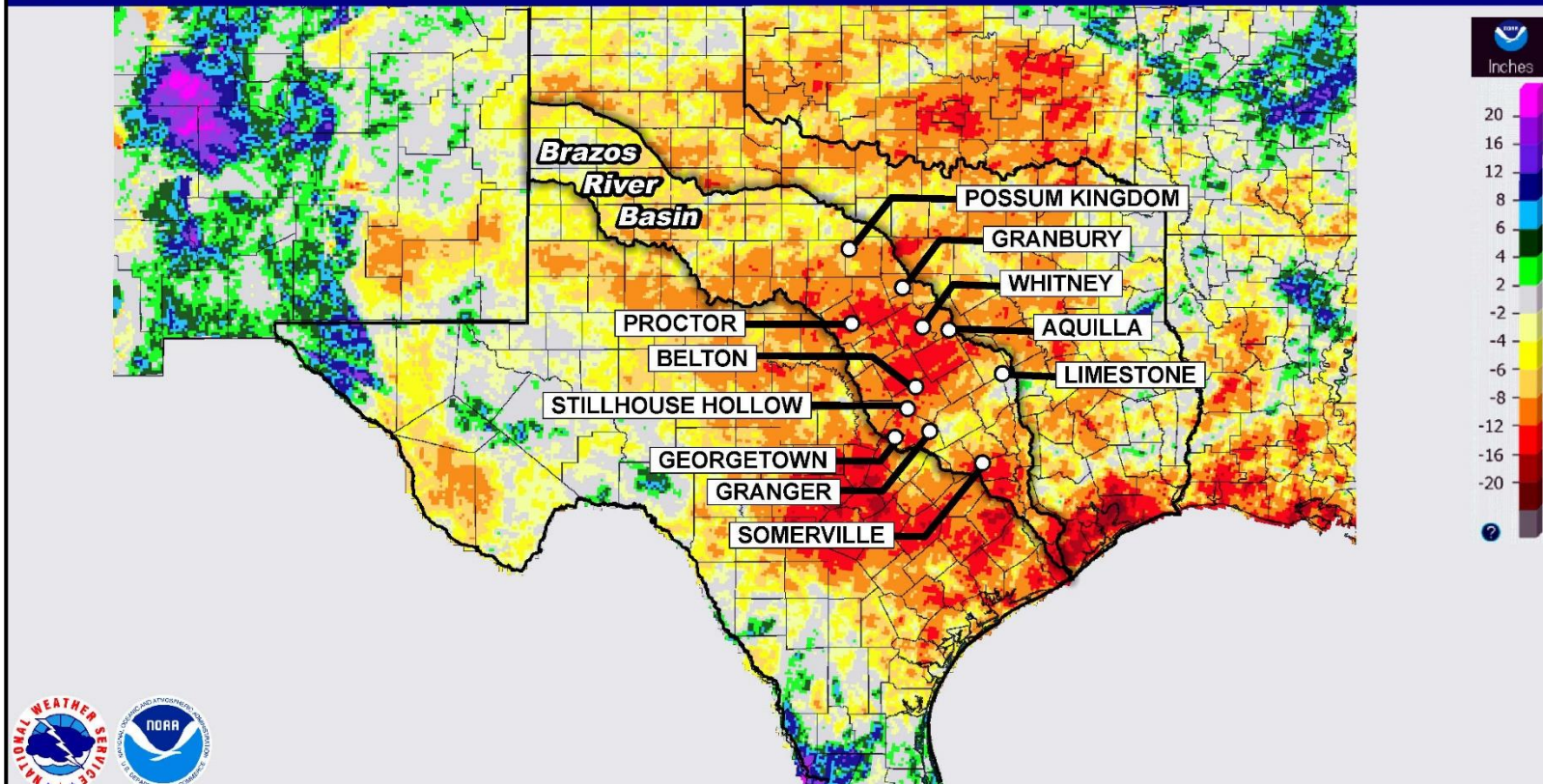


Departure from Normal Precipitation

October 10, 2022 Year to Date Departure Precipitation

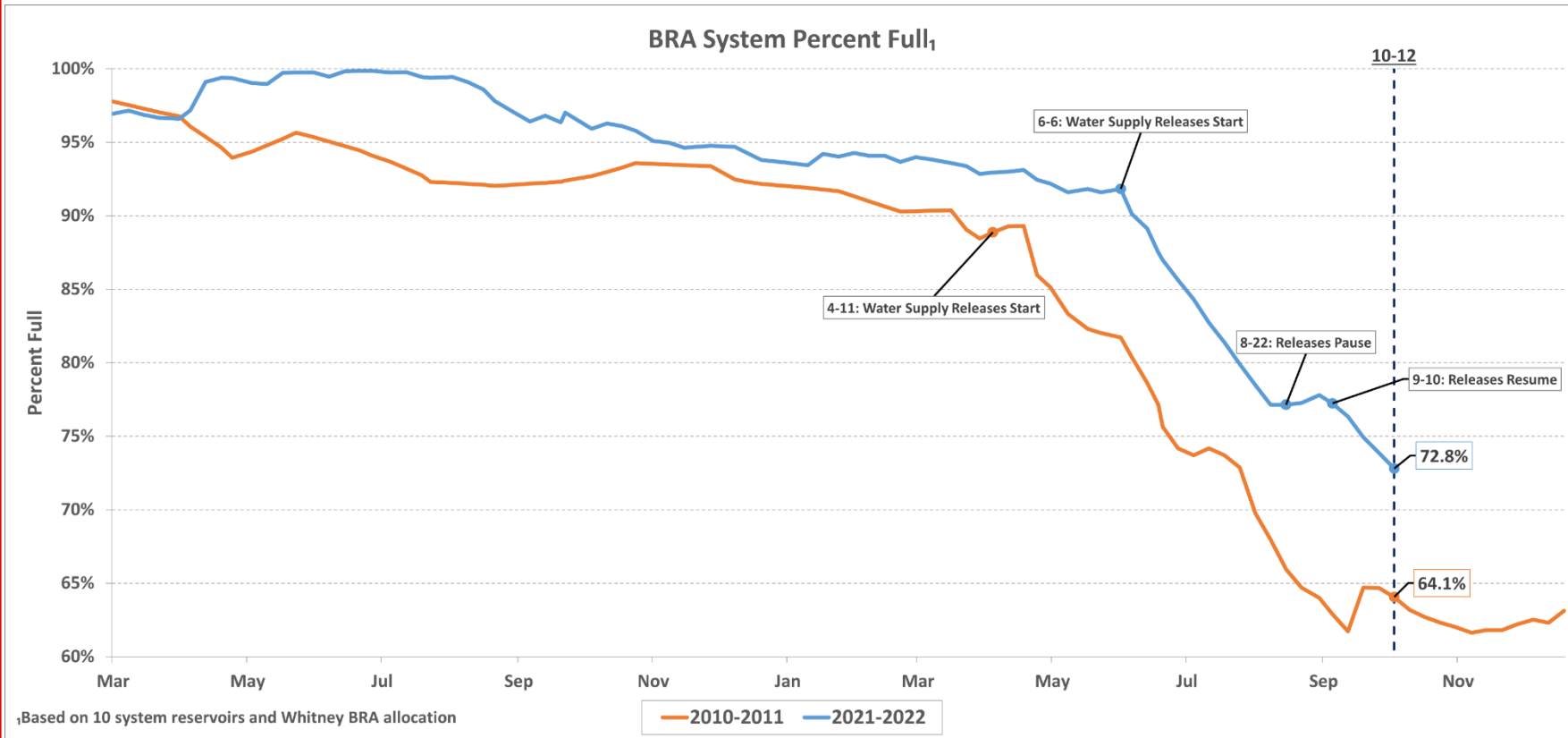
Created on: October 10, 2022 - 18:57 UTC

Valid on: October 10, 2022 12:00 UTC



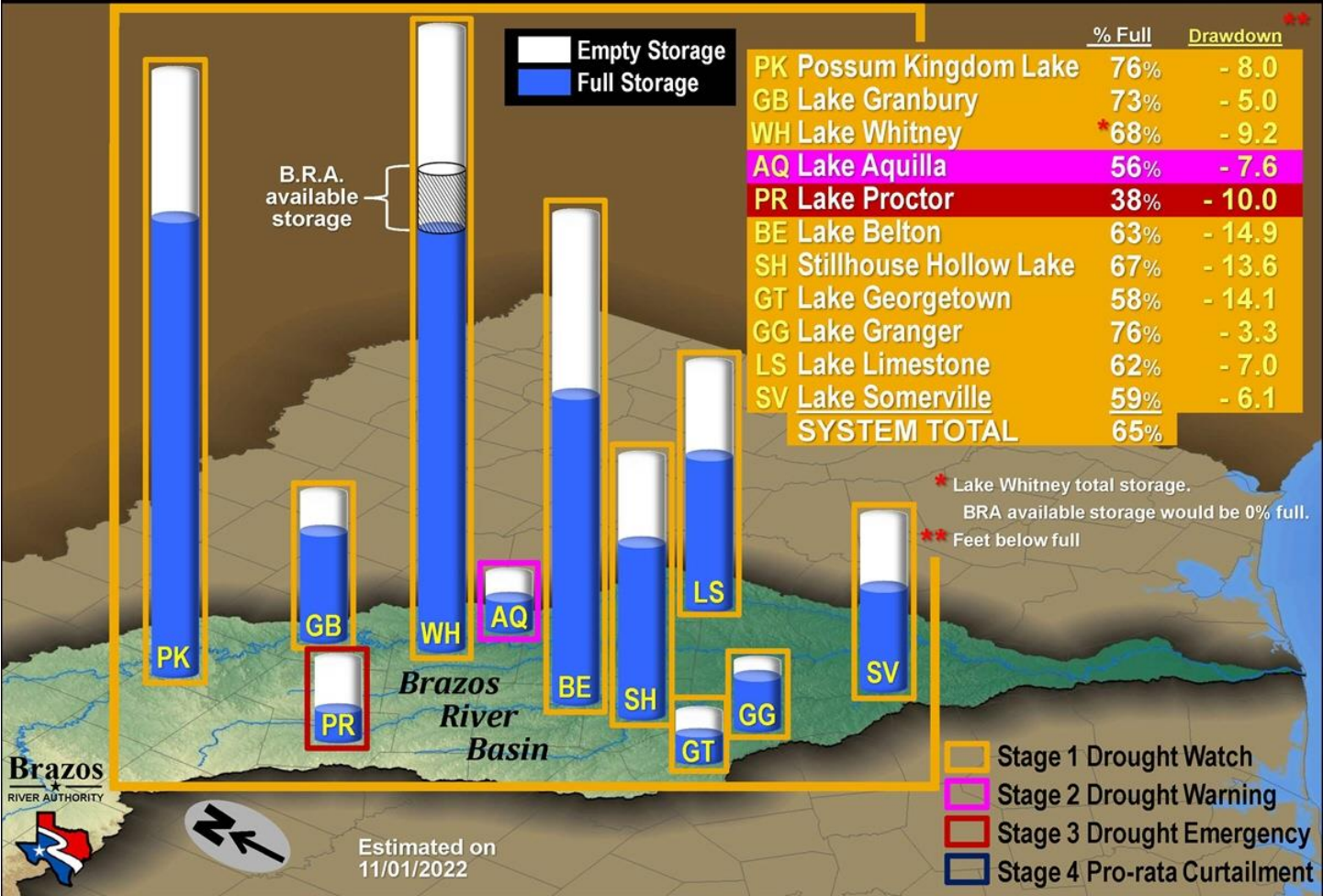


BRA System Storage: 2022 vs. 2011



Projected Reservoir Status for December 31, 2022 (based on minimum inflows and high evaporation)

Combined Storage of Authority System is Below Stage 1 Drought Watch Storage Trigger



Brazos River Authority

Brazos RIVER AUTHORITY





Brazos

RIVER AUTHORITY
www.brazos.org



information@brazos.org

www.BrazosBasinNow.org



@BrazosWater



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Welcome to BrazosBasinNOW

Current Brazos River Basin Information

Streamflow

Streamflow

- Upper Basin Streamflow
- Central Basin Streamflow
- Lower Basin Streamflow

Reservoirs

Reservoir Elevation
Reservoir Drawdown
Percent Capacity

Rainfall

Limestone Mean Areal Precip
Granbury Mean Areal Precip
Possum Kingdom Mean Areal Precip



Brazos River Authority