



# ***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

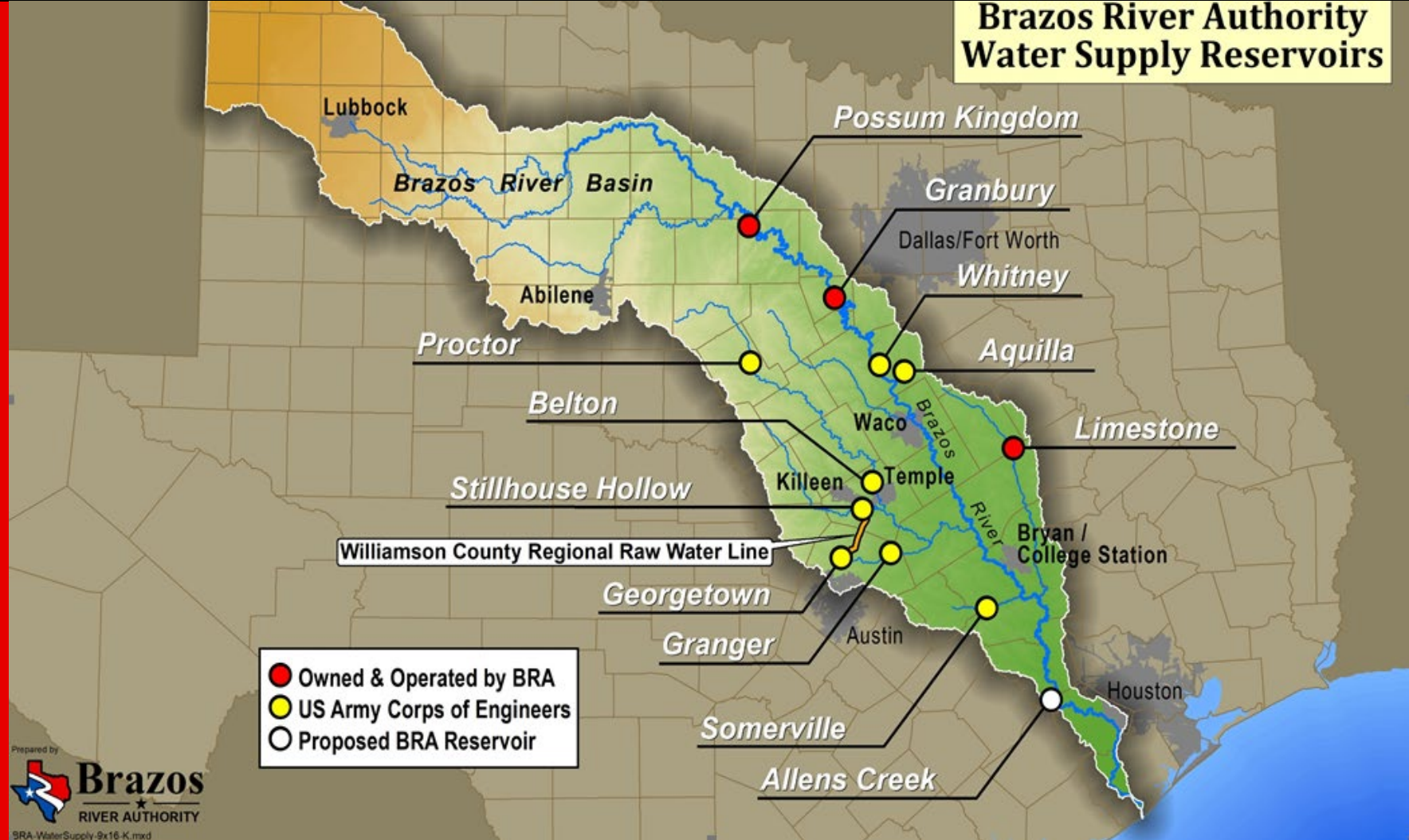
- Raw Water Supply
- Water & Wastewater Treatment
- Water Quality & Environmental Stewardship



# Brazos River Authority Water Supply Reservoirs



Brazos River Authority



- Owned & Operated by BRA
- US Army Corps of Engineers
- Proposed BRA Reservoir

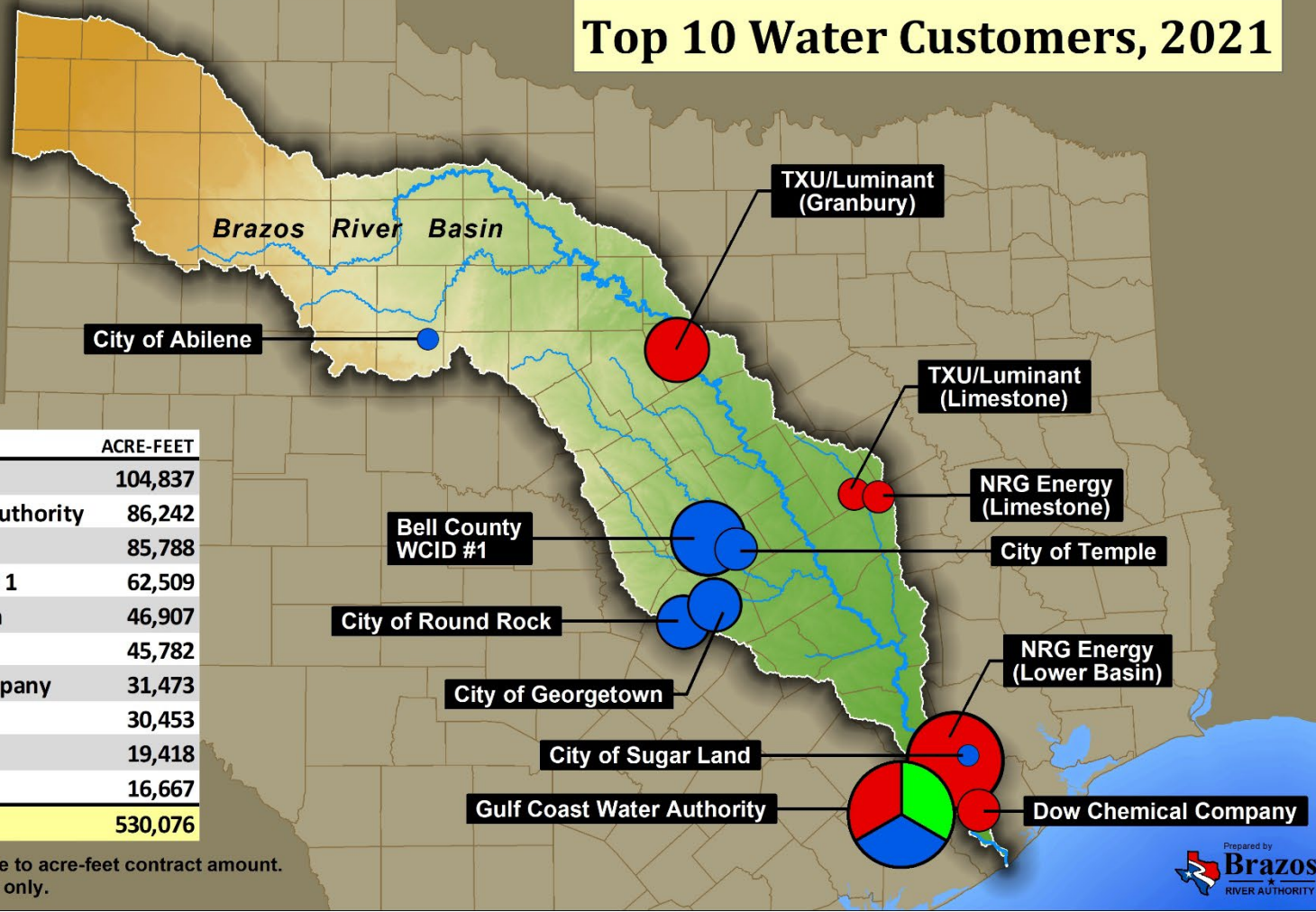


# Top 10 Water Customers, 2021

**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
<b>TOTAL</b>	<b>530,076</b>



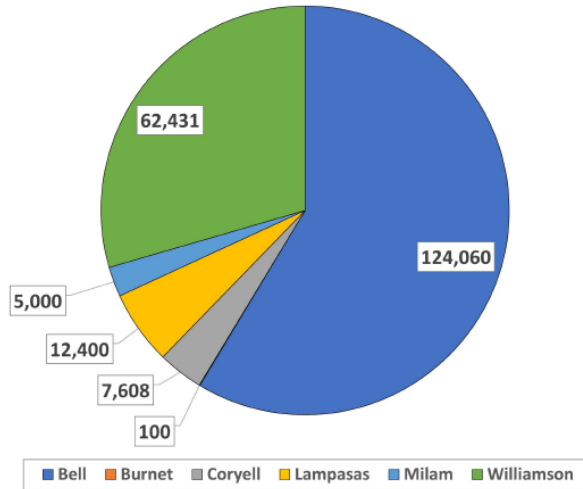
Circle size is proportionate to acre-feet contract amount.  
Map is for general display only.



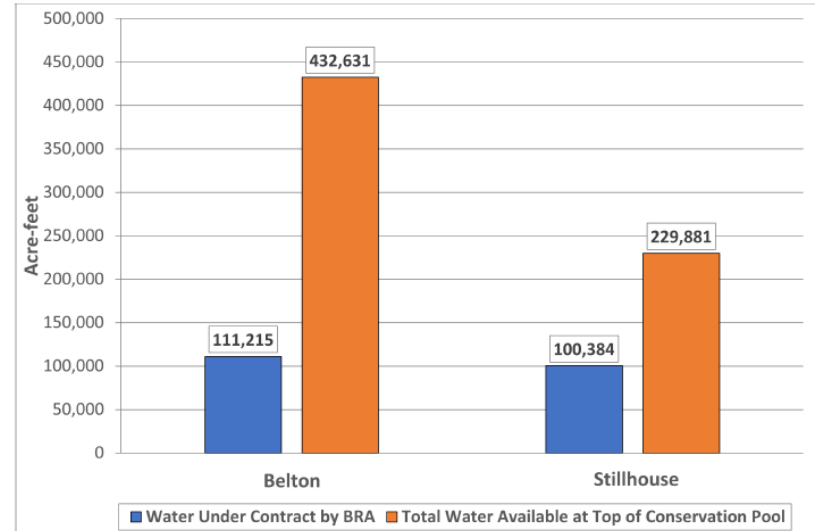
# Serving Water Commitments



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

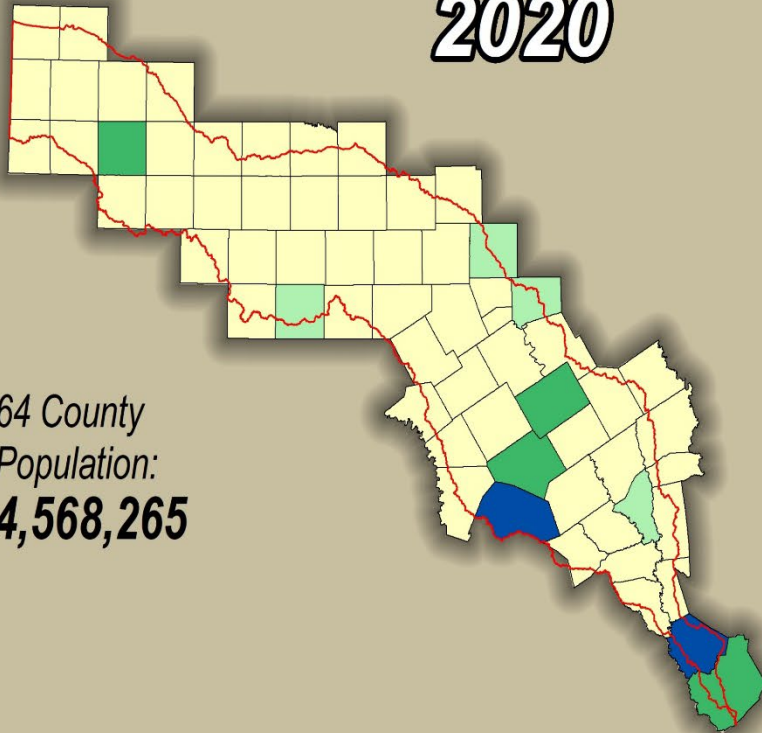


### Water Under Contract vs. Total Available Water for Belton and Stillhouse Hollow Lakes



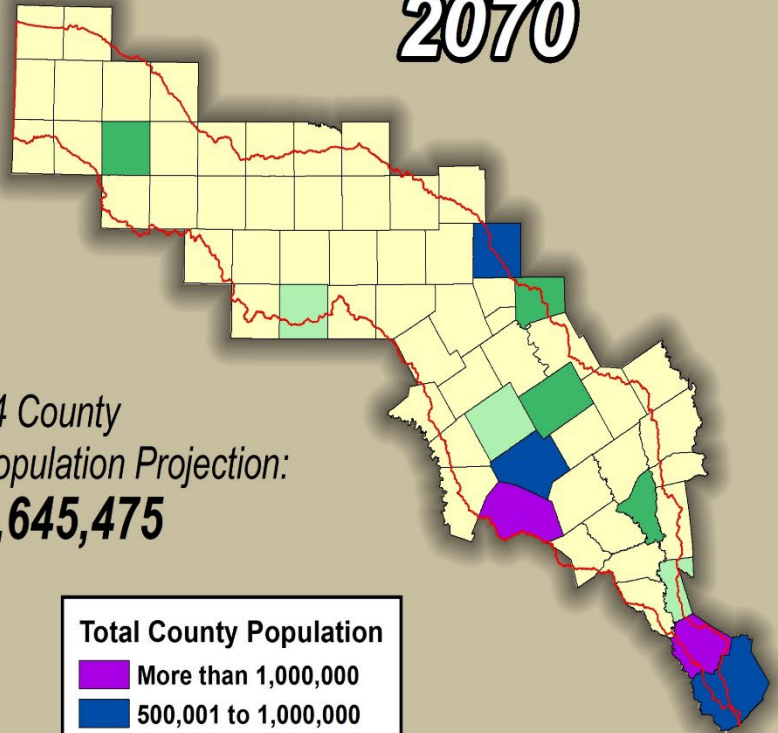
# Brazos Basin Population Growth *Projected Increase: 4,077,210*

## 2020



64 County  
Population:  
**4,568,265**

## 2070



64 County  
Population Projection:  
**8,645,475**

### Total County Population

- More than 1,000,000
- 500,001 to 1,000,000
- 250,001 to 500,000
- 100,001 to 250,000
- Less than 100,000

Brazos River Basin

Source: 2022 State Water Plan, Texas Water Development Board



Brazos River Authority

Prepared by



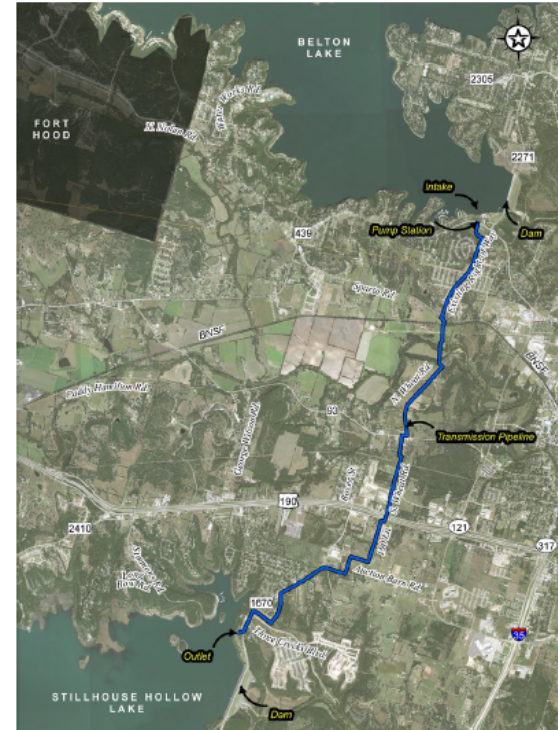
IGCR\Population\CountyPop2020to2070-9x16-2021-SWP2022.mxd



# 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**

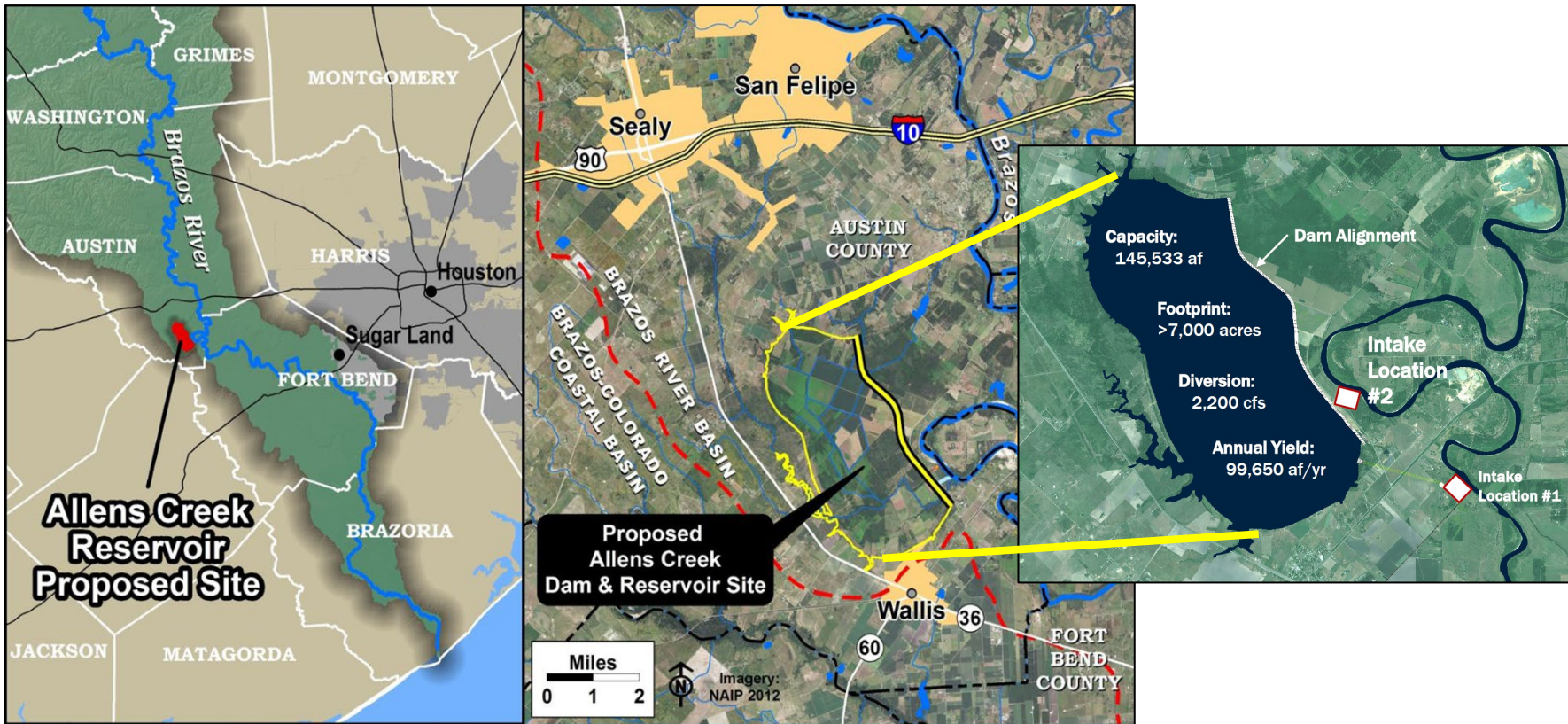






# Allens Creek Reservoir

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

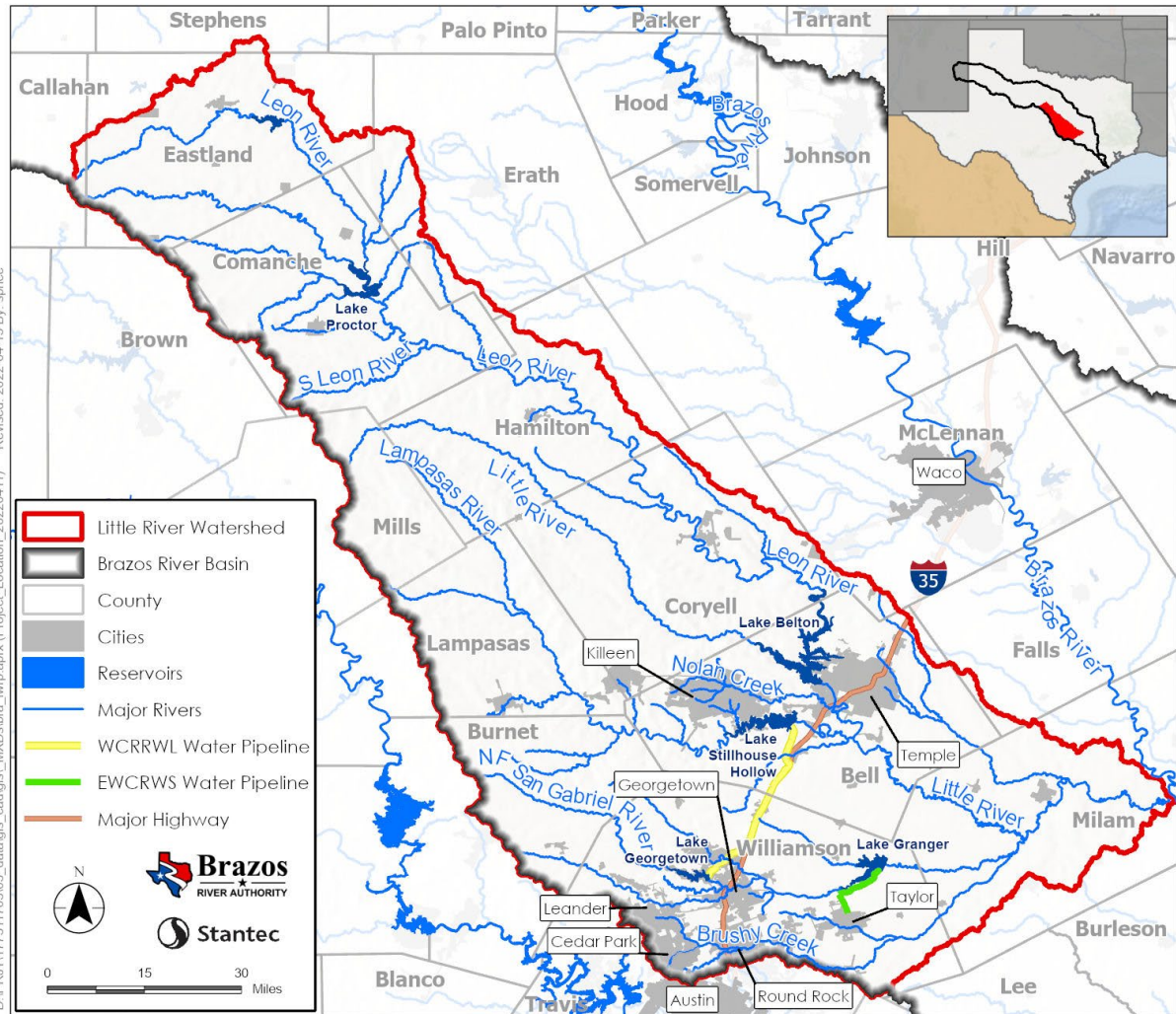




# ***BRA Little River System***

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)**.

D:\PRJ\17731170303\_data\gis\MXDs\bra\_wrp\aprx (Project\_Location\_20220411) Revised: 2022-04-15 By: sprice





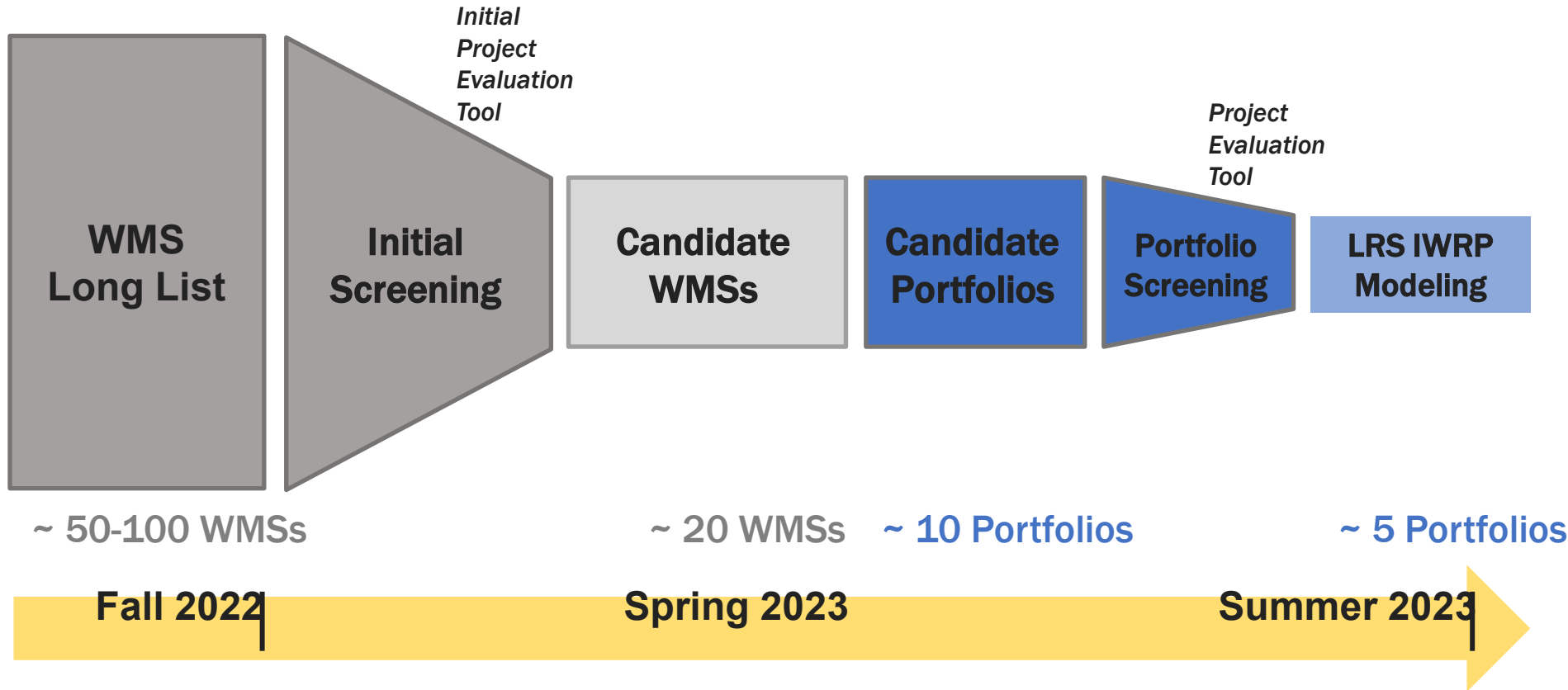


# Subtask 1.2 Identify and Prioritize Issues, Risks and Uncertainties

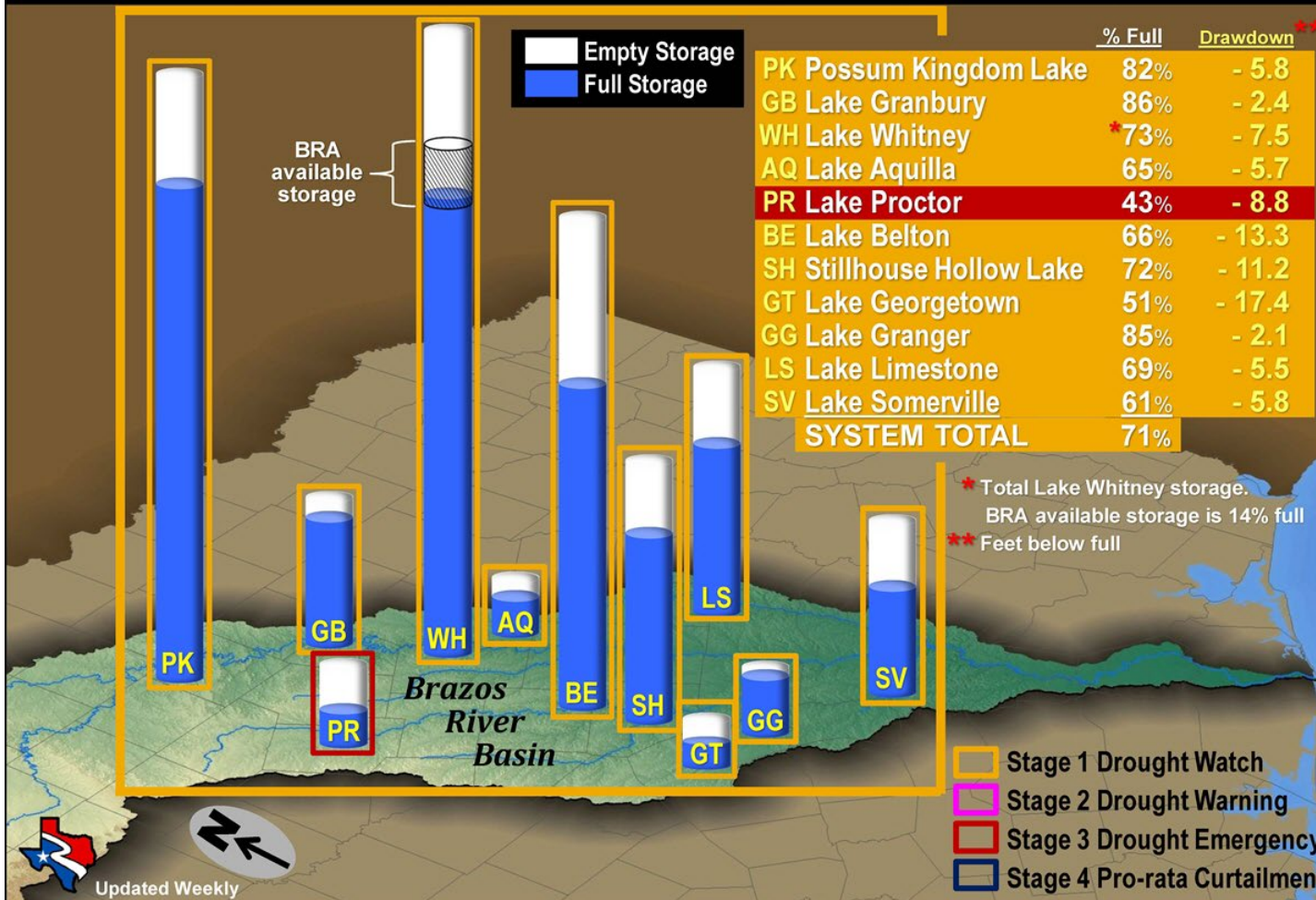


Driver	Description
<i>Dry Climate and Hydrology</i>	Droughts that are more frequent, intense, and/or severe than the historical record, exacerbated by long-term climate variability
<i>High Water Demand</i>	Population growth and water use changes that increase water demands within the LRW
<i>Key Facility 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**

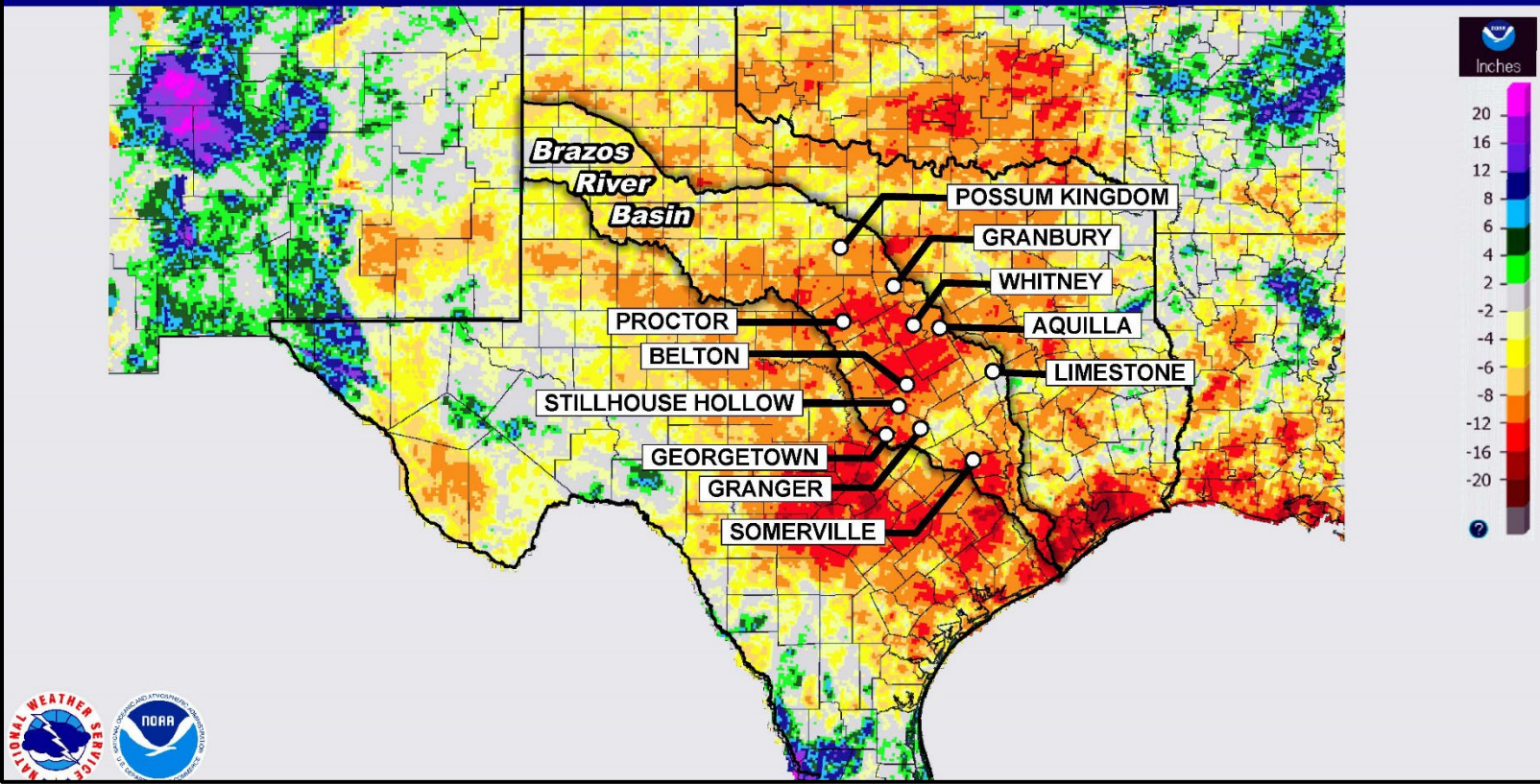


# Departure from Normal Precipitation

October 10, 2022 Year to Date Departure Precipitation

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

Valid on: October 10, 2022 12:00 UTC

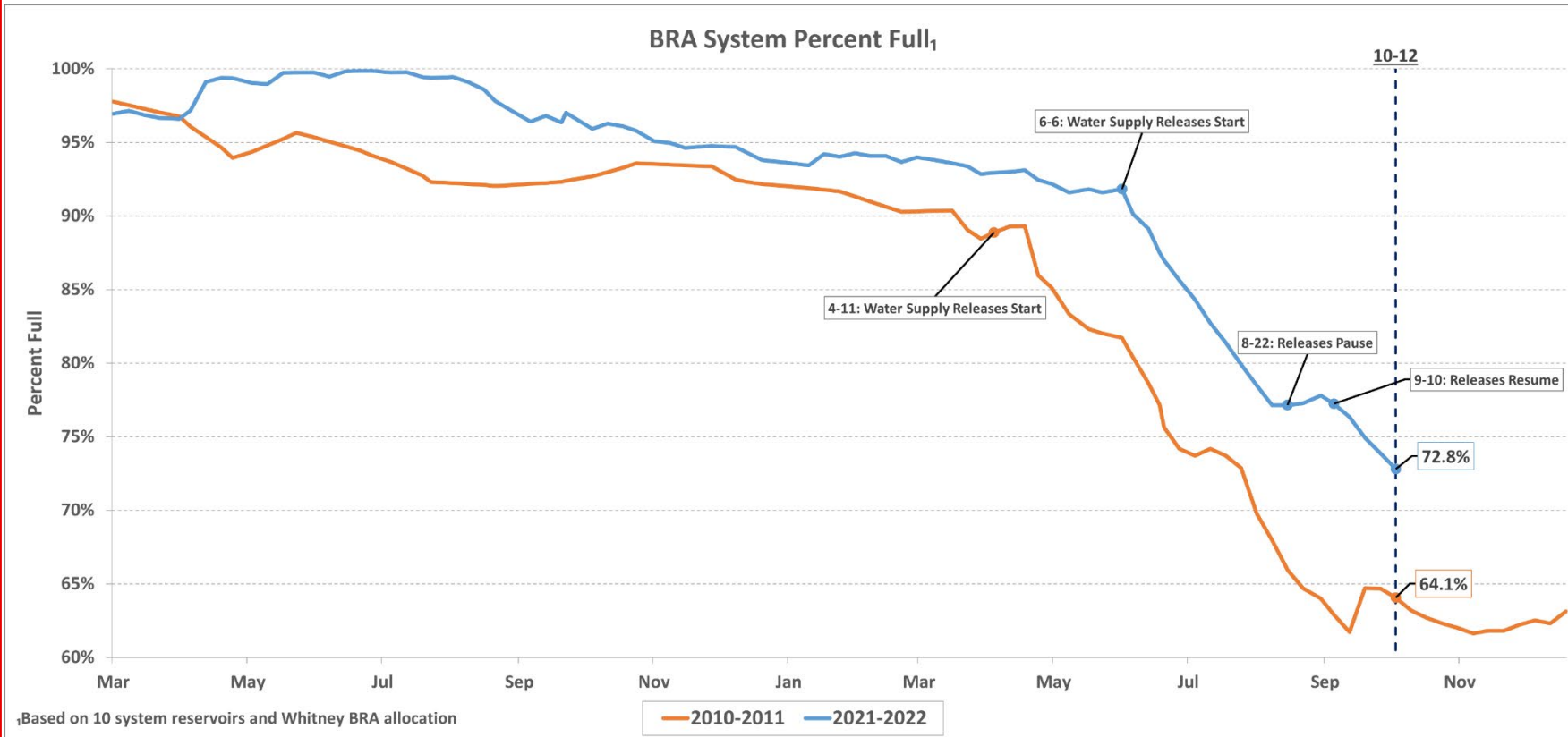


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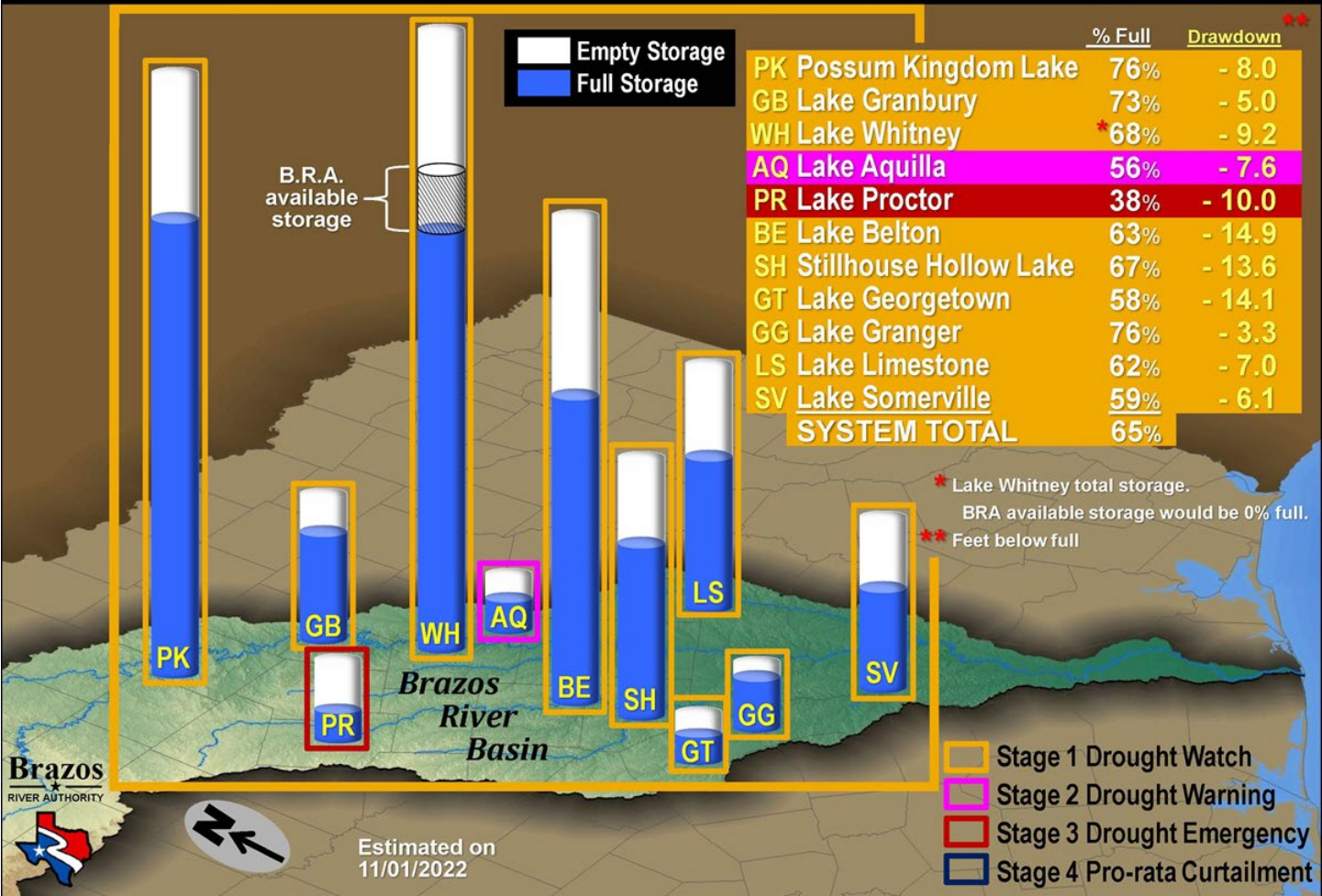
# BRA System Storage: 2022 vs. 2011





# 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



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# Brazos

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[www.brazos.org](http://www.brazos.org)



[information@brazos.org](mailto:information@brazos.org)

[www.BrazosBasinNow.org](http://www.BrazosBasinNow.org)



@BrazosWater



**Brazos**  
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Home Map Sites Dashboards Bookmarks

Welcome to BrazosBasinNOW  
Current Brazos River Basin Information

**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