



18th Annual Bell County Water Symposium

Brazos River Authority Water Supply System & Operations

November 15, 2018

**Aaron Abel, Water Services Manager
Brazos River Authority**

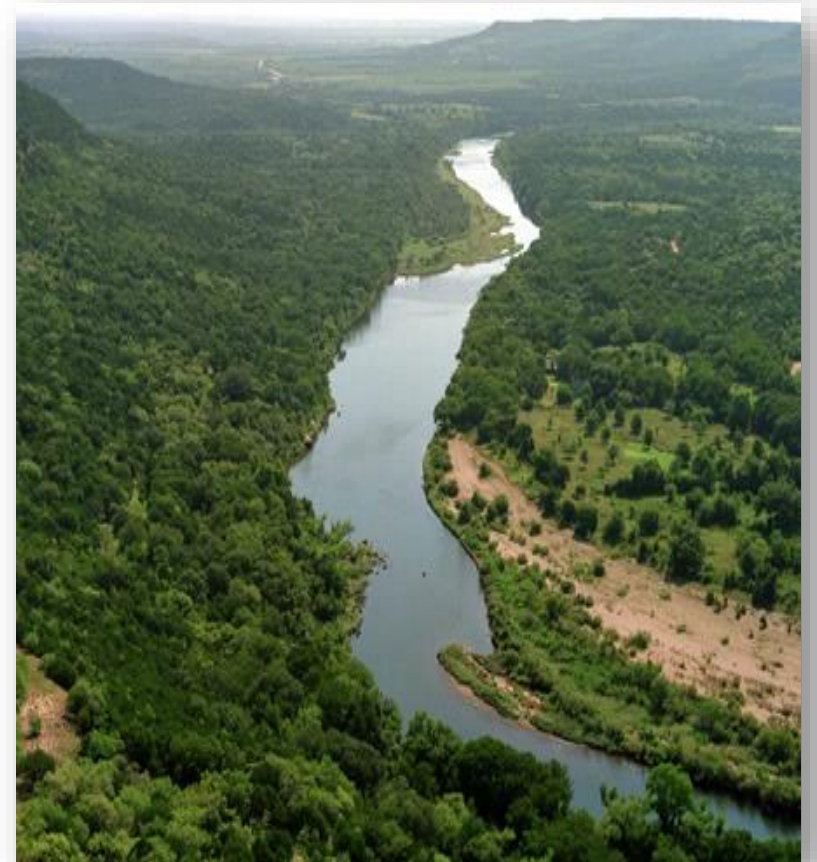


Brazos River Authority Overview

Our Mission

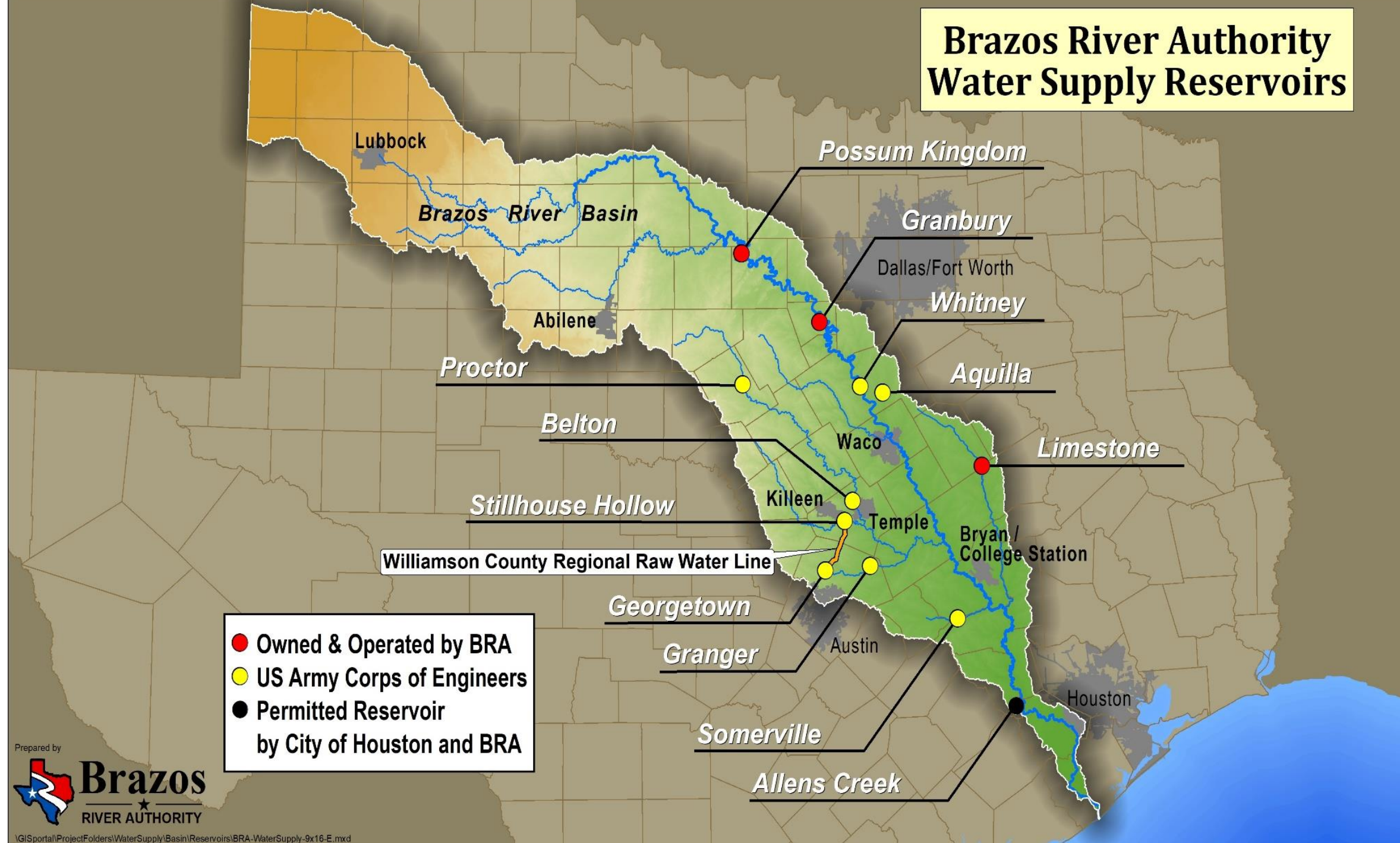
**To develop, manage, and protect
the water resources of the Brazos River basin**

- **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**





Brazos River Authority Water Supply Reservoirs



Prepared by



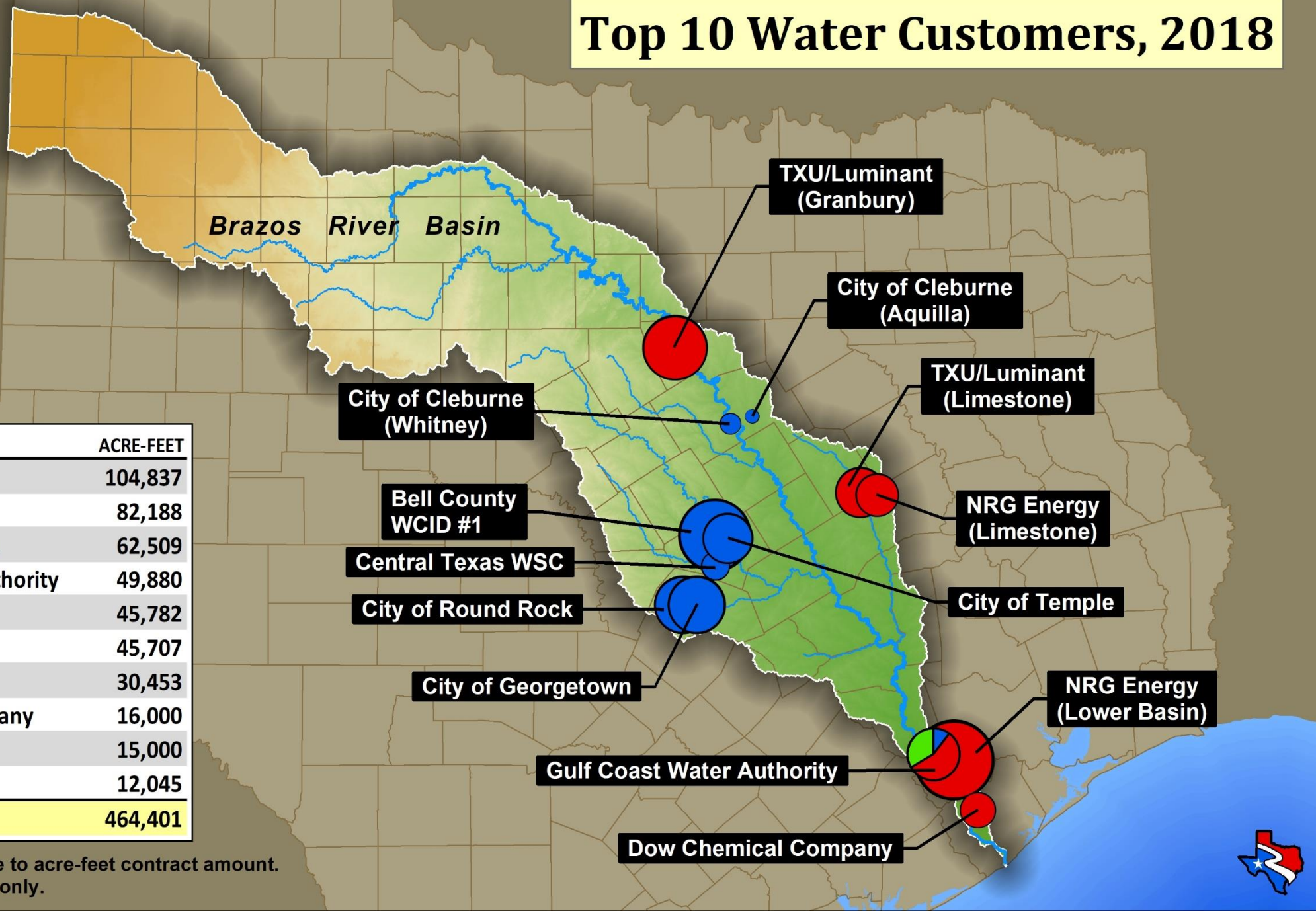
Top 10 Water Customers, 2018

Use Type

- Municipal
- Industrial
- Irrigation

CUSTOMER	ACRE-FEET
NRG Energy	104,837
TXU/Luminant	82,188
Bell County WCID # 1	62,509
Gulf Coast Water Authority	49,880
City of Round Rock	45,782
City of Georgetown	45,707
City of Temple	30,453
Dow Chemical Company	16,000
City of Cleburne	15,000
Central Texas WSC	12,045
TOTAL	464,401

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

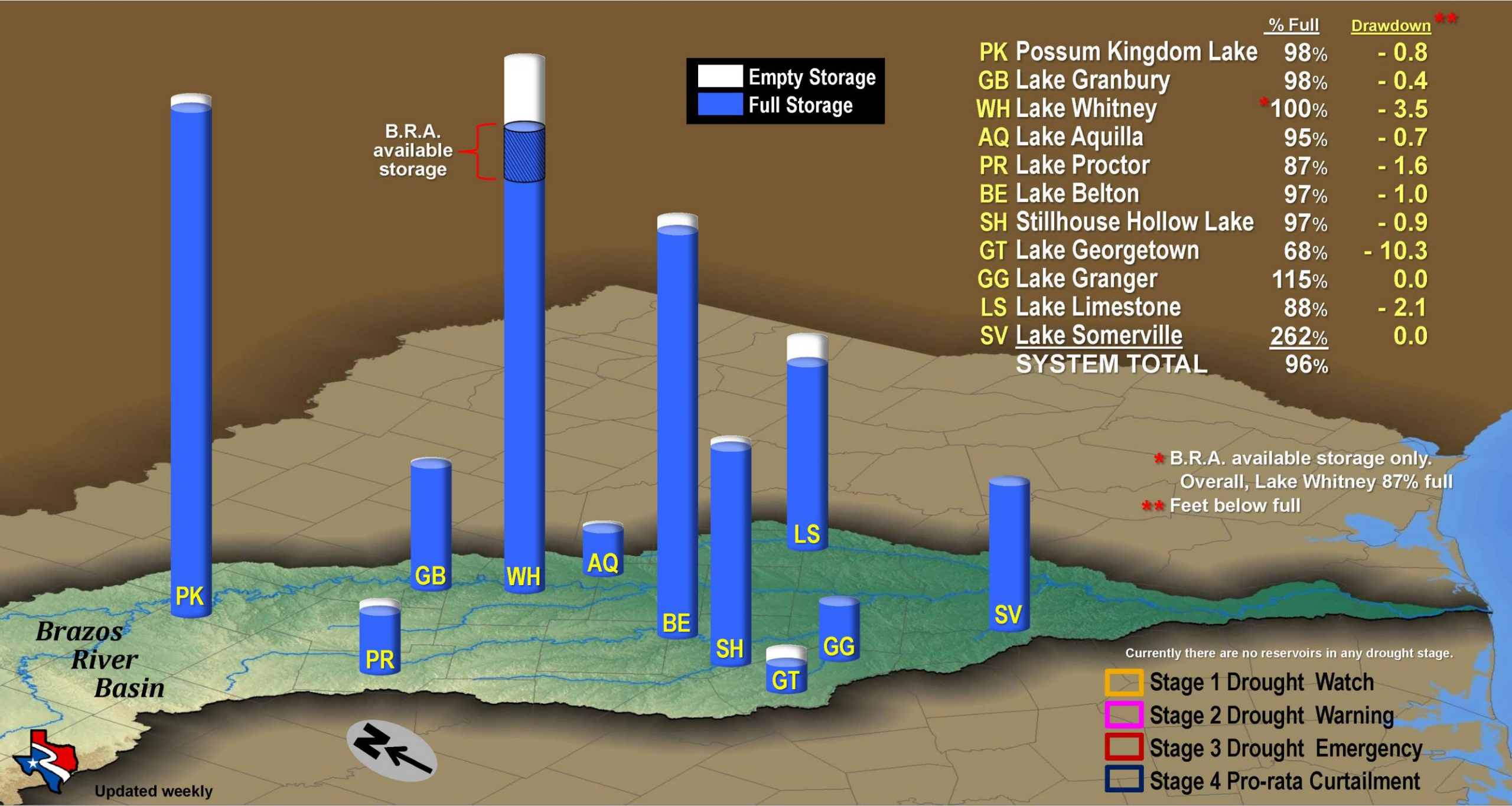


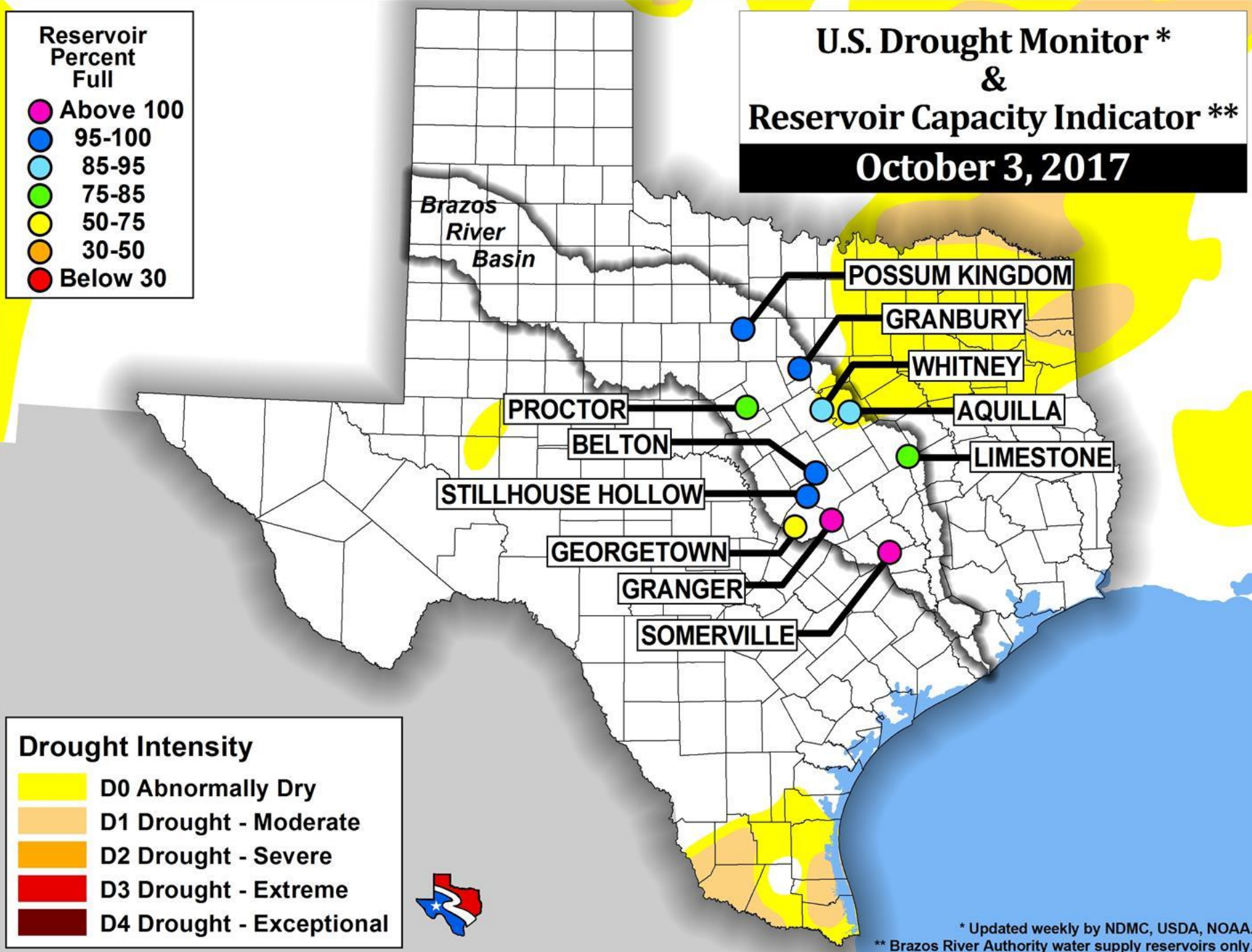


Hydrologic Extremes – A Texas Constant



B.R.A. Water Supply Reservoirs "PERCENT FULL" September 13, 2017



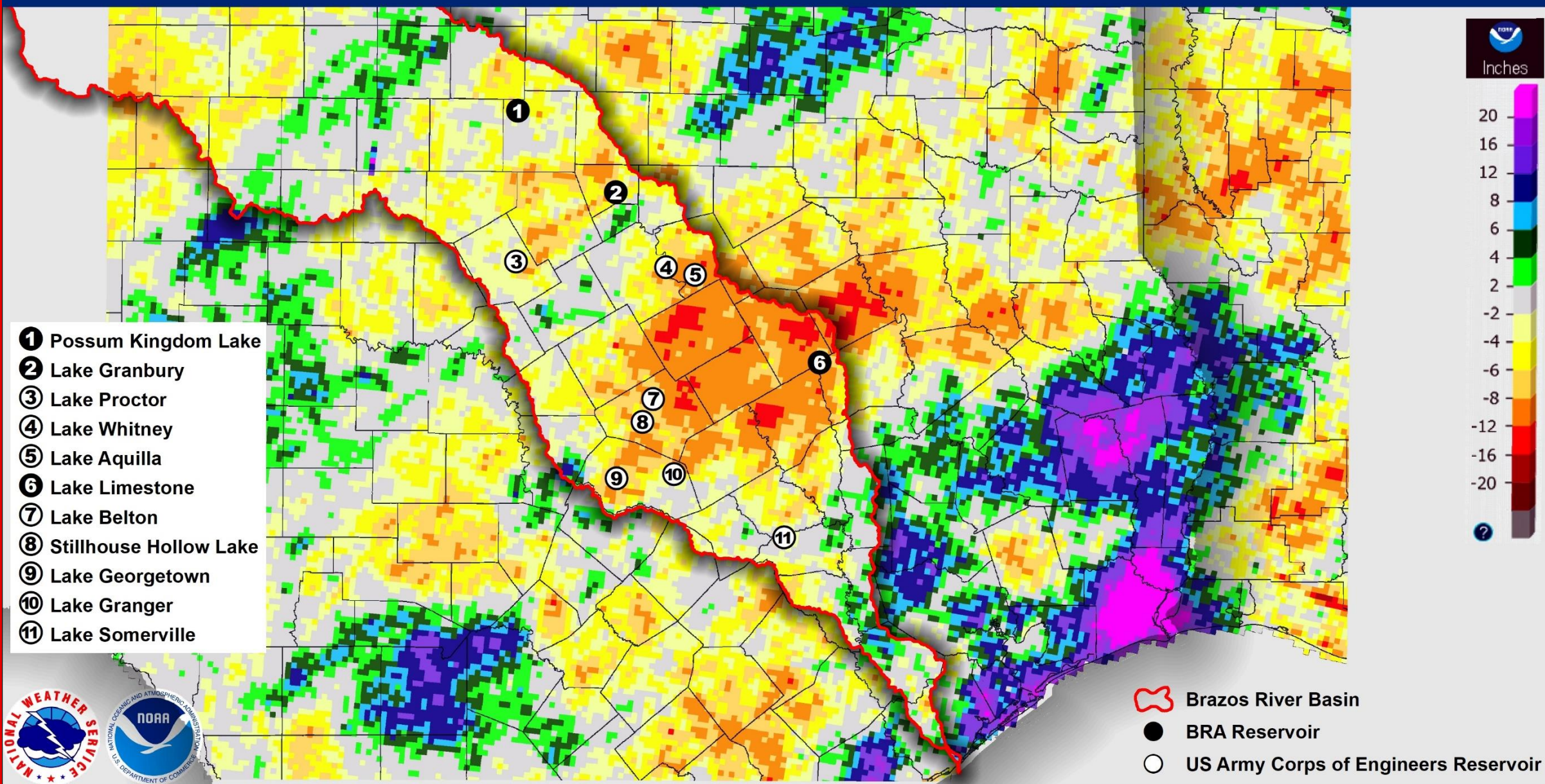




October 01, 2018 Water Year (Oct. 1) Departure Precipitation

Created on: November 05, 2018 - 14:24 UTC

Valid on: October 01, 2018 12:00 UTC





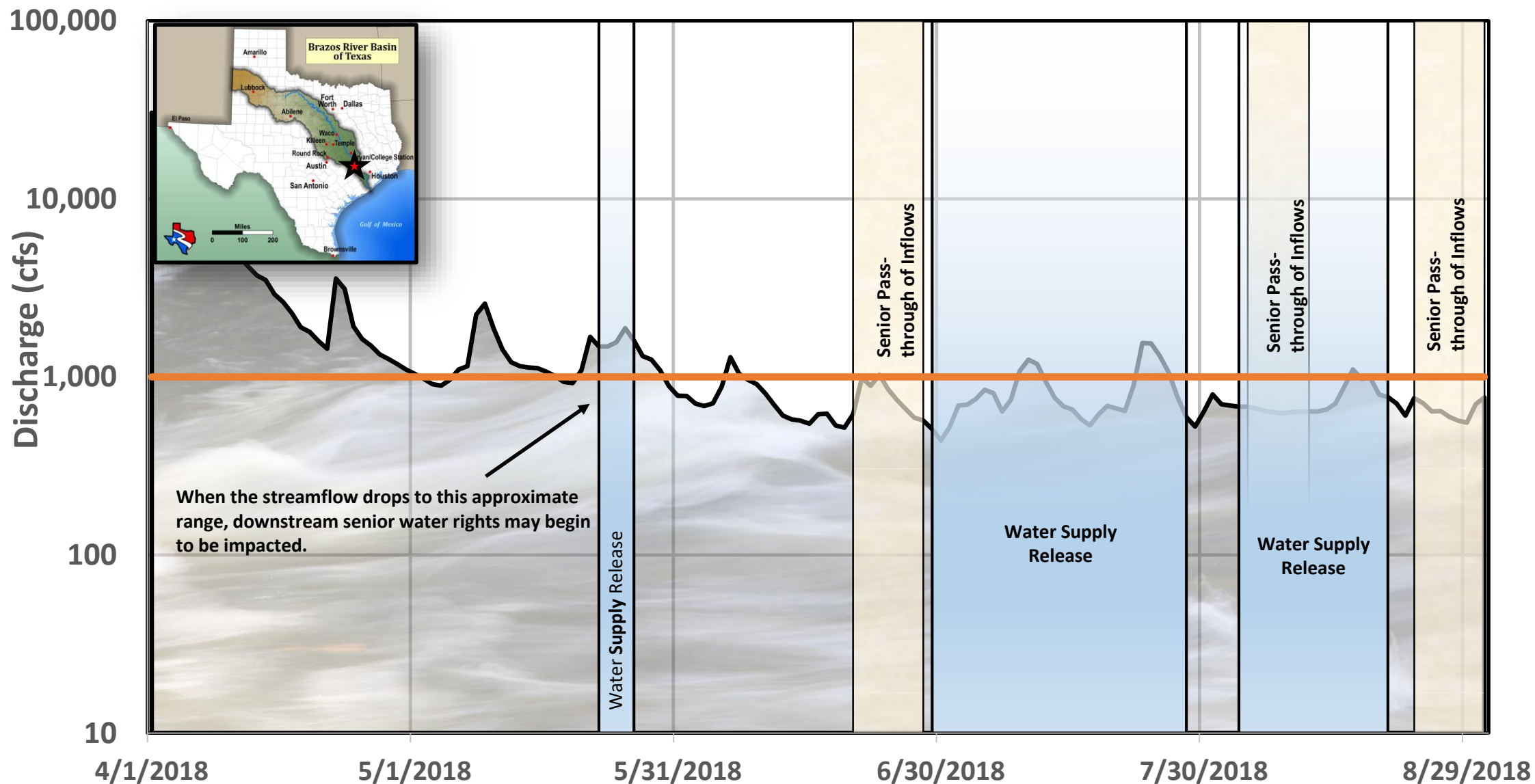
Brazos Watermaster

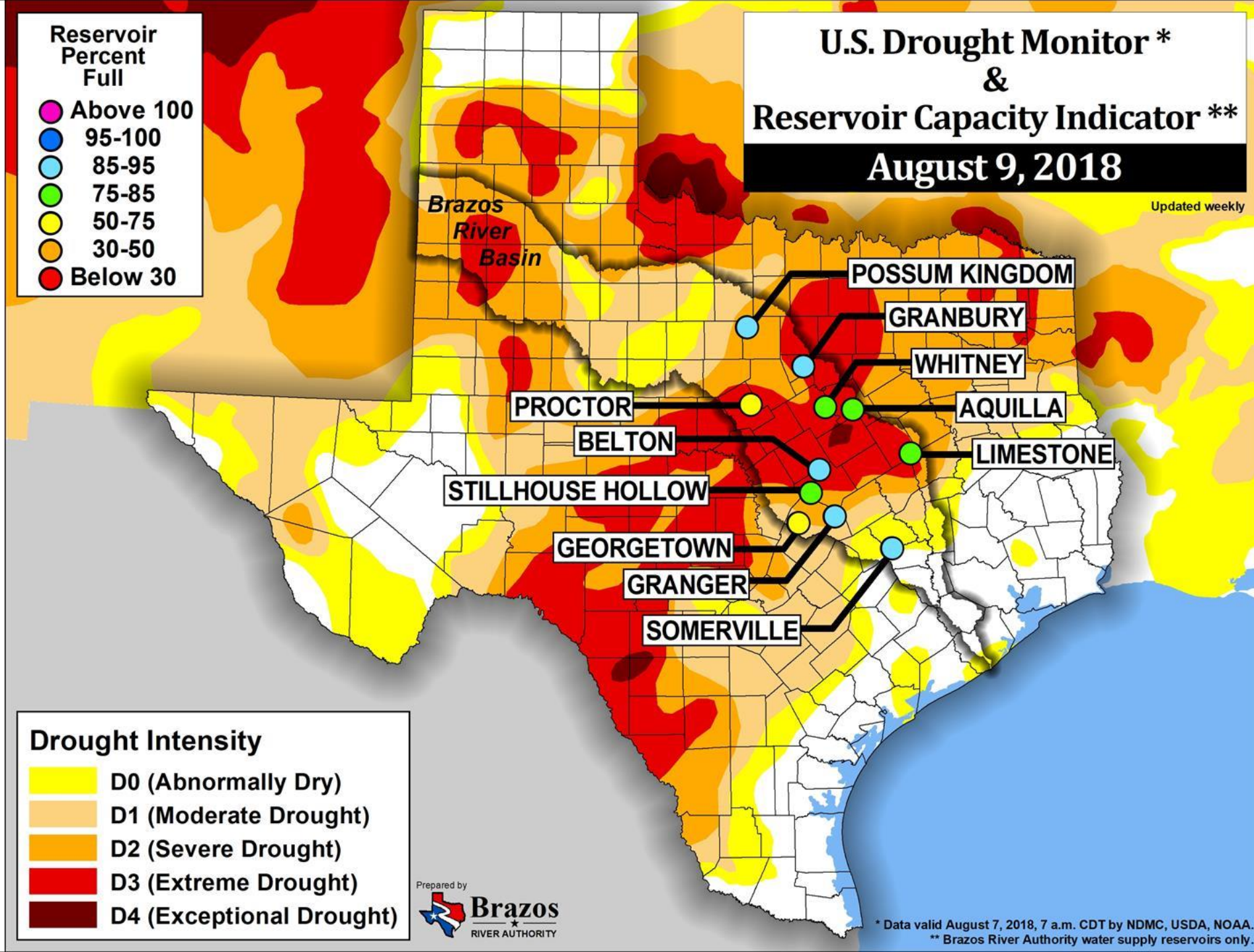
- **Regulates water rights from Possum Kingdom Lake to the Gulf**
- **Priority System – older rights have priority over newer rights**
- **Cannot require BRA to release water from reservoir storage**
- **Can require BRA to release or pass inflow through a reservoir**

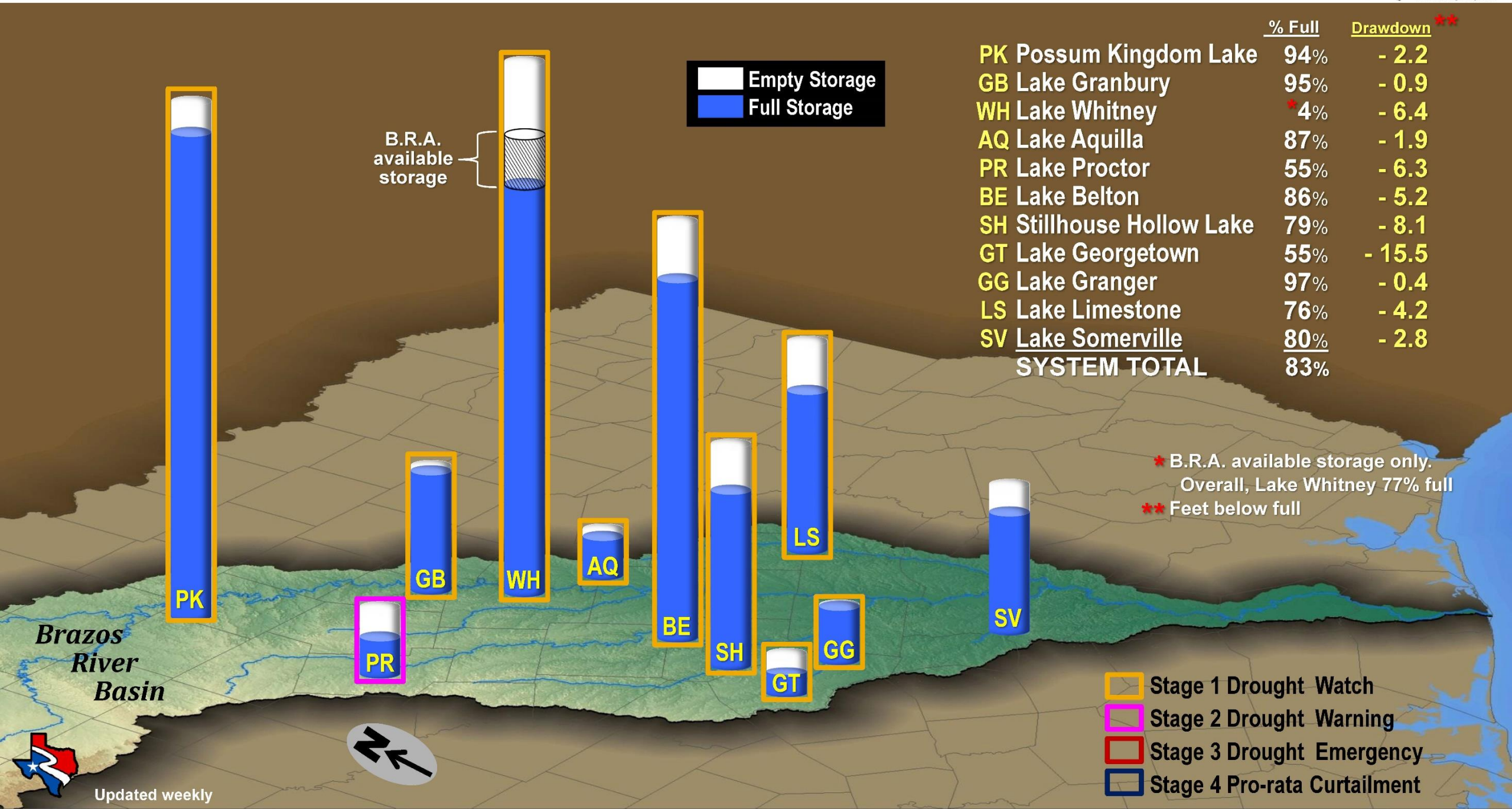




Mean Daily Discharge, Brazos River near Hempstead (April 1, 2018 thru August 31, 2018)





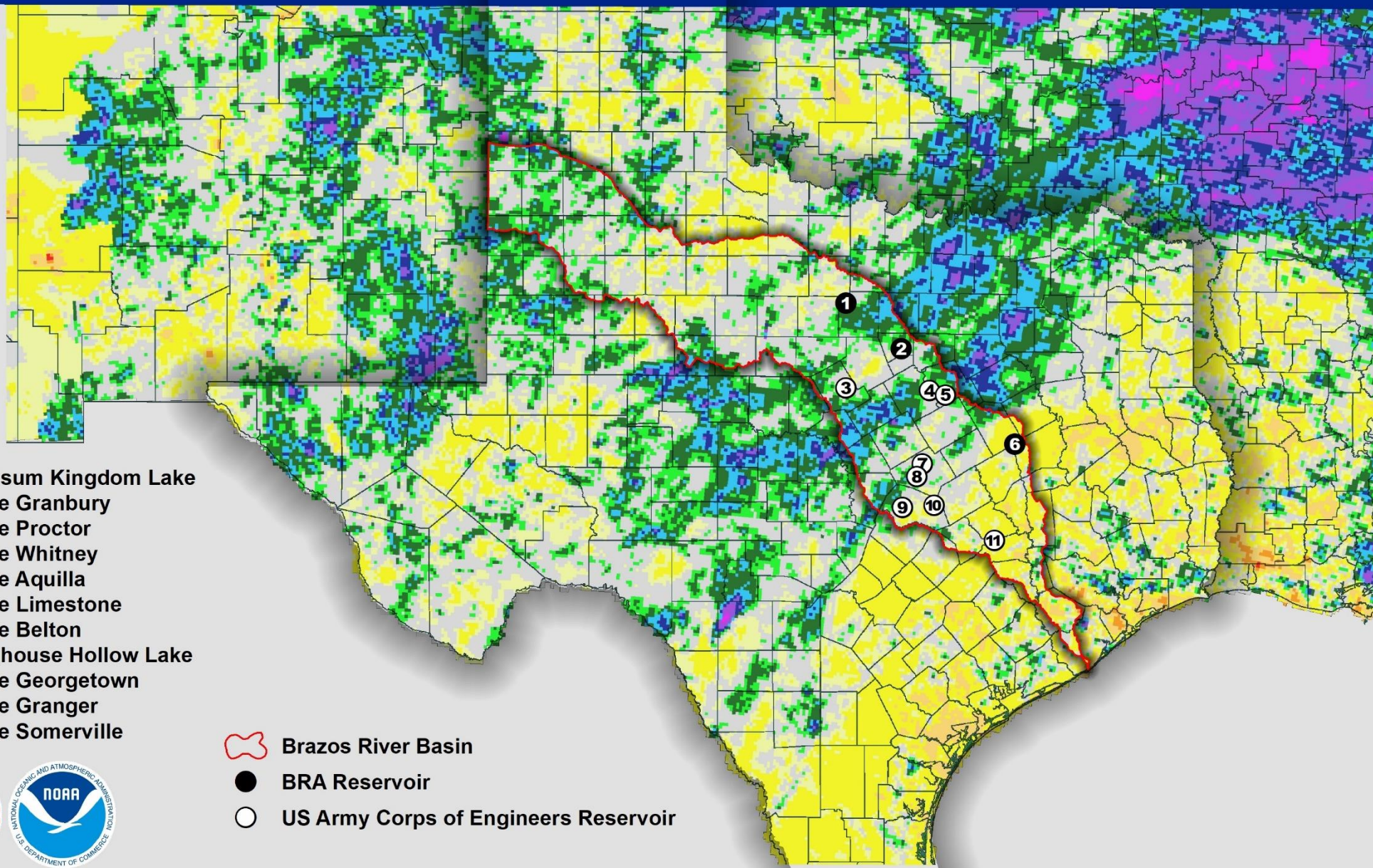




August 01, 2018 Monthly Departure Precipitation

Created on: November 08, 2018 - 17:47 UTC

Valid on: September 01, 2018 12:00 UTC



- ① Possum Kingdom Lake
- ② Lake Granbury
- ③ Lake Proctor
- ④ Lake Whitney
- ⑤ Lake Aquilla
- ⑥ Lake Limestone
- ⑦ Lake Belton
- ⑧ Stillhouse Hollow Lake
- ⑨ Lake Georgetown
- ⑩ Lake Granger
- ⑪ Lake Somerville



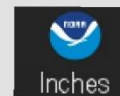
Brazos River Basin



BRA Reservoir



US Army Corps of Engineers Reservoir

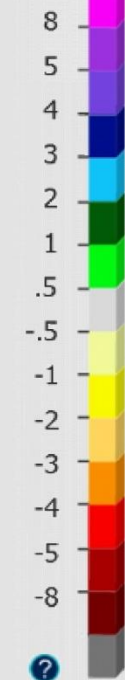
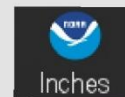
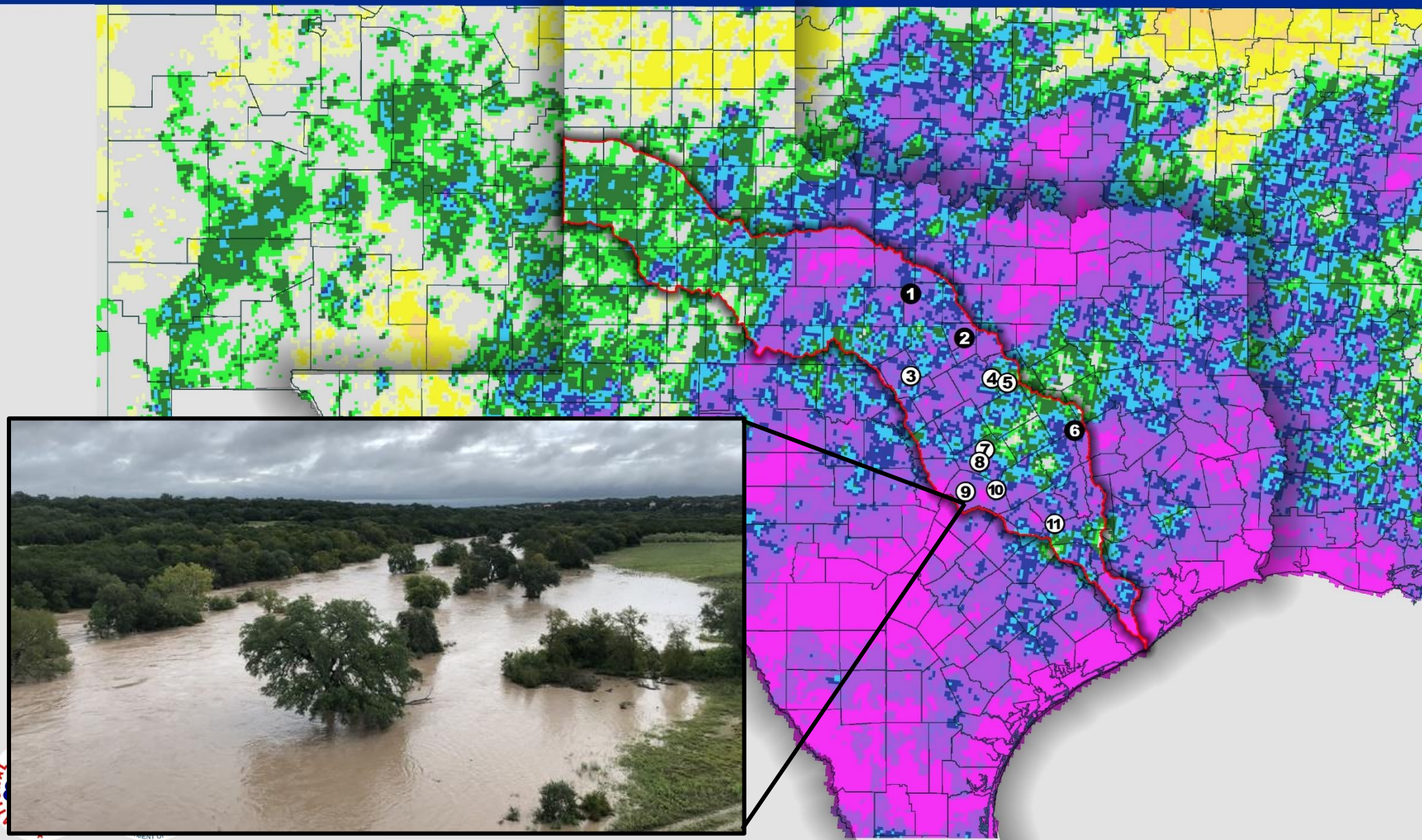




September 01, 2018 Monthly Departure Precipitation

Created on: November 08, 2018 - 17:47 UTC

Valid on: October 01, 2018 12:00 UTC

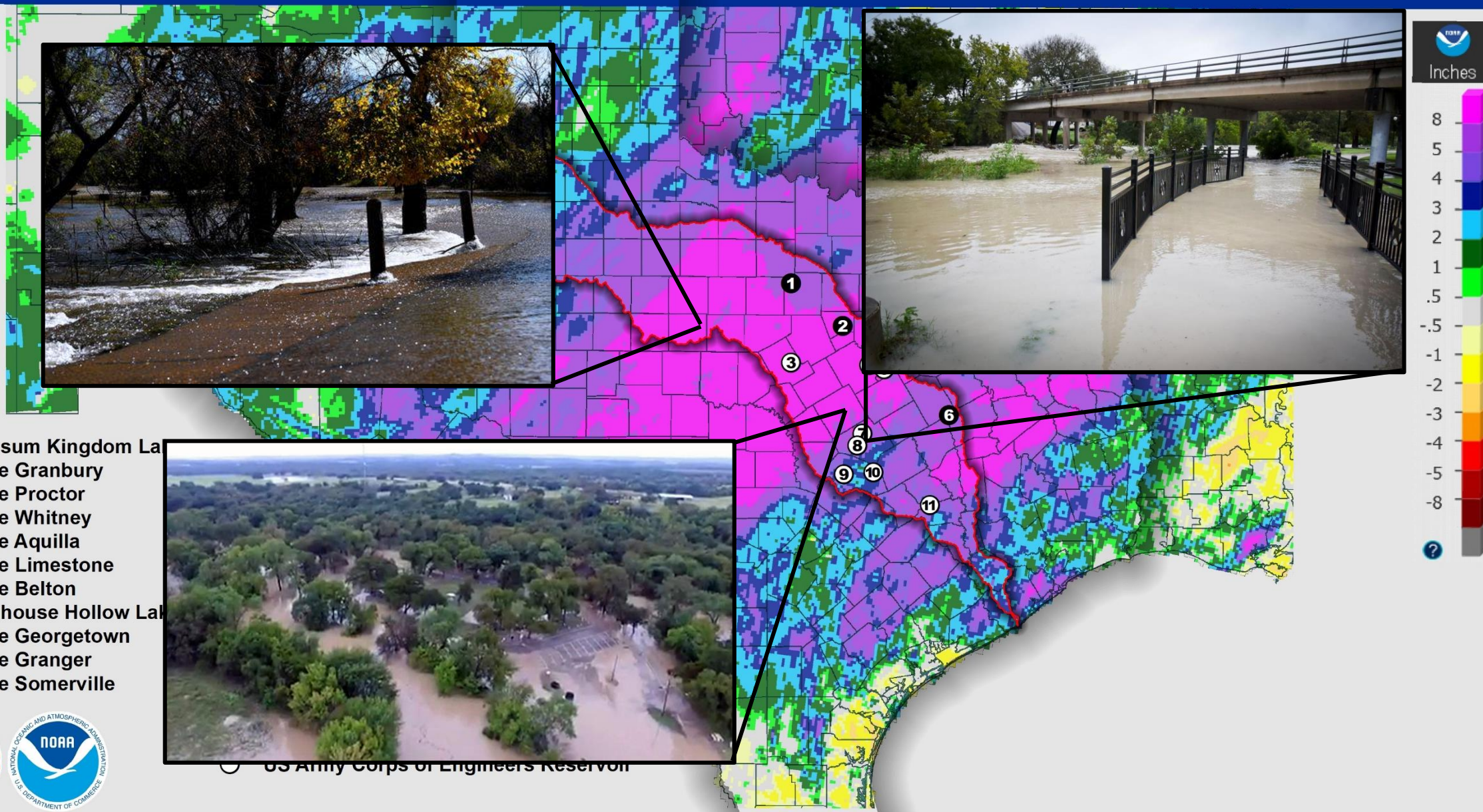




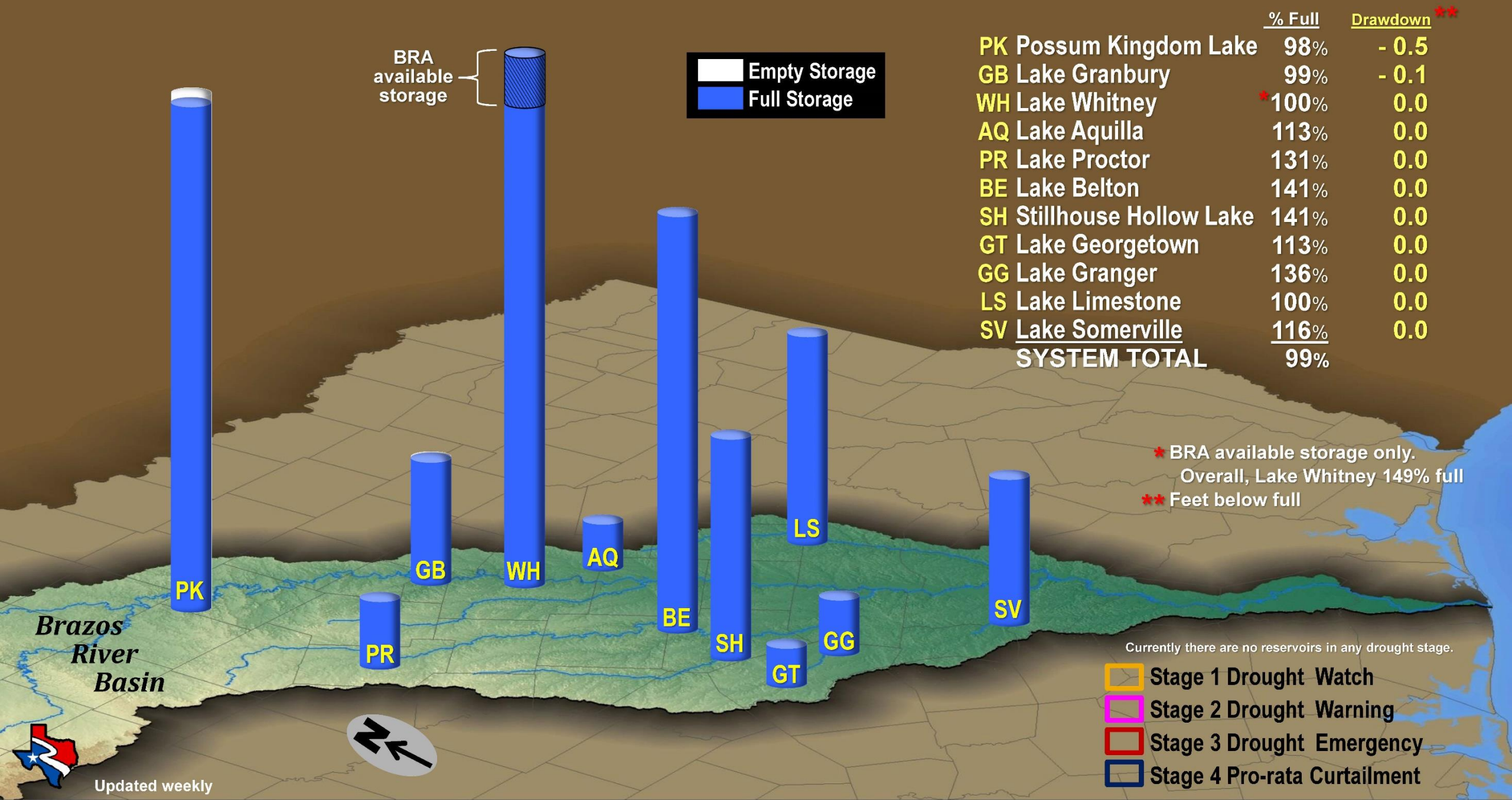
October 01, 2018 Monthly Departure Precipitation

Created on: November 08, 2018 - 17:48 UTC

Valid on: November 01, 2018 12:00 UTC



BRA Water Supply Reservoirs "PERCENT FULL" November 7, 2018

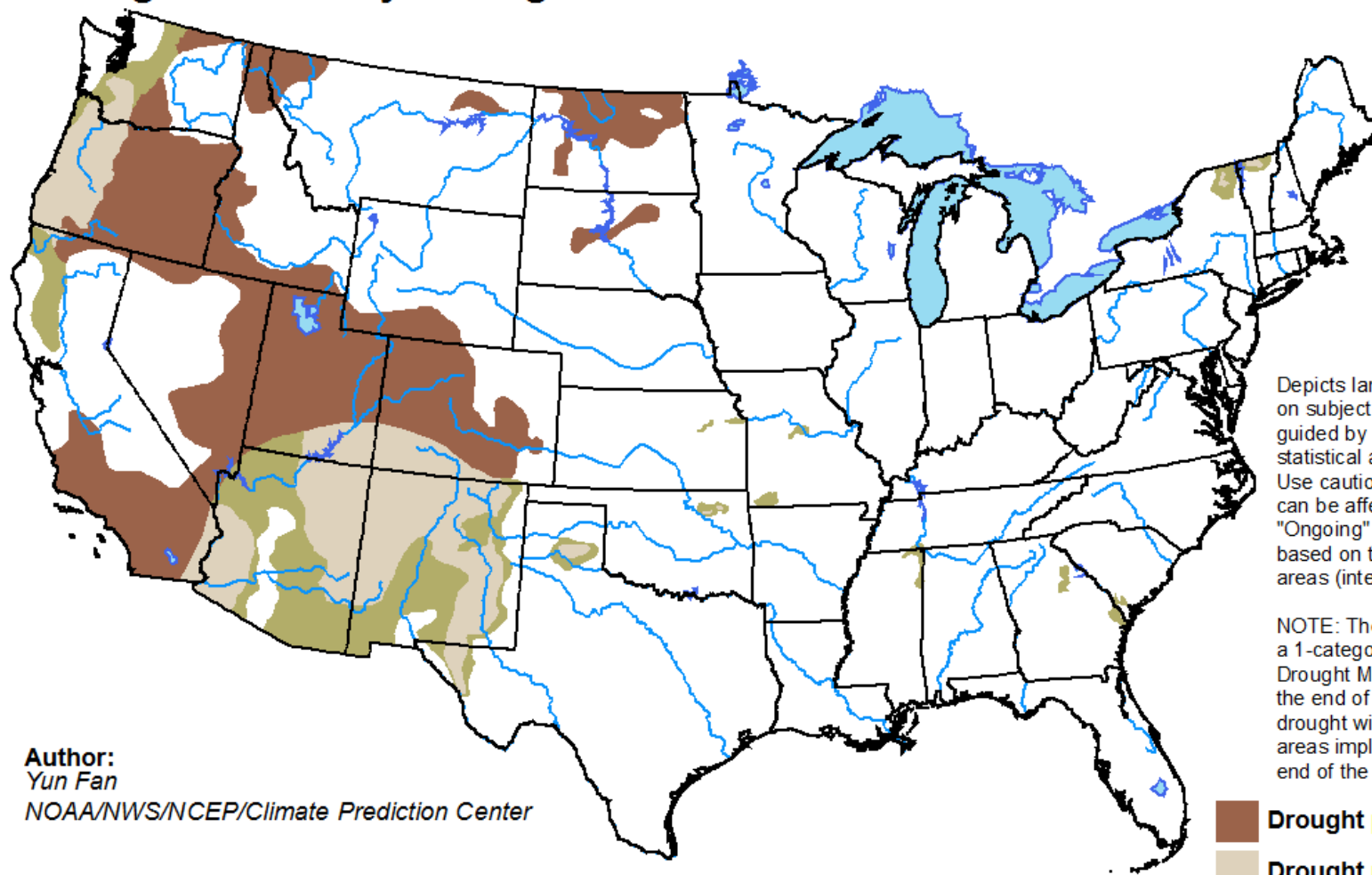




U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period





Valid for October 18 - January 31, 2019
Released October 18, 2018

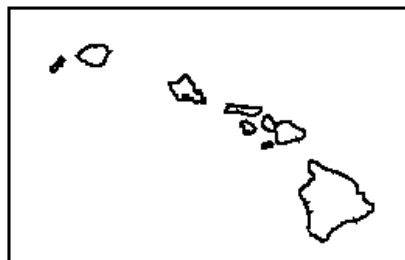
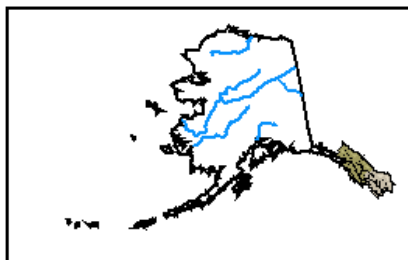


Author:
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NOAA/NWS/NCEP/Climate Prediction Center

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

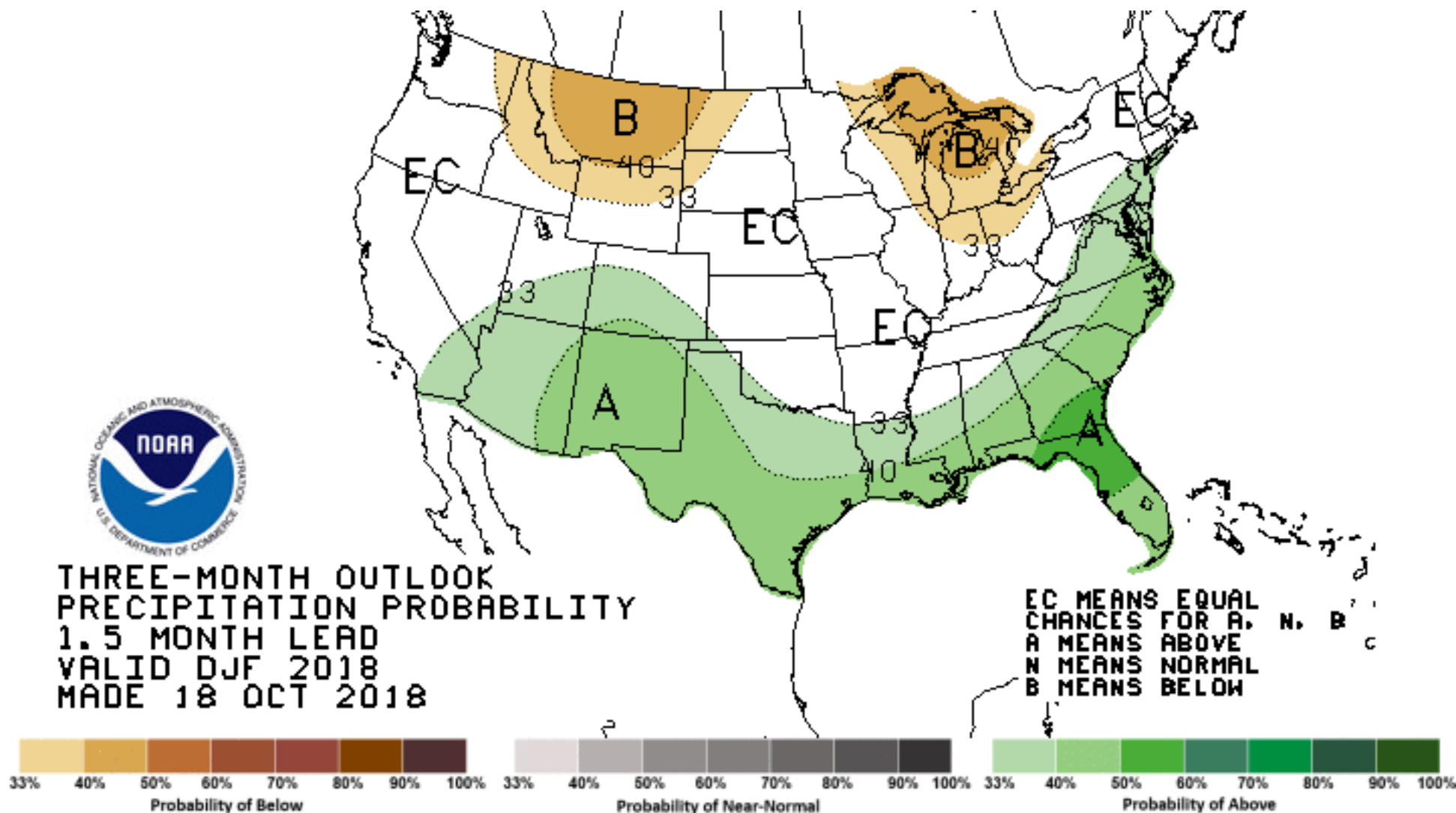
-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>



December – February Precip Outlook





Brazos
— ★ —
RIVER AUTHORITY
www.brazos.org

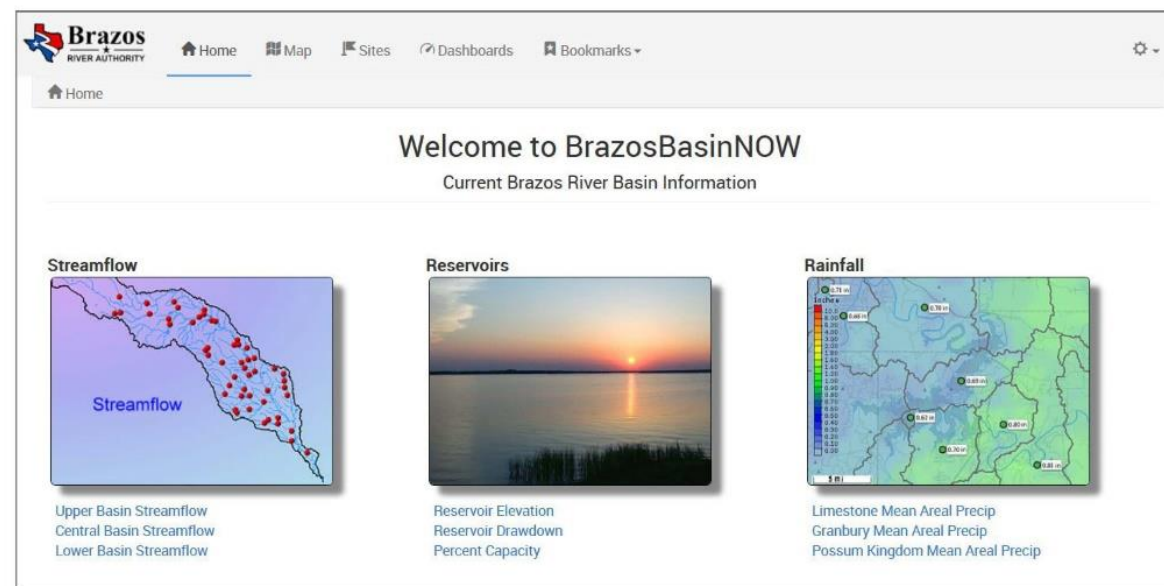


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Questions?

www.brazos.org



**Brazos
River
Authority**