

# Water Management Plan Update

---

Participant Meeting  
Sept. 23, 2025



# Agenda

- Drought Worse Than Drought of Record
- Firm Yield
- Discussion and questions



# Response to Comments

---



# Individual Meetings Since Aug. 25

- **Agricultural interests**
- **City of Austin**
- **Highland Lakes Firm Water Customer Cooperative**

# Response to Comments

- **Received written comments from nine entities/persons**
  - Will post on [www.lcra.org](http://www.lcra.org) by Sept. 26
- **Preparing written comment responses in advance of the November meeting**
  - Will post on [www.lcra.org](http://www.lcra.org) by Oct. 10
- **Will continue to consider participant input throughout the update process**

# Questions?

# **Firm Yield and Drought Worse Than Drought of Record**

- **Firm Yield is the maximum amount of water that is available 100% of the years over the period of record, including the drought of record**
- **LCRA firm customers contract for portions of LCRA System Firm Yield**
- **Combined Firm Yield of Buchanan and Travis is the largest portion of LCRA System Firm Yield**
- **Drought of Record (DOR) is the limiting period that determines the Firm Yield**
- **A drought worse than the DOR is a theoretical drought with less firm supply than the DOR**

# Drought Worse Than Drought of Record Test

---

9/23/2025



# Status of the DWDR Test

- **Historic drought of record has not changed (2008-2015)**
- **Drought Worse Than Drought of Record (DWDR) test was not met in recent drought**
- **No proposed change to DWDR test criteria for 2032 WMP**

# What is a “Drought Worse Than Drought of Record” Declaration?

- **Test required by TCEQ**
- **Real-time tracking of water supply conditions**
  - Identifies hydrology potentially worse than historical hydrology in real time
- **DWDR is a drought response stage**
  - Basis for pro rata curtailment of firm water uses

# DWDR Tests

---

## INTENSITY TEST

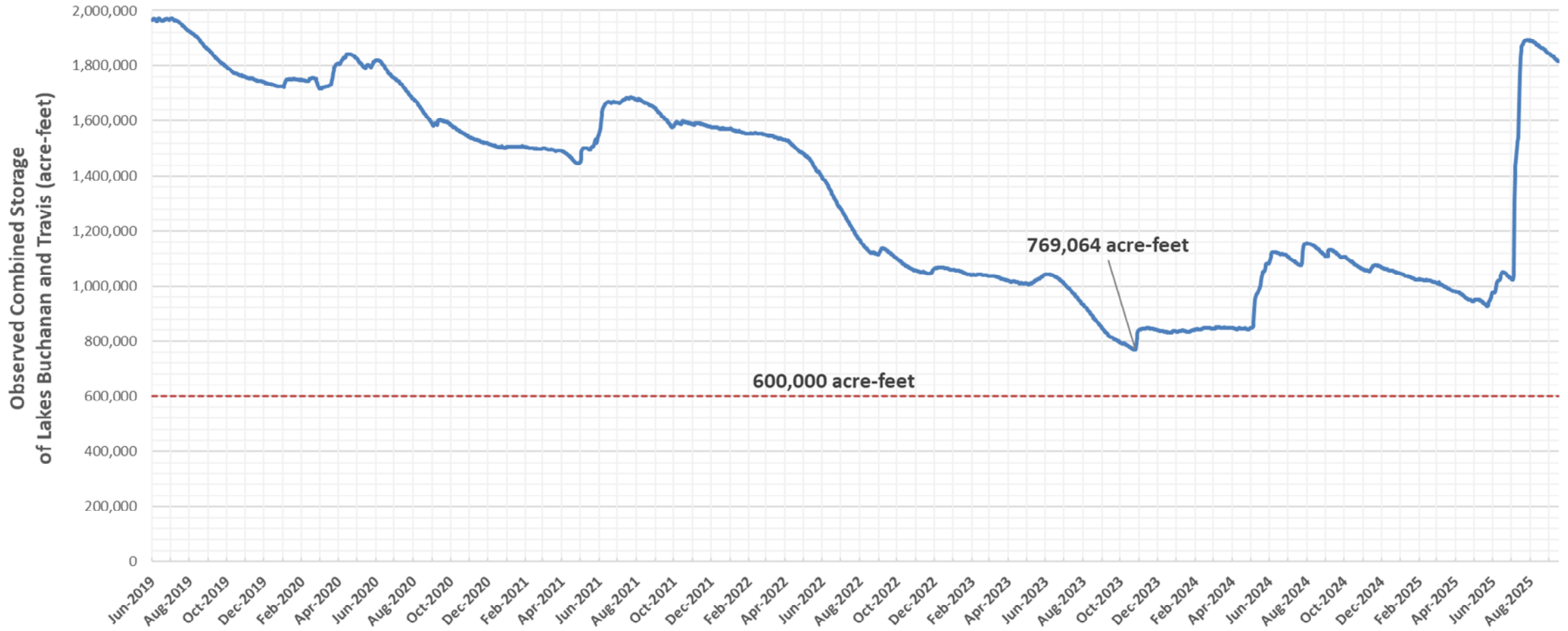
OR

## DURATION TEST

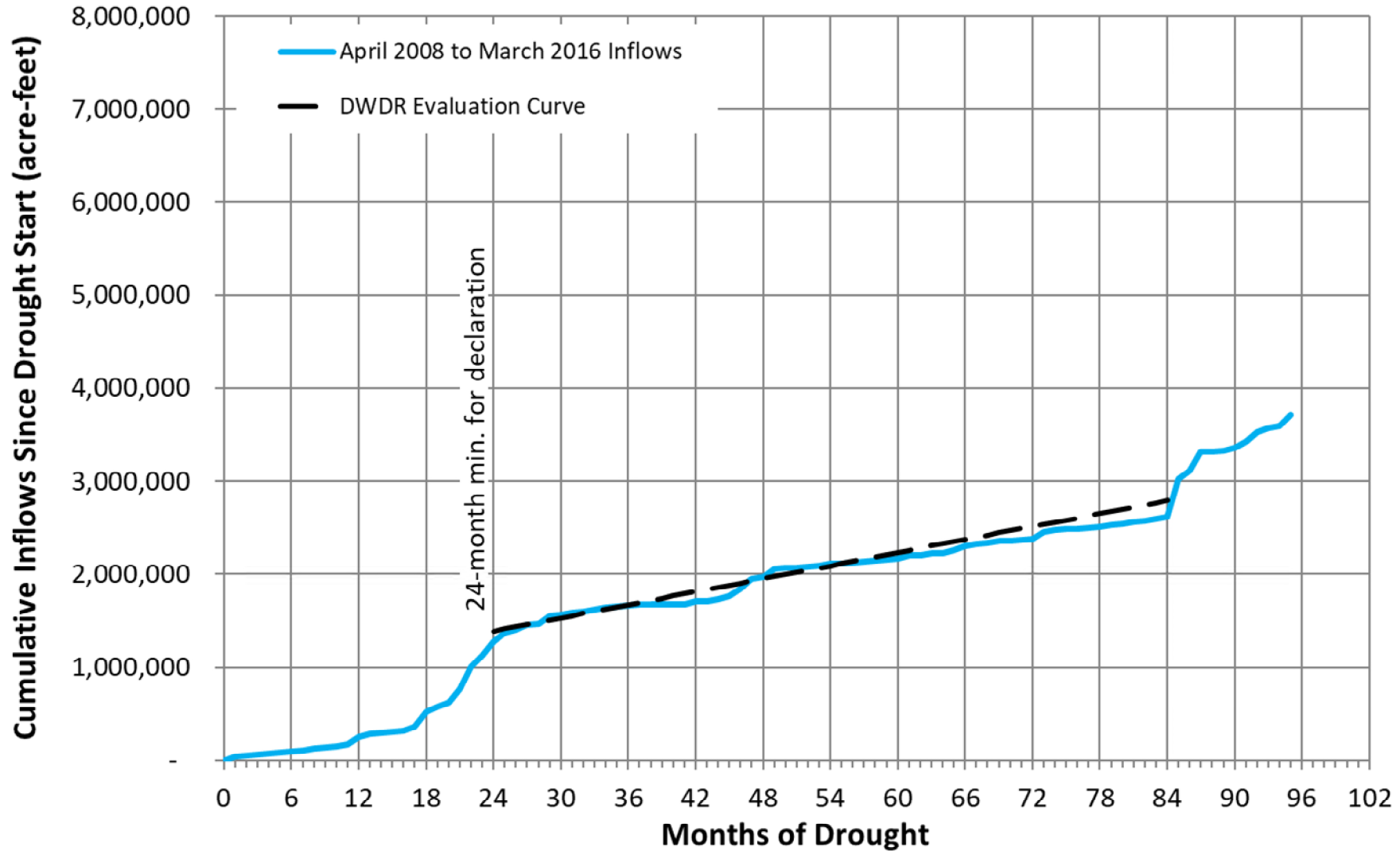
- Combined storage below 600,000 acre-feet
- 24 months or more since lakes last full
- Cumulative inflow less than 2008-2016

- Combined storage below 600,000 acre-feet
- 84 months or more since lakes last full

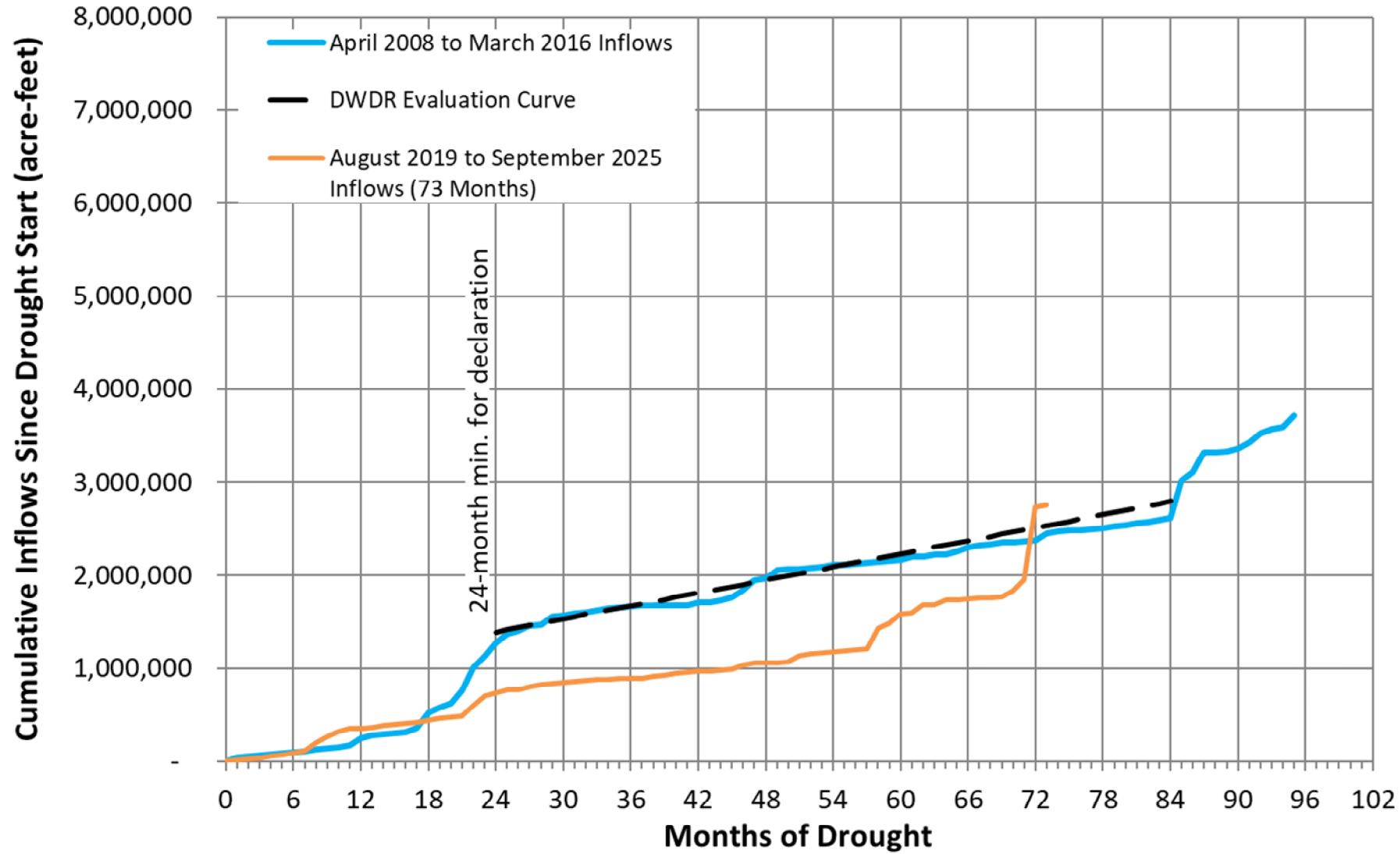
# Combined Storage (June 2019 to Present)



# DWDR Intensity Test



# DWDR Intensity Test with Current Drought Inflows



# Lakes Buchanan and Travis Combined Firm Yield

---



# **Combined Firm Yield of Lakes Buchanan and Travis**

- **Drought of Record did not change (2008-2015)**
- **New survey and projected sedimentation for 2032 conditions reduced the firm yield by about 2,000 acre-feet per year**
- **The combined firm yield of lakes Buchanan and Travis is about 417,000 acre-feet per year (for 1940-2023 period)**

# Firm Yield Overview

- TCEQ firm yield definition
- WAM model logic and settings
- Combined firm yield of lakes Buchanan and Travis

# Firm Yield Definition

## TCEQ rules define firm yield as:

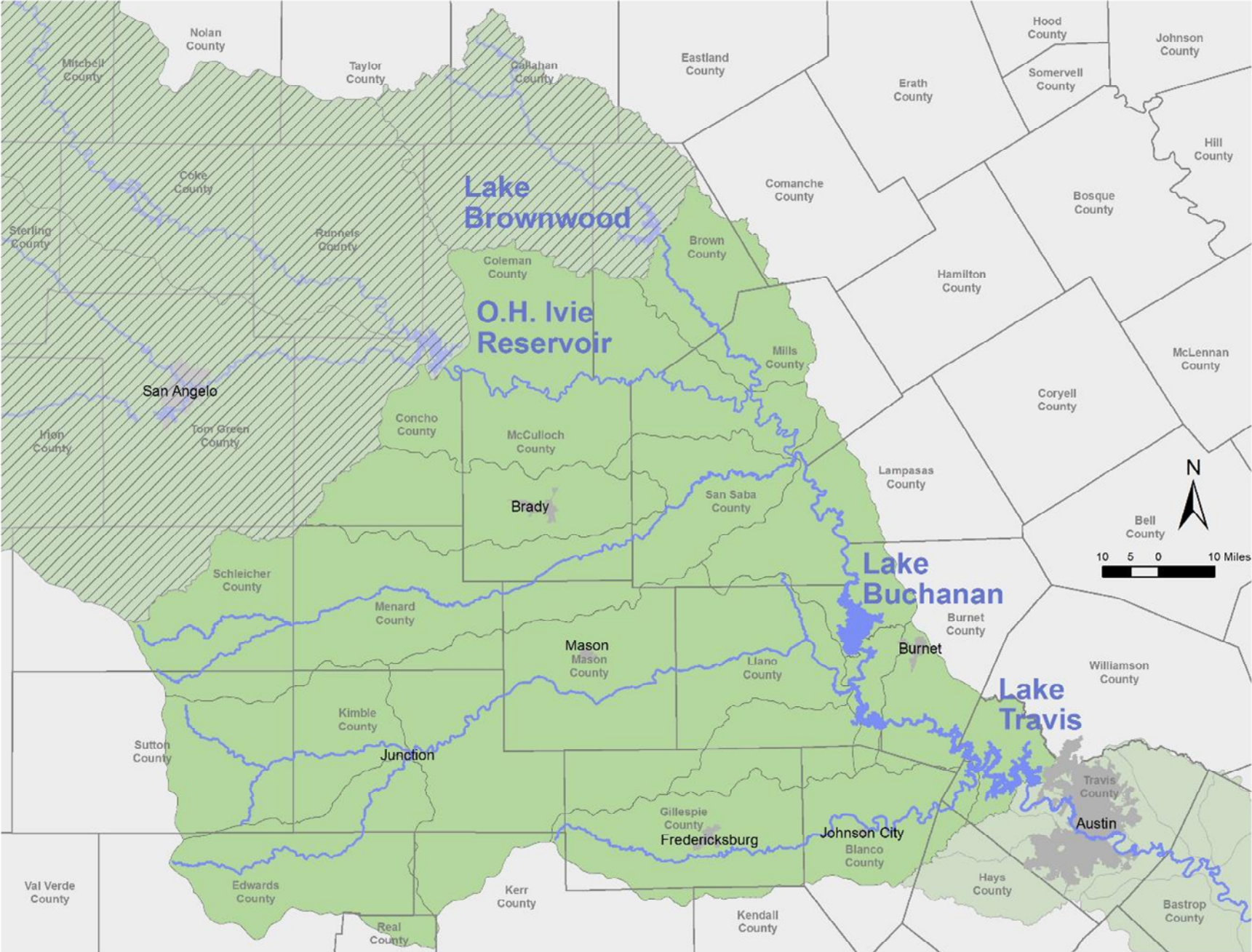
*"That amount of water, that the reservoir could have produced annually if it had been in place during the worst drought of record. In performing this simulation, naturalized streamflows will be modified as appropriate to account for the full exercise of upstream senior water rights is assumed as well as the passage of sufficient water to satisfy all downstream senior water rights valued at their full authorized amounts and conditions as well as the passage of flows needed to meet all applicable permit conditions relating to instream and freshwater inflow requirements."*

*30 TAC 297.1(20)*

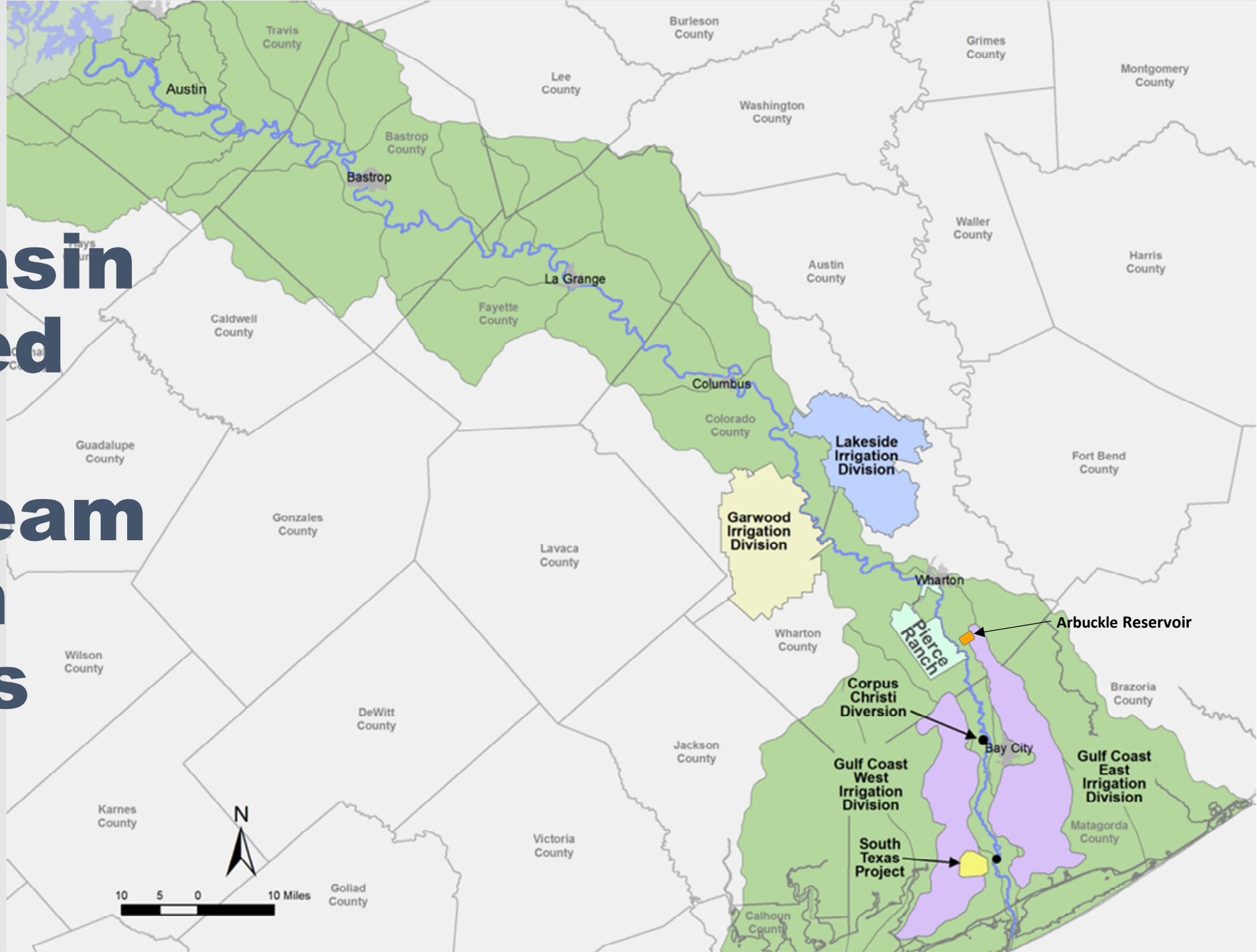
# Firm Yield Water Availability Model

- **Does not include Water Management Plan operation**
  - No interruptible supplies from lakes Buchanan and Travis
  - 33,440 acre-feet per year reserved for the environment
- **Water rights at full authorization**
- **O.H. Ivie Reservoir and Lake Brownwood cutoff model (no water expected above these reservoirs)**
- **Projected 2032 lake storage volumes**
- **Period of record is 1940-2023**
- **Includes City of Austin return flows**

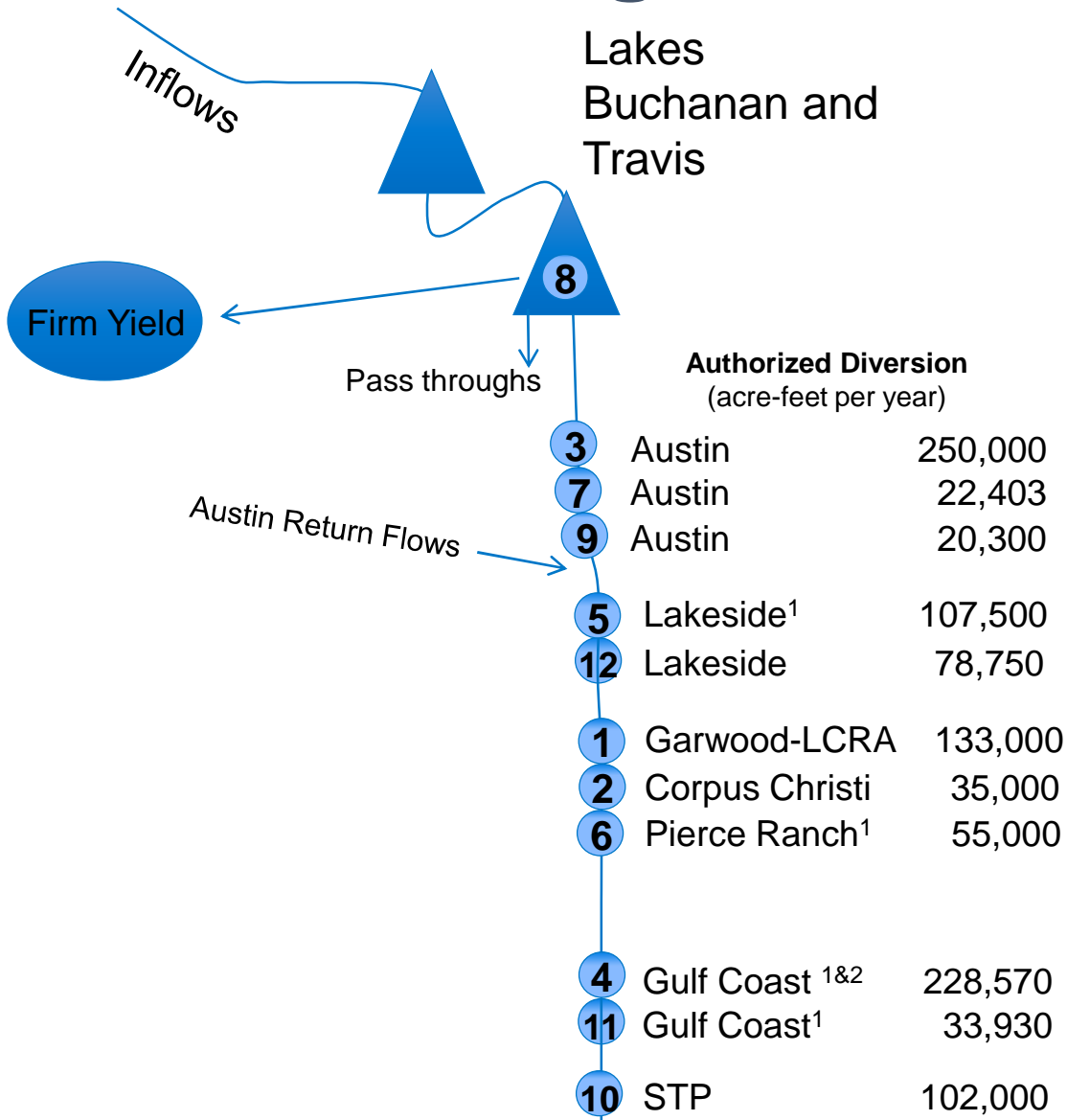
# Highland Lakes Watershed



# Lower Basin Watershed and Downstream Diversion Locations



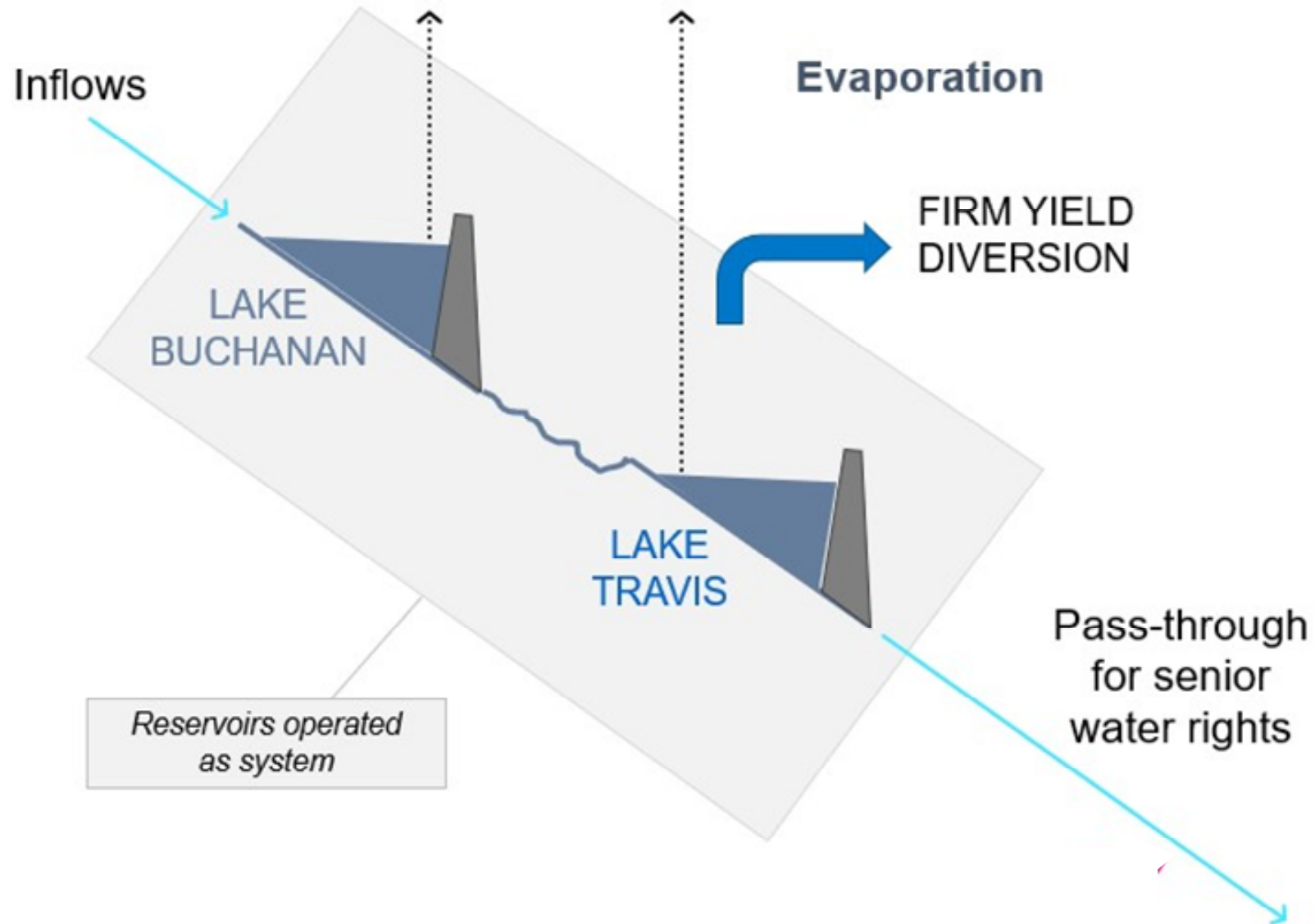
# Firm Yield Modeling – Water Rights Priorities



## Notes:

- Numbers in circles represent relative priorities of water rights.
- Some details are not represented or are represented in aggregate.
- <sup>1</sup> Run-of-river diversions are subordinated to City of Austin water rights.
- <sup>2</sup> Arbuckle Reservoir is included within the more senior Gulf Coast water right.

# Firm Yield Model Lakes Buchanan and Travis



# **Combined Firm Yield of Lakes Buchanan and Travis**

- **Drought of Record did not change (2008-2015)**
- **New survey and projected sedimentation for 2032 conditions reduced the firm yield by about 2,000 acre-feet per year**
- **The combined firm yield of lakes Buchanan and Travis is about 417,000 acre-feet per year (for 1940-2023 period)**

# Questions?

# Next Steps

- **By Oct. 10:** Responses to comments from the Aug. 25 meeting will be posted on [www.lcra.org](http://www.lcra.org)
- **By Oct. 17:** Deadline to submit comments related to this meeting to [LCRAWMP@lcra.org](mailto:LCRAWMP@lcra.org)
- **By Oct. 31:** Responses to comments from this meeting will be posted
  
- **Staff is available to meet upon request**
- **Sixth participant meeting: Nov. 20\***
  - Provide comment responses and review other items

\*Date changed after the Sept. 23 participant meeting

# Timeline

<b>March 27, 2025</b>	First participant meeting
<b>April 23, 2025</b>	Second participant meeting
<b>June 25, 2025</b>	Third participant meeting
<b>Aug. 26, 2025</b>	Fourth participant meeting
<b>Sept. 23, 2025</b>	<b>Fifth participant meeting (DWDR and Firm Yield)</b>
<b>Nov. 20, 2025*</b>	Sixth participant meeting
<b>January 2026</b>	Present staff recommendation on WMP updates to LCRA Board
<b>Spring 2026</b>	Request LCRA Board approval
<b>Summer 2026</b>	Submit to TCEQ for approval

\*Date changed after the Sept. 23 participant meeting



# LORA

ENERGY • WATER • COMMUNITY SERVICES