

# **Water Supply Resource Report**

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**Water Operations Committee Meeting  
Nov. 12, 2025**



# Key Considerations

- Board Policy
- Water supply needs of LCRA's firm customers through 2080
- Future water supply goals
- Conservation strategies
- New firm supply strategies
  - Firm supply estimate
  - Costs
  - Implementation timelines



LOWER COLORADO RIVER AUTHORITY

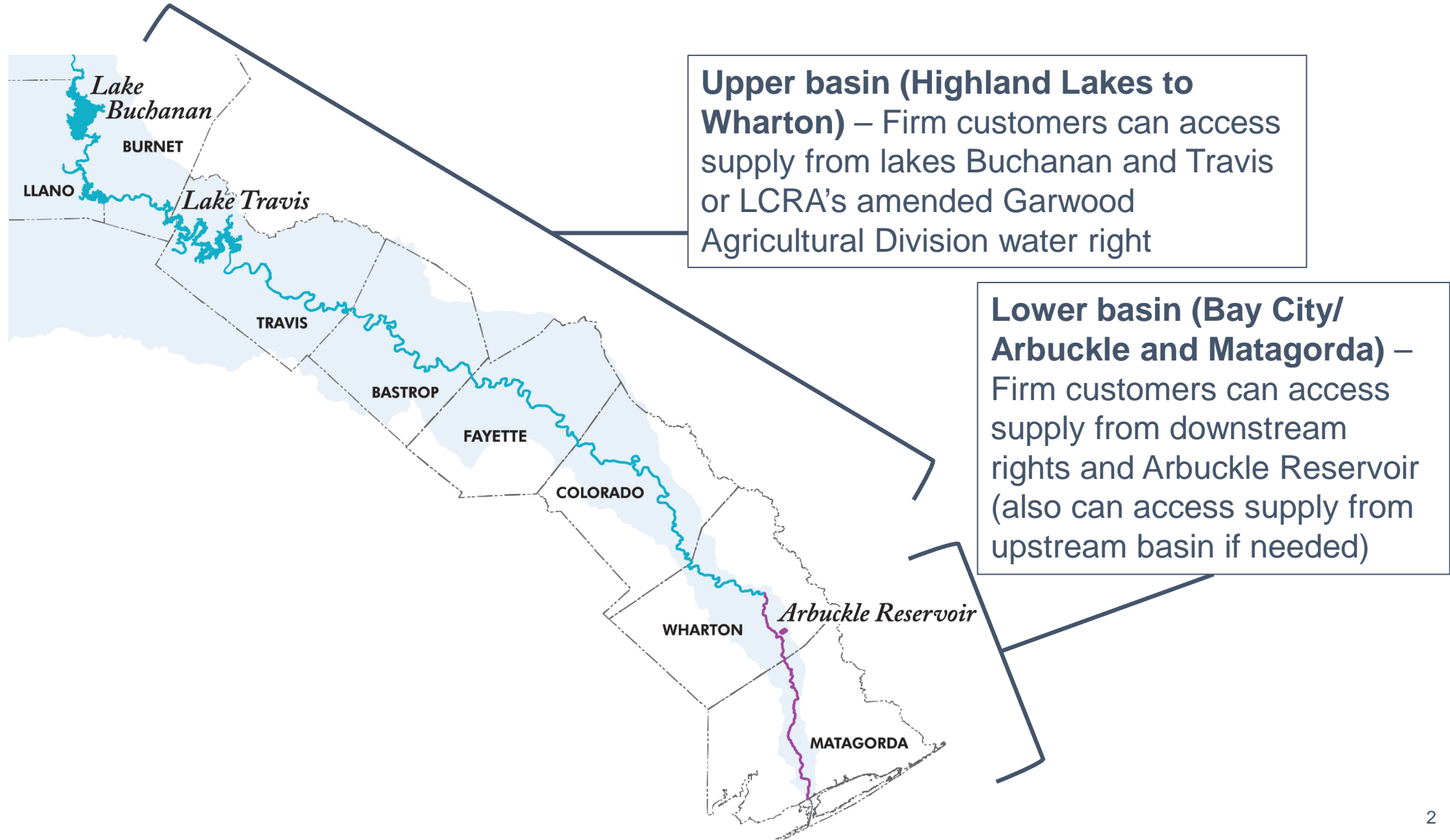
## WATER SUPPLY RESOURCE REPORT



Strategies to meet long-term  
water supply needs in a growing region

NOVEMBER 2025

# Firm Supplies and Demands Vary by Location



# Need for New Water Supply in the Lower Colorado River's Upper Basin (Highland Lakes to Wharton)

	Acre-feet per year					
	2030	2040	2050	2060	2070	2080
Projected future firm contractual commitments in upper basin	468,000	477,000	455,000	456,000	464,000	464,000
Uncertainty cushion	30,000	30,000	50,000	50,000	50,000	50,000
Total supply needed	498,000	507,000	505,000	506,000	514,000	514,000
Historic firm yield – upper basin <sup>1</sup>	450,000	450,000	450,000	450,000	450,000	450,000
<b>New supply needed</b>	<b>48,000</b>	<b>57,000</b>	<b>55,000</b>	<b>56,000</b>	<b>64,000</b>	<b>64,000</b>

<sup>1</sup>Combined firm yield of lakes Travis and Buchanan plus 33,000 a-f per year of Garwood Agricultural Division water right; does not include potential sedimentation

**Targeted new firm water supply for upper basin of about 60,000 a-f per year by 2040**

# Upper Basin Water Supply Strategies

- To meet the firm supply needs in the upper basin, LCRA identified and evaluated 17 potential supply strategies in the WSRR
- Initially considered more than 60 potential water supply strategies



# **Upper Basin Water Supply Strategies**

## **(Continued)**

- **The 17 strategies were categorized into three main categories to help meet the goal of adding 60,000 acre-feet of new firm supplies to the upper basin by 2040**
  - Water conservation and reuse
  - System optimization and new Colorado River supplies
  - New, non-Colorado River supplies
- **Infrastructure strategies require the development and movement of water from various source locations to the upper basin, where projected demands are highest**

# Upper Basin Water Supply Strategy Evaluation

	STRATEGY	FIRM SUPPLY (Acre-Foot Per Year)	CONCEPTUAL- LEVEL CAPITAL COST*	CONCEPTUAL- LEVEL UNIT COST PER ACRE-FOOT*	TIME TO IMPLEMENT
<div style="text-align: center;"> <span style="font-size: 2em; border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;">1</span>            Water conservation and reuse         </div>	Conservation - Canal lining (firm customers)	2,400-5,900**	\$5.4 million	\$100	3-7 Yrs
	Conservation - Enhanced incentives	210-1,750**	\$314,000-\$950,000	\$500-1,500	< 5 Yrs
	Conservation - Permanent once-per-week watering	10,000-28,000**	Nominal	Nominal	< 5 Yrs
	Conservation - Municipal gallons per capita per day cap	4,900-17,600**	Nominal	Nominal	< 5 Yrs
	Direct Potable Reuse	1,120	\$117 million	\$10,100	12-22 Yrs

\*September 2023 dollars

\*\*Represents the volume of firm supply extended; not the new firm supply created

# Upper Basin Water Supply Strategy Evaluation (continued)

STRATEGY		FIRM SUPPLY (Acre-Foot Per Year)	CONCEPTUAL-LEVEL CAPITAL COST*	CONCEPTUAL-LEVEL UNIT COST PER ACRE- FOOT*	TIME TO IMPLEMENT
<div style="text-align: center;"> <span style="font-size: 48pt; border: 1px solid black; border-radius: 50%; width: 60px; height: 60px; display: inline-block; margin: 0 auto 10px auto;">2</span> <p>System optimization and new Colorado River supplies</p> </div>	<b>Aquifer Storage and Recovery</b>	<b>22,000</b>	<b>\$1.0 billion</b>	<b>\$3,500</b>	<b>12-20 Yrs</b>
	<b>Bastrop County Off-Channel Reservoir (OCR)</b> (60,000 acre-feet storage)	<b>35,000</b>	<b>\$1.8 billion</b>	<b>\$3,800</b>	<b>12-24 Yrs</b>
	<b>Fayette County OCR</b> (48,000 acre-feet storage)	<b>29,000</b>	<b>\$2.3 billion</b>	<b>\$6,000</b>	<b>13-26 Yrs</b>
	<b>Baylor Creek Reservoir</b> (48,000 acre-feet storage)	<b>29,000</b>	<b>\$1.8 billion</b>	<b>\$4,800</b>	<b>19-36 Yrs</b>
	<b>Lower Basin OCR</b> (48,000 acre-feet storage)	<b>49,000</b>	<b>\$3.4 billion</b>	<b>\$5,300</b>	<b>14-27 Yrs</b>
	<b>Lower Basin OCR</b> (80,000 acre-feet storage)	<b>73,000</b>	<b>\$4.1 billion</b>	<b>\$4,200</b>	<b>14-27 Yrs</b>
	<b>Arbuckle Pipeline with Fayette County OCR</b> (48,000 acre-feet storage)	<b>58,000</b>	<b>\$4.0 billion</b>	<b>\$5,200</b>	<b>14-27 Yrs</b>
	<b>Arbuckle Pipeline with Lower Basin OCR</b> (48,000 acre-feet storage)	<b>72,000</b>	<b>\$4.5 billion</b>	<b>\$4,700</b>	<b>14-27 Yrs</b>

\*September 2023 dollars

# Upper Basin Water Supply Strategy Evaluation (Continued)

STRATEGY		FIRM SUPPLY (Acre-Foot Per Year)	CONCEPTUAL- LEVEL CAPITAL COST*	CONCEPTUAL- LEVEL UNIT COST PER ACRE-FOOT*	TIME TO IMPLEMENT
<div style="text-align: center;"> <span style="font-size: 2em; border: 1px solid black; border-radius: 50%; padding: 5px;">3</span>            New, non-Colorado River supplies         </div>	Purchase Wholesale Groundwater	25,000	\$635 million	\$2,600	8-15 Yrs
	East Texas Transfer*** (200,000 acre-feet/year)	66,667	\$3.2 billion	\$3,600	19-34 Yrs
	East Texas Transfer*** (600,000 acre-feet/year)	200,000	\$7.8 billion	\$3,000	19-34 Yrs
	Seawater Desalination	30,000	\$3.6 billion	\$10,300	14-26 Yrs

\*September 2023 dollars

\*\*\*Involves partners. Firm supply and capital costs reflect LCRA's share

# Public Comments

- **Public comment period from Aug. 25 to Sept. 19**
  - 35 comments received
- **Posted the draft WSRR online for review**
- **Sent emails to water customers and to public comments mailing list**
- **Held meetings with three entities**
- **Comments and responses have been posted to LCRA's website**



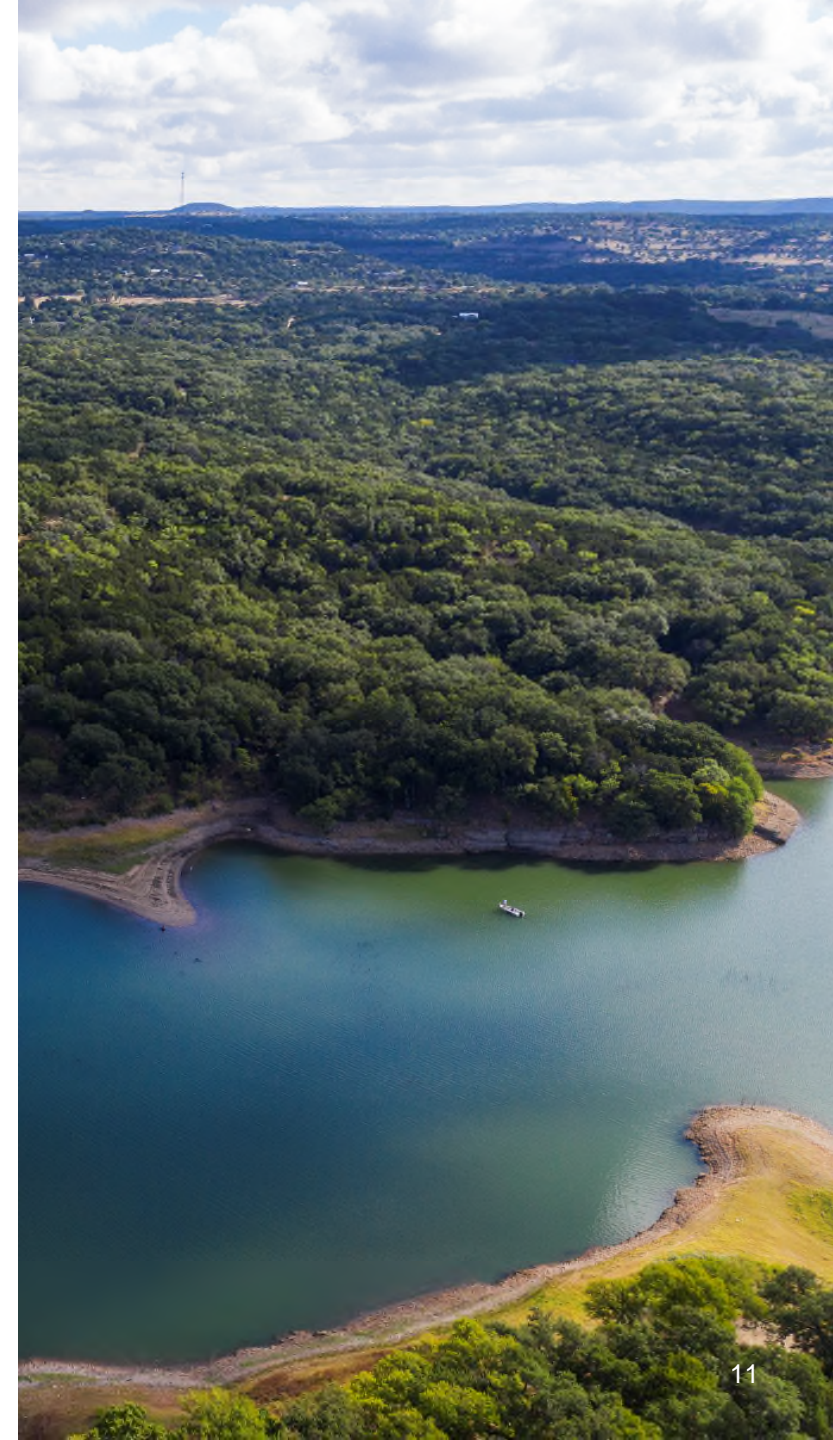
# Public Comments (Continued)

- **Comment categories**
  - Water conservation
  - Water use, demands and commitments
  - Water supply modeling
  - Uncertainty cushion
  - Water supply strategies
  - Cost estimates
  - Project funding



# Next Steps

- **Now**
  - Conduct siting studies, develop project layouts and configurations, identify more detailed costs and permitting requirements
- **Near-term**
  - Identify funding sources
  - Select and begin developing the next new water supply project(s)



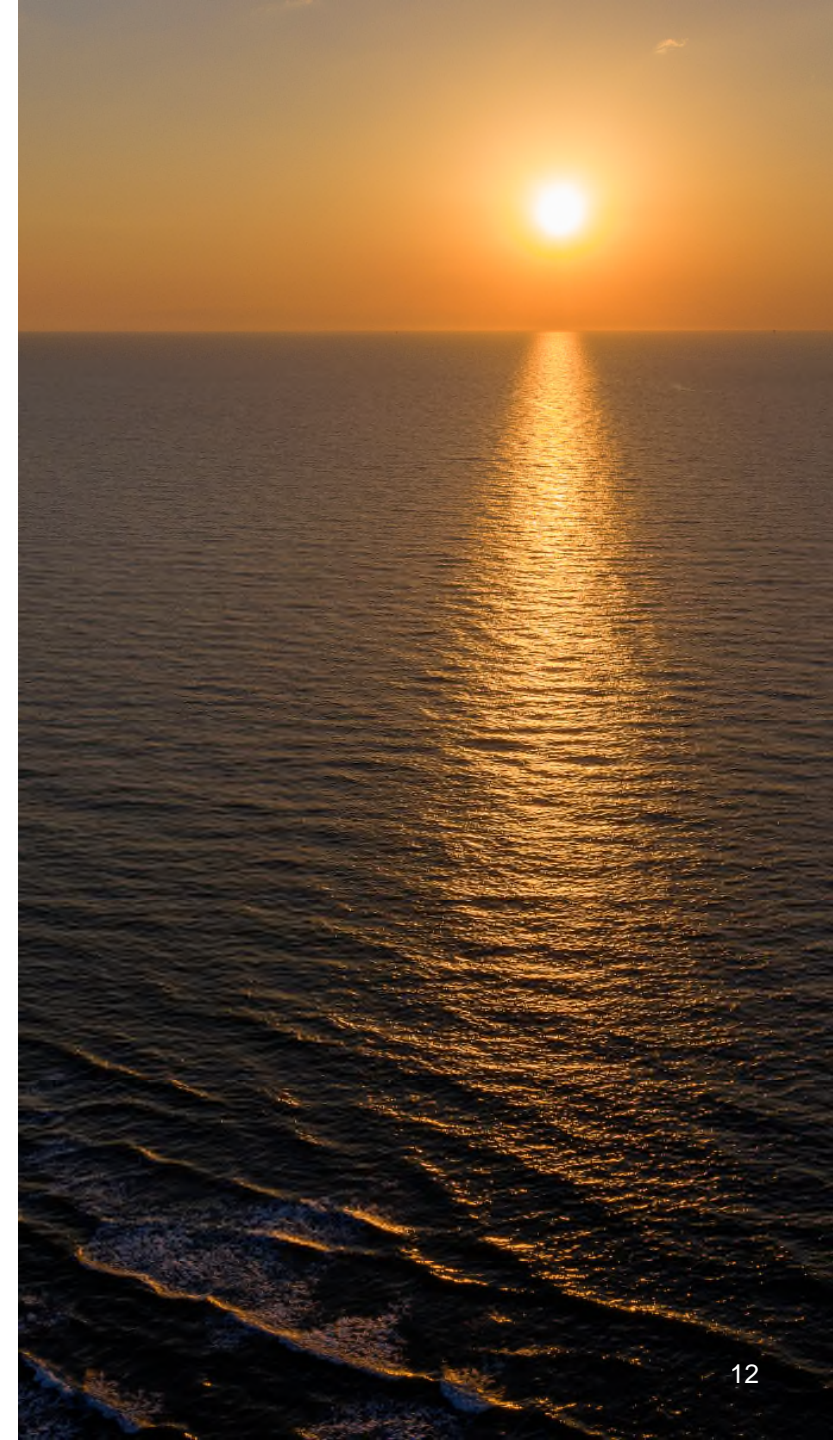
# Next Steps (Continued)

- **Ongoing**

- Coordinate with LCRA customers; federal, state and local agencies; and other stakeholders
- Implement enhanced water conservation strategies

- **Regularly**

- Update the WSRR to account for population growth and changing demands and water supply needs





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