

LCRA Interruptible Water Rates for Calendar Year 2023

**Water Operations Committee
Meeting**

Nov. 16, 2022



Water Rates Review

- **For rate-setting purposes, costs are divided into the following four categories:**
 - River management – operations and maintenance expenses
 - Water debt obligation – debt service and coverage
 - Irrigation canals water delivery – agriculture and Gulf Coast industry
 - Other adjustments:
 1. Additional revenue-funded capital
 2. Firm revenue requirement offsets – STP Nuclear Operating Company revenue and City of Austin Lake Travis diversions revenue

Water Rates Review (Continued)

- **Firm pays for:**

- Allocated portion of river management (78.7%)
- Water debt obligation (100%)
- Other adjustments and revenue requirement offsets (100%)

- **Interruptible pays for:**

- Allocated portion of river management (21.3%) – Gulf Coast and Lakeside agricultural divisions only
- Irrigation debt (100%)
- Irrigation canals water delivery (100%)

Water Rates Review (Continued)

- In 2023, interruptible rates will recover full allocation of river management costs (21.3%)
- Transition occurred over eight years beginning in calendar year 2016

2015 WMP: 20.7%

2020 WMP: 21.3%

Calendar Year	2016	2017	2018	2019	2020	2021	2022	2023
Transition year:	1	2	3	4	5	6	7	8
Interruptible – 2020 WMP	13.5%	14.7%	15.9%	15.9%	17.1%	18.5%	19.9%	21.3%
Interruptible – 2015 WMP	13.5%	14.7%	15.9%	15.9%	17.1%	18.3%	19.5%	20.7%

What's Changed From 2022 Rate?

- **Agricultural division – operations and maintenance costs updated**
 - Based on fiscal year 2022 actual results
 - Adjusted for known and measurable changes
 - 3.5% base labor increase; market adjustments
 - Electric costs adjusted to reflect CY 2023 estimate of acres and water use
 - Other adjustments, including outside services and materials costs

What's Changed From 2022 Rate?

(Continued)

- **River management cost allocation updated**
 - CY 2023 is year eight of the eight-year transition to full-cost recovery of allocated river management costs
- **Interruptible billing units updated**
 - Acres based on three-year rolling average of actual acres
 - 2020, 2021, 2022
 - Water use per acre based on 20-plus year statistical analysis

Gulf Coast Agricultural Division

CY 2022 Acres and Water Use

	First Season Rice	Second Season Rice	Turf	Row Crop	Aquaculture	Wildlife	Pasture
Number of contracts	21	0	6	8	5	3	6
Number of contracts not serviced	0	0	0	0	0	0	0
Acres contracted	8,326.6	0	1,790.1	1,804.0	506.0	176.0	386.0
Acres contracted not serviced	0	0	0	0	0	0	0
Acres serviced	8,326.6	0	1,790.1	1,804.0	506.0	176.0	386.0
Water delivered (acre-feet)	22,520.6	0	1,572.0	746.3	1,068.4	265.4096	331.9
Water use per acre (a-f per acre)	2.705	0	.878	.414	2.11	1.51	.860
Number of contracts in surcharge	3	0	0	0	0	0	0

Lakeside Agricultural Division

CY 2022 Acres and Water Use

	First Season Rice	Second Season Rice	Row Crop	Pasture
Number of contracts	55	0	1	1
Number of contracts not serviced	0	0	0	0
Acres contracted	26,563.4	0	865.0	10.0
Acres contracted not serviced	938.7	0	0	0
Acres serviced	25,624.7	0	865.0	10.0
Water delivered (a-f)	64,606.2	0	222.6	12.2
Water use per acre (a-f per acre)	2.52	0	.257	1.2
Number of contracts in surcharge	6	0	0	0

Garwood Agricultural Division

CY 2022 Acres and Water Use

	First Season Rice	Second Season Rice	Row Crop	Wildlife	Pasture
Number of contracts	56	47	1	31	0
Number of contracts not serviced	1	3	0	1	0
Acres contracted	20,890.2	18,022.2	82.0	4,408.3	0
Acres contracted not serviced	105.0	2,144.2	0	900.0	0
Acres serviced	20,785.2	15,878.0	82.0	3,508.3	0
Water delivered (a-f)	66,331.5	19,624.6	42.4	4,618.3	0
Water use per acre (a-f per acre)	3.191	1.236	.517	1.316	0
Number of contracts in surcharge	23	0	0	4	0

Interruptible Billing Units – CY 2023

		Gulf Coast	Lakeside	Garwood	How Derived
Acres					
Rice – first season		8,956	22,893	19,836	Three-year averages: <ul style="list-style-type: none"> • First season rice, turf – 2020, 2021, 2022 • Second season rice: <ul style="list-style-type: none"> Gulf Coast and Lakeside – 2019, 2020, 2021 Garwood – 2020, 2021, 2022
Rice – second season		3,762	11,908	15,707	
Turf		1,700			
Times: water use per acre (a-f per acre)*					
Rice – first season		2.826	1.848	1.854	20-plus year statistical analysis
Rice – second season		1.346	1.165	1.248	Three-year weighted averages: <ul style="list-style-type: none"> • Gulf Coast and Lakeside – 2019, 2020, 2021 • Garwood – 2020, 2021, 2022
Turf		0.710			
Equals: billing units (a-f)*					
Rice – first season		25,310	42,311	36,785	
Rice – second season		5,065	13,875	19,601	
Turf		1,206			
Total interruptible billing units		31,581	56,186	56,386	

*Water use is delivered to the field

Gulf Coast Agriculture Rate – CY 2023

(Dollars in thousands)	CY 2023 Rate	CY 2022 Rate	Variance – Favorable (Unfavorable)	
			Amount	Percent
Water delivery costs	\$2,282	\$2,173	(\$109)	(5.0%)
Add: allocated river management costs – full-cost recovery	\$1,158	\$1,199	\$41	3.4%
Total costs – full-cost recovery	\$3,440	\$3,372	(\$68)	(2.0%)
Less: amount paid by firm during transition of river management costs	\$0	(\$79)	(\$79)	(100.0%)
Less: Agriculture Reserve Funds used	(\$1,094)	(\$1,235)	(\$141)	(11.4%)
Total costs	\$2,346	\$2,058	(\$288)	(14.0%)
Divided by: billing units (a-f)	31,581	29,633	1,949	6.6%
Equal: rate (Dollars per a-f)				
Water delivery costs	\$72.26	\$73.33	(\$1.07)	(1.5%)
River management costs – full-cost recovery	\$36.67	\$40.45	(\$3.78)	(9.3%)
Total full-cost recovery rate	\$108.93	\$113.78	(\$4.85)	(4.3%)
Less: river management costs paid by firm during eight-year transition	\$0.00	(\$2.66)	\$2.66	100.0%
Less: Agriculture Reserve Funds used	(\$34.63)	(\$41.68)	\$7.05	16.9%
Total Gulf Coast agriculture rate	\$74.30	\$69.44	\$4.86	7.0%

Gulf Coast Industrial Rate – CY 2023

(Dollars in thousands unless otherwise noted)	Gulf Coast Industrial Billing Units (a-f)			CY 2023 Rate
	Use	Less: Losses	Billing Units	
Gulf Coast costs allocated to industry				\$735
Divided by: Gulf Coast industrial billing units				
Underground Services Markham – losses at 23.4%	7,119 (1)	(1,668)	5,451	
OQ Chemicals Corporation – losses at 23%	4,529 (1)	(1,042)	3,487	
Total billing units – delivered to facility	11,648	(2,710)	8,938	
Total billing units (thousand gallons) (1 a-f equals 325,851 gallons)				2,912,442
Gulf Coast industrial distribution rate (Dollars per thousand gallons)				\$0.2525 (2)
Gulf Coast industrial distribution rate (Dollars per a-f)				\$82.28 (3)

(1) Use volumes billed at firm rate.

(2) Current rate is \$0.235 per thousand gallons or \$76.57 per a-f per Board approval in January 2021.

(3) Increase from current rate of \$0.018 per thousand gallons or \$5.71 per a-f (7.5% increase).

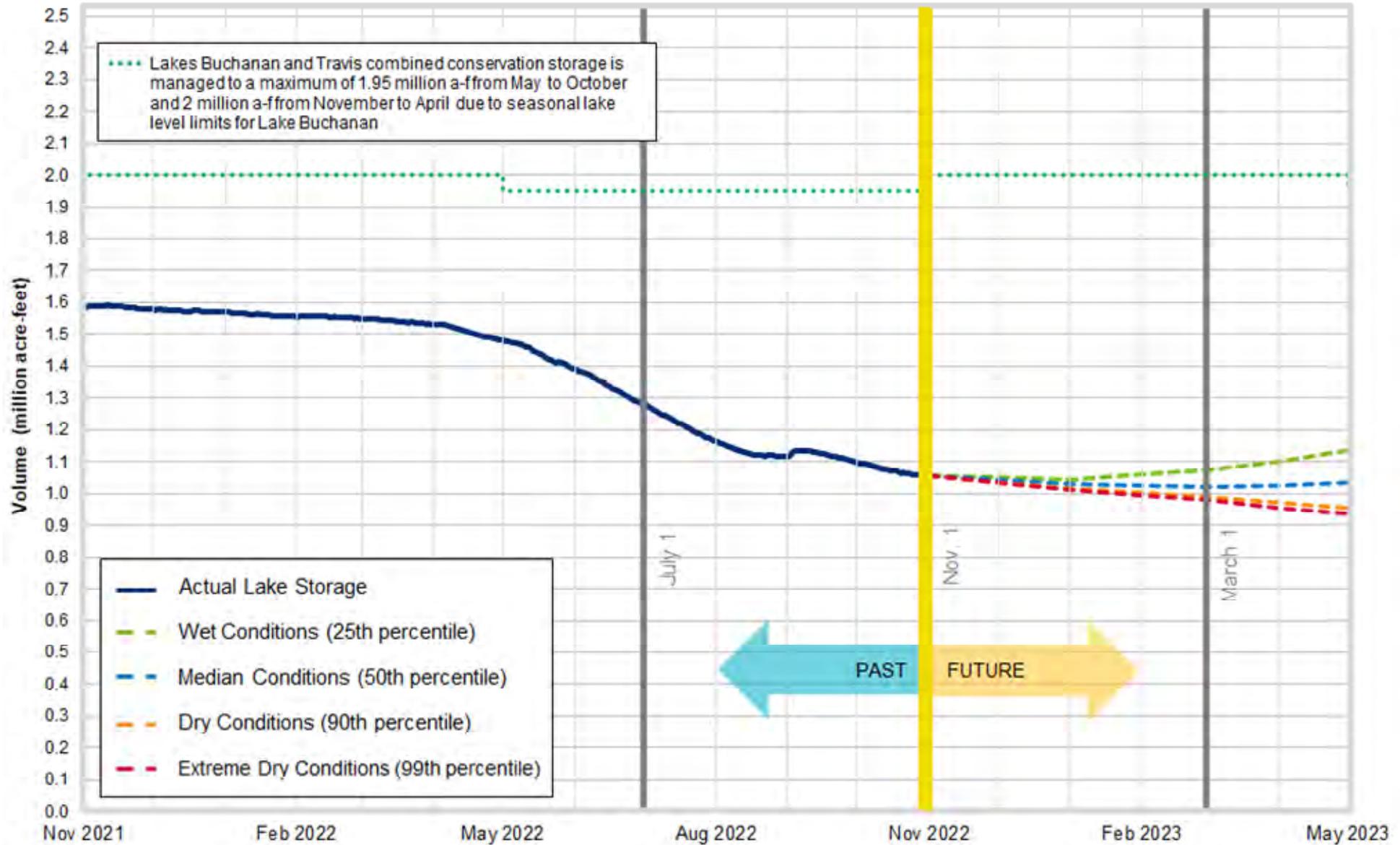
Lakeside Rate – CY 2023

(Dollars in thousands unless otherwise noted)	CY 2023 Rate	CY 2022 Rate	Variance – Favorable (Unfavorable)	
			Amount	Percent
Water delivery costs	\$3,117	\$2,747	(\$370)	(13.5%)
Add: allocated river management costs – full-cost recovery	\$2,060	\$2,088	\$28	1.3%
Total costs – full-cost recovery	\$5,177	\$4,835	(\$342)	(7.1%)
Less: amount paid by firm during transition of river management costs	\$0	(\$137)	(\$137)	(100.0%)
Less: Agriculture Reserve Funds used	(\$1,002)	(\$1,113)	(\$111)	(10.0%)
Total costs	\$4,175	\$3,585	(\$590)	(16.5%)
Divided by: billing units (a-f)	56,186	51,624	4,561	8.8%
Equal: rate (Dollars per a-f)				
Water delivery costs	\$55.48	\$53.21	\$2.27	4.3%
River management costs – full-cost recovery	\$36.67	\$40.45	(\$3.78)	(9.3%)
Total full-cost recovery rate	\$92.15	\$93.66	(\$1.51)	(1.6%)
Less: river management costs paid by firm during eight-year transition	\$0.00	(\$2.66)	\$2.66	100.0%
Less: Agriculture Reserve Funds used	(\$17.85)	(\$21.56)	\$3.71	17.2%
Total Lakeside rate	\$74.30	\$69.44	\$4.86	7.0%

Garwood Rate – CY 2023

(Dollars in thousands unless otherwise noted)	CY 2023 Rate	CY 2022 Rate	Variance – Favorable (Unfavorable)	
			Amount	Percent
Water delivery costs	\$2,394	\$2,155	(\$239)	(11.1%)
Add: allocated river management costs – full-cost recovery	n/a	n/a	n/a	n/a
Total costs – full-cost recovery	\$2,394	\$2,155	(\$239)	(11.1%)
Less: amount paid by firm during transition of river management costs	n/a	n/a	n/a	n/a
Total costs	\$2,394	\$2,155	(\$239)	(11.1%)
Divided by: billing units (a-f)	56,386	53,139	3,247	6.1%
Equal: rate (Dollars per a-f)				
Water delivery costs	\$42.46	\$40.55	\$1.91	4.7%
River management costs – full-cost recovery	n/a	n/a	n/a	n/a
Total full-cost recovery rate	\$42.46	\$40.55	\$1.91	4.7%
Less: amount paid by firm during transition of river management costs	n/a	n/a	n/a	n/a
Garwood rate – weighted average	\$42.46	\$40.55	\$1.91	4.7%
Garwood rate – one lift (81% of total volume)	\$41.04	\$39.19	\$1.85	4.7%
Garwood rate – two lifts (19% of total volume)	\$48.64	\$46.46	\$2.18	4.7%

Lakes Buchanan and Travis Total Combined Storage Projections



..... Lakes Buchanan and Travis combined conservation storage is managed to a maximum of 1.95 million a-ft from May to October and 2 million a-ft from November to April due to seasonal lake level limits for Lake Buchanan

- Actual Lake Storage
- - Wet Conditions (25th percentile)
- - Median Conditions (50th percentile)
- - Dry Conditions (90th percentile)
- - Extreme Dry Conditions (99th percentile)

Date: Nov. 1, 2022

Note: One acre-foot equals 325,851 gallons

Proposed CY 2023 Interruptible Rules, Rates and Drought Contingency Plan Changes

- **Reviewing and considering potential changes to the following:**
 - Minimum charges
 - Contracting for supplemental water
 - Groundwater transport agreements
 - Change deadline for first season use to be considered for second season allocation
 - Updates to surcharge triggers

CY 2023 Interruptible Rules, Rates and Drought Contingency Plan Implementation Summary and Timeline

- **Interruptible rates – increasing**
- **Agriculture Drought Contingency Plan and contract rules**
 - Post on website for review and comment in December 2022
 - Close comment period in early January 2023
 - Consider approval at Jan. 18, 2023, Board meeting
- **Interruptible water availability – driven by conditions on March 1, 2023**

