

# **LCRA Interruptible Water Rates for Calendar Year 2022**

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**Water Operations Committee  
Meeting**

**Nov. 16, 2021**



# Water Rates Review

- **For rate-setting purposes, costs are divided into the following four pools:**
  - 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, City of Austin Lake Travis diversions revenue, Lometa lease revenue
    3. Interruptible share of river management paid by firm during eight-year transition period

# 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 irrigation divisions only
  - Irrigation debt (100%)
  - Irrigation canals water delivery (100%)

# **Water Rates Review (Continued)**

- **River management cost allocation statistics updated to 2020 Water Management Plan**
  - Allocated portion of river management to interruptible (Gulf Coast and Lakeside only): 21.3%
    - Includes Arbuckle Reservoir
    - Includes additional drought years 2014 to 2016

# Water Rates Review (Continued)

- River management costs transitioned to full-cost allocation to interruptible over eight years beginning in calendar year 2016
  - Full-cost allocation to interruptible is 21.3% by year eight, or CY 2023
  - Firm pays for difference during transition period

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 2021 Rate?

- **Operations and maintenance costs updated**
  - Based on fiscal year 2021 actual results
  - Adjusted for “known and measurable” changes
    - 3% labor increase
    - Electric costs adjusted to reflect CY 2022 estimate of acres and water use
    - Nonrecurring repairs excluded
    - Arbuckle O&M costs included, primarily pumping costs, during testing, etc.

# **What's Changed From 2021 Rate?**

## **(Continued)**

- **River management cost allocation updated**
  - Eight-year transition to full-cost recovery of allocated river management costs to interruptible
  - CY 2022 is year seven of the eight-year transition
- **Firm and interruptible billing units updated**
  - Acres based on three-year rolling average of actual acres
    - 2019, 2020, 2021
  - Water use per acre based on 20+ year statistical analysis

# Lakeside Agricultural Division

## Calendar Year 2021 Acres and Water Use

	First Season Rice	Second Season Rice	Wildlife	Pasture
Number of contracts	59	43	17	1
Number of contracts not serviced	4	0	0	1
Acres contracted	23,961	15,666	1,299	23
Acres contracted not serviced	2,367	1,258	297	23
Acres serviced	21,594	14,408	1,002	0
Water delivered (acre-feet)	20,195	16,112	1,735	0
Water use per acre (a-f per acre)	0.935	1.118	1.731	0
Number of contracts in surcharge	0	1	4	0



# Gulf Coast Agricultural Division

## CY 2021 Acres and Water Use

	First Season Rice	Second Season Rice	Turf	Row Crop	Aquaculture	Wildlife	Pasture
Number of contracts	23	11	6	0	1	9	1
Number of contracts not serviced	0	1	0	0	0	0	1
Acres contracted	8,952	4,359	1,715	0	111	2,229	50
Acres contracted not serviced	0	1,387	75	0	0	1,053	50
Acres serviced	8,952	2,972	1,640	0	111	1,176	0
Water delivered (a-f)	15,984	4,214	700	0	62	1,385	0
Water use per acre (a-f per acre)	1.785	1.418	0.427	0	0.555	1.178	0
Number of contracts in surcharge	0	0	0	0	0	0	0

# Garwood Agricultural Division

## CY 2021 Acres and Water Use

	First Season Rice	Second Season Rice	Row Crop	Wildlife	Pasture
Number of contracts	56	47	1	31	1
Number of contracts not serviced	1	0	1	1	1
Acres contracted	19,965	17,308	154	4,090	11
Acres contracted not serviced	997	2,211	154	942	11
Acres serviced	18,968	15,097	0	3,148	0
Water delivered (a-f)	24,541	19,697	0	3,533	0
Water use per acre (a-f per acre)	1.294	1.305	0	1.122	0
Number of contracts in surcharge	0	2	0	2	0

# Interruptible Billing Units – CY 2022

		Lakeside	Gulf Coast	Garwood	How Derived
Acres					
	Rice – first season	20,350	8,265	18,766	Three-year average – 2019, 2020, 2021
	Rice – second season	11,908	3,762	14,854	
	Turf		1,658		
Times: water use per acre (a-f per acre)*					
	Rice – first season	1.855	2.842	1.836	20+ year statistical analysis
	Rice – second season	1.165	1.346	1.257	Three-year average – 2019, 2020, 2021
	Turf		0.652		
Equals: billing units (a-f)*					
	Rice – first season	37,749	23,487	34,462	
	Rice – second season	13,875	5,065	18,677	
	Turf		1,081		
	<b>Total interruptible billing units</b>	<b>51,624</b>	<b>29,633</b>	<b>53,139</b>	

\*Water use is delivered to the field

# Lakeside Rate – CY 2022

(Dollars in thousands unless otherwise noted)	CY 2022 Rate	CY 2021 Rate	Variance – Favorable (Unfavorable)	
			Amount	Percent
Water delivery costs	\$2,747	\$2,825	\$78	2.8%
Add: allocated river management costs – full-cost recovery	\$2,088	\$1,786	(\$302)	(16.9%)
Total costs – full-cost recovery	\$4,835	\$4,611	(\$224)	(4.9%)
Less: amount paid by firm during transition of river management costs	(\$137)	(\$235)	(\$98)	(41.7%)
Less: Agriculture Reserve Fund used	(\$1,113)	(\$974)	\$139	14.3%
Total costs	\$3,585	\$3,402	(\$183)	(5.4%)
Divided by: billing units (a-f)	51,624	51,428	196	0.4%
Equals: rate (\$ per a-f)				
Water delivery costs	\$53.21	\$54.93	(\$1.72)	(3.1%)
River management costs – full-cost recovery	\$40.45	\$34.70	\$5.75	16.6%
Total full-cost recovery rate	\$93.66	\$89.63	\$4.03	4.5%
Less: amount paid by firm during transition of river management costs	(\$2.66)	(\$4.56)	\$1.90	41.7%
Less: Agriculture Reserve Fund used	(\$21.56)	(\$18.93)	(\$2.63)	(13.9%)
<b>Total Lakeside rate</b>	<b>\$69.44</b>	<b>\$66.14</b>	<b>\$3.30</b>	<b>5.0%</b>

# Gulf Coast Cost Allocation – CY 2022

- **Gulf Coast system provides water to two industrial customers – Underground Services Markham and OQ Chemicals Corp.**
  - USM and OQ pay a separate water delivery rate
- **Gulf Coast costs are allocated between agriculture and industry based on relative projected water use for CY 2022**
  - 76.6% agriculture, 23.4% industry

Projected Gulf Coast Water Use – CY 2022 (a-f)				% of Total
	USM	OQ Chemicals	Total	
Industry – delivered to facility	5,258	3,814	9,072	<b>23.4%</b>
Agriculture – delivered to field			29,633	<b>76.6%</b>
Total Gulf Coast:			38,705	100.0%

# Gulf Coast Agriculture Rate – CY 2022

(Dollars in thousands unless otherwise noted)	CY 2022 Rate	CY 2021 Rate	Variance – Favorable (Unfavorable)	
			Amount	Percent
Water delivery costs	\$2,173	\$2,389	\$216	9.0%
Add: allocated river management costs – full-cost recovery	\$1,199	\$1,195	(\$4)	(0.3%)
Total costs – full-cost recovery	\$3,372	\$3,584	\$212	5.9%
Less: amount paid by firm during transition of river management costs	(\$79)	(\$157)	(\$78)	(49.7%)
Less: Agriculture Reserve Fund used	(\$1,235)	(\$1,149)	\$86	7.5%
Total costs	\$2,058	\$2,278	\$220	9.7%
Divided by: billing units (a-f)	29,633	34,444	(4,811)	(14.0%)
Equals: rate (\$ per a-f)				
Water delivery costs	\$73.33	\$69.36	\$3.97	5.7%
River management costs – full-cost recovery	\$40.45	\$34.70	\$5.75	16.6%
Total full-cost recovery rate	\$113.78	\$104.06	\$9.72	9.3%
Less: amount paid by firm during transition river management costs	(\$2.66)	(\$4.56)	\$1.90	41.7%
Less: Agriculture Reserve Fund used	(\$41.68)	(\$33.36)	(\$8.32)	(24.9%)
<b>Total Gulf Coast agriculture rate</b>	<b>\$69.44</b>	<b>\$66.14</b>	<b>\$3.30</b>	<b>5.0%</b>

# Gulf Coast Industrial Rate – CY 2022

(Dollars in thousands unless otherwise noted)	
	CY 2022 Rate
Gulf Coast costs allocated to industry	\$705
Divided by: Gulf Coast industry use (a-f)	9,072
Gulf Coast <u>industrial</u> distribution rate (\$ per a-f)	<b>\$77.81</b>
Gulf Coast <u>agriculture</u> delivery rate (\$ per a-f)	\$73.33
Gulf Coast industrial distribution rate (\$ per thousand gallons)	<b>\$0.239</b>
Current Gulf Coast industrial distribution rate (\$ per thousand gallons)*	\$0.235

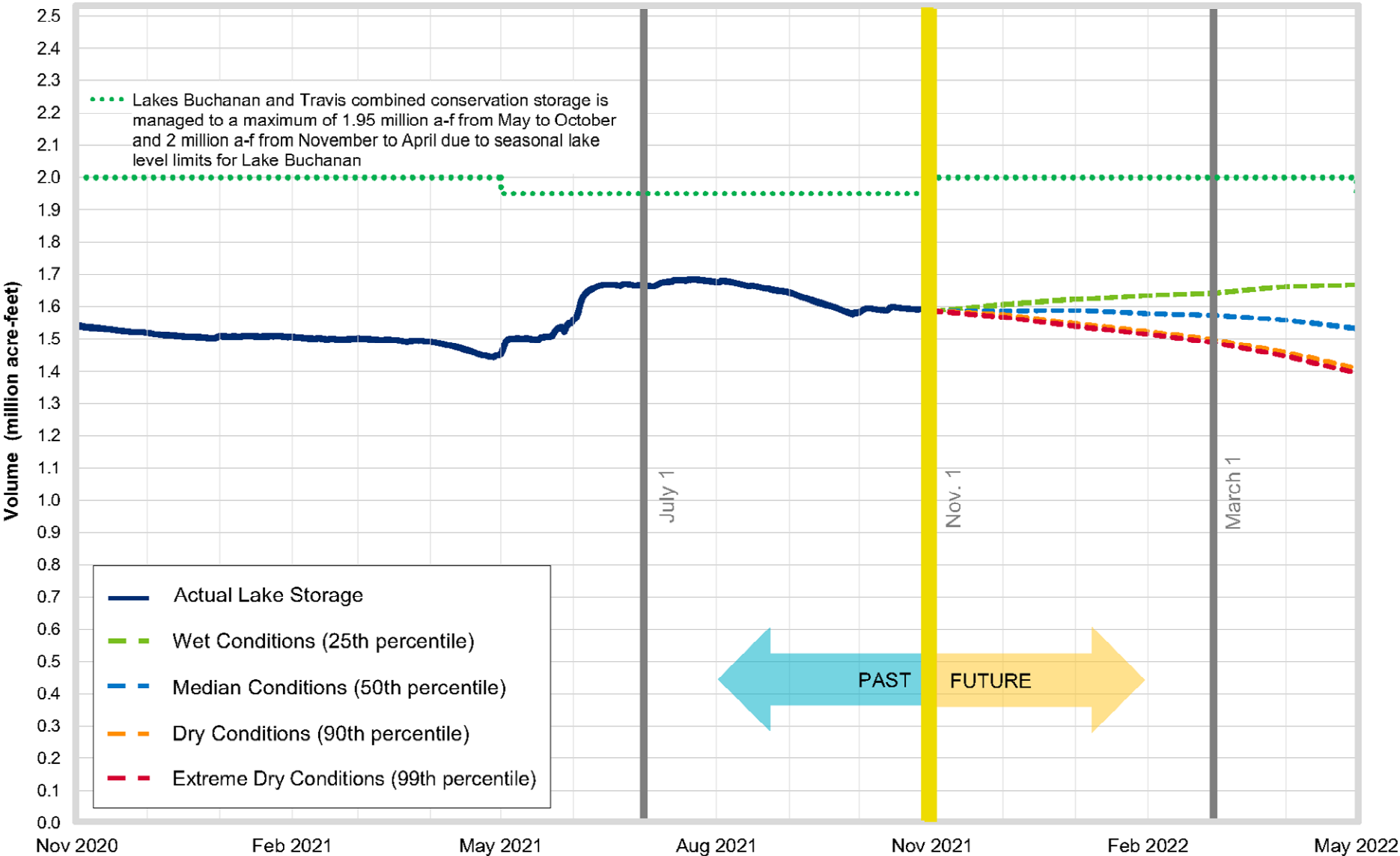
\*Current rate of \$0.235 per thousand gallons last changed effective January 2021.  
No rate change recommended at this time.

# Garwood Rate – CY 2022

(Dollars in thousands unless otherwise noted)	CY 2022 Rate	CY 2021 Rate	Variance – Favorable (Unfavorable)	
			Amount	Percent
Water delivery costs	\$2,155	\$2,101	(\$54)	(2.6%)
Add: allocated river management costs – full-cost recovery	n/a	n/a	n/a	n/a
Total costs – full-cost recovery	\$2,155	\$2,101	(\$54)	(2.6%)
Less: amount paid by firm during transition of river management costs	n/a	n/a	n/a	n/a
Total costs	\$2,155	\$2,101	(\$54)	(2.6%)
Divided by: billing units (a-f)	53,139	52,990	149	0.3%
Equals: rate (\$ per a-f)				
Water delivery costs	\$40.55	\$39.65	\$0.90	2.3%
River management costs – full-cost recovery	n/a	n/a	n/a	n/a
Total full-cost recovery rate	\$40.55	\$39.65	\$0.90	2.3%
Less: amount paid by firm during transition of river management costs	n/a	n/a	n/a	n/a
<b>Garwood rate – weighted average</b>	<b>\$40.55</b>	<b>\$39.65</b>	<b>\$0.90</b>	<b>2.3%</b>
Garwood rate – one lift (81% of total volume)	\$39.19	\$38.32	\$0.87	2.3%
Garwood rate – two lifts (19% of total volume)	\$46.46	\$45.42	\$1.04	2.3%



### Lakes Buchanan and Travis Total Combined Storage Projections



Date: Nov. 1, 2021  
 Note: One acre-foot equals 325,851 gallons

# **Proposed CY 2022 Drought Contingency Plan, Rule and Rate Changes**

- **Modify the minimum charge as a percentage of the current year's interruptible water rate (currently 33%)**
- **Change the ISW allocation methodology for Gulf Coast and Lakeside**
- **Modify the maximum ISW allocations for first and second seasons in Gulf Coast and Lakeside**
- **Discuss potential changes at farmer meetings in early December and get feedback**

# **CY 2022 Interruptible Rule, Rate and Drought Contingency Plan Implementation Summary and Timeline**

- **Interruptible rates – increasing**
- **Agriculture DCP and contract rules**
  - Post on website for review and comment mid-December 2021
  - Comment period closing about Jan. 8, 2022
  - Agenda Jan. 19 Board meeting
- **Interruptible water availability – driven by conditions March 1, 2022**

