LCRA Interruptible Water Rates for Calendar Year 2022

Water Operations Committee Meeting

Jan. 18, 2022



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

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

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

2015 WMP: 20.7%

2020 WMP: 21.3%

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
 - **2**019, 2020, 2021
 - Water use per acre based on 20+ year statistical analysis

Interruptible Billing Units - CY 2022

	Lakeside	Gulf Coast	Garwood	How Derived
Acres				
Rice – first season	20,350	8,265	18,766	
Rice – second season	11,908	3,762	14,854	Three-year average - 2019, 2020, 2021
Turf		1,658		
Times: water use per acre (a-f per acre	re)*			
Rice – first season	1.855	2.842	1.836	20+ year statistical analysis
Rice – second season	1.165	1.346	1.257	Three weer everage 2010 2020 2021
Turf		0.652		Three-year average – 2019, 2020, 2021
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		
Total interruptible billing units	51,624	29,633	53,139	

*Water use is delivered to the field

Lakeside Rate - CY 2022

(Dollars in thousands unless otherwise noted)			Variance – Favorable (Unfavorable)	
	CY 2022 Rate	CY 2021 Rate	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%)
Total Lakeside rate	\$69.44	\$66.14	\$3.30	5.0%

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 U	% of Total			
	USM	OQ Chemicals	Total	
Industry – delivered to facility	5,258	3,814	9,072	23.4%
Agriculture – delivered to field			29,633	76.6%
Total Gulf Coast:			38,705	100.0%

Gulf Coast Agriculture Rate - CY 2022

(Dollars in thousands unless otherwise noted)			Variance – Favorable (Unfavorable)	
	CY 2022 Rate	CY 2021 Rate	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%)
Total Gulf Coast agriculture rate	\$69.44	\$66.14	\$3.30	5.0%

Gulf Coast Industrial Rate - CY 2022

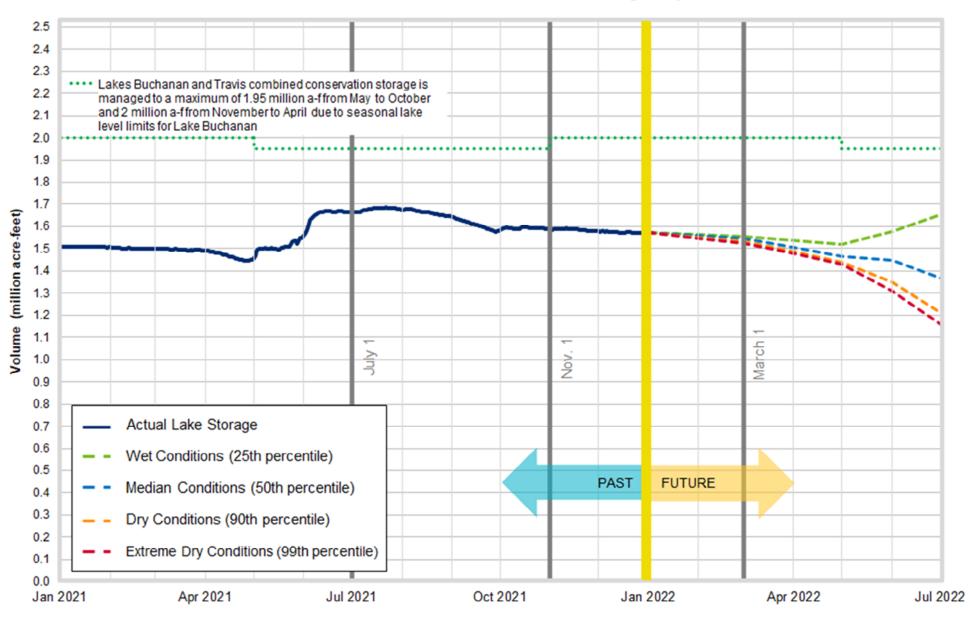
(Dollars in thousands unless otherwise noted)	
	CY 2022 Rate
Gulf Coast costs allocated to industry	\$705
Divided by: Gulf Coast industry use (a-f)	9,072
Gulf Coast industrial distribution rate (\$ per a-f)	\$77.81
Gulf Coast agriculture delivery rate (\$ per a-f)	\$73.33
Gulf Coast industrial distribution rate (\$ per thousand gallons)	\$0.239
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)			Variance – Favorable (Unfavorable)	
	CY 2022 Rate	CY 2021 Rate	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
Garwood rate – weighted average	\$40.55	\$39.65	\$0.90	2.3%
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



Proposed CY 2022 Drought Contingency Plan, Rule and Rate Changes

- Increase the minimum charge to be equal to 45% of the current year's interruptible water rate (in Gulf Coast and Lakeside)
- Modify customer history methodology (in Gulf Coast and Lakeside)
 - Four-year average for allocations
 - If additional allocations are available, allocate remaining based on maximum acreage year in the preceding four years

Proposed CY 2022 Drought Contingency Plan, Rule and Rate Changes (Continued)

- Modify the maximum allocation of interruptible stored water (foot per acre):
 - Gulf Coast Agricultural Division

	First Season		Second Season	
	Current	Proposed	Current	Proposed
Rice	3.75	3.25	2.5	2.2
Turf	1.75	1.0	1.0	0.5

Lakeside Agricultural Division

	First Season		Second Season	
	Current	Proposed	Current	Proposed
Rice	3.25	2.75	2.0	1.7
Turf	1.75	1.0	1.0	0.5

Proposed CY 2022 Drought Contingency Plan, Rule and Rate Changes (Continued)

Proposed CY 2022 interruptible water rates

	Dies/Turf and	Excess Use Surcharge			
Division	Rice/Turf and Supplemental		Tier 2	Tier 3	
Gulf Coast	\$69.44	\$27.78	\$55.55	\$104.16	
Lakeside	\$69.44	\$27.78	\$55.55	\$104.16	
Garwood – one lift Garwood – two lifts	\$39.19 \$46.46	\$15.68	\$31.35	\$58.79	

- Gulf Coast and Lakeside divisions minimum charge = \$31.25 per a-f
- Garwood division minimum charge = \$25.00 per acre of rice under contract

Summary of Comments Received on Proposed CY 2022 Drought Contingency Plan, Rule and Rate Changes

Received about 150 comments and provided them to the Board for review. The following is a summary of the comments:

- Interruptible rates should be higher to discourage waste and encourage conservation
- LCRA should recover full cost of irrigation water through the rates
- Agricultural Reserve Fund should be used to encourage more modern and efficient irrigation methods

Summary of Comments Received on Proposed CY 2022 Drought Contingency Plan, Rule and Rate Changes (Continued)

- Maintain lake levels to support recreational use
- Consider alternate supplies for interruptible agriculture
- Update the planning and pricing to prepare for the future

