

LCRA Water Use Summary 2022

In 2022, the lower Colorado River basin saw continued drought conditions, with generally hotter- and drier-than-average weather thanks to a persistent and long-running La Niña weather pattern. The year was the seventh driest on record across the Hill Country, and the 13th driest for all of Texas. Summer 2022 was the second hottest on record, behind 2011.

Brief stretches of heavy rain in late August and November helped bring some drought improvement to parts of the area, but parched soils in the Hill Country soaked up most of the rainfall, resulting in limited runoff into the Highland Lakes. Monthly inflows were below historical averages each month throughout the year, and 2022 inflows into lakes Buchanan and Travis were the lowest on record.

In summer 2022, LCRA's state-approved Water Management Plan required it to cut off Highland Lakes water to agricultural customers in the Gulf Coast, Lakeside and Pierce Ranch operations for the second growing season. The determination was based on the intensity and duration of the drought and the amount of water in lakes Buchanan and Travis on July 1.

Total water use from the Highland Lakes and lower Colorado River increased from 2021 to 2022. Water use from the Highland Lakes increased by 103%, with increases for all types of use. Diversions of water originating from the lower Colorado River decreased by 45% from 2021 to 2022.



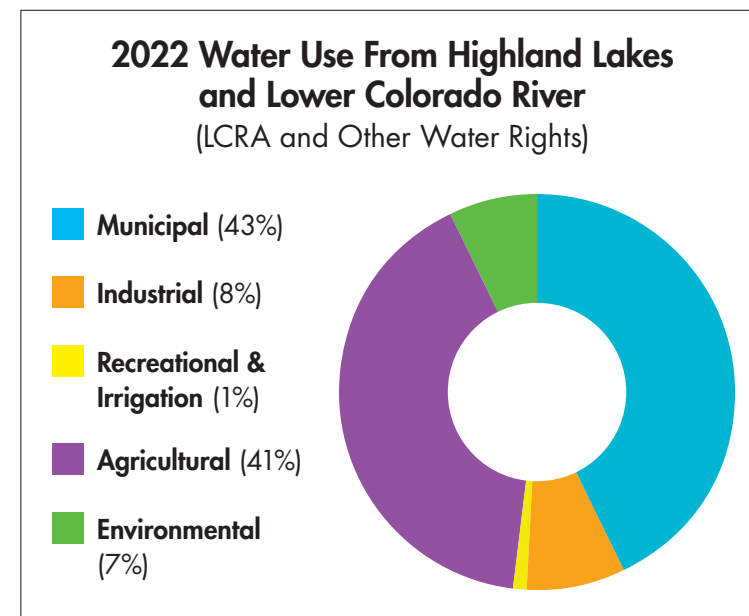
April 2023

WATER USE BY SOURCE – LCRA uses two basic sources of water to meet customer and environmental needs: water stored in lakes Buchanan and Travis and water naturally flowing in the Colorado River. When the natural flow into the Highland Lakes is greater than customer needs and environmental obligations, LCRA stores the excess in lakes Buchanan and Travis for later use.

- Highland Lakes water use** – Contracts for water stored in lakes Buchanan and Travis can be for firm or interruptible supply. LCRA also supplies water from the Highland Lakes to help maintain environmental flows, as required by the state-approved Water Management Plan. In 2022, the Highland Lakes supplied 429,314 acre-feet of water for all uses.
 - Firm water contracts** – These contracts supply cities, businesses and industries that need a reliable long-term water supply. Firm supply is available through a repeat of the driest conditions the region has experienced. Firm customers used 228,591 acre-feet, or about 53% of all water used from the Highland Lakes, in 2022. This includes 108 acre-feet used in hydroelectric generation to meet emergency needs for electricity.
 - Interruptible water contracts** – These contracts supply agricultural customers. Interruptible water is subject to cutbacks during drought conditions, and its availability was curtailed for the second season in 2022 because of the drought. Interruptible customers used 160,213 acre-feet, or about 37% of all water used from the Highland Lakes, in 2022.
 - Environmental** – From time to time, LCRA releases water from the Highland Lakes to meet environmental flow requirements for the Colorado River downstream of Austin and for Matagorda Bay. In 2022, LCRA released 40,510 acre-feet, or about 10% of water released from the Highland Lakes, for environmental flows.
- Colorado River water use** – In addition to the rights to water from the Highland Lakes, LCRA owns and manages other rights to the natural flow of the Colorado River. In 2022, a total of 124,457 acre-feet of water was supplied from the Colorado River for agricultural, municipal, industrial, recreation and firm irrigation uses under these water rights.

Water Rights	2022 Use (in acre-feet)
LCRA Garwood*	89,687
LCRA and South Texas Project*	9,955
LCRA Lakeside*	824
LCRA Gulf Coast*	22,853
LCRA Pierce Ranch*	1,138
LCRA Lakes Buchanan and Travis	429,314
SUBTOTAL – LCRA	553,771
City of Austin Water Rights*	70,799
Bastrop Energy Partners, LP*	180
SUBTOTAL – Other	70,979
TOTAL	624,750

*Water use from the Colorado River was 195,436 acre-feet.



HOW DOES 2022 COMPARE?

TYPE OF WATER USE*	2018	2019	2020	2021	2022
Municipal (firm customers)	225,861	234,648	251,970	249,011	266,848
Water from the Highland Lakes	133,517	112,701	144,531	118,821	198,971
Water from the Colorado River†	92,344	121,947	107,439	130,190	67,877
Industrial (firm customers)	80,580	57,030	50,343	113,594	51,790
Water from the Highland Lakes	24,433	9,157	18,593	12,390	22,722
Water from the Colorado River†	56,147	47,873	31,750	101,204	29,068
Recreational & Irrigation (firm customers)	6,760	7,013	7,568	4,204	6,898
Water from the Highland Lakes	6,667	6,766	7,413	4,204	6,898
Water from the Colorado River	93	247	155	0	0
Agricultural (interruptible customers)	289,665	219,467	247,573	171,900	258,704
Water from the Highland Lakes	136,490	27,319	84,472	45,109	160,213
Water from the Colorado River	153,175	192,148	163,101	126,791	98,491
Environmental‡	55,923	61,954	115,586	31,317	40,510
(from the Highland Lakes)					
TOTAL WATER USE	658,789	580,112	673,040	570,026	624,750

* Water use is in acre-feet.

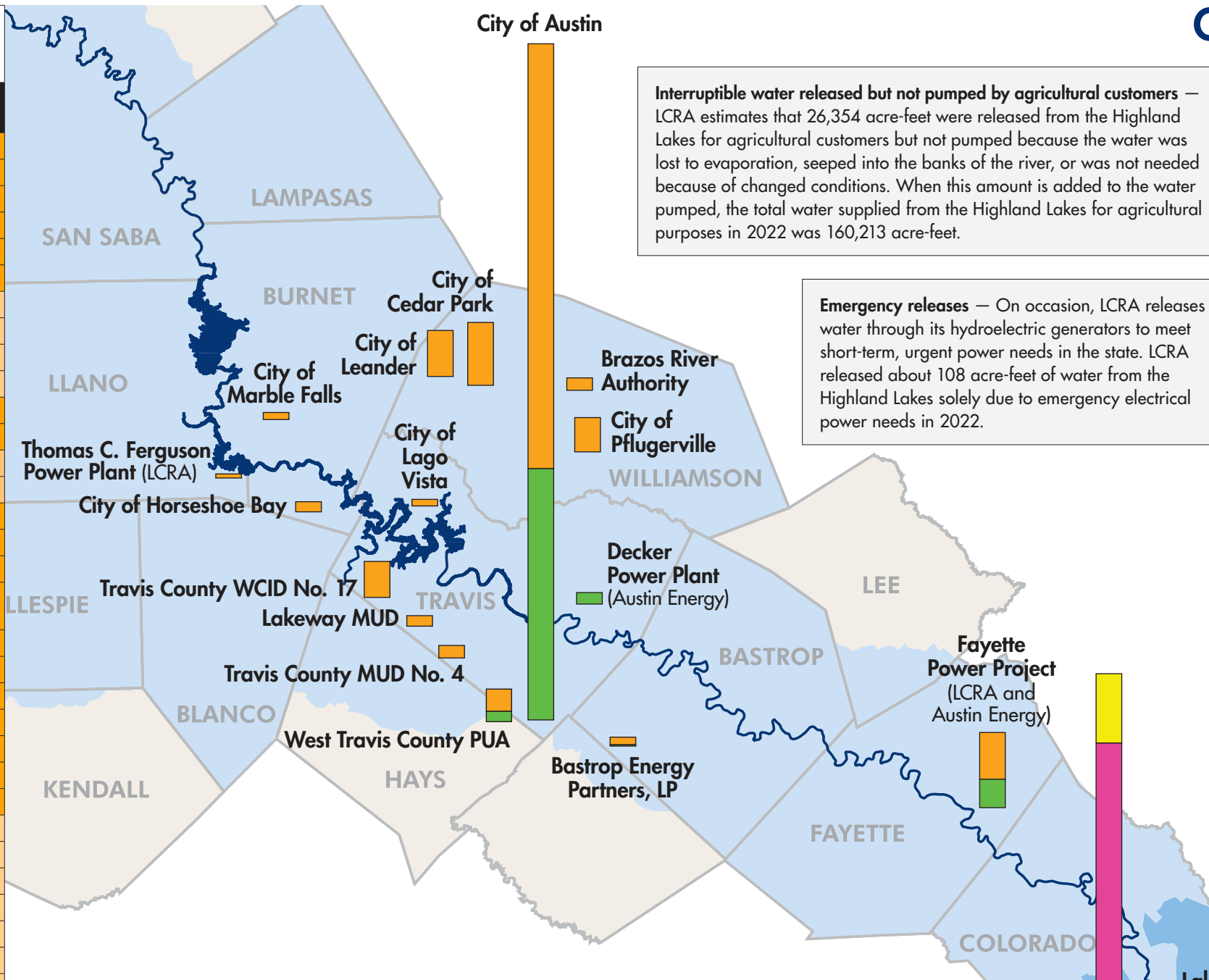
† Reported use includes water under water rights held by the City of Austin and Bastrop Energy Partners, LP and jointly by South Texas Project and LCRA.

‡ Environmental releases are made to meet environmental requirements set out in the LCRA Water Management Plan. Releases for downstream customers and runoff flowing into the river and bay also help satisfy environmental needs.

Learn more about the lower Colorado River at www.lcra.org.

2022 Total Water Pumped by LCRA's Firm Water Customers

Water supplied from the Highland Lakes	Volume (acre-feet)
City of Austin, municipal and parks	110,237
City of Cedar Park	16,304
City of Leander	11,932
Travis County WCID No. 17	9,326
City of Pflugerville	8,897
LCRA power plants	8,677
• Fayette Power Project (LCRA share)	7,616
• Sim Gideon Power Plant*	0
• Lost Pines 1 Power Project*	0
• Thomas C. Ferguson Power Plant	1,061
West Travis County PUA	5,767
Austin Energy (AE) power plants	4,512
• Fayette Power Project (AE share)	4,512
• Decker Power Plant	0
Domestic water users on the Highland Lakes	4,395
OQ Chemicals Corp.	3,353
Travis County MUD No. 4	3,236
Brazos River Authority (Georgetown, Liberty Hill and Round Rock)	3,214
Lakeway MUD	2,718
City of Horseshoe Bay	2,620
Underground Services Markham, LP	2,279
Bastrop Energy Partners, LP	1,973
City of Marble Falls	1,827
City of Lago Vista	1,708
Other firm customers	21,273
• Diverted from Lake Buchanan	902
• Diverted from Inks Lake	607
• Diverted from Lake LBJ	3,719
• Diverted from Lake Marble Falls	0
• Diverted from Lake Travis	6,076
• Diverted from Lake Austin	8,139
• Diverted downstream of Lake Austin	1,830
Subtotal from Highland Lakes**	224,248
Water supplied from other water rights	Volume (acre-feet)
LCRA municipal use - Garwood amendment	2,683
LCRA Fayette Power Project - Garwood amendment	4,749
LCRA Gulf Coast municipal and industrial use	8,578
• Underground Services Markham, LP	4,877
• OQ Chemicals Corp.	3,701
LCRA/STP Nuclear Operating Company	9,955
City of Austin, municipal and parks	65,194
Austin Energy (AE) power plants	5,605
• Fayette Power Project (AE share)	2,626
• Decker Power Plant	2,979
Bastrop Energy Partners, LP	180
Subtotal from other water rights	96,944
Total from both sources	321,192

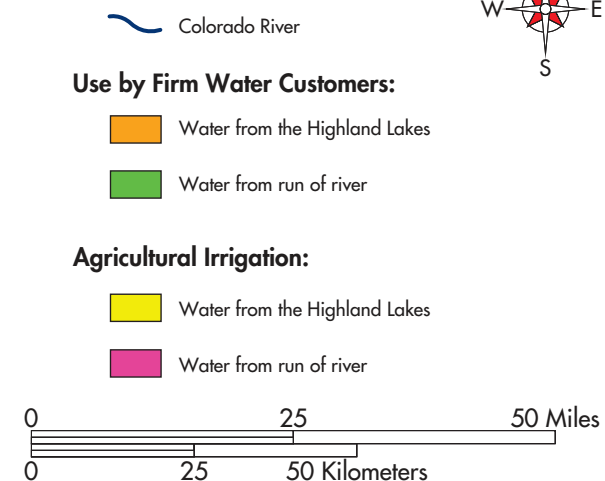


Customer Water Use in 2022

2022 Total Water Pumped for LCRA's Interruptible Water Customers (Agriculture)

Water supplied from the Highland Lakes	Volume (acre-feet)
Garwood Irrigation Division	17,989
Lakeside Irrigation Division	76,679
Gulf Coast Irrigation Division	25,841
Pierce Ranch Irrigation Company	13,350
Subtotal from Highland Lakes	133,859
Water supplied from downstream water rights	Volume (acre-feet)
Garwood Irrigation Division	82,254
Lakeside Irrigation Division	824
Gulf Coast Irrigation Division	14,275
Pierce Ranch Irrigation Company	1,138
Subtotal from downstream water rights	98,491
Total from both sources	232,350

Legend



Evaporation — In 2022, an estimated 171,496 acre-feet of water evaporated from the six Highland Lakes – Buchanan, Inks, LBJ, Marble Falls, Travis and Austin. This is roughly 14% more than the amount that evaporated in 2021, and below the record 192,470 acre-feet that evaporated in 2011.

****Firm water released but not pumped by firm customers** — LCRA estimates that 4,236 acre-feet were released from the Highland Lakes but not pumped by firm customers because the water was lost to evaporation, seeped into the banks of the river, or was not needed because of changed conditions. When this amount is added to the water pumped and the 108 acre-feet used in hydroelectric generation to meet emergency electrical power needs, the total water supplied from the Highland Lakes for LCRA's firm customers in 2022 was 228,592 acre-feet.

Environmental flows — In 2022, LCRA released 40,510 acre-feet of water from the Highland Lakes for environmental obligations. Of this amount, LCRA released 5,138 acre-feet of Highland Lakes inflows to help meet freshwater inflow needs, and 35,372 acre-feet to help meet instream flow criteria. About 473,422 acre-feet of fresh water flowed in the Colorado River past Bay City toward Matagorda Bay in 2022. This water came from rainfall and runoff occurring below Lake Travis and pass-through releases of a portion of the inflows to the Highland Lakes.

The City of Corpus Christi holds a senior water right in the lower Colorado River basin but is not an LCRA water customer. Corpus Christi began diverting water from the river in 2016. In 2022, Corpus Christi diverted 11,124 acre-feet.

*Groundwater was used to meet demand.