

How does 2015 compare?

TYPE OF WATER USE	2009	2010	2011	2012	2013	2014	2015
Municipal Water Use	218,202	209,265	246,601	228,570	213,691	203,668	198,738
Water from the Highland Lakes	110,150	78,091	184,889	122,360	133,317	107,996	98,920
Water from the Colorado River	108,052	131,174	61,712	106,210	80,374	95,672	99,818
Industrial Water Use	112,716	86,258	60,272	117,977	96,253	72,327	92,443
Water from the Highland Lakes	33,234	35,572	53,757	19,133	34,296	14,482	8,776
Water from the Colorado River	79,482	50,686	6,515	98,844	61,957	57,845	83,667
Agricultural Water Use	509,839	430,622	529,580	102,668	108,296	88,401	74,723
Water from the Highland Lakes	367,920	182,152	433,251	8,896	22,346	15,952	0
Water from the Colorado River	141,919	248,470	96,329	93,772	85,950	72,449	74,723
Recreational and Firm Irrigation	5,945	5,784	9,099	6,546	5,680	5,853	5,620
Water from the Highland Lakes	5,753	5,550	8,759	6,338	5,535	5,599	5,346
Water from the Colorado River	192	234	340	208	145	254	274
Environment*	32,573	19,279	33,433	31,285	33,465	4,582	0
(from the Highland Lakes)							
Emergency Hydroelectric Releases	2,084	352	345	0	0	490	180
(from the Highland Lakes)							
TOTAL WATER USE	881,359	751,560	879,330	487,046	457,385	375,321	371,704

Why does LCRA release water from the Highland Lakes?

Releases are made for several reasons:

LCRA is legally obligated to pass water through the dams if a downstream senior water right holder is entitled to the water. Downstream senior water rights include those owned by LCRA and by the cities of Austin and Corpus Christi.

LCRA releases water to meet the needs of customers such as cities, power plants and farmers.

LCRA releases water for environmental flow needs for the river and Matagorda Bay as required by the state-approved Water Management Plan.

In general, LCRA releases water through hydroelectric generating units in order to produce electrical energy while supplying water for other demands. In the event of an emergency shortage of electricity, water may be released for hydrogeneration absent a downstream demand.

LCRA releases water through Mansfield Dam for flood control purposes in accordance with U.S. Army Corps of Engineers' regulations and protocols. LCRA made no flood releases from Mansfield Dam during 2015.

*Dedicated environmental releases are the amounts of water released solely for the purpose of satisfying environmental needs. In addition, releases for downstream customers and runoff flowing into the river and bays help satisfy environmental needs.

Learn more about the lower Colorado River

- Visit the River Operations Report at lra.org.
- Visit lra.org/watersupply to learn about long-term water planning.
- Visit lra.org/water/supply/contracts for a complete list of LCRA's firm water contracts.



LCRA Water Use Summary 2015



In 2015, heavy rains eased the severe drought gripping the lower Colorado River basin and more than doubled the volume of water stored in lakes Travis and Buchanan — the region's water supply reservoirs — to their highest levels since 2010. At 81 percent of the yearly average, inflows into the Highland Lakes in 2015 were higher than in any year since 2007. Inflows are the estimated amount of water flowing into the Highland Lakes from rivers and tributaries based on four streamflow gauges.

LCRA continued to take significant steps to preserve and increase water supplies for the lower Colorado River basin in 2015. With approval from the Texas Commission on Environmental Quality (TCEQ), LCRA suspended releases of Highland Lakes water for most downstream agricultural irrigation for the fourth year in a row because of the drought. In November 2015, TCEQ also approved an updated Water Management Plan to govern how LCRA manages lakes Travis and Buchanan beginning in 2016. The updated plan better protects the water supply for firm customers — mainly cities and industrial users — and allows LCRA to more quickly adapt its operations as drought conditions change.

LCRA continued construction on the Lane City Reservoir in Wharton County in 2015. As the first significant new water supply reservoir in the region in decades, the Lane City Reservoir could add up to 90,000 acre-feet per year to the region's water supply.

Water use by source — LCRA uses two basic sources of water to meet customers' needs: water naturally flowing in the Colorado River, and water stored in lakes Buchanan and Travis. When the flows into the Highland Lakes are greater than the downstream needs for water — for example, during floods — LCRA captures as much of the excess water as can be safely stored in lakes Buchanan and Travis.

Highland Lakes water use — Contracts for water stored in the Highland Lakes can be for firm or interruptible supply. LCRA also uses water from the Highland Lakes to help maintain environmental flows and to produce hydroelectric energy. In 2015, the Highland Lakes supplied 113,222 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 expected to be available through a repeat of the driest conditions the region has experienced. Firm customers accounted for 113,042 acre-feet, or about 99.8 percent of all water used from the Highland Lakes, in 2015.

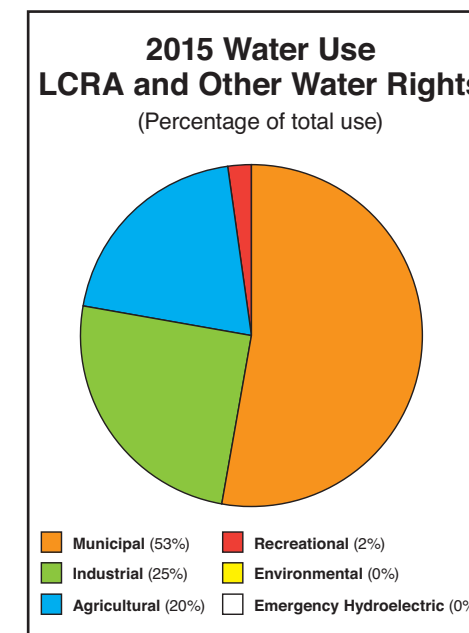
Interruptible water contracts — These contracts primarily supply agricultural customers. Interruptible water is subject to cutbacks during drought conditions, and its availability was curtailed in 2015 for the fourth straight year because of the drought. Interruptible agricultural customers used no water from the Highland Lakes in 2015.

Environmental and emergency hydroelectric releases — LCRA releases water from the Highland Lakes to meet environmental flow requirements for the Colorado River downstream of Austin and for Matagorda Bay. No water from the Highland Lakes was released for environmental flows in 2015. About 180 acre-feet, or 0.2 percent of water released from the Highland Lakes, was used solely to meet emergency needs for electricity in 2015.

Colorado River water use — In addition to the rights to water from the Highland Lakes, LCRA owns and manages other rights to water from the Colorado River. A total of 155,613 acre-feet of water was supplied from the Colorado River for agricultural, municipal and industrial uses under these water rights in 2015.

Evaporation — In 2015, an estimated 139,788 acre-feet of water evaporated from the six Highland Lakes — Buchanan, Inks, LBJ, Marble Falls, Travis and Austin. This is more than in the previous few years because levels of lakes Buchanan and Travis rose in 2015. As the combined average surface area increased, so did the amount of evaporation. Evaporation is not reported as a use under the LCRA lakes Buchanan and Travis water rights.

Water Rights	2015 Use (in acre-feet)
LCRA Garwood	66,548
LCRA South Texas Project	66,355
LCRA Lakeside	3,199
LCRA Gulf Coast	13,004
LCRA Pierce Ranch	6,508
LCRA Lakes Buchanan and Travis	113,222
SUBTOTAL — LCRA	268,836
City of Austin Water Rights	102,689
Bastrop Energy Partners, LP	180
TOTAL	371,705



Customer Water Use in 2015

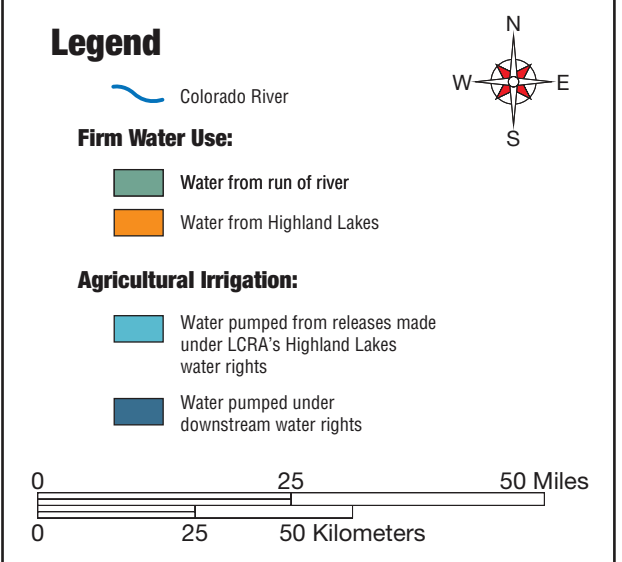
2015 Total Water Pumped by LCRA's Firm Water Customers

Water supplied from the Highland Lakes	Volume (acre-feet)
City of Austin, Municipal & Parks	40,955
City of Cedar Park	14,304
LCRA Power Plants, includes:	7,041
• Fayette Power Project (LCRA share)	5,294
• Sim Gideon Power Plant	0
• Lost Pines 1 Power Project	0
• Thomas C. Ferguson Power Plant	1,748
Travis County WCID No. 17	6,482
West Travis County Public Utility Agency	5,473
City of Leander	6,026
Domestic Water Users on Highland Lakes	3,652
Austin Energy (AE) Power Plants, includes:	369
• Fayette Power Project (AE share)	15
• Decker Power Plant	354
City of Pflugerville	3,010
Lakeway MUD	2,350
City of Horseshoe Bay	2,185
City of Lago Vista	1,776
Travis County MUD No. 4	1,816
City of Marble Falls	1,519
Bastrop Energy Partners, LP	1,326
Horseshoe Bay Resort, LTD	1,076
Loop 360 WSC	897
Hurst Creek MUD (The Hills)	1,076
Other Firm Customers	11,709
• Diverted from Lake Buchanan	1,049
• Diverted from Inks Lake	678
• Diverted from Lake LBJ	1,859
• Diverted from Lake Marble Falls	52
• Diverted from Lake Travis	2,092
• Diverted from Lake Austin	4,797
• Diverted Downstream of Lake Austin	1,182
Subtotal from Highland Lakes	**113,042
Water supplied from other water rights	Volume (acre-feet)
City of Austin / Austin Energy:	102,689
• Municipal & Parks	98,576
• Fayette Power Project (AE share)	3,267
• Decker Power Plant	846
South Texas Project Nuclear Operating Co.	66,355
Gulf Coast Municipal & Industrial Use, includes:	11,337
• Underground Services Markham, LP	8,882
• Oxea Corporation	2,454
Lakeside Municipal & Industrial Use, includes:	3,199
• City of Pflugerville*	1,516
• Bastrop Energy Partners, LP*	704
• Fayette Power Project (LCRA share)*	987
• Sim Gideon Power Plant*	0
• Lost Pines 1 Power Project*	0
Bastrop Energy Partners, LP	180
Subtotal from other water rights	183,759
Total from both sources	296,802

Emergency releases — On occasion, LCRA releases water through its hydroelectric generators to meet short-term, urgent power needs in the state. LCRA released about 180 acre-feet of water from the Highland Lakes due to emergency electrical power needs in 2015.

The City of Austin owns several water rights that allow it to pump water from the Colorado River. The city also relies on water from the Highland Lakes under a contract with LCRA. In 2015, the city's municipal and park irrigation use was 139,531 acre-feet, including 98,576 acre-feet diverted under Austin's water right from the Colorado River at Lake Austin and 40,955 acre-feet obtained under contract with LCRA from the Highland Lakes.

****Firm water released but not used** — No water was released from the Highland Lakes and not pumped by firm customers in 2015. The total water supplied to LCRA's firm water customers from the Highland Lakes in 2015 was 113,042 acre-feet.

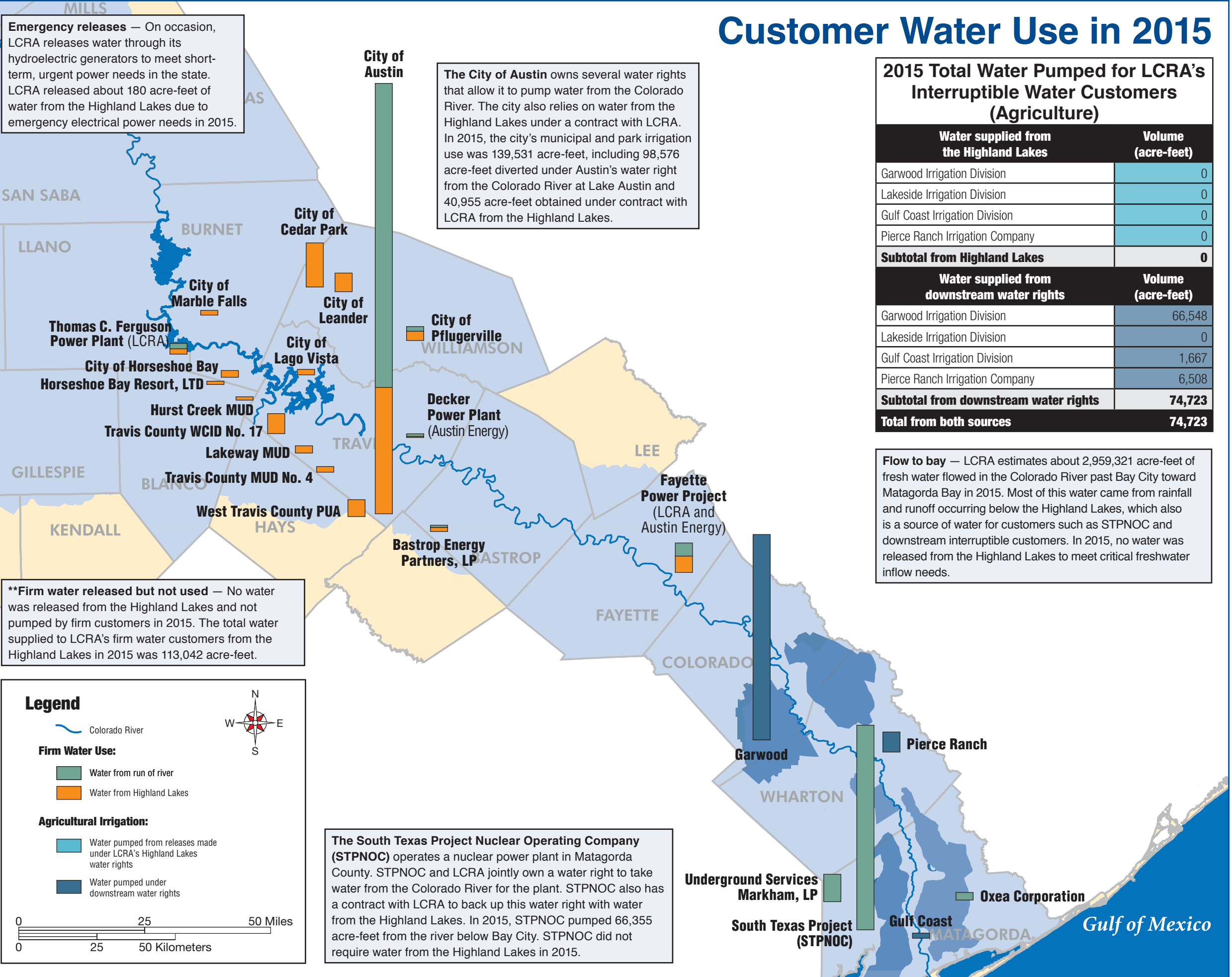


The South Texas Project Nuclear Operating Company (STPNOC) operates a nuclear power plant in Matagorda County. STPNOC and LCRA jointly own a water right to take water from the Colorado River for the plant. STPNOC also has a contract with LCRA to back up this water right with water from the Highland Lakes. In 2015, STPNOC pumped 66,355 acre-feet from the river below Bay City. STPNOC did not require water from the Highland Lakes in 2015.

2015 Total Water Pumped for LCRA's Interruptible Water Customers (Agriculture)

Water supplied from the Highland Lakes	Volume (acre-feet)
Garwood Irrigation Division	0
Lakeside Irrigation Division	0
Gulf Coast Irrigation Division	0
Pierce Ranch Irrigation Company	0
Subtotal from Highland Lakes	0
Water supplied from downstream water rights	Volume (acre-feet)
Garwood Irrigation Division	66,548
Lakeside Irrigation Division	0
Gulf Coast Irrigation Division	1,667
Pierce Ranch Irrigation Company	6,508
Subtotal from downstream water rights	74,723
Total from both sources	74,723

Flow to bay — LCRA estimates about 2,959,321 acre-feet of fresh water flowed in the Colorado River past Bay City toward Matagorda Bay in 2015. Most of this water came from rainfall and runoff occurring below the Highland Lakes, which also is a source of water for customers such as STPNOC and downstream interruptible customers. In 2015, no water was released from the Highland Lakes to meet critical freshwater inflow needs.



* Temporary water use permits allowed 3,199 acre-feet of water authorized by the Lakeside water right to be diverted for municipal and industrial purposes at other locations in 2015.