

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF A HEARING TO DETERMINE WHETHER TO AFFIRM, MODIFY OR SET ASIDE AN EMERGENCY ORDER ISSUED BY THE EXECUTIVE DIRECTOR TO THE LOWER COLORADO RIVER AUTHORITY AUTHORIZING A REDUCTION OF THE INSTREAM FLOW REQUIREMENTS FOR THE BLUE SUCKER UNDER ITS WATER MANAGEMENT PLAN

**TCEQ Docket No. 2015-0219-WR
Permit No. 5838**

On December 23, 2014, the Lower Colorado River Authority ("LCRA") filed an application with the Texas Commission on Environmental Quality ("TCEQ") for an emergency order under Tex. Water Code §§ 5.506, 11.139, or 11.148, and 30 Tex. Admin. Code ("TAC") §§ 35.24, 35.25, 35.101, or 295.91, to amend its Water Management Plan ("WMP") to reduce the requirement to maintain a minimum streamflow of 500 cubic feet per second ("cfs") for six consecutive weeks between March and May from Bastrop to Eagle Lake for the Blue Sucker. LCRA's requested relief would reduce the requirement from 500 cfs to 300 cfs for this time period.

The TCEQ Executive Director issued an Emergency Order for the requested relief on February 18, 2015. The Commission will hold a hearing on March 4, 2015 to affirm, modify or set aside the order. See more information below.

Summary of LCRA's application: LCRA has the right to divert and use up to 1.5 million acre feet ("AF") from Lakes Buchanan and Travis under Certificates of Adjudication Nos. 14-5478 and 14-5482. By court order, LCRA has developed a Water Management Plan ("WMP"), currently dated 2010, which is part of these certificates and has its own number, Permit No. 5838.

LCRA's WMP describes how LCRA will manage and curtail supplies from the lakes during times of drought including through a repeat of the Drought of Record. The Certificates of Adjudication and the 2010 WMP govern LCRA's operation of Lakes Buchanan and Travis and dictate how LCRA makes water available from these lakes to help meet "firm" water customer needs, downstream interruptible irrigation demands, and environmental flow needs of the lower Colorado River and Matagorda Bay. Environmental flow needs include instream flows for the river, and bay and estuary freshwater inflows.

LCRA states in its application that:

The inflow conditions experienced in the last several years present an extreme drought situation that was not contemplated when the special conditions related to instream flows were incorporated into the 2010 WMP. LCRA may be required to make a declaration of a Drought Worse than the Drought of Record (“DWDR”) as soon as March 2015. Two of the three criteria for a DWDR have been met, leaving only a lake storage level of 600,000 acre-feet as the remaining criteria to be met. When LCRA makes a DWDR declaration, firm water customers are curtailed and firm water for environmental requirements is subject to a pro rata reduction.

Under the 2010 WMP, LCRA is required to maintain critical instream flows, including maintaining a minimum continuous instream flow of 120 cfs from Bastrop to Eagle Lake at all times, and a minimum flow of 500 cfs for a continuous six week period between March and May from Bastrop to Eagle Lake to provide higher flows to support habitat for Blue Sucker spawning. If the river is not supplying this amount during a six week period from March to May, stored water must be released. In 2012, this instream flow requirement resulted in releases of about 22,991 AF and in 2013, this instream flow requirement resulted in releases of about 15,678 AF from the lakes. In 2014, LCRA was granted emergency relief from the 500 cfs requirement and operated under the 300 cfs requirement it requests again in this application. From January to November 2014, the amount released from the Highland Lakes for instream flows was approximately 4,600 AF; approximately 17,000 AF of water was preserved in storage due to the 2014 Blue Sucker Emergency Order.

Without emergency relief on or before the end of May 2015, LCRA could be required to release as much as 21,000 AF of water in storage in Lakes Buchanan and Travis to meet the Blue Sucker instream flow requirement in the 2010 WMP, further lowering lake levels.

LCRA monitoring has shown that water quality standards are maintained in the river segments between Bastrop and Eagle Lake if the flow levels have been near or lower than 300 cfs with few exceptions. The Blue Sucker is a State-Threatened Species. Based on instream flow studies evaluating the habitat of the Blue Sucker, LCRA states that at 500 cfs, the flow provides for 93 to 100% of the maximum available spawning habitat for the Blue Sucker, while at 300 cfs, at least 86 % of the habitat will be supported.

There are no reasonably available and feasible practicable alternative water supplies or water management or conservation strategies that could be obtained or implemented at this time that would replace the volume of water that LCRA might otherwise have to release from the lakes if the requested relief is not granted that LCRA is not already pursuing. It takes many years to develop new water supplies and transport them to the areas where they are needed. LCRA and its customers over the past three years have implemented the requirements in their water conservation plans and drought contingency plans to reduce demands. However, for the most part, LCRA's firm customers have also not been able to secure any readily available alternative sources of water supply that could substitute for their reliance on the Colorado River.

LCRA is seeking emergency relief from its Water Management Plan to curtail releases of interruptible stored water for most irrigated agriculture this year and has obtained authorizations for the temporary use of its downstream water rights to help meet firm

customer demands in the lower basin. Those actions have delayed the timeframe for reaching a DWDR declaration. As combined storage drops, it becomes more difficult and expensive for the retail water suppliers to pump water from Lakes Buchanan and Travis. There is no readily available option that would immediately offset the irreversible impact of releasing additional stored water for instream flows.

Statute and Rule: The Commission or Executive Director may issue an emergency order under Tex. Water Code §§ 5.506 and 11.148 and 30 TAC § 35.101 to temporarily suspend conditions in water rights relating to beneficial inflows to bays and estuaries and instream uses during an emergency. The Commission or Executive Director must find that: (1) emergency conditions exist that present an imminent threat to public health, safety, and welfare, and that: (A) override the necessity to comply with general procedures and criteria for changing the conditions in a water right; or (B) override the need to maintain the balance between protecting environmental flow need and other public interests and relevant factors; and (2) there are no feasible, practicable alternatives to the emergency order.

Under 30 TAC § 35.25(c), an affected person may request an evidentiary hearing on issuance of the emergency order. Pursuant to 30 TAC § 35.101(g), the Commission may refer the application to the State Office of Administrative Hearings for an expedited hearing.

Executive Director and Commission Action: The Executive Director issued an Emergency Order to LCRA on February 18, 2015. The Executive Director's Emergency Order is attached to this notice. The Emergency Order references LCRA's application as Attachment A. Attachment A and the supporting affidavits can be accessed at: <http://www.tceq.texas.gov/agency/lcra-emergency-order>. You may also call Ruth Takeda at (512) 239-0600 to receive a copy of Attachment A or the supporting affidavits.

Pursuant to Tex. Water Code §§ 5.506 and 11.148, and 30 TAC § 35.101(i), the TCEQ provided notice to the Texas Parks and Wildlife Department ("TPWD") of the proposed action on February 9, 2015. Pursuant to TCEQ rules, LCRA provided published notice in all counties in the affected area from the Highland Lakes downstream to Matagorda Bay. Also pursuant to Tex. Water Code §§ 5.506 and 11.148, and 30 TAC § 35.101(i) TCEQ is providing notice to the TPWD and the water right holders from the Highland Lakes downstream to Matagorda Bay that the Commission will consider whether to affirm, modify, or set-aside the order at a hearing on March 4, 2015 at 9:30 a.m.

Hearing: The Commission's hearing to affirm, modify, or set-aside the Executive Director's Emergency Order will be held at:

9:30 a.m., Wednesday, March 4, 2015
Texas Commission on Environmental Quality
12100 Park 35 Circle
Building E, Room 201S
Austin, Texas

Public Comment: Persons may attend the public hearing and make oral comment. Written public comments should be submitted to the Office of the Chief Clerk, MC 105,

TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at www.tceq.texas.gov/goto/eFilings. In order for a comment to be included in the record, it must be filed by 5:00 p.m. on Monday March 2, 2015. There is no right to a contested case hearing on this emergency order; however, the Commission may grant contested case hearings as it deems appropriate.

Information: For additional information, individual members of the general public may contact the Public Education Program at 1-800-687-4040. General information regarding the TCEQ can be found at our web site at www.tceq.texas.gov. Si desea informacion en Espanol, puede llamar al 1-687-4040 o por el internet al www.tceq.texas.gov.

Issued: February 20, 2015

A handwritten signature in cursive script that reads "Bridget C. Bohac".

Bridget C. Bohac
Chief Clerk

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AN EMERGENCY ORDER issued to the Lower Colorado River Authority partially suspending releases of stored water for instream flows for the Blue Sucker under its Water Management Plan, Permit No. 5838, pursuant to Sections 5.506 and 11.148 of the Texas Water Code

On February 18, 2015, the Executive Director of the Texas Commission on Environmental Quality (Commission) considered an application from the Lower Colorado River Authority (LCRA) for an Emergency Order to amend its Water Management Plan (WMP), Permit No. 5838. The application requests to reduce the higher instream flows required for a six-week continuous period to support spawning habitat for the Blue Sucker fish.

The Executive Director has jurisdiction to consider this matter and makes the following Findings of Fact and Conclusions of Law:

I. FINDINGS OF FACT

1. On December 23, 2014, LCRA filed an application for an emergency order to amend its WMP to reduce the requirement to maintain a minimum streamflow of 500 cubic feet per second (cfs) for six weeks in between March and May from Bastrop to Eagle Lake for the Blue Sucker. LCRA requests that the application be processed under Texas Water Code Sections 5.506, 11.139, or 11.148, as appropriate, and the Governor's Emergency Disaster Proclamation related to drought. Without an amendment, this requirement would necessitate a release of stored water of approximately 21,000 acre feet (AF) by the end of May 2015. LCRA's requested relief would reduce the release requirement from 500 cfs to 300 cfs, which would prevent approximately 17,000 AF from being released from Lakes Buchanan and Travis. LCRA's application is attached hereto as Attachment A and incorporated herein by reference.

LCRA's Water Rights and 2010 Water Management Plan

2. LCRA has the right to divert and use up to 1.5 million acre feet (AF) from Lakes Buchanan and Travis under Certificates of Adjudication Nos. 14-5478 and 14-

5482. By court order, LCRA has developed a Water Management Plan (WMP), currently dated 2010, which is part of LCRA's water rights and has its own number, Permit No. 5838.

3. The Certificates of Adjudication and the 2010 WMP govern LCRA's operation of Lakes Buchanan and Travis and dictate how LCRA makes water available from these lakes to help meet "firm" water customer needs, downstream interruptible irrigation demands, and environmental flow needs of the lower Colorado River and Matagorda Bay. Environmental flow needs include instream flows for the river, and bay and estuary freshwater inflows.
4. Certificates of Adjudication 14-5478 and 14-5482 state that "LCRA shall interrupt or curtail the supply of water . . . pursuant to commitments that are specifically subject to interruption or curtailment, to the extent necessary to allow LCRA to satisfy all demand for water under such certificate pursuant to all firm, uninterruptible water commitments." LCRA's WMP further describes how LCRA will manage and curtail supplies from the lakes during times of drought including through a repeat of the Drought of Record.
5. As established in the 2010 WMP, the combined firm yield of Lakes Buchanan and Travis is 535,812 acre feet per year (AFY). Of this amount, 90,546 AFY is committed to O.H. Ivie Reservoir, making 445,266 AFY of firm water supply available from Lakes Buchanan and Travis for LCRA's firm water customers. LCRA has reserved 33,400 AF of firm supply to meet its instream flow and bay inflow obligations under the WMP.
6. LCRA's 2010 WMP defines "Drought of Record" as "the drought that occurred during the critical drought period." "The Critical Drought Period" is defined as "the period of time during which the reservoir was last full and refilled, and the storage content was at its lowest minimum value."
7. The LCRA Board may declare a Drought Worse than the Drought of Record (DWDR) if it finds that the following three conditions are simultaneously met:
 - a. Duration of drought is more than 24 months, which is determined by counting the number of consecutive months since both Lakes Buchanan and Travis were last full;
 - b. Inflows to the lakes are less than inflows during the Drought of Record; and
 - c. Lakes Buchanan and Travis combined storage has less than 600,000 acre feet of water.
8. LCRA's environmental flow obligations in the 2010 WMP are generally tied to the amount of water LCRA has in storage on January 1 each year. Under a

declaration of a DWDR, water for instream flows and bay inflows is subject to a pro rata reduction along with other firm users of water. These triggers are:

Combined Storage of Lakes Buchanan and Travis	Date on Which Trigger is Decided	Action Taken
1.7 MAF	On Jan. 1	Environmental releases for bay and estuary inflows reduced to meet intermediate needs for the following year
1.4 MAF	At any time	Request firm customers to implement voluntary drought response measures.
1.4 MAF	On Jan. 1	Environmental releases for instream flows reduced to meet critical needs for ecosystems for following year. Begin gradual curtailment of interruptible supply to four major irrigation operations.
1.1 MAF	On Jan. 1	Environmental releases for bay and estuary inflows reduced to meet critical needs for following year.
900,000 acre feet	At any time	Request firm customers to implement mandatory water restrictions; develop firm customer curtailment plan.
600,000 acre feet	At any time	If criteria indicate a drought worse than the Drought of Record, then cease interruptible supply and begin curtailment of firm supply.

9. Under the 2010 WMP, once a drought has lasted more than 36 months and a DWDR has been declared by the LCRA Board, interruptible stored water would be fully and immediately curtailed, making no stored water available for agricultural irrigation or other interruptible uses until lake levels recover or the inflows into the lakes increase substantially. LCRA will also implement pro rata curtailment of its firm water users once a DWDR is declared and after interruptible stored water uses have been curtailed. Under a DWDR, water for

instream flows and bay inflows is subject to a pro rata reduction along with other firm uses of water.

10. Criteria prompting LCRA to make a DWDR declaration could be met as soon as March 2015. Two of the three criteria, the 24 month criteria and the cumulative inflow deficit criteria, have been met. Releasing this stored water could cause the DWDR to occur sooner and water should be reserved to ensure LCRA can continue to meet critical needs.
11. This year, under the 2010 WMP, LCRA is required to maintain critical instream flows, including maintaining a minimum continuous instream flow of 120 cfs from Bastrop to Eagle Lake at all times, and a minimum flow of 500 cfs for a continuous six weeks from Bastrop to Eagle Lake in between March and May to provide higher flows to support habitat for Blue Sucker spawning. If the river is not supplying this amount from March to May, stored water must be released under the 2010 WMP. In 2012, the amount released from the lakes to meet this instream flow requirement was 22,991 AF, and in 2013, it was 15,678 AF. In 2014, the LCRA operated under an Emergency Order that reduced the LCRA's obligation to provide stored water for the Blue Sucker. The amount released from the lakes to meet this instream flow requirement from January through November 2014 was approximately 4,600 acre feet under a minimum flow of 300 cfs. If the minimum flow had remained at 500 cfs, approximately 17,000 AF of additional water would have had to be released.

Current Conditions

12. As of February 17, 2015, the combined storage of Lakes Buchanan and Travis was about 717,368 AF or 36 percent of capacity.
13. In May 2012, the lakes refilled to an amount close to 1.1 million AF (to 1.033 million AF on May 22, 2012) and yet without any release to Lakeside, Gulf Coast and Pierce Ranch, the lakes dropped to 637,123 AF on September 19, 2013, the second lowest level on record and also the lowest level in the current drought – 637,123 AF, nearing 31.7 percent capacity.
14. On December 1, 2014, the combined storage of 691,132 AF was the lowest combined storage on December 1 since the reservoirs were built.
15. The inflows to the Highland Lakes are at record lows. The deficit has been as much as 90% more than the inflow deficit for a similar period of inflows experienced during the Drought of Record for the lower Colorado River Basin, which occurred from 1947 to 1957.
16. Annual inflows into Lakes Buchanan and Travis in five of the last six years are among the ten lowest years of inflow on record. Only one year in the historical

Drought of Record for the lower Colorado River Basin is in the list of ten lowest annual inflows.

17. Inflows in 2011 were the lowest on record. Calendar years 2008, 2009, 2011, 2012, and 2013 are all among the lowest ten years of inflows for the Highland Lakes. Inflows in 2014 from January through November were the second lowest inflows on record.
18. The inflows into Lakes Buchanan and Travis during the current drought have been lower for time periods ranging from 12 months to 84 months than the lowest inflows for periods of similar duration during the historic Drought of Record. When inflows are adjusted to account for the fact that O.H. Ivie Reservoir was not in place in the 1950s, recent inflows are still lower than the Drought of Record, with inflows since 2008 at only about half of the inflows for the first six years of the Drought of Record.
19. The inflow conditions experienced in the last several years present an extreme drought situation that was not contemplated when the special conditions related to freshwater inflows and instream flows were incorporated into the 2010 WMP.
20. The 2010 WMP was developed using simulations of a repetition of the hydrologic period from 1940 to 1965. While that period includes the 1950s Drought of Record, the recent severe low inflows of 2011 and 2013 are less than half of the lowest annual inflow in the 1950s and the multi-year inflows are also worse than any multi-year inflows which were simulated during the development of the WMP. This trend continued in 2014.
21. LCRA has reserved 33,400 AF of firm supply to meet its instream flow and bay inflow obligations under the 2010 WMP. This reservation is for the average amount of firm water needed for the environment over a repeat of the Drought of Record and includes 6,060 AF for bay inflows. In any year, the amount can exceed that number.
22. In 2012, 2013, and 2014, LCRA operated under TCEQ-issued emergency orders that modified the amount of water supplied from Lakes Buchanan and Travis for irrigated agriculture in the lower basin. In 2014, LCRA operated under a TCEQ-issued emergency order that reduced LCRA's obligation to provide stored water for the Blue Sucker from March to May. In 2012, total water use from the lakes was approximately 188,000 AF. Firm water use was approximately 148,000 AF, 31,285 AF was supplied to help meet environmental flow needs consisting of 28,235 AF for instream flows (22,991 AF of which was for the 500 cfs requirement) and 3,050 AF for bay inflows. In 2013, total water use from the lakes was approximately 228,959 AF. Firm water use was approximately 173,148 AF, a total of 33,465 AF was supplied to help meet environmental flow needs consisting of 18,779 AF for instream flow (15,678 of which was for the 500 cfs requirement) and 14,686 AF for bay inflows; and 22,346 AF was released to

supply farmers in the Garwood irrigation division. LCRA expects water use in 2014 to be similar to 2013, except for the approximate 17,000 AF preserved in storage due to the 2014 Blue Sucker Emergency Order, which reduced the instream flow requirement to 300 cfs.

23. On September 19 and 20, 2013, the watershed upstream of Lakes Buchanan and Travis experienced a widespread rain event with rain totals averaging two to three inches, with some rain gages reporting as much as seven inches. Although the rainfall amounts were significant, the resulting inflows to Lakes Buchanan and Travis were very limited, totaling only about 24,000 AF. Two large rain events occurred in the lower Colorado River Basin watershed in October 2013, but the majority of rainfall and runoff occurred below the watersheds of Lakes Buchanan and Travis. A widespread, light to moderate intensity rain on November 4, 5, and 6, 2014 included rainfall totals averaging two to three inches above the Highland Lakes but only yielded about 4,000 acre-feet of inflow to the lakes. A rain event on November 21 and 22, 2014 included rainfall totals averaging one to three inches above the Highland Lakes but only yielded about 17,000 acre-feet of inflow to the lakes. The limited amount of inflows is indicative of the severity of the ongoing drought and the extremely dry soil conditions that have yet to be overcome.
24. The Texas State Climatologist, Dr. John Nielsen-Gammon, has recognized the period from October 2010 to September 2011 as the worst one-year statewide drought on record dating back to 1895. Although 2012, 2013, and 2014 have included some periods with near-normal or normal rainfall totals, rainfall has been very sporadic, often with several weeks of dry weather between significant rainfall events such that the soils have not remained saturated enough to allow runoff to occur in any substantial amount. The rain events in November 2014 discussed above are the most recent example of this pattern.
25. High temperatures have also been unprecedented. For Texas, the summer of 2011 was the hottest summer ever recorded in Texas and the hottest summer on record for Austin. Statewide, calendar year 2011 was the second hottest year ever recorded and the hottest year on record for Austin. The summer of 2012 was the tenth hottest summer on record statewide and the 11th hottest summer on record for Austin. Statewide, 2012 tied with 1921 as the hottest year on record. Summer temperatures recorded for Austin in 2013 were the fifth hottest on record. While the summer of 2014 brought milder temperatures in comparison, the high temperatures in prior years exacerbated the water situation.
26. These conditions have created a circumstance where the lakes have been unable to recover in any significant manner, even with an emergency cutoff of nearly all water supply for downstream irrigation in 2012, 2013, and 2014, as well as the emergency relief for Blue Sucker streamflow requirements in the spring of 2014.
27. Recent weather forecasts provide some hope for relief during the period covered by this emergency order, including an El Niño developing this winter and

continuing into early spring. For that period, forecasters expect a pattern of above normal rainfall in Central and South Texas. After early spring the forecast is uncertain. Even if normal to above normal rainfall materializes in the near term, significant drought improvement is not expected.

28. The U.S. Drought monitor (February 10, 2015) shows that most of the Texas Hill Country within the “moderate drought” or “abnormally dry” category. Central Texas and coastal plains region are either in “moderate drought” or “abnormally dry.” However, some portions of the Texas Hill Country are in worse drought conditions ranging from “severe” to “exceptional” in areas that contribute inflows to Lakes Buchanan and Travis. The Drought Monitor does not specifically show hydrologic drought, which is worse than the depicted conditions.
29. The Governor of Texas issued an Emergency Disaster Proclamation on July 5, 2011, certifying that exceptional drought conditions posed a threat of imminent disaster in specified counties in Texas. This proclamation has been renewed monthly, most recently on January 18, 2015, and includes counties that contribute inflow to the Highland Lakes.

Effect of Emergency Order

30. LCRA’s requested relief would partially suspend the instream flow requirement from 500 cfs to 300 cfs, which LCRA states could prevent approximately 17,000 AF from being released from Lakes Buchanan and Travis.
31. As of December 1, 2014, if LCRA obtains emergency relief that suspends the supply of interruptible stored water to the Gulf Coast, Lakeside and Pierce Ranch irrigation operations and LCRA obtains emergency relief that reduces the instream flow requirement for the Blue Sucker from 500 cfs to 300 cfs, the chance of triggering a DWDR declaration by the end of 2015 is reduced to about 8 percent. As of December 1, 2014, if LCRA does not obtain either emergency relief it requests, the chance of triggering a DWDR declaration by the end of 2015 is about 33 percent.

LCRA’s Firm Customers

32. LCRA provides raw water to over 60 retail and wholesale potable water suppliers that together serve over one million people throughout the lower Colorado River Basin. LCRA’s municipal raw water customers include Austin, Cedar Park, Leander, Burnet, Marble Falls, Pflugerville, Lakeway, Bee Cave, Horseshoe Bay, other Highland Lakes municipalities; water supply corporations, special districts; and investor-owned utilities.
33. In addition, LCRA provides water to several electric utilities-LCRA, Bastrop Energy Partners, Austin Energy, Gen-Tex Corporation, and South Texas Project Nuclear Operating Company-from the firm water supply of Lakes Buchanan and

Travis. These utilities provide power into the electrical grid in Texas operated by the Electric Reliability Council of Texas (ERCOT) to meet the electrical needs of customers in Texas. LCRA also provides firm raw water to several industries located downstream.

34. Over 40 public water systems that rely on the Highland Lakes or that draw from the tributaries that typically contribute significant inflow to the Highland Lakes are in some form of drought restriction and are at risk of water supply shortages.
35. The 2010 WMP requires that firm customers (mainly cities and industries) be curtailed on a pro rata basis and that LCRA cease all releases for interruptible stored water (regardless of the impact on crops) when a DWDR is declared.
36. This emergency order request, which is expected to have little to no adverse effect on the Blue Sucker, would help meet the clearly identified water needs of LCRA's firm water customers and thus constitutes a benefit to the public welfare.
37. If LCRA is required to follow the 2010 WMP and the drought continues, LCRA and its firm customers may need to acquire or develop large quantities of alternative water supplies to meet essential needs of their respective potable water systems. LCRA's firm customers are working on plans to implement curtailment and secure alternative supplies; however many of LCRA's firm customers do not have any readily available alternative sources of water supply that could substitute for their reliance on the Colorado River, and these projects could take years to develop.
38. If LCRA is required to follow the 2010 WMP and the drought continues, LCRA will be required to release approximately 21,000 AF to maintain a flow rate of 500 cfs and the third criteria for DWDR conditions will likely be reached sooner than if a reduced amount of water is released. If a DWDR is declared, LCRA will have to curtail cities' and industries' water use by 20% or more.
39. Curtailments that would occur will result in reduced water supply to power plants, threatening their ability to generate electricity. Because LCRA's firm water customers would be required to cut back substantially if the drought persists under a DWDR declaration, municipal customers are likely to be forced to institute drought response measures that would include restrictions on indoor water use, resulting in threats to public health, safety and welfare.
40. LCRA has 18 firm water customers that actively take raw water for municipal purposes from Lake Travis. The lowest pumping elevations of the intakes range from 545 feet mean sea level (msl) to 645 feet msl on Lake Travis.
41. As lake levels drop, retail water suppliers are unable to pump water from the lakes. This causes wholesale raw water customers to either move intakes to reach the water, or obtain alternative sources. Smaller systems will likely have to haul water from a water utility with a viable source. If the lake levels drop more quickly than arrangements for alternative intakes or supplies can be

implemented, the current drought presents an imminent threat to public health and safety for the water systems of those customers.

Water Conservation and Drought Contingency Plans

42. LCRA's Raw Water Conservation Plan (WCP) and Drought Contingency Plan (DCP) comply with TCEQ rules and are contained in Chapter 4 of the 2010 WMP. LCRA was originally required to develop this part of the WMP as a direct result of the court order adjudicating LCRA's water rights and the Texas Water Commission's 1989 WMP Order, giving initial approval to LCRA of an earlier version of the plan.
43. When TCEQ adopted the 30 Texas Administrative Code (TAC) Chapter 288 rules for DCPs, LCRA adopted separate stand-alone DCPs related to irrigation, municipal, and industrial operations that more specifically addressed the requirements of the Chapter 288 rules. LCRA incorporated all of the same triggers and criteria from the WMP into its Chapter 288 DCP. These DCPs were incorporated into Chapter 4 of the WMP.
44. LCRA adopted additional changes to LCRA's raw water contract rules that include the procedures for implementing a pro rata curtailment of firm water customers. The rules also provide a surcharge to be set by the LCRA Board for unauthorized use of water (taking more water than authorized under a mandated curtailment of firm water supplies) and clarifying the drought contingency requirements related to golf course irrigation and recreational use. The 2010 WMP includes a requirement that LCRA develop a stored water curtailment plan to be approved by the LCRA Board and TCEQ in response to combined storage dropping below 900,000 AF. TCEQ approved LCRA's water curtailment plan for its firm customers in December 2011.
45. LCRA's WCP complies with TCEQ rules. LCRA has required its municipal customers to adopt conservation plans since before there was a state requirement.
46. LCRA provides conservation program planning support for its customers. In 2012, LCRA began a rebate program for certain irrigation technologies and a wholesale customer cost-share program focused on conservation. LCRA has supported significant improvements in water use efficiency in rice irrigation systems, including volumetric pricing and canal rehabilitation.
47. In its DCP, LCRA has adopted water use reduction targets for its firm customers that include the following: when the combined storage of Lakes Buchanan and Travis is at or below 1.4 MAF, LCRA encourages its customers to implement voluntary water conservation measures; when combined storage levels at or below 900,000 AF, LCRA asks its customers to implement mandatory water restrictions, with a goal of reduction in use by 10 to 20 percent; and when combined storage levels reaches 600,000 AF and the LCRA board declares a drought worse than the Drought of Record, LCRA will implement a mandatory

pro rata curtailment of its customers' water use, with an initial goal of reducing water use by 20 percent.

48. In August 2011, LCRA called on its firm water customers to voluntarily implement mandatory water use restrictions under their DCPs to reduce water use by 10 to 20 percent.
49. LCRA has fully implemented its DCP. It requires all of its customers that currently divert and purchase water from LCRA to have a DCP. Currently, all customers have an approved DCP. Most of these firm customers have stayed in some form of mandatory water restrictions, significantly limiting landscape irrigation. LCRA's industrial customers have worked to reduce non-essential water uses. Also, LCRA has had several meetings with firm customers in preparation for pro rata curtailment.
50. In November 2013, the LCRA Board approved a no-more-than-once-per-week watering restriction that took effect in March 2014. The Board re-affirmed this watering restriction in November 2014. The restriction applies if combined storage is below 1.1 million AF and interruptible stored water has been cut off. The Executive Director has not been asked to approve this restriction and expresses no opinion on this restriction.

Alternatives

51. There are no immediate feasible or practicable alternatives to the emergency authorization LCRA seeks. LCRA is currently evaluating a number of short and long-term alternatives to address the emergency conditions, but they will take time to implement. Alternatives explored include: utilizing water from LCRA's other lakes, conservation, off-channel reservoir storage, interbasin transfers and trucking in water from other sources. LCRA has evaluated many other alternatives to address the emergency conditions that the drought presents.
52. None of the alternatives LCRA has identified would avert the projected water supply shortage because most of the supplies identified would produce insufficient or uncertain quantities of supply, are constrained by existing contractual commitments, would create other operational issues for customers, and/or are subject to a high level of regulatory uncertainty and involve a lengthy permitting process (if not obtained on an emergency basis). In most cases, the alternatives would take years to develop and transport to the area of use. None of the alternatives identified are feasible or practicable alternatives to the emergency authorization.
53. Amending downstream run of the river rights to allow diversion for new uses and at new locations would provide some supply, but the use of these rights alone is not – by itself – a feasible and practicable alternative to the emergency relief related to the 2010 WMP. All of the rights would require amendments to add diversion points, additional places of use, and possible storage. Also, the downstream run-of-river water rights are highly variable in terms of availability

and quantity, and do not provide by themselves a sufficient quantity of water to eliminate the need for the emergency relief from the 2010 WMP.

54. In 2012 and 2013, LCRA supplied about 7,000 AF and 1,000 AF respectively to firm customers downstream of Austin under temporary permits that would otherwise have been released from Lakes Buchanan and Travis. While this was beneficial, temporary permits are not sufficient replacement for water lost if releases are required.
55. On August 23, 2011, combined storage in the Highland Lakes dropped below 900,000 AF and LCRA asked firm customers to implement their mandatory drought contingency measures, with a goal of a 10 to 20 percent reduction in water use. Some LCRA customers have reported their estimated savings from drought restrictions imposed over the past two years at 15 percent or greater annually.
56. Amendment of the WMP to reduce these streamflow requirements is not a feasible or practicable alternative because the WMP must be amended using regular procedures for amending a water right, which require basin-wide 30 day notice and an opportunity for a hearing. LCRA has applied for a formal amendment to its 2010 WMP. TCEQ is currently reviewing that application, which was amended in October 2014, but the process will not be completed in time to address LCRA's requested emergency relief. Releases for the Blue Sucker at 500 cfs are required to be in effect for a continuous six-week period between March and May 2015.
57. LCRA is also seeking an Emergency Order under Tex. Water Code Section 11.139 in an application filed on December 23, 2014, to suspend its obligation under the 2010 WMP to release interruptible stored water to customers in the Gulf Coast, Lakeside, and Pierce Ranch irrigation operations for the duration of the order.

Water Quality and High Interest Species/Protecting Environmental Flow Needs

58. Section 35.101(m) of 30 Tex. Admin. Code provides that when issuing an emergency order, all existing instream flows shall be passed, up to the amount necessary to maintain water quality standards for the affected stream. Section 35.101(m) states that additional flows necessary to protect an endangered species under federal law or "other species that are considered to be of high interest" may be required.
59. LCRA monitoring has shown that water quality standards are consistently met if the flow levels have been near or lower than 300 cfs, with few exceptions. Texas Parks and Wildlife Department (TPWD) provided additional information on LCRA's application. TPWD does not oppose LCRA's request for emergency relief based on current river conditions. TPWD indicates that a four-year study in the lower Colorado River to provide information to assess the effects of streamflow on habitat use and reproductive and recruitment success of the Blue Sucker is

ongoing, with the most recent collection and tagging efforts occurring in mid-December 2014. These efforts resulted in the collection of juvenile Blue Suckers in the lower Colorado River – the first juveniles collected in this area.

60. The Blue Sucker is a state-listed threatened species in Texas which is uniquely adapted to life in swift current. When spawning, adults utilize high velocity flow areas over hard substrate such as bedrock outcrop, boulders, and cobble riffles. These habitat types are abundant between Bastrop and Eagle Lake.
61. An instream flow study in 1992 established critical and target instream flow criteria for several locations in the lower Colorado River. The study also recommended the requirement for the 500 cfs for a continuous six week period in March, April and May to provide spawning habitat for the Blue Sucker. The 2010 WMP used these critical instream flow criteria.
62. LCRA's WMP includes "target" and "critical" requirements for instream flows based on the amount of water LCRA has in storage on January 1 each year. At the present time, LCRA must meet critical instream flow requirements, including the 500 cfs instream flow requirement for a continuous six week period between March and May.
63. Based on instream flow studies evaluating the habitat of the Blue Sucker, LCRA states that at 500 cfs, the flow provides for 93% to 100% of the maximum available spawning habitat for the Blue Sucker, while at 300 cfs, at least 86% of the habitat will be supported.
64. Although emergency conditions override the need to maintain a balance between protecting environmental flows and other public interests, environmental flow needs would continue to be protected under the requested relief.
65. The release of additional stored water from the lakes to maintain 500 cfs would only provide a small incremental benefit to the Blue Sucker spawning habitat.

Relief Requested

66. LCRA requests an emergency order amending the 2010 WMP to reduce the required continuous streamflow for a six consecutive week period from March to May for the Blue Sucker from Bastrop to Eagle Lake. The reduction would be from 500 cfs continuous flow to 300 cfs. LCRA requests a duration of 120 days for the emergency order.
67. LCRA states that this emergency order will not reduce the overall firm commitment of water for instream flows included in LCRA's 2010 WMP. The requirement to release a minimum continuous flow of 120 cfs from Bastrop to Eagle Lake at all times would remain.

Notice

68. Notice of the date of the Executive Director's consideration of this order was provided to Texas Parks and Wildlife and the Public Interest Counsel of the TCEQ. Texas Parks and Wildlife was provided more than 72 hours notice for submitting comments, which it did on February 10, 2015. These comments were considered by the Executive Director.
69. Notice that the Executive Director may issue this emergency order and the Commission's hearing to affirm, modify or set aside the order is scheduled for March 4, 2015, will be provided by publication by February 20, 2015, in a newspaper or newspapers of general circulation in the affected area, and provided by notice mailed by February 20, 2015, to affected persons. The affected area to receive notice by newspaper publication is the counties in the Colorado River Basin from the Highland Lakes downstream to the Gulf of Mexico. Affected persons who will receive notice of this emergency order are those water right holders in the Colorado River Basin from the Highland Lakes downstream to the Gulf of Mexico.

Specific Statute and Rule Requirements

70. The Commission may issue an emergency order under Tex. Water Code Sections 5.506 and 11.148 to suspend permit conditions relating to beneficial inflows to affected bays and estuaries and instream uses if the Commission finds that an emergency exists and cannot practically be resolved in other ways. Section 35.101 of 30 TAC sets forth the procedures and criteria to be used by the Commission or the Executive Director in acting under Tex. Water Code Section 5.506 and 11.148.
71. Under 30 TAC Section 35.101(a), the Commission or the Executive Director must find that: (1) Emergency conditions exist that present an imminent threat to public health, safety, and welfare, and that: (A) override the necessity to comply with general procedures and criteria for changing the conditions in a water right; or (B) override the need to maintain the balance between protecting environmental flow needs and other public interests and relevant factors; and, (2) There are no feasible, practicable alternatives to the emergency authorization.
72. Under 30 TAC Section 35.101(b), an emergency is a condition where water supplies available to the applicant have been reduced or impaired to such an extent that an imminent peril to the public health, safety, or welfare exists. An emergency may include:
 - a. The reduction of public water supplies to critical levels as a result of a severe and sustained drought;
 - b. The failure of a dam for a public water supply reservoir;
 - c. The significant contamination of a public water supply; or

- d. The failure or destruction of public water supply pipelines or other distribution systems.
73. Under 30 TAC Section 35.101(k), in determining whether feasible, practicable alternatives exist to the suspension of water right conditions, the Commission or Executive Director shall examine:
 - a. The amount and purposes of use for water currently being used by the applicant;
 - b. All evidence relating to the availability of alternative, supplemental water supplies to the applicant; and
 - c. The applicant's efforts to curtail water use not essential for the protection of the public health, safety, and welfare.
 74. An applicant for an emergency order must file the specific information described under Tex. Water Code Section 35.101(c).
 75. Staff reviewed LCRA's application, supporting materials and affidavits and determined that the application included all of the information and documents required by Tex. Water Code Section 35.101(c).

II. CONCLUSIONS OF LAW

1. Findings of Fact Nos. 1 through 75 show that the requirements of Tex. Water Code Sections 5.506 and 11.148, and applicable subsections of 30 TAC Section 35.101 have been met.
2. The Executive Director has the authority to issue this emergency order. A Commission hearing to affirm, modify, or set aside this order will be held on March 4, 2015.

NOW, THEREFORE, BE IT ORDERED BY THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY THAT:

1. The requirement in LCRA's WMP, Permit No. 5838, to maintain a continuous streamflow of 500 cfs for six consecutive weeks in between March and May from Bastrop to Eagle Lake for Blue Sucker habitat for spawning is partially suspended by reducing the streamflow requirement to 300 cfs.
2. The emergency order becomes effective upon issuance.

3. The emergency order terminates in 120 days, which is June 18, 2015. It may be renewed once for 60 days.
4. This emergency order was issued without a hearing. A hearing to affirm, modify, or set aside this order will be held before the Commission on March 4, 2015, at 9:30 a.m. at the following location:

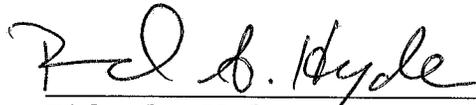
Texas Commission on Environmental Quality
12100 Park 35 Circle
Building E, Room 201S
Austin Texas 78753

5. The Chief Clerk of the Commission shall forward a copy of this emergency order to all affected persons.
6. If any provision, sentence, clause, or phrase of this emergency order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of this order.

Issue Date:

February 18, 2015

**TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY**



Richard A. Hyde, P.E.
Executive Director