2130-335

# PLAINTIFF'S ORIGINAL PETITION

## TO THE HONORABLE COURT:

**COMES NOW**, the Lower Colorado River Authority ("Plaintiff" or "LCRA"), and files this its Original Petition and would show the Court as follows:

## I. DISCOVERY

1. LCRA will conduct discovery under Level 3, pursuant to Rule 190.4, Texas Rules of Civil Procedure. This is an appeal of the action by the Lost Pines Groundwater Conservation District ("Defendant" or "the District") on LCRA's applications for permits to produce underground water from its groundwater rights on the Griffith League Ranch in Bastrop County. It is an administrative appeal on the record that would normally not require discovery; however, potential procedural irregularities, constitutional issues, and other issues not subject to the contested case hearing may require limited discovery.

## II. PARTIES AND SERVICE OF PROCESS

- 2. Plaintiff is the LCRA, a conservation and reclamation district created under the authority of Texas Constitution Article XVI, § 59 and Texas Special District Local Laws Code §§ 8503, et seq.
- 3. Defendant is a groundwater conservation district created under the authority of Texas Constitution Article XVI, § 59 and Texas Special District Local Laws Code §§ 8849.01, et. seq. Its boundaries include all of Bastrop and Lee counties. Process may be served on the District by service upon the District's General Manager at its office: 908 NE Loop 230, Smithville, TX 78957.
- 4. LCRA requests that the District file with the Court, within the time allowed for an answer or such additional time as may be allowed by the Court, the original or a certified copy of the entire record of proceedings under review. *Cf.*, Government Code § 2001.175(b).
- 5. Other parties to the contested case proceeding were as follows: the District's General Manager ("GM"); Aqua Water Supply Corporation; Environmental Stewardship; the City of Elgin; Recharge Water, LP; Peggy Jo and Marshall Hilburn; Elvis and Roxanne Hernandez; Vera L. Dement; Catherine and Charles L. White; and the "Brown Landowners," as identified in the Administrative Law Judges' Order No. 5. Plaintiff is providing copies of its Original Petition to all persons, or their representatives, identified as parties in proceedings below.

## III. JURISDICTION AND VENUE

6. Jurisdiction to appeal an action of the District on LCRA's permit applications is explicit under Texas Water Code § 36.251. Venue is appropriate in either Bastrop County or Lee County pursuant to that statute.

## IV. GOVERNMENTAL IMMUNITY

7. Governmental immunity is waived and consent to suit provided by Texas Water Code § 36.251.

## V. BACKGROUND AND PROCEEDINGS BELOW

- 8. LCRA is a regional water supplier, supplying untreated water to people, cities, businesses, farmers, and industries within its 35-county water service area.
- 9. In 2015, to secure additional water supplies to meet the growing demands of existing and future customers within central Texas, and to diversify and help "drought proof" its water supply, LCRA acquired groundwater rights from the 4,847-acre Griffith League Ranch in Bastrop County, owned by the Boy Scouts of America. In February 2018, LCRA filed applications with the District for eight operating permits to produce up to 25,000 acre-feet per year from the Simsboro Formation on this property. Similar to operating permits of this magnitude previously approved by the District for private entities, LCRA proposed to phase in production over time as demand for the water increased, with the production starting at 8,000 acre-feet per year, then increasing to 15,000 acre-feet per year, then the full 25,000 acre-feet per year. As with other District permits, LCRA also sought to tie its phased production to special conditions requiring monitoring of aquifer

conditions over time. LCRA also applied for transport permits to authorize transport and use of this water outside the District. (LCRA's applications for operating permits and transport permits are collectively referred to as the "Applications.") LCRA later amended its transport permit request to limit use of the groundwater to Bastrop, Lee, and Travis counties, which comprise some of the fastest growing areas in the country.

- 10. Following mailed and newspaper notice, the District held a public hearing on the Applications on September 26, 2018. Numerous persons made public comments objecting to issuance of the permits and filed written requests for a contested case hearing. LCRA also objected to some of the special conditions included in the General Manager's proposed draft permits included with the public notice. At the request of LCRA and others, the District contracted with the State Office of Administrative Hearings ("SOAH") to conduct a preliminary hearing, determine party status and, if necessary, conduct an evidentiary hearing on the Applications consistent with Texas Water Code § 36.416. As described above, numerous persons were recognized as affected persons and admitted as protesting parties, opposed to LCRA's Applications.
- 11. LCRA's Applications were fully litigated over the course of 16 months (December 2018 June 2020), including several rounds of written discovery, multiple depositions of experts, thousands of pages of pre-filed written direct and rebuttal testimony and exhibits, and a 6-day in-person hearing before two SOAH administrative law judges ("ALJs"), Rebecca S. Smith and Ross Henderson, who applied the rules of evidence and

assessed the credibility of witnesses. The primary contested issues at the hearing were as follows:

- a. Whether the proposed use of water unreasonably affects existing groundwater or surface water resources or existing permit holders (Texas Water Code § 36.113(d)(2) and District Rule 5.2.D(2));<sup>1</sup>
- b. Whether the proposed use of water is dedicated to any beneficial use (Texas Water Code § 36.113(d)(3) and District Rule 5.2.D(3));
- c. Whether the proposed use is consistent with the District's approved management plan (Texas Water Code § 36.113(d)(4) and District Rule 5.2.D(4));
- d. Whether various special conditions proposed in the General Manager's (GM) draft operating and transport permits should be modified (District Rule 5.2.D(9) and District Rule 5.3);
- e. Whether LCRA should be required to develop a "mitigation fund" to compensate other property owners for impacts of production under the Applications;
- f. Whether a Monitoring Well Agreement should be required of LCRA and, if so, whether it should include monitoring the impacts of groundwater production (by LCRA and others) on both groundwater and surface water resources;

<sup>&</sup>lt;sup>1</sup> The citations to the District Rules are to the Amended April 20, 2016 Rules of the Lost Pines Groundwater Conservation District. These rules were in effect when LCRA filed its Applications and are applicable to LCRA's Applications.

- g. Whether granting the Applications is consistent with the District's duty to manage total production of groundwater on a long-term basis to achieve the desired future condition (District Rule 5.2.D(8));
- h. Whether the conditions and limitations of the draft permits will achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells (District Rule 5.2.D.(9)); and,
- Whether the District has authority under the Transport Permits to prohibit as "waste" the discharge and transport of groundwater through the bed and banks of surface watercourses.

Numerous other issues were also raised that directly or indirectly bore on these key issues.

12. The ALJs considered the evidence and argument of the parties and, following extensive briefing, issued their Proposal for Decision ("PFD"), along with proposed Findings of Fact and Conclusions of Law on March 31, 2020. The PFD as issued by the ALJs, with Findings and Conclusions, is attached hereto as "Exhibit 1" and incorporated for all purposes. On July 20, 2020, the ALJs recommended minor changes to the PFD in response to the parties' exceptions to the PFD; the letter reflecting their rulings is attached hereto as "Exhibit 2" and incorporated herein for all purposes. The PFD recommended granting the Operating Permits for phased production of up to 25,000 acrefeet per year subject to conditions (many of which were identical or very similar to those included in prior phased District permits). The PFD also recommended that LCRA be

required to enter a Monitoring Well Agreement and monitor the impacts of groundwater production on both groundwater and surface water resources. Finally, the PFD agreed with LCRA that the District could not prohibit as "waste" LCRA's use of surface watercourses to transport the groundwater, as the GM had proposed.

13. Even though the District had a fully litigated PFD on July 31, 2020, it took almost two full years to reach a final and appealable decision on LCRA's Applications.<sup>2</sup> Initially, the District's Board of Directors ("Board" or "District Board") voted to set the final hearing on LCRA's Applications for September 9, 2020, which was subsequently canceled. On October 21, 2020, the District held a remote meeting of the Board with an agenda item to reschedule the final hearing. Citing the coronavirus pandemic, the District Board refused to hold a final hearing, and indicated its intent not to do so until the pandemic was "over." Nevertheless, all the while, the District continued to hold its regular meetings using telephone and video conferencing. The Board finally convened an in-person meeting in a socially-distancing setting with masks on January 28, 2021 to consider SOAH's PFD that had been issued six months prior. The District Board made no decision on the PFD, LCRA's Applications, or the requested permits. Nearly six months later, on July 14, 2021, the District held another hearing on SOAH's PFD.

<sup>&</sup>lt;sup>2</sup> Compounding the delays on the Board's consideration was the fact that three of the ten board members were recused from participating in any deliberations or votes on LCRA's Applications because they were parties to the contested case.

<sup>&</sup>lt;sup>3</sup> See official recording of LPGCD 10/21/20 Board Meeting, available at https://www.lostpineswater.org/CivicMedia?VID=3 (last viewed 11/6/20), at 59:24.

14. Three months later, on October 12, 2021, the District Board, after a lengthy Executive Session and with no public presentation or deliberation among the Board, *finally* took action, voting to "grant to LCRA a five-year production permit for 8,000 acre-feet of water per year, striking every finding of fact and conclusion of law referencing the definition of waste, and granting a 30-year transport permit to transport 24,000 acre-feet per year." See The Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, Tuesday, October 12, 2021 at p. 19. The Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, Tuesday, October 12, 2021 are attached hereto as "Exhibit 3" and incorporated herein. On October 13, 2021, LCRA requested findings and conclusions of the District's decision on the Applications, as required by Texas Water Code § 36.412. On November 8, 2021, the Board voted to adopt findings and conclusions. Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, Monday, November 8, 2021 are attached hereto as "Exhibit 4" and incorporated herein.

15. On November 15, 2021, the District issued its written order approving a final decision with Findings of Fact and Conclusions of Law on LCRA's Applications ("First Order"). The First Order included – without explanation – significant and substantive changes to the PFD, including substantial modifications to and elimination of findings and conclusions recommended by the PFD and the addition of several new findings and conclusions not included in the PFD. As adopted, the First Order granted permits for a maximum combined authorized production of only 8,000 acre-feet per year and eliminated

the additional phased production recommended by the PFD. The First Order retained all groundwater and surface water monitoring requirements and several other special conditions. Consistent with the PFD, the District's First Order granted the requested transport permits for the full 25,000 acre-feet per year without any restrictions regarding transport of the groundwater using state watercourses.

- 16. LCRA timely filed a Motion for Rehearing on the First Order on November 22, 2021 ("First MFR"), which was granted by the District on February 16, 2022. The Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, Wednesday, February 16, 2022 are attached hereto as "Exhibit 5" and incorporated herein.
- 17. After additional briefing and argument on April 4, 2022, the Board voted to revise its decision and to adopt a written explanation for its decision. The Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, Monday, April 4, 2022 are attached hereto as "Exhibit 6" and incorporated herein. On May 18, 2022, the Board adopted a revised final order ("Second Order"). The Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, May 18, 2022 are attached hereto as "Exhibit 7" and incorporated herein.
- 18. The District issued its second order adopting the (second) Final Decision, Findings, Conclusions and associated operating and transport permits on May 18, 2022. The Second Order is attached hereto as "Exhibit 8" and incorporated herein. The Second Order included written Findings of Fact and Conclusions of Law as well as a written explanation of the changes in the Second Order compared to the PFD. A "red-line" version

of the Boards (second) Final Decision, Findings of Fact and Conclusions of Law and Permits, showing changes made from the ALJs' PFD, along with an affidavit supporting how the redline was created, is attached hereto as "Exhibit 9," and incorporated herein.

- 19. Although the Second Order adopted on May 18, 2022 already included findings and conclusions, LCRA filed its request for Findings of Fact and Conclusions of Law on May 19, 2022, as required by Water Code Section 36.412(c).
- 20. LCRA filed its Second Motion for Rehearing ("Second MFR") June 7, 2022, which remains pending before the District.
- 21. Out of an abundance of caution, LCRA files this Appeal of the District's decision on LCRA's Application, prior to action by the District, if any, on its Second MFR, in anticipation of possible arguments that LCRA's First MFR satisfied statutory requirements, making the Second MFR unnecessary. Once the Second MFR is finally disposed, LCRA anticipates filing another comparable appeal of the District's action on LCRA's Application and consolidating that appeal with this one to preclude any jurisdictional objections.

## VI. CAUSE OF ACTION

22. Under Texas Water Code § 36.253, the District's Second Order on LCRA's Application is reviewed on the administrative record under the substantial evidence rule as defined by the Administrative Procedure Act, Texas Government Code § 2001.174. According to that provision, the reviewing court:

- (2) shall reverse or remand the case for further proceedings if substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions, or decisions are:
  - (A) in violation of a constitutional or statutory provision;
  - (B) in excess of the agency's statutory authority;
  - (C) made through unlawful procedure;
  - (D) affected by other error of law;
  - (E) not reasonably supported by substantial evidence considering the reliable and probative evidence in the record as a whole; or
  - (F) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

As described below, the District's action on LCRA's Applications violates these standards on nearly every one of these grounds. The Second Order violates applicable constitutional and statutory provisions, exceeds the District's statutory authority, is affected by clear error of law, is not reasonably supported by substantial evidence, and is arbitrary and capricious and characterized by abuse of discretion.

# Grounds for Reversal 1: The District violated Texas Water Code § 36.4165.

23. The District violated Texas Water Code § 36.4165(b) when it adopted changes to the ALJ's proposed Findings of Fact and Conclusions of Law without providing reasons for the changes that comply with Section 36.4165. Texas Water Code § 36.4165 applies to the District Board's treatment of a PFD resulting from a SOAH contested case hearing. It provides:

Sec. 36.4165. FINAL DECISION; CONTESTED CASE HEARINGS.

(a) In a proceeding for a permit application or amendment in which a district has contracted with the State Office of Administrative Hearings for a contested case hearing, the board has the authority to make a final decision on consideration of a proposal for decision issued by an administrative law judge.

- (b) A board may change a finding of fact or conclusion of law made by the administrative law judge, or may vacate or modify an order issued by the administrative judge, **only if the board determines**:
  - (1) that the administrative law judge did not properly apply or interpret applicable law, district rules, written policies provided under Section 36.416(e), or prior administrative decisions;
  - (2) that a prior administrative decision on which the administrative law judge relied is incorrect or should be changed; or
  - ((3) that a technical error in a finding of fact should be changed.

(Emphasis added).

24. When a case is referred to SOAH for hearing, the ALJs become the fact finders, responsible for weighing and evaluating the evidence presented and the Board is not free to substitute its opinions; the Board is essentially limited to correcting errors of law. Hyundai Motor America v. New World Car Nissan, Inc., 581 S.W. 3d 831, 838 (Tex. App. Austin, 2019 no pet.). When the Board voted to change the ALJ's proposed Findings of Fact or Conclusions of Law, the Board was required to "articulate a rationale" for the changes and "to explain with particularity its specific reason and legal basis for each change made." Sanchez v. Tex. State Bd. of Medical Examiners, 229 S.W.3d 498, 515 (Tex. App. – Austin 2007, no pet.); Hyundai Motor America, 581 S.W.3d at 837. Articulating its reasons for making the changes to the findings and conclusions in some form enhances the fairness of the adjudicative process for the parties appearing before the District and ensures that a reviewing court can judge whether the Board has followed the procedures set out in Section 36.4165 and the District's rules and statutes. Flores v. Employees Ret. Sys., 74 S.W.3d 532, 534 (Tex. App. – Austin 2002, pet. denied).

- 25. Here, the Board, without making any finding of legal error by the ALJs or other allowable justification set forth in Section 36.4165, twice adopted orders that substantially modified the PFD, including its proposed Findings and Conclusions, and modified the recommended action of the ALJs with regard to the requested permits. The Board failed to correct this flagrant error from its First Order when it issued its Second Order. By not complying with Texas Water Code § 36.4165, the District exceeded its statutory authority, violated TWC provisions, acted arbitrarily and capriciously, and abused its discretion. On this ground alone, the Board's action should be reversed.
- 26. Additionally, the Board failed to make any determination as part of any discussion or a motion in open session regarding the basis on which it was voting to modify the PFD or the Findings of Fact and Conclusions of Law. At its meeting on October 12, 2021, the Board went into a closed session at 6:33 p.m. to consult with its attorney. The Board reconvened in open session at 7:59 p.m. Without discussion, Board member Melissa Cole made a motion, which was seconded by Billy Sherrill. Board Chair Sheril Smith called for any discussion or deliberation, but there was none. *See* The Transcript Excepts of the Lost Pines Groundwater Conservation District Board Meeting, Tuesday, October 12, 2021 at p. 19, attached hereto as "Exhibit 3."
- 27. At its April 4, 2022 meeting, the Board apparently sought to address this obvious error, but it failed to provide the required justification in the Board discussion or in its motion for the changes to the ALJs' proposed Findings of Fact and Conclusions of Law that comply with Section 36.4165. *See* Transcript Excerpts of the Lost Pines

Groundwater Conservation District Board Meeting, Monday, April 4, 2022, at pp. 60-68, attached hereto as "Exhibit 6."

28. The Board provided no additional justifications when it voted to adopt the Second Order on May 18, 2022. *See* Transcript Excerpts of the Lost Pines Groundwater Conservation District Board Meeting, May 18, 2022, at pp. 3-5, attached hereto as "Exhibit 7." The Second Order also continues to lack a legally defensible explanation of the Board's decision to depart so substantially from the recommendations in the PFD and thus remains defective.

Ground for Reversal 2: The District's reduction of authorized production and elimination of subsequent phases of increased production is arbitrary and capricious and not reasonably supported by substantial evidence.

29. The District's reduction of the authorized production under LCRA's Operating Permits from 25,000 acre-feet per year to 8,000 acre-feet per year reflects an improper re-weighing of the record evidence, is arbitrary and capricious, and not reasonably supported by substantial evidence, considering the reliable and probative evidence in the record as a whole. The parties presented competing evidence at the contested case hearing focused on the impacts of production of 25,000 acre-feet per year. The ALJs specifically considered the evidence that protestants argued showed "unreasonable" impacts and rejected it, instead concluding that LCRA's evidence demonstrated that, under the terms and conditions in the permits, production of 25,000 acre-feet per year would not unreasonably affect existing groundwater and surface water resources or existing permit holders. By contrast, virtually no credible evidence was

introduced regarding the impact of production of 8,000 acre-feet per year on existing groundwater and surface water resources and permit holders.

Ground for Reversal 3: The District's Second Order discriminates against LCRA, a transporter of water, violates Texas Water Code § 36.122(c) and the equal protection clause of the Texas Constitution.

30. The permits issued to LCRA by the District in this matter depart substantially from permits issued to other applicants, in violation of Texas Water Code § 36.122(c). This statute states, "Except as provided in Section 36.113(e), the district may not impose more restrictive permit conditions on transporters than the district imposes on existing in-district users." Permit conditions imposed on LCRA by the District violate Section 36.122(c) because Special Condition (1) requires the construction and maintenance of a Well Monitoring System and execution of a Monitoring Well Agreement, including monitoring of surface water, all of which have never been imposed on in-district users, even though some in-district permittees are authorized to produce comparable or substantially more groundwater than LCRA.

31. Pleading further, and in the alternative, the discriminatory permit conditions and limitations imposed on LCRA by the District's Second Order also violate LCRA's right to equal protection under the Texas Constitution. Although LCRA is a governmental entity, the Texas Supreme Court has long held that property acquired by a political subdivision is protected by the same constitutional guarantees that shield the property of

LCRA v. Lost Pines Groundwater Conservation District Plaintiff's Original Petition

<sup>&</sup>lt;sup>4</sup> Texas Water Code § 36.113(e) allows a district, under certain conditions to impose more restrictive conditions if those restrictive conditions are also applied to all subsequent permit applications or permit amendment applications. The District has not imposed comparable conditions on applications that it has considered since its decision on LCRA's Applications, e.g., Application by the City of Bastrop.

Austin 2021, pet. filed), *citing Milam County v. Bateman*, 54 Tex. 153, 165-66 (Tex. 1880). LCRA has a constitutionally protected property interest in the groundwater beneath the Griffith League Ranch in Bastrop County, *see Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 838 (Tex. 2012), and is therefore entitled to equal treatment in permitting conditions and allowances for the withdrawal of groundwater as in-district permittees and others similarly situated. *Klumb v. Houston Municipal Employees Pension Sys.*, 458 S.W.3d 1, 13 (Tex. 2015). However, as alleged herein, the District's Second Order imposes far greater production restrictions and other conditions on LCRA than other similarly situated permittees, including but not limited to Aqua Water Supply Corporation.

32. These discriminatory limitations and conditions are not rationally related to the protection of existing groundwater uses or any other legitimate governmental purpose of the District. Nor is there any evidence or finding to suggest that the District could reasonably believe that imposing these onerous and unnecessary limitations on LCRA—and only LCRA—would promote groundwater protection or any other authorized purpose. Consequently, in addition to violating the nondiscrimination provision of Texas Water Code § 36.122(c), the District's Second Order unconstitutionally denies LCRA equal protection in the use of its vested groundwater rights.

Ground for Reversal 4: Special Condition (1) is unauthorized and contrary to numerous statutory and constitutional provisions.

33. The District exceeded its statutory authority by including a special condition in the permits that requires LCRA, prior to construction of any groundwater

wells, to construct and maintain groundwater monitoring wells and "any scientifically supported tool to monitor surface water." While LCRA does not dispute the District's authority to fund and implement its own groundwater monitoring program, the fact is that the District has neglected to do so. Instead, despite the lack of any authority to do so, it seems intent on arbitrarily imposing groundwater monitoring requirements on only certain groundwater permittees and further requiring LCRA alone to bear the burden of monitoring surface water.

- 34. Groundwater conservation districts possess only the authority granted by the legislature. See South Plains Lamesa Railroad Ltd. v. High Plains Water Conservation Dist., 52 S.W.3d 770, 780-81 (Tex. App. Amarillo 2001, no pet.). Examination of Texas Water Code §§ 36.113 and 36.1131 demonstrates that, without a rule in place authorizing such a requirement, groundwater conservation districts do not have authority to require surface water or groundwater monitoring or Monitoring Well Agreements. Although the District subsequently, in October 2019, amended its Rules to authorize imposition of a groundwater monitoring well requirement on some applicants, that rule (even if valid) does not apply to LCRA's Applications and cannot justify imposition of Special Condition (1). Applying the new rule to LCRA's then pending applications would be unconstitutionally retroactive and a violation of Local Government Code Chapter 245.
- 35. Inclusion of this special condition in LCRA's permits as approved by the District is also in error because it is not a reasonable condition rationally related to a

<sup>5</sup> See Special Condition (1) in the Operating Permits attached to the Second Order. (Exhibit "8").

legitimate governmental purpose associated with LCRA's proposed groundwater production. Indeed, the data to be collected from the groundwater or surface water monitoring systems is not used in the permits to specifically regulate LCRA's groundwater production.

- 36. LCRA agrees that aquifer information is a necessary component of the phased permits requested by LCRA and thus, in that context, a nexus exists to justify requiring groundwater monitoring under the District's authority to regulate production. However, when the District limited LCRA's production to 8,000 acre-feet and removed phased production from the permits, it was left with no other basis upon which it could rely to require LCRA to construct and maintain groundwater monitoring wells.
- 37. Additionally, Special Condition (1)'s requirement that the Monitoring Well Agreement include "any scientifically supported tool to monitor surface water" is overbroad, unconstitutionally vague, and violates LCRA's substantive due process because there is no statutory or regulatory authority that allows groundwater districts to impose this type of special permit condition. Substantive due process generally protects against the arbitrary exercise of governmental powers. See Cnty. of Sacramento v. Lewis, 523 U.S. 833, 845 (1998); Mayhew v. Town of Sunnyvale, 964 S.W.2d 922, 938 (Tex.1998) (governmental action violates due process when it is clearly arbitrary and unreasonable). An action is arbitrary when it is taken without reference to guiding rules or principles. See Hendee v. Dewhurst, 228 S.W.3d 354, 374 n. 27 (Tex. App.—Austin 2007, pet. denied) citing Neeley v. West-Orange Cove Consolidated Indep. Sch. Dist., 176 S.W.3d 746

(Tex.2005). Here, because the District issued the challenged monitoring requirements without reference to any authority in rule or statute, it acted arbitrarily and capriciously by retaining Special Condition (1) in the Permits, notwithstanding the fact that it baselessly removed all phasing and limited production to 8,000 acre-feet/year.

- 38. The District also acted arbitrarily and capriciously and violated LCRA's right to equal protection when it treated LCRA's Applications differently than how the District has treated other large permit operation and transport requests. The District's prejudicial and unequal treatment of LCRA compared to other permittees is arbitrary and capricious, particularly in light of the ALJs' Findings of Fact that LCRA's proposed production of the full 25,000 acre-feet per year alone will not result in unreasonable impacts to existing groundwater or surface water resources or existing permittees. The District's modified findings therefore demonstrate that the disparate classification and treatment of LCRA is not rationally related to any legitimate governmental purpose, nor is there any evidence or finding to suggest that the District could reasonably believe that denying LCRA what it has so readily granted others would promote groundwater protection or any other legitimate purpose of the District.
- 39. Finally, the District violated the Texas Constitution when it conditioned LCRA's groundwater pumping on the requirement to provide for groundwater and surface water monitoring. In imposing conditions in a permit, a regulatory governmental authority may not condition approval of a permit on successfully coercing a permittee to spend money to acquire and then relinquish property interests for public benefit, unless there is a

nexus and rough proportionality between the government's demand and the effects of the proposed land use. *See, e.g., Koontz v. St. Johns River Water Mgmt. Dist.*, 570 U.S. 595, 604-07 (2013) and *Town of Flower Mound v. Stafford Estates*, 135 S.W.3d. 620 (Tex. 2004). In this case, there is neither a nexus between LCRA's permitted pumping and the monitoring requirements nor any proportionality between the monitoring requirements and the production authorized for LCRA. The District's imposition of monitoring requirements violates this principle, is unconstitutional, and must be stricken.

# VII. RELIEF REQUESTED

- 40. LCRA requests that the Court enter its Order declaring the Second Order invalid because the District's action violates applicable constitutional and statutory provisions, exceeds the District's statutory authority, is affected by clear error of law, is not reasonably supported by substantial evidence, and is arbitrary and capricious and characterized by abuse of discretion for the reasons described above.
- 41. LCRA further requests that the Court enter its Order declaring as invalid all of the modifications made by the District to the ALJs' PFD and proposed Findings of Fact and Conclusions of Law, and related changes to LCRA's operating and transport permits (other than declaring the "waste" issue for transport permits moot)<sup>6</sup> because none of the Board's modifications are within the limited authorization provided by Texas Water

<sup>&</sup>lt;sup>6</sup> LCRA agrees with the District that the issue about whether the transport of groundwater using the bed and banks of a water course is considered "waste" under Chapter 36 of Texas Water Code is moot, as explained by the Second Order. That is because LCRA's amended its transport permit applications to limit transport of water to Travis County, which the record confirms cannot be accomplished using the bed and banks of a water course.

Code § 36.4165, and they violate other applicable constitutional and statutory provisions, as described above.

42. LCRA further requests that the Court reverse the District's Second Order and remand this matter to the District to issue an order consistent with the ALJs' proposed Findings of Fact and Conclusions of Law and the statutory and constitutional limitations on the District's authority, as described above.

## **PRAYER**

WHEREFORE, PREMISES CONSIDERED, LCRA respectfully prays that it be granted the following relief, in whole or in part:

- Defendant Lost Pines Groundwater Conservation District be cited to answer and appear herein;
- 2. The Court grant relief as requested herein; and
- 3. LCRA have all such other and further relief, both general and special, at law and in equity, to which it may show itself justly entitled.

Respectfully submitted,

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**COUNSEL FOR PLAINTIFF** 

# Exhibit 1

FILED 952-19-0705 3/31/2020 1:51 PM STATE OFFICE OF ADMINISTRATIVE HEARINGS Jessie Harbin, CLERK



ACCEPTED 952-19-0705 03/31/2020 1:59 PM STATE OFFICE OF ADMINISTRATIVE HEARINGS Jessie Harbin, CLERK

# State Office of Administrative Hearings

Kristofer Monson Chief Administrative Law Judge

March 31, 2020

Natasha J. Martin

Re Client: Lost Pines Groundwater Conservation District

Graves Dougherty Hearon & Moody, P.C.

401 Congress Ave., Suite 2200

Austin, TX 78701

RE: Docket No. 952-19-0705; Application of Lower Colorado River Authority for Operating and Transport Permits for Eight Wells in Bastrop County, Texas

Dear Ms. Martin:

Please find enclosed a Proposal for Decision in this case. It contains our recommendation and underlying rationale.

Exceptions and replies may be filed by any party in accordance with 1 Tex. ADMIN. CODE § 155.507(c), a SOAH rule which may be found at www.soah.state.tx.us.

Sincerely,

Ross Henderson

Administrative Law Judge

Rebecca S. Smith

Administrative Law Judge

Kebecca S. Smith

VIA E-FILE TEXAS

RS/lc

Enclosure (including 2 CDs)

Eric Allmon, Attorney at Law, 1205 San Antonio St., Austin, TX 78701 - <u>VIA E-FILE TEXAS</u>
Michael Gershon, Attorney at Law, 816 Congress Ave., Suite 1900, Austin, TX 78701-2478 - <u>VIA E-FILE TEXAS</u>
Gregory Ellis, Attorney at Law, 2104 Midway Court, League City, TX 77573 - VIA E-FILE TEXAS
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# **SOAH DOCKET NO. 952-19-0705**

APPLICATION OF LOWER COLORADO	§	BEFORE THE STATE OFFICE
RIVER AUTHORITY FOR OPERATING	§	
AND TRANSPORT PERMITS FOR	§	OF
EIGHT WELLS IN BASTROP COUNTY,	§	
TEXAS	Š	ADMINISTRATIVE HEARINGS

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## PROPOSAL FOR DECISION

## I. INTRODUCTION

The Lower Colorado River Authority (LCRA) submitted eight applications (Applications) to the Lost Pines Groundwater Conservation District (District) seeking authorization to withdraw 25,000 acre-feet of water per year from eight wells in the Simsboro Formation in Bastrop County, Texas, and to transport that water to Travis, Lee, and Bastrop Counties. The District's General Manager (GM) issued Draft Operating Permits and Draft Transport Permits, which contain provisions that LCRA and various other parties object to. At the close of briefing, the GM proposed additional changes to the Draft Operating Permits (Revised Draft Operating Permits). The Administrative Law Judges (ALJs) recommend that the Revised Draft Operating Permits and the Draft Transport Permits be issued with the following changes: (1) changes to the requirements to enter a well monitoring agreement, including the deadline to enter into the agreement and removal of the requirement that violation of the agreement is a permit violation; (2) an amendment to the definition of "monitoring well system" to require that effects on surface water be monitored; (3) the removal of the requirement that LCRA present end-user contracts or binding commitments; (4) an amendment to Revised Draft Operating Permit Special Condition 5 to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and (5) the removal from the Draft Transport Permits of the Special Provision prohibiting discharge into a surface watercourse.

## II. BACKGROUND AND PROCEDURAL HISTORY

# A. The Applications

LCRA is a conservation and reclamation district established by the Texas Legislature in 1934 that serves as a regional water supplier within its 35-county service area. <sup>1</sup> Although LCRA primarily manages and supplies surface water, its Executive Vice President for Water, John Hofmann, testified that LCRA's responsibility is not limited to surface water. <sup>2</sup> As part of a goal to diversify its water supply in order to "drought proof" it, LCRA began a groundwater project in the aquifer regulated by the District. <sup>3</sup>

As part of that project, on February 1, 2018, LCRA filed the Applications for operating and transport permits with the District. The application for operating permits sought authorization to withdraw a total of 25,000 acre-feet per year of groundwater from the Simsboro Formation based on groundwater rights LCRA acquired in 2015. These groundwater rights were beneath the Griffith League Ranch, an approximately 4,847-acre property owned by the Capitol Area Council, Inc. of the Boy Scouts of America. The water was to be used for all beneficial uses authorized in chapter 36 of the Texas Water Code. On February 21, 2018, LCRA resubmitted the Applications on different forms.

On August 20, 2018, the District's GM, James Totten, notified LCRA by letter that its Applications were administratively complete and that the Applications would be set for a public hearing. The letter also provided LCRA with the GM's Draft Operating Permits and Draft Transport Permits (collectively, Draft Permits.).

Following notice, the District held a public hearing on the Applications on September 26, 2018, and voted to contract with the State Office of Administrative Hearings

<sup>&</sup>lt;sup>1</sup> LCRA Ex. 1 (Hofmann direct) at 7.

<sup>&</sup>lt;sup>2</sup> LCRA Ex. 1 (Hofmann direct) at 8.

<sup>&</sup>lt;sup>3</sup> LCRA Ex. 1 (Hofmann direct) at 9.

(SOAH) to conduct a hearing on the Applications. Several Protestants disagreed with the issuance of the Draft Permits, and LCRA also challenged some of the Draft Transport Permits' provisions.

On December 18, 2018, SOAH ALJs Michael O'Malley and Laura Valdez held a prehearing conference in Bastrop, Texas. At the prehearing conference, the ALJs admitted the following as parties: LCRA, the District, Aqua Water Supply Corporation (Aqua), Environmental Stewardship, City of Elgin (Elgin), and Recharge Water, LP (Recharge). A group of landowners represented by a single attorney was also admitted, and will be referred to as the Brown Landowners. Several self-represented litigants were also named as parties. Following a challenge to party status, many of the self-represented litigants, and some of the Brown Landowners, were determined not to have a justiciable interest and were struck as parties. The remaining self-represented litigants were Peggy Jo and Marshall Hilburn, Walter Winslett, JC Jensen, Elvis and Roxanne Hernandez, Verna L. Dement, Catherine and Charles L. White, and Richard Martinez. Mr. Jensen and Mr. Martinez withdrew their protests, as did several of the Brown Landowners.

The hearing on the merits was held October 15-22, 2019, before ALJs Ross Henderson and Rebecca S. Smith. The first four days of the hearing were held in Bastrop, Texas, and the last two took place at SOAH's hearing facility in Austin, Texas. Mr. and Mrs. Hernandez were the only self-represented litigants who prefiled testimony and participated in the hearing on the merits. The record closed on January 31, 2020, with the filing of reply briefs.

In its original Applications, LCRA stated that the water would be used throughout its 35-county water service area. In its testimony, and at hearing, LCRA amended its request to only seek to use the water in Bastrop, Lee, and Travis Counties.

As an attachment to his reply brief, the GM made several changes to the Draft Operating Permits. Some of these changes are substantive; some are not. No party objected to these changes

<sup>&</sup>lt;sup>4</sup> SOAH Order No. 5.

or asked to file briefing in response to these changes. The ALJs will address these changes and will refer to the GM's January 31, 2020 version of the permits as the Revised Draft Operating Permits.<sup>5</sup>

#### B. Permits in the District

The groundwater regulated by the District is in the Simsboro Formation, part of the larger Carrizo-Wilcox aquifer.<sup>6</sup> Overlaying the Simsboro is the Calvert Bluff, and the Hooper Formation underlies the Simsboro Formation.<sup>7</sup> The Simsboro Formation "is often used for large-scale public water supply production."<sup>8</sup> However, there is no history of large-volume pumping within the District.<sup>9</sup>

The Simsboro Formation and the other aquifer units dip toward the Gulf of Mexico, and thus are deeper toward the east and southeast in Bastrop County.<sup>10</sup> The deeper portion of the Simsboro is referred to as the downdip. There are also shallower outcrop areas.

The parties challenging the Draft Permits either have wells or permits to produce water from the area. Aqua, a retail public utility with a service area in Bastrop, Caldwell, Fayette, Lee, Travis, and Williamson Counties, has a permit from the District authorizing the production of 23,627 acre-feet per year from 15 wells in the Simsboro Formation. Twelve of those wells are in two well fields near the shallow outcrop of the Simsboro. Aqua's three other wells are located on the south side of Highway 290, in the deeper downdip portion of the aquifer. 12

<sup>&</sup>lt;sup>5</sup> The Revised Draft Permits reflect the second amendment the GM made to the Draft Operating Permits.

<sup>&</sup>lt;sup>6</sup> Recharge Ex. B (Thornhill direct) at 3.

<sup>&</sup>lt;sup>7</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>8</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>9</sup> GM Ex. 11 (Hutchison direct) at 16.

<sup>&</sup>lt;sup>10</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>11</sup> Aqua Ex. 1 (McMurry direct) at 2; Aqua Ex. 4 (Keester direct) at 8.

<sup>&</sup>lt;sup>12</sup> Aqua Ex. 4 (Keester direct) at 8.

Elgin has a retail public utility that provides retail water utility service within its certificated service area.<sup>13</sup> The city, which is located in the greater Austin area, expects continued and rapid growth.<sup>14</sup> Elgin has four wells that are all partially or wholly completed within the Simsboro Formation.<sup>15</sup> Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations.<sup>16</sup> Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation.<sup>17</sup>

Recharge, formerly known as End Op, L.P., has permits authorizing the production of 46,000 acre-feet from 14 wells, to be phased in, which it acquired following years of litigation and a settlement. Seven of the permitted wells are to be located in Bastrop County, and seven are to be located in Lee County. Some of Recharge's proposed wells in Bastrop County are the closest wells to LCRA's proposed pumping. Many of the parties currently opposed to LCRA's permit application also opposed Recharge's application. As part of its settlement of the underlying contested case about its application, Recharge agreed to create a mitigation fund to pay well owners. Recharge has not yet drilled any wells, but is required under the terms of its permit to complete four wells in Lee County before drilling any wells in Bastrop County, a term that was added to its permit, but was not part of its settlement. Recharge did not appeal the inclusion of this term. Under the permit (and settlement terms), Recharge's mitigation obligations start once it begins pumping in Lee County.

The other large permits in the District belong to Forestar USA Real Estate Group, Inc. (Forestar), which is authorized to pump 28,500 acre-feet per year in Lee County, subject to

<sup>&</sup>lt;sup>13</sup> Elgin Ex. 1 (Prinz direct) at 2.

<sup>&</sup>lt;sup>14</sup> Elgin Ex. 1 (Prinz direct) at 2.

<sup>15</sup> Elgin Ex. 2 (Perry direct) at 3.

<sup>&</sup>lt;sup>16</sup> Elgin Ex. 6 (Keester direct) at 7.

<sup>&</sup>lt;sup>17</sup> Elgin Ex. 6 (Keester direct) at 8.

<sup>&</sup>lt;sup>18</sup> Recharge Ex. 1.

<sup>19</sup> Recharge Ex. B (Thornhill direct) at 19.

<sup>&</sup>lt;sup>20</sup> Recharge Ex. B (Thornhill direct) at 56.

phasing,<sup>21</sup> and the City of Bastrop (Bastrop), which is authorized to pump 2,000 acre-feet per year.<sup>22</sup> Bastrop's application was the subject of a contested case hearing. The Proposal for Decision (PFD) in that contested case was officially noticed in this case.<sup>23</sup> The Brown Landowners' and the Hernandezes' wells are exempt from District regulation. The Hernandezes' well is in the Calvert Bluff Formation, which overlays the Simsboro. The Brown Landowners' wells are scattered around the area.<sup>24</sup>

# C. The Draft Operating Permits

The GM's Draft Operating Permits contain sixteen special conditions, several of which are at the heart of this dispute. These special conditions first require that LCRA enter into a monitoring well agreement within a certain time. The Draft Operating Permits provided a 90-day deadline to enter into this agreement, but in response to LCRA's arguments, the Revised Draft Operating Permits extended the deadline to 180 days.<sup>25</sup>

The special conditions in both the Draft Operating Permits and Revised Draft Operating Permits also divide the withdrawal of groundwater into four phases, three of which involve pumping. Withdrawal is not allowed during Phase I, which requires LCRA to add new monitoring wells and to comply with the monitoring well agreement required in another special condition.

Once the monitoring wells are in place, LCRA may move to Phase II. Phase II authorizes the withdrawal from two wells (Wells 7 and 8) of an aggregated annual amount of up to 8,000 acre-feet of water, with an aggregated maximum rate of withdrawal of 6,000 gallons per minute. LCRA would not be authorized to withdraw more water per year than the amount LCRA has a

<sup>21</sup> Recharge Ex. 6.

<sup>22</sup> Recharge Ex. 8.

<sup>&</sup>lt;sup>23</sup> Application of City of Bastrop for an Operating Permit for Well No. 1 in Bastrop County, Texas, SOAH Docket No. 952-15-3851 (July 26, 2016).

<sup>&</sup>lt;sup>24</sup> Environmental Stewardship's standing was based on the wells of some of its members.

<sup>&</sup>lt;sup>25</sup> Revised Draft Operating Permit, Special Condition No. 1.

contract (under the Draft Operating Permits), or binding commitment (under the Revised Draft Permits) to provide to an authorized place of use.

Three years after permit issuance, LCRA may then request to be moved to Phase III, under which the aggregated annual withdrawal amount could be increased to 15,000 acre-feet of water per year from four wells with an aggregated maximum rate of withdrawal of 10,000 gallons per minute. To move to Phase III, LCRA must show it has withdrawn an aggregate amount of acre-feet per year from a combination of one or more of the aggregated wells during two consecutive twelve-month periods. In the Draft Operating Permits, this amount was 8,000 acre-feet per year; in the Revised Draft Operating Permits, it is 4,000 acre-feet. Once again, LCRA must show binding contracts or commitments. The utility and clarity of the formula the GM proposed to use in advancing LCRA from one phase to another is disputed. Discussion of the phasing formula is set out in Section G, below.

Finally, LCRA may request to move to Phase IV, under which the aggregated annual withdrawal may be increased to an amount not to exceed 25,000 acre-feet per year from all eight wells, with an aggregated maximum rate of withdrawal of 18,000 gallons per minute. To reach this phase, under the Revised Draft Permit, LCRA must show binding contracts or commitments. LCRA must also show it has withdrawn at least an aggregate amount of at least 11,250 acre-feet<sup>26</sup> per year from a combination of one or more of the aggregated wells during three consecutive twelve-month periods. As with Phase III, the GM's proposed formula is in dispute.

Additionally, the special conditions in the Revised Draft Permits require LCRA to provide written contracts or commitments within five years of beginning to pump under Phase II; to submit drought contingency and water conservation plans for certain end users; to be subject to future production limits the District imposes; to pay production fees; and to conduct 36-hour pump tests for each well.

<sup>&</sup>lt;sup>26</sup> The 11,250 amount is contained in the Revised Draft Operating Permits. The Draft Operating Permits required a withdrawal of at least 15,000 acre-feet per year.

Unlike the Draft Operating Permits, the Revised Draft Operating Permits' special condition 14 requires a pump test for each new well.<sup>27</sup> This special condition requires that "[p]rior to the operation of any of the Aggregated Wells, [LCRA] shall complete a 36-hour pump test for each new well that complies with District Rule 5.1.B(5) and report the results of the test to the District."

Under both the Draft Operating Permits and the Revised Draft Permits, wells must be sited within 100 feet of the location identified in the Application, and LCRA is granted a variance for the time limits for completion of permitted wells or well operation. Both versions of the Draft Permits required LCRA to provide the GM with the well-design specifications for his approval. Between the Draft Operating Permits and the Revised Draft Permits, the GM changed the timeline for LCRA to provide that information.

# D. The Draft Transport Permits

The Draft Transport Permits authorize LCRA to transport the water it pumps in the District outside the District. Following LCRA's Application amendment, Travis County is the only county where LCRA seeks to transport water. A special condition in the Draft Transport Permits that prohibits transporting groundwater via the bed and banks of a river remains in dispute.

## III. APPLICABLE LAW

In Texas, a landowner owns the groundwater below the surface of his or her land as real property and is entitled to drill for and produce that groundwater, subject to a groundwater conservation district's well-spacing and production restrictions, so long as the drilling and production does not cause waste or malicious drainage of other property, or negligently cause

<sup>&</sup>lt;sup>27</sup> The Draft Operating Permits were ambiguous about whether a pump test was required before the operation of each well or before the operation of the first well. The change in the Revised Draft Operating Permits appears to be an uncontroversial clarification of the earlier special condition.

subsidence.<sup>28</sup> Groundwater conservation districts, which are described as the state's preferred method of groundwater management, have the following obligations:

to protect property rights, balance the conservation and development of groundwater to meet the needs of this state, and use the best available science in the conservation and development of groundwater through rules developed, adopted, and promulgated by a district in accordance with [chapter 36].<sup>29</sup>

Chapter 36 of the Texas Water Code (Code) outlines the process by which landowners obtain the right to produce their groundwater within groundwater conservation districts. Under chapter 36, a groundwater conservation district, such as the District, "shall require a permit for the drilling, equipping, operating, or completing of wells," <sup>30</sup> except for exempt wells. <sup>31</sup>

Before granting or denying an operating permit, a groundwater conservation district must consider whether:

- (1) the application conforms to the requirements prescribed by [Code chapter 36] and is accompanied by the prescribed fees;
- (2) the proposed use of water unreasonably affects existing groundwater and surface water resources or existing permit holders;
- (3) the proposed use of water is dedicated to any beneficial use;
- (4) the proposed use of water is consistent with the district's approved management plan;
- (5) if the well will be located in the Hill Country Priority Groundwater Management Area, the proposed use of water from the well is wholly or partly to provide water to a pond, lake, or reservoir to enhance the appearance of the landscape;

<sup>&</sup>lt;sup>28</sup> Tex. Water Code § 36.002(a), (b), (d).

<sup>&</sup>lt;sup>29</sup> Tex. Water Code § 36.0015(b).

<sup>&</sup>lt;sup>30</sup> Tex. Water Code § 36.113(a).

Exempt wells are wells used solely for domestic use or for providing water for livestock or poultry and that are located on a tract of land larger than 10 acres and cannot produce more than 25,000 gallons of groundwater a day. Tex. Water Code § 36.117(b)(1). Certain wells related to oil rigs and mining are also exempt. Tex. Water Code § 36.117(b)(2),(3).

- (6) the applicant has agreed to avoid waste and achieve water conservation; and
- (7) the applicant has agreed that reasonable diligence will be used to protect groundwater quality and that the applicant will follow well plugging guidelines at the time of well closure.<sup>32</sup>

The District has adopted similar rules for permit applications.<sup>33</sup> In deciding whether to grant an application, approve an application with terms other than those requested, or deny the application, the District's rules require it to consider, in addition to the seven factors set out above, the following:

- (8) whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition, considering:
  - (a) the Modeled Available Groundwater determined by the [Texas Water Development Board (TWDB)] executive administrator;
  - (b) the TWDB executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by District Rules and Texas Water Code § 36.117;
  - (c) the amount of groundwater authorized under permits previously issued by the District;
  - (d) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District; and
  - (e) yearly precipitation and production patterns.
- (9) whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells; [and]
- (10) whether the applicant has a history of non-compliance with District Rules and chapter 36 of the Texas Water Code, including any record of

<sup>&</sup>lt;sup>32</sup> Tex. Water Code § 36.113(d). Identical provisions are found in Rule 5.2.D of the District's rules.

<sup>&</sup>lt;sup>33</sup> The District's Rules were admitted into evidence as GM Ex. 9, and are also available at <a href="https://www.lostpineswater.org/DocumentCenter/View/127/LPGCD-Rules---Adopted-10-16-19">https://www.lostpineswater.org/DocumentCenter/View/127/LPGCD-Rules---Adopted-10-16-19</a> (last visited March 23, 2020).

enforcement actions against the applicant for violation of District Rules or chapter 36.<sup>34</sup>

Groundwater conservation districts may adopt rules regulating the spacing of wells and the production of groundwater.<sup>35</sup> When promulgating rules that limit groundwater production, a groundwater conservation district "may preserve historic or existing use before the effective date of the rules," subject to the district's management plan.<sup>36</sup>

Under chapter 36, groundwater conservation districts are not required to adopt rules that provide for correlative rights—in other words, allocating to each landowner a proportionate share of available groundwater for production from the aquifer based on the number of acres the landowner owns.<sup>37</sup>

#### IV. ISSUES REGARDING OPERATING PERMITS

Of the Protestants, Elgin, Environmental Stewardship, and Brown Landowners argue that the Applications should be denied, Recharge, Aqua, and Environmental Stewardship argue that the operating permits should be limited to 8,000 acre-feet per year, which is also the limit in the first phase of pumping (Phase II) under the Draft Permits. Elgin suggests the limit, if the permits are issued, should be 7,000 acre-feet per year; for Brown Landowners, that total is 6,000 acre-feet. The Hernandezes argue that the permit limit should be 10,000 acre-feet per year. Recharge, Elgin, and the Mr. Hernandez want the limits to be expressly tied to other factors.

In making their arguments, the parties focus on the following factors set out in Code chapter 36 and the District's rules:

• Whether the proposed use of water unreasonably affects existing groundwater water resources or existing permit holders;

<sup>&</sup>lt;sup>34</sup> District Rule 5.2.D.

<sup>35</sup> Tex. Water Code § 36.116(a).

<sup>&</sup>lt;sup>36</sup> Tex. Water Code § 36.116(b).

<sup>&</sup>lt;sup>37</sup> Tex. Water Code § 36.002(d)(3).

- Whether the proposed use of water unreasonably affects existing surface water resources or existing permit holders;
- Whether the conditions and limitations in the Operating Permit minimize as
  far as practicable the drawdown of the water table or the reduction of
  artesian pressure, or lessen interference between wells; and
- Whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition.

The parties generally do not address the remaining factors, which will be set out in the findings of fact and conclusions of law, but not discussed further in this PFD.

## A. Unreasonable Effects on Existing Groundwater Resources or Permit Holders

In deciding whether to issue an operating permit, the District must consider whether "the proposed use of water unreasonably affects existing groundwater . . . resources or existing permit holders."<sup>38</sup>

Many of the parties argue that the GM improperly determined that LCRA's proposed pumping would not cause an unreasonable effect on groundwater resources or existing permits. LCRA and the GM disagree. In arguing about unreasonable effects, the parties focus on four aspects of the examination. First, Elgin and Aqua disagree with LCRA and the GM about whose use—LCRA's or all permit holders'—should be considered in making this determination. Second, the parties disagree about what "unreasonably affects" means. Third, they disagree about which model should be used in determining whether the effects of pumping are unreasonable. Finally, the parties disagree about whether LCRA sufficiently modeled local effects.

After reviewing the four issues, the ALJs conclude that the District should look at LCRA's use, not the full permitted use; that the definition of "unreasonably affects" provided by LCRA's expert is too narrow; that the new Groundwater Availability Model (GAM) approved by the Texas

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<sup>38</sup> Tex. Water Code § 36.113(d)(2), District Rule 5.2.D(2).

Water Development Board—and not the previous model that it superseded—should be used in modeling effects; and that, finally LCRA's modeling sufficiently showed that LCRA's pumping should not cause unreasonable effects on groundwater.

#### 1. Whose Use Should Be Considered

Before determining whether "a proposed use" would cause unreasonable impacts, the ALJs must first decide whose use—LCRA's proposed use or all permitted use—should be considered.

## a. Parties' Arguments

LCRA and the GM contend that in determining the effect of the use, the District must examine the use proposed in the Applications, not the use proposed in the Applications combined with all other permitted use in the District. Aqua and Elgin strongly disagree. Elgin points to another factor, which requires looking at District-wide pumping to argue that this factor envisions looking at District-wide pumping, as well.<sup>39</sup>

#### b. ALJs' Analysis

The ALJs will decide this issue by looking at both precedent and the language of the statute and rule. In an earlier contested case hearing for Bastrop's application with the District for an operating permit, the ALJ concluded that only the applicant's use should be examined when determining whether proposed use would lead to unreasonable effects. That ALJ concluded, "District Rule 5.2.D(2) only requires the Board to consider whether the [applicant's] proposed use of water unreasonably affects existing groundwater, not cumulative pumping under the [applicant's] permit and other existing users at a 100% pumping capacity." He noted that "Rule 5.2.D. and Code § 36.113(d)(2), on which it is based, focus on the impact of the specific application, not cumulative pumping under the requested permit and other existing users."

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<sup>&</sup>lt;sup>39</sup> See Closing Arguments of City of Elgin (Elgin's Closing) at 20.

The ALJs agree with this conclusion. The language of the statute and the rule requires an examination of "the proposed use of water," which suggests a concern with the use represented by the application. The language of "proposed use" is the same language used in other factors that only refer to an applicant's use, such as whether "the proposed use of water is dedicated to any beneficial use" and, for proposed wells in the Hill Country Priority Groundwater Management Area, whether "the proposed use of water from the well is wholly or partly to provide water to a pond, lake or reservoir to enhance the appearance of the landscape."<sup>40</sup>

When the District intended to look at use beyond that proposed in an application, it made that clear. For example, the District must consider "the amount of groundwater authorized *under permits previously issued* by the District," when analyzing whether the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable desired future condition (DFC).<sup>41</sup>

Accordingly, the ALJs conclude that the analysis of whether the proposed use unreasonably affects groundwater or existing permits must focus on LCRA's proposed pumping, not District-wide permitted pumping.

## 2. The Definition of "Unreasonably Affect"

## a. Parties' Evidence and Arguments

Only LCRA provided a definition of the term "unreasonably affect," which is not defined in either the Code or the District Rules. LCRA's hydrogeology expert, Dr. Young, provided a definition in his testimony. According to Dr. Young, only the following, when resulting from drawdown solely from the pumping well, would constitute unreasonable impacts:

<sup>&</sup>lt;sup>40</sup> Tex. Water Code § 36.113(d)(3), (5).

<sup>&</sup>lt;sup>41</sup> District Rule 5.2.D(8)(c) (emphasis added).

- Drawdown that produces land subsidence that (a) threatens the structural integrity of existing pipelines, building, or other infrastructure; (b) causes land from being used for its intended use; or (c) creates a drainage problem;
- Intrusion of surface water or groundwater from another aquifer into the pumped aquifer that degrades groundwater quality in the pumped aquifer so it would not be suitable for its intended use or its potential use;
- Sufficient reduction (or depletion) of the saturated thickness of an aquifer that prevents the intended use of the aquifer;
- Drawdowns in an aquifer that causes the groundwater conservation district to exceed a DFC for the aquifer; or
- Drawdown from a permitted well that does not meet the District's well spacing or property boundary set-back requirements.<sup>42</sup>

Elgin's and Aqua's expert witness, Michael Keester, declined to offer an opinion on whether certain effects would be unreasonable. The other parties do not define the term in their arguments.

#### b. ALJs' Analysis

Although Dr. Young offered the only definition of "unreasonably affects," the ALJs will not simply accept Dr. Young's definition. Dr. Young is a hydrogeologist, <sup>43</sup> not an expert on statutory construction. The ALJs find Dr. Young's definition too narrow. While the ALJs agree that all five of Dr. Young's instances of unreasonable impacts would, indeed, be unreasonable, they conclude that impacts short of preventing the intended use of the aquifer or causing a DFC to be exceeded by one's own pumping could still be unreasonable. An unreasonableness determination is necessarily fact-specific. With that, the ALJs turn to the evidence relating to effects of LCRA's proposed pumping on the parties' wells, which requires first looking at the modeling, or the GAM.

<sup>&</sup>lt;sup>42</sup> LCRA Ex. 28 (Young direct) at 36.

<sup>&</sup>lt;sup>43</sup> LCRA Ex. 28 (Young direct) at 8.

## 3. Which Groundwater Availability Model Should Be Used

## a. Parties' Evidence and Arguments

What effects are predicted from LCRA's pumping depends on which model is used. Much of the testimony at hearing involved issues relating to the GAM, which is "a computer-based, three-dimensional numerical groundwater flow model that is designed to simulate the dynamics of the groundwater flow for a specific area in Texas." GAMs for all major and most minor aquifers were developed by the Texas Water Development Board (TWDB) as part of state water planning.

In 2004, the Central Queen City-Sparta GAM was developed and was then used by the District. In 2018, the TWDB updated the model, which is now called the Central Carrizo-Wilcox GAM.<sup>45</sup> For purposes of this Proposal for Decision, the 2004 GAM will be called the "Old GAM," and the 2018 GAM will be called the "New GAM."

The GM's expert witness Dr. William Hutchison described both GAMs as using a three-dimensional grid of cells, with rows, columns, and layers to represent the structure of an aquifer. The rows and columns represent the area of the aquifers, such as would be seen on a map, and the layers represent the individual aquifers and intervening low-permeability units.

Dr. Hutchison described how the GAM works:

Boundaries of the aquifer and the thicknesses and depths of the layers are represented in the grid based on the best information available to the modelers. Properties of the aquifer—i.e., numerical values such as horizontal and vertical hydraulic conductivity—that control how water moves and how water levels change in response to stresses to the aquifer—e.g., pumping from wells—are applied to each model cell. Processes that add and subtract water to and from the model, including recharge to the various aquifers, movement in and out of the model from areas outside of the model boundaries, discharge to streams and springs, evaporation and transpiration (i.e., uptake of water from plants), and

<sup>44</sup> GM Ex. 11 (Hutchison direct) at 10.

<sup>45</sup> GM Ex. 11 (Hutchison direct) at 10.

pumping from wells is also included in a separate set of text files with one text file representing each process, e.g., a wel file (or "welfile") for the well pumping, a .rch file for the recharge, etc. In model terminology, the processes that add and subtract water from the model domain are called "stresses." The GAMS are "transient" models, in that they simulate changes throughout time, e.g., through an historical period and throughout the multi-decadal planning period. Time in the model is simulated by a set of stress periods. In the case of the Old GAM and New GAM, each stress period represents a single year.

The actual functions of the aquifer—i.e., the movement of water through the aquifer, changes in water stored within the aquifer layers, and changes in water levels throughout time—are simulated by a set of equations that basically calculate the hydraulic head, i.e. water level, in each model cell in each stress period. Calculating hydraulic head is specifically what the GAMs do, and the changes in hydraulic head from one cell to the next, and from one stress period to the next, can then be used to determine fluxes of water throughout the model and changes in hydraulic head, i.e., drawdown, throughout time. 46

Several changes were made between the Old GAM and the New GAM. Among those changes is the grid cell. In the Old GAM, the grid cells are consistently spaced at one square mile. In contrast, the New GAM has a variable grid that that reduces the cell size in the area of selected surface water features. The largest cell size in the New GAM is one square mile (the same as the Old GAM), whereas the smallest size is 40 acres.<sup>47</sup> Although these changes were made to the grid cell sizes, the grid cell size for the area around LCRA's proposed production area remains one square mile.

GM witness Dr. Hutchison testified that the calibration of the New GAM is better than the Old GAM in Bastrop County, and that impacts from production in Bastrop County may occur in Lee County. LCRA's expert witnesses Van Kelly and Dr. Steven Young, along with Recharge expert witness Michael Thornhill, also agreed that the New GAM was an improvement over the Old GAM. These witnesses all agreed that the Old GAM did not accurately predict drawdown

<sup>&</sup>lt;sup>46</sup> GM Ex. 11 (Hutchison direct) at 11.

<sup>&</sup>lt;sup>47</sup> GM Ex. 11 (Hutchison direct) at 13.

<sup>&</sup>lt;sup>48</sup> GM Ex. 11 (Hutchison direct) at 11. See also Tr. at 1489 ("given all those factors, [the New GAM] was a better model.").

<sup>&</sup>lt;sup>49</sup> Recharge Ex. B (Thornhill direct) at 18.

within the District. When LCRA filed its application, the Old GAM was in place, and it was the model the GM used in analyzing the Application. Since that time, both the GM's and LCRA's experts have analyzed the application using the New GAM.

In contrast, Aqua's and Elgin's joint expert, Michael Keester, relied on the Old GAM in his report and testimony.<sup>50</sup> Mr. Keester testified that while the New GAM was better calibrated for high-volume pumping near the Bryan-College Station area, he did not believe it was better calibrated for high-volume pumping near LCRA's proposed pumping.<sup>51</sup> He also testified that the New GAM has the potential to underestimate drawdown in the updip areas, and stated that this limitation was specifically noted in the New GAM report.<sup>52</sup> On cross-examination, it was brought out that, when testifying on behalf of End-Op (now Recharge), Mr. Keester had testified about problems with the Old GAM, specifically, that the Old GAM overstates drawdown in the outcrop.<sup>53</sup>

## b. ALJs' Analysis

Based on the overwhelming consensus of the evidence, the ALJs find that the New GAM, as opposed to the Old GAM, is the better model to use to predict the effect of LCRA's pumping. The question then becomes whether LCRA's modeling, using the New GAM, was sufficient to show that its use would not cause unreasonable effects on groundwater or existing wells.

## 4. The Modeling Does Not Show Unreasonable Effects

<sup>&</sup>lt;sup>50</sup> Mr. Keester testified that he redid his analysis using the new GAM, but did not provide the results of that redone analysis. Aqua Ex. 4 (Keester direct) at 12.

<sup>&</sup>lt;sup>51</sup> Tr. at 747-48.

<sup>52</sup> Tr. at 747-48.

<sup>53</sup> Tr. at 753.

## a. Parties' Evidence and Arguments

The parties opposed to the Applications argue that LCRA has failed to present sufficient evidence on the effects its pumping would have on existing groundwater resources and permit holders. LCRA and the GM disagree.

The parties and the witnesses agree that the GAM is a regional planning tool that has limited use when it comes to looking at local effects.<sup>54</sup> Nevertheless, LCRA argues that the New GAM should still be used to evaluate effects. Its expert Dr. Young testified, "despite these limitations, the GAM is an appropriate tool to evaluate unreasonable impacts and represents the best available tool for such evaluation."<sup>55</sup>

The GM also argues that modeling performed under the New GAM is sufficient to allow the District to issue a permit, when that modeling is combined with permit terms that provide for monitoring and phasing.

When analyzing impacts using the New GAM, GM expert Dr. Hutchison predicted drawdowns in the Simsboro Formation from LCRA's wells of approximately 8 feet in 2022; 14 feet in 2025; and 30 feet in 2070. For the Calvert Bluff, he predicted drawdowns of 2 feet in 2022; 4 feet in 2025; and 15 feet in 2070. In doing this analysis, he analyzed approximately 1,800 wells. His analysis does not, however, specifically address any of the wells owned by any of the parties here.

Aqua's and Elgin's expert Mr. Keester testified that he used a multi-step analysis to determine the effect of the proposed pumping on Aqua's and Elgin's wells. His four steps were as follows. First, he modeled using the Old GAM. Second, he "used an analytic model to improve

<sup>54</sup> LCRA Ex. 28 (Young direct) at 25.

<sup>55</sup> LCRA Ex. 28 (Young direct) at 25-26.

<sup>&</sup>lt;sup>56</sup> GM Ex. 13 at 20.

<sup>&</sup>lt;sup>57</sup> Tr. at 1278; GM Ex. 13 at 18.

the estimate of the water level at the grid scale to the well scale." Third, he "applied another analytic model to simulate the effect [Aqua's or Elgin's] pumping would have on itself, that is, interference drawdown." Fourth, to "estimate the water level declines during peak production, [he] used a pumping rate that was 12 percent above the annual average pumping rate in the analytic model of interference drawdown." 58

Mr. Keester performed his analysis for peak summer demands with four alternatives: the Baseline (which consisted of the Modeled Available Groundwater calculated by the TWDB); the Baseline plus LCRA pumping; the Baseline plus Recharge's pumping; and the Baseline plus LCRA's and Recharge's pumping.<sup>59</sup> As discussed above regarding whose use should be considered, the ALJs do not believe using Recharge's possible pumping is appropriate in this analysis of the effects of LCRA's permits.

Mr. Keester testified that he used the Old GAM and agreed that, using the New GAM, the drawdowns would be smaller than those he modeled. He added that he believed the level of uncertainty with the New GAM would be too high.<sup>60</sup>

On rebuttal, LCRA's expert Dr. Young testified about several problems he found with Mr. Keester's approach. Among these problems was that Mr. Keester (1) reported results as reflecting LCRA's impacts when those results included all of Recharge's pumping; (2) used the Old GAM instead of the New GAM; and (3) inadequately described the models he used as part of his four-step process. Other problems Dr. Young noted were that, although Mr. Keester increased the levels for peak summer demands, he did not reduce the pumping amount he modeled. Dr. Young also criticized Mr. Keester's correction for local interference among Aqua's own wells because he was "unaware of any proven best-method for making such a correction." On the content of the

<sup>&</sup>lt;sup>58</sup> Aqua Ex. 4 (Keester direct) at 11.

<sup>&</sup>lt;sup>59</sup> Aqua Ex. 8.

<sup>60</sup> Aqua Ex. 4 (Keester direct) at 26.

<sup>61</sup> LCRA Ex. 55 (Young rebuttal) at 13.

<sup>62</sup> LCRA Ex. 55 (Young rebuttal) at 17.

In Dr. Young's rebuttal testimony, he testified that he performed several model runs with the New GAM.<sup>63</sup> He also testified that he updated his runs to improve the accuracy of the water level in Aqua's and Elgin's Simsboro wells.<sup>64</sup> He testified that his analysis factored in well-design factors, such as pump settings, well constrictions, and location of well screens for Aqua's and Elgin's wells.<sup>65</sup>

Dr. Young provided graphs that show simulated water levels following his analysis for a baseline, a baseline with LCRA, a baseline with Aqua pumping its permitted amounts and with Elgin pumping its permitting amounts, a baseline with Aqua (or Elgin) plus LCRA, and finally for LCRA's pumping under the Old GAM.<sup>66</sup>

Dr. Young testified that, under his modeling using the baseline plus LCRA, the water level for all of Aqua's wells would remain above the pump setting.<sup>67</sup> For one well, the combination of the baseline pumping plus LCRA's and Aqua's full pumping would result in the water level dropping below the pump setting in approximately 2050, but remaining well above the constriction point.<sup>68</sup>

Dr. Young also predicted, as a result of his simulations, that LCRA's pumping along with the baseline pumping would not cause the water levels to drop below the elevation of the pump in any of Elgin's wells.<sup>69</sup> For Elgin's two wells in the outcrop, Dr. Young predicted that LCRA's pumping would cause less than one foot of drawdown.<sup>70</sup> For the two wells in the downdip, he

<sup>63</sup> LCRA Ex. 55 (Young rebuttal) at 18.

<sup>64</sup> LCRA Ex. 55 (Young rebuttal) at 15.

<sup>65</sup> LCRA Ex. 55 (Young rebuttal) at 20.

<sup>66</sup> LCRA Ex. 58 (Aqua), LCRA Ex. 59 (Elgin).

<sup>67</sup> LCRA Ex. 55 (Young rebuttal) at 21.

<sup>68</sup> LCRA Ex. 55 (Young rebuttal) at 22.

<sup>69</sup> LCRA Ex. 55 (Young rebuttal) at 24.

<sup>&</sup>lt;sup>70</sup> LCRA Ex. 55 (Young rebuttal) at 25.

predicted that, in 2070, LCRA's pumping would contribute 29% of the total drawdown for one well and 27% for the other.<sup>71</sup>

#### b. ALJs' Analysis

The ALJs agree with Dr. Young's criticism of Mr. Keester's approach. The Old GAM has been shown to be less accurate, and an analysis based on that will not suffice. Yet, it is not enough that LCRA merely criticize the other experts, however. As the party seeking a permit, it does have a burden of proof. The parties opposed to the Applications argue that LCRA has failed to present sufficient evidence on the effects its pumping would have on existing groundwater resources and permit holders. The ALJs agree that LCRA's direct case is light on detail about other parties' wells; however, LCRA presented a more targeted analysis in its rebuttal case.

The ALJs conclude that the analysis conducted by Dr. Young is sufficient to allow the District to determine whether LCRA's proposed use would unreasonably affect existing groundwater resources or permit holders. Given the modeling, the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders. The fact that real-world effects can differ from predicted modeling is addressed by the monitoring and phasing aspects of the Draft Permits, which will be addressed below.

## B. Unreasonable Effects on Existing Surface Water Resources

As part of its review of LCRA's permit requests, the District must consider whether the proposed use of water unreasonably affects surface water resources. Three parties, LCRA, the GM, and Environmental Stewardship, provided evidence and testimony relating to the issue. All three found that LCRA's requested pumping may have some impact on surface water resources. Environmental Stewardship's and the GM's analysis both show potential loss of surface water to the groundwater formations in Bastrop County by around 2050. Environmental Stewardship

<sup>&</sup>lt;sup>71</sup> LCRA Ex. 55 (Young rebuttal) at 25.

<sup>72</sup> Tex. Water Code § 36.113(d)(2); District Rule 5.2.D(2).

argues that the impacts to surface water resources will be unreasonable after the first 8,000 acre-feet of pumping. However, LCRA counters that unreasonable impacts are not defined, and that under LCRA expert's definition, the impacts would not be considered unreasonable. The GM maintains that impacts cannot accurately be determined until high-volume pumping in the District has begun—after the first phase of pumping (Phase II) is reached—and that is the purpose of having phases.

The ALJs find that LCRA's proposed pumping, standing alone, will not cause unreasonable impacts to surface water resources, but that certain changes to the Revised Draft Operating Permits are required for the District to monitor potential impacts to surface water resources.

## 1. Environmental Stewardship's Arguments

Environmental Stewardship posits that the best available science for evaluating impacts to surface water resources is the GAM.<sup>73</sup> Environmental Stewardship elaborates that while impacts cannot be quantified with specificity due to limitations of the GAM, all three parties that submitted information regarding this factor found that modeling LCRA's proposed withdrawals using the GAM showed impacts to the surface water system.<sup>74</sup> Environmental Stewardship estimated that LCRA's pumping would result in a loss of .5% of average annual flows to the Colorado River and that during periods of low flows (Nov. 1963 and Mar. 1964) the amount lost would be around 8%.<sup>75</sup> Environmental Stewardship and the GM both used the GAM to analyze the cumulative impacts of LCRA's permits combined with all other users in Bastrop County (the Base Case) and both show that District-wide proposed pumping of groundwater may result in loss of surface water to the groundwater formations in Bastrop County by around 2050.<sup>76</sup>

<sup>&</sup>lt;sup>73</sup> Environmental Stewardship's Closing Arguments (Environmental Stewardship's Closing) at 5.

<sup>&</sup>lt;sup>74</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>75</sup> Environmental Stewardship Ex. 100 (Rice direct) at 10.

<sup>&</sup>lt;sup>76</sup> Environmental Stewardship's Closing at 5.

Environmental Stewardship argues that LCRA's analysis improperly excludes the cumulative impacts and looks only at LCRA's impacts to surface water. Environmental Stewardship argues that ignoring cumulative impacts ignores the reality of what the total impacts to the surface water resource will be, and that considering the cumulative impacts is the only way for the District to consider the application in the context of the consistency with the District Management Plan as required by District Rule 5.2.D.(4). Further, Environmental Stewardship disagrees with any reliance on the *City of Bastrop* PFD, which considered only Bastrop's impacts and not cumulative impacts because that permit was for a much smaller quantity of water (2,000 acre-feet). Environmental Stewardship also takes issue with LCRA's decision not to use the "shallow flow zone" feature or the latest pumping file when running models using the New GAM. 80

Environmental Stewardship's expert Joseph Trungale used the GAM projections of its other expert, George Rice, 81 which show loss of surface water to the groundwater formations in Bastrop County. 82 He used the surface water availability model (WAM) to examine what the impacts of the estimated losses of surface water would be to the reliability of senior water rights and to instream flow conditions in the Colorado River. 83 Based on the WAM modeling, he concluded that LCRA's pumping and resultant reduction in surface water flows would unreasonably affect existing surface water rights holders and the environment. 84

Environmental Stewardship urges denial of the permits, arguing that the GM's Draft Operating Permits ignore the best available science (the GM's GAM analysis), which shows that

<sup>&</sup>lt;sup>77</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>78</sup> Environmental Stewardship's Reply to Closing Arguments (Environmental Stewardship's Reply) at 3.

<sup>&</sup>lt;sup>79</sup> Environmental Stewardship's Reply at 2-3.

<sup>80</sup> Environmental Stewardship's Reply at 6.

<sup>81</sup> Mr. Rice was also retained by the Brown Landowners.

<sup>82</sup> Environmental Stewardship's Reply at 8.

<sup>83</sup> Environmental Stewardship's Reply at 8.

<sup>&</sup>lt;sup>84</sup> Environmental Stewardship's Closing at 5.

the permits will unreasonably affect surface water resources in around 2050.<sup>85</sup> Environmental Stewardship argues that LCRA should not receive permits for even a portion of its total request, because it must meet the burden to prove the full amount of water requested, or receive none at all.<sup>86</sup> In the alternative, Environmental Stewardship requests the permits (which include phases), to require District Board approval of any GM recommendation for LCRA to proceed past the second phase, include provisions for notice and an opportunity for protestants to have a hearing on any decisions of the District.<sup>87</sup> Environmental Stewardship also requests that the Draft Operating Permits include requirements for LCRA to enter into a special surface/groundwater monitoring network agreement separate from the GM proposed Monitoring Well Agreement. The new surface/groundwater monitoring network agreement would provide data to the GM and the District in deciding whether to allow LCRA to proceed past Phase II.<sup>88</sup> Lastly, Environmental Stewardship suggests that LCRA's permits include requirements that LCRA implement a work plan set forth in a report conducted by LCRA witness Dr. Young which he had previously developed for the area.<sup>89</sup>

## 2. GM's Arguments

Dr. Hutchison, the GM's expert, used the GAM to evaluate impacts to surface water resources. 90 The GM argues that the GAM is the best available science for conducting such evaluations and that expert model runs made by Dr. Hutchison using the New GAM indicate that pumping with the Base Case for the District will potentially reduce groundwater discharge to surface water. 91 Further, adding LCRA's proposed withdrawals to the Base Case could result in a condition where the groundwater would be recharged by surface water in the Colorado River

<sup>85</sup> Environmental Stewardship's Closing at 5.

<sup>86</sup> Environmental Stewardship's Reply at 14.

<sup>&</sup>lt;sup>87</sup> Environmental Stewardship's Reply at 13-14.

<sup>88</sup> Environmental Stewardship's Reply at 13-14.

<sup>&</sup>lt;sup>89</sup> Environmental Stewardship's Reply; Environmental Stewardship Ex. 301.

<sup>&</sup>lt;sup>90</sup> GM Ex. 11 (Hutchison direct) at 18.

<sup>91</sup> GM Ex. 11 (Hutchison direct) at 18.

and its tributaries in Bastrop County.<sup>92</sup> The GM agrees with Environmental Stewardship's assessment that under the modeling assumptions made by Dr. Hutchison and Environmental Stewardship expert Rice, the Colorado River could go from gaining to a losing stream by 2050.<sup>93</sup> Dr. Hutchison's GAM model runs show that half of LCRA's proposed pumping could be sourced from surface water after 2050.<sup>94</sup>

However, the GM argues that the GAMs (both the Old and New GAM) are limited as a predictive tool by the lack of high volume pumping data in the District and should not be relied upon to make accurate quantifications of impacts. The GM argues that the only conclusion to be made is that the GAM shows that surface water impacts from LCRA's and all other District users' potential pumping *are possible*. The GM is not opposed to including surface water monitoring in the well monitoring agreement with LCRA. He GM concludes that the permits can be protective of surface water by including surface water monitoring in the well monitoring agreement with LCRA and by using the phased approach to permitting. Further, the GM states that the Revised Draft Operating Permits' Special Condition 11 allows district-wide curtailment in the event of unreasonable impacts to surface water resources in the future.

#### 3. LCRA's Arguments

LCRA states that there is not specific guidance in State law or District Rules on the means by which a groundwater district should determine whether proposed permits will unreasonably

<sup>&</sup>lt;sup>92</sup> GM Ex. 13.

<sup>&</sup>lt;sup>93</sup> GM's Closing Brief (GM's Closing) at 30. A gaining stream is one that receives water from an aquifer. A losing stream is the reverse; in other words, where water from the stream flows into the aquifer. Environmental Stewardship Ex. 100 (Rice direct) at 8.

<sup>94</sup> GM Ex. 13.

<sup>95</sup> GM's Closing at 30.

<sup>&</sup>lt;sup>96</sup> GM's Closing at 31.

<sup>97</sup> GM's Closing at 30.

<sup>98</sup> GM's Closing at 30-31.

affect surface water resources.<sup>99</sup> Therefore, LCRA relies upon the conclusions of its witness, Dr. Young. Based upon his expertise as a hydrogeologist and environmental scientist, Dr. Young suggests impacts to surface water resources are only unreasonable if LCRA's pumping, standing alone without considering the contributing pumping of others, will cause (1) drawdown that results in capture of underflow; or (2) cause a change in the hydraulic gradient between the water level in the stream and the water level in an adjacent shallow groundwater flow that causes a persistent and substantial flow from surface water to the groundwater system.<sup>100</sup> In its analysis using the GAM model, LCRA estimates the drawdown resulting solely from LCRA's pumping to be about .3% of annual average flow of the Colorado River near Bastrop (with annual average flow of about 1.4 million acre-feet per year). With this predicted amount of drawdown being a relatively small portion of the total annual flow, Dr. Young concludes that neither of his identified unreasonable condition are possible.<sup>101</sup>

LCRA is critical of Environmental Stewardship's approach, and the validity of Environmental Stewardship witness Mr. Trungale's findings in particular. <sup>102</sup> LCRA argues that Environmental Stewardship's overly stringent approach has not been adopted in this District, or any other, and should be rejected. <sup>103</sup>

Regarding Environmental Stewardship's use of the GAM to estimate the impact of LCRA's proposed pumping on surface water resources, LCRA argues that Environmental Stewardship's inquiry improperly evaluated LCRA's proposed use in combination with all other groundwater production authorized by the District, instead of the impact of LCRA's use standing alone because Code § 36.113(d)(2) and District Rule 5.2.D(2) refer to only the unreasonable impacts caused by the "proposed use." LCRA also maintains that Environmental Stewardship's

<sup>99</sup> LCRA's Post-Hearing Closing Arguments (LCRA's Closing) at 30.

<sup>100</sup> LCRA's Closing at 30-31.

<sup>&</sup>lt;sup>101</sup> LCRA's Closing at 30-32.

<sup>&</sup>lt;sup>102</sup> LCRA's Post-Hearing Reply to Closing Arguments (LCRA's Reply) at 32-44.

<sup>&</sup>lt;sup>103</sup> LCRA's Reply at 32-34.

<sup>104</sup> LCRA's Reply at 33.

approach is inherently flawed because Environmental Stewardship witness Mr. Rice's analysis goes beyond the limited predictive capabilities of the GAM to model impacts by making oversimplified and incorrect assumptions. 105 LCRA asserts that the GAM cannot accurately capture the complexities and variabilities of river conditions and bank storage, specifically, because: (1) the GAM is an annual average condition and analysis of surface-groundwater interactions requires timesteps of hours or days; and (2) infiltration and unsaturated flows in the alluvium are not represented in the GAM. LCRA lists assumptions made by Mr. Rice that LCRA alleges appear to be designed to overstate the potential impacts of pumping including: (1) assuming that LCRA (and only LCRA) will pump at maximum rates every year for 50 years; (2) attributing all losses to LCRA even though his model shows losses prior to LCRA pumping; (3) including other pumpers besides LCRA; (4) omitting critical parts of the alluvium from a segment of the Colorado River that shows a net gain of water through 2070; and (5) adjusting pumping at LCRA's Lost Pines Power Park up to permitted limits without making similar adjustments to other users. 106 LCRA argues that the flaws of the modeling are demonstrated by the fact that the modeling shows levels of flow in certain tributaries that historical records indicate have not occurred even under natural conditions. 107

LCRA believes that Mr. Trungale relied upon Mr. Rice's flawed inputs to conduct his own flawed analysis using the WAM. <sup>108</sup> LCRA states Mr. Trungale's use of the "Run 3" version of the WAM for his analysis significantly understates the amount of water expected to be in the Colorado River and therefore overstates modeled impacts of LCRA's pumping on the surface water. <sup>109</sup> LCRA attributes the over-stated impacts to "Run 3" not accounting for historic or future expected real world conditions in the river. Instead, "Run 3" is a conservative estimate of water consumption because it assumes full use of all permitted water by every water right holder in the Colorado River

<sup>105</sup> LCRA's Reply at 35-38.

<sup>106</sup> LCRA's Reply at 37-38.

<sup>107</sup> LCRA's Reply at 39.

<sup>108</sup> LCRA's Reply at 39-44.

<sup>109</sup> LCRA's Reply at 40-41.

basin and 100% consumption of the water (with no return flows) which is not the historical or expected norm in the future. 110

LCRA also concludes that Mr. Trungale's use of the WAM to examine pumping impacts on instream flow requirements is overly simplistic and flawed. LCRA claims that even if Environmental Stewardship's quantifications in reduced surface water flows resulting from LCRA's pumping were accurate, Mr. Trungale's assessment of the impact to instream flows and the environment ignores consideration of actual historical subsistence flow data and the actual impact to wildlife habitat such as the Blue Sucker spawning area.<sup>111</sup>

## 4. ALJs' Analysis

The ALJs conclude that LCRA's pumping under the Revised Draft Operating Permits alone would not result in unreasonable effects on surface water resources. Accordingly, the Applications should not be denied on that basis. On the other hand, the ALJs agree with the GM and Environmental Stewardship that the District should include appropriate conditions in the operating permits to monitor whether LCRA's proposed pumping combined with District-wide pumping will cause unreasonable effects and to order curtailment when needed.

#### a. The Standard for Unreasonable Effects on Surface Water Resources

No party cited precedent or a legal definition of unreasonable effects to surface water resources, but LCRA witness Dr. Young proposed certain standards for what would constitute unreasonable effects. Under Dr. Young's definitions, unreasonable effects would be shown by pumping that: (1) causes a drawdown that results in the capture of underflow; or (2) causes a change in the hydraulic gradient between the water level in the stream and the water level in an adjacent shallow groundwater flow that causes a persistent and substantial flow from surface water

<sup>110</sup> LCRA's Reply at 40-41.

<sup>111</sup> LCRA's Reply at 43; LCRA Ex. 70.

to the groundwater system.<sup>112</sup> As they did regarding effects on groundwater, the ALJs note that there may be additional conditions that would constitute unreasonable effects, but agree that either condition would constitute unreasonable effects on surface water resources.

There is no requirement in law or the District's rules that requires the District to maintain groundwater flow of any amount into the surface water system. On the contrary, Texas courts have consistently held that groundwater can be pumped without protection of spring flow. Districts are, however, required to address conjunctive water management in their water management plans and in the adoption of the DFCs. Herefore, although cumulative effects of pumping are not relevant to the issue of unreasonable effects, those effects can, and should be, considered as part of the District's management, and the possibility exists that the District could curtail all users if necessary. In order to make those sorts of determinations, there will need to be monitoring, as discussed below.

# b. There is No Evidence in the Record that LCRA's Proposed Pumping, Standing Alone, Will Unreasonably Affect Surface Water Resources

No party argues that LCRA's proposed pumping, standing alone, will cause a loss of surface water in the Colorado River in Bastrop County to the groundwater system. At most, the parties who modeled the effects of LCRA's pumping found that it would cause a loss of discharges of groundwater into the surface waters, resulting in a loss of flow in the Colorado and its tributaries of .5% of the average annual flow of the Colorado River at Bastrop. <sup>115</sup> Environmental Stewardship also argued that such losses would be a greater percentage of the flows (up to 8%) during low flow conditions. <sup>116</sup> The ALJs find, based on the credible testimony of Dr. Young and supported by

<sup>112</sup> LCRA Ex. 28 (Young direct) at 40.

<sup>&</sup>lt;sup>113</sup> See Denis v. Kickapoo Land Co., 771 S.W.2d 235 (Tex. App.—Austin 1989, writ denied); Pecos County Water Control & Improvement District No. 1 v. Williams, 271 S.W.2d 503 (Tex. App.—El Paso 1954, writ ref'd n.r.e.).

<sup>&</sup>lt;sup>114</sup> Tex. Water Code §§ 36.1071(a)(4), 36.108(d)(4).

LCRA Ex. 28 at 41 (Dr. Young estimated losses of .2% of annual flow); Environmental Stewardship Ex. 100 (Rice direct) at 10. Mr. Rice estimated losses of .5% of annual flow and loss of 8% during low flows.

<sup>&</sup>lt;sup>116</sup> Environmental Stewardship Ex. 100 (Rice direct) at 10.

Dr. Hutchison, that extrapolations of the GAM model to low flow conditions are not appropriate because the GAM is a model that is based on annualized flows. Extrapolations improperly ignore many variables and the complexities of river conditions during different flow regimes. In sum, it has not been shown that LCRA's proposed pumping alone will cause unreasonable effects on surface water resources, and the permits should not be denied on that basis.

#### c. Cumulative Effects

The ALJs find that Dr. Hutchison's and Mr. Rice's GAM models show that the cumulative effects of LCRA's proposed pumping, combined with the District pumping base case, may cause significant losses of surface water to the groundwater system in Bastrop County by 2050, including up to half of LCRA's groundwater pumping being sourced by surface water. Such losses would be a "persistent and substantial flow from surface water to the groundwater system" and thus would meet the standards set forth by LCRA witness Dr. Young for unreasonable effects. However, the ALJs agree with Dr. Hutchison's (and others') conclusion that the GAM models are not accurate enough to predict such impacts with certainty, due to the lack of reliable high volume pumping data in Bastrop County.<sup>117</sup>

Because the ALJs do not find that the GAM is accurate enough to predict the loss of surface water with sufficient certainty or precision, the ALJs do not accept Environmental Stewardship's conclusion that LCRA's pumping will definitely cause unreasonable effects. Specifically, because the inputted surface water losses calculated by the GAM are not precise or certain enough to be used as reliable inputs in further analysis relating to surface water impacts, the ALJs do not make any findings relating to whether the methods Environmental Stewardship witness Mr. Trungale used, which relied upon those uncertain inputs, are appropriate evaluations.

Nevertheless, while the Old and New GAMs do not conclusively show future impacts, absent additional data, they are the most reliable tool available with which to make a determination

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<sup>117</sup> GM Ex. 11 at 16.

on the subject. The ALJs agree that the GAM modeling shows the possibility of future unreasonable effects on surface water resources caused by the cumulative effects of District-wide pumping, including LCRA's. Therefore, the District needs to monitor the impacts of groundwater pumping in order to have sufficient knowledge to be able to mitigate or prevent unreasonable effects. Details of this monitoring will be discussed in Section H, which addresses the Monitoring Well Agreement.

#### C. Well Drawdown and Interference

District Rule 5.2.D(9) requires consideration of "whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." Relatedly, the District Rules require large-volume wells, such as those proposed by LCRA, to be spaced more than 5,000 feet away from other wells in the same aquifer owned by a different owner. 118

## 1. Parties' Evidence and Arguments

LCRA's proposed wells are closely-spaced together on one portion of the Griffith League Ranch. According to LCRA's evidence, this was to respect the preference of the Boy Scouts as reflected in the deed. 119 LCRA argues that, consistent with the District Rules, these wells are more than 100 feet away from the nearest property line and will be spaced at least 5,000 feet from the nearest Simsboro well not owned by LCRA. LCRA also noted that its wells will be located where the aquifer is deepest, and that its wells, like Recharge's permitted nearby wells, will be located in some of the most transmissive parts of the Simsboro in the District. LCRA presented testimony that because the wells will be part of an aggregated system, it will be able to adjust pumping among

<sup>118</sup> District Rule 8.2(B).

<sup>&</sup>lt;sup>119</sup> LCRA Ex. 3 at 2 (granting LCRA the right to use the portion of the surface area designated as the Preferred Groundwater Development Area).

the wells to minimize reduction of artesian pressure. <sup>120</sup> LCRA noted that the pump test required by the Draft Operating Permits will reveal characteristics, and that the GM can restrict pumping if impacts are worse than anticipated, which will, in turn minimize impacts on wells. <sup>121</sup> LCRA argues that its compliance with the spacing rules, along with the pump tests and potential restriction shows that the Draft Operating Permits will lessen interference among wells.

LCRA also presented evidence about Recharge's permitted wells. It notes that modeling shows that LCRA's impacts on Recharge's well will be approximately the same as Recharge's impacts on LCRA's wells. 122

Recharge, whose permitted wells will be close to LCRA's proposed well field, argues that LCRA failed to establish that its Applications will minimize as far as practicable the interference between wells. Pecharge argues that, to the contrary, LCRA's close-space siting of its wells on a portion of the Griffith League Ranch property maximizes well interference. Recharge argues that it was improper for LCRA to concentrate all of its wells near the property line and as close to Recharge's pre-existing permitted well field as the District's spacing rules allow. Recharge further contends, "LCRA took advantage of a recent change to the District's spacing rules that allows a well owner to avoid the 5000-foot well spacing rule that applies to all other wells of this size." Recharge emphasizes that compliance with the District's spacing rules is not enough to lessen well interference. Recharge challenges LCRA's motives and emphasizes that LCRA's original experts used in studying the Griffith League Ranch site and obtaining the permits were not the same experts who testified at hearing.

Aqua and Elgin also argue that compliance with spacing rules is not enough to satisfy this requirement and contend that spacing rules do not override the permitting rule.

<sup>120</sup> LCRA Ex. 28 (Young direct) at 47.

<sup>&</sup>lt;sup>121</sup> Tr. at 583-592.

<sup>122</sup> LCRA Ex. 55 (Young rebuttal) at 40.

<sup>&</sup>lt;sup>123</sup> Recharge's Response to Closing Arguments (Recharge's Reply) at 8.

<sup>&</sup>lt;sup>124</sup> Recharge's Closing Argument (Recharge's Closing) at 2.

Elgin emphasizes that its wells "are relatively updip within the Simsboro when compared to LCRA's proposed wells," and expresses concern that updip migration of drawdown caused by downdip pumping may be underestimated in the New GAM.

The Hernandezes argue that lessening drawdown and interference should be addressed by monitoring and mitigation.

The GM argues that his phased approach presents a reasonable and adequate solution to the issue of drawdown and interference and disagrees that its phased approach only considers broad, District-wide impacts. The GM points to the spacing rules and the 36-hour pump test as permit conditions that would lessen well interference. He also argues that if the pump test shows that there would be adverse impacts, Special Condition 14 of the Revised Draft Permits authorizes the GM to lower the maximum rate of withdrawal.

## 2. ALJs' Analysis

The District's Rule requires consideration of "whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." Thus, under the District's rule, the obligation on the District is to "minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure," but only to "lessen interference between wells." Therefore, the standard is not whether interference between wells will be minimized as far as practicable, but rather whether it will be lessened. Similarly, the ALJs note that this Rule requires an inquiry into the terms of the Draft Permits, not just the Applications.

<sup>&</sup>lt;sup>125</sup> This rule is consistent with Code section 36.116, which authorizes a groundwater conservation district to regulate "in order to minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, to control subsidence, to prevent interference between wells, to prevent the degradation of water quality, or to prevent waste." Tex. Water Code § 36.116(a).

The ALJs agree that the Revised Draft Permits contain sufficient terms to lessen well interference. In particular, they find that the combination of pump tests, monitoring wells, and phasing, plus the GM's ability to curtail pumping if necessary satisfy this factor. The ALJs decline to read anything sinister into LCRA's decision to change experts. The ALJs also decline to find that compliance with the spacing rules automatically satisfies this rule.

## D. Management of Total Groundwater Production on a Long-Term Basis to Achieve Desired Future Condition

District Rule 5.2.D(8) requires the District to consider "whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition." A DFC is "a quantitative description, adopted in accordance with Section 36.108, of the desired condition of the groundwater resources in a management area<sup>126</sup> at one or more specified future times."<sup>127</sup>

## The Code requires that:

In issuing permits, the district shall manage total groundwater production on a long-term basis to achieve an applicable [DFC] and consider:

- (1) the Modeled Available Groundwater (MAG) determined by the executive administrator;
- (2) the executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by district rules and Section 36.117;
- (3) the amount of groundwater authorized under permits previously issued by the district;
- (4) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district; and
- (5) yearly precipitation and production patterns. 128

<sup>&</sup>lt;sup>126</sup> A management area is defined as "an area designated and delineated by the Texas Water Development Board under Chapter 35 as an area suitable for management of groundwater resources." Tex. Water Code § 36.001(13).

<sup>&</sup>lt;sup>127</sup> Tex. Water Code § 36.001(30).

<sup>&</sup>lt;sup>128</sup> Tex. Water Code Ann. § 36.1132.

The District is a part of Groundwater Management Area (GMA) 12, which on April 27, 2017, adopted a DFC for the Simsboro Formation of a District-wide average drawdown between January 2000 and December 2069 of 240 feet. The DFC is also divided into DFCs for the counties in the District. For Bastrop County, the DFC is a county-wide average drawdown between January 2000 and December 2069 of 174 feet; for Lee County, the DFC is a county-wide average drawdown between those dates of 350 feet.

The DFC is used to determine the GMA's MAG. The MAG is "the amount of water that the [TWDB's] executive administrator determines may be produced on an average annual basis to achieve a desired future condition." <sup>130</sup>

It is undisputed that if LCRA and all the other permit holders pumped their full permitted amount, the total pumping would exceed the MAG.

## 1. The Parties' Arguments

The Hernandezes are the only party to raise an issue about how the District is issuing permits in relation to the DFCs and MAGs. They argue that by not using the MAG as a permitting cap, the District is not fulfilling its duty. They add, "[i]t is inane that countless hours and dollars are spent by five [groundwater conservation districts] in the GMA-12 to develop the DFCs only to have them disregarded for permitting decisions."<sup>131</sup>

For its part, the GM contends the MAG is not a hard cap; rather it is "a factor to consider when managing the DFC." He argues that this use of the MAG as a permitting tool is consistent with Code §36.1132, which requires a district, when making permitting decisions, to consider "a

<sup>129</sup> GM Ex. 10 at 7.

<sup>&</sup>lt;sup>130</sup> Tex. Water Code § 36.001 (25).

<sup>&</sup>lt;sup>131</sup> Closing Argument of Elvis Hernandez (Hernandez Closing) at 3.

<sup>132</sup> GM's Closing at 44.

reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district." He similarly testified that a significant reason why MAGs are used as management guides, not hard caps for permitting, is because permit holders typically do not produce their full permitted values. 133

## 2. ALJs' Analysis

While noting the Hernandezes' frustration, the ALJs find that the GM's approach to the DFC and the MAG is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable DFC. The Code does not anticipate the MAG being a hard permitting cap. Rather, the MAG is one factor in the permitting analysis. The ALJs find that the evidence shows the GM appropriately considered the factors.

## E. Special Conditions from Previous Permits

## 1. Parties' Arguments

Recharge's permits, like Forestar's, contain several conditions that resulted from settlement. Among the settlement-related terms in Recharge's permits are a reduction in its requested production amount, tiered phasing of production, and the creation of a mitigation fund.

Recharge argues that provisions contained in previous permits reflect District policy and, thus, must be included in the Draft Permits. Alternatively, they argue that the principle of applying equal, non-discriminatory treatment to all citizens of the District requires that permit provisions be the same.

As with its permits, Recharge argues that the same District policy considerations require that the following conditions be placed in LCRA's Draft Operating Permits:

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<sup>133</sup> GM Ex. I (Totten direct) at 39.

- Reducing the initial amount of water requested by the applicant;
- Requiring adequate spacing;
- Requiring future cutbacks, if necessary;
- For all permits over 20,000 acre-feet, requiring end-user contracts, monitoring-well agreements, and tiered phasing of production; and
- Financial mitigation for all production in Bastrop County.

Some of these items are, in fact, contained in the Revised Draft Operating Permits. The Revised Draft Operating Permits anticipate that the GM may require future cutbacks. The Revised Draft Operating Permits also require end-user contracts, monitoring-well agreements, and tiered phasing of production.

Recharge also argues that if the Draft Permits are issued without these provisions, its permit (as well as Forestar's and Bastrop's permits) should be reopened, and those provisions removed. Such an action is beyond the scope of this hearing and will not be addressed further.

Recharge argues that "policy can be adopted by action, in addition to a formal written policy, much like a contract can be formed through the parties' course of conduct."<sup>134</sup> It then argues that the District has adopted a standard practice of including certain special conditions in similarly-situated permits, and that this practice rises to the level of District policy. It argues that the record "demonstrates that the [District's] board adopted certain special conditions in writing for similarly-situated permit holders on a systematic basis."<sup>135</sup>

Finally, Recharge also argues that "[t]he District has similarly adopted an effective policy of requiring adequate spacing between wells of at least 5,000 feet as between all large volume wells, as evidenced by the spacing for the Bastrop, Forestar, and Recharge wells." <sup>136</sup>

<sup>&</sup>lt;sup>134</sup> Recharge's Closing at 25.

<sup>135</sup> Recharge's Closing at 26.

<sup>136</sup> Recharge's Closing at 27.

The GM disagrees, as does LCRA. The GM argues that permitting decisions are made on a case-by-case basis, and that what is appropriate for one applicant and permit may not be appropriate for another. The GM also emphasizes the need for balancing private property and natural resource interests when managing groundwater.

## 2. ALJs' Analysis

The ALJs conclude that when, following a settlement, a groundwater conservation district issues a permit that reduces the total amount of production from the amount requested in the application, it does not create a policy of reducing the amount of production from the amount requested. Recharge cannot rely on the fact that in previous cases, the permit that was issued authorized less production than requested to argue that LCRA's requested production should be reduced, as well. Such an approach would be inconsistent with the balancing analysis required by Code § 36.113(d) and District Rule 5.2.D.

As for a spacing policy, the undisputed evidence is that the District's spacing rules changed between the time the permits for Recharge's three wells were issued and LCRA's Applications. Under the current rules, the rules for spacing between wells belonging to one party are different from the rules addressing spacing between wells of different owners. The current rules only require a distance of 5,000 feet between large wells owned by different owners. And it is also undisputed that the proposed wells in the Applications comply with the current spacing rules. Even assuming, for the sake of argument, that the District had a policy of requiring at least 5,000 feet between large-volume wells regardless of ownership, it changed that policy by adopting a new rule. Recharge does not—and could not—argue that it was improper for the District to amend its rules. Likewise, Recharge does not—and could not—directly argue that all later permit applications should be subject to the rules in place at the time the District granted the first large-volume permit. But by turning the spacing requirements in its permit into a "policy," despite

The ALJs note that Forestar's and Recharge's permitted production amounts (28,500 and 46,000 acre-feet, respectively) exceed the production amount allowed in the Revised Draft Operating Permits.

<sup>138</sup> District Rule 8.2.

the existence of the rule, that is, in essence, what Recharge is arguing. The ALJs are not convinced that the District has a separate well-spacing policy, aside from its spacing rule, that should apply here. 139

## F. Separate Issues Raised by the Brown Landowners

The Brown Landowners raised several issues that were not raised by the other parties. Those issues will be addressed here.

## 1. Was the District Required to Consider Historic Use?

The Brown Landowners argue that the District was required to consider historic use when reviewing the Applications and failed to do so. In making this argument, they rely on Code § 36.116(b). As set out above, § 36.116(b) provides that a groundwater conservation district *may* preserve historic use in its rules that limit production. This section does not *require* a district to adopt rules preserving historic use, and it is undisputed that historic use is not one of the factors in the District's permitting rules. <sup>140</sup>

Moreover, the Brown Landowners do not clearly describe the historic use that they argue must be considered. They argue that most of the available water in Bastrop and Lee Counties is groundwater, that those counties "are significantly more rural than Travis County," and that "[t]here is no history of Travis County being an intended importer of Bastrop and Lee County water." Rather than protect a specific historic use—except, broadly, groundwater use in Bastrop

Recharge also argued that the District has a policy of requiring future cutbacks, which it agrees are contained in the Draft Permits.

<sup>&</sup>lt;sup>140</sup> The Brown Landowners quote *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (Tex. 2012) for the proposition that "the amount of groundwater withdrawn and its purpose are both relevant when identifying an existing or historic use to be preserved," but they do not argue that *Day* holds that historic use must be preserved. Brown Landowners' Brief in Support of Closing (Brown Landowners' Closing) at 17 (quoting *Day*, 369 S.W.3d at 836).

<sup>&</sup>lt;sup>141</sup> Brown Landowners' Closing at 17.

and Lee Counties—they appear to argue that because groundwater has been used in Bastrop and Lee Counties, a new use should not be allowed.

For these reasons, the ALJs decline to find that the District was required and failed to consider historic use.

## 2. Were the Applications Administratively Complete?

The Brown Landowners also argue that the Applications should be denied because they were not administratively complete.<sup>142</sup> They contend that "[w]hen viewed under these guidelines and principles the LCRA application is not administratively complete as it was not given the proper scrutiny by the [District]."<sup>143</sup>

The GM disagrees. According to the GM, administrative completeness is a technical requirement that does not require a balancing of the various factors that the District's board must consider under chapter 36 and the District's rules. Instead, Mr. Totten testified that to determine whether the Applications were complete, he determined whether LCRA had provided the information the District Rules and Code require and whether it used the correct forms in its Applications. He also agreed that administratively complete "means it must have the minimal amount of information required in [the District's] rules. 145

The ALJs find that GM's understanding is consistent with Code chapter 36, which provides that an application is administratively complete if it contains the information set forth under

<sup>&</sup>lt;sup>142</sup> Brown Landowners' Closing at 2 ("First and foremost, the ALJ should deny the permit as it is administratively incomplete.").

<sup>143</sup> Brown Landowners' Closing at 5.

<sup>&</sup>lt;sup>144</sup> GM Ex. 1 (Totten direct) at 17. Mr. Totten originally determined that LCRA had used the incorrect forms; he required LCRA to resubmit its applications using the correct forms.

<sup>&</sup>lt;sup>145</sup> Tr. at 1118.

Sections 36.113 and 36.1131.<sup>146</sup> It also prohibits a district from requiring that additional information be included in an application for it to be considered administratively complete.<sup>147</sup>

The Brown Landowners do not offer a competing definition of administrative completeness, nor do they indicate what it requires. They only argue that they do not think the Application satisfies it. To the extent that the Brown Landowners argue that the Application is not administratively complete because of the factors set out in the Code or the District's Rules, the discussion of that argument is set out in the sections discussing the substantive portions of the Code or Rules. Otherwise, the ALJs are satisfied that the Applications are administratively complete in that they contain the required information.

## 3. Analysis Based on Benefit in the District

The Brown Landowners also argue that a sort of geographic limitation should be added to the Draft Permits. In essence, they argue that the District failed to examine whether there will be a beneficial use in Bastrop and Lee Counties. <sup>148</sup> They do not point to any statute or rule that requires an examination of beneficial use within the District, as opposed to outside it, and the ALJs are not persuaded that any such requirement exists.

## G. Phasing

The Draft Operating Permits and the Revised Draft Operating Permits both anticipate that LCRA will increase its pumping in phases. LCRA and the parties opposed to the Applications expressed concerns about various aspects of the phasing process.

<sup>&</sup>lt;sup>146</sup> Tex. Water Code § 36.114(h).

<sup>&</sup>lt;sup>147</sup> Tex. Water Code § 36.114(h).

<sup>&</sup>lt;sup>148</sup> Brown Landowners' Brief in Support of Closing at 18 ("Including Travis county in their permit, the LCRA cannot demonstrate that there is a beneficial use to Bastrop and Lee counties.").

First, LCRA objects to a requirement in the Draft Operating Permits that it have binding contracts with end users to move to the next phase and increase pumping.

Next, both LCRA and Recharge have concerns about the phasing formula, and LCRA requested it be changed. LCRA argues that, although it is willing to phase in production, it should not be required to accept special conditions "that are unreasonable, flawed, create significant uncertainty, or are so open to interpretation that they cannot be reasonably implemented" just because previous permittees agreed to those special conditions. In particular, LCRA argues, citing Recharge's expert, that the phasing formula is "a mess" that should be eliminated.

Finally, Aqua and Elgin raise a different concern: that the phasing examines district-wide conditions, as opposed to local impacts. Equally significant for Aqua is that potentially-impacted local users cannot participate in the decision to move LCRA from one phase to the next. Aqua argues that, as the phasing standards stand in the Draft Operating Permits, they provide "no meaningful review of local impacts, and no due process for protestants to have their respective *local* impacts heard and addressed." Both sets of concerns will be addressed in turn.

## 1. Binding Contracts

The GM's Draft Operating Permits originally required LCRA to have "binding contracts" prior to each phase of pumping.<sup>153</sup> The permits would expire if LCRA did not have any binding contracts before the anniversary of five years from the Phase II date.<sup>154</sup> The Revised Draft

Recharge would like to have this formula removed from its permit. As discussed above, such a request is outside the scope of this contested case hearing. In its briefing, LCRA suggests that nothing precludes potential amendments to Forestar's and Recharge's permits to remove the formula. LCRA's Closing at 55 n.10.

<sup>150</sup> LCRA's Closing at 44.

<sup>151</sup> LCRA's Closing at 51.

<sup>&</sup>lt;sup>152</sup> Closing Argument of Aqua (Aqua's Closing) at 21.

<sup>&</sup>lt;sup>153</sup> Draft Operating Permit Special Conditions 3(b)-(d), found in GM Ex. 7.

<sup>154</sup> Draft Operating Permit Special Condition 8, found in GM Ex. 7.

Operating Permits have amended the language to require "binding commitments" instead of "binding contracts," as requested by LCRA, to reflect the possibility that LCRA may be the end user of the groundwater. <sup>155</sup> As will be explained below, the ALJs find that the requirement for "binding contracts" or "binding commitments" is unnecessary, but is within the District's discretion and authority. If the District retains the requirement, the ALJs recommend the language in the Revised Draft Operating Permits should be included in the final permit.

## a. GM's Arguments

The GM argues that the requirement for "binding contracts" goes to the heart of LCRA's requirement to demonstrate a need for groundwater under chapter 36 and the District's Rules. Specifically, the GM argues that the contracts are necessary to show beneficial use of the water and a need for the water in the receiving area. The GM states that LCRA's reliance upon Texas Commission on Environmental Quality (TCEQ) treatment of surface water permits is misplaced because groundwater is subject to different legal standards due to its nature of being private property – as opposed to State property. The GM concludes that even if LCRA has shown enough contracts to obtain the permits, the language should not be removed from the permits because the contracts are needed after issuance at Phases II and III to show a continued beneficial use. Finally, the GM states that such provisions have been included in recently granted operating permits and should likewise be included in LCRA's permits for consistency.

#### b. LCRA's Arguments

<sup>155</sup> GM's Reply Brief (GM's Reply) at 9, See also Revised Draft Operating Permit.

<sup>156</sup> GM's Reply at 7-9.

<sup>157</sup> GM's Reply at 7-9.

<sup>158</sup> GM's Reply at 7-9.

<sup>159</sup> GM's Reply at 7-9.

<sup>160</sup> GM Ex. I (Totten direct) at 30.

LCRA states that it has met all requirements of District Rule 5.1.B(8) because it has identified its existing and future customers as the end users. <sup>161</sup> LCRA also contends that a requirement for "binding contracts" goes beyond the requirements of District Rule 5.1.B(8) and exceeds the District's authority. <sup>162</sup> LCRA notes that chapter 11 of the Code requires that surface water be put to a beneficial use, similar to chapter 36 with respect to groundwater, and that TCEQ has never required contracts with End Users prior to issuance of a surface water permit. <sup>163</sup> LCRA argues that there is no basis to hold groundwater to a higher standard than surface water. <sup>164</sup>

Additionally, LCRA argues that the "binding contracts" language is not needed because the requirement in the permits to use the groundwater for a beneficial use subjects LCRA to enforcement if LCRA were to arbitrarily increase its pumping for a purpose other than meeting its end users' needs. <sup>165</sup> LCRA believes that the requirements in the Draft Permits for LCRA to supply the water conservation and drought contingency plans of its end users to the District are sufficient for the District to evaluate whether the water is being beneficially used and not wasted. <sup>166</sup>

LCRA contends that there is no over-arching policy to include this provision in all permits, rather, that it was only included as part of the Forestar Permit as a negotiated settlement term. <sup>167</sup> Further, LCRA believes that even to the extent that past permits have included this requirement, that LCRA, as an established reliable public water supplier, should be treated differently than other permit applicants that lack a demonstrable track record of reliability. <sup>168</sup>

LCRA requests removal of the "binding contract" requirements from the permits. If it is not removed, LCRA requests: (1) that LCRA be found to have met the requirement with the

<sup>&</sup>lt;sup>161</sup> LCRA's Closing at 50.

<sup>&</sup>lt;sup>162</sup> LCRA's Closing at 50.

<sup>&</sup>lt;sup>163</sup> LCRA's Closing at 50.

<sup>&</sup>lt;sup>164</sup> LCRA's Closing at 50.

<sup>165</sup> LCRA's Closing at 49.

<sup>166</sup> LCRA's Reply at 51.

<sup>167</sup> LCRA's Reply at 51.

<sup>168</sup> LCRA's Closing at 51.

contracts it has submitted in this proceeding; (2) amendment of the language to "binding commitments" to reflect that LCRA may be the end user; (3) removal of the definition of "End User" from the permits because the language is already in the District's rules and could be amended in the future; (4) removal of the language "for any agricultural commitments, LCRA shall be the End User" or amendment to say "LCRA may also be the End User;" and (5) removal of Special Condition 8 (which states the permits expire five years from the anniversary of the Phase II date unless LCRA provides one or more contracts), because LCRA has already provided contracts that allow LCRA to provide its existing customers water from any source of supply available. <sup>169</sup>

## c. ALJs' Analysis

The ALJs find that it is within the District's authority to require submission of End User contracts or proof from LCRA that it intends to use the water itself; however, such provisions do not appear to be necessary in these permits because: (1) LCRA has demonstrated a need for the water; (2) it is unlikely that LCRA would not beneficially use the groundwater it pumps; and (3) there are other safeguards in the permit to prevent waste by LCRA.

Although not currently required in the District's rules, it is within the District's authority to require LCRA to submit End User contracts or a statement from LCRA that it intends to use the water itself. Code § 36.113(c) provides a list of potential requirements a district may include in a permit or permit application. Subsection (8)(B) of that provision includes "other information . . . reasonably related to an issue that a district by law is authorized to consider." The GM's stated reason for including the language is for LCRA to demonstrate a need for groundwater in the receiving area under chapter 36 and the District's Rules and to show that the water will be beneficially used. Both reasons are within the scope and the District's authority and are related to

<sup>169</sup> LCRA's Reply at 51-52.

<sup>&</sup>lt;sup>170</sup> Tex. Water Code § 36.113(c).

<sup>&</sup>lt;sup>171</sup> Tex. Water Code § 36.113(c)(8)(B).

the requirement to provide "binding contracts." The District could amend its rules to require "binding contracts" in permits prior to pumping or otherwise require the information in a permit if the facts of the application warrant such a requirement.

However, the ALJs do not find there is a need for the provisions in LCRA's permits. LCRA has met the District's rule requirement to identify any End Users of the groundwater by providing contracts from existing users which far exceed the total amount of requested groundwater through all of the GM's proposed phases.<sup>173</sup> Further, LCRA has demonstrated there is a need for the water in the receiving area by submission of these contracts, and as demonstrated by the Regional Water Plans.<sup>174</sup> It is highly unlikely that LCRA would arbitrarily pump water without beneficially using it, and to do so would violate the Revised Draft Operating Permit. In addition, the District can monitor LCRA's use of the water by examining LCRA's submittal of drought contingency plans and water conservation plans, which are required by the permits prior to supplying water to any End User, and the District can enforce provisions in the permits that require LCRA to use the water for beneficial purposes.<sup>175</sup> Therefore, there is not a compelling reason to include the requirement for "binding contracts."<sup>176</sup>

If the District decides to retain the requirement for "binding commitments" in the permits, the ALJs recommend the language in the Revised Draft Operating Permits. Regarding the definition of "End User" provided in the permits, while the definition unnecessarily lists the allowable beneficial uses, it is not necessary to remove the definition as suggested by LCRA because the language is sufficiently conditioned by the inclusion of the language preceding the

<sup>&</sup>lt;sup>172</sup> Tex. Water Code § 36.113(d)(3) ("the district shall consider whether... the proposed use of water is dedicated to any beneficial use."); Tex. Water Code § 36.122(f) (the district shall consider the need for water in the proposed receiving area).

<sup>&</sup>lt;sup>173</sup> LCRA Ex. 12; LCRA Ex. 46 (each contract includes a provision stating that LCRA may supply water from any source available).

<sup>&</sup>lt;sup>174</sup> LCRA Ex. 13.

<sup>175</sup> Revised Draft Operating Permit, Standard Provision 8 and Special Condition, found at GM Ex. 7.

<sup>&</sup>lt;sup>176</sup> LCRA requested a finding that its existing contracts would satisfy any End User requirement. Whether LCRA has complied with a permit before it has been issued is outside the scope of this contested case.

listed beneficial uses ("including, but not limited to") so as to not require future amendment if the definition changes in the rules.

#### 2. The Phasing Formula

The phasing formula contained in the Draft Operating Permits was developed as part of the District's settlement with Forestar, and was then incorporated into Recharge's permit. The GM incorporated many of LCRA's objections to this formula in drafting the Revised Draft Operating Permit.

# a. Parties' Arguments

LCRA first argues that formula contained in the Draft Operating Permits—but not the idea of tiered phasing—should be eliminated. It argues that "at renewal, if the District has adopted by rule scientifically sound and objective criteria to determine if further restrictions are warranted based on aquifer impacts, the GM could seek to initiate an amendment to LCRA's permits at that time."<sup>178</sup>

In the alternative to eliminating the formula entirely, LCRA proposed, in its Exhibit 8A, changes to the phasing formula in Special Condition 3. In the Revised Draft Operating Permits, the GM accepted most of those changes, except proposed changes related to End User requirements, which are discussed above. Thus, the GM accepted that the relevant factor should be drawdown pursuant to the DFC, rather than a water level. <sup>179</sup> One proposed change the GM did not accept was LCRA's suggestion that the relevant DFC that should be examined as LCRA moves through the phases is the DFC in place at the time the permit is issued, rather than the DFC in place

<sup>&</sup>lt;sup>177</sup> Tr. at 1246.

<sup>&</sup>lt;sup>178</sup> The Draft Operating Permits (and Revised Draft Operating Permits) have a five-year term.

<sup>&</sup>lt;sup>179</sup> The DFC for the Simsboro adopted by GMA 12 is expressed in terms of drawdown, not water level. GM Ex. 10 at 7.

when the phasing inquiry occurs. <sup>180</sup> LCRA argues that the current DFC should be used for the life of the permit. It argues that keeping the current DFC is "consistent with the notion that DFC compliance should not be borne solely by a single permittee." <sup>181</sup>

#### b. ALJs' Analysis

The ALJs do not agree with LCRA that a phasing formula is unnecessary and that the District must adopt rules before it can impose requirements on LCRA that would allow it to progress from one phase to another. Therefore, the ALJs will not recommend removing the phasing formula from the Revised Draft Operating Permits.

Because the GM has agreed to most of LCRA's proposed changes to the phasing formula, the only remaining issue is which DFC should be used when LCRA requests to move to the next phase and increase its pumping.

The ALJs agree with the GM that the DFC in place at the time LCRA requests to increase its pumping should apply. Contrary to LCRA's arguments, using the DFC in place at the time of the requested increase in pumping does not mean that LCRA solely bears the responsibility of complying with the DFC. Instead it means that LCRA is not exempt from the effect of changes in conditions when it seeks to pump more water. The ALJs will not recommend making this change to the Revised Draft Operating Permits.

### 3. Concerns About Local Impacts and Input

#### a. Parties' Arguments

<sup>&</sup>lt;sup>180</sup> Compare LCRA Ex. 8A at 3-4 with Revised Draft Operating Permit at 3-4.

<sup>&</sup>lt;sup>181</sup> LCRA's Closing at 59.

Aqua, Environmental Stewardship, and Elgin's primary concerns are that the phasing decision will not look at local impacts and that the decisions about whether LCRA can increase its pumping will be made solely by the District and LCRA, with no opportunity for public input.

The GM cites to several provisions in the Revised Draft Permits that it contends protects existing users. These are the monitoring well agreement, the phased approach, that LCRA like all users is subject to future cutbacks, the well-spacing requirements, and the 36-hour pump test requirements.<sup>182</sup>

The GM strongly objects to parties other than LCRA being involved in any phasing decision. The GM argues, in fact, that allowing participation in such decisions would be contrary to Code chapter 36. In particular, the GM argues that participation must be limited to persons with a personal justiciable interest and that this interest be affected by the requested permit. The GM also argues that other parties' participation would be "disruptive" and undercut the District's ability to do its job. 184

### b. ALJs' Analysis

The ALJs are unconvinced by the GM's argument that the parties' involvement must end at the conclusion of this contested case hearing. The parties here have established their personal interest, and their focus is on potential harm to their wells, not to some generalized interest to the public.

One change the GM made in the Revised Draft Operating Permits is relevant to this issue. This change was to Special Condition 5 (previously Special Condition 7), which addresses the renewal application. In the Revised Draft Permits, if LCRA files a renewal application, the GM and LCRA must evaluate "the data collected from the Monitoring Well System prior to the date

<sup>&</sup>lt;sup>182</sup> GM's Reply at 24-25.

<sup>&</sup>lt;sup>183</sup> Tex. Water Code § 36.415(b)(2).

<sup>184</sup> GM's Reply at 26.

of the application to renew to determine whether LCRA's pumping has resulted in substantially different impacts to groundwater resources than those predicted by the modeling relied upon [by] the District when the Permit was issued and jointly propose revisions to the Permit based on that data." The ALJs recommend that the District adopt this Special Condition, but believe the condition should be revised to provide an opportunity for affected landowners to participate in the permit renewal process, including the determination of whether an amendment is necessary.

### H. Monitoring Well Agreement

There are two main issues relating to the Special Condition 1, which requires LCRA and the GM to enter into a Monitoring Well Agreement. The GM and LCRA disagree about certain aspects of this Special Condition as it relates to monitoring groundwater. As discussed above, the ALJs also find it necessary to conduct monitoring of the impacts on surface water, as well.

# 1. Details of the Monitoring Well Agreement as It Relates to Groundwater

The GM and LCRA disagree about certain aspects of the special conditions relating to a Monitoring Well Agreement. Special Condition 1 of the Revised Draft Operating Permit requires LCRA to enter into a Monitoring Well System Construction and Maintenance Agreement, approved by the District's Board, within 180 days after the Permit has been issued. LCRA would be required to construct and maintain the new monitoring wells, and a violation of the Monitoring Well Agreement would be a violation of the Permit.

Special Condition 4 of the Revised Draft Operating Permits sets out certain criteria for a monitoring well system. Wells in the system must be screened in the Simsboro Formation; must

<sup>&</sup>lt;sup>185</sup> Revised Draft Operating Permit at 8.

<sup>&</sup>lt;sup>186</sup> In the Draft Operating Permit, this deadline was 90 days after permit issuance.

improve the spatial coverage of the monitoring well system; must be easily accessible for regular measurements; and must meet any other criteria agreed upon by the GM and LCRA. 187

### 2. Parties' Arguments

LCRA first objects to the 180-day deadline to enter into a Monitoring Well Agreement. LCRA argues that decisions about the timing and number of monitoring wells should be deferred to provide both LCRA and the District with additional flexibility. LCRA suggests that the deadline to enter into a monitoring well agreement should be before construction of a well to be used in the first pumping phase of the permit (Phase II). According to LCRA, not having an exact date would provide greater flexibility and would allow it (and the District) to take changed conditions into account. 190

LCRA argues that the portion of Special Condition 1 under which a violation of the Monitoring Well Agreement is a violation of the operating permit should be removed. In LCRA's view, tying together an as-yet-unnegotiated Monitoring Well Agreement and the Draft Operating Permit would add an unreasonable amount of uncertainty to the process. LCRA points that it has incentive to comply with the Monitoring Well Agreement because it will be prevented from increasing its pumping unless it complies. LCRA also argues that the Monitoring Well Agreement should be enforced as a contract between the LCRA and the District, not as part of an operating permit.

The Revised Draft Operating Permits remove a reference to an existing monitoring well, as LCRA requested. Similarly, the Revised Draft Operating Permits no longer require LCRA to "operate" the monitoring wells. LCRA had also requested that change.

<sup>&</sup>lt;sup>188</sup> LCRA's Closing at 45.

<sup>&</sup>lt;sup>189</sup> LCRA Ex. 8A at 2.

<sup>190</sup> LCRA's Closing at 45.

LCRA also suggests that the requirement that it "has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping [to the requested phase]" be added to the Draft Operating Permit. <sup>191</sup>

The GM argues that negotiation of a monitoring well agreement cannot be delayed until after production, particularly since monitoring wells are used to analyze local impacts, <sup>192</sup> such as those that have been contested in this case. The GM also argues that the District has the authority to include a special condition requiring a monitoring well agreement pursuant to District Rule 5.3.D(2), which provides that an operating permit may include "any special conditions required by the considerations in Rule 5.2.D and any other special condition required or authorized by these Rules or applicable law."

# 3. ALJs' Analysis

The ALJs agree that the District has the authority to require LCRA to enter into a Monitoring Well Agreement. The District may impose Special Conditions it determines are required by the considerations in Rule 5.2.D. <sup>193</sup> Among those considerations are whether the conditions and limitations "minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." The special conditions relating to the Monitoring Well Agreement tie in to those considerations. The ALJs also note that the GM has incorporated some of LCRA's suggestions in the Revised Draft Operating Permit.

That said, the ALJs recommend adopting LCRA's proposed change to extend the deadline to enter into a Monitoring Well Agreement. The ALJs are convinced that a flexible deadline, rather than a 180-day deadline, will better allow LCRA and the GM to take any new pumping into account. Additionally, the ALJs agree that the portion of Special Condition 1 under which violation

<sup>&</sup>lt;sup>191</sup> LCRA Ex. 8A at 3-4.

<sup>&</sup>lt;sup>192</sup> Tr. at 1594.

<sup>&</sup>lt;sup>193</sup> District Rule 5.3.D(2).

of the Monitoring Well Agreement is a permit violation should be removed. Incorporating a contract that does not yet exist into a permit adds too great a level of confusion to the permitting process.

#### 4. Monitoring Effects on Surface Water Resources

As the ALJs previously found, the GAM modeling does not reliably address the potential cumulative effects of LCRA's proposed pumping on surface water resources, in combination with all other authorized pumping in the District. Code § 36.113(d)(2) requires the District to consider whether "the proposed use of water unreasonably affects... surface water resources." However, the GM's test-and-see approach, without a definite plan for monitoring effects, is not adequate to prevent unreasonable impacts on surface water resources.

The GM supports incorporating surface water monitoring in the Monitoring Well Agreement and is open to including language in that agreement that will be helpful in assessing impacts. The GM is also not opposed to Environmental Stewardship's suggestion of including a work plan in the permit developed for the Colorado River which would relate to surface water/groundwater interaction. However, the GM suggests that both the surface water monitors and the work plan be part of the Well Monitoring Agreement to be negotiated with LCRA at a later date. 196

The ALJs find that, in light of the fact that the GAMs show potential impacts to surface water resources caused by LCRA and District-wide pumping, any monitoring well system must include monitoring wells that could monitor effects on surface water resources. Thus, the ALJs recommend amending the definition of "Monitoring Well System" contained in Special Condition

<sup>194</sup> GM's Reply at 39.

<sup>195</sup> GM's Reply at 39.

<sup>196</sup> GM's Reply at 39.

(4)(a) in the Revised Draft Operating Permit to require that a monitoring well system must monitor such effects.

The ALJs have not included Environmental Stewardship's recommended changes to the permits incorporating the work plan created by Dr. Young. While the ALJs agree that adoption of a surface water plan (like the work plan created by Dr. Young or some other work plan the District has approved) may be beneficial for the purposes of managing District-wide pumping impacts on surface water resources, the adoption of a work plan in a permit is not appropriate. The process of adoption of a surface water work plan falls squarely within the process of adoption of the District's water management plan. <sup>197</sup> Instead, the Well Monitoring Agreement should incorporate any work plan that is adopted during the water management planning process.

# I. 36-Hour Pump Test

LCRA argues that certain changes should be made to Special Condition 14, which relates to the 36-hour pump test. A 36-hour pump test is used to collect data to calculate aquifer parameters, such as transmissivity and storativity. LCRA was concerned that, as it stood, the Special Condition lacked specific parameters for transmissivity that would be used to determine whether pumping limits should be imposed. LCRA also suggested shortening the advance notice required before performing the pump test. LCRA also requested a clarification that the authorized maximum rate of withdrawal is an aggregated amount for all wells and also requested a procedure that would allow it to appeal the GM's decision to limit pumping as a result of a pump test. In his reply brief, the GM noted that he agreed to all those changes and included those changes in the Revised Draft Permits. No issues involving the 36-hour pump test remain to be resolved by the ALJs.

197 Tex. Water Code §§ 36.1071(a)(4) (requiring coordination with surface water entities when developing a water management plan to include addressing conjunctive surface water management issues), .108(d)(4).

### J. Review of LCRA's Designs and Specifications

LCRA argues that Special Condition 15, which in the Draft Operating Permit provided that the GM has the authority to approve or reject LCRA's well design after well completion, should be removed.

The GM concedes that a similar special condition is not in other permits. He argues that some kind of well-design review is necessary in this case, however, because LCRA did not include specific well-design information in its Applications. He adds that "[w]ell-design requirements are intended to ensure that the well is completed in such a way as to prevent degradation of the aquifer and to protect the quality of the state's resource. As shown by the Revised Draft Permits, the GM has agreed to amend Special Condition 15 to require LCRA to provide design specifications before drilling, rather than after the well is completed. The revision also removes the GM's authority to reject that design.

With this change in the timing of the design specification review and the elimination of the GM's approval authority, the ALJs find Special Condition 15 to be within the District's authority and not arbitrary. The ALJs recommend it remain in the Revised Draft Operating Permits.

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<sup>198</sup> GM's Reply at 13.

# K. Place and Type of Use

At LCRA's request, the Revised Draft Operating Permits reflect a change to the place of use. In its prefiled testimony, LCRA requested to amend its Applications to reduce the place of use from LCRA's entire water service area to the portion of LCRA's service area that is within Lee, Travis, and Bastrop Counties. <sup>199</sup> The GM initially did not accept the amendment because it was not part of the original application and was not submitted on the District's forms. <sup>200</sup> However, no other parties contested this reduction in service area, and the GM ultimately accepted the change after LCRA witness Hoffman testified to the requested reduction at the hearing. <sup>201</sup> This reduction is reflected in the GM's Revised Draft Operating and Transport Permits.

LCRA also requested changes to the language relating to the type of use in both the Operating and Transportation Permits. The Applications requested authority to use the requested groundwater for all beneficial uses as defined by the District's rules and recognized under Chapter 36 of the Code. The GM's initial draft permits granted LCRA's request by authorizing some, but not all, of the beneficial uses found in the District's rules and Chapter 36 (municipal, industrial, recreational, irrigation, and agricultural), because LCRA only listed that it had commitments for those uses. LCRA re-urged that the GM change the language to include "all beneficial uses as defined by the District's rules and recognized under Chapter 36 of the Texas Water Code" to give LCRA the flexibility to serve customers for any lawful beneficial use in its service area The GM responded that to be consistent with previously authorized permits, it must list out the authorized uses, and LCRA should be required to amend its permits if Chapter 36 is amended to include new uses. However, as a compromise, the GM's Revised Draft Operating Permits were amended to authorize "[a]ll beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B)."

<sup>199</sup> LCRA Exs. 8A, 8B.

<sup>&</sup>lt;sup>200</sup> GM Ex. 1 (Totten direct) at 30.

<sup>&</sup>lt;sup>201</sup> GM's Reply at 4.

<sup>&</sup>lt;sup>202</sup> LCRA Ex. 3(A-2).

<sup>&</sup>lt;sup>203</sup> GM Ex. 7.

<sup>&</sup>lt;sup>204</sup> LCRA's Closing at 42.

The ALJs agree that LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use and the revision offered by the GM appears to allow for that flexibility.

#### L. Mitigation

The Brown Landowners, the Hernandezes, and Recharge argue that LCRA should be required to create a mitigation account, such as the one contained in Recharge's permit. This mitigation account was part of a negotiated settlement of the contested case concerning Recharge's application.<sup>205</sup>

The parties who argue in favor of mitigation have not pointed to a provision of chapter 36 or the District's rules that allow the District to impose mitigation requirements in individual permits. Certainly, it seems that the District could set up rules, or require production fees, that could be used for a mitigation fund. But the Protestants have not presented the authority the under which District could require the establishment of a fund. Nor have they presented any analysis for which permits should be subject to such a fund.

The ALJs recognize the difficulty this creates for the Protestants, particularly Recharge. Under the terms of Recharge's settlement agreement, it could theoretically pay to mitigate LCRA's impacts. But that difficulty does not give the District the authority, much less require it, to impose a mitigation fund as a special condition. <sup>206</sup>

<sup>&</sup>lt;sup>205</sup> GM Ex. 8.

<sup>&</sup>lt;sup>206</sup> In the City of Bastrop contested case, the ALJ addressed the proposed mitigation fund in the analysis of whether the effects of pumping would be unreasonable. City of Bastrop, SOAH Docket No. 952-15-3851, PFD at 31Here, because LCRA did not propose a mitigation fund, there was none to analyze. Moreover, nothing in the City of Bastrop PFD suggested that a mitigation fund was required.

#### IV. ISSUES RELATING TO THE TRANSPORT PERMITS

Pursuant to District Rule 6.1, a transport permit is required to convey groundwater out of the District's boundaries, which are coextensive with the boundaries of Bastrop and Lee counties. <sup>207</sup> LCRA's Applications initially requested transport permits to use the requested 25,000 acre-feet per year of groundwater anywhere within LCRA's water service area. <sup>208</sup> LCRA subsequently amended its Applications to limit the place of use of the groundwater to its service area only within Bastrop, Lee, and Travis Counties. <sup>209</sup> Therefore, transport permits are only required for LCRA's requested authorization to use groundwater in Travis County, the only place of use that is not within the District's boundaries. <sup>210</sup> The GM's Draft Transport Permits would authorize LCRA's requested place of use in Travis County; <sup>211</sup> however, the Draft Transport Permits include a special provision which prohibits the transport of LCRA's authorized groundwater pursuant to a bed and banks permit or discharge of the groundwater into any surface water. <sup>212</sup>

# A. Whether LCRA's Transport Permit Applications Meet the Requirements of Section 6 of the District's Rules and Texas Water Code § 36.122(f).

The GM concluded that LCRA's applications for transport permits meet the requirements of Section 6 of the District's Rules and Code § 36.122(f), and the ALJs agree.<sup>213</sup> The Applications met each of the filing requirements under District Rule 6.2.

<sup>&</sup>lt;sup>207</sup> Tex. Spec. Dist. Code § 8849.004.

<sup>&</sup>lt;sup>208</sup> LCRA Exs. A-4, A-2 at 3.

<sup>&</sup>lt;sup>209</sup> LCRA Ex. 1 (Hofmann direct) at 21.

<sup>&</sup>lt;sup>210</sup> Tex. Spec. Dist. Code § 8849.004; GM Ex. 9.

<sup>&</sup>lt;sup>211</sup> GM Ex. 7.

<sup>&</sup>lt;sup>212</sup> GM Ex. 7.

<sup>&</sup>lt;sup>213</sup> GM's Closing at 51.

In reviewing a proposed transfer of groundwater out of the District, Code § 36.122(f) and District Rule 6.3 require the District to consider: (1) the availability of water in the District and in the proposed receiving area during the period for which the water supply is requested; (2) the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District; and (3) the approved regional water plan and approved District management plan. The GM properly considered each of the factors, none of which were directly challenged by any party. The analysis of the proposed effect of pumping, as set out above applies to the second factor, and no party alleges that the GM did not consider the approved regional water plan or district management plan.

As for the factor relating to the availability of water in the district and in the proposed receiving area during the period for which the water supply is requested, the District considered the 2016 Region K and Region G Water Plans.<sup>214</sup> The Region K and Region G Water Plans identify water supply shortages in the counties LCRA is requesting to serve (Lee, Bastrop, and Travis Counties) and project that there is sufficient water available for LCRA's planned withdrawals from the Simsboro Formation in the Carrizo-Wilcox aquifer underlying the District.<sup>215</sup>

# B. Draft Transport Permit Special Provision Relating to Discharge of Groundwater into a Surface Watercourse

LCRA requests removal of the special provision relating to the prohibition against discharge of the groundwater into a surface watercourse from the Draft Transport Permit, but the GM has declined to do so.<sup>216</sup> The ALJs find that the special provision should be removed from the permit because it is unnecessary, overbroad to accomplish the District's stated purpose, and unlawful as currently drafted.

<sup>&</sup>lt;sup>214</sup> GM's Closing at 51.

<sup>&</sup>lt;sup>215</sup> LCRA Ex. 13; GM's Closing at 51.

<sup>&</sup>lt;sup>216</sup> GM's Closing at 49-50.

### 1. GM's Arguments

The GM testified that he included the special provision because he was concerned regarding water loss through evaporation or carriage losses.<sup>217</sup> Mr. Totten's prefiled direct testimony states, "there was no plan in the requested permit to prevent waste during the transport of water to the farthest areas in LCRA's service area."<sup>218</sup>

The GM acknowledges that LCRA's subsequent limitation of its request to include only Travis County as a place of use outside of the District makes transportation of groundwater by use of a proposed bed-and-banks permit impossible because water cannot be conveyed upstream upriver from Bastrop County to Travis County.<sup>219</sup> However, the GM maintains that the special provision remains necessary because LCRA might choose to amend the permits in the future to change the place of use to areas downriver from Bastrop County.<sup>220</sup> Therefore, he argues, the possibility of transport of the groundwater via the bed and banks is not foreclosed.<sup>221</sup> The GM will recommend the District include such a provision in all future transport permits.<sup>222</sup>

The GM's explanation for the proposed provisions evolved after the hearing on the merits. The GM continues to maintain in his briefs that inclusion of the provision is within the District's authority and duty to prevent waste of groundwater pursuant to chapter 36 of the Code. The GM elaborates on his original position (that LCRA did not state its plan to prevent waste during the transportation) by now stating conclusively, that discharge of *any* amount of groundwater into the bed and banks would constitute waste under chapter 36.<sup>223</sup> To support his argument that discharge of groundwater in the bed and banks of a surface water body (watercourse) is *per se* waste, the

<sup>&</sup>lt;sup>217</sup> GM Ex. 1 (Totten direct).

<sup>&</sup>lt;sup>218</sup> GM Ex. 1 (Totten direct) at 19.

<sup>&</sup>lt;sup>219</sup> GM's Closing at 49.

<sup>220</sup> GM's Closing at 49.

<sup>&</sup>lt;sup>221</sup> GM's Closing at 49.

<sup>222</sup> GM's Closing at 49.

<sup>&</sup>lt;sup>223</sup> GM's Closing at 49; GM's Reply at 15-16.

GM relies on the definition of waste in the District's rules and Chapter 36, which provides that "waste" includes:

willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the [TCEQ] under Chapter 26.<sup>224</sup>

The GM acknowledges that LCRA possesses an approved in-district permit from the District for the purpose of discharging groundwater into Lake Bastrop for power plant cooling purposes. However, the GM argues that his proposed special provision prohibiting LCRA from doing so in Travis County is not more restrictive than for that previous in-district permit, because that permit did not include a transport permit. His primary concern, he states, is with regional transport of water via a bed-and-banks permit. His primary concern, he states, is with regional transport of water via a bed-and-banks permit.

<sup>&</sup>lt;sup>224</sup> Tex. Water Code § 36.001(8)(E); see also District's Rules §1.

<sup>&</sup>lt;sup>225</sup> GM's Reply at 15-16.

<sup>&</sup>lt;sup>226</sup> GM's Reply at 15-16.

<sup>&</sup>lt;sup>227</sup> GM's Reply at 15-16.

### 2. LCRA's Arguments

LCRA first argues that the special provision is unnecessary in these transport permits due to the physical impossibility of using any watercourse to transport water from Bastrop County to Travis County. Second, LCRA argues that the District does not have the enumerated authority to prohibit the transport of water in the bed and banks of a watercourse. Third, LCRA points out that it is authorized by the District to discharge water into Lake Bastrop by an already-issued permit. Therefore, LCRA states, the District is prohibited by section 36.122(c) of the Texas Water Code, from making more restrictive conditions on transporters than it does on in-district users. Finally, LCRA cites various authorities to support its argument that transport of water in a watercourse is not, as the District asserts, *per se* waste.

LCRA's first argument regarding whether transport of water in a watercourse constitutes waste is that the definitions of "waste" cited by the GM both require groundwater to "escape" into a watercourse to constitute waste. Permitted transport of groundwater does not meet the definition of "waste," LCRA contends, because when a permit to transport groundwater via bed and banks of a watercourse is obtained prior to discharge, the groundwater does not "escape." <sup>234</sup> Instead, the transporter maintains legal possession and ownership of the groundwater for later diversion even after it is discharged. <sup>235</sup>

LCRA cites several cases to show that discharge of groundwater into a watercourse is not waste and that using the bed and banks of a watercourse is a lawful means of transporting

<sup>&</sup>lt;sup>228</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>229</sup> LCRA's Closing at 66-74, citing various sections of ch. 36, Tex. Water Code.

<sup>&</sup>lt;sup>230</sup> LCRA Ex. 49.

<sup>&</sup>lt;sup>231</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>232</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>233</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>234</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>235</sup> LCRA's Closing at 66-74.

groundwater.<sup>236</sup> The cases include: *City of Corpus Christi v. City of Pleasanton*, 276 S.W.2d 798, 800 (Tex. 1955) (holding that the transport of groundwater using the bed and banks is not waste under the 1925 statutory definition of "waste"); *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235 (Tex. Civ. App.—Austin 1989, writ denied) (holding that a landowner has absolute ownership of groundwater under his land, even where the groundwater would normally percolate into a surface watercourse, but for a landowner intercepting it underground and then discharging it into the same stream for later diversion); *City of San Marcos v. Texas Comm'n on Environmental Quality*, 128 S.W.3d 264 (Tex. App—Austin 2004, pet. denied) (holding that effluent derived from privately owned groundwater, was abandoned once discharged to surface water, as distinguished from the holdings in *Corpus Christi* and *Denis* solely because effluent was not fungible with superior quality surface water); and *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814, 822-23 (Tex. 2012) (recognizing that the Code specifically allows authorizations for a person to discharge privately owned groundwater into a natural watercourse and withdraw it downstream).

LCRA also cites to provisions of the Texas Water Code to support its position. LCRA notes that Texas Water Code § 11.042 specifically authorizes the use of the bed and banks of a watercourse to transport effluent derived from privately owned groundwater under subsection (b) or other water under subsection (c). LCRA argues that the legislative history for those subsections as well as TCEQ's history of routinely granting permits to transport groundwater under those subsections support its position that such transport is not waste. LCRA mentions that LCRA has a bed and banks authorization from TCEQ for its Lake Bastrop Permit which uses groundwater permitted by the District. LCRA also mentions that Texas Water Code § 11.143 requires notice to a groundwater conservation district when a project contemplates the discharge of groundwater into a watercourse for use as an alternative to state surface water – which necessarily implies such discharges are allowed by law. 240

<sup>&</sup>lt;sup>236</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>237</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>238</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>239</sup> LCRA Ex. 49.

<sup>&</sup>lt;sup>240</sup> LCRA's Closing at 66-74.

Finally, LCRA argues that the transport of groundwater in the bed and banks of a watercourse cannot be waste because it does not involve more transportation losses than conveyance used by other users in the District - such as conveyance by pipes. LCRA argues that certain of the District's permit holders experience losses of 20% or more conveying water in pipes, whereas LCRA estimates the losses of transport to be 10% for transport in the bed and banks of the Colorado River from Lake Travis to the Texas Coast. 242

#### 3. ALJs' Analysis

The ALJs find that the special provision should not be included in LCRA's permits. Groundwater districts have a duty to ensure that groundwater is put to beneficial use and have the authority to control waste of groundwater with rules and permit conditions. A district must consider whether an applicant for a well permit has agreed to avoid waste and achieve water conservation. The District argues that inclusion of special provision in LCRA's transport permit prohibiting all discharge of groundwater into a watercourse is necessary based upon these provisions and the definitions of "waste" found in Chapter 36 of the Texas Water Code and the District' rules. For reasons set out below, the ALJs disagree.

Further, the ALJs find that the special provision is unnecessary in the transport permits due to the physical impossibility of using a watercourse to transport water upstream from Bastrop County to Travis County. Additionally, even if the question were not mooted by LCRA's amendments to the transport applications, the ALJs find that, as drafted, the special provision is overbroad to accomplish the District's stated purpose of preventing waste of groundwater in transport. Finally, even if the provision was more narrowly tailored to address only waste of groundwater in transport, the provision would still be unlawfully restrictive, because there is no

<sup>&</sup>lt;sup>241</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>242</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>243</sup> Tex. Water Code §§ 36.101(a),

<sup>&</sup>lt;sup>244</sup> Tex. Water Code § 36.113(d)(6).

evidence in the record to support the GM's opinion that water transported via bed and banks would result in loss or waste.

# a. The Special Provision Exceeds the District's Authority

The ALJs agree with LCRA that discharge of groundwater into a surface watercourse pursuant to a bed-and-banks permit is not waste. The GM argues that "waste" is defined in chapter 36 of the Code and the District's Rules to include any discharge of groundwater into a watercourse without a chapter 26 wastewater discharge permit. The ALJs disagree. Groundwater discharged under a bed-and-banks permit does not meet the definitions of "waste" relied upon by the GM because the definitions cited specifically require the "escape" of groundwater—meaning the owner has lost possession of it without putting it to beneficial use. A bed-and-banks permit holder maintains ownership and control over the water discharged pursuant to a bed-and-banks permit and can put the water to a beneficial use even after it has been discharged. Such discharges are authorized by the Texas Water Code. The legislative history of the bed-and-banks permit provisions, case law, and the historical permitting practice of the TCEQ and groundwater districts (including this District) clearly show that such discharges are not considered waste, as argued by the GM.

LCRA is no longer seeking to transport water out of the district via bed and banks, therefore, LCRA does not have the burden to show that hypothetical transport of water will result in waste. Nevertheless, LCRA introduced evidence to show that LCRA's most extreme hypothetical transport (from Lake Travis to the Texas coast), would incur fewer losses of groundwater than other existing users currently incur transporting water within the District.<sup>247</sup> In contrast, the record does not show that the GM has made any analysis to justify his blanket

<sup>&</sup>lt;sup>245</sup> Tex. Water Code § 36.001(8)(E); see also § 1 of the District's Rules.

<sup>&</sup>lt;sup>246</sup> Tex. Water Code §§ 11.043, 153, 143. See also Tex. Water Code § 36.113(d)(5) (provision states that use of groundwater for certain purposes which involve groundwater discharge to surface watercourses is only scrutinized in a particular enumerated district, but otherwise not limited in any other areas).

<sup>&</sup>lt;sup>247</sup> LCRA's Closing at 66-74.

prohibition of all transport in a watercourse. Without any evidence to support the GM's conclusion that transporting groundwater out of the District in a watercourse pursuant to a lawfully obtained permit would result in loss or waste, the provisions are arbitrary and exceed the District's authority to prevent waste.

### b. The Special Provision Is Unnecessary

The GM acknowledges the impossibility of transporting water in a watercourse upriver from Bastrop County to Travis County; however, the GM argues that the provision is necessary because LCRA may later seek to amend its transport permits to include a new place of use downriver from Bastrop County at some point in the future, which would open the possibility of LCRA transporting groundwater in a watercourse. This argument is unpersuasive. Any such amendment would be subject to the District's application and review process, and the GM could evaluate such a request on its actual, and not hypothetical, merits or failings.

The GM states that is important to include the provision in these particular transport permits for fairness and consistency because the GM intends to bar transport via bed and banks for all new permits by including the provision in any new future transport permit. As discussed below, the ALJs conclude that the special provision in this matter is overbroad as drafted and unlawful absent any analysis or evidence that transport would result in loss or waste of groundwater.

# c. The Special Provision Is Overbroad to Accomplish Its Stated Purpose

On its face, the provision appears to go beyond the District's stated purpose of simply preventing the waste of groundwater in transport and actually prohibits uses that the District allows within its boundaries. Under Code § 36.122(c) "a district may not impose more restrictive permit conditions on transporters than the district imposes on existing in-district users." The special provision language is significantly more expansive than simply prohibiting the transport of water in the bed-and-banks of a watercourse. It states:

Water withdrawn and transported under the permit must be put to beneficial use at all times, and may not be transported pursuant to a bed and banks permit nor discharged to any surface water, as defined by Section 11.021 of the Texas Water Code, as amended (e.g., a stream, river, or lake (emphasis added).

The special provision would not only prevent the transportation of water to Travis County pursuant to a bed and banks permit, it would also more broadly prevent the discharge and beneficial use of the groundwater *in* Travis County, by LCRA or any of its customers, after transport to Travis County. For example, by the plain language, this provision would disallow LCRA, or any of LCRA's customers, from using the groundwater for power plant cooling purposes in Travis County (as LCRA is currently authorized to do within the District's boundaries to use its Lake Bastrop Permit). This violates the prohibition in Code § 36.122(c) of a district imposing more restrictive permit conditions on transporters than the district imposes on existing in-district users.

#### V. CONCLUSION

The ALJs recommend issuance of the Revised Draft Operating Permits and the Draft Transport Permits with the following changes:

- 1. That Special Condition 1 of the Revised Draft Operating Permits be amended to read, "Prior to construction of a well authorized under Special Condition 3(b), Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee;"
- 2. That the following language be removed from Special Condition (3)(a) of the Revised Draft Operating Permit: "and has complied with the terms and provisions of the Monitoring Well Agreement."

- 3. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(c)(iv) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase III."
- 4. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(d)(iii) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase IV."
- 5. That Special Condition (4)(a) of the Revised Draft Operating Permit be amended to include a requirement that a "Monitoring Well System" include wells to monitor surface water;
- 6. That Special Condition 5 be amended to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and
- 7. That Special Provision 1, prohibiting discharge into a surface watercourse, be removed from the Draft Transport Permits.

In support of these recommendations, the ALJs propose the following Findings of Fact and Conclusions of Law.

#### VI. FINDINGS OF FACT

#### **Background and Procedural History**

- 1. The Lower Colorado River Authority (LCRA) is a conservation and reclamation district established by the Texas Legislature in 1934 that serves as a regional water supplier within its 35-county service area.
- 2. In 2015, as part of a goal to diversify its water supply and "drought proof" it, LCRA acquired groundwater rights beneath the Griffith League Ranch, an approximately 4,847.5-acre property owned by the Capitol Area Council, Inc. of the Boy Scouts of America.
- 3. On February 1, 2018, LCRA filed applications (Applications) for eight operating and transport permits with the Lost Pines Groundwater Conservation District (District). The applications for operating permits sought authorization to withdraw a total of 25,000 acre-feet per year of groundwater from the Simsboro Formation based on the groundwater rights it acquired at the Griffith League Ranch. The water was to be used for municipal, industrial, recreational, irrigation and agricultural purposes.

- 4. On February 21, 2018, LCRA resubmitted the Applications on different forms.
- 5. On August 20, 2018, the District's General Manager (GM) notified LCRA by letter that its Applications were administratively complete and that the Applications would be set for a public hearing. The letter also provided LCRA with the GM's Draft Operating Permits and Draft Transport Permits (collectively, Draft Permits.)
- 6. Following notice, the District held a public hearing on the Applications on September 26, 2018, and voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a hearing on the Applications. Several persons disagreed with the issuance of the Draft Permits, and LCRA challenged some of the Draft Transport Permit provisions.
- 7. On December 18, 2018, SOAH Administrative Law Judges (ALJs) Michael O'Malley and Laura Valdez held a prehearing conference in Bastrop, Texas. At the prehearing conference, the ALJs admitted the following as parties: LCRA, the District, Aqua Water Supply Corporation (Aqua), Environmental Stewardship, City of Elgin (Elgin), and Recharge Water, LP (Recharge). A group of landowners represented by a single attorney was also admitted, and will be referred to as the Brown Landowners. Several self-represented litigants were also named parties.
- 8. Following a challenge to party status, the ALJs determined that many of the self-represented litigants, and some of the Brown Landowners, did not have a justiciable interest and struck them as parties. The remaining self-represented litigants were Peggy Jo and Marshall Hilburn, Walter Winslett, JC Jensen, Elvis and Roxanne Hernandez, Verna L. Dement, Catherine and Charles L. White, Richard Martinez. Mr. Jensen and Mr. Martinez withdrew their protests, as did several of the Brown Landowners.
- 9. Aqua is a retail public utility with a service area in Bastrop, Caldwell, Fayette, Lee, Travis, and Williamson Counties that has a permit from the District authorizing the production of 23,627 acre-feet per year from 15 wells in the Simsboro Formation. Twelve of those wells are in two well fields near the shallow outcrop of the Simsboro. Aqua's three other wells are located on the south side of Highway 290, in the deeper downdip portion of the aquifer.
- 10. Elgin has a retail public utility that provides retail water utility service within its certificated service area. The city, which is located in the greater Austin area, expects continued and rapid growth. Elgin has four wells that are all partially or wholly completed within the Simsboro Formation. Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations. Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation.
- 11. Recharge, formerly known as End Op, L.P., has operating permits from the District authorizing the production of 46,000 acre-feet from 14 wells, to be phased in, which it

- acquired following years of litigation and a settlement. Seven of the permitted wells are to be located in Bastrop County, and seven are to be located in Lee County.
- 12. The Hernandezes' well is in the Calvert Bluff Formation, which overlays the Simsboro. The Brown Landowners' wells are located throughout the District.
- 13. The hearing on the merits was held October 15-22, 2019, before ALJs Ross Henderson and Rebecca S. Smith. The first four days of the hearing were held in Bastrop, Texas, and the last two took place at SOAH's hearing facility in Austin, Texas. Mr. and Mrs. Hernandez were the only self-represented litigants who prefiled testimony and participated in the hearing on the merits. The record closed on January 31, 2020, with the filing of reply briefs.
- 14. In its original Applications, LCRA stated that the water would be used throughout its 35-county service area. In its testimony, and at hearing, LCRA amended its request to only seek to use the water in Bastrop, Lee, and Travis Counties.
- 15. As an attachment to his reply brief, the GM provided a January 31, 2020 Revised Draft Operating Permit (Revised Draft Operating Permit) that made several changes to the Draft Operating Permit. No party objected to these changes.

# **Uncontested Texas Water Code Factors Relevant to Operating Permits**

- 16. The Applications for Operating Permit included all of the information required by chapter 36 of the Texas Water Code (Code) and the District Rules.
- 17. LCRA intends to use the groundwater it produces to meet its existing and future water supply obligations.
- 18. Standard Provision No. 1 in the Revised Draft Operating Permits require that the water withdrawn be put to beneficial use at all times and prohibits the operation of a permitted well in a wasteful manner.
- 19. The District's Management Plan states that the District will endeavor to manage groundwater to meet demands on a sustainable basis.
- 20. The Revised Draft Operating Permits' production limits, requirements for pump-testing and monitoring, and a provision that LCRA is subject to future production limits allow the District to manage groundwater to meet demands on a sustainable basis.
- 21. LCRA's proposed use of water is consistent with the District's approved management plan.
- 22. LCRA has adopted water conservation and drought contingency plans pursuant to its policy to meet or exceed state water conservation requirements.

- 23. In its Applications and with its plans, LCRA has agreed to avoid waste and achieve water conservation.
- 24. In its Applications, LCRA agreed that reasonable diligence will be used to protect groundwater quality and that it will follow well plugging guidelines at the time of well closure.
- 25. LCRA does not have a history of non-compliance with District Rules or Chapter 36.

# Unreasonable Effects on Groundwater or Surface Water Resources or Existing Permit Holders

- 26. The 2018 Central Carrizo-Wilcox Groundwater Availability Model (New GAM) provides a better tool to model the impact of LCRA's proposed pumping than does the 2004 Central Queen City-Sparta Groundwater Availability Model.
- 27. LCRA's expert Dr. Steven Young performed several model runs using the New GAM, factoring in well-design factors, such as pump settings, well constrictions, and location of well screens for Aqua's and Elgin's wells.
- 28. Under Dr. Young's modeling, LCRA's proposed pumping would not cause the water level in Aqua's or Elgin's wells to drop below the pump elevation.
- 29. The Special Conditions proposed by the GM in the Revised Draft Permit—in particular, the 36-hour pump test, the requirement that a groundwater monitoring well agreement be entered into, and the phased production tiers—will help ensure that LCRA's proposed use will not unreasonably affect existing groundwater resources or existing permit holders.
- 30. Dr. Young's modeling showed that LCRA's proposed pumping will not unreasonably affect existing surface water resources.
- 31. The modeling also showed that LCRA's proposed pumping, when combined with other pumping, has the potential to affect existing surface water resources.
- 32. Because LCRA's proposed pumping, when combined with other pumping, has the potential to affect existing surface water resources, the Revised Draft Operating Permits should be revised to require monitoring for effects on surface water resources.

Whether Granting the Applications is Consistent with the District's Duty to Manage Total Groundwater Production on a Long-Term Basis to Achieve an Applicable Desired Future Condition

- 33. The District is a part of Groundwater Management Area 12, which on April 27, 2017, adopted a desired future condition (DFC) for the Simsboro Formation of a District-wide average drawdown between January 2000 and December 2069 of 240 feet.
- 34. The DFC is also divided into DFCs for the counties in the District. For Bastrop County, the DFC is a county-wide average drawdown between January 2000 and December 2069 of 174 feet; for Lee County, the DFC is a county-wide average drawdown between those dates of 350 feet.
- 35. Modeled Available Groundwater (MAG) is the amount of water that the Texas Water Development Board's executive administrator determines may be produced on an average annual basis to achieve a DFC.
- 36. MAG is a factor for the District to consider when managing the DFC.
- 37. Granting the application, with the Special Conditions contained in the Revised Draft Operating Permit, is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve the applicable DFC.

Whether the Conditions and Limitations in the Revised Draft Operating Permit Will Prevent Waste, Achieve Water Conservation, Minimize as far as Practicable the Drawdown of the Water Table or the Reduction of Artesian Pressure, or Lessen Interference Between Wells

- 38. LCRA's proposed wells will be located greater more than 100 feet away from the nearest property line and will be spaced at least 5,000 feet from the nearest Simsboro well not owned by LCRA.
- 39. LCRA's proposed wells will be located where the aquifer is deepest, in some of the most transmissive parts of the Simsboro in the District.
- 40. Because LCRA's proposed wells will be part of an aggregated system, LCRA will be able to adjust pumping among the wells to minimize reduction of artesian pressure.
- 41. Under the Revised Draft Operating Permits, the GM can restrict pumping if the 36-hour pump tests reveal that impacts from pumping are worse than anticipated.
- 42. The Special Conditions regarding the 36-hour pump tests, phasing, and monitoring wells in the Revised Draft Operating Permit will prevent waste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells.

#### **Other Issues**

- 43. The District has not adopted policies of reducing the initial amount of water requested by an applicant or of requiring financial mitigation for production in Bastrop County.
- 44. The District has not adopted a policy of requiring spacing between wells of at least 5,000 feet as between all large volume wells, even those owned by the same owner.
- 45. Special Condition 15 in the Revised Draft Operating Permits, which requires LCRA to provide well design specifications before drilling, is within the District's authority and is appropriate.

# **Phasing Issues**

- 46. Revised Draft Operating Permits Special Condition 3 provides for tiered phasing of production containing four phases.
- 47. Phase I, which requires LCRA to add new monitoring wells and to comply with the monitoring well agreement required in another special condition.
- 48. Phase II authorizes the withdrawal from two wells (Wells 7 and 8) of an aggregated annual amount of up to 8,000 acre-feet of water, with an aggregated maximum rate of withdrawal of 6,000 gallons per minute. LCRA would not be authorized to withdraw more water per year than the amount LCRA has a binding commitment to provide to an authorized place of use.
- 49. Under Phase III, the aggregated annual withdrawal amount could be increased to 15,000 acre-feet of water per year from four wells with an aggregated maximum rate of withdrawal of 10,000 gallons per minute. To move to Phase III, LCRA must show it has withdrawn 4,000 acre-feet per year from a combination of one or more of the aggregated wells during two consecutive twelve-month period sand show binding commitments. LCRA must also show that the Estimated DFC Year Drawdown is less than the DFC for the Simsboro in effect when LCRA submits that information.
- 50. In Phase IV, the aggregated annual withdrawal may be increased to an amount not to exceed 25,000 acre-feet per year from all eight wells, with an aggregated maximum rate of withdrawal of 18,000 gallons per minute. To reach this phase, LCRA must show binding commitments and that it has withdrawn at least an aggregate amount of at least 11,250 acre-feet per year from a combination of one or more of the aggregated wells during three consecutive twelve-month periods. LCRA must also show that the Estimated DFC Year Drawdown is less than the DFC for the Simsboro in effect when LCRA submits that information.

- 51. Revised Draft Operating Permits Special Conditions (3)(c)(i) and (3)(d)(iii) require LCRA to show binding commitments to provide the requested withdrawal amount before advancing to the next phase.
- 52. The Regional Water Plans and LCRA's existing contract demonstrated there is a need for the water in the receiving area.
- 53. Pumping water without beneficially using it would violate the Revised Draft Operating Permit.
- 54. Therefore, there is not a compelling reason to include the requirement for binding contracts in Revised Draft Operating Permits Special Conditions (3)(c)(iv) and (3)(d)(iii).
- 55. The Revised Draft Operating Permits contain most of the changes LCRA proposed to the formula in the Draft Operating Permit's Special Condition 3, with the exception of which DFC should be considered in deciding whether LCRA can advance to the next phase of production.
- 56. Examining LCRA's pumping in relation to the DFC in existence at the time LCRA seeks to advance to the next tier of pumping, helps ensure that LCRA is not exempt from the effect of changes in conditions when it seeks to pump more water.
- 57. The reference to "the Desired Future Condition for the Simsboro Aquifer in effect when the Permittee submits the information" in Revised Draft Operating Permits Special Conditions (3)(c)(ii) and (3)(d)(ii) should be included in the issued permits.
- 58. Special Condition 5 of the Revised Draft Operating Permit Special Condition 5 provides that if LCRA files a renewal application, the GM and LCRA must evaluate "the data collected from the Monitoring Well System prior to the date of the application to renew to determine whether LCRA's pumping has resulted in substantially different impacts to groundwater resources than those predicted by the modeling relied upon [by] the District when the Permit was issued and jointly propose revisions to the Permit based on that data."
- 59. The parties admitted at this hearing are affected persons, and have an interests beyond the general public.
- 60. To protect their interests, Special Condition 5 should be clarified to provide that affected persons may participate in the permit renewal process, including the determination of whether an amendment is necessary.

# **Monitoring Wells**

- 61. Special Condition 1 of the Revised Draft Operating Permit requires LCRA to enter into a Monitoring Well System Construction and Maintenance Agreement, approved by the District's Board, within 180 days after the Permit has been issued. Under this condition, LCRA would be required to construct and maintain the new monitoring wells, and a violation of the Monitoring Well Agreement would be a violation of the Permit.
- 62. Special Condition 4 of the Revised Draft Operating Permits sets out certain criteria for a monitoring well system. Wells in the system must be screened in the Simsboro Formation; must improve the spatial coverage of the monitoring well system; must be easily accessible for regular measurements; and must meet any other criteria agreed upon by the GM and LCRA.
- 63. Providing a flexible deadline, rather than a 180-day deadline, will better allow LCRA and the GM to take any new pumping into account.
- 64. Special Condition 1 should be amended to require LCRA and the GM to enter into a Monitoring Well Agreement before LCRA can construction of a well, rather than within 180 days of permit issuance.
- 65. Incorporating a Monitoring Well Agreement that does not yet exist into a permit adds a significant level of confusion to the permitting process.
- 66. The portion of Special Condition 1 under which violation of the Monitoring Well Agreement is a permit violation should be removed from the permit.
- 67. The GM incorporated LCRA's proposed changes to the 36-hour pump test into the Revised Draft Operating Permit.
- 68. Special Condition 15 of the Revised Draft Operating Permit requires LCRA to provide the GM with design specifications before drilling a well.
- 69. LCRA did not submit well design specifications with its Applications.
- 70. The GM is authorized to require LCRA to provide design specifications.
- 71. Revised Draft Operating Permits authorize "[a]II beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B)."
- 72. LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use and the revision offered by the GM allows for that flexibility.

### **Undisputed Draft Transport Permit Requirements**

- 73. The Region K and Region G Water Plans identify water supply shortages in the in the counties LCRA is requesting to serve (Lee, Bastrop, and Travis Counties) and project that there is sufficient water available for LCRA's planned withdrawals.
- 74. In reviewing LCRA's Applications for Transport Permits, the GM considered the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence.
- 75. In reviewing LCRA's Applications for Transport Permits, the GM considered the or effects on existing permit holders or other groundwater users within the District.
- 76. In reviewing LCRA's Applications for Transport Permits, the GM considered the approved regional water plan and approved district management plan.
- 77. Special Provision 1 prohibits LCRA from transporting water pursuant to a bed-and-banks permit and from discharging to any surface water.
- 78. Under the Draft Permits, transportation of groundwater by use of a proposed bed-and-banks permit would be impossible because water cannot be conveyed upriver from Bastrop County to Travis County, the only place of use outside the District.
- 79. Discharge of groundwater into a surface watercourse pursuant to a bed-and-banks permit is not waste.
- 80. Operating permits in the District do not prohibit discharge into surface water.
- 81. Special Provision 1 imposes more restrictive permit conditions on transporters than the District imposes on existing in-district users.

#### VII. CONCLUSIONS OF LAW

- 1. The District has jurisdiction to decide the issues raised by LCRA's Applications. Tex. Water Code ch. 36.
- 2. Notice was accomplished in accordance with chapter 36 of the Texas Water Code and District Rules.
- 3. LCRA's Applications are subject to the District Rules that were amended April 20, 2016.
- 4. Under the Standard and Special Conditions proposed by the GM in the Revised Draft Operating Permits, LCRA's Applications for Operating Permits conform to the requirements prescribed by chapter 36 of the Code and the District Rules. Tex. Water Code § 36.113(d)(1); District Rule 5.2D(1).

- 5. Modeled Available Groundwater is the amount of water that may be produced on an average annual basis to achieve a desired future condition. Tex. Water Code § 36.001 (25).
- 6. Under District Rule 8.2.B, a new non-exempt well with a maximum pumping capacity of greater than 1,000 gpm must be spaced at least 5,000 feet from the nearest well completed in the same aquifer unit and owned by a different well owner.
- 7. The District is not required to consider historic use in evaluating LCRA's Applications. Tex. Water Code § 36.116(b).
- 8. Neither the Texas Water Code nor the District Rules authorize the District to unilaterally impose a requirement that an applicant recreate a mitigation account to pay other well owners for the impacts from the applicant's drilling.
- 9. In reviewing LCRA's Applications for Transport Permits, the District considered the factors required by Texas Water Code § 36.122(f) and District Rule 6.3.
- 10. Texas Water Code § 36.001(8)(E) defines "waste" as including "willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the commission under Chapter 26."
- 11. Authorized discharge pursuant to a bed-and-banks permit issued under the Texas Water Code is not "waste."
- 12. The District may not prohibit the transport of water via a bed-and-banks permit as part of its authority to control waste of groundwater under Texas Water Code § 36.101(a).
- 13. After weighing the factors under Texas Water Code § 36.113(d) and the District Rules, the District should approve the GM's Revised Draft Operating Permit and the Draft Transport Permit with the following changes:
  - a. That Special Condition 1 of the Revised Draft Operating Permits be amended to read, "Prior to construction of a well authorized under Special Condition 3(b), Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee;"
  - b. That the following language be removed from Special Condition (3)(a) of the Revised Draft Operating Permit: "and has complied with the terms and provisions of the Monitoring Well Agreement;"

- c. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(c)(iv) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase III;"
- d. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(d)(iii) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase IV;"
- e. That Special Condition (4)(a) of the Revised Draft Operating Permit be amended to include a requirement that a "Monitoring Well System" include wells to monitor surface water;
- f. That Special Condition 5 be amended to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and
- g. That Special Provision 1, prohibiting discharge into a surface watercourse, be removed from the Draft Transport Permits.

SIGNED March 31, 2020.

MÉBECCA S. SMITH ADMINISTRATIVE LAW JUDGE

STATE OFFICE OF ADMINISTRATIVE HEARINGS

ROSS HENDERSON

ADMINISTRATIVE LAW JUDGE

STATE OFFICE OF ADMINISTRATIVE HEARINGS

# Exhibit 2



# State Office of Administrative Hearings

# Kristofer S. Monson Chief Administrative Law Judge

July 20, 2020

Natasha J. Martin

Re Client: Lost Pines Groundwater Conservation District

Graves Dougherty Hearon & Moody, P.C.

401 Congress Ave., Suite 2200

RE: Docket No. 952-19-0705; Application of Lower Colorado River Authority for Operating and Transport Permits for Eight Wells in Bastrop County, Texas

Dear Ms. Martin:

Austin, TX 78701

The parties filed exceptions and replies to the Proposal for Decision (PFD) in this matter. In response to the exceptions, the Administrative Law Judges (ALJs) recommend making some changes to the PFD. Many other requests for changes will be denied.

The parties repeat many of the arguments they made in closing. Because these arguments have already been addressed in the PFD, the ALJs do not recommend any changes be made in response to these arguments and decline to address them in detail in this letter. These arguments include:

- The General Manager (GM)'s arguments regarding binding commitments for use of the water (Finding of Fact 54);<sup>1</sup>
- The GM's arguments concerning a bed-and-banks permit and waste (Findings of Fact 77-81 and Conclusions of Law 11-13);
- Aqua and Elgin's arguments relating to the role of the GAM and which GAM should be used (Findings of Fact 26-28);

<sup>&</sup>lt;sup>1</sup> The GM argues that in Conclusions of Law 13c and 13d, the ALJs conclude that monitoring wells substitute for binding contracts. The ALJs made no such conclusion; the ALJs suggest that any confusion is the result of changes to subsection numbers that resulted from deleting the subsection on binding commitments.

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- Aqua and Elgin's exceptions relating to modeled available groundwater, the Special Conditions, and the District's duty to manage total groundwater production on a long-term basis to achieve the applicable DFC. (Findings of Fact 36-37);
- Lower Colorado River Authority (LCRA)'s objections to the inclusion of the phasing formula and whether the relevant DFC should be the DFC in place at the time of the requested increase in pumping (Findings of Fact 55-57); and
- Environmental Stewardship's requests that the PFD be revised to make violations of monitoring well agreement enforceable permit violations (Finding of Fact 66).

# **General Arguments**

Several of the parties filed exceptions that do not address specific findings of fact or conclusions of law. The ALJs will first address those exceptions.

In their exceptions, the Brown Landowners express their disagreement with the ALJs' factual findings and their determination of expert credibility and request that the entire PFD be withdrawn. The Brown Landowners would have the ALJs rely on a memo by an expert who was hired by LCRA but who did not testify and was not available for cross examination and on the testimony of a non-expert landowner. The ALJs explained their reasoning in the PFD and will decline to withdraw the PFD, as the Brown Landowners request.

Aqua and Elgin jointly filed exceptions, some of which are discussed above and below. These exceptions assert that the PFD reflects "permitting by rule." The PFD addresses the various factors that went into the analysis, which the ALJs do not believe reflects permitting by rule.

In its exceptions, Recharge largely reurges its closing arguments about the relevant legal standard and about whether LCRA met its burden of proof. The ALJs disagree, for the reasons set out in the PFD. Also for the reasons set out in the PFD, the ALJs decline to find that the District has the authority to require a mitigation fund, as Recharge argues.

Environmental Stewardship requests specific changes to the draft permit to ensure the monitoring well agreement is enforceable. Specifically, Environmental Stewardship requests that parties be allowed to participate in the permit renewal process to evaluate impacts to surface water and would like an opportunity to provide comments on the monitoring well agreement relating to surface water monitoring. The ALJs have found that LCRA has met its burden to show its pumping alone (through all phases) will not have unreasonable impacts to surface water and that was not a basis to deny the permit. The requirement for surface water monitoring wells is to make sure the District can meet its responsibility of protecting surface water from cumulative impacts. Therefore, there is no basis to require or allow further participation on LCRA's impacts to surface water.

Environmental Stewardship also requests that monitoring well data be made publicly accessible. The ALJs find that this is a policy decision for the District that is outside the scope of this hearing and will not make a recommendation based on this exception.

SOAH Docket No. 952-19-0705 Exceptions Letter by ALJ July 20, 2020 Page 3

Environmental Stewardship additionally ask that the findings and conclusions acknowledge that environmental flow targets and the frequency with which they are met provide relevant, reliable, and useful data that should be considered in determining whether proposed groundwater pumping will unreasonably impact surface water resources. This issue was specifically addressed in the PFD, and the ALJs will not address it further.

#### **Other Exceptions**

The ALJs will address some of the parties' arguments to specific statements within the PFD, and to findings of fact and conclusions of law.

LCRA argues that there is no basis in the record for a statement on page 31 of the PFD that, in the future, up to half of LCRA's groundwater pumping under the permit may be sourced by surface water. The ALJs note that the same statement is supported in footnote 94 with a citation to GM Exhibit 13. The statement is supported in the record and the ALJs make no revisions to the statement.

LCRA also requests that Finding of Fact Nos. 47-50 each be revised by adding "Under the Revised Draft Operating Permits" so not be in conflict with Finding of Fact No. 54. The ALJs make no revisions based on this comment because Finding of Fact No. 46 makes it clear that Findings of Fact Nos. 47-50 are referring to the Revised Draft Operating Permit.

Although Aqua and Elgin argue that Conclusion of Law 6 is misleading and not helpful, the ALJs note that it restates the law and will not recommend amending it.

### **Recommended Changes**

The ALJs agree, however, that the following changes should be made to the findings of fact and conclusions of law:

Finding of Fact 3: The last sentence of Finding of Fact 3 should be amended to read "The water was to be used for all beneficial uses under Chapter 36 of the Texas Water Code."

Finding of Fact 6: Finding of Fact 6 should be amended as follows to clarify that LCRA objected to the draft operation permit provisions: "Several persons disagreed with the issuance of the Draft Permits, and LCRA challenged some of the Draft Operation and Transport Permit provisions."

Finding of Fact 10: The ALJs agree with Elgin that this Finding of Fact No. 10 should be amended to reflect that Elgin has permits issued by the Lost Pines Groundwater Conservation District. This Finding should be amended to read as follows:

Elgin has a retail public utility that provides retail water utility service within its certificated service area. The city, which is located in the greater Austin area, expects continued and rapid growth. Elgin has four wells, permitted by the District, that are all partially or wholly completed within the Simsboro Formation. Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations. Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation

Finding of Fact 38: The word "greater" should be deleted.

Finding of Fact 48: The word "which" and the comma preceding it should be deleted.

Finding of Fact 52: The word "demonstrated" should be replaced with "demonstrate."

Finding of Fact 57: The ALJs agree with the GM that a correction should be made to the citation in Finding of Fact 57. The reference should be to Special Condition (3)(e)(iii), not (ii).

Finding of Fact 58: The ALJs agree with the GM that a correction should be made to Finding of Fact 58. The reference should be to Special Condition 5, not to Special Condition 7.

Finding of Fact 60: After further reflection, the ALJs agree with LCRA, the GM, and Recharge that Finding of Fact 60 should be removed as potentially in conflict with Texas Water Code §36.114(b).

Additionally, the ALJs agree with the GM that certain findings of fact, listed in the GM's attachment A as Findings of Fact Nos. 38-41 should be added. These are:

- 38. The TWDB executive administrator's estimate of the current and projected amount of the groundwater produced under exemptions granted by District Rules and Texas Water Code §36.117 is a factor for the District to consider when reviewing an application and managing the DFC.
- 39. The amount of groundwater authorized under permits previously issued by the District is a factor for the District to consider when reviewing an application and managing the DFC.
- 40. A reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District is a factor for the District to consider when reviewing an application and managing the DFC.
- 41. Yearly precipitation and production patterns are factors for the District to consider when reviewing an application and managing the DFC.

SOAH Docket No. 952-19-0705 Exceptions Letter by ALJ July 20, 2020 Page 5

Conclusion of Law 3: The word "drilling" should be replaced with "production."

Conclusion of Law 13e. Both the GM and LCRA argue that Conclusion of Law No. 13e should be modified to remove "monitoring well system" because it improperly inserts surface water monitoring into the groundwater formula. The ALJs agree and make the District GM's proposed revisions to Conclusion of Law No. 13e:<sup>2</sup>

That a monitoring well agreement entered into between LCRA and the District shall include wells, gauges, or any scientifically supported tool to monitor surface water.

The ALJs make the corresponding change to the PFD on the last paragraph of page 54 as follows:

The ALJs find that, in light of the fact that the GAMs show potential impacts to surface water resources caused by LCRA and District-wide pumping, any monitoring well system the monitoring well agreement between LCRA and the District must include monitoring wells that could monitor effects on surface water resources. Thus, the ALJs recommend amending the definition of "Monitoring Well System" contained in Special Condition (4)(a) in the Revised Draft Operating Permit to require that a monitoring well system must monitor such effects.

Conclusion of Law 13f should be deleted, consistent with Finding of Fact 60, above.

Sincerely,

Rebecca S. Smith

Administrative Law Judge

rebecca S. Smith

ROSS HENDERSON

ADMINISTRATIVE LAW JUDGE

STATE OFFICE OF ADMINISTRATIVE HEARINGS

cc: All parties of record

<sup>&</sup>lt;sup>2</sup> The ALJs reject LCRA's additional argument that Finding of Fact Nos. 31 and 32 and Conclusion of Law No. 13e should be removed because it should not have to solely bear the burden to have surface water monitoring wells.

## Exhibit 3

#### BEFORE THE

## LOST PINES GROUNDWATER CONSERVATION DISTRICT BASTROP, TEXAS

#### BOARD MEETING

TUESDAY, OCTOBER 12, 2021

HYBRID IN-PERSON / TELEPHONIC / VIDEOCONFERENCE MEETING

Tuesday, the 12th day of October 2021, the above-entitled matter came on for hearing at the Bastrop Convention & Exhibit Center, 1408 Chestnut Street, Bastrop, Texas 78602; before SHERIL SMITH, President; LARRY SCHATTE, CARL STEINBACH, MICHAEL SIMMANG, HERBERT COOK, BILLY SHERRILL, MELISSA COLE, Members of the Board; and the following proceedings were reported by Lorrie A. Schnoor, Certified Shorthand Reporter, Registered Diplomate Reporter, and Certified Realtime Reporter.

1	TABLE OF CONTENTS	
2	P.	AGE
3	PROCEEDINGS, TUESDAY, OCTOBER 12, 2021	4
4		
5	The subjects to be discussed or considered, or upon which any formal actions may be taken, are listed	
6	below. Items may or may not be taken in the same order as shown on the meeting notice.	
7		
8	1) Call to Order - President Sheril Smith	4
9	2) Welcome and Introductions	4
10	3) Virtual and In-Person Public Comments - limit 3 minutes each person	5
11	Hugh Brown	5
12	Nancy McKee	6 8
13	John DeGomez Ernie Bogart	11 13
14	Andy Wier	14 15
15	4) Continued Final Hearing from July 14, 2021 on	
16	Applications of Lower Colorado River Authority for Operating Permits and Transfer Permits for 8	
17	wells located in Bastrop County, Texas and the Administrative Law Judges' Proposal for Decision	
18	issued in SOAH Docket No. 952-19-0705 recommending granting said permits in an aggregate amount of	
19	25,000 acre-feet of water per year from the Simsboro Aquifer along with other terms and	1 -
20	conditions	17
21	EXECUTIVE SESSION	18
22	5) Consideration of and possible action on the Applications of Lower Colorado River Authority for	
23	Operating Permits and Transport Permits for 8 wells located in Bastrop County, Texas and to withdraw an	
	aggregate amount of 25,000 acre-feet of water per	
24	year from the Simsboro Aquifer to be used in Bastrop, Lee, and Travis Counties	19
25		

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3	6) Consideration of and possible action on a resolution designating one or more places	
4	inside the district in Lee and Bastrop Counties for conducting the meetings of the board	21
5	PROCEEDINGS ADJOURNED	26
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1	PROCEEDINGS
2	TUESDAY, OCTOBER 12, 2021
3	(6:10 p.m.)
4	AGENDA ITEM NO. 1
5	MS. SMITH: Okay. I think we're ready to
6	begin. I call the meeting to order at 6:10 p.m. on
7	October the 11th, 2021.
8	First, I'd like just to do a roll call
9	vote just so we have the members that will be making up
10	the quorum. And I also want to note that we have three
11	members recused, and that's David Fleming, Phil Cook,
12	and Kay Rogers. And I believe I'm not sure they're
13	all present or not, but now I'll do a roll call.
14	Mike Simmang?
15	MR. SIMMANG: Here.
16	MS. SMITH: Larry Schatte?
17	MR. SCHATTE: Here.
18	MS. SMITH: Billy Sherrill?
19	MR. SHERRILL: Here.
20	MS. SMITH: Herb Cook?
21	MR. COOK: Here.
22	MS. SMITH: Carl Steinbach?
23	MR. STEINBACH: Here.
24	MS. SMITH: Melissa Cole?
25	MS. COLE: Here.

1	our neighboring county of what it's doing to the wells
2	and everybody that's asked for water. It isn't pumping
3	yet, and we don't know what that holds. But, again,
4	please think about it. It's serious, very serious.
5	And I come back again, I told Billy a
6	while ago, when I retire, please don't ask me to serve
7	on this board because I know the tough job you guys got,
8	and I commend you for it. And it's decisions that
9	you've got to make sometimes are not popular. So please
LO	continue the work you're doing, and let's protect all
L1	water; but I understand we need to share. Thank y'all.
L2	MS. SMITH: Thank you, Judge Fischer.
L3	(Applause)
L4	MS. SMITH: Do we have anybody remote that
L5	would like to make comments?
L6	MR. TOTTEN: If they'll put their name in
L7	the chat, we'll unmute them. If you can say that over
L8	the mic, please.
L9	MS. SMITH: Okay. If you are joining us
20	remotely, if you would put your name in the chat room,
21	then we will recognize you.
22	I'm not seeing any, so we'll go ahead and
23	proceed.
24	AGENDA ITEM NO. 4
25	MS. SMITH: Agenda Item 4: Continued

final hearing from July 14th, 2021, on applications of 1 the Lower Colorado River Authority for operating permits 2 and transport permits for 8 wells located in Bastrop 3 County, Texas, and the Administrative Law Judges' 4 proposal for decision issued in the SOAH Docket 5 No. 952-19-0705 recommending granting said permits in an 6 aggregate amount of 25,000 acre-feet of water per year 7 from the Simsboro aguifer along with terms and 8 conditions. 9 10 At this time the board will be going into The board -- note on the -- we are executive session. 11 going into the Executive Session to consult with our 12 13 attorneys regarding any posted matter in which the board 14 may seek advice of its attorneys under Government Code 551.071 or for any action on the agenda for which a 15 16 closed session is permitted by law, and we will reconvene in open session for any appropriate action on 17 18 any matter considered in executive session. 19 Okay. So we are leaving now at 6:33. (Executive Session: 6:33 p.m. to 7:59 2.0 21 p.m.) AGENDA ITEM NO. 5 22 MS. SMITH: Well, it looks like 23 24 everybody's back, so we'll go ahead and begin. coming out of Executive Session at 7:59. No votes were 25

```
taken -- no votes were taken, no polls, or anything
1
 2
   else.
                  Board members, does anyone have a motion
 3
 4
   they'd like to make?
                  MS. COLE:
                             I would like to make a motion
 5
   to grant to LCRA a five-year production permit for 8,000
6
   acre-feet of water per year, striking every finding of
7
   fact and conclusion of law referencing the definition of
8
   waste, and granting a 30-year transport permit to
9
10
   transport 25,000 acre-feet per year.
                  MR. ELLIS: Okay. I'm going to wait for a
11
12
   second on that, but I've got a guestion for you.
                                                       Do we
13
   have a second?
14
                  MR. SHERRILL: I'm going to second it,
15
   second the motion.
16
                  MR. ELLIS: Okay. Sorry about that.
                                                         Is
   the motion then to strike the part of the draft permit
17
18
   that deals with the phased-in approach over time and
   simply grant a five-year, 8,000 acre-foot permit?
19
                  MS. COLE: Correct.
20
                  MR. ELLIS: Okay. Is that the intention
21
   of the second?
22
2.3
                  MR. SHERRILL:
                                 It is.
24
                  MR. ELLIS:
                              Okay.
25
                                     I'm going to try to
                  MS. SMITH:
                              Okay.
```

repeat this. I'm not sure I'll get it exactly right. 1 2 Melissa -- Board Member Melissa Cole has a motion to grant a five-year production permit for 8,000 3 acre-feet of water per year. She also said she strikes 4 every finding of fact and conclusion of law referencing 5 the definition of waste. She also suggested that we 6 grant a 30-year transport permit for the 25,000 7 acre-feet. And we're also canceling the phasing. 8 Is 9 that adequate? 10 MR. ELLIS: (Nods head) MS. SMITH: All right. Does any of the 11 12 board members have any questions? 13 (No response) MS. SMITH: Any thoughts, discussion, 14 15 deliberation? 16 (No response) MS. SMITH: So we have a motion and a 17 18 second to grant the five-year production permit for 19 8,000 acre-feet of water per year, striking every finding of fact and conclusion of law referencing the 2.0 21 definition of waste, granting a 30-year transport permit 22 for 25,000 acre-feet, and canceling the phased approach. We're going to do a roll-call vote. 23 24 Director Simmang? 25 MR. SIMMANG: Yes.

1	MS. SMITH: Director Schatte.
2	MR. SCHATTE: Yes.
3	MS. SMITH: Director Sherrill.
4	MR. SHERRILL: Yes.
5	MS. SMITH: Director Cook.
6	MR. COOK: Yes, ma'am.
7	MS. SMITH: Director Steinbach.
8	MR. STEINBACH: Yes.
9	MS. SMITH: And Director Cole.
10	MS. COLE: Yes.
11	MS. SMITH: And I vote yes as well, so we
12	have a unanimous decision. It passes.
13	Okay. That completes agenda item let's
14	see I'm on the wrong page. Excuse me.
15	AGENDA ITEM NO. 6
16	MS. SMITH: Okay. Now we are down to
17	Agenda Item 6: Consideration of and possible action on
18	a resolution designating one or more places inside the
19	district in Lee and Bastrop Counties for conducting of
20	meetings of the board.
21	Mr. Totten, would you like to cover this?
22	UNIDENTIFIED SPEAKER: I don't have any
23	information on the agenda. I looked at the agenda.
24	MR. ELLIS: I don't know where that's
25	coming from.

1	CERTIFICATE
2	STATE OF TEXAS )
3	COUNTY OF TRAVIS )
4	I, Lorrie A. Schnoor, Certified Shorthand
5	Reporter in and for the State of Texas, Registered
6	Diplomate Reporter and Certified Realtime Reporter, do
7	hereby certify that the above-mentioned matter occurred
8	as hereinbefore set out.
9	I FURTHER CERTIFY THAT the proceedings of such
10	were reported by me or under my supervision, later
11	reduced to typewritten form under my supervision and
12	control, and that the foregoing pages are a full, true,
13	and correct transcription of the original notes.
14	IN WITNESS WHEREOF, I have hereunto set my hand
15	and seal this 26th day of October, 2021.
16	Con - A Salaron.
17	LORRIE A. SCHNOOR, RDR, CRR
18	Certified Shorthand Reporter CSR No. 4642 - Expires 1/31/22
19	Firm Registration No. 276
20	Kennedy Reporting Service, Inc. 555 Round Rock West Drive
21	Suite E-202 Round Rock, Texas 78681
22	512.474.2233
23	
24	
25	

### **Exhibit 4**

#### BEFORE THE

# LOST PINES GROUNDWATER CONSERVATION DISTRICT BASTROP, TEXAS

#### BOARD MEETING

MONDAY, NOVEMBER 8, 2021

HYBRID IN-PERSON / TELEPHONIC / VIDEOCONFERENCE MEETING

BE IT REMEMBERED THAT at 6:00 p.m, on Monday, the 8th day of November 2021, the above-entitled matter came on for hearing at the Bastrop Convention & Exhibit Center, 1408 Chestnut Street, Bastrop, Texas 78602; before SHERIL SMITH, President; DAVID FLEMING, LARRY SCHATTE, MICHAEL SIMMANG, HERBERT COOK, BILLY SHERRILL, MELISSA COLE, PHIL COOK, KAY ROGERS, Members of the Board; and the following proceedings were reported by Kim Pence, a Certified Shorthand Reporter.

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2	P	AGE
3	PROCEEDINGS, MONDAY, NOVEMBER 8, 2021	4
4 5	The subjects to be discussed or considered, or upon which any formal actions may be taken, are listed below. Items may or may not be taken in the same order as shown on the meeting notice.	
6 7	1) Call to Order - President Sheril Smith	4
8	2) Welcome and Introductions	4
9	3) Virtual and In-Person Public Comments - limit 3 minutes each person	4
10 11	Linda Curtis	4 7
12 13 14	4) Consideration of and possible action on findings of fact and conclusions of law related to the Board's October 12, 2021 action on the Applications of Lower Colorado River Authority (LCRA) for Operating Permits and Transport Permits for 8 wells located in Bastrop County, Texas	10
15 16 17	5) Discussion of, reconsideration of, and possible action on guidance previously provided to the District General Manager and District Hydrogeologist on the desired future conditions (DFCs) proposed by Groundwater Management Area 12 in the current round of joint planning	20
18	PUBLIC COMMENTS:	
19 20 21 22	Ed McCarthy Ernie Bogart Steve Box Jen Bezner Terry Wilson Keith Copeland Tom Glass David Lanford	22 28 29 34 35 38 41
<ul><li>23</li><li>24</li><li>25</li></ul>	Madeline Eden Lee Dustman Andy Wier Mark Whiting	45 47 49 52

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2		PAGE
3	6) Consideration of and possible action on applications submitted to the District's	NOT REPORTED
4	Groundwater Mitigation Reimbursement Fund program for reimbursement greater than \$3,500,	
5	and further discussion and possible action on the scope of reimbursement under the program.	
6	7) EXECUTIVE SESSION:	NOT
7	Executive Session of the Board pursuant	REPORTED
8	to Tex. Gov't Code Section 551.071, or any closed session permitted by law, to consult	
9	with its attorneys and seek advice regarding the following items:	
10	a) Item 4, Consultation with Attorney regarding	
11	the above-posted item related to the LCRA Operating Permit and Transport Permit	
12	Applications.	
13	REPORTER'S CERTIFICATE	99
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1	PROCEEDINGS
2	MONDAY, NOVEMBER 8, 2021
3	(6:00 p.m.)
4	AGENDA ITEM NOS. 1 AND 2
5	MS. SMITH: Okay. Could the meeting come
6	to order, please. If everyone would please have a seat.
7	I welcome you-all tonight. Beautiful weather outside.
8	And here comes Judge Fischer. Welcome.
9	Good to see you here again.
10	AGENDA ITEM NO. 3
11	MS. SMITH: Item No. 3, virtual and
12	in-person public comments, limit three minutes per
13	person. I have a big handful of public comments. So if
14	I somehow overlook you or miss you, please let me know.
15	We will start with Linda Curtis. Turn the
16	light on.
17	MS. CURTIS: Ah-hah.
18	MS. SMITH: And please state your name,
19	please.
20	MS. CURTIS: I'm Linda Curtis, and good
21	evening, President Smith and Board Members. I am
22	speaking for the nonprofit, nonpartisan League of
23	Independent Voters.
24	We started LIV in 2013 after we realized
25	that both parties had a conflict of interest on water.

1	Mike Thornhill?
2	MR. THORNHILL: Item 5.
3	MS. SMITH: Wesley Bluestein.
4	MR. BLUESTEIN: Also Item 5.
5	MS. SMITH: Okay. And Ed McCarthy, you're
6	No. 5, I assume.
7	MR. McCARTHY: Yes, ma'am.
8	MS. SMITH: Thank you.
9	AGENDA ITEM NO. 4
10	MS. SMITH: Okay. We shall proceed.
11	Agenda Item No. 4, consideration of and possible action
12	on findings of fact and conclusions of law related to
13	the Board's October 12th, 2021 action on the
14	Applications of Lower Colorado River Authority, LCRA,
15	for Operating Permits and Transport Permits for 8 wells
16	located in Bastrop County, Texas.
17	For the record, Mr. Phil Cook, Mr. David
18	Fleming and Kay Rogers will be recused from voting. And
19	Phil Cook and David Fleming are present, and
20	Kay Rogers
21	Kay, have you joined us on Zoom?
22	MR. TOTTEN: She's there.
23	MS. SMITH: Very Good. Thank you.
24	MR. ELLIS: (Inaudible)
25	MS. SMITH: Yeah, she will when she

```
doesn't get to vote on this one. She'll join us later.
1
2.
   That's right.
                   Okay.
3
                  All right. Board Members that are voting
   on this Agenda Item 4, I want to verify that all of you
4
   have read -- you received and read findings of fact and
5
   conclusions of law and the draft permit. Did everyone
6
   do so?
7
                  MR. COOK: Not completely.
8
9
                  MS. SMITH: Not completely.
                  THE REPORTER: Can you use your
10
   microphone?
11
                  MS. SMITH: Yes, turn your -- so you can
12
   be recorded.
13
14
                  MR. COOK: Not completely.
                  MS. SMITH: What do you mean "not
15
   completely"?
16
                  MR. COOK: (Inaudible)
17
18
                  THE REPORTER: Can you use your
19
   microphone?
                  MR. COOK:
                             The document is about 80 pages
2.0
   long, and I haven't completely read all the 80 pages.
21
2.2
                  MS. SMITH:
                              Okay. Other Board Members?
                  (No audible response)
23
                              The packet you received I
24
                  MS. SMITH:
   think the findings of fact and conclusions of law and
25
```

the draft permit were in the last few pages. The other you probably received previously.

MR. COOK: Yes.

2.0

2.2

MS. SMITH: Okay. Board Members, do you have any questions? Mr. Ellis is here to help us with any questions we may have.

MS. COLE: I have a question about the recommendation transfer of 25,000 versus the 8,000 that's permitted.

MR. ELLIS: Okay. The motion that was made and approved by the Board was to grant the 8,000 acre-foot production permit with a five-year permit term, which is your standard permit term but the 25,000 acre-foot amount for the transport. The reason for this is they are two totally separate permits, they have two completely different standards for what is -- what you have to review in issuing the permits. The Administrative Law Judges found that they had met the standards required to justify the 25,000 acre-foot permit for that transport permit, which once they begin construction becomes a 30-year permit.

If they have growing demand, if they amend their production permit up to that number, then they could be able to transport that number. Obviously they are not going to be able to transport more than they are

1 allowed to produce, but they won't have to come back in 2. and amend that transport permit, they've already proven 3 And because it is such a long-term permit, that 30-year permit, there's no reason for them to have to come back and amend it later on. They still can't 5 produce more than the amount of their production permit 6 regardless. Does that --7 MS. COLE: But they could purchase water 8 from another producer and transport it. 9 MR. ELLIS: If they purchase water from 10 another producer and produce it from their wells, they 11 would have to amend that permit to allow that to happen. 12 If they produce that water and that arrangement is for 13 them to produce it from their own wells, they would 14 still have to amend their own well to be able to do 15 that. There isn't automatic transfer of the permit 16 amount from one permittee to another allowing them to 17 18 increase their production without having to go through 19 the amendment process. I'm pretty sure I'm right on this. 2.0 Where is Natasha? 21 I'm hiding over here. 2.2 MS. MARTIN: MR. ELLIS: You're hiding? Okay. 23 I mean, I'm pretty sure I'm right about 24 You don't allow for production to be moved from 25 that.

1 | Point A to Point B without amending both permits.

MS. MARTIN: Off the cuff, that's --

3 | that's my take, yeah.

2.0

2.2

MR. ELLIS: Okay. You know, there's -the comparison there is to the Edwards Aquifer Authority
where we have the exact opposite situation. The Edwards
Aquifer Authority, because, again, that aquifer acts
like a lot like a pipeline, you stop pumping the water
in Medina County and start pumping in Bexar County, the
aquifer level really doesn't change that much. It comes
up a little bit in Medina County and goes down a little
bit in Bexar County, but really not that much. And the
legislature made all of those permits, with the
exception of the base irrigation groundwater tied to
irrigation permits, those are all fully transferable
from Point A to Point B.

The situation here is different. Here you -- if you want to increase your production on your well, you're going to have to amend your permit to be able to do so, specifically because you want to look at the impacts, potential local impacts, to other pumpers in that -- in that area. So buying up permits from other people doesn't necessarily mean you get to pump it from your wells.

And the other thing is there are -- there

```
are existing permits out there. They would have to be
1
   amended to allow for the same place of use, purpose of
3
   use.
          If they were to pump from those same locations but
   then put it into LCRA's pipeline, they'd still have to
4
   go through the amendment process to allow that on that
5
   production permit.
6
                  Now, I haven't done an exhaustive review
7
   of every permit that's out there, but I'm pretty sure --
8
   I doubt there's a single permit out there that would
9
   allow that to happen without an amendment of some kind.
10
   I could be wrong. Again, I haven't looked at every
11
    single permit.
12
                              (Inaudible)
13
                  MS. SMITH:
14
                  THE REPORTER:
                                 I can't hear you, ma'am.
                  MS. COLE:
                             She asked if that answered my
15
   question, and I said sort of.
16
17
                  MS. SMITH: Any other questions, comments
   from the Board?
18
19
                  (No response)
                              Would anyone care to make a
2.0
                  MS. SMITH:
   motion to approve the findings of fact and conclusions
21
   of law, or is there more discussion needed?
2.2
                             I will make that motion.
                  MS. COLE:
23
                  MS. SMITH: Okay. So your motion is to
24
   approve the findings of fact and conclusions of law on
25
```

```
the Applications of the Lower Colorado River Authority
2.
   for Operating Permits and Transport Permits for 8 wells
3
   located in Bastrop County, Texas. Is that correct?
4
                  MS. COLE: Yes.
                  MS. SMITH:
                              Is there a second?
5
                  MR. SIMMANG:
                                Since you didn't let me go
6
   first --
7
                  (Laughter)
8
                              I don't -- is your green light
9
                  MS. SMITH:
   on?
10
11
                  MR. SIMMANG:
                                Yes.
12
                  MS. SMITH:
                              Oh, okay. Was that a --
                                Since you didn't let me go
13
                  MR. SIMMANG:
   first, I will second it.
14
                  MS. SMITH:
                              Okay. We have a motion and a
15
   second to approve the findings of fact and conclusions
16
   of law related to the Board's October 12th, 2021 action
17
   on the Applications of the Lower Colorado River for
18
19
   Operating Permits and Transport Permits for 8 wells
   located in Bastrop County. Is there any further
2.0
   discussion?
21
2.2
                  (No response)
                  MS. SMITH: Okay. We'll do a roll call
23
24
   vote -- oh, yeah, go ahead.
25
                  MR. COOK:
                             Yes, ma'am. Just to make sure,
```

```
1
   I want to be clear. We're going to vote on the same
   thing we voted on here last month?
2.
                  MS. SMITH:
3
                              We're -- well, Greg, why don't
   you answer that question.
4
                              Because the final decision of
                  MR. ELLIS:
5
   the Board differed from the proposal for decision that
6
   came from the State Office of Administrative Hearings
7
   Administrative Law Judges, we had to make changes to
   that decision. So both the decision itself, the
9
   findings of fact and conclusions of law have been edited
10
   to match up with the motion that was made.
11
                  MR. COOK:
                             Okay.
12
                  MR. ELLIS: Remember the ALJs recommended
13
14
   granting --
15
                  MR. COOK: Right.
                  MR. ELLIS: -- the 25,000 acre-foot
16
   production permit.
17
18
                  MR. COOK:
                             Right.
                  MR. ELLIS: And so because the Board did
19
   not approve that, we need to go in and change the
2.0
   findings of fact and conclusions of laws to match the
21
   action the Board took.
2.2
                  MR. COOK: All right. Thank you,
23
   Mr. Ellis.
24
25
                  MR. ELLIS:
                              Sure.
```

MS. SMITH: Anyone else, any questions? 1 2 Billy? 3 MR. SHERRILL: I have one. What was it that the Board found or said? 4 Excuse me. MR. ELLIS: I think there's about 70 5 different findings of fact. 6 MR. SHERRILL: I apologize. What are we 7 going to vote on, how many acre-feet? 8 MR. ELLIS: You've already decided what 9 the permit should say. You've already set the permit at 10 8,000 acre-foot production permit --11 MR. SHERRILL: Thank you. 12 MR. ELLIS: -- and 25,000 acre-foot 13 14 transport permit. MR. SHERRILL: Thank you. 15 MR. ELLIS: What you're approving here is 16 the rationale behind that decision, why you made that 17 18 decision, what facts you found to be true and correct in the -- in the administrative record and what conclusions 19 of law that you have reached based on the law applicable 2.0 to this particular application. And we've listed all 21 those findings of fact out and all the conclusions of 2.2 law. All the ones that dealt with things that were no 23 longer relevant to the permit if the decision was made 24 have been either edited or deleted. 25

1	MR. SHERRILL: Thank you.
2	MR. ELLIS: So these findings of fact and
3	conclusions of law now match the decision you made at
4	the last at the last meeting.
5	MR. SHERRILL: I appreciate your
6	clarification.
7	MR. ELLIS: Sure.
8	MR. SHERRILL: Thank you.
9	MR. ELLIS: Okay.
10	MS. SMITH: Any further questions?
11	(No response)
12	MS. SMITH: Okay. We have a motion and a
13	second on the floor. I'll do a roll call vote.
14	Herb Cook.
15	MR. COOK: Yes, yes.
16	MS. SMITH: Billy Sherrill.
17	MR. SHERRILL: Yes.
18	MS. SMITH: Mike Simmang.
19	MR. SIMMANG: Yes.
20	MS. SMITH: Larry Schatte.
21	MR. SCHATTE: Yes.
22	MS. SMITH: Melissa Cole.
23	MS. COLE: Yes.
24	MS. SMITH: And myself, I vote yes.
25	Unanimously passes. Thank you.

```
If the other Board Members would like to
1
2
    join us, and Kay Rogers, if you're remote, if you could
3
    join us by video.
                  MS. ROGERS: Got it, I think.
4
                              We see you. Welcome.
5
                  MS. SMITH:
                  I know that several people are going to be
6
   leaving us, if we want to give them a minute or two.
7
   Greq, it's up to you whether you stay or not.
8
9
                  MR. ELLIS:
                              (Inaudible)
                              Okay. Yeah, you can, you can,
                  MS. SMITH:
10
   uh-huh.
11
                       AGENDA ITEM NO. 5
12
                              Okay. We'll go ahead and
13
                  MS. SMITH:
14
             We're going to item number -- Agenda Item 5,
   discussion of, reconsideration of, and possible action
15
   on guidance previously provided to the District General
16
   Manager and District Hydrogeologist on the desired
17
18
   future conditions, DFCs, proposed by Groundwater
   Management Area 12 in the current round of joint
19
2.0
   planning.
21
                  Now, we have many people signed up for
2.2
               Ed McCarthy, you're first, and I see that you
   comments.
   have several people that have donated their time to you.
23
                  MR. COOK:
                             Sheril, will Board Members be
24
   allowed to ask questions of the folks who are giving
25
```

## Exhibit 5

#### BEFORE THE

## LOST PINES GROUNDWATER CONSERVATION DISTRICT BASTROP, TEXAS

#### BOARD MEETING

WEDNESDAY, FEBRUARY 16, 2022

HYBRID IN-PERSON / TELEPHONIC / VIDEOCONFERENCE MEETING

BE IT REMEMBERED THAT at 6:00 p.m, on Wednesday, the 16th day of February 2022, the above-entitled matter came on for hearing at the Bastrop Convention & Exhibit Center, 1408 Chestnut Street, Bastrop, Texas 78602; before SHERIL SMITH, President; KAY ROGERS, LARRY SCHATTE, MIKE SIMMANG, TOM ARSUFFI, HERBERT COOK, MELISSA COLE, PHIL COOK, BILLY SHERRILL, ELVIS HERNANDEZ, Members of the Board; and the following proceedings were reported pursuant to the Office of the Governor's Temporary Suspension of Certain Open Meetings Act Laws due to COVID-19, by Mary Carol Griffin, a Certified Shorthand Reporter.

1	TABLE OF CONTENTS	
2	PROCEEDINGS, WEDNESDAY, FEBRUARY 16, 2022	PAGE 3
3		3
4	The subjects to be discussed or considered, or upon which any formal actions may be taken, are	
5	listed below. Items may or may not be taken in the same order as shown on the meeting notice.	
6 7	1) Call to Order, Welcome and Introduction of new Board Directors and Assistant General Manager?	3
8	2) Public Comments - limit 3 minutes each person a) Non-Agenda Items	
9	b) Agenda Items	4
10	3) Pursuant to Board Rule 2.1 A, the Board will conduct its annual election for president,	
11 12	vice-president and secretary-treasurer. For Board action	9
13	4) Review and approval of the minutes of the Dec. 15, 2021 special board meeting and Dec. 15, 2021 regular board meeting	12
14	5) Discussion, consideration of and possible	
15	action on modifying District signature authority for banking and investments	13
16	6) Discussion, consideration of and possible	
17	action on application by Alcoa USA Corp. for the approval of transfer of ownership of the Operating	
18	Permits for District Well Nos. 5839608, 5840101, 5840428, 5840427, 5840426, 5840431, 5840432,	
19	and 5840433 to SLR Properties I, LLC	18
20	7) Discussion, consideration of and possible action on Lower Colorado River Authority's Motion	
21	for Rehearing dated November 22, 2021 on the District's decision on the Applications of	
22	Lower Colorado River Authority for Operating Permits and Transfer Permits for Eight Wells	
23	in Bastrop County; SOAH Docket No. 952-19-0705	26
24	EXECUTIVE SESSION	30
25	REPORTERS CERTIFICATE	34

1	PROCEEDINGS
2	WEDNESDAY, FEBRUARY, 2022
3	(6:00 p.m.)
4	AGENDA ITEM NO. 1
5	MS. SMITH: Okay. The meeting will come
6	to order at 6:05 p.m.
7	I'd like to welcome everyone for coming.
8	Do we have people on the Internet? How
9	many people do we have?
10	MR. TOTTEN: Hold on one second, please.
11	We need to start recording.
12	MS. SMITH: Okay.
13	MR. TOTTEN: Right now there are 11.
14	MS. SMITH: We're waiting for the
15	recording to start.
16	MR. TOTTEN: We have 11 people online.
17	MS. SMITH: Okay. We have 11 people
18	joining us through Zoom.
19	Thank you.
20	I'd like to as I was saying welcome
21	everyone, including those of you online. Thank you for
22	joining us this evening.
23	I would like to introduce we have two
24	new board directors and also a new staff person. First,
25	Mr. Tom Arsuffi is a board member from Bastrop, and

1	bit out of the purpose of this agenda item.
2	Thank you, sir. You may have a seat.
3	All right. Action to approve the Alcoa
4	USA Corp for transfer of ownership of the operating
5	permits with the District Wells as listed in Agenda Item
6	No. 6. All in favor?
7	(All those in favor so responded)
8	MS. SMITH: Any opposed?
9	(No response)
10	MS. SMITH: Motion carries.
11	ITEM NO. 7
12	MS. SMITH: Item No. 7: Discussion,
13	consideration of and possible action on the Lower
14	Colorado River Authority's Motion for Rehearing dated
15	November 22, 2021 on the District's decision on the
16	Applications of Lower Colorado River Authority for
17	Operating Permits and Transfer Permits for Eight Wells
18	in Bastrop County; SOAH Docket No. 952-19-0705.
19	I believe the Board wishes to adjourn into
20	executive session. Executive session of the Board
21	pursuant to Texas Government Code, Section 551.06
22	pardon?
23	MR. ELLIS: Ask if LCRA has a presentation
24	on this first.
25	MS. SMITH: Does LCRA have a presentation

that they'd like to make before we go into executive 1 2 session? (No response) 3 MS. SMITH: Would you care to make any 4 comments before we go? 5 MS. ROGERS: 6 No. Okay. Mr. Ellis is going to 7 MS. SMITH: make some then before. Go ahead. 8 9 MR. ELLIS: Okay. I just wanted to make 10 clear how the process works from here. We have a motion for rehearing pending before the board. 11 If the board takes no action tonight, then 12 13 this motion for rehearing will be overruled as a matter 14 Within a few days -- I'm not sure exactly if that's Friday or Monday. I think we disagreed on what 15 16 the count is, but it's one of those. And what that does is, it begins the countdown time limit by which they 17 18 have to file a lawsuit as an appeal of the Board's decision. 19 If the Board acts tonight, they have 20 basically two options: They can deny it tonight, which 21 starts that clock moving a little faster than if we let 22 it expire by operation of law or they can grant the 23 24 motion for rehearing. 25 If they do, then the Board is required to

conduct that hearing within 45 days.

2.0

My recommendation would be to schedule something for the third or fourth week of March. I would suggest we have a briefing schedule. We already have the motion from LCRA. I would ask within probably 21 days to get reply briefs from the other parties, and that gives LCRA an opportunity to file a response to those reply briefs before the rehearing hearing is held.

There are several points of error that have been raised, and I think all of them deserve consideration.

My recommendation to you -- I'm going to tell you right now, my recommendation to you is that we grant the motion for rehearing and we get that scheduled and on the books.

I'm not going to discuss the weaknesses of the case publicly, but I would be happy to go over that with you in the executive session -- if there are any weaknesses, but I'll tell you -- explain more about why I think we should grant the motion for rehearing. If nothing else, I think it gives us one more opportunity to hear all of the parties on what they think should be done.

Just to be aware: The granting of the motion for rehearing reopens the permit and any action

```
can occur at that -- following that rehearing.
1
                                                      I mean,
 2
    the Board could do anything from grant the permit as
    requested to denying the permit outright.
 3
                  So that's where we're at. I'll be happy
 4
    to answer any questions from the Board if you have any
 5
    at this time. And if not, I think we should go into
6
    executive session.
7
                  MS. ROGERS:
8
                                Greq?
                  MR. ELLIS:
9
                               Yes.
10
                  MS. ROGERS:
                               Elvis, Phil, Kay, recused.
                  MR. ELLIS:
                               That's right.
11
                                              Cannot
12
    participate in the discussion or deliberation on this or
13
    vote.
           Right.
                                Just speaking up on that.
14
                  MS. ROGERS:
15
                                     I'm glad you did.
                  MR. ELLIS:
                              Okay.
16
                  Anything else?
17
                  (No response)
18
                  MR. ELLIS:
                               Okay.
19
                  MS. SMITH:
                               Thank you.
                  Executive session of the Board, pursuant
20
    to Texas Government Code Section 551.071 or any closed
21
    session permitted by law to consult with this attorney
22
    and seek advice regarding Lower Colorado River
23
24
    Authority's Motion for Rehearing dated November 22, 2021
25
    on the District's decision on the Applications of Lower
```

1	Colorado River Authority for Operating Permits and
2	Transfer Permits for Eight Wells in Bastrop County; SOAH
3	Docket No. 952-19-0705.
4	We shall adjourn, I believe to the back
5	meeting room.
6	EXECUTIVE SESSION
7	MR. TOTTEN: Yes, ma'am. We have the back
8	room.
9	MS. SMITH: Okay.
10	(End Executive Session)
11	(Recess: 6:36 p.m. to 6:59 p.m.)
12	MS. SMITH: We are back from an executive
13	session at 6:59 p.m. No votes were taken.
14	We are ready to proceed.
15	ITEM NO. 7
16	MS. SMITH: This is Item No. 7:
17	Discussion, consideration of and possible action on
18	Lower Colorado River Authority's Motion for Rehearing
19	dated November 22, 2021.
20	Do the Board Members have any comments or
21	discussion, questions, based on our meeting?
22	(No response)
23	MS. SMITH: Comments? Concerns? Or are
24	you ready to take a vote?
25	(No response)

1	MS. SMITH: Mr. Ellis has made a
2	recommendation for rehearing.
3	Would anyone like to make that motion or
4	another motion?
5	(No response)
6	MS. COLE: I would follow Mr. Ellis'
7	recommendation to grant the rehearing. I make that
8	motion.
9	MS. SMITH: Okay. We have a motion for
10	rehearing from Melissa Cole.
11	Do we have a second?
12	MR. SCHATTE: I'll second it.
13	MS. SMITH: A second from Larry Schatte.
14	All in favor?
15	(All those in favor so responded)
16	MS. SMITH: Any opposed?
17	(No response)
18	MS. SMITH: Motion carries unanimously.
19	MR. TOTTEN: Are we clear about who was
20	recused on that
21	(Simultaneous discussion)
22	MS. SMITH: The recused were Kay Rogers,
23	Elvis Hernandez, and Phil Cook, who were parties to the
24	suit.
25	Thank you, Jim.

1	Greg, do you have anything else you want
2	to say?
3	MR. ELLIS: Do we want to schedule the
4	hearing?
5	MS. SMITH: Do we wish to schedule the
6	hearing?
7	Board Members, what are we what would
8	you recommend, Greg?
9	MR. ELLIS: I think second or third week
10	of March. I think the last week of March is within the
11	time limit.
12	MS. SMITH: I'm recommending the third
13	week of March because
14	MR. ELLIS: The fourth week. The week of
15	the 28th.
16	MS. SMITH: The fourth week in
17	(Simultaneous discussion)
18	MS. COLE: Well, she needs to find out
19	about available space for this.
20	MS. SMITH: Yeah, we do have to, but we
21	could say we'll schedule it a certain week and then see
22	if we can get
23	MR. ELLIS: Yeah, we can get a location
24	and an exact date when we know what those are. But if
25	we can, you know, give them an idea, then we can work

r	
1	out a briefing schedule as well.
2	MS. SMITH: Okay. I'm looking up the
3	March schedule right now.
4	So are you suggesting March 28th through
5	April 1st, or the week before that? The third week is
6	the 21st through 25th.
7	MR. ELLIS: I think March 28th.
8	MS. SMITH: March 28th through April 1.
9	Board Members, availability? Any concerns
10	with the hearing date?
11	MR. ELLIS: We have to have it before the
12	1st of April, so we're in good shape.
13	MS. SMITH: Okay. We don't need to vote
14	on that, though.
15	MR. ELLIS: No.
16	MS. SMITH: Okay.
17	MR. ELLIS: We will just set the date.
18	MS. SMITH: Okay. We will set an exact
19	date and location as soon as possible.
20	Thank you.
21	MR. ELLIS: Thank you.
22	(Requested portion concluded at 7:02 p.m.)
23	
24	(The conclusion of the Board Meeting was
25	not reported for purposes of this record)

1	CERTIFICATE
2	STATE OF TEXAS )
3	COUNTY OF TRAVIS )
4	I, Mary Carol Griffin, Certified Shorthand
5	Reporter in and for the State of Texas, do hereby
6	certify that the above-mentioned matter occurred as
7	hereinbefore set out.
8	I FURTHER CERTIFY THAT the proceedings of such
9	were reported by me or under my supervision, later
10	reduced to typewritten form under my supervision and
11	control, and that the foregoing pages are a full, true,
12	and correct transcription of the original notes.
13	IN WITNESS WHEREOF, I have hereunto set my hand
14	and seal this 2nd day of March, 2022.
15	
16	Mary Carol Shiffin
17	may como payon
18	MARY CAROL GRIFFIN Certified Shorthand Reporter
19	CSR No. 3799 - Expires 07/31/23
20	Firm Registration No. 276 Kennedy Reporting Service, Inc.
21	100 E. Whitestone Blvd. Suite 148
22	Cedar Park, Texas 78613 512.474.2233
23	J14.1/1.44JJ
24	
25	

# Exhibit 6

### BEFORE THE

# LOST PINES GROUNDWATER CONSERVATION DISTRICT BASTROP, TEXAS

### BOARD MEETING

MONDAY, APRIL 4, 2022

HYBRID IN-PERSON / TELEPHONIC / VIDEOCONFERENCE MEETING

BE IT REMEMBERED THAT at 2:07 p.m, on Monday, the 4th day of April 2022, the above-entitled matter came on for hearing at the Bastrop Convention & Exhibit Center, 1408 Chestnut Street, Bastrop,
Texas 78602; before SHERIL SMITH, President; LARRY SCHATTE, MICHAEL SIMMANG, HERBERT COOK, BILLY SHERRILL, MELISSA COLE, PHIL COOK, KAY ROGERS, ELVIS HERNANDEZ and TOM ARSUFFI, Members of the Board; and the following proceedings were reported by Kim Pence, a Certified Shorthand Reporter.

1	TABLE OF CONTENTS	
2	P	AGE
3	PROCEEDINGS, MONDAY, APRIL 4, 2022	4
4	The subjects to be discussed or considered, or upon	
5	which any formal actions may be taken, are listed below. Items may or may not be taken in the same order as shown on the meeting notice.	
6	1) Call to Order - President Sheril Smith	4
7	2) Welcome and Introductions	4
8 9	3) Virtual and In-Person Public Comments - limit 3 minutes each person	5
10	Mr. Kermit Heaton	5 5
11 12	4) Rehearing on the District's decision on the Applications of Lower Colorado River Authority	
13	for Operating Permits and Transfer Permits for Eight Wells in Bastrop County; SOAH Docket No. 952-19-0705	7
14 15	PRESENTATION ON BEHALF OF LOWER COLORADO RIVER AUTHORITY (Rogers)	7
16	PRESENTATION ON BEHALF OF CITY OF ELGIN (Ruiz)	17
17	PRESENTATION ON BEHALF OF AQUA WATER SUPPLY CORPORATION (Gershon)	18
18 19	PRESENTATION ON BEHALF OF RECHARGE WATER, LP (Rutherford)	26
20	PRESENTATION ON BEHALF OF BROWN LANDOWNERS (Grissom)	30
21	PRESENTATION ON BEHALF OF ENVIRONMENTAL	37
22	STEWARDSHIP (Perales)	3 /
23	PRESENTATION ON BEHALF OF LOST PINES GROUNDWATER CONSERVATION DISTRICT (MARTIN)	44
24 25	PRESENTATION ON BEHALF OF LOWER COLORADO RIVER AUTHORITY (CONTINUED) (Rogers)	48

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1	TABLE OF CONTENTS	
2	PAGE	
3	5) Consideration of and possible action on the rehearing on the District's decision on the	
4	Applications of Lower Colorado River Authority for Operating Permits and Transfer Permits for	
5	Eight Wells in Bastrop County; SOAH Docket No. 952-19-0705 60	
6	6) EXECUTIVE SESSION:	
7	Executive Session of the Board pursuant to	
8	Tex. Gov't Code Section 551.071, or any closed session permitted by law, to consult with its	
9	attorney and seek advice regarding Item Nos. 4 and 5 above 61	
10	ADJOURNMENT 68	
11	PROCEEDINGS CONCLUDED	
12	REPORTER'S CERTIFICATE	
13		
14		
15		
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19		
20		
21		
22		
23		
24		
25		

At this point, the only 1 MR. TOTTEN: comment we received is "No audio." So we're still 2 3 sorting that. 4 MS. SMITH: Okay. Are there any other comments from the public? 5 6 (No response) AGENDA ITEM NO. 4 7 MS. SMITH: If not, we will proceed to 8 item -- Agenda Item No. 4, rehearing on the District's 9 decision on the Applications of Lower Colorado River 10 Authority for Operating Permits and Transfer Permits for 11 Eight Wells in Bastrop County, SOAH Docket 952-919-0705. 12 I also want to mention that we have three 13 Board Members that have recused from this, Mr. Phil 14 Cook, Mr. Elvis Hernandez and Ms. Kay Rogers. 15 I would first like to call the Applicant 16 from LCRA, Ms. Rogers. And I understand you have 20 17 18 minutes, but if you don't use them, you can reserve them until the end. 19 PRESENTATION ON BEHALF OF LOWER COLORADO RIVER AUTHORITY 2.0 Very good. Thank you. 21 MS. ROGERS: Good afternoon, Ladies and Gentlemen. 2.2 name is Emily Rogers, and I represent the Lower Colorado 23 River Authority. LCRA requests that this Board grant 24 25 LCRA's applications in issuing the operating permits

```
1
                  In addition, it would help be a drought --
   it would help drought-proof some of LCRA's current
2
               So if the surface water isn't available, it
3
    supplies.
4
   could use this groundwater to supply some of its
5
   customers.
                  MR. SHERRILL: So when -- so when Father
6
   Time and Mother Nature decide to let water flow again,
7
   are you going to stop the groundwater usage and go back
8
9
   to your normal every day use?
                  MS. ROGERS:
                               Well, again, I'll go back and
10
    say it's part of the whole portfolio of water that LCRA
11
   has. And I can't speak to exactly how they would manage
12
   the different resources at different times of the year
13
   or different -- in different ways.
14
                  MR. SHERRILL:
                                 Thank you, ma'am.
15
                  MS. ROGERS:
                               Thank you.
16
17
                  MS. SMITH:
                              Thank you very much,
18
   Ms. Rogers.
19
                  MS. ROGERS:
                               Thank you.
                              Okay. This concludes the
2.0
                  MS. SMITH:
   rehearing.
21
                       AGENDA ITEM NO. 5
2.2
                  MS. SMITH:
                              We will go to Item No. 5,
23
   consideration of and possible action on the rehearing on
24
    the District's decision on the Applications of Lower
25
```

Colorado River Authority for Operating Permits and Transfer Permits for Eight Wells in Bastrop County; SOAH 2. 3 Docket No. 952-19-0705. AGENDA ITEM NO. 6 4 MS. SMITH: And at this time, I believe 5 the Board wishes to adjourn into executive session. 6 The Board may recess into executive session to 7 consult with its attorneys regarding any posted manner in which the Board may seek the advice of its attorneys 9 under Government Code 551.071 or for any action on the 10 agenda for which a closed session is permitted by law, 11 and we will reconvene in open session after executive 12 session. 13 So we now adjourn to executive session at 14 3:26 p.m. on April 4th. 15 (Recess: 3:26 p.m. to 4:15 p.m.) 16 Okay. We are now back in 17 MS. SMITH: 18 session at 4:13 -- we are now back in the meeting at 4:15 p.m. on April the 4th. 19 The Board went into executive session. 2.0 No votes were taken. 21 2.2 Would anyone care to make a motion? I'd be happy to entertain one. 23 MS. COLE: I would make a motion to 24 25 approve the general manager's permit as presented.

```
1
                  MS. SMITH:
                              There is a motion, been made
   by Director Cole to approve the general manager's permit
2.
3
   recommendations.
                      Is there a second?
                                Second.
4
                  MR. ARSUFFI:
                  MS. SMITH: Mr. Arsuffi seconded.
5
                             I would like to make a
                  MS. COLE:
6
   subsequent motion to sever the questions and vote on
7
   each of the general manager's conditions separately.
8
                  Mr. Ellis, could you read those for us?
9
                  MR. ELLIS: Let's get a second and a vote
10
   first.
11
12
                  MS. COLE:
                             Oh, sorry.
                              Okay. So Ms. Cole has also
13
                  MS. SMITH:
    suggested that we sever the question to vote on the
14
   general manager's recommendation in his report so that
15
   we can vote on them separately.
16
                  Is there a second?
17
18
                  MR. SCHATTE:
                                Second.
                  MS. SMITH: So we have a motion and a
19
   second.
2.0
21
                  MR. ELLIS:
                              To sever the question, you
2.2
   need a vote.
                  MS. SMITH:
                              To sever the question, all in
23
   favor.
24
                  (All those in favor so responded)
25
```

1 MS. SMITH: Any opposed? 2. (No response) The motion carries. 3 MS. SMITH: Mr. Ellis, would you be so kind as to read 4 the different questions? 5 Okay. The first change 6 MR. ELLIS: proposed by the general manager of this permit would be 7 to strike in its entirety Condition 1. Condition 1 is the condition that requires the LCRA to enter into a 9 monitoring well agreement. That monitoring well 10 agreement would consist of new monitoring wells under 11 the rules based on an 8,000 acre-foot permit. Unless 12 that -- unless that changes, there will be a -- we're 13 14 getting an echo. MS. MARTIN: Put that mic on mute. 15 MR. ELLIS: I'm not -- I'm not connected. 16 Under the rules, an 8,000-acre permit will 17 require one monitoring well. 18 The second part of Condition 1 is that the 19 monitoring well agreement entered into shall include 2.0 21 wells, gauges or any scientifically supported tool to monitor surface water. So both -- this condition 2.2 includes both groundwater monitoring and surface water 23 monitoring. 24 Is there a motion to So the question is: 25

```
1
   retain Condition 1 or parts of Condition 1?
                  MR. ARSUFFI:
2
                                I move to retain
   Condition 1.
3
                  MS. SMITH: Mr. Arsuffi has moved that we
4
   retain Condition 1 of the general manager's report.
5
                  MR. ARSUFFI: And can I make a comment
6
   associated with that motion?
7
                  MS. SMITH: Yes.
8
                  MR. ARSUFFI: I think, you know, with --
9
   water is not a limited resource and -- and it's going
10
   away. And we're getting a lot of population demands on
11
   our water in this particular region. So I think if
12
   we're going to look out for the next generation and for
13
    this generation, we need to be monitoring wells,
14
   groundwater, surface water, so that we can make informed
15
16
   decisions as conditions change.
                              Thank you, Mr. Arsuffi.
17
                  MS. SMITH:
18
                  So we have a motion. Is there a second?
                                Second.
19
                  MR. H. COOK:
                  MS. SMITH: We have a motion and a second
2.0
   to retain Condition No. 1 to do with surface water and
21
   groundwater monitoring. I'll do a record vote -- roll
2.2
   call vote.
23
                  Mr. Arsuffi.
24
25
                  MR. ARSUFFI:
                                Yes.
```

1	MS. SMITH: Melissa Cole.
2	MS. COLE: Yes.
3	MS. SMITH: Herb Cook.
4	MR. H. COOK: Yes.
5	MS. SMITH: Billy Sherrill.
6	MR. SHERRILL: Yes.
7	MS. SMITH: Larry Schotte.
8	MR. SCHATTE: Yes.
9	MS. SMITH: Mike Simmang.
10	MR. SIMMANG: No.
11	MS. SMITH: And Sheril Smith, myself.
12	Yes.
13	The motion passes.
14	MR. ELLIS: The second change recommended
15	by the general manager is to remove in its entirety
16	Condition 3. If you want to keep that condition
17	Condition 3 is the one that would require them to do
18	certain reporting to the general manager prior to
19	renewing their permit. If you want to keep that
20	condition or any part of it, we need a motion to do so.
21	MS. SMITH: Just to be clear, he's
22	recommending that be removed?
23	MR. ELLIS: Right.
24	MS. SMITH: Okay. I will entertain a
25	motion. Would anyone care to make a motion?

MR. SHERRILL: (Inaudible) 1 2 MS. SMITH: No? I'm sorry? 3 MR. SHERRILL: I move that condition be removed. 4 MR. ELLIS: Well, the -- the original 5 motion would already remove that because the motion was 6 to accept the general manager's recommended changes. 7 if there's no motion, then that section will be stricken. 9 All right. The third thing is we had a 10 lot of discussion tonight about providing a detailed 11 response of some kind. If we're going to provide a 12 response of justification for changes to the proposal 13 for decision, my strong recommendation is we do that in 14 writing. Although I don't think it's required, I think 15 it's a good idea. 16 So the question is: Is there a motion to 17 18 prepare written justification for the changes to the 19 PFD? I would make a motion for MS. COLE: 2.0 written response for justification of changes in the 21 2.2 PFD. 23 MR. ARSUFFI: Second. MS. SMITH: We have a -- okay. We have a 24 motion and a second for written justifications of the 25

1	PFDs.
2	MR. H. COOK: Second.
3	MS. SMITH: We have a second, now we have
4	a third. Okay. Roll call vote.
5	Tom Arsuffi.
6	MR. ARSUFFI: Yes.
7	MS. SMITH: Melissa Cole.
8	MS. COLE: Yes.
9	MS. SMITH: Herb Cook.
10	MR. H. COOK: Yes.
11	MS. SMITH: Billy Sherrill.
12	MR. SHERRILL: No.
13	MS. SMITH: Larry Schotte.
14	MR. SCHATTE: Yes.
15	MS. SMITH: Mike Simmang.
16	MR. SIMMANG: Yes.
17	MS. SMITH: And Sheril Smith, yes.
18	The motion passes.
19	MR. ELLIS: Okay. Based on that motion
20	passing, again, my recommendation would be that we table
21	this to the next Board meeting so we have time to
22	prepare those written responses and the Board has time
23	to review them and agree that those are justifications
24	for the action they've taken.
25	So at this time, I think it would be

```
1
   appropriate to move to table this item to the next Board
   meeting.
                  MS. SMITH: I would entertain a motion to
3
   table.
4
                  MR. SIMMANG:
                                 (Inaudible)
5
                  MR. ELLIS: We have a motion by Mike
6
   Simmang; Simmang moves to table.
7
                  MS. SMITH: Mike Simmang motions to table.
8
                  MR. SCHATTE:
                                And I second.
9
                  MS. SMITH: Second, Mr. Schotte.
10
                  All in favor.
11
                  (All those in favor so responded)
12
                  MS. SMITH:
13
                              Any opposed?
                  (No response)
14
                  MS. SMITH: Motion carries.
15
                  MR. ELLIS: That concludes that item.
16
                          ADJOURNMENT
17
                              This concludes Board action
18
                  MS. SMITH:
   for the evening. We stand adjourned as of 4:22 p.m.,
19
   April 4th. Thank you all for attending.
2.0
21
                  (Proceedings concluded at 4:22 p.m.)
2.2
23
24
25
```

1	CERTIFICATE
2	STATE OF TEXAS )
3	COUNTY OF TRAVIS )
4	I, Kim Pence, Certified Shorthand Reporter in
5	and for the State of Texas, do hereby certify that the
6	above-mentioned matter occurred as hereinbefore set out.
7	I further certify that I am neither counsel
8	for, related to, nor employed by any of the parties or
9	attorneys in the action in which this proceeding was
10	taken, and further that I am not financially or
11	otherwise interested in the outcome of the action.
12	Certified to by me this 15th day of April 2022.
13	1/ 0
14	Pun Pence
15	KIM PENCE, CSR Certified Shorthand Reporter
16	CSR No. 4595 - Expires 01/31/24
17	Firm Registration No. 276 Kennedy Reporting Service, Inc.
18	100 E. Whitestone Blvd., Ste. 148 Cedar Park, Texas 78613
19	512.474.2233
20	
21	
22	
23	
24	
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# Exhibit 7

1	
2	
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5	
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7	************
8	LOST PINES GROUNDWATER CONSERVATION DISTRICT
9	BOARD MEETING
10	HYBRID IN-PERSON/TELEPHONIC/VIDEO CONFERENCE MEETING
11	TITERCE THE LERGON TERRITORIES VIDEO CONTENED THE TIME
12	MAY 18, 2022
13	*************
14	
15	
16	
17	
18	
19	
20	
21	
22	TRANSCRIBED BY:
23	Robin J. Brame
24	Certified Shorthand Reporter
25	Texas License No. 5325

```
1
                 BOARD MEMBER: I make a motion to
  approve.
 3
                                   We have a motion to
                 PRESIDENT SMITH:
             Do we have a second?
  approve.
                 BOARD MEMBER: I'll second.
 5
 6
                 PRESIDENT SMITH: We have a second.
  We have a motion and a second to approve the
 8 April 20th, 2022, minutes of the regular board
  meeting.
10
                 All in favor.
11
                 (Ayes heard.)
12
                 PRESIDENT SMITH:
                                   Any opposed?
13
                 (None opposed.)
14
                 PRESIDENT SMITH:
                                   Agenda item number
15
  five, consideration of and possible action on the
  rehearing of the District's decision on the
161
  applications of Lower Colorado River Authority for
17
18 operating permits and transfer permits for
19|
  eight wells in Bastrop County, SOAH Docket
20 No. 952-19-0705.
21
                 The board, we will recall the meeting
22
  of April the 4th we voted unanimously and everything
23
  that we voted on has been put into a resolution.
24
                 Get that up. You also received from
  our counsel, Greg Ellis here, an explanation of the
```

```
1 different -- of the board of directors final
 2 decision and the differences between the state
 3 office of administrative hearings proposal or
 4 decision and what the board actually voted on.
 5 hopefully all of you have read that.
                                         If you have
 6 any questions, Mr. Ellis is here.
 7
                 We have a resolution that is before us
 8 prepared by our legal counsel to vote to approve our
 9 decision from April the 4th that has been put into
10 writing. Does anyone have any questions or wish to
11 discuss the matter?
12
                 If there are no questions or
13 discussions, would someone care to make a motion on
14 the resolution before you?
15
                 We have a resolution, an order
  adopting a final decision and findings of fact and
17 conclusions of law on the rehearing of the Lower
18 | Colorado River Authority's applications for
19 operating and transport permits. Would someone --
20
                 DIRECTOR COLE: I'll make a motion to
21 adopt the resolution.
2.2
                 PRESIDENT SMITH: I have a motion to
  adopt the resolution. Do we have a second?
23 |
24
                 DIRECTOR COOK: I'll second.
25
                                   We have a motion,
                 PRESIDENT SMITH:
```

```
1 Ms. Coal, and a second, Mr. Cook, to approve the
 2 resolute adopting the final decision of findings of
  fact and conclusions of law on the rehearing of the
 4 Lower Colorado River Authority's applications for
   operating in transport permits. All in favor?
 6
                 (Ayes heard.)
 7
                 PRESIDENT SMITH:
                                   Any opposed?
 8
                 (None opposed.)
                 PRESIDENT SMITH:
                                   I failed to note
10 that we had some abstention from parties that were
11 recused, Elvis Hernandez, Kay Rogers and Phil Cook,
12 but Phil Cook is not here.
                 So we have six for and two abstentions
13
14 and so the motion carries.
15
                 BOARD MEMBER: I just wanted to
   clarify that you adopted an order.
16
17
                 PRESIDENT SMITH: Yes.
18
                 BOARD MEMBER: You adopted an order on
19 the rehearing and not a resolution.
20
                 PRESIDENT SMITH:
                                   Thank you.
21
                 BOARD MEMBER: Does the vote still
2.2
  stand?
23
                 PRESIDENT SMITH:
                                   Yes.
24
                 BOARD MEMBER:
                                Thank you.
25
                 PRESIDENT SMITH:
                                   Okay.
                                           What's up?
```

```
1
                 (Inaudible.)
 2
                 MR. ELLIS: Okay.
 3
                 PRESIDENT SMITH:
                                   Okay.
                                          Thank you for
   coming, Mr. Ellis.
 5
                 Agenda item number six, consideration
  of and possible action on the 2021 -- general
  manager.
 8
                 Mr. Totten, are you going to speak to
 9 that or is someone else? Oh, we have the auditor
10 present. Great.
                 (Inaudible.)
11
12
                 PRESIDENT SMITH: Oh, okay.
                                              Thank
13 you. You're good.
14
                 MR. GATTILIA: Generally I'm a half an
15 hour early.
                I got stuck behind an accident on 130
  this evening and so I'm running a little behind.
16
17
                 Good evening. My name is Robert
18 Gattilia, and I'm with Singleton Clark, the
19 district's auditor. I'm joining you tonight to
20 present for the Board's acceptance the district's
21 audit for the fiscal year end of December 31st,
22 20221.
           I'm going to try to be brief in my remarks.
23
                 I just passed out the bound copy of
               I like to use it. We just have two
24 the audit.
25 pages.
          But if you don't wish to flip through it,
```

## 1 REPORTER'S CERTIFICATE 2 I, Robin J. Brame, Court Reporter in and for the State of Texas, do hereby certify that the above and 4 foregoing is a true and correct record of the proceedings, to the best of my ability, from the 6 proceedings in the above-styled matter. I further certify that I am neither counsel for, 8 related to, nor employed by any of the parties to the action in which this proceeding was taken, and 10 further that I am not financially or otherwise 11 interested in the outcome of the action. 12 Please note that I was not personally present for said proceeding to make a stenographic record; 13 14 due to the quality of the Zoom connection, 15 unintelligibles or inaudibles may have created 16 inaccuracies in the transcription of said proceeding 17 or verify the correct spellings of proper names. 18 | Without being present, I cannot verify the accuracy of the speakers. 19| WITNESS MY OFFICIAL HAND this th 20 2022 21 22 ROBIN J. BRAME, Texas CSR 5325 23 Expiration Date: 10/31/23 Firm Registration No. 633 24 Magna Legal Services, LLC 16414 San Pedro, Suite 900

Phone 866-672-7880

25

# Exhibit 8

### LOST PINES GROUNDWATER CONSERVATION DISTRICT AN ORDER ADOPTING A FINAL DECISION AND FINDINGS OF FACT AND CONCLUSIONS OF LAW

# ON THE REHEARING ON LOWER COLORADO RIVER AUTHORITY'S APPLICATIONS FOR OPERATING AND TRANSPORT PERMITS

WHEREAS, on February 1, 2018, Lower Colorado River Authority filed applications for Operating Permits and Transport Permits with the Lost Pines Groundwater Conservation District (the "District") for eight wells in Bastrop County, Texas, seeking authorization to withdraw an aggregate of 25,000 acre-feet per year from the Simsboro Formation (the "Applications"), and on February 21, 2018, the Applications were resubmitted on different forms;

WHEREAS, on September 26, 2018, the District held a public hearing on the Applications and referred the Applications and contested case hearing requests to the State Office of Administrative Hearings (SOAH);

WHEREAS, the contested case hearing on the merits on the Applications was held October 15-22, 2019 before SOAH and briefing followed;

WHEREAS, on January 28, 2021, and July 14, 2021 the District conducted a final hearing on SOAH's Proposal for Decision (PFD);

WHEREAS, on October 12, 2021, the Board of Directors of the District (the "Board") considered the PFD and voted to grant the permits with modifications to the PFD;

WHEREAS, the Board voted, at its November 8, 2021 meeting, to approve the Final Decision with findings of fact and conclusions of law and issue to LCRA the Operating and Transport Permits for Well No. 58-55-5-0032, Well No. 58-55-5-0032, Well No. 58-55-4-0016, Well No. 58-55-4-0017, Well No. 58-55-4-0018, Well No. 58-55-4-0019, Well No. 58-55-4-0020, Well No. 58-55-4-0021 and Well No. 58-55-5-0032 (the "Permitted Wells");

WHEREAS, on November 22, 2021, LCRA filed a Motion for Rehearing (the "Motion") alleging nine points of error on the District's November 8, 2021 Final Decision on the Permitted Wells;

WHEREAS, on February 16, 2022, the Board granted LCRA's request for a rehearing on the Final Decision and directed District Staff to schedule the rehearing;

WHEREAS, the Board requested written briefing from the parties to the contested case on the points of error raised in the Motion with a briefing schedule that closed on March 25, 2022;

WHEREAS, at the Rehearing on April 4, 2022, the Board heard arguments from the parties to the contested case proceeding on the points of error raised in the Motion;

WHEREAS, at its May 18, 2022 board meeting, the Board considered the briefs submitted by the parties, the arguments made at the Rehearing, Chapter 36 of the Texas Water Code, the

District's Rules, and Board counsel's document explaining the difference between the Final Decision and the SOAH ALJs' PFD, and found that the authorizations for the Permitted Wells should be reissued as they appear in <u>Exhibit A</u> attached;

NOW THEREFORE, the Board APPROVES and ADOPTS the attached Final Decision with findings of fact and conclusions of law and ISSUES the associated Operating and Transport Permits for the Permitted Wells as shown in Exhibit A.

PASSED AND EFFECTIVE, this 18th day of May, 2022.

LOST PINES GROUNDWATER CONSERVATION DISTRICT

By

Sheril Smith, President Board of Directors

ATTEST:

Elvis Hernandez, Secretary-Treasurer

Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

District Well Number: 58-55-5-0032

Permit Approved: May 18, 2022

#### Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.202285/-97.207107), Well No. 1

Permittee is authorized to operate Well No. 58-55-5-0032 within the Lost Pines Groundwater Conservation District under the following conditions:

Authorized annual withdrawal: 8,000 acre-feet per year in aggregate.

Maximum rate of withdrawal: 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

#### Standard Permit Provisions:

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permit's terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

### **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements;
- (d) For an existing well, records regarding the amount and schedule of pumping are available; and
  - (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-5-0032 (Well No. 1) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-55-4-0018 (Well No. 5); Well No. 5855-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8). Well No. 58-55-5-0032 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.1.B(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

### **Permit Term:**

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: 5-18-22

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-5-0032

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of WeII: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.202285/-97.207107), Well No. 1

Permittee is authorized to transfer water produced from Well No. 58-55-5-0032 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acrefeet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

District Well Number: 58-55-5-0033

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.196312/-97.205782), Well No. 2

Permittee is authorized to operate Well No. 58-55-5-0033 within the Lost Pines Groundwater Conservation District under the following conditions:

Authorized annual withdrawal: 8,000 acre-feet per year in aggregate.

**Maximum rate of withdrawal:** 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

## **Standard Permit Provisions:**

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

# **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements;
  - (d) For an existing well, records regarding the amount and schedule of pumping

are available; and

- (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-5-0033 (Well No. 2) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-55-4-0018 (Well No. 5); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8). Well No. 58-55-5-0033 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

## **Permit Term:**

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: <u>5-18-22</u>

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-5-0033

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of WeII: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.196312/-97.205782), Well No. 2

Permittee is authorized to transfer water produced from Well No. 58-55-5-0033 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acre-feet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

**District Well Number:** 58-55-4-0016

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.191995/-97.210665), Well No. 3

Permittee is authorized to operate Well No. 58-55-4-0016 within the Lost Pines Groundwater Conservation District under the following conditions:

Authorized annual withdrawal: 8,000 acre-feet per year in aggregate.

Maximum rate of withdrawal: 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

### Standard Permit Provisions:

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

# **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements:
- (d) For an existing well, records regarding the amount and schedule of pumping are available; and
  - (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-4-0016 (Well No. 3) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-55-4-0018 (Well No. 5); Well No. 585-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8). Well No. 58-55-4-0016 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

# **Permit Term:**

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: <u>5-18-22</u>

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-4-0016

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of WeII: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.191995/-97.210665), Well No. 3

Permittee is authorized to transfer water produced from Well No. 58-55-4-0016 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acre-feet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

**District Well Number:** 58-55-4-0017

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.187590/-97.215441), Well No. 4

Permittee is authorized to operate Well No. 58-55-4-0017 within the Lost Pines Groundwater Conservation District under the following conditions:

Authorized annual withdrawal: 8,000 acre-feet per year in aggregate.

**Maximum rate of withdrawal:** 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

### **Standard Permit Provisions:**

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

# **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements;
  - (d) For an existing well, records regarding the amount and schedule of pumping

are available; and

- (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-4-0017 (Well No. 4) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0018 (Well No. 5); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8). Well No. 58-55-4-0017 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

## **Permit Term:**

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: <u>5-18-22</u>

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-4-0017

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of WeII: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.187590/-97.215441), Well No. 4

Permittee is authorized to transfer water produced from Well No. 58-55-4-0017 outside the boundaries of the lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acre-feet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

# Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

**District Well Number:** 58-55-4-0018

Permit Approved: May 18, 2022

## Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.183820/-97.219671), Well No. 5

Permittee is authorized to operate Well No. 58-55-4-0018 within the Lost Pines Groundwater Conservation District under the following conditions:

Authorized annual withdrawal: 8,000 acre-feet per year in aggregate.

Maximum rate of withdrawal: 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

# **Standard Permit Provisions:**

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

# **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements;
  - (d) For an existing well, records regarding the amount and schedule of pumping
- are available; and

  (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-4-0018 (Well No. 5) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 5855-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8). Well No. 58-55-4-0018 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

## **Permit Term:**

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-4-0018

Permit Approved: May 18, 2022

## Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of Well: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.1838201-97.219671), Well No. 5

Permittee is authorized to transfer water produced from Well No. 58-55-4-0018 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acre-feet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

# Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

District Well Number: 5855-4-0019

Permit Approved: May 18, 2022

## Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.180035/-97.223745), Well No. 6

Permittee is authorized to operate Well No. 58-55-4-0019 within the Lost Pines Groundwater Conservation District under the following conditions:

Authorized annual withdrawal: 8,000 acre-feet per year in aggregate.

**Maximum rate of withdrawal:** 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

**Type of water use:** All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

## **Standard Permit Provisions:**

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

# **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements:
  - (d) For an existing well, records regarding the amount and schedule of pumping
- are available; and
  - (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 5855-4-0019 (Well No. 6) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-55-4-0018 (Well No. 5); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8). Well No. 5855-4-0019 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

## **Permit Term:**

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: <u>5-18-22</u>

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-4-0019

Permit Approved: May 18, 2022

## Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of WeII: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.180035/-97.223745), Well No. 6

Permittee is authorized to transfer water produced from Well No. 58-55-4-0019 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acre-feet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

District Well Number: 58-55-4-0020

Permit Approved: May 18, 2022

### Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.176107/-97.228192), Well No. 7

Permittee is authorized to operate Well No. 58-55-4-0020 within the Lost Pines Groundwater Conservation District under the following conditions:

**Authorized annual withdrawal:** 8,000 acre-feet per year in aggregate.

Maximum rate of withdrawal: 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

**Type of water use:** All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

## **Standard Permit Provisions:**

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

# **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements;
  - (d) For an existing well, records regarding the amount and schedule of pumping
- are available; and
  - (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-4-0020 (Well No. 7) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-55-4-0018 (Well No. 5); Well No. 5855-4-0019 (Well No. 6); and Well No. 58-55-4-0021 (Well No. 8). Well No. 58-55-4-0020 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

# Permit Term:

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-4-0020

Permit Approved: May 18, 2022

#### Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of WeII: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.176107/-97.228192), Well No. 7

Permittee is authorized to transfer water produced from Well No. 58-55-4-0020 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acrefeet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: 5-18-22

# LOST PINES GROUNDWATER CONSERVATION DISTRICT OPERATING PERMIT

**District Well Number:** 58-55-4-0021

Permit Approved: May 18, 2022

#### Permittee:

Lower Colorado River Authority (LCRA) P.O. Box 220 Austin, Texas 78767-0220

**Location of Well:** Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.172072/-97.232585), Well No. 8

Permittee is authorized to operate Well No. 58-55-4-0021 within the Lost Pines Groundwater Conservation District under the following conditions:

**Authorized annual withdrawal:** 8,000 acre-feet per year in aggregate.

**Maximum rate of withdrawal:** 6,000 gallons per minute in aggregate.

Aquifer unit: Simsboro

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Bastrop, Lee, and Travis Counties

#### Standard Permit Provisions:

This Operating Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Operating Permit, this Operating Permit includes the following provisions:

- (1) This permit is granted in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that Permittee will comply with the terms, conditions, and limitations set forth in this permit, the District rules, the orders of the Board, and the District Management Plan.
- (2) Water withdrawn under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.
- (3) Water produced from the well must be measured using a water measuring device or method approved by the District that is within plus or minus 10% of accuracy.
- (4) The well site must be accessible to District representatives for inspection, and permittee agrees to cooperate fully in any reasonable inspection of the well and well site by District representatives.

- (5) Permittee will use reasonable diligence to protect groundwater quality.
- (6) Permittee will follow well plugging guidelines at the time of well closure.
- (7) The application pursuant to which this permit has been issued is incorporated in this permit by reference, and this permit is granted on the basis of and contingent upon the accuracy of the information provided in that application. A finding that false or inaccurate information has been provided is grounds for revocation of the permit.
- (8) Violation of the permits terms, conditions, requirements, or special provisions, including pumping amounts in excess of authorized withdrawals, may subject the permittee to enforcement action under District Rules.
- (9) Whenever the special conditions in the permit are inconsistent with other provisions of the permit or the District Rules, the special condition will prevail.

#### **Special Permit Conditions:**

This Operating Permit is granted subject to the following special conditions:

- (1) Prior to construction of a well authorized by this permit, Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee (the "Monitoring Well Agreement"). Permittee shall construct and maintain the New Monitoring Wells, in accordance with the terms and provisions of a Monitoring Well Agreement. The Monitoring Well System shall consist of any New Monitoring Wells, as defined in the Monitoring Well Agreement. Monitoring Well System may also include existing District monitoring wells or third-party wells used for Desired Future Condition compliance district-wide, county-wide or for any applicable existing or future District management zone that the General Manager and the Permittee agree meet the criteria set forth in this subsection (a). The Monitoring Well Agreement entered into between LCRA and the District shall include wells, gages, or any scientifically supported tool to monitor surface water. A well to be included in the "Monitoring Well System" shall meet the following criteria:
  - (a) The well is screened in the Simsboro formation;
  - (b) The well improves the spatial coverage of the Monitoring Well System;
  - (c) The well is easily accessible for regular measurements;
  - (d) For an existing well, records regarding the amount and schedule of pumping

are available; and

- (e) Any other criteria agreed upon by the General Manager and the Permittee.
- (2) The authorized annual withdrawal amount and the authorized maximum rate of withdrawal under this permit for this Well No. 58-55-4-0021 (Well No. 8) are hereby aggregated with the authorized annual withdrawal amount and the authorized maximum rate of withdrawal for the following designated wells: 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-55-4-0018 (Well No. 5); Well No. 5855-4-0019 (Well No. 6); and Well No. 58-55-4-0020 (Well No. 7). Well No. 58-55-4-0021 and the designated wells are collectively referred to as the "Aggregated Wells."
- (3) Before providing water withdrawn from the Aggregated Wells to any End User, Permittee shall submit to the District: (a) each End User's water conservation plan and drought

contingency plan, if the Texas Water Code or Texas Commission on Environmental Quality rules require the End User to prepare a water conservation plan and drought contingency plan; or (b) if the Texas Water Code or Texas Commission on Environmental Quality rules do not require the End User to prepare a water conservation plan and drought contingency plan, a certification from the End User that the End User agrees to avoid waste and achieve water conservation. Any End User water conservation plans and drought contingency plans that are submitted must comply with the relevant provisions of the Texas Water Code and rules of the Texas Commission on Environmental Quality or successor agency.

- (4) This Permit is not subject to the District's rules on time limits for the completion of a permitted well or the operation of a permitted well.
- (5) This permit is issued subject to any future production limits adopted by the District under the District Rules.
- (6) Production Fees charged to Permittee under this Permit shall be based upon amounts authorized to be produced under this Permit at the time that Production Fees are due.
- (7) Permittee is subject to the District Rules that require that all wells be completed within 100 feet of the location identified on the application pursuant to which this permit has been issued; provided that the well location complies with the applicable well spacing requirements under the District Rule 8.2.B.
- (8) Prior to operation of any new well authorized by this permit, Permittee shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.13(5) and report the results of the test to the District.
- (a) During the 36-hour pump test for each well, Permittee shall produce groundwater from the well at an instantaneous rate of withdrawal of at least 2,250 gallons per minute and not to exceed the aggregated maximum rate of withdrawal authorized by this permit.
- (b) Permittee shall provide the District with not less than 30 days' prior notice of the earliest date the 36-hour pump test will begin and confirm the scheduled date by phone or email with the General Manager at least 3 days' prior to the test.
  - (c) Permittee shall pay all costs of the 36-hour pump test.
- (d) Within ninety (90) days of the completion of the 36-hour pump test, Permittee shall provide the General Manager with the data gathered at all of the Aggregated Wells tested during the pump test.
- (e) The General Manager will review the results of the 36-hour pump test. If the General Manager determines that the transmissivity of the aquifer (measured in ft2/day) at the well is lower than the values included in the model grid cell in which the well is located, then the General Manager may reduce the authorized maximum rate of withdrawal under this permit. The General Manager will mail notice to Permittee no later than the 90th day after receipt of the information described in subsection (d) of his decision whether to reduce the maximum rate of withdrawal.
- (f) Permittee may appeal the General Manager's decision under subsection (e) to the Board pursuant to the procedures set out District Rule 15.6.B. through 15.6.E.
- (9) At least thirty (30) days prior to drilling the well, Permittee shall provide the General Manager with the design specifications for the well that are required for registration of a well under the District rules, including the total depth of the well, the depth of the screened interval, the pump size, and any other well information required by the District's then-current well registration form.

#### Permit Term:

This Operating Permit shall be effective for a period of five (5) years from the date the permit is approved, unless terminated, amended, renewed, or revoked as provided in the District Rules.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: <u>5-18-22</u>

# LOST PINES GROUNDWATER CONSERVATION DISTRICT TRANSPORT PERMIT

District Well Number: 58-55-4-0021

Permit Approved: May 18, 2022

#### Permittee:

Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

Location of Well: Approximately eight (8) miles northeast of the City of Bastrop in Bastrop County (30.172072/-97.232585), Well No. 8

Permittee is authorized to transfer water produced from Well No. 58-55-4-0021 outside the boundaries of the Lost Pines Groundwater Conservation District under the following conditions:

Maximum annual transfer amount: An aggregated annual amount of not more than 25,000 acre-feet per year in aggregate from Well No. 58-55-5-0032 (Well No. 1); Well No. 58-55-5-0033 (Well No. 2); Well No. 58-55-4-0016 (Well No. 3); Well No. 58-55-4-0017 (Well No. 4); Well No. 58-554-0018 (Well No. 5); Well No. 58-55-4-0019 (Well No. 6); Well No. 58-55-4-0020 (Well No. 7); and Well No. 58-55-4-0021 (Well No. 8), subject to the terms and conditions of the Operating Permits for those wells.

Type of water use: All beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

Place of water use: LCRA Water Service Area in Travis County.

Standard Permit provisions:

This Transport Permit is granted subject to the District Rules, the orders of the Board, the District Management Plan, and Chapter 36 of the Texas Water Code. In addition to any well-specific permit provisions and special conditions included in this Transport Permit, this Transport Permit includes the following provision:

(1) Water withdrawn and transported under the permit must be put to beneficial use at all times, and operation of the permitted well in a wasteful manner is prohibited.

Term:

- (1) The term of this Transport Permit shall be three (3) years if construction of a conveyance system has not been initiated prior to the issuance of the permit.
- (2) The term of this Transport Permit shall be thirty (30) years if construction of a conveyance system has been initiated prior to the issuance of the permit.
- (3) A three-year term under subsection (1) shall automatically be extended to a 30-year term under subsection (2) if construction of a conveyance system is begun before the expiration of the initial three-year term.

Acceptance of this permit by the Permittee constitutes acknowledgment and agreement to comply with all of the terms, provisions, conditions, and restrictions stated in the permit and the rules of the Lost Pines Groundwater Conservation District.

ISSUED:

President, Lost Pines Groundwater Conservation District Board of Directors

Date: 5-18-22

# **SOAH DOCKET NO. 952-19-0705**

APPLICATION OF LOWER COLORADO	§	
RIVER AUTHORITY FOR OPERATING	§	BEFORE THE LOST PINES
AND TRANSPORT PERMITS FOR	§	CD OWNER WATER
EIGHT WELLS IN BASTROP COUNTY,	§	GROUNDWATER
TEXAS	§	CONSERVATION DISTRICT
	§	CONSERVATION DISTRICT

# **FINAL DECISION**

May 18, 2022

APPLICATION OF LOWER COLORADO	§	BEFORE THE LOST PINES
RIVER AUTHORITY FOR OPERATING	§	
AND TRANSPORT PERMITS FOR	§	GROUNDWATER
EIGHT WELLS IN BASTROP COUNTY,	§	
TEXAS	§	CONSERVATION DISTRICT

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APPLICATION OF LOWER COLORADO	§	BEFORE THE LOST PINES		
RIVER AUTHORITY FOR OPERATING	§			
AND TRANSPORT PERMITS FOR	§	GROUNDWATER		
EIGHT WELLS IN BASTROP COUNTY,	§	CONCEDIATION DISTRICT		
TEXAS	§	CONSERVATION DISTRICT		

#### FINAL DECISION

#### I. INTRODUCTION

The Lower Colorado River Authority (LCRA) submitted eight applications (Applications) to the Lost Pines Groundwater Conservation District (District) seeking authorization to withdraw 25,000 acre-feet of water per year from eight wells in the Simsboro Formation in Bastrop County, Texas, and to transport that water throughout its 35-county water service area. The District's General Manager (GM) issued Draft Operating Permits and Draft Transport Permits; LCRA and various other parties objected to certain provisions in the Draft Operating Permits and Draft Transport Permits. LCRA amended the applications to change the proposed place of use to Bastrop, Travis, and Lee Counties. At the close of briefing, the GM proposed additional changes to the Draft Operating Permits (Revised Draft Operating Permits). The Administrative Law Judges (ALJs) recommended that the Board issue Revised Draft Operating Permits and the Draft Transport Permits with the following changes: (1) changes to the requirements to enter a well monitoring agreement, including the deadline to enter into the agreement and removal of the requirement that violation of the agreement is a permit violation; (2) an amendment to the definition of "monitoring well system" to require monitoring the effects on surface water; (3) removal of the requirement that LCRA present end-user contracts or binding commitments; (4) an amendment to Revised Draft Operating Permit Special Condition 5 to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and

(5) removal from the Draft Transport Permits of the Special Provision prohibiting discharge into a surface watercourse.

The Board of Directors considered the Draft Operating Permits and Draft Transport Permits along with the ALJs' recommendations and voted to approve the permit applications as recommended with the following changes: (1) limit the production permits to 8,000 acre-feet per year for the five-year permit term; and (2) remove all references to "waste."

#### II. BACKGROUND AND PROCEDURAL HISTORY

# A. The Applications

LCRA is a conservation and reclamation district established by the Texas Legislature in 1934 that serves as a regional water supplier within its 35-county service area. Although LCRA primarily manages and supplies surface water, its Executive Vice President for Water, John Hofmann, testified that LCRA's responsibility is not limited to surface water. As part of a goal to diversify its water supply to "drought-proof" supply, LCRA began a groundwater project in the aquifer regulated by the District.

As part of that project, on February 1, 2018, LCRA filed the Applications for operating and transport permits with the District. The applications for operating permits sought authorization to withdraw a total of 25,000 acre-feet per year of groundwater from the Simsboro Formation based on groundwater rights LCRA acquired in 2015. These groundwater rights were beneath the Griffith League Ranch, an approximately 4,847-acre property owned by the Capitol Area Council, Inc. of the Boy Scouts of America. The proposed Purpose of Use for the permits was for all

<sup>&</sup>lt;sup>1</sup> LCRA Ex. 1 (Hofmann direct) at 7.

<sup>&</sup>lt;sup>2</sup> LCRA Ex. 1 (Hofmann direct) at 8.

<sup>&</sup>lt;sup>3</sup> LCRA Ex. 1 (Hofmann direct) at 9.

beneficial uses authorized in chapter 36 of the Texas Water Code. On February 21, 2018, LCRA resubmitted the Applications on different forms.

On August 20, 2018, the District's GM, James Totten, notified LCRA by letter that its Applications were administratively complete and scheduled a public hearing. The letter also provided LCRA with the GM's Draft Operating Permits and Draft Transport Permits (collectively, Draft Permits.).

Following notice, the District held a public hearing on the Applications on September 26, 2018, and several Protestants disagreed with the issuance of the Draft Permits. LCRA also challenged some of the Draft Transport Permits' provisions. Following the public hearing, the Board voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a preliminary hearing to determine party status and, if necessary, conduct an evidentiary hearing on the Applications.

On December 18, 2018, SOAH ALJs Michael O'Malley and Laura Valdez held a prehearing conference in Bastrop, Texas. At the prehearing conference, the ALJs admitted the following as parties: LCRA, the District, Aqua Water Supply Corporation (Aqua), Environmental Stewardship, City of Elgin (Elgin), and Recharge Water, LP (Recharge). The ALJs also admitted a group of landowners represented by a single attorney (the "Brown Landowners"). The ALJs admitted several self-represented litigants as parties. Following a challenge to party status, many of the self-represented litigants and some of the Brown Landowners were determined not to have a justiciable interest and were struck as parties. The remaining self-represented litigants were Peggy Jo and Marshall Hilburn, Walter Winslett, JC Jensen, Elvis and Roxanne Hernandez, Verna L. Dement, Catherine and Charles L. White, and Richard Martinez. Mr. Jensen and Mr.

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<sup>&</sup>lt;sup>4</sup> SOAH Order No. 5.

Martinez withdrew their protests, as did several of the Brown Landowners.

The hearing on the merits was held October 15-22, 2019, before ALJs Ross Henderson and Rebecca S. Smith. The first four days of the hearing were held in Bastrop, Texas, and the last two took place at SOAH's hearing facility in Austin, Texas. Mr. and Mrs. Hernandez were the only self-represented litigants who prefiled testimony and participated in the hearing on the merits. The record closed on January 31, 2020, with the filing of reply briefs.

In its original Applications, LCRA stated that the water would be used throughout its 35-county water service area. In its testimony and at hearing, LCRA amended its request to only seek to use the water in Bastrop, Lee, and Travis Counties.

As an attachment to his reply brief, the GM made several changes to the Draft Operating Permits. Some of these changes were substantive; some were not. No party objected to these changes or asked to file briefing in response to the changes. The ALJs Proposal for Decision addressed the changes and referred to the GM's January 31, 2020 version of the permits as the Revised Draft Operating Permits.<sup>5</sup>

#### **B.** Permits in the District

The groundwater regulated by the District is in the Simsboro Formation, part of the larger Carrizo-Wilcox aquifer.<sup>6</sup> Overlaying the Simsboro is the Calvert Bluff, and the Hooper Formation underlies the Simsboro Formation.<sup>7</sup> The Simsboro Formation "is often used for large-scale public water supply production." However, there is no history of large-volume pumping within the District.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> The Revised Draft Permits reflect the second amendment the GM made to the Draft Operating Permits.

<sup>&</sup>lt;sup>6</sup> Recharge Ex. B (Thornhill direct) at 3.

<sup>&</sup>lt;sup>7</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>8</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>9</sup> GM Ex. 11 (Hutchison direct) at 16.

The Simsboro Formation and the other aquifer units dip toward the Gulf of Mexico and thus are deeper toward the east and southeast in Bastrop County. <sup>10</sup> The deeper portion of the Simsboro is referred to as the downdip. There are also shallower outcrop areas.

The parties challenging the Draft Permits either have wells or permits to produce water from the area. Aqua, a retail public utility with a service area in Bastrop, Caldwell, Fayette, Lee, Travis, and Williamson Counties, has a permit from the District authorizing the production of 23,627 acre-feet per year from 15 wells in the Simsboro Formation. Twelve of those wells are in two well fields near the shallow outcrop of the Simsboro. Aqua's three other wells are located on the south side of Highway 290, in the deeper downdip portion of the aquifer. 12

Elgin has a retail public utility that provides retail water utility service within its certificated service area.<sup>13</sup> The city, which is located in the greater Austin area, expects continued and rapid growth.<sup>14</sup> Elgin has four wells that are all partially or wholly completed within the Simsboro Formation.<sup>15</sup> Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations.<sup>16</sup> Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation.<sup>17</sup>

Recharge, formerly known as End Op, L.P., has permits authorizing the production of 46,000 acre-feet from 14 wells, with production to be phased in over several years. Recharge acquired its permits following years of contested hearings and an agreed settlement. <sup>18</sup> Seven of the

<sup>&</sup>lt;sup>10</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>11</sup> Aqua Ex. 1 (McMurry direct) at 2; Aqua Ex. 4 (Keester direct) at 8.

<sup>&</sup>lt;sup>12</sup> Aqua Ex. 4 (Keester direct) at 8.

<sup>&</sup>lt;sup>13</sup> Elgin Ex. 1 (Prinz direct) at 2.

<sup>&</sup>lt;sup>14</sup> Elgin Ex. 1 (Prinz direct) at 2.

<sup>15</sup> Elgin Ex. 2 (Perry direct) at 3.

<sup>&</sup>lt;sup>16</sup> Elgin Ex. 6 (Keester direct) at 7.

<sup>&</sup>lt;sup>17</sup> Elgin Ex. 6 (Keester direct) at 8.

<sup>&</sup>lt;sup>18</sup> Recharge Ex. 1.

permitted wells are to be located in Bastrop County, and seven are to be located in Lee County. <sup>19</sup> Some of Recharge's proposed wells in Bastrop County are the closest wells to LCRA's proposed pumping. Many of the parties currently opposed to LCRA's permit application also opposed Recharge's application. As part of its settlement of the underlying contested case about its application, Recharge agreed to create a mitigation fund to pay well owners for any damages caused by production from Recharge's wells. Recharge has not yet drilled any wells, but its permit requires it to complete four wells in Lee County before drilling any wells in Bastrop County. Recharge did not appeal the inclusion of this term. Under the permit (and settlement terms), Recharge's mitigation obligations start once it begins pumping in Lee County. <sup>20</sup>

The other large permits in the District belong to Forestar USA Real Estate Group, Inc. (Forestar), which is authorized to pump 28,500 acre-feet per year in Lee County, subject to phasing,<sup>21</sup> and the City of Bastrop (Bastrop), which is authorized to pump 2,000 acre-feet per year.<sup>22</sup> Bastrop's application was the subject of a contested case hearing. The Proposal for Decision (PFD) in that contested case was officially noticed in this case.<sup>23</sup> The Brown Landowners' and the Hernandezes' wells are exempt from District regulation. The Hernandezes' well is in the Calvert Bluff Formation, which overlays the Simsboro. The Brown Landowners' wells are scattered around the area.<sup>24</sup>

<sup>19</sup> Recharge Ex. B (Thornhill direct) at 19.

<sup>&</sup>lt;sup>20</sup> Recharge Ex. B (Thornhill direct) at 56.

<sup>&</sup>lt;sup>21</sup> Recharge Ex. 6.

<sup>&</sup>lt;sup>22</sup> Recharge Ex. 8.

<sup>&</sup>lt;sup>23</sup> Application of City of Bastrop for an Operating Permit for Well No. 1 in Bastrop County, Texas, SOAH Docket No. 952-15-3851 (July 26, 2016).

<sup>&</sup>lt;sup>24</sup> Environmental Stewardship's standing was based on the wells of some of its members.

# C. The Revised Draft Operating Permits

The GM's Draft Operating Permits contain sixteen special conditions, several of which are at the heart of this dispute. These special conditions first require that LCRA enter into a monitoring well agreement within a certain time. The Draft Operating Permits provided a 90-day deadline to enter into this agreement, but in response to LCRA's arguments, the Revised Draft Operating Permits extended the deadline to 180 days.<sup>25</sup>

The special conditions in both the Draft Operating Permits and Revised Draft Operating Permits also divide the withdrawal of groundwater into four phases, three of which involve pumping. Withdrawals are not allowed during Phase I, which requires LCRA to add new monitoring wells and comply with the monitoring well agreement required in another special condition.

Once the monitoring wells are in place, LCRA may move to Phase II. Phase II authorizes withdrawals from two wells (Wells 7 and 8) of an aggregated annual amount of up to 8,000 acrefeet of water, with an aggregated maximum rate of withdrawal of 6,000 gallons per minute. LCRA would not be authorized to withdraw more water per year than the amount LCRA has a binding commitment to provide at an authorized place of use.

Three years after permit issuance, LCRA may then request to move to Phase III, under which the aggregated annual withdrawal amount could be increased to 15,000 acre-feet of water per year from four wells with an aggregated maximum rate of withdrawal of 10,000 gallons per minute. To move to Phase III, LCRA must show it has withdrawn an aggregate amount of acre-feet per year from a combination of one or more of the aggregated wells during two consecutive twelvemonth periods. In the Draft Operating Permits, this amount was 8,000 acre-feet per year; in the

<sup>&</sup>lt;sup>25</sup> Revised Draft Operating Permit, Special Condition No. 1.

Revised Draft Operating Permits, it is 4,000 acre-feet. Once again, LCRA must show binding contracts or commitments. The utility and clarity of the formula the GM proposed to use in advancing LCRA from one phase to another was disputed. Discussion of the phasing formula is set out in Section G, below.

Finally, LCRA may request to move to Phase IV, under which the aggregated annual withdrawal may be increased to an amount not to exceed 25,000 acre-feet per year from all eight wells, with an aggregated maximum rate of withdrawal of 18,000 gallons per minute. To reach this phase, under the Revised Draft Operating Permits, LCRA must show binding contracts or commitments. LCRA must also show it has withdrawn at least an aggregate amount of at least 11,250 acre-feet<sup>26</sup> per year from a combination of one or more of the aggregated wells during three consecutive twelve-month periods. As with Phase III, the GM's proposed formula is in dispute.

Additionally, the special conditions in the Revised Draft Operating Permits require LCRA to provide written contracts or commitments within five years of beginning to pump under Phase II; to submit drought contingency and water conservation plans for certain end-users; to be subject to future production limits the District imposes; to pay production fees; and to conduct 36-hour pump tests for each well.

The Revised Draft Operating Permits' special condition 14 requires a pump test for each new well.<sup>27</sup> This special condition requires that "[p]rior to the operation of any of the Aggregated Wells, [LCRA] shall, for each new well, complete a 36-hour pump test that complies with District Rule 5.1.B(5) and report the results of the test to the District.

<sup>&</sup>lt;sup>26</sup> The 11,250 amount is contained in the Revised Draft Operating Permits. The Draft Operating Permits required a withdrawal of at least 15,000 acre-feet per year.

<sup>&</sup>lt;sup>27</sup> The Draft Operating Permits were ambiguous about whether a pump test was required before the operation of each well or before the operation of the first well. The change in the Revised Draft Operating Permits appears to be an uncontroversial clarification of the earlier special condition.

Under the Revised Draft Operating Permits, wells must be sited within 100 feet of the location identified in the Application, and LCRA is granted a variance for the time limits for completion of permitted wells. The Revised Draft Operating Permits required LCRA to provide the GM with the well-design specifications for his approval.

#### **D.** The Draft Transport Permits

The Draft Transport Permits authorize LCRA to transport the water it pumps in the District outside the District. Following LCRA's Application amendment, Travis County is the only county where LCRA seeks to transport water. The change in the Place of Use made the special condition in the Revised Draft Transport Permits prohibiting transporting groundwater via the bed and banks of a river moot.

#### III. APPLICABLE LAW

In Texas, a landowner owns the groundwater below the surface of his or her land as real property and is entitled to drill for and produce that groundwater, subject to a groundwater conservation district's well-spacing and production restrictions, so long as the drilling and production does not cause waste or malicious drainage of other property, or negligently cause subsidence.<sup>28</sup> Groundwater conservation districts, which are described as the state's preferred method of groundwater management, have the following obligations:

to protect property rights, balance the conservation and development of groundwater to meet the needs of this state, and use the best available science in the conservation and development of groundwater through rules developed, adopted, and promulgated by a district in accordance with [chapter 36].<sup>29</sup>

Chapter 36 of the Texas Water Code (Code) outlines the process by which landowners obtain the right to produce their groundwater within groundwater conservation districts. Under

<sup>&</sup>lt;sup>28</sup> Tex. Water Code § 36.002(a), (b), (d).

<sup>&</sup>lt;sup>29</sup> Tex. Water Code § 36.0015(b).

chapter 36, a groundwater conservation district, such as the District, "shall require a permit for the drilling, equipping, operating, or completing of wells," except for groundwater produced pursuant to an exemption. 31

Before granting or denying an operating permit, a groundwater conservation district must consider whether:

- (1) the application conforms to the requirements prescribed by [Texas Water Code chapter 36] and is accompanied by the prescribed fees;
- (2) the proposed use of water unreasonably affects existing groundwater and surface water resources or existing permit holders;
- (3) the proposed use of water is dedicated to any beneficial use;
- (4) the proposed use of water is consistent with the district's approved management plan;
- (5) if the well will be located in the Hill Country Priority Groundwater Management Area, the proposed use of water from the well is wholly or partly to provide water to a pond, lake, or reservoir to enhance the appearance of the landscape;
- (6) the applicant has agreed to avoid waste and achieve water conservation; and
- (7) the applicant has agreed that reasonable diligence will be used to protect groundwater quality and that the applicant will follow well plugging guidelines at the time of well closure.<sup>32</sup>

The District has adopted similar rules for permit applications.<sup>33</sup> In deciding whether to grant an application, approve an application with terms other than those requested, or deny the

<sup>31</sup> Groundwater produced solely for domestic use or for providing water for livestock or poultry and that are located on a tract of land larger than 10 acres and produced from a well that cannot produce more than 25,000 gallons of groundwater a day, is exempt from the drilling and production permit requirements. Tex. Water Code § 36.117(b)(1). Water wells related to supply water for oil and gas rigs or for mining operations are exempt from the drilling permit requirement. Tex. Water Code § 36.117(b)(2),(3).

<sup>&</sup>lt;sup>30</sup> Tex. Water Code § 36.113(a).

<sup>&</sup>lt;sup>32</sup> Tex. Water Code § 36.113(d). Identical provisions are found in Rule 5.2.D of the District's rules.

<sup>&</sup>lt;sup>33</sup> The District's Rules were admitted into evidence as GM Ex. 9, and are also available at <a href="https://www.lostpineswater.org/DocumentCenter/View/127/LPGCD-Rules---Adopted-10-16-19">https://www.lostpineswater.org/DocumentCenter/View/127/LPGCD-Rules---Adopted-10-16-19</a> (last visited March 23, 2020).

application, the District's rules require it to consider, in addition to the seven factors set out above, the following:

- (8) whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition, considering:
  - (a) the Modeled Available Groundwater determined by the [Texas Water Development Board (TWDB)] executive administrator;
  - (b) the TWDB executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by District Rules and Texas Water Code § 36.117;
  - (c) the amount of groundwater authorized under permits previously issued by the District;
  - (d) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District; and
  - (e) yearly precipitation and production patterns.
- (9) whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells; [and]
- (10) whether the applicant has a history of non-compliance with District Rules and chapter 36 of the Texas Water Code, including any record of enforcement actions against the applicant for violation of District Rules or chapter 36.<sup>34</sup>

Groundwater conservation districts may adopt rules regulating the spacing of wells and the production of groundwater.<sup>35</sup> When promulgating rules that limit groundwater production, a groundwater conservation district "may preserve historic or existing use before the effective date of the rules," subject to the district's management plan.<sup>36</sup>

Under chapter 36, groundwater conservation districts are not required to adopt rules that

<sup>35</sup> Tex. Water Code § 36.116(a).

<sup>&</sup>lt;sup>34</sup> District Rule 5.2.D.

<sup>&</sup>lt;sup>36</sup> Tex. Water Code § 36.116(b).

provide for correlative rights—in other words, allocating to each landowner a proportionate share of available groundwater for production from the aquifer based on the number of acres the landowner owns.<sup>37</sup>

#### IV. ISSUES REGARDING OPERATING PERMITS

Of the Protestants, Elgin, Environmental Stewardship, and Brown Landowners argued that the Applications should be denied. Recharge, Aqua, and Environmental Stewardship argued that the operating permits should be limited to 8,000 acre-feet per year, which is also the limit in the first phase of pumping (Phase II) under the Draft Permits. Elgin suggests the limit, if the permits are issued, should be 7,000 acre-feet per year; for Brown Landowners, that total is 6,000 acre-feet. The Hernandezes argued that the permit limit should be 10,000 acre-feet per year. Recharge, Elgin, and Hernandezes want the limits to be expressly tied to other factors.

In making their arguments, the parties focus on the following factors set out in Texas Water Code chapter 36 and the District's rules:

- Whether the proposed use of water unreasonably affects existing groundwater water resources or existing permit holders;
- Whether the proposed use of water unreasonably affects existing surface water resources or existing permit holders;
- Whether the conditions and limitations in the Operating Permit minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells; and
- Whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition.

The parties generally did not address the remaining factors, which are set out in the findings

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<sup>&</sup>lt;sup>37</sup> Tex. Water Code § 36.002(d)(3).

of fact and conclusions of law.

## A. Unreasonable Effects on Existing Groundwater Resources or Permit Holders

In deciding whether to issue an operating permit, the District must consider whether "the proposed use of water unreasonably affects existing groundwater . . . resources or existing permit holders."<sup>38</sup>

Many of the parties argued that the GM improperly determined that LCRA's proposed pumping would not cause an unreasonable effect on groundwater resources or existing permits. LCRA and the GM disagreed. In arguing about unreasonable effects, the parties focus on four aspects. First, Elgin and Aqua disagreed with LCRA and the GM about whose use—LCRA's or all permit holders'—should be considered in making this determination. Second, the parties disagreed about what "unreasonably affects" means. Third, they disagreed about which model should be used in determining whether the effects of pumping are unreasonable. Finally, the parties disagreed about whether LCRA sufficiently modeled local effects.

After reviewing the four issues, the ALJs concluded: (1) that the District should look at LCRA's use, not the full permitted use; (2) that the definition of "unreasonably affects" provided by LCRA's expert is too narrow; (3) that the new Groundwater Availability Model (GAM) approved by the Texas Water Development Board—and not the previous model that it superseded—should be used in modeling effects; and (4) that LCRA's modeling sufficiently showed that LCRA's pumping should not cause unreasonable effects on groundwater.

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<sup>&</sup>lt;sup>38</sup> Tex. Water Code § 36.113(d)(2), District Rule 5.2.D(2).

#### 1. Whose Use Should Be Considered

Before determining whether "a proposed use" would cause unreasonable impacts, the ALJs first decided whose use—LCRA's proposed use or all permitted use—should be considered.

#### a. Parties' Arguments

LCRA and the GM contended that in determining the effect of the use, the District must examine the use proposed in the Applications, not the use proposed in the Applications combined with all other permitted use in the District. Aqua and Elgin strongly disagree. Elgin pointed to another factor, which requires looking at District-wide pumping, arguing that this factor envisions looking at District-wide pumping, as well.<sup>39</sup>

#### b. ALJs' Analysis

The ALJs decided this issue by looking at both precedent and the language of the statute and rule. In an earlier contested case hearing for Bastrop's application with the District for an operating permit, the ALJ concluded that only the applicant's use should be examined when determining whether the proposed use would lead to unreasonable effects. That ALJ concluded, "District Rule 5.2.D(2) only requires the Board to consider whether the [applicant's] proposed use of water unreasonably affects existing groundwater, not cumulative pumping under the [applicant's] permit and other existing users at a 100% pumping capacity." He noted that "Rule 5.2.D. and Texas Water Code § 36.113(d)(2), on which it is based, focus on the impact of the specific application, not cumulative pumping under the requested permit and other existing users."

The ALJs agreed with this conclusion. The language of the statute and the rule requires an examination of "the proposed use of water," which suggests a concern with the use represented by the application. The language of "proposed use" is the same language used in other factors that

<sup>&</sup>lt;sup>39</sup> See Closing Arguments of City of Elgin (Elgin's Closing) at 20.

only refer to an applicant's use, such as whether "the proposed use of water is dedicated to any beneficial use" and, for proposed wells in the Hill Country Priority Groundwater Management Area, whether "the proposed use of water from the well is wholly or partly to provide water to a pond, lake or reservoir to enhance the appearance of the landscape."

When the District intended to look at use beyond that proposed in an application, it made that clear. For example, the District must consider "the amount of groundwater authorized *under permits previously issued* by the District," when analyzing whether the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable desired future condition (DFC).<sup>41</sup>

Accordingly, the ALJs concluded that the analysis of whether the proposed use unreasonably affects groundwater or existing permits must focus on LCRA's proposed pumping, not District-wide permitted pumping.

# 2. The Definition of "Unreasonably Affect"

#### a. Parties' Evidence and Arguments

Only LCRA provided a definition of the term "unreasonably affect," which is not defined in either the Water Code or the District Rules. LCRA's hydrogeology expert, Dr. Young, provided a definition in his testimony. According to Dr. Young, only the following, when resulting from drawdown solely from the pumping well, would constitute unreasonable impacts:

- Drawdown that produces land subsidence that (a) threatens the structural integrity of existing pipelines, building, or other infrastructure; (b) causes land from being used for its intended use; or (c) creates a drainage problem;
- Intrusion of surface water or groundwater from another aquifer into the pumped aquifer that degrades groundwater quality in the pumped aquifer so it would not be suitable for its intended use or its potential use;

<sup>&</sup>lt;sup>40</sup> Tex. Water Code § 36.113(d)(3), (5).

<sup>&</sup>lt;sup>41</sup> District Rule 5.2.D(8)(c) (emphasis added).

- Sufficient reduction (or depletion) of the saturated thickness of an aquifer that prevents the intended use of the aquifer;
- Drawdowns in an aquifer that causes the groundwater conservation district to exceed a DFC for the aquifer; or
- Drawdown from a permitted well that does not meet the District's well spacing or property boundary set-back requirements. 42

Elgin's and Aqua's expert witness, Michael Keester, declined to offer an opinion on whether certain effects would be unreasonable. The other parties do not define the term in their arguments.

#### b. ALJs' Analysis

The ALJs found Dr. Young's definition to be too narrow. While the ALJs agreed that all five of Dr. Young's instances of unreasonable impacts would, indeed, be unreasonable, they concluded that impacts short of preventing the intended use of the aquifer or causing a DFC to be exceeded by one's own pumping could still be unreasonable. An unreasonableness determination is necessarily fact-specific. With that, the ALJs turned to the evidence relating to effects of LCRA's proposed pumping on the parties' wells, which requires first looking at the modeling, or the GAM.

#### 3. Which Groundwater Availability Model Should Be Used

#### a. Parties' Evidence and Arguments

What effects are predicted from LCRA's pumping depends on which model is used. Much of the testimony at hearing involved issues relating to the GAM, which is "a computer-based, three-dimensional numerical groundwater flow model that is designed to simulate the dynamics of the groundwater flow for a specific area in Texas." GAMs for all major and most minor aquifers were developed by the Texas Water Development Board (TWDB) as part of state water planning.

<sup>&</sup>lt;sup>42</sup> LCRA Ex. 28 (Young direct) at 36.

<sup>&</sup>lt;sup>43</sup> GM Ex. 11 (Hutchison direct) at 10.

In 2004, the Central Queen City-Sparta GAM (hereinafter "Old GAM") was developed and then used by the District. In 2018, the TWDB updated the model, which is now called the Central Carrizo-Wilcox GAM (hereinafter "New GAM").<sup>44</sup>

The GM's expert witness, Dr. William Hutchison, described both GAMs as using a three-dimensional grid of cells with rows, columns, and layers to represent the structure of an aquifer. The rows and columns represent the area of the aquifers, such as would be seen on a map, and the layers represent the individual aquifers and intervening low-permeability units.

#### Dr. Hutchison described how the GAM works:

Boundaries of the aquifer and the thicknesses and depths of the layers are represented in the grid based on the best information available to the modelers. Properties of the aquifer—i.e., numerical values such as horizontal and vertical hydraulic conductivity—that control how water moves and how water levels change in response to stresses to the aquifer—e.g., pumping from wells—are applied to each model cell. Processes that add and subtract water to and from the model, including recharge to the various aquifers, movement in and out of the model from areas outside of the model boundaries, discharge to streams and springs, evaporation and transpiration (i.e., uptake of water from plants), and pumping from wells is also included in a separate set of text files with one text file representing each process, e.g., a wel file (or "welfile") for the well pumping, a .rch file for the recharge, etc. In model terminology, the processes that add and subtract water from the model domain are called "stresses." The GAMS are "transient" models, in that they simulate changes throughout time, e.g., through an historical period and throughout the multi-decadal planning period. Time in the model is simulated by a set of stress periods. In the case of the Old GAM and New GAM, each stress period represents a single year.

The actual functions of the aquifer—i.e., the movement of water through the aquifer, changes in water stored within the aquifer layers, and changes in water levels throughout time — are simulated by a set of equations that basically calculate the hydraulic head, i.e. water level, in each model cell in each stress period. Calculating hydraulic head is specifically what the GAMs do, and the changes in hydraulic head from one cell to the next, and from one stress period to the next, can then be used to determine fluxes of water throughout the model and changes in hydraulic head, i.e., drawdown, throughout time.<sup>45</sup>

<sup>&</sup>lt;sup>44</sup> GM Ex. 11 (Hutchison direct) at 10.

<sup>&</sup>lt;sup>45</sup> GM Ex. 11 (Hutchison direct) at 11.

Several changes were made between the Old GAM and the New GAM. Among those changes is the grid cell. In the Old GAM, the grid cells are consistently spaced at one square mile. In contrast, the New GAM has a variable grid that reduces the cell size in the area of selected surface water features. The largest cell size in the New GAM is one square mile (the same as the Old GAM), whereas the smallest size is 40 acres. 46 Although these changes were made to the grid cell sizes, the grid cell size for the area around LCRA's proposed production area remains one square mile.

GM witness Dr. Hutchison testified that the calibration of the New GAM is better than the Old GAM in Bastrop County and that impacts from production in Bastrop County may occur in Lee County. 47 LCRA's expert witnesses Van Kelly and Dr. Steven Young, along with Recharge expert witness Michael Thornhill, also agreed that the New GAM was an improvement over the Old GAM. 48 These witnesses all agreed that the Old GAM did not accurately predict drawdown within the District. When LCRA filed its application, the Old GAM was in place, and it was the model the GM used in analyzing the Application. Since that time, both the GM's and LCRA's experts have analyzed the application using the New GAM.

In contrast, Aqua's and Elgin's joint expert, Michael Keester, relied on the Old GAM in his report and testimony. <sup>49</sup> Mr. Keester testified that while the New GAM was better calibrated for high-volume pumping near the Bryan-College Station area, he did not believe it was better calibrated for high-volume pumping near LCRA's proposed pumping. <sup>50</sup> He also testified that the New GAM has the potential to underestimate drawdown in the updip areas and stated that this

<sup>&</sup>lt;sup>46</sup> GM Ex. 11 (Hutchison direct) at 13.

<sup>&</sup>lt;sup>47</sup> GM Ex. 11 (Hutchison direct) at 11. *See also* Tr. at 1489 ("given all those factors, [the New GAM] was a better model.").

<sup>&</sup>lt;sup>48</sup> Recharge Ex. B (Thornhill direct) at 18.

<sup>&</sup>lt;sup>49</sup> Mr. Keester testified that he redid his analysis using the new GAM, but did not provide the results of that redone analysis. Aqua Ex. 4 (Keester direct) at 12.

<sup>&</sup>lt;sup>50</sup> Tr. at 747-48.

limitation was specifically noted in the New GAM report.<sup>51</sup> On cross-examination, it was brought out that, when testifying on behalf of End-Op (now Recharge), Mr. Keester had testified about problems with the Old GAM, specifically, that the Old GAM overstated drawdown in the outcrop.<sup>52</sup>

#### b. ALJs' Analysis

Based on the overwhelming consensus of the evidence, the ALJs found that the New GAM is the better model to predict the effect of LCRA's pumping. The question then becomes whether LCRA's modeling, using the New GAM, was sufficient to show that its use would not cause unreasonable effects on groundwater or existing wells.

# 4. The Modeling Does Not Show Unreasonable Effects

## a. Parties' Evidence and Arguments

The parties opposed to the Applications argued that LCRA has failed to present sufficient evidence on the effects its pumping would have on existing groundwater resources and permit holders. LCRA and the GM disagree.

The parties and the witnesses agreed that the GAM is a regional planning tool that has limited use when it comes to looking at local effects.<sup>53</sup> Nevertheless, LCRA argued that the New GAM should still be used to evaluate the effect production from the proposed wells will have on groundwater levels and other permit holders. Its expert Dr. Young testified, "despite these limitations, the GAM is an appropriate tool to evaluate unreasonable impacts and represents the best available tool for such evaluation."<sup>54</sup>

<sup>&</sup>lt;sup>51</sup> Tr. at 747-48.

<sup>&</sup>lt;sup>52</sup> Tr. at 753.

<sup>&</sup>lt;sup>53</sup> LCRA Ex. 28 (Young direct) at 25.

<sup>&</sup>lt;sup>54</sup> LCRA Ex. 28 (Young direct) at 25-26.

The GM also argued that modeling performed under the New GAM is sufficient to allow the District to issue a permit when that modeling is combined with permit terms that provide for monitoring and phasing.

When analyzing impacts using the New GAM, GM expert Dr. Hutchison predicted drawdowns in the Simsboro Formation from LCRA's wells of approximately 8 feet in 2022, 14 feet in 2025, and 30 feet in 2070. For the Calvert Bluff, he predicted drawdowns of 2 feet in 2022, 4 feet in 2025, and 15 feet in 2070. In doing this analysis, he analyzed approximately 1,800 wells. His analysis does not, however, specifically address any of the wells owned by any of the parties here.

Aqua's and Elgin's expert Mr. Keester testified that he used a multi-step analysis to determine the effect of the proposed pumping on Aqua's and Elgin's wells. His four steps were as follows. First, he modeled using the Old GAM. Second, he "used an analytic model to improve the estimate of the water level at the grid scale to the well scale." Third, he "applied another analytic model to simulate the effect [Aqua's or Elgin's] pumping would have on itself, that is, interference drawdown." Fourth, to "estimate the water level declines during peak production, [he] used a pumping rate that was 12 percent above the annual average pumping rate in the analytic model of interference drawdown." Fourth, to "estimate the water level declines during peak production, [he]

Mr. Keester performed his analysis for peak summer demands with four alternatives: the Baseline (which consisted of the Modeled Available Groundwater calculated by the TWDB); the Baseline plus LCRA pumping; the Baseline plus Recharge's pumping; and the Baseline plus LCRA's and Recharge's pumping.<sup>58</sup> As discussed above regarding whose use should be

<sup>&</sup>lt;sup>55</sup> GM Ex. 13 at 20.

<sup>&</sup>lt;sup>56</sup> Tr. at 1278; GM Ex. 13 at 18.

<sup>&</sup>lt;sup>57</sup> Aqua Ex. 4 (Keester direct) at 11.

<sup>&</sup>lt;sup>58</sup> Aqua Ex. 8.

considered, Recharge's possible production amounts should not be included in this analysis of the effects of LCRA's permits.

Mr. Keester testified that he used the Old GAM and agreed that, using the New GAM, the drawdowns would be smaller than those he modeled. He added that he believed the level of uncertainty with the New GAM would be too high.<sup>59</sup>

On rebuttal, LCRA's expert Dr. Young testified about several problems he found with Mr. Keester's approach. Among these problems was that Mr. Keester (1) reported results as reflecting LCRA's impacts when those results included all of Recharge's pumping; (2) used the Old GAM instead of the New GAM; and (3) inadequately described the models he used as part of his four-step process. <sup>60</sup> Other problems Dr. Young noted were that, although Mr. Keester increased the levels for peak summer demands, he did not reduce the pumping amount he modeled. Dr. Young also criticized Mr. Keester's correction for local interference among Aqua's wells because he was "unaware of any proven best-method for making such a correction." <sup>61</sup>

In Dr. Young's rebuttal testimony, he testified that he performed several model runs with the New GAM.<sup>62</sup> He also testified that he updated his runs to improve the accuracy of the water level in Aqua's and Elgin's Simsboro wells.<sup>63</sup> He testified that his analysis factored in well-design factors, such as pump settings, well constrictions, and the location of the well screens for Aqua's and Elgin's wells.<sup>64</sup>

Dr. Young provided graphs that show simulated water levels following his analysis for a baseline, a baseline with LCRA, a baseline with Aqua pumping its permitted amounts and with

<sup>&</sup>lt;sup>59</sup> Aqua Ex. 4 (Keester direct) at 26.

<sup>60</sup> LCRA Ex. 55 (Young rebuttal) at 13.

<sup>61</sup> LCRA Ex. 55 (Young rebuttal) at 17.

<sup>62</sup> LCRA Ex. 55 (Young rebuttal) at 18.

<sup>63</sup> LCRA Ex. 55 (Young rebuttal) at 15.

<sup>&</sup>lt;sup>64</sup> LCRA Ex. 55 (Young rebuttal) at 20.

Elgin pumping its permitting amounts, a baseline with Aqua (or Elgin) plus LCRA, and finally for LCRA's pumping under the Old GAM.<sup>65</sup>

Dr. Young testified that, under his modeling using the baseline plus LCRA, the water level for all of Aqua's wells would remain above the pump setting. <sup>66</sup> For one well, the combination of the baseline pumping plus LCRA's and Aqua's full pumping would result in the water level dropping below the pump setting in approximately 2050, but remaining well above the constriction point. <sup>67</sup>

Dr. Young also predicted, as a result of his simulations, that LCRA's pumping along with the baseline pumping would not cause the water levels to drop below the elevation of the pump in any of Elgin's wells.<sup>68</sup> For Elgin's two wells in the outcrop, Dr. Young predicted that LCRA's pumping would cause less than one foot of drawdown.<sup>69</sup> For the two wells in the downdip, he predicted that, in 2070, LCRA's pumping would contribute 29% of the total drawdown for one well and 27% for the other.<sup>70</sup>

<sup>65</sup> LCRA Ex. 58 (Aqua), LCRA Ex. 59 (Elgin).

<sup>66</sup> LCRA Ex. 55 (Young rebuttal) at 21.

<sup>&</sup>lt;sup>67</sup> LCRA Ex. 55 (Young rebuttal) at 22.

<sup>&</sup>lt;sup>68</sup> LCRA Ex. 55 (Young rebuttal) at 24.

<sup>&</sup>lt;sup>69</sup> LCRA Ex. 55 (Young rebuttal) at 25.

<sup>&</sup>lt;sup>70</sup> LCRA Ex. 55 (Young rebuttal) at 25.

### b. ALJs' Analysis

The ALJs agreed with Dr. Young's criticism of Mr. Keester's approach. The Old GAM is less accurate, and an analysis based on that model will not suffice. However, it is not enough that LCRA merely criticize the other experts. As the party seeking a permit, it does have the burden of proof. The parties opposed to the Applications argued that LCRA failed to present sufficient evidence on how its pumping would affect existing groundwater resources and permit holders. The ALJs agreed that LCRA's direct case was light on detail about other parties' wells; however, LCRA presented a more targeted analysis in its rebuttal case.

The ALJs concluded that the analysis conducted by Dr. Young is sufficient to allow the District to determine whether LCRA's proposed use would unreasonably affect existing groundwater resources or permit holders. Given the modeling, the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders. The fact that real-world effects can differ from predicted modeling is addressed by the monitoring aspects of the Revised Draft Operating Permits.

#### c. Board Conclusion.

Limiting the production permit to 8,000 acre-feet for the initial five-year permit term also provides real-world information to help decide any future permit amendment applications.

#### B. Unreasonable Effects on Existing Surface Water Resources

As part of its review of LCRA's permit requests, the District must consider whether the proposed Purpose of Use unreasonably affects surface water resources.<sup>71</sup> Three parties, LCRA, the GM, and Environmental Stewardship, provided evidence and testimony relating to the issue. All three found that LCRA's requested pumping may have some impact on surface water resources.

<sup>&</sup>lt;sup>71</sup> Tex. Water Code § 36.113(d)(2); District Rule 5.2.D(2).

Environmental Stewardship's and the GM's analysis both show potential loss of surface water to the groundwater formations in Bastrop County by around 2050. Environmental Stewardship argued that the impacts to surface water resources will be unreasonable after the first 8,000 acrefeet of pumping. However, LCRA countered that "unreasonable impacts" are not defined and that under LCRA expert's definition, the impacts would not be considered unreasonable. The GM maintains that the impacts cannot accurately be determined until high-volume pumping in the District has begun—after the first phase of pumping (Phase II) is reached—and that is the purpose of including phases of increased pumping amounts in the Revised Draft Operating Permit.

The ALJs found that LCRA's proposed pumping, standing alone, will not cause unreasonable impacts to surface water resources, but that certain changes to the Revised Draft Operating Permits are required for the District to monitor potential impacts to surface water resources.

# 1. Environmental Stewardship's Arguments

Environmental Stewardship posited that the best available science for evaluating impacts to surface water resources is the GAM.<sup>72</sup> Environmental Stewardship elaborates that while impacts cannot be quantified with specificity due to limitations of the GAM, all three parties that submitted information regarding this factor found that modeling LCRA's proposed withdrawals using the GAM showed impacts to the surface water system.<sup>73</sup> Environmental Stewardship estimated that LCRA's pumping would result in a loss of 0.5% of average annual flows to the Colorado River and that during periods of low flows (Nov. 1963 and Mar. 1964), the amount lost would be around 8%.<sup>74</sup> Environmental Stewardship and the GM both used the GAM to analyze the cumulative

<sup>&</sup>lt;sup>72</sup> Environmental Stewardship's Closing Arguments (Environmental Stewardship's Closing) at 5.

<sup>&</sup>lt;sup>73</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>74</sup> Environmental Stewardship Ex. 100 (Rice direct) at 10.

impacts of LCRA's permits combined with all other users in Bastrop County (the Base Case), and both show that District-wide proposed pumping of groundwater may result in loss of surface water to the groundwater formations in Bastrop County by around 2050.<sup>75</sup>

Environmental Stewardship argued that LCRA's analysis improperly excludes the cumulative impacts and looks only at LCRA's impacts to surface water. Environmental Stewardship argued that ignoring cumulative impacts ignores the reality of what the total impacts to the surface water resource will be, and that considering the cumulative impacts is the only way for the District to consider the application consistent with the District Management Plan as required by District Rule 5.2.D.(4). The Further, Environmental Stewardship disagreed with relying on the *City of Bastrop* PFD, which considered only Bastrop's impacts and not cumulative impacts, because that permit was for a much smaller quantity of water (2,000 acre-feet). Environmental Stewardship also took issue with LCRA's decision not to use the "shallow flow zone" feature or the latest pumping file when running models using the New GAM.

Environmental Stewardship's expert Joseph Trungale used the GAM projections of its other expert, George Rice, <sup>80</sup> which showed the loss of surface water to the groundwater formations in Bastrop County. <sup>81</sup> He used the surface water availability model (WAM) to examine the impacts of the estimated loss of surface water on the reliability of senior water rights and to instream flow conditions in the Colorado River. <sup>82</sup> Based on the WAM modeling, he concluded that LCRA's

<sup>&</sup>lt;sup>75</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>76</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>77</sup> Environmental Stewardship's Reply to Closing Arguments (Environmental Stewardship's Reply) at 3.

<sup>&</sup>lt;sup>78</sup> Environmental Stewardship's Reply at 2-3.

<sup>&</sup>lt;sup>79</sup> Environmental Stewardship's Reply at 6.

<sup>&</sup>lt;sup>80</sup> Mr. Rice was also retained by the Brown Landowners.

<sup>81</sup> Environmental Stewardship's Reply at 8.

<sup>&</sup>lt;sup>82</sup> Environmental Stewardship's Reply at 8.

pumping and the resultant reduction in surface water flows would unreasonably affect existing surface water rights holders and the environment.<sup>83</sup>

Environmental Stewardship urged denial of the permits, arguing that the GM's Draft Operating Permits ignored the best available science (the GM's GAM analysis), which shows that the permits will unreasonably affect surface water resources in around 2050.84 Environmental Stewardship argued that LCRA should not receive permits for even a portion of the total amount requested because it must meet the burden to prove the full amount of groundwater requested in the application or receive none at all.<sup>85</sup> In the alternative, Environmental Stewardship requested the permits (which include phases) to require District Board approval of any GM recommendation for LCRA to proceed past the second phase, including provisions for notice and an opportunity for protestants to have a hearing. 86 Environmental Stewardship also requested that the Draft Operating Permits include requirements for LCRA to enter into a special surface/groundwater monitoring network agreement separate from the GM proposed Monitoring Well Agreement. The new surface/groundwater monitoring network agreement would provide data to the GM and the District in deciding whether to allow LCRA to proceed past Phase II.<sup>87</sup> Lastly, Environmental Stewardship suggests that LCRA's permits include requirements that LCRA implement a work plan LCRA witness Dr. Young previously developed for the area.<sup>88</sup>

<sup>83</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>84</sup> Environmental Stewardship's Closing at 5.

<sup>85</sup> Environmental Stewardship's Reply at 14.

<sup>&</sup>lt;sup>86</sup> Environmental Stewardship's Reply at 13-14.

<sup>87</sup> Environmental Stewardship's Reply at 13-14.

<sup>&</sup>lt;sup>88</sup> Environmental Stewardship's Reply; Environmental Stewardship Ex. 301.

### 2. GM's Arguments

Dr. Hutchison, the GM's expert, used the GAM to evaluate impacts to surface water resources. <sup>89</sup> The GM argued that the GAM is the best available science for conducting such evaluations and that the model runs made by Dr. Hutchison using the New GAM indicated that pumping with the Base Case for the District will potentially reduce groundwater discharge to surface water. <sup>90</sup> Further, adding LCRA's proposed withdrawals to the Base Case could result in a condition where the groundwater would be recharged by surface water in the Colorado River and its tributaries in Bastrop County. <sup>91</sup> The GM agrees with Environmental Stewardship's assessment that under Dr. Hutchison's and Environmental Stewardship expert Rice's modeling assumptions, the Colorado River could go from a gaining stream to a losing stream by 2050. <sup>92</sup> Dr. Hutchison's GAM model runs showed that surface water could be the source of half of LCRA's proposed pumping after 2050. <sup>93</sup>

However, the GM argued that the GAMs (both the Old and New GAM) are limited as a predictive tool by the lack of high volume pumping data in the District and should not be relied upon to make accurate quantifications of impacts. <sup>94</sup> The GM argued that the only conclusion to be made is that the GAM shows that surface water impacts from LCRA's and all other District users' potential pumping *are possible*. The GM is not opposed to including surface water monitoring in the well monitoring agreement with LCRA. <sup>95</sup> The GM concluded that the permits can be protective of surface water by including surface water monitoring in the well monitoring agreement with

<sup>89</sup> GM Ex. 11 (Hutchison direct) at 18.

<sup>&</sup>lt;sup>90</sup> GM Ex. 11 (Hutchison direct) at 18.

<sup>&</sup>lt;sup>91</sup> GM Ex. 13.

<sup>&</sup>lt;sup>92</sup> GM's Closing Brief (GM's Closing) at 30. A gaining stream is one that receives water from an aquifer. A losing stream is the reverse; in other words, where water from the stream flows into the aquifer. Environmental Stewardship Ex. 100 (Rice direct) at 8.

<sup>&</sup>lt;sup>93</sup> GM Ex. 13.

<sup>&</sup>lt;sup>94</sup> GM's Closing at 30.

<sup>95</sup> GM's Closing at 31.

LCRA and by using the phased approach to permitting.<sup>96</sup> Further, the GM stated that the Revised Draft Operating Permits' Special Condition 11 allows district-wide curtailment in the event of unreasonable impacts to surface water resources in the future.<sup>97</sup>

# 3. LCRA's Arguments

LCRA stated that neither State law nor District Rules provide specific guidance on how a groundwater district should determine whether proposed permits will unreasonably affect surface water resources. 98 Therefore, LCRA relies upon the conclusions of its witness, Dr. Young. Based upon his expertise as a hydrogeologist and environmental scientist, Dr. Young suggests impacts to surface water resources are only unreasonable if LCRA's pumping, standing alone without considering the contributing pumping of others, will cause (1) drawdown that results in the capture of underflow; or (2) cause a change in the hydraulic gradient between the water level in the stream and the water level in an adjacent shallow groundwater flow that causes a persistent and substantial flow from surface water to the groundwater system. 99 In its analysis using the GAM model, LCRA estimates the drawdown resulting solely from LCRA's pumping to be about 0.3% of the annual average flow of the Colorado River near Bastrop (with average annual flow of about 1.4 million acre-feet per year). With this predicted amount of drawdown being a relatively small portion of the total annual flow, Dr. Young concluded that neither of his identified unreasonable conditions are possible. 100

LCRA is critical of Environmental Stewardship's approach and the validity of Environmental Stewardship witness Mr. Trungale's findings in particular. <sup>101</sup> LCRA argued that

<sup>&</sup>lt;sup>96</sup> GM's Closing at 30.

<sup>&</sup>lt;sup>97</sup> GM's Closing at 30-31.

<sup>&</sup>lt;sup>98</sup> LCRA's Post-Hearing Closing Arguments (LCRA's Closing) at 30.

<sup>99</sup> LCRA's Closing at 30-31.

<sup>&</sup>lt;sup>100</sup> LCRA's Closing at 30-32.

<sup>&</sup>lt;sup>101</sup> LCRA's Post-Hearing Reply to Closing Arguments (LCRA's Reply) at 32-44.

Environmental Stewardship's overly stringent approach should be rejected because it has not been adopted in this or any other groundwater conservation district.<sup>102</sup>

Regarding Environmental Stewardship's use of the GAM to estimate the impact of LCRA's proposed pumping on surface water resources, LCRA argued that Environmental Stewardship's inquiry improperly evaluated LCRA's proposed use in combination with all other groundwater production authorized by the District instead of the impact of LCRA's use standing alone because Texas Water Code § 36.113(d)(2) and District Rule 5.2.D(2) refer to only the unreasonable impacts caused by the "proposed use." <sup>103</sup> LCRA also maintains that Environmental Stewardship's approach is inherently flawed because Mr. Rice's analysis goes beyond the limited predictive capabilities of the GAM to model impacts by making oversimplified and incorrect assumptions. 104 LCRA asserts that the GAM cannot accurately capture the complexities and variabilities of river conditions and bank storage, specifically, because: (1) the GAM is an annual average condition and analysis of surface-groundwater interactions requires timesteps of hours or days; and (2) infiltration and unsaturated flows in the alluvium are not represented in the GAM. LCRA lists assumptions made by Mr. Rice that LCRA alleges appear to be designed to overstate the potential impacts of pumping, including: (1) assuming that LCRA (and only LCRA) will pump at maximum rates every year for 50 years; (2) attributing all losses to LCRA even though his model shows losses occurring before LCRA begins pumping; (3) including other pumpers besides LCRA; (4) omitting critical parts of the alluvium from a segment of the Colorado River that shows a net gain of water through 2070; and (5) adjusting pumping at LCRA's Lost Pines Power Park up to permitted limits without making similar adjustments to other users. 105 LCRA argued that the flaws

<sup>&</sup>lt;sup>102</sup> LCRA's Reply at 32-34.

<sup>103</sup> LCRA's Reply at 33.

<sup>104</sup> LCRA's Reply at 35-38.

<sup>&</sup>lt;sup>105</sup> LCRA's Reply at 37-38.

of the modeling are demonstrated by the fact that the modeling shows levels of flow in certain tributaries that historical records indicate have not occurred even under natural conditions. 106

LCRA believes that Mr. Trungale relied upon Mr. Rice's flawed inputs to conduct his flawed analysis using the WAM. 107 LCRA stated that Mr. Trungale's use of the "Run 3" version of the WAM for his analysis significantly understated the amount of water expected to be in the Colorado River and therefore overstated modeled impacts of LCRA's pumping on the surface water. 108 LCRA attributes the over-stated impacts to "Run 3," not accounting for historical or future expected real-world conditions in the river. Instead, "Run 3" is a conservative estimate of water consumption because it assumes full use of all permitted water by every water right holder in the Colorado River basin and 100% consumption of the water (with no return flows), which is not the historical or expected norm in the future. 109

LCRA also concluded that Mr. Trungale's use of the WAM to examine pumping impacts on instream flow requirements is overly simplistic and flawed. LCRA claimed that even if Environmental Stewardship's quantifications in reduced surface water flows resulting from LCRA's pumping were accurate, Mr. Trungale's assessment of the impact to instream flows and the environment ignores consideration of actual historical subsistence flow data and the actual impact to wildlife habitat such as the Blue Sucker spawning area. <sup>110</sup>

106 LCRA's Reply at 39.

<sup>&</sup>lt;sup>107</sup> LCRA's Reply at 39-44.

<sup>108</sup> LCRA's Reply at 40-41.

<sup>&</sup>lt;sup>109</sup> LCRA's Reply at 40-41.

<sup>110</sup> LCRA's Reply at 43; LCRA Ex. 70.

#### 4. ALJs' Analysis

The ALJs concluded that LCRA's pumping under the Revised Draft Operating Permits alone would not result in unreasonable effects on surface water resources. Accordingly, the Applications should not be denied on that basis. On the other hand, the ALJs agreed with the GM and Environmental Stewardship that the District should include appropriate conditions in the operating permits to monitor whether LCRA's proposed pumping combined with District-wide pumping will cause unreasonable effects and to order curtailment when needed.

#### a. The Standard for Unreasonable Effects on Surface Water Resources

No party cited precedent or a legal definition of unreasonable effects to surface water resources, but LCRA witness Dr. Young proposed certain standards for what would constitute unreasonable effects. Under Dr. Young's definitions, unreasonable effects would be shown by pumping that: (1) causes a drawdown that results in the capture of underflow; or (2) causes a change in the hydraulic gradient between the water level in the stream and the water level in an adjacent shallow groundwater flow that causes a persistent and substantial flow from surface water to the groundwater system.<sup>111</sup> As they did regarding effects on groundwater, the ALJs noted that there might be additional conditions that would constitute unreasonable effects, but agreed that either condition would constitute unreasonable effects on surface water resources.

Neither statutory law nor the District's rules require the District to maintain groundwater flow of any amount into the surface water system. On the contrary, Texas courts have consistently held that groundwater can be pumped without protection of spring flow. Districts are, however, required to address conjunctive water management in their water management plans and in the

<sup>111</sup> LCRA Ex. 28 (Young direct) at 40.

See Denis v. Kickapoo Land Co., 771 S.W.2d 235 (Tex. App.—Austin 1989, writ denied); Pecos County Water Control & Improvement District No. 1 v. Williams, 271 S.W.2d 503 (Tex. App.—El Paso 1954, writ ref'd n.r.e.).

adoption of the DFCs. <sup>113</sup> Therefore, although cumulative effects of pumping are not relevant to the issue of unreasonable effects, those effects can, and should be, considered as part of the District's management, and the possibility exists that the District could curtail all users if necessary. In order to make those sorts of determinations, there will need to be surface water monitoring, as discussed below.

# b. There is No Evidence in the Record that LCRA's Proposed Pumping, Standing Alone, Will Unreasonably Affect Surface Water Resources

No party argued that LCRA's proposed pumping, standing alone, will cause a loss of surface water in the Colorado River in Bastrop County to the groundwater system. At most, the parties who modeled the effects of LCRA's pumping found that it would cause a loss of discharges of groundwater into the surface waters, resulting in a loss of flow in the Colorado and its tributaries of 0.5% of the average annual flow of the Colorado River at Bastrop. 114 Environmental Stewardship also argued that such losses would be a greater percentage of the flows (up to 8%) during low flow conditions. 115 The ALJs found, based on the credible testimony of Dr. Young and supported by Dr. Hutchison, that extrapolations of the GAM model to low flow conditions are not appropriate because the GAM is a model that is based on annualized flows. Extrapolations improperly ignore many variables and the complexities of river conditions during different flow regimes. In sum, it has not been shown that LCRA's proposed pumping alone will cause unreasonable effects on surface water resources, and the permits should not be denied on that basis.

<sup>&</sup>lt;sup>113</sup> Tex. Water Code §§ 36.1071(a)(4), 36.108(d)(4).

LCRA Ex. 28 at 41 (Dr. Young estimated losses of .2% of annual flow); Environmental Stewardship Ex. 100 (Rice direct) at 10. Mr. Rice estimated losses of .5% of annual flow and loss of 8% during low flows.

Environmental Stewardship Ex. 100 (Rice direct) at 10.

#### c. Cumulative Effects

The ALJs found that Dr. Hutchison's and Mr. Rice's GAM models show that the cumulative effects of LCRA's proposed pumping, combined with the District pumping base case, may cause significant losses of surface water to the groundwater system in Bastrop County by 2050, including surface water sourcing up to half of LCRA's groundwater pumping. Such losses would be a "persistent and substantial flow from surface water to the groundwater system" and thus would meet the standards set forth by LCRA witness Dr. Young for unreasonable effects. However, the ALJs agreed with Dr. Hutchison's (and others') conclusion that the GAM models are not accurate enough to predict such impacts with certainty, due to the lack of reliable high volume pumping data in Bastrop County. 116

FINAL DECISION

Because the ALJs did not find that the GAM is accurate enough to predict the loss of surface water with sufficient certainty or precision, the ALJs did not accept Environmental Stewardship's conclusion that LCRA's pumping will definitely cause unreasonable effects. Specifically, because the inputted surface water losses calculated by the GAM are not precise or certain enough to be used as reliable inputs in further analysis relating to surface water impacts, the ALJs do not make any findings relating to whether the methods Environmental Stewardship witness Mr. Trungale used, which relied upon those uncertain inputs, are appropriate evaluations.

Nevertheless, while the Old and New GAMs do not conclusively show future impacts, absent additional data, they are the most reliable tool available with which to make a determination on the subject. The ALJs agreed that the GAM modeling shows the possibility of future unreasonable effects on surface water resources caused by the cumulative effects of District-wide pumping, including LCRA's. Therefore, the District needs to monitor the impacts of groundwater

<sup>&</sup>lt;sup>116</sup> GM Ex. 11 at 16.

pumping in order to have sufficient knowledge to be able to mitigate or prevent unreasonable effects.

#### C. Well Drawdown and Interference

District Rule 5.2.D(9) requires consideration of "whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." Relatedly, the District Rules require large-volume wells, such as those proposed by LCRA, to be spaced more than 5,000 feet away from other wells in the same aquifer owned by a different owner.<sup>117</sup>

#### 1. Parties' Evidence and Arguments

LCRA's proposed wells are closely spaced together on one portion of the Griffith League Ranch. According to LCRA's evidence, this was to respect the preference of the Boy Scouts as reflected in the deed. LCRA argued that (consistent with the District Rules) these wells are more than 100 feet away from the nearest property line and will be spaced at least 5,000 feet from the nearest Simsboro well not owned by LCRA. LCRA also noted that its wells will be located where the aquifer is deepest and that its wells, like Recharge's permitted nearby wells, will be located in some of the most transmissive parts of the Simsboro in the District. LCRA presented testimony that because the wells will be part of an aggregated system, it will be able to adjust pumping among the wells to minimize the reduction of artesian pressure. LCRA noted that the GM can restrict pumping if the pump tests required by the Draft Operating Permits reveal impacts worse than

<sup>117</sup> District Rule 8.2(B).

<sup>&</sup>lt;sup>118</sup> LCRA Ex. 3 at 2 (granting LCRA the right to use the portion of the surface area designated as the Preferred Groundwater Development Area).

<sup>119</sup> LCRA Ex. 28 (Young direct) at 47.

anticipated, which will, in tum minimize impacts on wells..<sup>120</sup> LCRA argued that its compliance with the spacing rules, along with the pump tests and potential restrictions, show that the Draft Operating Permits will lessen interference among wells.

LCRA also presented evidence about Recharge's permitted wells noting that modeling shows that LCRA's impacts on Recharge's well will be approximately the same as Recharge's impacts on LCRA's wells. 121

Recharge, whose permitted wells will be close to LCRA's proposed well field, argued that LCRA failed to establish that its Applications will minimize as far as practicable the interference between wells. 122 Recharge argued that, to the contrary, LCRA's close-space siting of its wells on a portion of the Griffith League Ranch property maximizes well interference. Recharge argued that it was improper for LCRA to concentrate all of its wells near the property line and as close to Recharge's pre-existing permitted well field as the District's spacing rules allow. Recharge further contends, "LCRA took advantage of a recent change to the District's spacing rules that allows a well owner to avoid the 5000-foot well spacing rule that applies to all other wells of this size." Recharge emphasizes that compliance with the District's spacing rules is not enough to lessen well interference. Finally, recharge challenges LCRA's motives and emphasizes that LCRA's original experts used to study the Griffith League Ranch site and obtain the permits were not the same experts who testified at the hearing.

Aqua and Elgin also argued that compliance with the spacing rule is insufficient to satisfy the requirement to lessen interference with other wells and contend that spacing rules do not override the permitting rule.

<sup>&</sup>lt;sup>120</sup> Tr. at 583-592.

<sup>&</sup>lt;sup>121</sup> LCRA Ex. 55 (Young rebuttal) at 40.

<sup>&</sup>lt;sup>122</sup> Recharge's Response to Closing Arguments (Recharge's Reply) at 8.

<sup>&</sup>lt;sup>123</sup> Recharge's Closing Argument (Recharge's Closing) at 2.

Elgin emphasizes that its wells "are relatively updip within the Simsboro compared to LCRA's proposed wells" and expresses concern that the New GAM may underestimate updip migration of drawdown caused by downdip pumping.

The Hernandezes argued that lessening drawdown and interference should be addressed by monitoring and mitigation.

The GM argued that the phased approach presents a reasonable and adequate solution to the issue of drawdown and interference and disagrees that its phased approach only considers broad, District-wide impacts. The GM points to the spacing rules and the 36-hour pump test as permit conditions that would lessen well interference. He also argued that if the pump test shows that there would be adverse impacts, Special Condition 14 of the Revised Draft Operating Permits authorizes the GM to lower the maximum rate of withdrawal.

### 2. ALJs' Analysis

The District's Rule requires consideration of "whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." Thus, under the District's rule, the obligation on the District is to "minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure," but only to "lessen interference between wells." Therefore, the standard is not whether interference between wells will be minimized as far as practicable, but rather whether it will be lessened. Similarly, the ALJs noted that this Rule requires an inquiry into the terms of the Draft Permits, not just the Applications.

This rule is consistent with Code section 36.116, which authorizes a groundwater conservation district to regulate "in order to minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, to control subsidence, to prevent interference between wells, to prevent the degradation of water quality, or to prevent waste." Tex. Water Code § 36.116(a).

The ALJs agreed that the Revised Draft Operating Permits contain sufficient terms to lessen well interference. In particular, they found that the combination of pump tests, monitoring wells, and phasing, plus the GM's ability to curtail pumping, if necessary, satisfy this factor. The ALJs declined to read anything sinister into LCRA's decision to change experts. The ALJs also declined to find that compliance with the spacing rules automatically satisfies this rule.

#### 3. Board Conclusion

The Final Operating Permit allows the GM to restrict the rate of withdrawal and will also require LCRA to file amendment applications to increase the authorized withdrawal amount.

# D. Management of Total Groundwater Production on a Long-Term Basis to Achieve Desired Future Condition

District Rule 5.2.D(8) requires the District to consider "whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition." A DFC is "a quantitative description, adopted in accordance with Section 36.108, of the desired condition of the groundwater resources in a management area<sup>125</sup> at one or more specified future times."

The Texas Water Code requires that:

In issuing permits, the district shall manage total groundwater production on a long-term basis to achieve an applicable [DFC] and consider:

- (1) the Modeled Available Groundwater determined by the executive administrator;
- (2) the executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by district rules and Section 36.117;
- (3) the amount of groundwater authorized under permits previously issued by the district;
- (4) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district; and

A management area is defined as "an area designated and delineated by the Texas Water Development Board under Chapter 35 as an area suitable for management of groundwater resources." Tex. Water Code § 36.001(13).

126 Tex. Water Code § 36.001(30).

# (5) yearly precipitation and production patterns. 127

The District is a part of Groundwater Management Area (GMA) 12, which on April 27, 2017, adopted a DFC for the Simsboro Formation of a District-wide average drawdown between January 2000 and December 2069 of 240 feet. The DFC is also divided into DFCs for the counties in the District. For Bastrop County, the DFC is a county-wide average drawdown between January 2000 and December 2069 of 174 feet; for Lee County, the DFC is a county-wide average drawdown between those dates of 350 feet.

The DFC is used to determine the GMA's Modeled Available Groundwater ("MAG"). The MAG is "the amount of water that the [TWDB's] executive administrator determines may be produced on an average annual basis to achieve a desired future condition."<sup>129</sup>

It is undisputed that if LCRA and all the other permit holders pumped their full permitted amount, the total groundwater production within the District would exceed the MAG.

# 1. The Parties' Arguments

The Hernandezes are the only party to raise an issue about how the District is issuing permits in relation to the DFCs and MAGs. They argued that by not using the MAG as a permitting cap, the District is not fulfilling its duty. They add, "[i]t is inane that countless hours and dollars are spent by five [groundwater conservation districts] in the GMA-12 to develop the DFCs only to have them disregarded for permitting decisions."<sup>130</sup>

For its part, the GM contends the MAG is not a hard permitting cap; rather, it is "a factor to consider when managing the DFC." He argued that this use of the MAG as a permitting tool is

<sup>&</sup>lt;sup>127</sup> Tex. Water Code Ann. § 36.1132.

<sup>&</sup>lt;sup>128</sup> GM Ex. 10 at 7.

<sup>&</sup>lt;sup>129</sup> Tex. Water Code § 36.001 (25).

<sup>130</sup> Closing Argument of Elvis Hernandez (Hernandez Closing) at 3.

<sup>&</sup>lt;sup>131</sup> GM's Closing at 44.

consistent with Texas Water Code §36.1132, which requires a district, when making permitting decisions, to consider "a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district." He similarly testified that a significant reason why MAGs are used as management guides, not hard caps for permitting, is because permit holders typically do not produce their full permitted values.<sup>132</sup>

# 2. ALJs' Analysis

While noting the Hernandezes' frustration, the ALJs found that the GM's approach to the DFC and the MAG is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable DFC. The Texas Water Code does not anticipate the MAG being a hard permitting cap, as evidenced by amendments adopted in 2015 to Texas Water Code §36.1132 to change the MAG from a permit cap to a production limit. <sup>133</sup> Instead, the MAG is one factor in the permitting analysis. <sup>134</sup> The ALJs found that the evidence shows the GM appropriately considered the factors.

### **E.** Special Conditions from Previous Permits

#### 1. Parties' Arguments

Recharge's permits, like Forestar's, contain several conditions that resulted from a settlement. Among the settlement-related terms in Recharge's permits are: (1) a reduction in its requested production amount, (2) tiered phasing of production, and (3) the creation of a mitigation fund.

Recharge argued that provisions contained in previous permits reflect District policy and, thus, must be included in the Draft Permits. Alternatively, they argued that the principle of applying

<sup>132</sup> GM Ex. 1 (Totten direct) at 39.

<sup>&</sup>lt;sup>133</sup> Act of May 27, 2011, 82d Leg., R.S., ch. 18, § 4, 2011 Tex. Gen. Laws 39

<sup>&</sup>lt;sup>134</sup> Tex. Water Code Ann. § 36.1132.

be the same.

equal, non-discriminatory treatment to all citizens of the District requires that permit provisions

As with its permits, Recharge argued that the same District policy considerations require that the following conditions be included in LCRA's Draft Operating Permits:

- Reducing the initial amount of water requested by the applicant;
- Requiring adequate spacing;
- Requiring future cutbacks, if necessary;
- For all permits over 20,000 acre-feet, requiring end-user contracts, monitoring-well agreements, and tiered phasing of production; and
- Provisions for financial mitigation for all production in Bastrop County.

Some of these items are, in fact, contained in the Revised Draft Operating Permits. The Revised Draft Operating Permits anticipate that the GM may require future cutbacks. The Revised Draft Operating Permits also required end-user contracts, monitoring-well agreements, and tiered phasing of production.

Recharge also argued that if the Draft Permits are issued without these provisions, its permit (as well as Forestar's and Bastrop's permits) should be reopened, and those provisions removed. Such an action is beyond the scope of this hearing and were not addressed further.

Recharge argued that "policy can be adopted by action, in addition to a formal written policy, much like a contract can be formed through the parties' course of conduct." <sup>135</sup> It then argued that the District has adopted a standard practice of including certain special conditions in similarly-situated permits and that this practice rises to the level of District policy. Recharge also argued that the record "demonstrates that the [District's] board adopted certain special conditions in writing for similarly-situated permit holders on a systematic basis." <sup>136</sup> Finally, Recharge argued

<sup>&</sup>lt;sup>135</sup> Recharge's Closing at 25.

<sup>136</sup> Recharge's Closing at 26.

that "[t]he District has similarly adopted an effective policy of requiring adequate spacing between wells of at least 5,000 feet as between all large volume wells, as evidenced by the spacing for the Bastrop, Forestar, and Recharge wells." <sup>137</sup>

The GM disagrees, as does LCRA. The GM argued that permitting decisions are made on a case-by-case basis and that what is appropriate for one applicant and permit may not be appropriate for another. The GM also emphasizes the need for balancing private property and natural resource interests when managing groundwater.

#### 2. ALJs' Analysis

The ALJs found that when, following a settlement, a groundwater conservation district issues a permit that reduces the total amount of production from the amount requested in the application, it does not create a policy of reducing the amount of production from the amount requested. Recharge cannot rely on the fact that in previous cases, the permit that was issued authorized less production than requested to argued that LCRA's requested production should be reduced, as well. Such an approach would be inconsistent with the balancing analysis required by Texas Water Code § 36.113(d) and District Rule 5.2.D.

As for a spacing policy, the undisputed evidence is that the District's spacing rules changed after the permits for Recharge's three wells were issued and before LCRA's Applications. Under the current rules, the spacing required between wells belonging to one party is different from the spacing required between wells of different owners. <sup>139</sup> The current rules only require a distance of 5,000 feet between large wells owned by different owners. And it is also undisputed that the proposed wells in the Applications comply with the current spacing rules. Even assuming, for the

<sup>&</sup>lt;sup>137</sup> Recharge's Closing at 27.

The ALJs note that Forestar's and Recharge's permitted production amounts (28,500 and 46,000 acre-feet, respectively) exceed the production amount allowed in the Revised Draft Operating Permits.

139 District Rule 8.2.

sake of argument, that the District had a policy of requiring at least 5,000 feet between large-volume wells regardless of ownership, it changed that policy by adopting a new rule. Recharge does not—and could not—argue that it was improper for the District to amend its rules. Likewise, Recharge does not—and could not—directly argue that all later permit applications should be subject to the rules in place at the time the District granted the first large-volume permit. But by turning the spacing requirements in its permit into a "policy," despite the existence of the rule, that is, in essence, what Recharge is arguing. The ALJs were not convinced that the District has a separate well-spacing policy, aside from its spacing rule, that should apply here. 140

#### F. Separate Issues Raised by the Brown Landowners

The Brown Landowners raised several issues that were not raised by the other parties.

Those issues will be addressed here.

### 1. Was the District Required to Consider Historic Use?

The Brown Landowners argued that the District was required to consider historic use when reviewing the Applications and failed to do so. In making this argument, they rely on Texas Water Code § 36.116(b). As set out above, § 36.116(b) provides that a groundwater conservation district *may* preserve historic use in its rules limiting production. That section does not *require* a district to adopt rules preserving historic use, and it is undisputed that historic use is not one of the factors in the District's permitting rules.<sup>141</sup>

Moreover, the Brown Landowners do not clearly describe the historic use that they argued must be considered. They argued that most of the available water in Bastrop and Lee Counties is

Recharge also argued that the District has a policy of requiring future cutbacks, which it agrees are contained in the Draft Permits.

The Brown Landowners quote *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (Tex. 2012) for the proposition that "the amount of groundwater withdrawn and its purpose are both relevant when identifying an existing or historic use to be preserved," but they do not argue that *Day* holds that historic use must be preserved. Brown Landowners' Brief in Support of Closing (Brown Landowners' Closing) at 17 (quoting *Day*, 369 S.W.3d at 836).

groundwater, that those counties "are significantly more rural than Travis County," and that "[t]here is no history of Travis County being an intended importer of Bastrop and Lee County water." Rather than protect a specific historic use—except, broadly, groundwater use in Bastrop and Lee Counties—they appear to argue that because groundwater has been used in Bastrop and Lee Counties, a new use should not be allowed.

For these reasons, the ALJs declined to find that the District was required and failed to consider historic use.

#### 2. Were the Applications Administratively Complete?

The Brown Landowners also argued that the Applications should be denied because they were not administratively complete. 143 They contend that "[w]hen viewed under these guidelines and principles the LCRA application is not administratively complete as it was not given the proper scrutiny by the [District]."144

The GM disagrees. According to the GM, administrative completeness is a technical requirement that does not require a balancing of the various factors that the District's board must consider under chapter 36 and the District's rules. Instead, Mr. Totten testified that to determine whether the Applications were complete, he determined whether LCRA had provided the information the District Rules and Code require and whether it used the correct forms in its Applications. He also agreed that administratively complete "means it must have the minimal amount of information required in [the District's] rules. The ALJs found that GM's understanding is consistent with Texas Water Code chapter 36, which provides that an application is

<sup>&</sup>lt;sup>142</sup> Brown Landowners' Closing at 17.

Brown Landowners' Closing at 2 ("First and foremost, the ALJ should deny the permit as it is administratively incomplete.").

<sup>&</sup>lt;sup>144</sup> Brown Landowners' Closing at 5.

<sup>&</sup>lt;sup>145</sup> GM Ex. 1 (Totten direct) at 17. Mr. Totten originally determined that LCRA had used the incorrect forms; he required LCRA to resubmit its applications using the correct forms.

<sup>&</sup>lt;sup>146</sup> Tr. at 1118.

administratively complete if it contains the information set forth under Sections 36.113 and 36.1131.<sup>147</sup> It also prohibits a district from requiring that additional information be included in an application for it to be considered administratively complete.<sup>148</sup>

The Brown Landowners do not offer a competing definition of administrative completeness, nor do they indicate what it requires. They only argued that they do not think the Application satisfies it. To the extent that the Brown Landowners argued that the Application is not administratively complete because of the factors set out in the Texas Water Code or the District's Rules, the discussion of that argument is set out in the sections discussing the substantive portions of the Texas Water Code or Rules. Otherwise, the ALJs were satisfied that the Applications are administratively complete in that they contain the required information.

#### 3. Analysis Based on Benefit in the District

The Brown Landowners argued that the District should add some sort of geographic limitation to the Draft Permits. In essence, they argued that the District failed to examine whether there will be a beneficial use in Bastrop and Lee Counties. <sup>149</sup> They do not point to any statute or rule that requires an examination of beneficial use within the District, as opposed to outside it, and the ALJs were not persuaded that any such requirement exists.

### G. Phasing

The Draft Operating Permits and the Revised Draft Operating Permits both anticipate that LCRA will increase its pumping in phases. LCRA and the parties opposed to the Applications expressed concerns about various aspects of the phasing process.

First, LCRA objects to a requirement in the Draft Operating Permits that it have binding

<sup>&</sup>lt;sup>147</sup> Tex. Water Code § 36.114(h).

<sup>&</sup>lt;sup>148</sup> Tex. Water Code § 36.114(h).

<sup>&</sup>lt;sup>149</sup> Brown Landowners' Brief in Support of Closing at 18 ("Including Travis county in their permit, the LCRA cannot demonstrate that there is a beneficial use to Bastrop and Lee counties.").

contracts with end users to move to the next phase and increase pumping.

Next, both LCRA and Recharge have concerns about the phasing formula, and LCRA requested it be changed. LCRA argued that, although it is willing to phase in production, it should not be required to accept special conditions "that are unreasonable, flawed, create significant uncertainty, or are so open to interpretation that they cannot be reasonably implemented" just because previous permittees agreed to those special conditions. In particular, LCRA argued, citing Recharge's expert, that the phasing formula is "a mess" that should be eliminated.

Finally, Aqua and Elgin raise a different concern: that the phasing examines district-wide conditions, as opposed to local impacts. Equally significant for Aqua is that potentially-impacted local users cannot participate in the decision to move LCRA from one phase to the next. Aqua argued that, as the phasing standards stand in the Draft Operating Permits, they provide "no meaningful review of local impacts, and no due process for protestants to have their respective *local* impacts heard and addressed."<sup>153</sup>

These concerns are moot under the Final Operating Permits, which do not include any phasing requirements or options. LCRA will have to file permit amendment applications if it desires to increase production at any point in the future. Should any amendment applications be filed, the parties here or any future protestants will have the opportunity to contest whether the groundwater will be put to any beneficial use and if the additional production will cause unreasonable local impacts.

Recharge would like to have this formula removed from its permit. As discussed above, such a request is outside the scope of this contested case hearing. In its briefing, LCRA suggests that nothing precludes potential amendments to Forestar's and Recharge's permits to remove the formula. LCRA's Closing at 55 n.10.

<sup>&</sup>lt;sup>151</sup> LCRA's Closing at 44.

<sup>152</sup> LCRA's Closing at 51.

<sup>&</sup>lt;sup>153</sup> Closing Argument of Aqua (Aqua's Closing) at 21.

# H. Monitoring Well Agreement

There are two main issues relating to Special Condition 1, which requires LCRA and the GM to enter into a Monitoring Well Agreement. The GM and LCRA disagreed about certain aspects of this Special Condition as it relates to monitoring groundwater. As discussed above, the ALJs also found it necessary to conduct monitoring of the impacts on surface water, as well.

### 1. Details of the Monitoring Well Agreement as It Relates to Groundwater

The GM and LCRA disagree about certain aspects of the special conditions relating to a Monitoring Well Agreement. Special Condition 1 of the Revised Draft Operating Permit requires LCRA to enter into a Monitoring Well System Construction and Maintenance Agreement, approved by the District's Board, within 180 days after the Permit is issued. LCRA would be required to construct and maintain the new monitoring wells, and a violation of the Monitoring Well Agreement would violate the Permit.

Special Condition 4 of the Revised Draft Operating Permits sets out certain criteria for a monitoring well system. Wells in the system must be screened in the Simsboro Formation; must improve the spatial coverage of the monitoring well system; must be easily accessible for regular measurements; and must meet any other criteria agreed upon by the GM and LCRA.<sup>155</sup>

### 2. Parties' Arguments

LCRA first objects to the 180-day deadline to enter into a Monitoring Well Agreement.

LCRA argued that decisions about the timing and number of monitoring wells should be deferred to provide both LCRA and the District with additional flexibility. 156 LCRA suggests that the

<sup>&</sup>lt;sup>154</sup> In the Draft Operating Permit, this deadline was 90 days after permit issuance.

The Revised Draft Operating Permits remove a reference to an existing monitoring well, as LCRA requested. Similarly, the Revised Draft Operating Permits no longer require LCRA to "operate" the monitoring wells. LCRA had also requested that change.

<sup>&</sup>lt;sup>156</sup> LCRA's Closing at 45.

deadline to enter into a monitoring well agreement should be before beginning construction of a well to be used in the first pumping phase of the permit (Phase II). According to LCRA, not having an exact date would provide greater flexibility and would allow it (and the District) to take changed conditions into account. 158

LCRA argued that the portion of Special Condition 1 under which a violation of the Monitoring Well Agreement is a violation of the operating permit should be removed. In LCRA's view, tying together an as-yet-unnegotiated Monitoring Well Agreement and the Draft Operating Permit would add an unreasonable amount of uncertainty to the process. LCRA points out that it has an incentive to comply with the Monitoring Well Agreement because it will not be allowed to increase its pumping unless it complies. LCRA also argued that the Monitoring Well Agreement should be enforced as a contract between the LCRA and the District, not as part of an operating permit.

LCRA also suggests that the requirement that it "has assisted the District in adding any New Monitoring Wells that the District and Permittee agreed are needed before Permittee may increase its pumping [to the requested phase]" be added to the Draft Operating Permit. 159

The GM argued that negotiation of a monitoring well agreement cannot be delayed until after production, particularly since monitoring wells are used to analyze local impacts, <sup>160</sup> such as those that have been contested in this case. The GM also argued that the District has the authority to include a special condition requiring a monitoring well agreement pursuant to District Rule 5.3.D(2), which provides that an operating permit may include "any special conditions

<sup>&</sup>lt;sup>157</sup> LCRA Ex. 8A at 2.

<sup>158</sup> LCRA's Closing at 45.

<sup>&</sup>lt;sup>159</sup> LCRA Ex. 8A at 3-4.

<sup>&</sup>lt;sup>160</sup> Tr. at 1594.

required by the considerations in Rule 5.2.D and any other special condition required or authorized by these Rules or applicable law."

# 3. ALJs' Analysis

The ALJs agreed that the District has the authority to require LCRA to enter into a Monitoring Well Agreement. The District may impose Special Conditions it determines are required by the considerations in Rule 5.2.D.<sup>161</sup> Among those considerations are whether the conditions and limitations "minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." The special conditions relating to the Monitoring Well Agreement tie into those considerations. The ALJs also noted that the GM incorporated some of LCRA's suggestions in the Revised Draft Operating Permit.

That said, the ALJs recommended adopting LCRA's proposed change to extend the deadline to enter into a Monitoring Well Agreement. The ALJs were convinced that a flexible deadline, rather than a 180-day deadline, would better allow LCRA and the GM to take any new pumping into account. Additionally, the ALJs agreed that the portion of Special Condition 1 under which violation of the Monitoring Well Agreement is a permit violation should be removed. Incorporating a contract that does not yet exist into a permit adds too great a level of confusion to the permitting process.

The Board decided that while a permittee may agree to a special condition to negotiate a future contract as part of a settlement agreement, the District may not impose such a condition. Further, because the Final Operating Permit does not include the proposed phasing provisions, there is no need to condition such phasing on following the Monitoring Well Agreement.

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<sup>&</sup>lt;sup>161</sup> District Rule 5.3.D(2).

# 4. Monitoring Effects on Surface Water Resources

As the ALJs previously found, the GAM modeling does not reliably address the potential cumulative effects of LCRA's proposed pumping on surface water resources, in combination with all other authorized groundwater production in the District. Texas Water Code § 36.113(d)(2) requires the District to consider whether "the proposed use of water unreasonably affects . . . surface water resources." However, the GM's test-and-see approach, without a definite plan for monitoring effects, is not adequate to prevent unreasonable impacts on surface water resources.

The GM supports incorporating surface water monitoring in the Monitoring Well Agreement and is open to including language in that agreement that will be helpful in assessing impacts. The GM is also not opposed to Environmental Stewardship's suggestion of including a work plan developed for the Colorado River related to surface water/groundwater interaction in the permit. However, the GM suggests that both the surface water monitors and the work plan be part of the Well Monitoring Agreement to be negotiated with LCRA at a later date. 164

The ALJs found that, in light of the fact that the GAMs show potential impacts to surface water resources caused by LCRA and District-wide pumping, the monitoring well agreement between LCRA and the District must include monitoring wells that could monitor effects on surface water resources. Thus, the ALJs recommended amending the definition of "Monitoring Well System" contained in Special Condition (4)(a) in the Revised Draft Operating Permit to require that a monitoring well system must monitor such effects.

The ALJs did not include Environmental Stewardship's recommended changes to the permits incorporating Dr. Young's work plan. While the ALJs agreed that adoption of a surface

<sup>&</sup>lt;sup>162</sup> GM's Reply at 39.

<sup>163</sup> GM's Reply at 39.

<sup>164</sup> GM's Reply at 39.

water plan (like Dr. Young's or some other work plan the District has approved) might be beneficial for in managing District-wide pumping impacts on surface water resources, the adoption of a work plan in a permit is not appropriate. Adoption of a surface water work plan falls squarely within the process of adoption of the District's water management plan. Instead, the Well Monitoring Agreement should incorporate any work plan added to the District's water management plan.

#### I. 36-Hour Pump Test

LCRA argued that certain changes should be made to Special Condition 14, which relates to the 36-hour pump test. A 36-hour pump test is used to collect data to calculate aquifer parameters, such as transmissivity and storativity. LCRA was concerned that, as it stood, the Special Condition lacked specific parameters for transmissivity that would be used to determine whether pumping limits should be imposed. LCRA also suggested shortening the advance notice required before performing the pump test. LCRA also requested a clarification that the authorized maximum rate of withdrawal is an aggregated amount for all wells and also requested a procedure that would allow it to appeal the GM's decision to limit pumping as a result of a pump test. In his reply brief, the GM noted that he agreed to all those changes and included those changes in the Revised Draft Operating Permits. Accordingly, the Final Operating Permit includes the agreed modifications.

#### J. Review of LCRA's Designs and Specifications

LCRA argued that Special Condition 15, which in the Draft Operating Permit provided that the GM has the authority to approve or reject LCRA's well design after the well is completed, should be removed.

Tex. Water Code §§ 36.1071(a)(4) (requiring coordination with surface water entities when developing a water management plan to include addressing conjunctive surface water management issues), .108(d)(4).

The GM concedes that a similar special condition is not in other permits. He argued that some kind of well-design review is necessary in this case, however, because LCRA did not include specific well-design information in its Applications. He adds that "[w]ell-design requirements are intended to ensure that the well is completed in such a way as to prevent degradation of the aquifer and to protect the quality of the state's resource." As shown by the Revised Draft Operating Permits, the GM has agreed to amend Special Condition 15 to require LCRA to provide design specifications before drilling, rather than after the well is completed. The revision also removes the GM's authority to reject that design.

With this change in the timing of the design specification review and the elimination of the GM's approval authority, the ALJs found Special Condition 15 to be within the District's authority and not arbitrary. The ALJs recommend it remain in the Revised Draft Operating Permits.

### K. Place and Type of Use

At LCRA's request, the Revised Draft Operating Permits reflect a change to the place of use. In its prefiled testimony, LCRA requested to amend its Applications to reduce the place of use from LCRA's entire water service area to the portion of LCRA's service area within Lee, Travis, and Bastrop Counties. <sup>167</sup> The GM initially did not accept the amendment because it was not part of the original application and not submitted on the District's forms. <sup>168</sup> However, no other parties contested this reduction in the place of use, and the GM ultimately accepted the change after LCRA witness Hoffman testified to the requested reduction at the hearing. This reduction is reflected in the GM's Revised Draft Operating and Transport Permits. <sup>169</sup>

<sup>166</sup> GM's Reply at 13.

<sup>&</sup>lt;sup>167</sup> LCRA Exs. 8A, 8B.

<sup>168</sup> GM Ex. 1 (Totten direct) at 30.

<sup>&</sup>lt;sup>169</sup> GM's Reply at 4.

LCRA also requested changes to the language relating to the type of use in both the Operating and Transportation Permits. The Applications requested authority to use the requested groundwater for all beneficial uses as defined by the District's rules and recognized under Chapter 36 of the Texas Water Code. The GM's initial draft permits granted LCRA's request by authorizing some, but not all, of the beneficial uses found in the District's rules and Chapter 36 (municipal, industrial, recreational, irrigation, and agricultural), because LCRA only listed that it had commitments for those uses. The LCRA re-urged that the GM change the language to include "all beneficial uses as defined by the District's rules and recognized under Chapter 36 of the Texas Water Code" to give LCRA the flexibility to serve customers for any lawful beneficial use in its service area The GM responded that to be consistent with previously authorized permits, it must list out the authorized uses, and LCRA should be required to amend its permits if Chapter 36 is amended to include new uses. However, as a compromise, the GM's Revised Draft Operating Permits were amended to authorize "[a]ll beneficial uses authorized by Texas Water Code \$ 36.001(9)(A)-(B)."

The ALJs agreed that LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use and the revision offered by the GM appears to allow for that flexibility.

The Board approved Final Operating Permits that allow all beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

<sup>&</sup>lt;sup>170</sup> LCRA Ex. 3(A-2).

<sup>&</sup>lt;sup>171</sup> GM Ex. 7

<sup>&</sup>lt;sup>172</sup> LCRA's Closing at 42.

# L. Mitigation

The Brown Landowners, the Hernandezes, and Recharge argued that LCRA should be required to create a mitigation account, such as the one contained in Recharge's permit. This mitigation account was part of a negotiated settlement of the contested case concerning Recharge's application.<sup>173</sup>

The parties who argued in favor of mitigation have not pointed to a provision of chapter 36 or the District's rules that allow the District to impose mitigation requirements in individual permits. Certainly, it seems that the District could adopt rules or require production fees that could be used for a mitigation fund. But the Protestants did not present any authority that would allow the District to require the establishment of a mitigation fund, nor have they offered any analysis for which permits should be subject to such a fund.

The ALJs recognized the difficulty this creates for the Protestants, particularly Recharge. Under the terms of Recharge's settlement agreement, it could theoretically pay to mitigate LCRA's impacts. But that difficulty does not give the District the authority, much less require it, to impose a mitigation fund as a special condition.<sup>174</sup>

#### V. ISSUES RELATING TO THE TRANSPORT PERMITS

Pursuant to District Rule 6.1, a transport permit is required to convey groundwater beyond the District's boundaries, which are coextensive with the boundaries of Bastrop and Lee counties. <sup>175</sup> LCRA's Applications requested transport permits to use the requested 25,000 acre-feet per year of groundwater anywhere within LCRA's water service area. LCRA subsequently

<sup>&</sup>lt;sup>173</sup> GM Ex. 8.

<sup>&</sup>lt;sup>174</sup> In the *City of Bastrop* contested case, the ALJ addressed the proposed mitigation fund in the analysis of whether the effects of pumping would be unreasonable. *City of Bastrop*, SOAH Docket No. 952-15-3851, PFD at 31. Here, because LCRA did not propose a mitigation fund, there was none to analyze. Moreover, nothing in the City of *Bastrop* PFD suggested that a mitigation fund was required.

<sup>&</sup>lt;sup>175</sup> Tex. Spec. Dist. Code § 8849.004.

amended its Applications to limit the place of use of the groundwater to its service area only within Bastrop, Lee, and Travis Counties. <sup>176</sup> Therefore, transport permits are only required for LCRA's requested authorization to use groundwater in Travis County, the only place of use that is not within the District's boundaries. <sup>177</sup> The GM's Draft Transport Permits would have authorized LCRA's requested place of use in Travis County; however, the Draft Transport Permits include a special provision which prohibits the transport of LCRA's authorized groundwater pursuant to a bed and banks permit or discharge of the groundwater into any surface water.

# A. Whether LCRA's Transport Permit Applications Meet the Requirements of Section 6 of the District's Rules and Texas Water Code § 36.122(f).

The GM concluded that LCRA's applications for transport permits meet the requirements of Section 6 of the District's Rules and Texas Water Code § 36.122(f), and the ALJs agreed. The Applications met each of the filing requirements under District Rule 6.2.

In reviewing a proposed transfer of groundwater out of the District, Texas Water Code § 36.122(f) and District Rule 6.3 require the District to consider: (1) the availability of water in the District and in the proposed receiving area during the period for which the water supply is requested; (2) the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District; and (3) the approved regional water plan and approved District management plan. The GM properly considered each of the factors, none of which were directly challenged by any party. The analysis of the proposed effect of pumping, as set out above applies to the second factor, and no party alleges that the GM did not consider the approved regional water plan or district management plan.

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<sup>&</sup>lt;sup>176</sup> LCRA Ex. 1 (Hofmann direct) at 21.

<sup>&</sup>lt;sup>177</sup> Tex. Spec. Dist. Code § 8849.004; GM Ex. 9.

<sup>&</sup>lt;sup>178</sup> GM's Closing at 51.

For the first factor relating to the availability of water in the district and the proposed receiving area during the period for which the water supply is requested, the District considered the 2016 Region K and Region G Water Plans. <sup>179</sup> The Region K and Region G Water Plans identify water supply demands in the counties LCRA is requesting to serve (Lee, Bastrop, and Travis Counties) and project that there is sufficient water available for LCRA's planned withdrawals from the Simsboro Formation in the Carrizo-Wilcox aquifer underlying the District. <sup>180</sup>

The Board concluded that the second factor relating to the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District was analyzed for the Operating Permit, and that analysis applies here. For the third factor related to the approved regional water plan and approved District management plan, the Board reviewed the evidence presented through the Region K and Region G Water Plans and the District's management plan. The Final Transport Permits meet all the requirements of Texas Water Code § 36.122(f) and District Rule 6.3

#### VI. CONCLUSION

The Board approves issuance of the Operating Permits with a five-year term at a maximum production of 8,000 acre-feet per year and Transport Permits with a three-year term (to be converted to a thirty-year term once construction of transportation facilities begins) at a maximum amount of 25,000 acre-feet per year.

In support of these recommendations, the Board provides the following Findings of Fact and Conclusions of Law.

<sup>179</sup> GM's Closing at 51.

<sup>180</sup> LCRA Ex. 13; GM's Closing at 51.

#### VII. FINDINGS OF FACT

#### **Background and Procedural History**

- 1. The Lower Colorado River Authority (LCRA) is a conservation and reclamation district established by the Texas Legislature in 1934 that serves as a regional water supplier within its 35-county service area.
- 2. In 2015, as part of a goal to diversify its water supply and "drought proof" it, LCRA acquired groundwater rights beneath the Griffith League Ranch, an approximately 4,847.5-acre property owned by the Capitol Area Council, Inc. of the Boy Scouts of America.
- 3. On February 1, 2018, LCRA filed applications (Applications) to drill eight water wells with associated operating permits and transport permits with the Lost Pines Groundwater Conservation District (District). The applications for operating permits sought authorization to withdraw a total of 25,000 acre-feet per year of groundwater from the Simsboro Formation based on the groundwater rights it acquired at the Griffith League Ranch. The water was to be used for all beneficial uses under Chapter 36 of the Texas Water Code.
- 4. On February 21, 2018, LCRA resubmitted the Applications on different forms.
- 5. On August 20, 2018, the District's General Manager (GM) notified LCRA by letter that its Applications were administratively complete and that the Applications would be set for a public hearing. The letter also provided LCRA with the GM's Draft Operating Permits and Draft Transport Permits (collectively, Draft Permits.)
- 6. Following notice, the District held a public hearing on the Applications on September 26, 2018. Several persons disagreed with the issuance of the Draft Permits, and LCRA challenged some of the Draft Operation and Transport Permit provisions. Following the public hearing, the Board voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a preliminary hearing on the Applications.
- 7. On December 18, 2018, SOAH Administrative Law Judges (ALJs) Michael O'Malley and Laura Valdez held a prehearing conference in Bastrop, Texas. At the prehearing conference, the ALJs admitted the following as parties: LCRA, the District, Aqua Water Supply Corporation (Aqua), Environmental Stewardship, City of Elgin (Elgin), and Recharge Water, LP (Recharge). A group of landowners represented by a single attorney was also admitted, and will be referred to as the Brown Landowners. Several self-represented litigants were also named parties.
- 8. Following a challenge to party status, the ALJs determined that many of the self-represented litigants, and some of the Brown Landowners, did not have a justiciable interest and struck them as parties. The remaining self-represented litigants were Peggy Jo and Marshall Hilburn, Walter Winslett, JC Jensen, Elvis and Roxanne Hernandez, Verna L. Dement, Catherine and Charles L. White, and Richard Martinez. Mr. Jensen and Mr. Martinez withdrew their protests, as did several of the Brown Landowners.

- 9. Aqua is a retail public utility with a service area in Bastrop, Caldwell, Fayette, Lee, Travis, and Williamson Counties that has a permit from the District authorizing the production of 23,627 acre-feet per year from 15 wells in the Simsboro Formation. Twelve of those wells are in two well fields near the shallow outcrop of the Simsboro. Aqua's three other wells are located on the south side of Highway 290, in the deeper downdip portion of the aquifer.
- 10. Elgin has a retail public utility that provides retail water utility service within its certificated service area. The city, which is located in the greater Austin area, expects continued and rapid growth. Elgin has four wells, permitted by the District, that are all partially or wholly completed within the Simsboro Formation. Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations. Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation.
- 11. Recharge, formerly known as End Op, L.P., has operating permits from the District authorizing the production of 46,000 acre-feet from 14 wells, to be phased in, which it acquired following settlement of the its contested case on its permit applications. Seven of the permitted wells are to be located in Bastrop County, and seven are to be located in Lee County.
- 12. The Hernandezes' well is in the Calvert Bluff Formation, which overlays the Simsboro. The Brown Landowners' wells are located throughout the District.
- 13. The hearing on the merits was held October 15-22, 2019, before ALJs Ross Henderson and Rebecca S. Smith. The first four days of the hearing were held in Bastrop, Texas, and the last two took place at SOAH's hearing facility in Austin, Texas. Mr. and Mrs. Hernandez were the only self-represented litigants who prefiled testimony and participated in the hearing on the merits. The record closed on January 31, 2020, with the filing of reply briefs.
- 14. In its original Applications, LCRA stated that the water would be used throughout its 35-county service area. In its testimony, and at hearing, LCRA amended its request to only seek to use the water in Bastrop, Lee, and Travis Counties.
- 15. As an attachment to his reply brief, the GM provided a January 31, 2020, Revised Draft Operating Permit (Revised Draft Operating Permit) that made several changes to the Draft Operating Permit. No party objected to these changes.

# **Uncontested Texas Water Code Factors Relevant to Operating Permits**

- 16. The Applications for Operating Permit included all of the information required by chapter 36 of the Texas Water Code and the District Rules.
- 17. LCRA intends to use the groundwater it produces to meet its existing and future water supply obligations.

- 18. Standard Provision No. 1 in the Revised Draft Operating Permits require that the water withdrawn be put to beneficial use at all times and prohibits the operation of a permitted well in a wasteful manner.
- 19. The District's Management Plan stated that the District will endeavor to manage groundwater to meet demands on a sustainable basis.
- 20. The Revised Draft Operating Permits' production limits, requirements for pump-testing and monitoring, and a provision that LCRA is subject to future production limits allow the District to manage groundwater to meet demands on a sustainable basis.
- 21. LCRA's proposed use of water is consistent with the District's approved management plan.
- 22. LCRA has adopted water conservation and drought contingency plans pursuant to its policy to meet or exceed state water conservation requirements.
- 23. In its Applications and with its plans, LCRA has agreed to avoid waste and achieve water conservation.
- 24. In its Applications, LCRA agreed that reasonable diligence will be used to protect groundwater quality and that it will follow well-plugging guidelines at the time of any well closure.
- 25. LCRA does not have a history of non-compliance with District Rules or Chapter 36.

# **Unreasonable Effects on Groundwater or Surface Water Resources or Existing Permit Holders**

- 26. The 2018 Central Carrizo-Wilcox Groundwater Availability Model (New GAM) provides a better tool to model the impact of LCRA's proposed pumping than does the 2004 Central Queen City-Sparta Groundwater Availability Model.
- 27. LCRA's expert Dr. Steven Young performed several model runs using the New GAM, factoring in well-design factors, such as pump settings, well constrictions, and location of well screens for Aqua's and Elgin's wells.
- 28. Under Dr. Young's modeling, LCRA's proposed pumping would not cause the waterlevel in Aqua's or Elgin's wells to drop below the pump elevation.
- 29. The Special Conditions proposed by the GM in the Revised Draft Operating Permit—in particular, the 36-hour pump test and the requirement that a groundwater monitoring well agreement be entered into—will help ensure that LCRA's proposed use will not unreasonably affect existing groundwater resources or existing permit holders.
- 30. Dr. Young's modeling showed that LCRA's proposed pumping should not unreasonably affect existing surface water resources.

- 31. The modeling also showed that LCRA's proposed pumping, when combined with other groundwater production, has the potential to affect existing surface water resources.
- 32. Because LCRA's proposed production, when combined with other groundwater production, has the potential to affect existing surface water resources, the Final Operating Permits require monitoring for effects on surface water resources.

# Whether Granting the Applications is Consistent with the District's Duty to Manage Total Groundwater Production on a Long-Term Basis to Achieve an Applicable Desired Future Condition

- 33. The District is a part of Groundwater Management Area 12, which on April 27, 2017, adopted a desired future condition (DFC) for the Simsboro Formation of a District-wide average drawdown between January 2000 and December 2069 of 240 feet.
- 34. The DFC is also divided into DFCs for the counties in the District. For Bastrop County, the DFC is a county-wide average drawdown between January 2000 and December 2069 of 174 feet; for Lee County, the DFC is a county-wide average drawdown between those dates of 350 feet.
- 35. Modeled Available Groundwater (MAG) is the amount of water that the Texas Water Development Board's executive administrator determines may be produced on an average annual basis to achieve a DFC.
- 36. MAG is a factor for the District to consider when managing the DFC.
- 37. The Special Conditions contained in the Final Operating Permit are consistent with the District's duty to manage total groundwater production on a long-term basis to achieve the applicable DFC.
- 38. The TWDB executive administrator's estimate of the current and projected amount of the groundwater produced under exemptions granted by District Rules and Texas Water Code §36.117 is a factor for the District to consider when reviewing an application and managing the DFC.
- 39. The amount of groundwater authorized under permits previously issued by the District is a factor for the District to consider when reviewing an application and managing the DFC.
- 40. A reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District is a factor for the District to consider when reviewing an application and managing the DFC.
- 41. Yearly precipitation and production patterns are factors for the District to consider when reviewing an application and managing the DFC.

Whether the Conditions and Limitations in the Revised Operating Permit Will Prevent Waste, Achieve Water Conservation, Minimize as far as Practicable the Drawdown of the Water Table or the Reduction of Artesian Pressure, or Lessen Interference Between Wells

- 42. LCRA's proposed wells will be located more than 100 feet away from the nearest property line and will be spaced at least 5,000 feet from the nearest Simsboro well not owned by LCRA.
- 43. LCRA's proposed wells will be located where the aquifer is deepest, in some of the most transmissive parts of the Simsboro in the District.
- 44. Because LCRA's proposed wells will be part of an aggregated system, LCRA will be able to adjust pumping among the wells to minimize the reduction of artesian pressure.
- 45. Under the Revised Draft Operating Permits, the GM can restrict the rate of withdrawal if the 36-hour pump tests reveal that impacts from pumping are worse than anticipated.
- 46. The Special Conditions regarding the 36-hour pump tests and monitoring wells in the Final Operating Permit will prevent waste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells.

#### **Other Issues**

- 47. The District has not adopted rules or policies requiring an applicant to reduce the initial amount of water requested or requiring permittees to provide financial mitigation for adverse impacts caused by production in the District.
- 48. The District has not adopted a rule or policy of requiring spacing between wells owned by the same owner.
- 49. The Special Condition in the Final Operating Permits, which requires LCRA to provide well design specifications before drilling, is appropriate and within the District's authority.
- 38. The Regional Water Plans and LCRA's existing contracts demonstrate there is a need for the water in the receiving area.
- 50. Pumping water without beneficially using it is a violation of the Final Operating Permit.
- 51. The parties admitted at this hearing are affected persons and have interests beyond those of the general public.
- 52. The Final Operating Permits provide that the authorized maximum rate of withdrawal is an aggregated amount for all LCRA wells included in the authorized well field and allow

- LCRA to appeal the GM's decision to limit the rate of withdrawal based on the results of a pump test.
- 53. LCRA did not submit well design specifications with its Applications.
- 54. The GM is authorized to require LCRA to provide design specifications.
- 55. A Special Condition of the Revised Draft Operating Permit requires LCRA to provide the GM with design specifications before drilling a new well.
- 56. The Final Operating Permits authorize "[a]ll beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B)."
- 57. LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use, and the Final Operating Permits provide for that flexibility.

#### **Monitoring Wells**

- 58. Special Condition 1 of the Final Operating Permits would require LCRA to enter into a Monitoring Well System Construction and Maintenance Agreement, approved by the District's Board, before LCRA may begin construction of a well.
- 59. A Special Condition of the Final Operating Permits sets out certain criteria for a monitoring well system. Wells in the system must be screened in the Simsboro Formation; must improve the spatial coverage of the monitoring well system; must be easily accessible for regular measurements; and must meet any other criteria agreed upon by the GM and LCRA.

#### **Transport Permit Requirements**

- 60. The Region K and Region G Water Plans identify water supply shortages in the counties LCRA is requesting to serve (Lee, Bastrop, and Travis Counties) and project that there is sufficient water available for LCRA's planned withdrawals.
- 61. LCRA's existing contracts demonstrate a need for the water in the receiving area.
- 62. In reviewing LCRA's Applications for Transport Permits, the GM considered the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence.
- 63. In reviewing LCRA's Applications for Transport Permits, the GM considered the effects on existing permit holders or other groundwater users within the District.
- 64. In reviewing LCRA's Applications for Transport Permits, the GM considered the approved regional water plan and approved district management plan.
- 65. Under the Final Transport Permits, transportation of groundwater by use of a bed-and-

banks permit would be impossible because water cannot be conveyed upriver from Bastrop County to Travis County, the only place of use outside the District.

#### VIII. CONCLUSIONS OF LAW

- 1. The District has jurisdiction to decide the issues raised by LCRA's Applications. Tex. Water Code ch. 36.
- 2. Notice was accomplished in accordance with chapter 36 of the Texas Water Code and District Rules.
- 3. LCRA's Applications are subject to the District Rules as amended on April 20, 2016.
- 4. LCRA's Applications for Operating Permits conform to the requirements prescribed by chapter 36 of the Texas Water Code and the District Rules. Tex. Water Code §36.113(d)(1); District Rule 5.2D(1).
- 5. Modeled Available Groundwater is the amount of water that may be produced on an average annual basis to achieve a desired future condition. Tex. Water Code § 36.001 (25).
- 6. Under District Rule 5.4.B, Operating Permits are effective for a period of five years from the date the permit is granted,
- 7. Under District Rule 8.2.B, a new non-exempt well with a maximum pumping capacity of greater than 1,000 gpm must be spaced at least 5,000 feet from the nearest well completed in the same aquifer unit and owned by a different well owner.
- 8. The District is not required to consider historic use in evaluating LCRA's Applications. Tex. Water Code § 36.116(b).
- 9. Neither the Texas Water Code nor the District Rules authorize the District to unilaterally impose a requirement that an applicant create a mitigation account to pay other well owners for the impacts from the applicant's drilling.
- 10. In reviewing LCRA's Applications for Transport Permits, the District considered the factors required by Texas Water Code § 36.122(f) and District Rule 6.3.
- 11. Under District Rule 6.5, the permit term for Transport Permits is three years unless the permittee has either already begun construction of a conveyance system or begins construction of a conveyance system before the expiration of the 3-year permit term, in which case the permit term is extended to 30 years.
- 12. After weighing the factors under Texas Water Code § 36.113(d) and the District Rules, the District approved the Final Operating Permit and the Final Transport Permit

SIGNED this 18th day of May , 2022.

APPLICATION OF LOWER COLORADO	§	BEFORE THE LOST PINES
RIVER AUTHORITY FOR OPERATING	§	
AND TRANSPORT PERMITS FOR	§	GROUNDWATER
EIGHT WELLS IN BASTROP COUNTY,	§	
TEXAS	§	CONSERVATION DISTRICT

Explanation of the Board of Director's Final Decision and differences with the State Office of Administrative Hearings' Proposal for Decision.

UNIVERSAL: Many of the edits were necessary to change the document from a proposed decision to a final decision. References to decisions by the Administrative Law Judges were identified as such and in the proper tense. The grammar was corrected throughout the document as well. Specific edits made by the Board of Directors are listed below.

#### SECTION I.

One paragraph was added stating the Board's final decision.

#### SECTION II.

A sentence reciting the Board's action to refer the matter to SOAH for a preliminary hearing and possible contested case hearing was added. This section was edited to focus on the final, revised draft permits and note that the revised draft permits made moot the question of delivering groundwater downstream from the well field.

#### SECTION IV.

In Subsection 4, "The Modeling Does Not Show Unreasonable Effects," added a new subsection stating the Board's conclusion that limiting the production permit to 8,000 acre-feet for the initial five-year permit term also provides real-world information to help decide any future permit amendment applications.

In Subsection C, "Well Drawdown and Interference," added a new subsection stating the Board's conclusion that the Final Operating Permit allows the GM to restrict the rate of withdrawal and will also require LCRA to file amendment applications to increase the authorized withdrawal amount.

In Subsection D, "Management of Total Groundwater Production on a Long-Term Basis to Achieve Desired Future Condition," under the ALJ's analysis, added a reference to amendments the Legislature adopted in 2015 to Water Code §36.1132 to change the MAG from a permit cap to a production limit.

In Subsection G. "Phasing," added a statement that the arguments related to phased-in production are moot under the Final Operating Permits, which do not include any phasing requirements or options. LCRA will have to file permit amendment applications if it desires to increase production at any point in the future. Should any amendment applications be filed, the parties here or any future protestants will have the opportunity to contest whether the groundwater will be put to any beneficial use and if the additional production will cause unreasonable local impacts. In addition, the entire discussion related to "binding contracts," the "phasing formula," and "concerns about local impact and input" to the decisions to advance to the next phase are deleted as irrelevant to the Final Operating Permits.

In Subsection H, "Monitoring Well Agreement," added a paragraph to the section discussing the ALJs' conclusions stating the Board's decision that while a permittee may agree to a special condition to negotiate a future contract as part of a settlement agreement, the District may not impose such a condition. Further, because the Final Operating Permit does not include the proposed phasing provisions, there is no need to condition such phasing on following the Monitoring Well Agreement.

In Subsection K, "Place and Type of Use." added the statement that the Board approved Final Operating Permits that allow all beneficial uses authorized by Water Code § 36.001(9)(A)-(B).

#### SECTION V.

Added a paragraph stating that the Board concluded that the second factor relating to the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District was analyzed for the Operating Permit, and that analysis applies here. For the third factor related to the approved regional water plan and approved District management plan, the Board reviewed the evidence presented through the Region K and Region G Water Plans and the District's management plan. The Final Transport Permits meet all the requirements of Water Code § 36.122(f) and District Rule 6.3

Because the applications were amended to change the proposed Place of Use to points upstream of the well field, the special provision prohibiting discharge of the groundwater into a surface water course was removed from the Final Transport Permit. The entire discussion of the Transport Permit special provision and the issue of whether discharge to a surface water course is waste as defined in the District Rules and Chapter 36 of the Water Code was deleted from the Final Decision. Consequently, there are no Findings of Fact or Conclusions of Law related to that issue in the Final Decision.

#### **SECTION VI**

This section was edited to reflect the conclusions reached by the Board in the Final Decision. Findings of Fact that are not relevant to the permits as issued were deleted.

#### **SECTION VII**

Added a conclusion that the District issued Operating Permits for a term of five years and a separate conclusion that Transport Permits are three years unless the permittee has either already begun construction of a conveyance system or begins construction of a conveyance system before the expiration of the 3-year permit term, in which case the permit term is extended to 30 years.

Conclusions related to the definition of "waste" were removed as irrelevant to the permits as issued.

# Exhibit 9

## **AFFIDAVIT OF SUZY HARRIS**

STATE OF TEXAS

**COUNTY OF TRAVIS** 

888

Before me, the undersigned authority, Suzy Harris, being first duly sworn, deposes and states:

My name is Suzy Harris. I am over eighteen years old, competent to make this affidavit, and personally acquainted with the facts herein stated.

I am employed by the Lower Colorado River Authority (LCRA) as a Paralegal in the Legal Services Department.

Attachment 1 is a true and accurate copy of a document that I created, with the assistance of others, to show the changes to the Proposal for Decision (PFD) made by the Lost Pines Groundwater Conservation District's May 18, 2022, Final Order. To create this document, I first converted the .pdf version of the ALJs' March 31, 2020 PFD to a Microsoft Word document using Nuance Power PDF Advanced and Adobe Pro DC. I then did a manual comparison of the converted MS Word version of the PFD to the March 31, 2020 .pdf version to do minor cleanup to ensure the MS Word document was an accurate reflection of the original. To identify changes from the PFD, I used the "compare" function in MS Word to create a redlined document comparing the PFD to a MS Word version of the Final Order provided by the District's Special Counsel on May 16, 2022. This document was then manually compared to the signed May 18, 2022, Final Order to ensure no further redline edits were needed to the main body of the document. Very few manual, minor corrections were needed after this comparison and, once those changes were made, Attachment 1 provides an accurate presentation of the changes to the PDF made by the May 18, 2022, Final Order. Thereafter, we made further manual redline edits to the document to create a redlined cover page and table of contents. For ease of review, nonredlined page numbers were also added to the document and the table of contents.

SUBSCRIBED AND SWORN TO BEFORE ME, a notary public in and for the State of Texas, this 7th day of July, 2022.

TABETHA JASKE lotary Public, State of Texas Comm. Expires 01-11-2026 Notary ID 128143668

# **SOAH DOCKET NO. 952-19-0705**

APPLICATION OF LOWER COLORADORIVER AUTHORITY FOR OPERATING	
AND TRANSPORT PERMITS FOR EIGHT WELLS IN BASTROP COUNTY,	§ § GROUNDWATER
TEXAS	§ CONSERVATION DISTRICT
APPLICATION OF LOWER COLORADO §	BEFORE THE STATE OFFICE
RIVER AUTHORITY FOR OPERATING §	
AND TRANSPORT PERMITS FOR §	<del>OF</del>
EIGHT WELLS IN BASTROP COUNTY, §	
TEXAS §	ADMINISTRATIVE HEARINGS

**PROPOSAL FOR FINAL DECISION** 

May 18, 2022

APPLICATION OF LOWER COLORADO RIVER AUTHORITY FOR OPERATING AND TRANSPORT PERMITS FOR	<ul><li>§ BEFORE THE LOST P</li><li>§ GROUNDWATER</li><li>§ CONSERVATION DIS</li></ul>	
EIGHT WELLS IN BASTROP COUNTY,	§	
TEXAS	§	
	§	
APPLICATION OF LOWER COLORADO §	BEFORE THE STATE OFFICE	
RIVER AUTHORITY FOR OPERATING 8		
AND TRANSPORT PERMITS FOR §	<del>OF</del>	
EIGHT WELLS IN BASTROP COUNTY, §		
TEXAS §	-ADMINISTRATIVE HEARINGS	
EIGHT WELLS IN BASTROP COUNTY, \$ TEXAS \$	-ADMINISTRATIVE HEARINGS	

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#### I. INTRODUCTION

The Lower Colorado River Authority (LCRA) submitted eight applications (Applications) to the Lost Pines Groundwater Conservation District (District) seeking authorization to withdraw 25,000 acre-feet of water per year from eight wells in the Simsboro Formation in Bastrop County, Texas, and to transport that water throughout its 35-county water service area. to Travis, Lee, and Bastrop Counties. The District's General Manager (GM) issued Draft Operating Permits and Draft Transport Permits; which contain provisions that LCRA and various other parties objected to certain provisions in the Draft Operating Permits and Draft Transport Permits. LCRA amended the applications object to change the proposed place of use to Bastrop, Travis, and Lee Counties. At the close of briefing, the GM proposed additional changes to the Draft Operating Permits (Revised Draft Operating Permits). The Administrative Law Judges (ALJs) recommended that the Board issue Revised Draft Operating Permits and the Draft Transport Permits be issued with the following changes: (1) changes to the requirements to enter a well monitoring agreement, including the deadline to enter into the agreement and removal of the requirement that violation of the agreement is a permit violation; (2) an amendment to the definition of "monitoring well system" to require monitoring the that effects on surface water be monitored; (3) the removal of the requirement that LCRA present end-user contracts or binding commitments; (4) an amendment to Revised Draft Operating Permit Special Condition 5 to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and (5) the removal from the Draft Transport Permits of the Special Provision prohibiting discharge into a surface watercourse.

The Board of Directors considered the Draft Operating Permits and Draft Transport Permits along with the ALJs' recommendations and voted to approve the permit applications as recommended with the following changes: (1) limit the production permits to 8,000 acre-feet per year for the five-year permit term; and (2) remove all references to "waste."

#### II. BACKGROUND AND PROCEDURAL HISTORY

#### A. The Applications

LCRA is a conservation and reclamation district established by the Texas Legislature in 1934 that serves as a regional water supplier within its 35-county service area. Although LCRA

<sup>&</sup>lt;sup>1</sup>LCRA Ex<sup>-</sup>1 (Hofmann direct) at 7<sup>-</sup>

primarily manages and supplies surface water, its Executive Vice President for Water, John Hofmann, testified that LCRA's responsibility is not limited to surface water.<sup>2</sup> As part of a goal to diversify its water supply in order to "drought -proof" supplyit, LCRA began a groundwater project in the aquifer regulated by the District.<sup>3</sup>

As part of that project, on February 1, 2018, LCRA filed the Applications for operating and transport permits with the District. The applications for operating permits sought authorization to withdraw a total of 25,000 acre-feet per year of groundwater from the Simsboro Formation based on groundwater rights LCRA acquired in 2015. These groundwater rights were beneath the Griffith League Ranch, an approximately 4,847-acre property owned by the Capitol Area Council, Inc. of the Boy Scouts of America. The proposed Purpose of Use for the permitswater was to be used for all beneficial uses authorized in chapter 36 of the Texas Water Code. On February 21, 2018, LCRA resubmitted the Applications on different forms.

On August 20, 2018, the District's GM, James Totten, notified LCRA by letter that its Applications were administratively complete and <u>scheduledthat the Applications would be set for</u> a public hearing. The letter also provided LCRA with the GM's Draft Operating Permits and Draft Transport Permits (collectively, Draft Permits.).

Following notice, the District held a public hearing on the Applications on September 26, 2018, and voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a hearing on the Applications. Seeveral Protestants disagreed with the issuance of the Draft Permits. and LCRA also challenged some of the Draft Transport Permits' provisions. Following the public hearing, the Board voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a preliminary hearing to determine party status and, if necessary, conduct an evidentiary hearing on the Applications.

On December 18, 2018, SOAH ALJs Michael O'Malley and Laura Valdez held a prehearing conference in Bastrop, Texas. At the prehearing conference, the ALJs admitted the following as parties: LCRA, the District, Aqua Water Supply Corporation (Aqua), Environmental Stewardship, City of Elgin (Elgin), and Recharge Water, LP (Recharge). The ALJs also admitted A group of landowners represented by a single attorney (was also admitted).

<sup>&</sup>lt;sup>2</sup> LCRA Ex. 1 (Hofmann direct) at 8.

<sup>&</sup>lt;sup>3</sup> LCRA Ex. 1 (Hofmann direct) at 9.

and will be referred to as the "Brown Landowners"). The ALJs admitted: Several self-represented litigants were also named as parties. Following a challenge to party status, many of the self-represented litigants; and some of the Brown Landowners; were determined not to have a justiciable interest and were struck as parties. The remaining self-represented litigants were Peggy Jo and Marshall Hilburn, Walter Winslett, JC Jensen, Elvis and Roxanne Hernandez, Verna L. Dement, Catherine and Charles L. White, and Richard Martinez. Mr. Jensen and Mr. Martinez withdrew their protests, as did several of the Brown Landowners.

The hearing on the merits was held October 15-22, 2019, before ALJs Ross Henderson and Rebecca S. Smith. The first four days of the hearing were held in Bastrop, Texas, and the last two took place at SOAH's hearing facility in Austin, Texas. Mr. and Mrs. Hernandez were the only self-represented litigants who prefiled testimony and participated in the hearing on the merits. The record closed on January 31, 2020, with the filing of reply briefs.

In its original Applications, LCRA stated that the water would be used throughout its 35-county water service area. In its testimony, and at hearing, LCRA amended its request to only seek to use the water in Bastrop, Lee, and Travis Counties.

As an attachment to his reply brief, the GM made several changes to the Draft Operating Permits. Some of these changes <u>wereare</u> substantive; some <u>wereare</u> not. No party objected to these changes or asked to file briefing in response to the changes. The ALJs <u>will-Proposal for Decision</u> address<u>ed these</u> changes and refer<u>red</u> to the GM's January 31, 2020 version of the permits as the Revised Draft Operating Permits.<sup>5</sup>

#### **B.** Permits in the District

The groundwater regulated by the District is in the Simsboro Formation, part of the larger Carrizo-Wilcox aquifer.<sup>6</sup> Overlaying the Simsboro is the Calvert Bluff, and the Hooper Formation underlies the Simsboro Formation.<sup>7</sup> The Simsboro Formation "is often used for large-scale public

<sup>&</sup>lt;sup>4</sup> SOAH Order No. 5.

<sup>&</sup>lt;sup>5</sup> The Revised Draft Permits reflect the second amendment the GM made to the Draft Operating Permits.

<sup>&</sup>lt;sup>6</sup> Recharge Ex. B (Thornhill direct) at 3.

<sup>&</sup>lt;sup>7</sup> Aqua Ex. 4 (Keester direct) at 7.

water supply production." However, there is no history of large-volume pumping within the District.9

The Simsboro Formation and the other aquifer units dip toward the Gulf of Mexico, and thus are deeper toward the east and southeast in Bastrop County. <sup>10</sup> The deeper portion of the Simsboro is referred to as the downdip. There are also shallower outcrop areas.

The parties challenging the Draft Permits either have wells or permits to produce water from the area. Aqua, a retail public utility with a service area in Bastrop, Caldwell, Fayette, Lee, Travis, and Williamson Counties, has a permit from the District authorizing the production of 23,627 acre-feet per year from 15 wells in the Simsboro Formation. Twelve of those wells are in two well fields near the shallow outcrop of the Simsboro. Aqua's three other wells are located on the south side of Highway 290, in the deeper downdip portion of the aquifer.

Elgin has a retail public utility that provides retail water utility service within its certificated service area.<sup>13</sup> The city, which is located in the greater Austin area, expects continued and rapid growth. <sup>14</sup> Elgin has four wells that are all partially or wholly completed within the Simsboro Formation. <sup>15</sup> Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations. <sup>16</sup> Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation. <sup>17</sup>

Recharge, formerly known as End Op, L.P., has permits authorizing the production of 46,000 acre-feet from 14 wells, <u>with production</u> to be phased in <u>over several years</u>. Recharge, which it acquired <u>its permits</u> following years of <u>contested hearings litigation</u> and <u>an agreed</u> settlement. Seven of the permitted wells are to be located in Bastrop County, and seven are to be located in

<sup>&</sup>lt;sup>8</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>9</sup> GM Ex. 11 (Hutchison direct) at 16.

<sup>&</sup>lt;sup>10</sup> Aqua Ex. 4 (Keester direct) at 7.

<sup>&</sup>lt;sup>11</sup> Aqua Ex. 1 (McMurry direct) at 2: Aqua Ex. 4 (Keester direct) at 8.

<sup>&</sup>lt;sup>12</sup> Aqua Ex. 4 (Keester direct) at 8.

<sup>&</sup>lt;sup>13</sup> Elgin Ex. 1 (Prinz direct) at 2.

<sup>&</sup>lt;sup>14</sup> Elgin Ex. 1 (Prinz direct) at 2.

<sup>&</sup>lt;sup>15</sup> Elgin Ex. 2 (Perry direct) at 3.

<sup>&</sup>lt;sup>16</sup> Elgin Ex. 6 (Keester direct) at 7.

<sup>&</sup>lt;sup>17</sup> Elgin Ex. 6 (Keester direct) at 8.

<sup>&</sup>lt;sup>18</sup> Recharge Ex. 1.

Lee County. 19 Some of Recharge's proposed wells in Bastrop County are the closest wells to LCRA's proposed pumping. Many of the parties currently opposed to LCRA's permit application also opposed Recharge's application. As part of its settlement of the underlying contested case about its application, Recharge agreed to create a mitigation fund to pay well owners for any damages caused by production from Recharge's wells. Recharge has not yet drilled any wells, but is required under the terms of its permit requires it to complete four wells in Lee County before drilling any wells in Bastrop County, a term that was added to its permit, but was not part of its settlement. Recharge did not appeal the inclusion of this term. Under the permit (and settlement terms), Recharge's mitigation obligations start once it begins pumping in Lee County. 20

The other large permits in the District belong to Forestar USA Real Estate Group, Inc. (Forestar), which is authorized to pump 28,500 acre-feet per year in Lee County, subject to phasing,<sup>21</sup> and the City of Bastrop (Bastrop), which is authorized to pump 2,000 acre-feet per year.<sup>22</sup> Bastrop's application was the subject of a contested case hearing. The Proposal for Decision (PFD) in that contested case was officially noticed in this case.<sup>23</sup> The Brown Landowners' and the Hernandezes' wells are exempt from District regulation. The Hernandezes' well is in the Calvert Bluff Formation, which overlays the Simsboro. The Brown Landowners' wells are scattered around the area.<sup>24</sup>

## C. The Revised Draft Operating Permits

The GM's Draft Operating Permits contain sixteen special conditions, several of which are at the heart of this dispute. These special conditions first require that LCRA enter into a monitoring well agreement within a certain time. The Draft Operating Permits provided a 90-day deadline to enter into this agreement, but in response to LCRA's arguments, the Revised Draft Operating Permits extended the deadline to 180 days.<sup>25</sup>

<sup>&</sup>lt;sup>19</sup> Recharge Ex. B (Thornhill direct) at 19.

<sup>&</sup>lt;sup>20</sup> Recharge Ex. B (Thornhill direct) at 56.

<sup>&</sup>lt;sup>21</sup> Recharge Ex. 6.

<sup>&</sup>lt;sup>22</sup> Recharge Ex. 8.

<sup>&</sup>lt;sup>23</sup> Application of City of Bastrop for an Operating Permit for Well No. 1 in Bastrop County, Texas, SOAH Docket No. 952-15-3851 (July 26, 2016).

<sup>&</sup>lt;sup>24</sup> Environmental Stewardship's standing was based on the wells of some of its members.

<sup>&</sup>lt;sup>25</sup> Revised Draft Operating Permit, Special Condition No. 1.

The special conditions in both the Draft Operating Permits and Revised Draft Operating Permits also divide the withdrawal of groundwater into four phases, three of which involve pumping. Withdrawals are not allowed during Phase I, which requires LCRA to add new monitoring wells and to comply with the monitoring well agreement required in another special condition.

Once the monitoring wells are in place, LCRA may move to Phase II. Phase II authorizes the withdrawals from two wells (Wells 7 and 8) of an aggregated annual amount of up to 8,000 acre-feet of water, with an aggregated maximum rate of withdrawal of 6,000 gallons per minute. LCRA would not be authorized to withdraw more water per year than the amount LCRA has a contract (under the Draft Operating Permits), or binding commitment (under the Revised Draft Permits) to provide atto an authorized place of use.

Three years after permit issuance, LCRA may then request to be moved to Phase III, under which the aggregated annual withdrawal amount could be increased to 15,000 acre-feet of water per year from four wells with an aggregated maximum rate of withdrawal of 10,000 gallons per minute. To move to Phase III, LCRA must show it has withdrawn an aggregate amount of acrefeet per year from a combination of one or more of the aggregated wells during two consecutive twelve- month periods. In the Draft Operating Permits, this amount was 8,000 acre-feet per year; in the Revised Draft Operating Permits, it is 4,000 acre-feet. Once again, LCRA must show binding contracts or commitments. The utility and clarity of the formula the GM proposed to use in advancing LCRA from one phase to another wasis disputed. Discussion of the phasing formula is set out in Section G, below.

Finally, LCRA may request to move to Phase IV, under which the aggregated annual withdrawal may be increased to an amount not to exceed 25,000 acre-feet per year from all eight wells, with an aggregated maximum rate of withdrawal of 18,000 gallons per minute. To reach this phase, under the Revised Draft Operating Permits, LCRA must show binding contracts or commitments. LCRA must also show it has withdrawn at least an aggregate amount of at least 11,250 acre-feet<sup>26</sup> per year from a combination of one or more of the aggregated wells during three consecutive twelve-month periods. As with Phase III, the GM's proposed formula is in dispute.

<sup>&</sup>lt;sup>26</sup> The 11,250 amount is contained in the Revised Draft Operating Permits. The Draft Operating Permits required a withdrawal of at least 15,000 acre-feet per year.

Additionally, the special conditions in the Revised Draft <u>Operating</u> Permits require LCRA to provide written contracts or commitments within five years of beginning to pump under Phase II; to submit drought contingency and water conservation plans for certain end <u>-</u>users; to be subject to future production limits the District imposes; to pay production fees; and to conduct 36-hour pump tests for each well.

Unlike the Draft Operating Permits, <u>T</u>the Revised Draft Operating Permits' special condition 14 requires a pump test for each new well.<sup>27</sup> This special condition requires that "[p]rior to the operation of any of the Aggregated Wells, [LCRA] shall, <u>for each new well</u>, complete a 36-hour pump test <u>for each new well</u> that complies with District Rule 5.1.B(5) and report the results of the test to the District."

Under both the Draft Operating Permits and the Revised Draft Operating Permits, wells must be sited within 100 feet of the location identified in the Application, and LCRA is granted a variance for the time limits for completion of permitted wells. The Revised or well operation. Both versions of the Draft Operating Permits required LCRA to provide the GM with the well-design specifications for his approval. Between the Draft Operating Permits and the Revised Draft Permits, the GM changed the timeline for LCRA to provide that information.

## **D.** The Draft Transport Permits

The Draft Transport Permits authorize LCRA to transport the water it pumps in the District outside the District. Following LCRA's Application amendment, Travis County is the only county where LCRA seeks to transport water. The change in the Place of Use made the A special condition in the Revised Draft Transport Permits prohibiting that prohibits transporting groundwater via the bed and banks of a river mootremains in dispute.

## III. APPLICABLE LAW

In Texas, a landowner owns the groundwater below the surface of his or her land as real property and is entitled to drill for and produce that groundwater, subject to a groundwater conservation district's well-spacing and production restrictions, so long as the drilling and production does not cause waste or malicious drainage of other property, or negligently cause

<sup>&</sup>lt;sup>27</sup> The Draft Operating Permits were ambiguous about whether a pump test was required before the operation of each well or before the operation of the first well. The change in the Revised Draft Operating Permits appears to be an uncontroversial clarification of the earlier special condition.

subsidence.<sup>28</sup> Groundwater conservation districts, which are described as the state's preferred method of groundwater management, have the following obligations:

to protect property rights, balance the conservation and development of groundwater to meet the needs of this state, and use the best available science in the conservation and development of groundwater through rules developed, adopted, and promulgated by a district in accordance with [chapter 36].<sup>29</sup>

Chapter 36 of the Texas Water Code (Code) outlines the process by which landowners obtain the right to produce their groundwater within groundwater conservation districts. Under chapter 36, a groundwater conservation district, such as the District, "shall require a permit for the drilling, equipping, operating, or completing of wells," except for groundwater produced pursuant to an exemptionexempt wells.<sup>31</sup>

Before granting or denying an operating permit, a groundwater conservation district must consider whether:

- (1) the application conforms to the requirements prescribed by [Code chapter 36] and is accompanied by the prescribed fees;
- (2) the proposed use of water unreasonably affects existing groundwater and surface water resources or existing permit holders;
- (3) the proposed use of water is dedicated to any beneficial use;
- (4) the proposed use of water is consistent with the district's approved management plan;
- (5) if the well will be located in the Hill Country Priority Groundwater Management Area, the proposed use of water from the well is wholly or partly to provide water to a pond, lake, or reservoir to enhance the appearance of the landscape;
- (6) the applicant has agreed to avoid waste and achieve water conservation; and

<sup>&</sup>lt;sup>28</sup> Tex. Water Code § 36.002(a), (b), (d).

<sup>&</sup>lt;sup>29</sup> Tex. Water Code § 36.0015(b).

<sup>&</sup>lt;sup>30</sup> Tex. Water Code § 36.113(a).

Groundwater produced Exempt wells are wells used solely for domestic use or for providing water for livestock or poultry and that are located on a tract of land larger than 10 acres and produced from a well that cannot produce more than 25,000 gallons of groundwater a day, is exempt from the drilling and production permit requirements. Tex. Water Code § 36.117(b)(1). WaterCertain wells related to supply water for oil and gas rigs or forand mining operations are also exempt from the drilling permit requirement. Tex. Water Code § 36.117(b)(2),(3).

(7) the applicant has agreed that reasonable diligence will be used to protect groundwater quality and that the applicant will follow well plugging guidelines at the time of well closure.<sup>32</sup>

The District has adopted similar rules for permit applications.<sup>33</sup> In deciding whether to grant an application, approve an application with terms other than those requested, or deny the application, the District's rules require it to consider, in addition to the seven factors set out above, the following:

- (8) whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition, considering:
  - (a) the Modeled Available Groundwater determined by the [Texas Water Development Board (TWDB)] executive administrator;
  - (b) the TWDB executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by District Rules and Texas Water Code § 36.117;
  - (c) the amount of groundwater authorized under permits previously issued by the District;
  - (d) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District; and
  - (e) yearly precipitation and production patterns.
- (9) whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells; [and]
- (10) whether the applicant has a history of non-compliance with District Rules and chapter 36 of the Texas Water Code, including any record of enforcement actions against the applicant for violation of District Rules or chapter 36.<sup>34</sup>

<sup>&</sup>lt;sup>32</sup> Tex. Water Code § 36.113(d). Identical provisions are found in Rule 5.2.D of the District's rules.

<sup>&</sup>lt;sup>33</sup> The District's Rules were admitted into evidence as GM Ex. 9, and are also available at <a href="https://www.lostpineswater.org/DocumentCenter/View/127/LPGCD-Rules---Adopted-10-16-19">https://www.lostpineswater.org/DocumentCenter/View/127/LPGCD-Rules---Adopted-10-16-19</a> (last visited March 23, 2020).

<sup>&</sup>lt;sup>34</sup> District Rule 5.2.D.

Groundwater conservation districts may adopt rules regulating the spacing of wells and the production of groundwater.<sup>35</sup> When promulgating rules that limit groundwater production, a groundwater conservation district "may preserve historic or existing use before the effective date of the rules," subject to the district's management plan.<sup>36</sup>

Under chapter 36, groundwater conservation districts are not required to adopt rules that provide for correlative rights—in other words, allocating to each landowner a proportionate share of available groundwater for production from the aquifer based on the number of acres the landowner owns.<sup>37</sup>

#### IV. ISSUES REGARDING OPERATING PERMITS

Of the Protestants, Elgin, Environmental Stewardship, and Brown Landowners argued that the Applications should be denied. Recharge, Aqua, and Environmental Stewardship argued that the operating permits should be limited to 8,000 acre-feet per year, which is also the limit in the first phase of pumping (Phase II) under the Draft Permits. Elgin suggests the limit, if the permits are issued, should be 7,000 acre-feet per year; for Brown Landowners, that total is 6,000 acre-feet. The Hernandezes argued that the permit limit should be 10,000 acre-feet per year. Recharge, Elgin, and Hernandezesthe Mr. Hernandez want the limits to be expressly tied to other factors.

In making their arguments, the parties focus on the following factors set out in <u>Texas</u> Water Code chapter 36 and the District's rules:

- Whether the proposed use of water unreasonably affects existing groundwater water resources or existing permit holders;
- Whether the proposed use of water unreasonably affects existing surface water resources or existing permit holders;
- Whether the conditions and limitations in the Operating Permit minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells; and
- Whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition.

<sup>&</sup>lt;sup>35</sup> Tex. Water Code § 36.116(a).

<sup>&</sup>lt;sup>36</sup> Tex. Water Code § 36.116(b).

<sup>&</sup>lt;sup>37</sup> Tex. Water Code § 36.002(d)(3).

The parties generally <u>diddo</u> not address the remaining factors, which <u>are will be</u> set out in the findings of fact and conclusions of law, but not discussed further in this PFD.

## A. Unreasonable Effects on Existing Groundwater Resources or Permit Holders

In deciding whether to issue an operating permit, the District must consider whether "the proposed use of water unreasonably affects existing groundwater . . . resources or existing permit holders."<sup>38</sup>

Many of the parties argued that the GM improperly determined that LCRA's proposed pumping would not cause an unreasonable effect on groundwater resources or existing permits. LCRA and the GM disagreed. In arguing about unreasonable effects, the parties focus on four aspects of the examination. First, Elgin and Aqua disagreed with LCRA and the GM about whose use—LCRA's or all permit holders'—should be considered in making this determination. Second, the parties disagreed about what "unreasonably affects" means. Third, they disagreed about which model should be used in determining whether the effects of pumping are unreasonable. Finally, the parties disagreed about whether LCRA sufficiently modeled local effects.

After reviewing the four issues, the ALJs concluded: (1)conclude that the District should look at LCRA's use, not the full permitted use; (2) that the definition of "unreasonably affects" provided by LCRA's expert is too narrow; (3) that the new Groundwater Availability Model (GAM) approved by the Texas Water Development Board—and not the previous model that it superseded—should be used in modeling effects; and (4) that, finally LCRA's modeling sufficiently showed that LCRA's pumping should not cause unreasonable effects on groundwater.

## 1. Whose Use Should Be Considered

Before determining whether "a proposed use" would cause unreasonable impacts, the ALJs must first decided whose use—LCRA's proposed use or all permitted use—should be considered.

## a. Parties' Arguments

LCRA and the GM contended that in determining the effect of the use, the District must examine the use proposed in the Applications, not the use proposed in the Applications combined with all other permitted use in the District. Aqua and Elgin strongly disagree. Elgin pointeds to

<sup>&</sup>lt;sup>38</sup> Tex. Water Code § 36.113(d)(2), District Rule 5.2.D(2).

another factor, which requires looking at District-wide pumping, arguing to argue that this factor envisions looking at District-wide pumping, as well.<sup>39</sup>

## b. ALJs' Analysis

The ALJs will-decided this issue by looking at both precedent and the language of the statute and rule. In an earlier contested case hearing for Bastrop's application with the District for an operating permit, the ALJ concluded that only the applicant's use should be examined when determining whether the proposed use would lead to unreasonable effects. That ALJ concluded, "District Rule 5.2.D(2) only requires the Board to consider whether the [applicant's] proposed use of water unreasonably affects existing groundwater, not cumulative pumping under the [applicant's] permit and other existing users at a 100% pumping capacity." He noted that "Rule 5.2.D. and Texas Water Code § 36.113(d)(2), on which it is based, focus on the impact of the specific application, not cumulative pumping under the requested permit and other existing users."

The ALJs agreed with this conclusion. The language of the statute and the rule requires an examination of "the proposed use of water," which suggests a concern with the use represented by the application. The language of "proposed use" is the same language used in other factors that only refer to an applicant's use, such as whether "the proposed use of water is dedicated to any beneficial use" and, for proposed wells in the Hill Country Priority Groundwater Management Area, whether "the proposed use of water from the well is wholly or partly to provide water to a pond, lake or reservoir to enhance the appearance of the landscape."

When the District intended to look at use beyond that proposed in an application, it made that clear. For example, the District must consider "the amount of groundwater authorized *under permits previously issued* by the District," when analyzing whether the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable desired future condition (DFC).<sup>41</sup>

Accordingly, the ALJs concluded that the analysis of whether the proposed use unreasonably affects groundwater or existing permits must focus on LCRA's proposed pumping, not District-wide permitted pumping.

<sup>&</sup>lt;sup>39</sup> See Closing Arguments of City of Elgin (Elgin's Closing) at 20.

<sup>&</sup>lt;sup>40</sup> Tex. Water Code § 36.113(d)(3), (5).

<sup>&</sup>lt;sup>41</sup> District Rule 5.2.D(8)(c) (emphasis added).

## 2. The Definition of "Unreasonably Affect"

# a. Parties' Evidence and Arguments

Only LCRA provided a definition of the term "unreasonably affect," which is not defined in either the <u>Water</u> Code or the District Rules. LCRA's hydrogeology expert, Dr. Young, provided a definition in his testimony. According to Dr. Young, only the following, when resulting from drawdown solely from the pumping well, would constitute unreasonable impacts:

- Drawdown that produces land subsidence that (a) threatens the structural integrity of existing pipelines, building, or other infrastructure; (b) causes land from being used for its intended use; or (c) creates a drainage problem;
- Intrusion of surface water or groundwater from another aquifer into the pumped aquifer that degrades groundwater quality in the pumped aquifer so it would not be suitable for its intended use or its potential use;
- Sufficient reduction (or depletion) of the saturated thickness of an aquifer that prevents the intended use of the aquifer;
- Drawdowns in an aquifer that causes the groundwater conservation district to exceed a DFC for the aquifer; or
- Drawdown from a permitted well that does not meet the District's well spacing or property boundary set-back requirements. 42

Elgin's and Aqua's expert witness, Michael Keester, declined to offer an opinion on whether certain effects would be unreasonable. The other parties do not define the term in their arguments.

## b. ALJs' Analysis

Although Dr. Young offered the only definition of "unreasonably affects," the ALJs will not simply accept Dr. Young's definition. Dr. Young is a hydrogeologist, <sup>43</sup> not an expert on statutory construction. The ALJs find found Dr. Young's definition too narrow. While the ALJs agreed that all five of Dr. Young's instances of unreasonable impacts would, indeed, be unreasonable, they concluded that impacts short of preventing the intended use of the aquifer or causing a DFC to be exceeded by one's own pumping could still be unreasonable. An

<sup>&</sup>lt;sup>42</sup> LCRA Ex. 28 (Young direct) at 36.

<sup>43-</sup>LCRA Ex. 28 (Young direct) at 8.

unreasonableness determination is necessarily fact-specific. With that, the ALJs turned to the evidence relating to effects of LCRA's proposed pumping on the parties' wells, which requires first looking at the modeling, or the GAM.

## 3. Which Groundwater Availability Model Should Be Used

## a. Parties' Evidence and Arguments

What effects are predicted from LCRA's pumping depends on which model is used. Much of the testimony at hearing involved issues relating to the GAM, which is "a computer-based, three-dimensional numerical groundwater flow model that is designed to simulate the dynamics of the groundwater flow for a specific area in Texas." GAMs for all major and most minor aquifers were developed by the Texas Water Development Board (TWDB) as part of state water planning.

In 2004, the Central Queen City-Sparta GAM (hereinafter "Old GAM") was developed and was then used by the District. In 2018, the TWDB updated the model, which is now called the Central Carrizo-Wilcox GAM (hereinafter "New GAM"). 45 For purposes of this Proposal for Decision, the 2004 GAM will be called the "Old GAM," and the 2018 GAM will be called the "New GAM."

The GM's expert witness, Dr. William Hutchison, described both GAMs as using a three-dimensional grid of cells, with rows, columns, and layers to represent the structure of an aquifer. The rows and columns represent the area of the aquifers, such as would be seen on a map, and the layers represent the individual aquifers and intervening low-permeability units.

#### Dr. Hutchison described how the GAM works:

Boundaries of the aquifer and the thicknesses and depths of the layers are represented in the grid based on the best information available to the modelers. Properties of the aquifer—i.e., numerical values such as horizontal and vertical hydraulic conductivity—that control how water moves and how water levels change in response to stresses to the aquifer—e.g., pumping from wells—are applied to each model cell. Processes that add and subtract water to and from the model, including recharge to the various aquifers, movement in and out of the model from areas outside of the model boundaries, discharge to streams and springs, evaporation and transpiration (i.e., uptake of water from plants), and pumping from wells is also included in a separate set of text files with one text file representing each process, e.g., a wel file (or "welfile") for the well pumping, a .rch file for the recharge, etc. In model terminology, the processes that add and subtract water from the model domain are called "stresses." The GAMS are

<sup>&</sup>lt;sup>44</sup> GM Ex. 11 (Hutchison direct) at 10.

<sup>45</sup> GM Ex. 11 (Hutchison direct) at 10.

"transient" models, in that they simulate changes throughout time, e.g., through an historical period and throughout the multi-decadal planning period. Time in the model is simulated by a set of stress periods. In the case of the Old GAM and New GAM, each stress period represents a single year.

The actual functions of the aquifer—i.e., the movement of water through the aquifer, changes in water stored within the aquifer layers, and changes in water levels throughout time — are simulated by a set of equations that basically calculate the hydraulic head, i.e. water level, in each model cell in each stress period. Calculating hydraulic head is specifically what the GAMs do, and the changes in hydraulic head from one cell to the next, and from one stress period to the next, can then be used to determine fluxes of water throughout the model and changes in hydraulic head, i.e., drawdown, throughout time.<sup>46</sup>

Several changes were made between the Old GAM and the New GAM. Among those changes is the grid cell. In the Old GAM, the grid cells are consistently spaced at one square mile. In contrast, the New GAM has a variable grid that that reduces the cell size in the area of selected surface water features. The largest cell size in the New GAM is one square mile (the same as the Old GAM), whereas the smallest size is 40 acres.<sup>47</sup> Although these changes were made to the grid cell sizes, the grid cell size for the area around LCRA's proposed production area remains one square mile.

GM witness Dr. Hutchison testified that the calibration of the New GAM is better than the Old GAM in Bastrop County, and that impacts from production in Bastrop County may occur in Lee County. As LCRA's expert witnesses Van Kelly and Dr. Steven Young, along with Recharge expert witness Michael Thornhill, also agreed that the New GAM was an improvement over the Old GAM. These witnesses all agreed that the Old GAM did not accurately predict drawdown within the District. When LCRA filed its application, the Old GAM was in place, and it was the model the GM used in analyzing the Application. Since that time, both the GM's and LCRA's experts have analyzed the application using the New GAM.

<sup>&</sup>lt;sup>46</sup> GM Ex. 11 (Hutchison direct) at 11.

<sup>&</sup>lt;sup>47</sup> GM Ex. 11 (Hutchison direct) at 13.

<sup>&</sup>lt;sup>48</sup> GM Ex. 11 (Hutchison direct) at 11. *See also* Tr. at 1489 ("given all those factors, [the New GAM] was a better model.").

<sup>&</sup>lt;sup>49</sup> Recharge Ex. B (Thornhill direct) at 18.

In contrast, Aqua's and Elgin's joint expert, Michael Keester, relied on the Old GAM in his report and testimony.<sup>50</sup> Mr. Keester testified that while the New GAM was better calibrated for high-volume pumping near the Bryan-College Station area, he did not believe it was better calibrated for high-volume pumping near LCRA's proposed pumping.<sup>51</sup> He also testified that the New GAM has the potential to underestimate drawdown in the updip areas; and stated that this limitation was specifically noted in the New GAM report.<sup>52</sup> On cross-examination, it was brought out that, when testifying on behalf of End-Op (now Recharge), Mr. Keester had testified about problems with the Old GAM, specifically, that the Old GAM overstateds drawdown in the outcrop.<sup>53</sup>

## b. ALJs' Analysis

Based on the overwhelming consensus of the evidence, the ALJs <u>foundfind</u> that the New GAM, as opposed to the Old GAM, is the better model to use to predict the effect of LCRA's pumping. The question then becomes whether LCRA's modeling, using the New GAM, was sufficient to show that its use would not cause unreasonable effects on groundwater or existing wells.

## 4. The Modeling Does Not Show Unreasonable Effects

## a. Parties' Evidence and Arguments

The parties opposed to the Applications argued that LCRA has failed to present sufficient evidence on the effects its pumping would have on existing groundwater resources and permit holders. LCRA and the GM disagree.

The parties and the witnesses agreed that the GAM is a regional planning tool that has limited use when it comes to looking at local effects.<sup>54</sup> Nevertheless, LCRA argueds that the New GAM should still be used to evaluate the effect production from the proposed wells will have on groundwater levels and other permit holderseffects. Its expert Dr. Young testified, "despite these

<sup>&</sup>lt;sup>50</sup> Mr. Keester testified that he redid his analysis using the new GAM, but did not provide the results of that redone analysis. Aqua Ex. 4 (Keester direct) at 12.

<sup>&</sup>lt;sup>51</sup> Tr. at 747-48.

<sup>&</sup>lt;sup>52</sup> Tr. at 747-48.

<sup>&</sup>lt;sup>53</sup> Tr. at 753.

<sup>&</sup>lt;sup>54</sup> LCRA Ex. 28 (Young direct) at 25.

limitations, the GAM is an appropriate tool to evaluate unreasonable impacts and represents the best available tool for such evaluation."<sup>55</sup>

The GM also argue<u>ds</u> that modeling performed under the New GAM is sufficient to allow the District to issue a permit; when that modeling is combined with permit terms that provide for monitoring and phasing.

When analyzing impacts using the New GAM, GM expert Dr. Hutchison predicted drawdowns in the Simsboro Formation from LCRA's wells of approximately 8 feet in 2022<sub>2</sub>; 14 feet in 2025<sub>2</sub>; and 30 feet in 2070.<sup>56</sup> For the Calvert Bluff, he predicted drawdowns of 2 feet in 2022<sub>2</sub>; 4 feet in 2025<sub>2</sub>; and 15 feet in 2070. In doing this analysis, he analyzed approximately 1,800 wells.<sup>57</sup> His analysis does not, however, specifically address any of the wells owned by any of the parties here.

Aqua's and Elgin's expert Mr. Keester testified that he used a multi-step analysis to determine the effect of the proposed pumping on Aqua's and Elgin's wells. His four steps were as follows. First, he modeled using the Old GAM. Second, he "used an analytic model to improve the estimate of the water level at the grid scale to the well scale." Third, he "applied another analytic model to simulate the effect [Aqua's or Elgin's] pumping would have on itself, that is, interference drawdown." Fourth, to "estimate the water level declines during peak production, [he] used a pumping rate that was 12 percent above the annual average pumping rate in the analytic model of interference drawdown." <sup>58</sup>

Mr. Keester performed his analysis for peak summer demands with four alternatives: the Baseline (which consisted of the Modeled Available Groundwater calculated by the TWDB); the Baseline plus LCRA pumping; the Baseline plus Recharge's pumping; and the Baseline plus LCRA's and Recharge's pumping. <sup>59</sup> As discussed above regarding whose use should be considered, the ALJs do not believe using Recharge's possible production amounts should not be included pumping is appropriate in this analysis of the effects of LCRA's permits.

<sup>&</sup>lt;sup>55</sup> LCRA Ex. 28 (Young direct) at 25-26.

<sup>&</sup>lt;sup>56</sup> GM Ex. 13 at 20.

<sup>&</sup>lt;sup>57</sup> Tr. at 1278; GM Ex. 13 at 18.

<sup>&</sup>lt;sup>58</sup> Aqua Ex. 4 (Keester direct) at 11.

<sup>&</sup>lt;sup>59</sup> Aqua Ex. 8.

Mr. Keester testified that he used the Old GAM and agreed that, using the New GAM, the drawdowns would be smaller than those he modeled. He added that he believed the level of uncertainty with the New GAM would be too high.<sup>60</sup>

On rebuttal, LCRA's expert Dr. Young testified about several problems he found with Mr. Keester's approach. Among these problems was that Mr. Keester (1) reported results as reflecting LCRA's impacts when those results included all of Recharge's pumping; (2) used the Old GAM instead of the New GAM; and (3) inadequately described the models he used as part of his four-step process. Other problems Dr. Young noted were that, although Mr. Keester increased the levels for peak summer demands, he did not reduce the pumping amount he modeled. Dr. Young also criticized Mr. Keester's correction for local interference among Aqua's own wells because he was "unaware of any proven best-method for making such a correction."

In Dr. Young's rebuttal testimony, he testified that he performed several model runs with the New GAM.<sup>63</sup> He also testified that he updated his runs to improve the accuracy of the water level in Aqua's and Elgin's Simsboro wells.<sup>64</sup> He testified that his analysis factored in well-design factors, such as pump settings, well constrictions, and the location of the well screens for Aqua's and Elgin's wells.<sup>65</sup>

Dr. Young provided graphs that show simulated water levels following his analysis for a baseline, a baseline with LCRA, a baseline with Aqua pumping its permitted amounts and with Elgin pumping its permitting amounts, a baseline with Aqua (or Elgin) plus LCRA, and finally for LCRA's pumping under the Old GAM.<sup>66</sup>

Dr. Young testified that, under his modeling using the baseline plus LCRA, the water level for all of Aqua's wells would remain above the pump setting.<sup>67</sup> For one well, the combination of the baseline pumping plus LCRA's and Aqua's full pumping would result in the water level

<sup>&</sup>lt;sup>60</sup> Aqua Ex. 4 (Keester direct) at 26.

<sup>&</sup>lt;sup>61</sup> LCRA Ex. 55 (Young rebuttal) at 13.

<sup>&</sup>lt;sup>62</sup> LCRA Ex. 55 (Young rebuttal) at 17.

<sup>&</sup>lt;sup>63</sup> LCRA Ex. 55 (Young rebuttal) at 18.

<sup>&</sup>lt;sup>64</sup> LCRA Ex. 55 (Young rebuttal) at 15.

<sup>&</sup>lt;sup>65</sup> LCRA Ex. 55 (Young rebuttal) at 20.

<sup>66</sup> LCRA Ex. 58 (Aqua), LCRA Ex. 59 (Elgin).

<sup>&</sup>lt;sup>67</sup> LCRA Ex. 55 (Young rebuttal) at 21.

dropping below the pump setting in approximately 2050, but remaining well above the constriction point.<sup>68</sup>

Dr. Young also predicted, as a result of his simulations, that LCRA's pumping along with the baseline pumping would not cause the water levels to drop below the elevation of the pump in any of Elgin's wells.<sup>69</sup> For Elgin's two wells in the outcrop, Dr. Young predicted that LCRA's pumping would cause less than one foot of drawdown.<sup>70</sup> For the two wells in the downdip, he predicted that, in 2070, LCRA's pumping would contribute 29% of the total drawdown for one well and 27% for the other.<sup>71</sup>

## b. ALJs' Analysis

The ALJs agreed with Dr. Young's criticism of Mr. Keester's approach. The Old GAM ishas been shown to be less accurate, and an analysis based on that model will not suffice. HoweverYet, it is not enough that LCRA merely criticize the other experts, however. As the party seeking a permit, it does have thea burden of proof. The parties opposed to the Applications argued that LCRA has failed to present sufficient evidence on howthe effects its pumping would affecthave on existing groundwater resources and permit holders. The ALJs agreed that LCRA's direct case wasis light on detail about other parties' wells; however, LCRA presented a more targeted analysis in its rebuttal case.

The ALJs concluded that the analysis conducted by Dr. Young is sufficient to allow the District to determine whether LCRA's proposed use would unreasonably affect existing groundwater resources or permit holders. Given the modeling, the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders. The fact that real-world effects can differ from predicted modeling is addressed by the monitoring and phasing aspects of the Revised Draft Operating Permits. which will be addressed below.

## c. Board Conclusion.

Limiting the production permit to 8,000 acre-feet for the initial five-year permit term also provides real-world information to help decide any future permit amendment applications.

<sup>&</sup>lt;sup>68</sup> LCRA Ex. 55 (Young rebuttal) at 22.

<sup>&</sup>lt;sup>69</sup> LCRA Ex. 55 (Young rebuttal) at 24.

<sup>&</sup>lt;sup>70</sup> LCRA Ex. 55 (Young rebuttal) at 25.

<sup>&</sup>lt;sup>71</sup> LCRA Ex. 55 (Young rebuttal) at 25.

# **B.** Unreasonable Effects on Existing Surface Water Resources

As part of its review of LCRA's permit requests, the District must consider whether the proposed Purposeuse of Usewater unreasonably affects surface water resources. Three parties, LCRA, the GM, and Environmental Stewardship, provided evidence and testimony relating to the issue. All three found that LCRA's requested pumping may have some impact on surface water resources. Environmental Stewardship's and the GM's analysis both show potential loss of surface water to the groundwater formations in Bastrop County by around 2050. Environmental Stewardship argueds that the impacts to surface water resources will be unreasonable after the first 8,000 acre-feet of pumping. However, LCRA countereds that "unreasonable impacts" are not defined; and that under LCRA expert's definition, the impacts would not be considered unreasonable. The GM maintains that the impacts cannot accurately be determined until high-volume pumping in the District has begun—after the first phase of pumping (Phase II) is reached—and that is the purpose of including phases of increased pumping amounts in the Revised Draft Operating Permithaving phases.

The ALJs <u>foundfind</u> that LCRA's proposed pumping, standing alone, will not cause unreasonable impacts to surface water resources, but that certain changes to the Revised Draft Operating Permits are required for the District to monitor potential impacts to surface water resources.

#### 1. Environmental Stewardship's Arguments

Environmental Stewardship positeds that the best available science for evaluating impacts to surface water resources is the GAM.<sup>73</sup> Environmental Stewardship elaborates that while impacts cannot be quantified with specificity due to limitations of the GAM, all three parties that submitted information regarding this factor found that modeling LCRA's proposed withdrawals using the GAM showed impacts to the surface water system.<sup>74</sup> Environmental Stewardship estimated that LCRA's pumping would result in a loss of 0.5% of average annual flows to the Colorado River and that during periods of low flows (Nov. 1963 and Mar. 1964), the amount lost would be around 8%.<sup>75</sup> Environmental Stewardship and the GM both used the GAM to analyze the cumulative impacts of

<sup>&</sup>lt;sup>72</sup> Tex. Water Code § 36.113(d)(2); District Rule 5.2.D(2).

<sup>&</sup>lt;sup>73</sup> Environmental Stewardship's Closing Arguments (Environmental Stewardship's Closing) at 5.

<sup>&</sup>lt;sup>74</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>75</sup> Environmental Stewardship Ex. 100 (Rice direct) at 10.

LCRA's permits combined with all other users in Bastrop County (the Base Case), and both show that District-wide proposed pumping of groundwater may result in loss of surface water to the groundwater formations in Bastrop County by around 2050.<sup>76</sup>

Environmental Stewardship argueds that LCRA's analysis improperly excludes the cumulative impacts and looks only at LCRA's impacts to surface water. <sup>77</sup> Environmental Stewardship argueds that ignoring cumulative impacts ignores the reality of what the total impacts to the surface water resource will be, and that considering the cumulative impacts is the only way for the District to consider the application consistent the context of the consistency with the District Management Plan as required by District Rule 5.2.D.(4). <sup>78</sup> Further, Environmental Stewardship disagreeds with relyingany reliance on the *City of Bastrop* PFD, which considered only Bastrop's impacts and not cumulative impacts, because that permit was for a much smaller quantity of water (2,000 acre-feet). <sup>79</sup> Environmental Stewardship also tooktakes issue with LCRA's decision not to use the "shallow flow zone" feature or the latest pumping file when running models using the New GAM. <sup>80</sup>

Environmental Stewardship's expert Joseph Trungale used the GAM projections of its other expert, George Rice, <sup>81</sup> which showed the loss of surface water to the groundwater formations in Bastrop County. <sup>82</sup> He used the surface water availability model (WAM) to examine what the impacts of the estimated losses of surface water onwould be to the reliability of senior water rights and to instream flow conditions in the Colorado River. <sup>83</sup> Based on the WAM modeling, he concluded that LCRA's pumping and the resultant reduction in surface water flows would unreasonably affect existing surface water rights holders and the environment. <sup>84</sup>

Environmental Stewardship urgeds denial of the permits, arguing that the GM's Draft Operating Permits ignored the best available science (the GM's GAM analysis), which shows that

<sup>&</sup>lt;sup>76</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>77</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>78</sup> Environmental Stewardship's Reply to Closing Arguments (Environmental Stewardship's Reply) at 3.

<sup>&</sup>lt;sup>79</sup> Environmental Stewardship's Reply at 2-3.

<sup>&</sup>lt;sup>80</sup> Environmental Stewardship's Reply at 6.

<sup>&</sup>lt;sup>81</sup> Mr. Rice was also retained by the Brown Landowners.

<sup>&</sup>lt;sup>82</sup> Environmental Stewardship's Reply at 8.

<sup>&</sup>lt;sup>83</sup> Environmental Stewardship's Reply at 8.

<sup>&</sup>lt;sup>84</sup> Environmental Stewardship's Closing at 5.

the permits will unreasonably affect surface water resources in around 2050.<sup>85</sup> Environmental Stewardship argueds that LCRA should not receive permits for even a portion of theits total amount requested, because it must meet the burden to prove the full amount of groundwaterwater requested in the application; or receive none at all. <sup>86</sup> In the alternative, Environmental Stewardship requesteds the permits (which include phases); to require District Board approval of any GM recommendation for LCRA to proceed past the second phase, including include provisions for notice and an opportunity for protestants to have a hearing on any decisions of the District. <sup>87</sup> Environmental Stewardship also requesteds that the Draft Operating Permits include requirements for LCRA to enter into a special surface/groundwater monitoring network agreement separate from the GM proposed Monitoring Well Agreement. The new surface/groundwater monitoring network agreement would provide data to the GM and the District in deciding whether to allow LCRA to proceed past Phase II. <sup>88</sup> Lastly, Environmental Stewardship suggests that LCRA's permits include requirements that LCRA implement a work plan set forth in a report conducted by LCRA witness Dr. Young—which he had previously developed for the area. <sup>89</sup>

## 2. GM's Arguments

Dr. Hutchison, the GM's expert, used the GAM to evaluate impacts to surface water resources. <sup>90</sup> The GM argueds that the GAM is the best available science for conducting such evaluations and that the three model runs made by Dr. Hutchison using the New GAM indicated that pumping with the Base Case for the District will potentially reduce groundwater discharge to surface water. <sup>91</sup> Further, adding LCRA's proposed withdrawals to the Base Case could result in a condition where the groundwater would be recharged by surface water in the Colorado River

<sup>&</sup>lt;sup>85</sup> Environmental Stewardship's Closing at 5.

<sup>&</sup>lt;sup>86</sup> Environmental Stewardship's Reply at 14.

<sup>&</sup>lt;sup>87</sup> Environmental Stewardship's Reply at 13-14.

<sup>&</sup>lt;sup>88</sup> Environmental Stewardship's Reply at 13-14.

<sup>89</sup> Environmental Stewardship's Reply; Environmental Stewardship Ex. 301.

<sup>&</sup>lt;sup>90</sup> GM Ex. 11 (Hutchison direct) at 18.

<sup>&</sup>lt;sup>91</sup> GM Ex. 11 (Hutchison direct) at 18.

and its tributaries in Bastrop County. <sup>92</sup> The GM agrees with Environmental Stewardship's assessment that under the modeling assumptions made by Dr. Hutchison's and Environmental Stewardship expert Rice's modeling assumptions, the Colorado River could go from a gaining stream to a losing stream by 2050. <sup>93</sup> Dr. Hutchison's GAM model runs showed that surface water could be the source of half of LCRA's proposed pumping could be sourced from surface water after 2050. <sup>94</sup>

However, the GM argueds that the GAMs (both the Old and New GAM) are limited as a predictive tool by the lack of high volume pumping data in the District and should not be relied upon to make accurate quantifications of impacts. The GM argueds that the only conclusion to be made is that the GAM shows that surface water impacts from LCRA's and all other District users' potential pumping *are possible*. The GM is not opposed to including surface water monitoring in the well monitoring agreement with LCRA. He GM concludeds that the permits can be protective of surface water by including surface water monitoring in the well monitoring agreement with LCRA and by using the phased approach to permitting. Further, the GM stateds that the Revised Draft Operating Permits' Special Condition 11 allows district-wide curtailment in the event of unreasonable impacts to surface water resources in the future.

# 3. LCRA's Arguments

LCRA stateds that neitherthere is not specific guidance in State law noror District Rules provide specific guidance on howthe means by which a groundwater district should determine whether proposed permits will unreasonably affect surface water resources. 99 Therefore, LCRA relies upon the conclusions of its witness, Dr. Young. Based upon his expertise as a hydrogeologist and environmental scientist, Dr. Young suggests impacts to surface water resources are only

<sup>&</sup>lt;sup>92</sup> GM Ex. 13.

<sup>&</sup>lt;sup>93</sup> GM's Closing Brief (GM's Closing) at 30. A gaining stream is one that receives water from an aquifer. A losing stream is the reverse; in other words, where water from the stream flows into the aquifer. Environmental Stewardship Ex. 100 (Rice direct) at 8.

<sup>&</sup>lt;sup>94</sup> GM Ex. 13.

<sup>&</sup>lt;sup>95</sup> GM's Closing at 30.

<sup>&</sup>lt;sup>96</sup> GM's Closing at 31.

<sup>&</sup>lt;sup>97</sup> GM's Closing at 30.

<sup>98</sup> GM's Closing at 30-31.

<sup>&</sup>lt;sup>99</sup> LCRA's Post-Hearing Closing Arguments (LCRA's Closing) at 30.

unreasonable if LCRA's pumping, standing alone without considering the contributing pumping of others, will cause (1) drawdown that results in the capture of underflow; or (2) cause a change in the hydraulic gradient between the water level in the stream and the water level in an adjacent shallow groundwater flow that causes a persistent and substantial flow from surface water to the groundwater system. <sup>100</sup> In its analysis using the GAM model, LCRA estimates the drawdown resulting solely from LCRA's pumping to be about <u>0</u>.3% of the annual average flow of the Colorado River near Bastrop (with annual average annual flow of about 1.4 million acre-feet per year). With this predicted amount of drawdown being a relatively small portion of the total annual flow, Dr. Young concludeds that neither of his identified unreasonable conditions are possible. <sup>101</sup>

LCRA is critical of Environmental Stewardship's approach, and the validity of Environmental Stewardship witness Mr. Trungale's findings in particular. <sup>102</sup> LCRA argue<u>ds</u> that Environmental Stewardship's overly stringent approach <u>should be rejected because it</u> has not been adopted in this <u>District</u>, or any other <u>groundwater conservation district</u>, and should be rejected. <sup>103</sup>

Regarding Environmental Stewardship's use of the GAM to estimate the impact of LCRA's proposed pumping on surface water resources, LCRA argueds that Environmental Stewardship's inquiry improperly evaluated LCRA's proposed use in combination with all other groundwater production authorized by the District; instead of the impact of LCRA's use standing alone because Texas Water Code § 36.113(d)(2) and District Rule 5.2.D(2) refer to only the unreasonable impacts caused by the "proposed use." LCRA also maintains that Environmental Stewardship's approach is inherently flawed because Environmental Stewardship witness. Mr. Rice's analysis goes beyond the limited predictive capabilities of the GAM to model impacts by making oversimplified and incorrect assumptions. LCRA asserts that the GAM cannot accurately capture the complexities and variabilities of river conditions and bank storage, specifically, because: (1) the GAM is an annual average condition and analysis of surface-groundwater interactions requires timesteps of hours or days; and (2) infiltration and unsaturated flows in the alluvium are not represented in the

<sup>&</sup>lt;sup>100</sup> LCRA's Closing at 30-31.

<sup>&</sup>lt;sup>101</sup> LCRA's Closing at 30-32.

<sup>&</sup>lt;sup>102</sup> LCRA's Post-Hearing Reply to Closing Arguments (LCRA's Reply) at 32-44.

<sup>&</sup>lt;sup>103</sup> LCRA's Reply at 32-34.

<sup>&</sup>lt;sup>104</sup> LCRA's Reply at 33.

<sup>&</sup>lt;sup>105</sup> LCRA's Reply at 35-38.

GAM. LCRA lists assumptions made by Mr. Rice that LCRA alleges appear to be designed to overstate the potential impacts of pumping, including: (1) assuming that LCRA (and only LCRA) will pump at maximum rates every year for 50 years; (2) attributing all losses to LCRA even though his model shows losses occurring beforeprior to LCRA begins pumping; (3) including other pumpers besides LCRA; (4) omitting critical parts of the alluvium from a segment of the Colorado River that shows a net gain of water through 2070; and (5) adjusting pumping at LCRA's Lost Pines Power Park up to permitted limits without making similar adjustments to other users. LCRA argueds that the flaws of the modeling are demonstrated by the fact that the modeling shows levels of flow in certain tributaries that historical records indicate have not occurred even under natural conditions. LCRA

LCRA believes that Mr. Trungale relied upon Mr. Rice's flawed inputs to conduct his own flawed analysis using the WAM. LCRA stateds Mr. Trungale's use of the "Run 3" version of the WAM for his analysis significantly understateds the amount of water expected to be in the Colorado River and therefore overstateds modeled impacts of LCRA's pumping on the surface water. LCRA attributes the over-stated impacts to "Run 3<sub>2</sub>" not accounting for historical or future expected real world conditions in the river. Instead, "Run 3" is a conservative estimate of water consumption because it assumes full use of all permitted water by every water right holder in the Colorado River basin and 100% consumption of the water (with no return flows), which is not the historical or expected norm in the future.

LCRA also concludeds that Mr. Trungale's use of the WAM to examine pumping impacts on instream flow requirements is overly simplistic and flawed. LCRA claimeds that even if Environmental Stewardship's quantifications in reduced surface water flows resulting from LCRA's pumping were accurate, Mr. Trungale's assessment of the impact to instream flows and the environment ignores consideration of actual historical subsistence flow data and the actual impact to wildlife habitat such as the Blue Sucker spawning area.<sup>111</sup>

<sup>&</sup>lt;sup>106</sup> LCRA's Reply at 37-38.

<sup>&</sup>lt;sup>107</sup> LCRA's Reply at 39.

<sup>108</sup> LCRA's Reply at 39-44.

<sup>109</sup> LCRA's Reply at 40-41.

<sup>&</sup>lt;sup>110</sup> LCRA's Reply at 40-41.

<sup>111</sup> LCRA's Reply at 43; LCRA Ex. 70.

# 4. ALJs' Analysis

The ALJs concluded that LCRA's pumping under the Revised Draft Operating Permits alone would not result in unreasonable effects on surface water resources. Accordingly, the Applications should not be denied on that basis. On the other hand, the ALJs agreed with the GM and Environmental Stewardship that the District should include appropriate conditions in the operating permits to monitor whether LCRA's proposed pumping combined with District-wide pumping will cause unreasonable effects and to order curtailment when needed.

#### a. The Standard for Unreasonable Effects on Surface Water Resources

No party cited precedent or a legal definition of unreasonable effects to surface water resources, but LCRA witness Dr. Young proposed certain standards for what would constitute unreasonable effects. Under Dr. Young's definitions, unreasonable effects would be shown by pumping that: (1) causes a drawdown that results in the capture of underflow; or (2) causes a change in the hydraulic gradient between the water level in the stream and the water level in an adjacent shallow groundwater flow that causes a persistent and substantial flow from surface water to the groundwater system. As they did regarding effects on groundwater, the ALJs noted that there mightmay be additional conditions that would constitute unreasonable effects, but agreed that either condition would constitute unreasonable effects on surface water resources.

Neither statutory There is no requirement in law nor the District's rules that requires the District to maintain groundwater flow of any amount into the surface water system. On the contrary, Texas courts have consistently held that groundwater can be pumped without protection of spring flow. Districts are, however, required to address conjunctive water management in their water management plans and in the adoption of the DFCs. Therefore, although cumulative effects of pumping are not relevant to the issue of unreasonable effects, those effects can, and should be, considered as part of the District's management, and the possibility exists that the District could curtail all users if necessary. In order to make those sorts of determinations, there will need to be surface water monitoring, as discussed below.

<sup>112</sup> LCRA Ex. 28 (Young direct) at 40.

<sup>&</sup>lt;sup>113</sup> See Denis v. Kickapoo Land Co., 771 S.W.2d 235 (Tex. App.—Austin 1989, writ denied); Pecos County Water Control & Improvement District No. 1 v. Williams, 271 S.W.2d 503 (Tex. App.—El Paso 1954, writ ref'd n.r.e.).

<sup>&</sup>lt;sup>114</sup> Tex. Water Code §§ 36.1071(a)(4), 36.108(d)(4).

# b. There is No Evidence in the Record that LCRA's Proposed Pumping, Standing Alone, Will Unreasonably Affect Surface Water Resources

No party argueds that LCRA's proposed pumping, standing alone, will cause a loss of surface water in the Colorado River in Bastrop County to the groundwater system. At most, the parties who modeled the effects of LCRA's pumping found that it would cause a loss of discharges of groundwater into the surface waters, resulting in a loss of flow in the Colorado and its tributaries of 0.5% of the average annual flow of the Colorado River at Bastrop. Environmental Stewardship also argued that such losses would be a greater percentage of the flows (up to 8%) during low flow conditions. The ALJs foundfind, based on the credible testimony of Dr. Young and supported by Dr. Hutchison, that extrapolations of the GAM model to low flow conditions are not appropriate because the GAM is a model that is based on annualized flows. Extrapolations improperly ignore many variables and the complexities of river conditions during different flow regimes. In sum, it has not been shown that LCRA's proposed pumping alone will cause unreasonable effects on surface water resources, and the permits should not be denied on that basis.

#### c. Cumulative Effects

The ALJs <u>foundfind</u> that Dr. Hutchison's and Mr. Rice's GAM models show that the cumulative effects of LCRA's proposed pumping, combined with the District pumping base case, may cause significant losses of surface water to the groundwater system in Bastrop County by 2050, including <u>surface water sourcing</u> up to half of LCRA's groundwater pumping <u>being sourced by surface water</u>. Such losses would be a "persistent and substantial flow from surface water to the groundwater system" and thus would meet the standards set forth by LCRA witness Dr. Young for unreasonable effects. However, the ALJs agreed with Dr. Hutchison's (and others') conclusion that the GAM models are not accurate enough to predict such impacts with certainty, due to the lack of reliable high volume pumping data in Bastrop County.<sup>117</sup>

Because the ALJs <u>diddo</u> not find that the GAM is accurate enough to predict the loss of surface water with sufficient certainty or precision, the ALJs <u>diddo</u> not accept Environmental Stewardship's conclusion that LCRA's pumping will definitely cause unreasonable effects. Specifically, because the inputted surface water losses calculated by the GAM are not precise or

<sup>&</sup>lt;sup>115</sup> LCRA Ex. 28 at 41 (Dr. Young estimated losses of .2% of annual flow); Environmental Stewardship Ex. 100 (Rice direct) at 10. Mr. Rice estimated losses of .5% of annual flow and loss of 8% during low flows.

<sup>&</sup>lt;sup>116</sup> Environmental Stewardship Ex. 100 (Rice direct) at 10.

<sup>&</sup>lt;sup>117</sup> GM Ex. 11 at 16.

certain enough to be used as reliable inputs in further analysis relating to surface water impacts, the ALJs do not make any findings relating to whether the methods Environmental Stewardship witness Mr. Trungale used, which relied upon those uncertain inputs, are appropriate evaluations.

Nevertheless, while the Old and New GAMs do not conclusively show future impacts, absent additional data, they are the most reliable tool available with which to make a determination on the subject. The ALJs agreed that the GAM modeling shows the possibility of future unreasonable effects on surface water resources caused by the cumulative effects of District-wide pumping, including LCRA's. Therefore, the District needs to monitor the impacts of groundwater pumping in order to have sufficient knowledge to be able to mitigate or prevent unreasonable effects. Details of this monitoring will be discussed in Section II, which addresses the Monitoring Well Agreement.

#### C. Well Drawdown and Interference

District Rule 5.2.D(9) requires consideration of "whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." Relatedly, the District Rules require large-volume wells, such as those proposed by LCRA, to be spaced more than 5,000 feet away from other wells in the same aquifer owned by a different owner.<sup>118</sup>

#### 1. Parties' Evidence and Arguments

LCRA's proposed wells are closely-spaced together on one portion of the Griffith League Ranch. According to LCRA's evidence, this was to respect the preference of the Boy Scouts as reflected in the deed. LCRA argueds that, (consistent with the District Rules), these wells are more than 100 feet away from the nearest property line and will be spaced at least 5,000 feet from the nearest Simsboro well not owned by LCRA. LCRA also noted that its wells will be located where the aquifer is deepest, and that its wells, like Recharge's permitted nearby wells, will be located in some of the most transmissive parts of the Simsboro in the District. LCRA presented testimony that because the wells will be part of an aggregated system, it will be able to adjust pumping among

<sup>&</sup>lt;sup>118</sup> District Rule 8.2(B).

<sup>&</sup>lt;sup>119</sup> LCRA Ex. 3 at 2 (granting LCRA the right to use the portion of the surface area designated as the Preferred Groundwater Development Area).

the wells to minimize the reduction of artesian pressure. LCRA noted that the GM can restrict pumping if the pump teststest required by the Draft Operating Permits will reveal characteristics, and that the GM can restrict pumping if impacts are worse than anticipated, which will, in turn minimize impacts on wells. LCRA argueds that its compliance with the spacing rules, along with the pump tests and potential restrictions, shows that the Draft Operating Permits will lessen interference among wells.

LCRA also presented evidence about Recharge's permitted wells <u>noting</u>. It notes that modeling shows that LCRA's impacts on Recharge's well will be approximately the same as Recharge's impacts on LCRA's wells. 122

Recharge, whose permitted wells will be close to LCRA's proposed well field, argueds that LCRA failed to establish that its Applications will minimize as far as practicable the interference between wells. <sup>123</sup> Recharge argueds that, to the contrary, LCRA's close-space siting of its wells on a portion of the Griffith League Ranch property maximizes well interference. Recharge argueds that it was improper for LCRA to concentrate all of its wells near the property line and as close to Recharge's pre-existing permitted well field as the District's spacing rules allow. Recharge further contends, "LCRA took advantage of a recent change to the District's spacing rules that allows a well owner to avoid the 5000-foot well spacing rule that applies to all other wells of this size." <sup>124</sup> Recharge emphasizes that compliance with the District's spacing rules is not enough to lessen well interference. Finally, Recharge challenges LCRA's motives and emphasizes that LCRA's original experts used to studyin studying the Griffith League Ranch site and obtaining the permits were not the same experts who testified at the hearing.

Aqua and Elgin also argued that compliance with the spacing rules is insufficient not enough to satisfy the this requirement to lessen interference with other wells and contend that spacing rules do not override the permitting rule.

<sup>&</sup>lt;sup>120</sup> LCRA Ex. 28 (Young direct) at 47.

<sup>&</sup>lt;sup>121</sup> Tr. at 583-592.

<sup>&</sup>lt;sup>122</sup> LCRA Ex. 55 (Young rebuttal) at 40.

<sup>&</sup>lt;sup>123</sup> Recharge's Response to Closing Arguments (Recharge's Reply) at 8.

<sup>&</sup>lt;sup>124</sup> Recharge's Closing Argument (Recharge's Closing) at 2.

Elgin emphasizes that its wells "are relatively updip within the Simsboro when compared to LCRA's proposed wells;" and expresses concern that the New GAM may underestimate updip migration of drawdown caused by downdip pumping may be underestimated in the New GAM.

The Hernandezes argued that lessening drawdown and interference should be addressed by monitoring and mitigation.

The GM argueds that thehis phased approach presents a reasonable and adequate solution to the issue of drawdown and interference and disagrees that its phased approach only considers broad, District-wide impacts. The GM points to the spacing rules and the 36-hour pump test as permit conditions that would lessen well interference. He also argueds that if the pump test shows that there would be adverse impacts, Special Condition 14 of the Revised Draft Operating Permits authorizes the GM to lower the maximum rate of withdrawal.

#### 2. ALJs' Analysis

The District's Rule requires consideration of "whether the conditions and limitations in the Operating Permit prevent [w]aste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." <sup>125</sup> Thus, under the District's rule, the obligation on the District is to "minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure," but only to "lessen interference between wells." <sup>126</sup> Therefore, the standard is not whether interference between wells will be minimized as far as practicable, but rather whether it will be lessened. Similarly, the ALJs noted that this Rule requires an inquiry into the terms of the Draft Permits, not just the Applications.

The ALJs agreed that the Revised Draft Operating Permits contain sufficient terms to lessen well interference. In particular, they foundfind that the combination of pump tests, monitoring wells, and phasing, plus the GM's ability to curtail pumping, if necessary, satisfy this factor. The ALJs declined to read anything sinister into LCRA's decision to change experts. The ALJs also declined to find that compliance with the spacing rules automatically satisfies this rule.

<sup>&</sup>lt;sup>125</sup> This rule is consistent with Code section 36.116, which authorizes a groundwater conservation district to regulate "in order to minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, to control subsidence, to prevent interference between wells, to prevent the degradation of water quality, or to prevent waste." Tex. Water Code § 36.116(a).

<sup>&</sup>lt;sup>126</sup> This rule is consistent with Code section 36.116, which authorizes a groundwater conservation district to regulate "in order to minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, to control subsidence, to prevent interference between wells, to prevent the degradation of water quality, or to prevent waste." Tex. Water Code § 36.116(a).

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# 3. Board Conclusion

The Final Operating Permit allows the GM to restrict the rate of withdrawal and will also require LCRA to file amendment applications to increase the authorized withdrawal amount.

#### D. Management of Total Groundwater Production on a Long-Term Basis to Achieve **Desired Future Condition**

District Rule 5.2.D(8) requires the District to consider "whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable Desired Future Condition." A DFC is "a quantitative description, adopted in accordance with Section 36.108, of the desired condition of the groundwater resources in a management area<sup>127</sup> at one or more specified future times."<sup>128</sup>

The Texas Water Code requires that:

In issuing permits, the district shall manage total groundwater production on a long-term basis to achieve an applicable [DFC] and consider:

- the Modeled Available Groundwater (MAG) determined by the executive (1) administrator;
- the executive administrator's estimate of the current and projected amount (2) of groundwater produced under exemptions granted by district rules and Section 36.117;
- the amount of groundwater authorized under permits previously issued by (3) the district;
- a reasonable estimate of the amount of groundwater that is actually (4) produced under permits issued by the district; and
- yearly precipitation and production patterns. 129 (5)

The District is a part of Groundwater Management Area (GMA) 12, which on April 27, 2017, adopted a DFC for the Simsboro Formation of a District-wide average drawdown between January 2000 and December 2069 of 240 feet. 130 The DFC is also divided into DFCs for the

<sup>&</sup>lt;sup>127</sup> A management area is defined as "an area designated and delineated by the Texas Water Development Board under Chapter 35 as an area suitable for management of groundwater resources." Tex. Water Code § 36.001(13).

<sup>&</sup>lt;sup>128</sup> Tex. Water Code § 36.001(30).

<sup>&</sup>lt;sup>129</sup> Tex. Water Code Ann. § 36.1132.

<sup>&</sup>lt;sup>130</sup> GM Ex. 10 at 7.

counties in the District. For Bastrop County, the DFC is a county-wide average drawdown between January 2000 and December 2069 of 174 feet; for Lee County, the DFC is a county-wide average drawdown between those dates of 350 feet.

The DFC is used to determine the GMA's <u>Modeled Available Groundwater ("MAG"</u>). The MAG is "the amount of water that the [TWDB's] executive administrator determines may be produced on an average annual basis to achieve a desired future condition."<sup>131</sup>

It is undisputed that if LCRA and all the other permit holders pumped their full permitted amount, the total groundwater production within the District pumping would exceed the MAG.

# 1. The Parties' Arguments

The Hernandezes are the only party to raise an issue about how the District is issuing permits in relation to the DFCs and MAGs. They argued that by not using the MAG as a permitting cap, the District is not fulfilling its duty. They add, "[i]t is inane that countless hours and dollars are spent by five [groundwater conservation districts] in the GMA-12 to develop the DFCs only to have them disregarded for permitting decisions."<sup>132</sup>

For its part, the GM contends the MAG is not a hard <u>permitting</u> cap; rather, it is "a factor to consider when managing the DFC." He argue<u>ds</u> that this use of the MAG as a permitting tool is consistent with <u>Texas Water</u> Code §36.1132, which requires a district, when making permitting decisions, to consider "a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district." He similarly testified that a significant reason why MAGs are used as management guides, not hard caps for permitting, is because permit holders typically do not produce their full permitted values. <sup>134</sup>

# 2. ALJs' Analysis

While noting the Hernandezes' frustration, the ALJs <u>foundfind</u> that the GM's approach to the DFC and the MAG is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve an applicable DFC. The <u>Texas Water</u> Code does not anticipate the MAG being a hard permitting cap, <u>as evidenced by amendments adopted in 2015</u>

<sup>&</sup>lt;sup>131</sup> Tex. Water Code § 36.001 (25).

<sup>&</sup>lt;sup>132</sup> Closing Argument of Elvis Hernandez (Hernandez Closing) at 3.

<sup>&</sup>lt;sup>133</sup> GM's Closing at 44.

<sup>&</sup>lt;sup>134</sup> GM Ex. 1 (Totten direct) at 39.

to Texas Water Code §36.1132 to change the MAG from a permit cap to a production limit. 

Instead. Rather, the MAG is one factor in the permitting analysis. 

The ALJs found find that the evidence shows the GM appropriately considered the factors.

# **E.** Special Conditions from Previous Permits

#### 1. Parties' Arguments

Recharge's permits, like Forestar's, contain several conditions that resulted from <u>a</u> settlement. Among the settlement-related terms in Recharge's permits are: (1) a reduction in its requested production amount, (2) tiered phasing of production, and (3) the creation of a mitigation fund.

Recharge argue<u>ds</u> that provisions contained in previous permits reflect District policy and, thus, must be included in the Draft Permits. Alternatively, they argue<u>d</u> that the principle of applying equal, non-discriminatory treatment to all citizens of the District requires that permit provisions be the same.

As with its permits, Recharge argue<u>ds</u> that the same District policy considerations require that the following conditions be <u>includedplaced</u> in LCRA's Draft Operating Permits:

- Reducing the initial amount of water requested by the applicant;
- Requiring adequate spacing;
- Requiring future cutbacks, if necessary;
- For all permits over 20,000 acre-feet, requiring end-user contracts, monitoring-well agreements, and tiered phasing of production; and
- Provisions for Financial mitigation for all production in Bastrop County.

Some of these items are, in fact, contained in the Revised Draft Operating Permits. The Revised Draft Operating Permits anticipate that the GM may require future cutbacks. The Revised Draft Operating Permits also required end-user contracts, monitoring-well agreements, and tiered phasing of production.

Recharge also argue<u>ds</u> that if the Draft Permits are issued without these provisions, its permit (as well as Forestar's and Bastrop's permits) should be reopened, and those provisions removed. Such an action is beyond the scope of this hearing and <u>werewill</u> not <u>be</u> addressed further.

<sup>135</sup> Act of May 27, 2011, 82d Leg., R.S., ch. 18, § 4, 2011 Tex. Gen. Laws 39

<sup>&</sup>lt;sup>136</sup> Tex. Water Code Ann. § 36.1132.

Recharge argue<u>ds</u> that "policy can be adopted by action, in addition to a formal written policy, much like a contract can be formed through the parties' course of conduct." It then argue<u>ds</u> that the District has adopted a standard practice of including certain special conditions in similarly-situated permits, and that this practice rises to the level of District policy. <u>Recharge also</u> It—argue<u>ds</u> that the record "demonstrates that the [District's] board adopted certain special conditions in writing for similarly-situated permit holders on a systematic basis." <sup>138</sup>

Finally, Recharge also argueds that "[t]he District has similarly adopted an effective policy of requiring adequate spacing between wells of at least 5,000 feet as between all large volume wells, as evidenced by the spacing for the Bastrop, Forestar, and Recharge wells." <sup>139</sup>

The GM disagrees, as does LCRA. The GM argueds that permitting decisions are made on a case-by-case basis, and that what is appropriate for one applicant and permit may not be appropriate for another. The GM also emphasizes the need for balancing private property and natural resource interests when managing groundwater.

# 2. ALJs' Analysis

The ALJs <u>foundeonelude</u> that when, following a settlement, a groundwater conservation district issues a permit that reduces the total amount of production from the amount requested in the application, it does not create a policy of reducing the amount of production from the amount requested. Recharge cannot rely on the fact that in previous cases, the permit that was issued authorized less production than requested to argue<u>d</u> that LCRA's requested production should be reduced, as well.<sup>140</sup> Such an approach would be inconsistent with the balancing analysis required by <u>Texas Water</u> Code § 36.113(d) and District Rule 5.2.D.

As for a spacing policy, the undisputed evidence is that the District's spacing rules changed <u>afterbetween the time</u> the permits for Recharge's three wells were issued and <u>before LCRA</u>'s Applications. Under the current rules, the <u>rules for spacing required</u> between wells belonging to one party isare different from the <u>rules addressing</u> spacing required between wells of different

<sup>&</sup>lt;sup>137</sup> Recharge's Closing at 25.

<sup>&</sup>lt;sup>138</sup> Recharge's Closing at 26.

<sup>&</sup>lt;sup>139</sup> Recharge's Closing at 27.

<sup>&</sup>lt;sup>140</sup> The ALJs note that Forestar's and Recharge's permitted production amounts (28,500 and 46,000 acre-feet, respectively) exceed the production amount allowed in the Revised Draft Operating Permits.

owners. <sup>141</sup> The current rules only require a distance of 5,000 feet between large wells owned by different owners. And it is also undisputed that the proposed wells in the Applications comply with the current spacing rules. Even assuming, for the sake of argument, that the District had a policy of requiring at least 5,000 feet between large-volume wells regardless of ownership, it changed that policy by adopting a new rule. Recharge does not—and could not—argue that it was improper for the District to amend its rules. Likewise, Recharge does not—and could not—directly argue that all later permit applications should be subject to the rules in place at the time the District granted the first large-volume permit. But by turning the spacing requirements in its permit into a "policy<sub>2</sub>", despite the existence of the rule, that is, in essence, what Recharge is arguing. The ALJs wereare not convinced that the District has a separate well-spacing policy, aside from its spacing rule, that should apply here. <sup>142</sup>

# F. Separate Issues Raised by the Brown Landowners

The Brown Landowners raised several issues that were not raised by the other parties. Those issues will be addressed here.

# 1. Was the District Required to Consider Historic Use?

The Brown Landowners argued that the District was required to consider historic use when reviewing the Applications and failed to do so. In making this argument, they rely on Texas Water Code § 36.116(b). As set out above, § 36.116(b) provides that a groundwater conservation district may preserve historic use in its rules that-limiting production. That This section does not require a district to adopt rules preserving historic use, and it is undisputed that historic use is not one of the factors in the District's permitting rules. 143

Moreover, the Brown Landowners do not clearly describe the historic use that they argued must be considered. They argued that most of the available water in Bastrop and Lee Counties is groundwater, that those counties "are significantly more rural than Travis County," and that "[t]here is no history of Travis County being an intended importer of Bastrop and Lee County water."

<sup>&</sup>lt;sup>141</sup> District Rule 8.2.

<sup>&</sup>lt;sup>142</sup> Recharge also argued that the District has a policy of requiring future cutbacks, which it agrees are contained in the Draft Permits.

<sup>&</sup>lt;sup>143</sup> The Brown Landowners quote *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (Tex. 2012) for the proposition that "the amount of groundwater withdrawn and its purpose are both relevant when identifying an existing or historic use to be preserved," but they do not argue that *Day* holds that historic use must be preserved. Brown Landowners' Brief in Support of Closing (Brown Landowners' Closing) at 17 (quoting *Day*, 369 S.W.3d at 836).

<sup>&</sup>lt;sup>144</sup> Brown Landowners' Closing at 17.

Rather than protect a specific historic use—except, broadly, groundwater use in Bastrop and Lee Counties—they appear to argue that because groundwater has been used in Bastrop and Lee Counties, a new use should not be allowed.

For these reasons, the ALJs declined to find that the District was required and failed to consider historic use.

# 2. Were the Applications Administratively Complete?

The Brown Landowners also argued that the Applications should be denied because they were not administratively complete. They contend that "[w]hen viewed under these guidelines and principles the LCRA application is not administratively complete as it was not given the proper scrutiny by the [District]." 146

The GM disagrees. According to the GM, administrative completeness is a technical requirement that does not require a balancing of the various factors that the District's board must consider under chapter 36 and the District's rules. Instead, Mr. Totten testified that to determine whether the Applications were complete, he determined whether LCRA had provided the information the District Rules and Code require and whether it used the correct forms in its Applications. He also agreed that administratively complete "means it must have the minimal amount of information required in [the District's] rules. 148

The ALJs <u>foundfind</u> that GM's understanding is consistent with <u>Texas Water</u> Code chapter 36, which provides that an application is administratively complete if it contains the information set forth under Sections 36.113 and 36.1131. <sup>149</sup> It also prohibits a district from requiring that additional information be included in an application for it to be considered administratively complete. <sup>150</sup>

The Brown Landowners do not offer a competing definition of administrative completeness, nor do they indicate what it requires. They only argued that they do not think the

<sup>&</sup>lt;sup>145</sup> Brown Landowners' Closing at 2 ("First and foremost, the ALJ should deny the permit as it is administratively incomplete.").

<sup>&</sup>lt;sup>146</sup> Brown Landowners' Closing at 5.

<sup>&</sup>lt;sup>147</sup> GM Ex. 1 (Totten direct) at 17. Mr. Totten originally determined that LCRA had used the incorrect forms; he required LCRA to resubmit its applications using the correct forms.

<sup>&</sup>lt;sup>148</sup> Tr. at 1118.

<sup>&</sup>lt;sup>149</sup> Tex. Water Code § 36.114(h).

<sup>&</sup>lt;sup>150</sup> Tex. Water Code § 36.114(h).

Application satisfies it. To the extent that the Brown Landowners argued that the Application is not administratively complete because of the factors set out in the <u>Texas Water</u> Code or the District's Rules, the discussion of that argument is set out in the sections discussing the substantive portions of the <u>Texas Water</u> Code or Rules. Otherwise, the ALJs <u>wereare</u> satisfied that the Applications are administratively complete in that they contain the required information.

# 3. Analysis Based on Benefit in the District

The Brown Landowners also argued that the District should add some sort of geographic limitation should be added to the Draft Permits. In essence, they argued that the District failed to examine whether there will be a beneficial use in Bastrop and Lee Counties. They do not point to any statute or rule that requires an examination of beneficial use within the District, as opposed to outside it, and the ALJs were not persuaded that any such requirement exists.

# G. Phasing

The Draft Operating Permits and the Revised Draft Operating Permits both anticipate that LCRA will increase its pumping in phases. LCRA and the parties opposed to the Applications expressed concerns about various aspects of the phasing process.

First, LCRA objects to a requirement in the Draft Operating Permits that it have binding contracts with end users to move to the next phase and increase pumping.

Next, both LCRA and Recharge have concerns about the phasing formula, and LCRA requested it be changed. LCRA argueds that, although it is willing to phase in production, it should not be required to accept special conditions "that are unreasonable, flawed, create significant uncertainty, or are so open to interpretation that they cannot be reasonably implemented" just because previous permittees agreed to those special conditions. In particular, LCRA argueds, citing Recharge's expert, that the phasing formula is "a mess" that should be eliminated.

<sup>&</sup>lt;sup>151</sup> Brown Landowners' Brief in Support of Closing at 18 ("Including Travis county in their permit, the LCRA cannot demonstrate that there is a beneficial use to Bastrop and Lee counties.").

<sup>&</sup>lt;sup>152</sup> Recharge would like to have this formula removed from its permit. As discussed above, such a request is outside the scope of this contested case hearing. In its briefing, LCRA suggests that nothing precludes potential amendments to Forestar's and Recharge's permits to remove the formula. LCRA's Closing at 55 n.10.

<sup>&</sup>lt;sup>153</sup> LCRA's Closing at 44.

<sup>&</sup>lt;sup>154</sup> LCRA's Closing at 51.

Finally, Aqua and Elgin raise a different concern: that the phasing examines district-wide conditions, as opposed to local impacts. Equally significant for Aqua is that potentially-impacted local users cannot participate in the decision to move LCRA from one phase to the next. Aqua argueds that, as the phasing standards stand in the Draft Operating Permits, they provide "no meaningful review of local impacts, and no due process for protestants to have their respective local impacts heard and addressed."<sup>155</sup> Both sets of concerns will be addressed in turn.

These concerns are moot under the Final Operating Permits, which do not include any phasing requirements or options. LCRA will have to file permit amendment applications if it desires to increase production at any point in the future. Should any amendment applications be filed, the parties here or any future protestants will have the opportunity to contest whether the groundwater will be put to any beneficial use and if the additional production will cause unreasonable local impacts.

# 1. Binding Contracts

The GM's Draft Operating Permits originally required LCRA to have "binding contracts" prior to each phase of pumping. 156 The permits would expire if LCRA did not have any binding contracts before the anniversary of five years from the Phase II date. 157 The Revised Draft Operating Permits have amended the language to require "binding commitments" instead of "binding contracts," as requested by LCRA, to reflect the possibility that LCRA may be the end user of the groundwater. 158 As will be explained below, the ALJs find that the requirement for "binding contracts" or "binding commitments" is unnecessary, but is within the District's discretion and authority. If the District retains the requirement, the ALJs recommend the language in the Revised Draft Operating Permits should be included in the final permit.

# a. GM's Arguments

The GM argues that the requirement for "binding contracts" goes to the heart of LCRA's requirement to demonstrate a need for groundwater under chapter 36 and the District's Rules. 159 Specifically, the GM argues that the contracts are necessary to show beneficial use of the water and

<sup>&</sup>lt;sup>155</sup> Closing Argument of Aqua (Aqua's Closing) at 21.

<sup>156</sup> Draft Operating Permit Special Conditions 3(b) (d), found in GM Ex. 7.

<sup>157</sup> Draft Operating Permit Special Condition 8, found in GM Ex. 7.

<sup>458</sup> GM's Reply Brief (GM's Reply) at 9, See also Revised Draft Operating Permit.

<sup>159</sup> GM's Reply at 7.9.

a need for the water in the receiving area. The GM states that LCRA's reliance upon Texas Commission on Environmental Quality (TCEQ) treatment of surface water permits is misplaced because groundwater is subject to different legal standards due to its nature of being private property—as opposed to State property. The GM concludes that even if LCRA has shown enough contracts to obtain the permits, the language should not be removed from the permits because the contracts are needed after issuance at Phases II and III to show a continued beneficial use. Finally, the GM states that such provisions have been included in recently granted operating permits and should likewise be included in LCRA's permits for consistency.

# b. LCRA's Arguments

LCRA states that it has met all requirements of District Rule 5.1.B(8) because it has identified its existing and future customers as the end users. <sup>164</sup> LCRA also contends that a requirement for "binding contracts" goes beyond the requirements of District Rule 5.1.B(8) and exceeds the District's authority. <sup>165</sup> LCRA notes that chapter 11 of the Code requires that surface water be put to a beneficial use, similar to chapter 36 with respect to groundwater, and that TCEQ has never required contracts with End Users prior to issuance of a surface water permit. <sup>166</sup> LCRA argues that there is no basis to hold groundwater to a higher standard than surface water. <sup>167</sup>

Additionally, LCRA argues that the "binding contracts" language is not needed because the requirement in the permits to use the groundwater for a beneficial use subjects LCRA to enforcement if LCRA were to arbitrarily increase its pumping for a purpose other than meeting its end users' needs. LCRA believes that the requirements in the Draft Permits for LCRA to supply the water conservation and drought contingency plans of its end users to the District are sufficient for the District to evaluate whether the water is being beneficially used and not wasted. 169

<sup>160</sup> GM's Reply at 7.9.

<sup>161</sup> GM's Reply at 7-9.

<sup>&</sup>lt;sup>162</sup> GM's Reply at 7-9.

<sup>&</sup>lt;sup>163</sup> GM Ex. 1 (Totten direct) at 30.

<sup>&</sup>lt;sup>164</sup> LCRA's Closing at 50.

<sup>165</sup> LCRA's Closing at 50.

<sup>166</sup> LCRA's Closing at 50.

<sup>&</sup>lt;sup>167</sup> LCRA's Closing at 50.

<sup>&</sup>lt;sup>168</sup> LCRA's Closing at 49.

<sup>169</sup> LCRA's Reply at 51.

LCRA contends that there is no over-arching policy to include this provision in all permits, rather, that it was only included as part of the Forestar Permit as a negotiated settlement term. Further, LCRA believes that even to the extent that past permits have included this requirement, that LCRA, as an established reliable public water supplier, should be treated differently than other permit applicants that lack a demonstrable track record of reliability. 171

LCRA requests: (1) that LCRA be found to have met the requirement with the contracts it has submitted in this proceeding; (2) amendment of the language to "binding commitments" to reflect that LCRA may be the end user; (3) removal of the definition of "End User" from the permits because the language is already in the District's rules and could be amended in the future; (4) removal of the language "for any agricultural commitments, LCRA shall be the End User" or amendment to say "LCRA may also be the End User;" and (5) removal of Special Condition 8 (which states the permits expire five years from the anniversary of the Phase II date unless LCRA provides one or more contracts), because LCRA has already provided contracts that allow LCRA to provide its existing customers water from any source of supply available. 172

# e. ALJs' Analysis

The ALJs find that it is within the District's authority to require submission of End User contracts or proof from LCRA that it intends to use the water itself; however, such provisions do not appear to be necessary in these permits because: (1) LCRA has demonstrated a need for the water; (2) it is unlikely that LCRA would not beneficially use the groundwater it pumps; and (3) there are other safeguards in the permit to prevent waste by LCRA.

Although not currently required in the District's rules, it is within the District's authority to require LCRA to submit End User contracts or a statement from LCRA that it intends to use the water itself. Code § 36.113(c) provides a list of potential requirements a district may include in a permit or permit application. Subsection (8)(B) of that provision includes "other information . . . reasonably related to an issue that a district by law is authorized to consider." The GM's stated

<sup>170</sup> LCRA's Reply at 51.

<sup>&</sup>lt;sup>171</sup> LCRA's Closing at 51.

<sup>172</sup> LCRA's Reply at 51-52.

<sup>&</sup>lt;sup>173</sup>-Tex. Water Code § 36.113(c).

<sup>174</sup> Tex. Water Code § 36.113(c)(8)(B).

reason for including the language is for LCRA to demonstrate a need for groundwater in the receiving area under chapter 36 and the District's Rules and to show that the water will be beneficially used. Both reasons are within the scope and the District's authority and are related to the requirement to provide "binding contracts." The District could amend its rules to require "binding contracts" in permits prior to pumping or otherwise require the information in a permit if the facts of the application warrant such a requirement.

However, the ALJs do not find there is a need for the provisions in LCRA's permits. LCRA has met the District's rule requirement to identify any End Users of the groundwater by providing contracts from existing users which far exceed the total amount of requested groundwater through all of the GM's proposed phases. 176 Further, LCRA has demonstrated there is a need for the water in the receiving area by submission of these contracts, and as demonstrated by the Regional Water Plans. 177 It is highly unlikely that LCRA would arbitrarily pump water without beneficially using it, and to do so would violate the Revised Draft Operating Permit. In addition, the District can monitor LCRA's use of the water by examining LCRA's submittal of drought contingency plans and water conservation plans, which are required by the permits prior to supplying water to any End User, and the District can enforce provisions in the permits that require LCRA to use the water for beneficial purposes. 178 Therefore, there is not a compelling reason to include the requirement for "binding contracts." 179

If the District decides to retain the requirement for "binding commitments" in the permits, the ALJs recommend the language in the Revised Draft Operating Permits. Regarding the definition of "End User" provided in the permits, while the definition unnecessarily lists the allowable beneficial uses, it is not necessary to remove the definition as suggested by LCRA because the language is sufficiently conditioned by the inclusion of the language preceding the

<sup>&</sup>lt;sup>175</sup> Tex. Water Code § 36.113(d)(3) ("the district shall consider whether . . . the proposed use of water is dedicated to any beneficial use."); Tex. Water Code § 36.122(f) (the district shall consider the need for water in the proposed receiving area).

<sup>&</sup>lt;sup>176</sup> LCRA Ex. 12; LCRA Ex. 46 (each contract includes a provision stating that LCRA may supply water from any source available).

<sup>177</sup> LCRA Ex. 13.

<sup>&</sup>lt;sup>178</sup> Revised Draft Operating Permit, Standard Provision 8 and Special Condition, found at GM Ex. 7.

<sup>&</sup>lt;sup>179</sup> LCRA requested a finding that its existing contracts would satisfy any End User requirement. Whether LCRA has complied with a permit before it has been issued is outside the scope of this contested case.

listed beneficial uses ("including, but not limited to") so as to not require future amendment if the definition changes in the rules.

# 2. The Phasing Formula

The phasing formula contained in the Draft Operating Permits was developed as part of the District's settlement with Forestar, and was then incorporated into Recharge's permit. The GM incorporated many of LCRA's objections to this formula in drafting the Revised Draft Operating Permit.

# a. Parties' Arguments

LCRA first argues that formula contained in the Draft Operating Permits—but not the idea of tiered phasing—should be eliminated. It argues that "at renewal, if the District has adopted by rule scientifically sound and objective criteria to determine if further restrictions are warranted based on aquifer impacts, the GM could seek to initiate an amendment to LCRA's permits at that time."

In the alternative to eliminating the formula entirely, LCRA proposed, in its Exhibit 8A, changes to the phasing formula in Special Condition 3. In the Revised Draft Operating Permits, the GM accepted most of those changes, except proposed changes related to End User requirements, which are discussed above. Thus, the GM accepted that the relevant factor should be drawdown pursuant to the DFC, rather than a water level. <sup>182</sup>One proposed change the GM did not accept was LCRA's suggestion that the relevant DFC that should be examined as LCRA moves through the phases is the DFC in place at the time the permit is issued, rather than the DFC in place when the phasing inquiry occurs. <sup>183</sup> LCRA argues that the current DFC should be used for the life of the permit. It argues that keeping the current DFC is "consistent with the notion that DFC compliance should not be borne solely by a single permittee." <sup>184</sup>

# b. ALJs' Analysis

<sup>180</sup> Tr. at 1246.

<sup>&</sup>lt;sup>181</sup> The Draft Operating Permits (and Revised Draft Operating Permits) have a five-year term.

<sup>&</sup>lt;sup>182</sup> The DFC for the Simsboro adopted by GMA 12 is expressed in terms of drawdown, not water level. GM Ex. 10 at 7.

<sup>&</sup>lt;sup>183</sup> Compare LCRA Ex. 8A at 3-4 with Revised Draft Operating Permit at 3-4.

<sup>&</sup>lt;sup>184</sup> LCRA's Closing at 59.

The ALJs do not agree with LCRA that a phasing formula is unnecessary and that the District must adopt rules before it can impose requirements on LCRA that would allow it to progress from one phase to another. Therefore, the ALJs will not recommend removing the phasing formula from the Revised Draft Operating Permits.

Because the GM has agreed to most of LCRA's proposed changes to the phasing formula, the only remaining issue is which DFC should be used when LCRA requests to move to the next phase and increase its pumping.

The ALJs agree with the GM that the DFC in place at the time LCRA requests to increase its pumping should apply. Contrary to LCRA's arguments, using the DFC in place at the time of the requested increase in pumping does not mean that LCRA solely bears the responsibility of complying with the DFC. Instead it means that LCRA is not exempt from the effect of changes in conditions when it seeks to pump more water. The ALJs will not recommend making this change to the Revised Draft Operating Permits.

# 3. Concerns About Local Impacts and Input

# a. Parties' Arguments

Aqua, Environmental Stewardship, and Elgin's primary concerns are that the phasing decision will not look at local impacts and that the decisions about whether LCRA can increase its pumping will be made solely by the District and LCRA, with no opportunity for public input.

The GM cites to several provisions in the Revised Draft Permits that it contends protects existing users. These are the monitoring well agreement, the phased approach, that LCRA like all users is subject to future cutbacks, the well-spacing requirements, and the 36-hour pump test requirements. 185

The GM strongly objects to parties other than LCRA being involved in any phasing decision. The GM argues, in fact, that allowing participation in such decisions would be contrary to Code chapter 36. In particular, the GM argues that participation must be limited to persons with a personal justiciable interest and that this interest be affected by the requested permit. The GM also argues that other parties' participation would be "disruptive" and undercut the District's ability to do its job. 187

<sup>&</sup>lt;sup>185</sup> GM's Reply at 24-25.

<sup>186-</sup>Tex. Water Code § 36.415(b)(2).

<sup>187-</sup>GM's Reply at 26.

# b. ALJs' Analysis

The ALJs are unconvinced by the GM's argument that the parties' involvement must end at the conclusion of this contested case hearing. The parties here have established their personal interest, and their focus is on potential harm to their wells, not to some generalized interest to the public.

One change the GM made in the Revised Draft Operating Permits is relevant to this issue. This change was to Special Condition 5 (previously Special Condition 7), which addresses the renewal application. In the Revised Draft Permits, if LCRA files a renewal application, the GM and LCRA must evaluate "the data collected from the Monitoring Well System prior to the date of the application to renew to determine whether LCRA's pumping has resulted in substantially different impacts to groundwater resources than those predicted by the modeling relied upon [by] the District when the Permit was issued and jointly propose revisions to the Permit based on that data." <sup>188</sup> The ALJs recommend that the District adopt this Special Condition, but believe the condition should be revised to provide an opportunity for affected landowners to participate in the permit renewal process, including the determination of whether an amendment is necessary.

# H. Monitoring Well Agreement

There are two main issues relating to the Special Condition 1, which requires LCRA and the GM to enter into a Monitoring Well Agreement. The GM and LCRA disagreed about certain aspects of this Special Condition as it relates to monitoring groundwater. As discussed above, the ALJs also foundfind it necessary to conduct monitoring of the impacts on surface water, as well.

# 1. Details of the Monitoring Well Agreement as It Relates to Groundwater

The GM and LCRA disagree about certain aspects of the special conditions relating to a Monitoring Well Agreement. Special Condition 1 of the Revised Draft Operating Permit requires LCRA to enter into a Monitoring Well System Construction and Maintenance Agreement, approved by the District's Board, within 180 days after the Permit <u>ishas been</u> issued. 189 LCRA would be required to construct and maintain the new monitoring wells, and a violation of the Monitoring Well Agreement would <u>violatebe a violation of</u> the Permit.

<sup>&</sup>lt;sup>188</sup> Revised Draft Operating Permit at 8.

<sup>&</sup>lt;sup>189</sup> In the Draft Operating Permit, this deadline was 90 days after permit issuance.

Special Condition 4 of the Revised Draft Operating Permits sets out certain criteria for a monitoring well system. Wells in the system must be screened in the Simsboro Formation; must improve the spatial coverage of the monitoring well system; must be easily accessible for regular measurements; and must meet any other criteria agreed upon by the GM and LCRA.<sup>190</sup>

# 2. Parties' Arguments

LCRA first objects to the 180-day deadline to enter into a Monitoring Well Agreement. LCRA argueds that decisions about the timing and number of monitoring wells should be deferred to provide both LCRA and the District with additional flexibility. <sup>191</sup> LCRA suggests that the deadline to enter into a monitoring well agreement should be before beginning construction of a well to be used in the first pumping phase of the permit (Phase II). <sup>192</sup> According to LCRA, not having an exact date would provide greater flexibility and would allow it (and the District) to take changed conditions into account. <sup>193</sup>

LCRA argueds that the portion of Special Condition 1 under which a violation of the Monitoring Well Agreement is a violation of the operating permit should be removed. In LCRA's view, tying together an as-yet-unnegotiated Monitoring Well Agreement and the Draft Operating Permit would add an unreasonable amount of uncertainty to the process. LCRA points out that it has an incentive to comply with the Monitoring Well Agreement because it will not be allowed to increase be prevented from increasing its pumping unless it complies. LCRA also argueds that the Monitoring Well Agreement should be enforced as a contract between the LCRA and the District, not as part of an operating permit.

LCRA also suggests that the requirement that it "has assisted the District in adding any New Monitoring Wells that the District and Permittee agreed are needed before Permittee may increase its pumping [to the requested phase]" be added to the Draft Operating Permit. 194

<sup>&</sup>lt;sup>190</sup> The Revised Draft Operating Permits remove a reference to an existing monitoring well, as LCRA requested. Similarly, the Revised Draft Operating Permits no longer require LCRA to "operate" the monitoring wells. LCRA had also requested that change.

<sup>&</sup>lt;sup>191</sup> LCRA's Closing at 45.

<sup>&</sup>lt;sup>192</sup> LCRA Ex. 8A at 2.

<sup>&</sup>lt;sup>193</sup> LCRA's Closing at 45.

<sup>&</sup>lt;sup>194</sup> LCRA Ex. 8A at 3-4.

The GM argueds that negotiation of a monitoring well agreement cannot be delayed until after production, particularly since monitoring wells are used to analyze local impacts, <sup>195</sup> such as those that have been contested in this case. The GM also argueds that the District has the authority to include a special condition requiring a monitoring well agreement pursuant to District Rule 5.3.D(2), which provides that an operating permit may include "any special conditions required by the considerations in Rule 5.2.D and any other special condition required or authorized by these Rules or applicable law."

# 3. ALJs' Analysis

The ALJs agreed that the District has the authority to require LCRA to enter into a Monitoring Well Agreement. The District may impose Special Conditions it determines are required by the considerations in Rule 5.2.D. <sup>196</sup>Among those considerations are whether the conditions and limitations "minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells." The special conditions relating to the Monitoring Well Agreement tie into those considerations. The ALJs also noted that the GM-has incorporated some of LCRA's suggestions in the Revised Draft Operating Permit.

That said, the ALJs recommended adopting LCRA's proposed change to extend the deadline to enter into a Monitoring Well Agreement. The ALJs were convinced that a flexible deadline, rather than a 180-day deadline, wouldwill better allow LCRA and the GM to take any new pumping into account. Additionally, the ALJs agreed that the portion of Special Condition 1 under which violation of the Monitoring Well Agreement is a permit violation should be removed. Incorporating a contract that does not yet exist into a permit adds too great a level of confusion to the permitting process.

The Board decided that while a permittee may agree to a special condition to negotiate a future contract as part of a settlement agreement, the District may not impose such a condition. Further, because the Final Operating Permit does not include the proposed phasing provisions, there is no need to condition such phasing on following the Monitoring Well Agreement.

# 4. Monitoring Effects on Surface Water Resources

As the ALJs previously found, the GAM modeling does not reliably address the potential cumulative effects of LCRA's proposed pumping on surface water resources, in combination with

<sup>&</sup>lt;sup>195</sup> Tr. at 1594.

<sup>&</sup>lt;sup>196</sup> District Rule 5.3.D(2).

all other authorized groundwater productionpumping in the District. Texas Water Code § 36.113(d)(2) requires the District to consider whether "the proposed use of water unreasonably affects... surface water resources." However, the GM's test-and-see approach, without a definite plan for monitoring effects, is not adequate to prevent unreasonable impacts on surface water resources.

The GM supports incorporating surface water monitoring in the Monitoring Well Agreement and is open to including language in that agreement that will be helpful in assessing impacts. The GM is also not opposed to Environmental Stewardship's suggestion of including a work plan in the permit developed for the Colorado River related which would relate to surface water/groundwater interaction in the permit. However, the GM suggests that both the surface water monitors and the work plan be part of the Well Monitoring Agreement to be negotiated with LCRA at a later date. 199

The ALJs <u>foundfind</u> that, in light of the fact that the GAMs show potential impacts to surface water resources caused by LCRA and District-wide pumping, <u>theany</u> monitoring well <u>agreement</u> <u>between LCRA and the Districtsystem</u> must include monitoring wells that could monitor effects on surface water resources. Thus, the ALJs recommend<u>ed</u> amending the definition of "Monitoring Well System" contained in Special Condition

(4)(a) in the Revised Draft Operating Permit to require that a monitoring well system must monitor such effects.

The ALJs <u>didhave</u> not <u>include included</u> Environmental Stewardship's recommended changes to the permits incorporating <u>Dr. Young's the</u> work plangereated by <u>Dr. Young's</u> While the ALJs agreed that adoption of a surface water plan (like the work plan created by <u>Dr. Young's</u> or some other work plan the District has approved) <u>mightmay</u> be beneficial for <u>inthe purposes of managing District-wide</u> pumping impacts on surface water resources, the adoption of a work plan in a permit is not appropriate. <u>The process of Aa</u>doption of a surface water work plan falls squarely within the process of adoption of the District's water management plan.<sup>200</sup> Instead, the Well Monitoring Agreement

<sup>&</sup>lt;sup>197</sup> GM's Reply at 39.

<sup>&</sup>lt;sup>198</sup> GM's Reply at 39.

<sup>&</sup>lt;sup>199</sup> GM's Reply at 39.

<sup>&</sup>lt;sup>200</sup> Tex. Water Code §§ 36.1071(a)(4) (requiring coordination with surface water entities when developing a water management plan to include addressing conjunctive surface water management issues), .108(d)(4).

should incorporate any work plan <u>added to that is adopted during</u> the <u>District's</u> water management plan<del>planning process</del>.

# I. 36-Hour Pump Test

LCRA argueds that certain changes should be made to Special Condition 14, which relates to the 36-hour pump test. A 36-hour pump test is used to collect data to calculate aquifer parameters, such as transmissivity and storativity. LCRA was concerned that, as it stood, the Special Condition lacked specific parameters for transmissivity that would be used to determine whether pumping limits should be imposed. LCRA also suggested shortening the advance notice required before performing the pump test. LCRA also requested a clarification that the authorized maximum rate of withdrawal is an aggregated amount for all wells and also requested a procedure that would allow it to appeal the GM's decision to limit pumping as a result of a pump test. In his reply brief, the GM noted that he agreed to all those changes and included those changes in the Revised Draft Operating Permits. Accordingly, No issues involving the Final Operating Permit includes 36-hour pump test remain to be resolved by the agreed modifications ALJs.

# J. Review of LCRA's Designs and Specifications

LCRA argue<u>ds</u> that Special Condition 15, which in the Draft Operating Permit provided that the GM has the authority to approve or reject LCRA's well design after <u>the</u> well <u>is</u> <u>completed</u> should be removed.

The GM concedes that a similar special condition is not in other permits. He argueds that some kind of well-design review is necessary in this case, however, because LCRA did not include specific well-design information in its Applications.<sup>201</sup> He adds that "[w]ell-design requirements are intended to ensure that the well is completed in such a way as to prevent degradation of the aquifer and to protect the quality of the state's resource." As shown by the Revised Draft Operating Permits, the GM has agreed to amend Special Condition 15 to require LCRA to provide design specifications before drilling, rather than after the well is completed. The revision also removes the GM's authority to reject that design.

With this change in the timing of the design specification review and the elimination of the GM's approval authority, the ALJs <u>foundfind</u> Special Condition 15 to be within the District's authority and not arbitrary. The ALJs recommend it remain in the Revised Draft Operating Permits.

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<sup>&</sup>lt;sup>201</sup> GM's Reply at 13.

# K. Place and Type of Use

At LCRA's request, the Revised Draft Operating Permits reflect a change to the place of use. In its prefiled testimony, LCRA requested to amend its Applications to reduce the place of use from LCRA's entire water service area to the portion of LCRA's service area that is within Lee, Travis, and Bastrop Counties. The GM initially did not accept the amendment because it was not part of the original application and was not submitted on the District's forms. However, no other parties contested this reduction in the place of useservice area, and the GM ultimately accepted the change after LCRA witness Hoffman testified to the requested reduction at the hearing. This reduction is reflected in the GM's Revised Draft Operating and Transport Permits.

LCRA also requested changes to the language relating to the type of use in both the Operating and Transportation Permits. The Applications requested authority to use the requested groundwater for all beneficial uses as defined by the District's rules and recognized under Chapter 36 of the Texas Water Code. The GM's initial draft permits granted LCRA's request by authorizing some, but not all, of the beneficial uses found in the District's rules and Chapter 36 (municipal, industrial, recreational, irrigation, and agricultural), because LCRA only listed that it had commitments for those uses. CRA re-urged that the GM change the language to include "all beneficial uses as defined by the District's rules and recognized under Chapter 36 of the Texas Water Code" to give LCRA the flexibility to serve customers for any lawful beneficial use in its service area. The GM responded that to be consistent with previously authorized permits, it must list out the authorized uses, and LCRA should be required to amend its permits if Chapter 36 is amended to include new uses. However, as a compromise, the GM's Revised Draft Operating Permits were amended to authorize "[all] beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B)."

<sup>&</sup>lt;sup>202</sup> LCRA Exs. 8A, 8B.

<sup>&</sup>lt;sup>203</sup> GM Ex. 1 (Totten direct) at 30.

<sup>&</sup>lt;sup>204</sup> GM's Reply at 4.

<sup>&</sup>lt;sup>205</sup> GM's Reply at 4.

<sup>&</sup>lt;sup>206</sup> LCRA Ex. 3(A-2).

<sup>&</sup>lt;sup>207</sup> GM Ex. 7.

<sup>&</sup>lt;sup>208</sup> LCRA's Closing at 42.

The ALJs agreed that LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use and the revision offered by the GM appears to allow for that flexibility.

The Board approved Final Operating Permits that allow all beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).

# L. Mitigation

The Brown Landowners, the Hernandezes, and Recharge argued that LCRA should be required to create a mitigation account, such as the one contained in Recharge's permit. This mitigation account was part of a negotiated settlement of the contested case concerning Recharge's application.<sup>209</sup>

The parties who argued in favor of mitigation have not pointed to a provision of chapter 36 or the District's rules that allow the District to impose mitigation requirements in individual permits. Certainly, it seems that the District could adoptset up rules, or require production fees, that could be used for a mitigation fund. But the Protestants didhave not present any presented the authority that would allow the under which District toeould require the establishment of a mitigation fund. Nor have they offeredpresented any analysis for which permits should be subject to such a fund.

The ALJs recognized the difficulty this creates for the Protestants, particularly Recharge. Under the terms of Recharge's settlement agreement, it could theoretically pay to mitigate LCRA's impacts. But that difficulty does not give the District the authority, much less require it, to impose a mitigation fund as a special condition.<sup>210</sup>

#### **IV. ISSUES RELATING TO THE TRANSPORT PERMITS**

Pursuant to District Rule 6.1, a transport permit is required to convey groundwater beyondout of the District's boundaries, which are coextensive with the boundaries of Bastrop and Lee counties.<sup>211</sup> LCRA's Applications initially requested transport permits to use the requested

<sup>&</sup>lt;sup>209</sup> GM Ex. 8.

<sup>&</sup>lt;sup>210</sup> In the *City of Bastrop* contested case, the ALJ addressed the proposed mitigation fund in the analysis of whether the effects of pumping would be unreasonable. *City of Bastrop*, SOAH Docket No. 952-15-3851, PFD at 31. Here31Here, because LCRA did not propose a mitigation fund, there was none to analyze. Moreover, nothing in the City of *Bastrop* PFD suggested that a mitigation fund was required.

<sup>&</sup>lt;sup>211</sup> Tex. Spec. Dist. Code § 8849.004.

25,000 acre-feet per year of groundwater anywhere within LCRA's water service area. LCRA subsequently amended its Applications to limit the place of use of the groundwater to its service area only within Bastrop, Lee, and Travis Counties. Therefore, transport permits are only required for LCRA's requested authorization to use groundwater in Travis County, the only place of use that is not within the District's boundaries. The GM's Draft Transport Permits would have authorized LCRA's requested place of use in Travis County; however, the Draft Transport Permits include a special provision which prohibits the transport of LCRA's authorized groundwater pursuant to a bed and banks permit or discharge of the groundwater into any surface water.

# A. Whether LCRA's Transport Permit Applications Meet the Requirements of Section 6 of the District's Rules and Texas Water Code § 36.122(f).

The GM concluded that LCRA's applications for transport permits meet the requirements of Section 6 of the District's Rules and <u>Texas Water</u> Code § 36.122(f), and the ALJs agree<u>d</u>.<sup>217</sup> The Applications met each of the filing requirements under District Rule 6.2.

In reviewing a proposed transfer of groundwater out of the District, <u>Texas Water</u> Code § 36.122(f) and District Rule 6.3 require the District to consider: (1) the availability of water in the District and in the proposed receiving area during the period for which the water supply is requested; (2) the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District; and (3) the approved regional water plan and approved District management plan. The GM properly considered each of the factors, none of which were directly challenged by any party. The analysis of the proposed effect of pumping, as set out above applies to the second factor, and no party alleges that the GM did not consider the approved regional water plan or district management plan.

<sup>&</sup>lt;sup>212</sup> LCRA Exs. A-4, A-2 at 3.

<sup>&</sup>lt;sup>213</sup> LCRA Ex. 1 (Hofmann direct) at 21.

<sup>&</sup>lt;sup>214</sup> Tex. Spec. Dist. Code § 8849.004; GM Ex. 9.

<sup>&</sup>lt;sup>215</sup> GM Ex. 7.

<sup>&</sup>lt;sup>216</sup>-GM Ex. 7.

<sup>&</sup>lt;sup>217</sup> GM's Closing at 51.

As for the <u>first</u> factor relating to the availability of water in the district and in the proposed receiving area during the period for which the water supply is requested, the District considered the 2016 Region K and Region G Water Plans.<sup>218</sup> The Region K and Region G Water Plans identify water supply <u>demands</u> in the counties LCRA is requesting to serve (Lee, Bastrop, and Travis Counties) and project that there is sufficient water available for LCRA's planned withdrawals from the Simsboro Formation in the Carrizo-Wilcox aquifer underlying the District.<sup>219</sup>

The Board concluded that the second factor relating to the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the District was analyzed for the Operating Permit, and that analysis applies here. For the third factor related to the approved regional water plan and approved District management plan, the Board reviewed the evidence presented through the Region K and Region G Water Plans and the District's management plan. The Final Transport Permits meet all the requirements of Texas Water Code § 36.122(f) and District Rule 6.3

# B. Draft Transport Permit Special Provision Relating to Discharge of Groundwater into a Surface Watercourse

LCRA requests removal of the special provision relating to the prohibition against discharge of the groundwater into a surface watercourse from the Draft Transport Permit, but the GM has declined to do so.<sup>220</sup> The ALJs find that the special provision should be removed from the permit because it is unnecessary, overbroad to accomplish the District's stated purpose, and unlawful as currently drafted.

# 1. GM's Arguments

The GM testified that he included the special provision because he was concerned regarding water loss through evaporation or carriage losses. <sup>221</sup> Mr. Totten's prefiled direct testimony states, "there was no plan in the requested permit to prevent waste during the transport of water to the farthest areas in LCRA's service area." <sup>222</sup>

<sup>&</sup>lt;sup>218</sup> GM's Closing at 51.

<sup>&</sup>lt;sup>219</sup> LCRA Ex. 13; GM's Closing at 51.

<sup>&</sup>lt;sup>220</sup> GM's Closing at 49-50.

<sup>&</sup>lt;sup>221</sup> GM Ex. 1 (Totten direct).

<sup>&</sup>lt;sup>222</sup> GM Ex. 1 (Totten direct) at 19.

The GM acknowledges that LCRA's subsequent limitation of its request to include only Travis County as a place of use outside of the District makes transportation of groundwater by use of a proposed bed and banks permit impossible because water cannot be conveyed upstream upriver from Bastrop County to Travis County.<sup>223</sup> However, the GM maintains that the special provision remains necessary because LCRA might choose to amend the permits in the future to change the place of use to areas downriver from Bastrop County.<sup>224</sup> Therefore, he argues, the possibility of transport of the groundwater via the bed and banks is not foreclosed.<sup>225</sup> The GM will recommend the District include such a provision in all future transport permits.<sup>226</sup>

The GM's explanation for the proposed provisions evolved after the hearing on the merits. The GM continues to maintain in his briefs that inclusion of the provision is within the District's authority and duty to prevent waste of groundwater pursuant to chapter 36 of the Code. The GM elaborates on his original position (that LCRA did not state its plan to prevent waste during the transportation) by now stating conclusively, that discharge of *any* amount of groundwater into the bed and banks would constitute waste under chapter 36. <sup>227</sup> To support his argument that discharge of groundwater in the bed and banks of a surface water body (watercourse) is *per se* waste, the GM relies on the definition of waste in the District's rules and Chapter 36, which provides that "waste" includes:

willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the [TCEQ] under Chapter 26. 228

The GM acknowledges that LCRA possesses an approved in-district permit from the District for the purpose of discharging groundwater into Lake Bastrop for power plant cooling purposes.<sup>229</sup> However, the GM argues that his proposed special provision prohibiting LCRA from doing so in

<sup>&</sup>lt;sup>223</sup> GM's Closing at 49.

<sup>&</sup>lt;sup>224</sup> GM's Closing at 49.

<sup>&</sup>lt;sup>225</sup> GM's Closing at 49.

<sup>&</sup>lt;sup>226</sup> GM's Closing at 49.

<sup>&</sup>lt;sup>227</sup> GM's Closing at 49; GM's Reply at 15-16.

<sup>&</sup>lt;sup>228</sup>-Tex. Water Code § 36.001(8)(E); see also District's Rules §1.

<sup>&</sup>lt;sup>229</sup>-GM's Reply at 15-16.

Travis County is not more restrictive than for that previous in-district permit, because that permit did not include a transport permit.<sup>230</sup> His primary concern, he states, is with regional transport of water via a bed- and-banks permit.<sup>231</sup>

FINAL DECISION

# 2. LCRA's Arguments

LCRA first argues that the special provision is unnecessary in these transport permits due to the physical impossibility of using any watercourse to transport water from Bastrop County to Travis County. Second, LCRA argues that the District does not have the enumerated authority to prohibit the transport of water in the bed and banks of a watercourse. Third, LCRA points out that it is authorized by the District to discharge water into Lake Bastrop by an already-issued permit. Therefore, LCRA states, the District is prohibited by section 36.122(c) of the Texas Water Code, from making more restrictive conditions on transporters than it does on in-district users. Finally, LCRA cites various authorities to support its argument that transport of water in a watercourse is not, as the District asserts, per se waste.

LCRA's first argument regarding whether transport of water in a watercourse constitutes waste is that the definitions of "waste" cited by the GM both require groundwater to "escape" into a watercourse to constitute waste. 237 Permitted transport of groundwater does not meet the definition of "waste," LCRA contends, because when a permit to transport groundwater via bed and banks of a watercourse is obtained prior to discharge, the groundwater does not "escape." Instead, the transporter maintains legal possession and ownership of the groundwater for later diversion even after it is discharged. 239

LCRA cites several cases to show that discharge of groundwater into a watercourse is not waste and that using the bed and banks of a watercourse is a lawful means of transporting

<sup>&</sup>lt;sup>230</sup> GM's Reply at 15-16.

<sup>&</sup>lt;sup>231</sup> GM's Reply at 15-16.

<sup>232</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>233</sup> LCRA's Closing at 66-74, citing various sections of ch. 36, Tex. Water Code.

<sup>&</sup>lt;sup>234</sup> LCRA Ex. 49.

<sup>&</sup>lt;sup>235</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>236</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>237</sup> LCRA's Closing at 66-74.

<sup>238</sup> LCRA's Closing at 66-74.

<sup>239</sup> LCRA's Closing at 66-74.

groundwater.<sup>240</sup> The cases include: *City of Corpus Christi v. City of Pleasanton*, 276 S.W.2d 798, 800 (Tex. 1955) (holding that the transport of groundwater using the bed and banks is not waste under the 1925 statutory definition of "waste"); *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235 (Tex. Civ. App. Austin 1989, writ denied) (holding that a landowner has absolute ownership of groundwater under his land, even where the groundwater would normally percolate into a surface watercourse, but for a landowner intercepting it underground and then discharging it into the same stream for later diversion); *City of San Marcos v. Texas Comm'n on Environmental Quality*, 128 S.W.3d 264 (Tex. App. Austin 2004, pet. denied) (holding that effluent derived from privately owned groundwater, was abandoned once discharged to surface water, as distinguished from the holdings in *Corpus Christi* and *Denis* solely because effluent was not fungible with superior quality surface water); and *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814, 822-23 (Tex. 2012) (recognizing that the Code specifically allows authorizations for a person to discharge privately owned groundwater into a natural watercourse and withdraw it downstream).

LCRA also cites to provisions of the Texas Water Code to support its position. LCRA notes that Texas Water Code § 11.042 specifically authorizes the use of the bed and banks of a watercourse to transport effluent derived from privately owned groundwater under subsection (b) or other water under subsection (c). 241 LCRA argues that the legislative history for those subsections as well as TCEQ's history of routinely granting permits to transport groundwater under those subsections support its position that such transport is not waste. 242 LCRA mentions that LCRA has a bed and banks authorization from TCEQ for its Lake Bastrop Permit which uses groundwater permitted by the District. 243 LCRA also mentions that Texas Water Code § 11.143 requires notice to a groundwater conservation district when a project contemplates the discharge of groundwater into a watercourse for use as an alternative to state surface water—which necessarily implies such discharges are allowed by law. 244

Finally, LCRA argues that the transport of groundwater in the bed and banks of a watercourse cannot be waste because it does not involve more transportation losses than

<sup>&</sup>lt;sup>240</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>241</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>242</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>243</sup> LCRA Ex. 49.

<sup>&</sup>lt;sup>244</sup>-LCRA's Closing at 66-74.

conveyance used by other users in the District - such as conveyance by pipes. <sup>245</sup> LCRA argues that certain of the District's permit holders experience losses of 20% or more conveying water in pipes, whereas LCRA estimates the losses of transport to be 10% for transport in the bed and banks of the Colorado River from Lake Travis to the Texas Coast. <sup>246</sup>

# 3. ALJs' Analysis

The ALJs find that the special provision should not be included in LCRA's permits. Groundwater districts have a duty to ensure that groundwater is put to beneficial use and have the authority to control waste of groundwater with rules and permit conditions. A district must consider whether an applicant for a well permit has agreed to avoid waste and achieve water conservation. The District argues that inclusion of special provision in LCRA's transport permit prohibiting all discharge of groundwater into a watercourse is necessary based upon these provisions and the definitions of "waste" found in Chapter 36 of the Texas Water Code and the District' rules. For reasons set out below, the ALJs disagree.

Further, the ALJs find that the special provision is unnecessary in the transport permits due to the physical impossibility of using a watercourse to transport water upstream from Bastrop County to Travis County. Additionally, even if the question were not mooted by LCRA's amendments to the transport applications, the ALJs find that, as drafted, the special provision is overbroad to accomplish the District's stated purpose of preventing waste of groundwater in transport. Finally, even if the provision was more narrowly tailored to address only waste of groundwater in transport, the provision would still be unlawfully restrictive, because there is no evidence in the record to support the GM's opinion that water transported via bed and banks would result in loss or waste.

#### a. The Special Provision Exceeds the District's Authority

The ALJs agree with LCRA that discharge of groundwater into a surface watercourse pursuant to a bed- and- banks permit is not waste. The GM argues that "waste" is defined in chapter 36 of the Code and the District's Rules to include any discharge of groundwater into a watercourse without a chapter 26 wastewater discharge permit. The ALJs disagree. Groundwater discharged

<sup>&</sup>lt;sup>245</sup> LCRA's Closing at 66-74

<sup>&</sup>lt;sup>246</sup> LCRA's Closing at 66-74.

<sup>&</sup>lt;sup>247</sup>-Tex. Water Code §§ 36.101(a),

<sup>&</sup>lt;sup>248</sup>-Tex. Water Code § 36.113(d)(6).

under a bed and banks permit does not meet the definitions of "waste" relied upon by the GM because the definitions cited specifically require the "escape" of groundwater—meaning the owner has lost possession of it without putting it to beneficial use. 249 A bed and banks permit holder maintains ownership and control over the water discharged pursuant to a bed-and-banks permit and can put the water to a beneficial use even after it has been discharged. Such discharges are authorized by the Texas Water Code. 250 The legislative history of the bed-and-banks permit provisions, case law, and the historical permitting practice of the TCEQ and groundwater districts (including this District) clearly show that such discharges are not considered waste, as argued by the GM:

LCRA is no longer seeking to transport water out of the district via bed and banks, therefore, LCRA does not have the burden to show that hypothetical transport of water will result in waste. Nevertheless, LCRA introduced evidence to show that LCRA's most extreme hypothetical transport (from Lake Travis to the Texas coast), would incur fewer losses of groundwater than other existing users currently incur transporting water within the District. In contrast, the record does not show that the GM has made any analysis to justify his blanket prohibition of all transport in a watercourse. Without any evidence to support the GM's conclusion that transporting groundwater out of the District in a watercourse pursuant to a lawfully obtained permit would result in loss or waste, the provisions are arbitrary and exceed the District's authority to prevent waste.

# b. The Special Provision Is Unnecessary

The GM acknowledges the impossibility of transporting water in a watercourse upriver from Bastrop County to Travis County; however, the GM argues that the provision is necessary because LCRA may later seek to amend its transport permits to include a new place of use downriver from Bastrop County at some point in the future, which would open the possibility of LCRA transporting groundwater in a watercourse. This argument is unpersuasive. Any such amendment would be subject to the District's application and review process, and the GM could evaluate such a request on its actual, and not hypothetical, merits or failings.

<sup>&</sup>lt;sup>249</sup> Tex. Water Code § 36.001(8)(E); see also § 1 of the District's Rules.

<sup>&</sup>lt;sup>250</sup> Tex. Water Code §§ 11.043, 153, 143. See also Tex. Water Code § 36.113(d)(5) (provision states that use of groundwater for certain purposes which involve groundwater discharge to surface watercourses is only scrutinized in a particular enumerated district, but otherwise not limited in any other areas).

<sup>&</sup>lt;sup>251</sup> LCRA's Closing at 66 74.

The GM states that is important to include the provision in these particular transport permits for fairness and consistency because the GM intends to bar transport via bed and banks for all new permits by including the provision in any new future transport permit. As discussed below, the ALJs conclude that the special provision in this matter is overbroad as drafted and unlawful absent any analysis or evidence that transport would result in loss or waste of groundwater.

# e. The Special Provision Is Overbroad to Accomplish Its Stated Purpose

On its face, the provision appears to go beyond the District's stated purpose of simply preventing the waste of groundwater in transport and actually prohibits uses that the District allows within its boundaries. Under Code § 36.122(c) "a district may not impose more restrictive permit conditions on transporters than the district imposes on existing in-district users." The special provision language is significantly more expansive than simply prohibiting the transport of water in the bed and banks of a watercourse. It states:

Water withdrawn and transported under the permit must be put to beneficial use at all times, and may not be transported pursuant to a bed and banks permit nor discharged to any surface water, as defined by Section 11.021 of the Texas Water Code, as amended (e.g., a stream, river, or lake (emphasis added).

The special provision would not only prevent the transportation of water to Travis County pursuant to a bed and banks permit, it would also more broadly prevent the discharge and beneficial use of the groundwater *in* Travis County, by LCRA or any of its customers, after transport to Travis County. For example, by the plain language, this provision would disallow LCRA, or any of LCRA's customers, from using the groundwater for power plant cooling purposes in Travis County (as LCRA is currently authorized to do within the District's boundaries to use its Lake Bastrop Permit). This violates the prohibition in Code § 36.122(c) of a district imposing more restrictive permit conditions on transporters than the district imposes on existing in-district users.

# VI. CONCLUSION

The ALJs recommend issuance of the Revised Draft Operating Permits and the Draft Transport Permits with the following changes:

- 1. That Special Condition 1 of the Revised Draft Operating Permits be amended to read, "Prior to construction of a well authorized under Special Condition 3(b), Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee;"
- 2. That the following language be removed from Special Condition (3)(a) of the Revised Draft Operating Permit: "and has complied with the terms and provisions of the Monitoring Well Agreement."

- 3. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(c)(iv) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase III."
- 4. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(d)(iii) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase IV."
- 5. That Special Condition (4)(a) of the Revised Draft Operating Permit be amended to include a requirement that a "Monitoring Well System" include wells to monitor surface water;
- 6. That Special Condition 5 be amended to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and
- 7. That Special Provision 1, prohibiting discharge into a surface watercourse, be removed from the Draft Transport Permits.

The Board approves issuance of the Operating Permits with a five-year term at a maximum production of 8,000 acre-feet per year and Transport Permits with a three-year term (to be converted to a thirty-year term once construction of transportation facilities begins) at a maximum amount of 25,000 acre-feet per year.

In support of these recommendations, the <u>Board provides ALJs propose</u> the following Findings of Fact and Conclusions of Law.

# VII. FINDINGS OF FACT

# **Background and Procedural History**

- 1. The Lower Colorado River Authority (LCRA) is a conservation and reclamation district established by the Texas Legislature in 1934 that serves as a regional water supplier within its 35-county service area.
- 2. In 2015, as part of a goal to diversify its water supply and "drought proof" it, LCRA acquired groundwater rights beneath the Griffith League Ranch, an approximately 4,847.5-acre property owned by the Capitol Area Council, Inc. of the Boy Scouts of America.
- 3. On February 1, 2018, LCRA filed applications (Applications) to drillfor eight water wells with associated operating permits and transport permits with the Lost Pines Groundwater Conservation District (District). The applications for operating permits sought authorization to withdraw a total of 25,000 acre-feet per year of groundwater from the Simsboro Formation based on the groundwater rights it acquired at the Griffith League Ranch. The water was to be used for all beneficial uses under Chapter 36 of the Texas Water Codemunicipal, industrial, recreational, irrigation and agricultural purposes.
- 4. On February 21, 2018, LCRA resubmitted the Applications on different forms.
- 5. On August 20, 2018, the District's General Manager (GM) notified LCRA by letter that its Applications were administratively complete and that the Applications would be set for a public hearing. The letter also provided LCRA with the GM's Draft Operating Permits and Draft Transport Permits (collectively, Draft Permits.)
- 6. Following notice, the District held a public hearing on the Applications on September 26, 2018, and voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a hearing on the Applications. Several persons disagreed with the issuance of the Draft Permits, and LCRA challenged some of the Draft Operation and Transport Permit provisions. Following the public hearing, the Board voted to contract with the State Office of Administrative Hearings (SOAH) to conduct a preliminary hearing on the Applications. Transport Permit provisions.
- 7. On December 18, 2018, SOAH Administrative Law Judges (ALJs) Michael O'Malley and Laura Valdez held a prehearing conference in Bastrop, Texas. At the prehearing conference, the ALJs admitted the following as parties: LCRA, the District, Aqua Water Supply Corporation (Aqua), Environmental Stewardship, City of Elgin (Elgin), and Recharge Water, LP (Recharge). A group of landowners represented by a single attorney was also admitted, and will be referred to as the Brown Landowners. Several self-represented litigants were also named parties.
- 8. Following a challenge to party status, the ALJs determined that many of the self-represented litigants, and some of the Brown Landowners, did not have a justiciable interest and struck them as parties. The remaining self-represented litigants were Peggy

Jo and Marshall Hilburn, Walter Winslett, JC Jensen, Elvis and Roxanne Hernandez, Verna L. Dement, Catherine and Charles L. White, and Richard Martinez. Mr. Jensen and Mr. Martinez withdrew their protests, as did several of the Brown Landowners.

- 9. Aqua is a retail public utility with a service area in Bastrop, Caldwell, Fayette, Lee, Travis, and Williamson Counties that has a permit from the District authorizing the production of 23,627 acre-feet per year from 15 wells in the Simsboro Formation. Twelve of those wells are in two well fields near the shallow outcrop of the Simsboro. Aqua's three other wells are located on the south side of Highway 290, in the deeper downdip portion of the aquifer.
- 10. Elgin has a retail public utility that provides retail water utility service within its certificated service area. The city, which is located in the greater Austin area, expects continued and rapid growth. Elgin has four wells, permitted by the District, that are all partially or wholly completed within the Simsboro Formation. Two of Elgin's wells are in the outcrop area of the Simsboro Formation, with the wells screened partially in both the Simsboro and Hooper Formations. Its other two wells are located in the downdip and are entirely screened within the Simsboro Formation.
- 11. Recharge, formerly known as End Op, L.P., has operating permits from the District authorizing the production of 46,000 acre-feet from 14 wells, to be phased in, which it acquired following years of litigation and a settlement of the its contested case on its permit applications. Seven of the permitted wells are to be located in Bastrop County, and seven are to be located in Lee County.
- 12. The Hernandezes' well is in the Calvert Bluff Formation, which overlays the Simsboro. The Brown Landowners' wells are located throughout the District.
- 13. The hearing on the merits was held October 15-22, 2019, before ALJs Ross Henderson and Rebecca S. Smith. The first four days of the hearing were held in Bastrop, Texas, and the last two took place at SOAH's hearing facility in Austin, Texas. Mr. and Mrs. Hernandez were the only self-represented litigants who prefiled testimony and participated in the hearing on the merits. The record closed on January 31, 2020, with the filing of reply briefs.
- 14. In its original Applications, LCRA stated that the water would be used throughout its 35-county service area. In its testimony, and at hearing, LCRA amended its request to only seek to use the water in Bastrop, Lee, and Travis Counties.
- 15. As an attachment to his reply brief, the GM provided a January 31, 2020, Revised Draft Operating Permit (Revised Draft Operating Permit) that made several changes to the Draft Operating Permit. No party objected to these changes.

# **Uncontested Texas Water Code Factors Relevant to Operating Permits**

16. The Applications for Operating Permit included all of the information required by chapter 36 of the Texas Water Code (Code) and the District Rules.

- 17. LCRA intends to use the groundwater it produces to meet its existing and future water supply obligations.
- 18. Standard Provision No. 1 in the Revised Draft Operating Permits require that the water withdrawn be put to beneficial use at all times and prohibits the operation of a permitted well in a wasteful manner.
- 19. The District's Management Plan <u>statedstates</u> that the District will endeavor to manage groundwater to meet demands on a sustainable basis.
- 20. The Revised Draft Operating Permits' production limits, requirements for pump-testing and monitoring, and a provision that LCRA is subject to future production limits allow the District to manage groundwater to meet demands on a sustainable basis.
- 21. LCRA's proposed use of water is consistent with the District's approved management plan.
- 22. LCRA has adopted water conservation and drought contingency plans pursuant to its policy to meet or exceed state water conservation requirements.
- 23. In its Applications and with its plans, LCRA has agreed to avoid waste and achieve water conservation.
- 24. In its Applications, LCRA agreed that reasonable diligence will be used to protect groundwater quality and that it will follow well -plugging guidelines at the time of any well closure.
- 25. LCRA does not have a history of non-compliance with District Rules or Chapter 36.

# **Unreasonable Effects on Groundwater or Surface Water Resources or Existing Permit Holders**

- 26. The 2018 Central Carrizo-Wilcox Groundwater Availability Model (New GAM) provides a better tool to model the impact of LCRA's proposed pumping than does the 2004 Central Queen City-Sparta Groundwater Availability Model.
- 27. LCRA's expert Dr. Steven Young performed several model runs using the New GAM, factoring in well-design factors, such as pump settings, well constrictions, and location of well screens for Aqua's and Elgin's wells.
- 28. Under Dr. Young's modeling, LCRA's proposed pumping would not cause the water level in Aqua's or Elgin's wells to drop below the pump elevation.
- 29. The Special Conditions proposed by the GM in the Revised Draft Operating Permit—in particular, the 36-hour pump test and, the requirement that a groundwater monitoring well agreement be entered into, and the phased production tiers—will help ensure that LCRA's proposed use will not unreasonably affect existing groundwater resources or existing permit holders.

- 30. Dr. Young's modeling showed that LCRA's proposed pumping shouldwill not unreasonably affect existing surface water resources.
- 31. The modeling also showed that LCRA's proposed pumping, when combined with other groundwater productionpumping, has the potential to affect existing surface water resources.
- 32. Because LCRA's proposed <u>production pumping</u>, when combined with other <u>groundwater production pumping</u>, has the potential to affect existing surface water resources, the <u>FinalRevised Draft</u> Operating Permits <u>should be revised to require monitoring</u> for effects on surface water resources.

Whether Granting the Applications is Consistent with the District's Duty to Manage Total Groundwater Production on a Long-Term Basis to Achieve an Applicable Desired Future Condition

- 33. The District is a part of Groundwater Management Area 12, which on April 27, 2017, adopted a desired future condition (DFC) for the Simsboro Formation of a District-wide average drawdown between January 2000 and December 2069 of 240 feet.
- 34. The DFC is also divided into DFCs for the counties in the District. For Bastrop County, the DFC is a county-wide average drawdown between January 2000 and December 2069 of 174 feet; for Lee County, the DFC is a county-wide average drawdown between those dates of 350 feet.
- 35. Modeled Available Groundwater (MAG) is the amount of water that the Texas Water Development Board's executive administrator determines may be produced on an average annual basis to achieve a DFC.
- 36. MAG is a factor for the District to consider when managing the DFC.
- 37. Granting the application, with the The Special Conditions contained in the FinalRevised Draft Operating Permit are, is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve the applicable DFC.
- 38. The TWDB executive administrator's estimate of the current and projected amount of the groundwater produced under exemptions granted by District Rules and Texas Water Code §36.117 is a factor for the District to consider when reviewing an application and managing the DFC.
- 39. The amount of groundwater authorized under permits previously issued by the District is a factor for the District to consider when reviewing an application and managing the DFC.
- 40. A reasonable estimate of the amount of groundwater that is actually produced under permits issued by the District is a factor for the District to consider when reviewing an application and managing the DFC.

41. Yearly precipitation and production patterns are factors for the District to consider when reviewing an application and managing the DFC.

Whether the Conditions and Limitations in the Revised Draft Operating Permit Will Prevent Waste, Achieve Water Conservation, Minimize as far as Practicable the Drawdown of the Water Table or the Reduction of Artesian Pressure, or Lessen Interference Between Wells

- <u>4238</u>. LCRA's proposed wells will be located greater more than 100 feet away from the nearest property line and will be spaced at least 5,000 feet from the nearest Simsboro well not owned by LCRA.
- 4339. LCRA's proposed wells will be located where the aquifer is deepest, in some of the most transmissive parts of the Simsboro in the District.
- <u>4440</u>. Because LCRA's proposed wells will be part of an aggregated system, LCRA will be able to adjust pumping among the wells to minimize <u>the</u> reduction of artesian pressure.
- <u>4541</u>. Under the Revised Draft Operating Permits, the GM can restrict <u>the rate of withdrawalpumping</u> if the 36-hour pump tests reveal that impacts from pumping are worse than anticipated.
- <u>4642</u>. The Special Conditions regarding the 36-hour pump tests, <u>phasing</u>, and monitoring wells in the <u>FinalRevised Draft</u> Operating Permit will prevent waste, achieve water conservation, minimize as far as practicable the drawdown of the water table or the reduction of artesian pressure, or lessen interference between wells.

#### **Other Issues**

- 4743. The District has not adopted <u>rules or policies requiring an applicant to reduce of reducing</u> the initial amount of water requested by an applicant or of requiring <u>permittees to provide</u> financial mitigation for <u>adverse impacts caused by production in the District Bastrop County.</u>
- 4844. The District has not adopted a <u>rule or policy</u> of requiring spacing between wells of at least 5,000 feet as between all large volume wells, even those owned by the same owner.
- <u>4945</u>. <u>The Special Condition 15</u> in the <u>FinalRevised Draft</u> Operating Permits, which requires LCRA to provide well design specifications before drilling, is <u>appropriate and</u> within the District's authority and is appropriate.

#### **Phasing Issues**

- 46. Revised Draft Operating Permits Special Condition 3 provides for tiered phasing of production containing four phases.
- 47. Phase I, which requires LCRA to add new monitoring wells and to comply with the monitoring well agreement required in another special condition.

- 48. Phase II authorizes the withdrawal from two wells (Wells 7 and 8) of an aggregated annual amount of up to 8,000 acre-feet of water, with an aggregated maximum rate of withdrawal of 6,000 gallons per minute. LCRA would not be authorized to withdraw more water per year than the amount LCRA has a binding commitment to provide to an authorized place of use.
- 49. Under Phase III, the aggregated annual withdrawal amount could be increased to 15,000 acre-feet of water per year from four wells with an aggregated maximum rate of withdrawal of 10,000 gallons per minute. To move to Phase III, LCRA must show it has withdrawn 4,000 acre-feet per year from a combination of one or more of the aggregated wells during two consecutive twelve-month period sand show binding commitments. LCRA must also show that the Estimated DFC Year Drawdown is less than the DFC for the Simsboro in effect when LCRA submits that information.
- 50. In Phase IV, the aggregated annual withdrawal may be increased to an amount not to exceed 25,000 acre-feet per year from all eight wells, with an aggregated maximum rate of withdrawal of 18,000 gallons per minute. To reach this phase, LCRA must show binding commitments and that it has withdrawn at least an aggregate amount of at least 11,250 acre-feet per year from a combination of one or more of the aggregated wells during three consecutive twelve-month periods. LCRA must also show that the Estimated DFC Year Drawdown is less than the DFC for the Simsboro in effect when LCRA submits that information.
- 51. Revised Draft Operating Permits Special Conditions (3)(c)(i) and (3)(d)(iii) require LCRA to show binding commitments to provide the requested withdrawal amount before advancing to the next phase.
- 3852. The Regional Water Plans and <u>LCRA's LCRA's</u> existing <u>contracts demonstrate</u> demonstrated there is a need for the water in the receiving area.
- <u>50</u>53. Pumping water without beneficially using it <u>is a violation of would violate</u> the <u>FinalRevised Draft</u> Operating Permit.
- 54. Therefore, there is not a compelling reason to include the requirement for binding contracts in Revised Draft Operating Permits Special Conditions (3)(c)(iv) and (3)(d)(iii).
- 55. The Revised Draft Operating Permits contain most of the changes LCRA proposed to the formula in the Draft Operating Permit's Special Condition 3, with the exception of which DFC should be considered in deciding whether LCRA can advance to the next phase of production.
- 56. Examining LCRA's pumping in relation to the DFC in existence at the time LCRA seeks to advance to the next tier of pumping, helps ensure that LCRA is not exempt from the effect of changes in conditions when it seeks to pump more water.

- 57. The reference to "the Desired Future Condition for the Simsboro Aquifer in effect when the Permittee submits the information" in Revised Draft Operating Permits Special Conditions (3)(e)(ii) and (3)(d)(ii) should be included in the issued permits.
- 58. Special Condition 5 of the Revised Draft Operating Permit Special Condition 5 provides that if LCRA files a renewal application, the GM and LCRA must evaluate "the data collected from the Monitoring Well System prior to the date of the application to renew to determine whether LCRA's pumping has resulted in substantially different impacts to groundwater resources than those predicted by the modeling relied upon [by] the District when the Permit was issued and jointly propose revisions to the Permit based on that data."
- <u>5159</u>. The parties admitted at this hearing are affected persons, and have an interests beyond those of the general public.
- 52. The Final Operating Permits provide that the authorized maximum rate of withdrawal is an aggregated amount for all LCRA wells included in the authorized well field and allow LCRA to appeal the GM's decision to limit the rate of withdrawal based on the results of a pump test.
- 53. LCRA did not submit well design specifications with its Applications.
- 54. The GM is authorized to require LCRA to provide design specifications.
- 55. A Special Condition of the Revised Draft Operating Permit requires LCRA to provide the GM with design specifications before drilling a new well.
- 56. The Final Operating Permits authorize "[a]ll beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B)."
- 57. LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use, and the Final Operating Permits provide for that flexibility.
- 60. To protect their interests, Special Condition 5 should be clarified to provide that affected persons may participate in the permit renewal process, including the determination of whether an amendment is necessary.

#### **Monitoring Wells**

- 5861. Special Condition 1 of the FinalRevised Draft Operating Permits would requirePermit requires LCRA to enter into a Monitoring Well System Construction and Maintenance Agreement, approved by the District's Board, before LCRA may begin construction of a wellwithin 180 days after the Permit has been issued. Under this condition, LCRA would be required to construct and maintain the new monitoring wells, and a violation of the Monitoring Well Agreement would be a violation of the Permit.
- <u>5962</u>. <u>A Special Condition 4-of the Final Revised Draft</u> Operating Permits sets out certain criteria for a monitoring well system. Wells in the system must be screened in the Simsboro

- Formation; must improve the spatial coverage of the monitoring well system; must be easily accessible for regular measurements; and must meet any other criteria agreed upon by the GM and LCRA.
- 63. Providing a flexible deadline, rather than a 180-day deadline, will better allow LCRA and the GM to take any new pumping into account.
- 64. Special Condition 1 should be amended to require LCRA and the GM to enter into a Monitoring Well Agreement before LCRA can construction of a well, rather than within 180 days of permit issuance.
- 65. Incorporating a Monitoring Well Agreement that does not yet exist into a permit adds a significant level of confusion to the permitting process.
- 66. The portion of Special Condition 1 under which violation of the Monitoring Well Agreement is a permit violation should be removed from the permit.
- 67. The GM incorporated LCRA's proposed changes to the 36-hour pump test into the Revised Draft Operating Permit.
- 68. Special Condition 15 of the Revised Draft Operating Permit requires LCRA to provide the GM with design specifications before drilling a well.
- 69. LCRA did not submit well design specifications with its Applications.
- 70. The GM is authorized to require LCRA to provide design specifications.
- 71. Revised Draft Operating Permits authorize "[a]ll beneficial uses authorized by Texas Water Code § 36.001(9)(A) (B)."
- 72. LCRA, as a regional water provider, should have the flexibility to serve its customers for any lawful beneficial use and the revision offered by the GM allows for that flexibility.

#### **Undisputed Draft** Transport Permit Requirements

- <u>6073</u>. The Region K and Region G Water Plans identify water supply shortages in the in the counties LCRA is requesting to serve (Lee, Bastrop, and Travis Counties) and project that there is sufficient water available for LCRA's planned withdrawals.
- 61. LCRA's existing contracts demonstrate a need for the water in the receiving area.
- <u>6274</u>. In reviewing LCRA's Applications for Transport Permits, the GM considered the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence.
- <u>63</u>75. In reviewing LCRA's Applications for Transport Permits, the GM considered the <u>or</u> effects on existing permit holders or other groundwater users within the District.

- <u>6476</u>. In reviewing LCRA's Applications for Transport Permits, the GM considered the approved regional water plan and approved district management plan.
- 77. Special Provision 1 prohibits LCRA from transporting water pursuant to a bed-and-banks permit and from discharging to any surface water.
- <u>6578</u>. Under the <u>Final TransportDraft</u> Permits, transportation of groundwater by use of a <u>proposed</u>-bed-and-banks permit would be impossible because water cannot be conveyed upriver from Bastrop County to Travis County, the only place of use outside the District.
- 79. Discharge of groundwater into a surface watercourse pursuant to a bed-and-banks permit is not waste.
- 80. Operating permits in the District do not prohibit discharge into surface water.
- 81. Special Provision 1 imposes more restrictive permit conditions on transporters than the District imposes on existing in-district users.

# VIII. CONCLUSIONS OF LAW

- 1. The District has jurisdiction to decide the issues raised by LCRA's Applications. Tex. Water Code ch. 36.
- 2. Notice was accomplished in accordance with chapter 36 of the Texas Water Code and District Rules.
- 3. LCRA's Applications are subject to the District Rules <u>asthat were</u> amended <u>on April 20, 2016.</u>
- 4. Under the Standard and Special Conditions proposed by the GM in the Revised Draft Operating Permits, LCRA's Applications for Operating Permits conform to the requirements prescribed by chapter 36 of the <u>Texas Water</u> Code and the District Rules. Tex. Water Code § 36.113(d)(1); District Rule 5.2D(1).
- 5. Modeled Available Groundwater is the amount of water that may be produced on an average annual basis to achieve a desired future condition. Tex. Water Code § 36.001 (25).
- 6. Under District Rule 5.4.B, Operating Permits are effective for a period of five years from the date the permit is granted,
- 76. Under District Rule 8.2.B, a new non-exempt well with a maximum pumping capacity of greater than 1,000 gpm must be spaced at least 5,000 feet from the nearest well completed in the same aquifer unit and owned by a different well owner.
- <u>87.</u> The District is not required to consider historic use in evaluating LCRA's Applications. Tex. Water Code § 36.116(b).

- 98. Neither the Texas Water Code nor the District Rules authorize the District to unilaterally impose a requirement that an applicant <u>createrecreate</u> a mitigation account to pay other well owners for the impacts from the applicant's drilling.
- 109. In reviewing LCRA's Applications for Transport Permits, the District considered the factors required by Texas Water Code § 36.122(f) and District Rule 6.3.
- 11. Under District Rule 6.5, the permit term for Transport Permits is three years unless the permittee has either already begun construction of a conveyance system or begins construction of a conveyance system before the expiration of the 3-year permit term, in which case the permit term is extended to 30 years.
- 10. Texas Water Code § 36.001(8)(E) defines "waste" as including "willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the commission under Chapter 26."
- 11. Authorized discharge pursuant to a bed-and-banks permit issued under the Texas Water Code is not "waste."
- 12. The District may not prohibit the transport of water via a bed-and-banks permit as part of its authority to control waste of groundwater under Texas Water Code § 36.101(a).
- <u>12</u>13. After weighing the factors under Texas Water Code § 36.113(d) and the District Rules, the District <u>approved should approve</u> the <u>FinalGM's Revised Draft</u> Operating Permit and the Final<del>Draft</del> Transport Permit with the following changes:
  - a. That Special Condition 1 of the Revised Draft Operating Permits be amended to read, "Prior to construction of a well authorized under Special Condition 3(b), Permittee shall enter into a monitoring well agreement approved by the District Board and Permittee;"
  - b. That the following language be removed from Special Condition (3)(a) of the Revised Draft Operating Permit: "and has complied with the terms and provisions of the Monitoring Well Agreement;"
  - c. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special Condition (3)(c)(iv) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase III;"
  - d. That the requirement that LCRA present end-user contracts or binding commitments be removed from the Revised Draft Operating Permits Special

Condition (3)(d)(iii) and replaced with the following language: "Permittee has assisted the District in adding any New Monitoring Wells that the District and Permittee agree are needed before Permittee may increase its pumping under Phase IV;"

- e. That Special Condition (4)(a) of the Revised Draft Operating Permit be amended to include a requirement that a "Monitoring Well System" include wells to monitor surface water;
- f. That Special Condition 5 be amended to clarify that affected landowners may participate in the permit renewal process, including the determination of whether an amendment is necessary; and
- g. That Special Provision 1, prohibiting discharge into a surface watercourse, be removed from the Draft Transport Permits.

SIGNED this day of , 2022 March 31, 2020.