

**SOAH DOCKET NO. 952-19-0705**

<b>APPLICATION OF LOWER</b>	<b>§</b>	<b>BEFORE THE LOST PINES</b>
<b>COLORADO RIVER AUTHORITY</b>	<b>§</b>	
<b>FOR OPERATING AND TRANSPORT</b>	<b>§</b>	<b>GROUNDWATER CONSERVATION</b>
<b>PERMITS FOR EIGHT WELLS IN</b>	<b>§</b>	
<b>BASTROP COUNTY, TEXAS</b>	<b>§</b>	<b>DISTRICT</b>

**LOWER COLORADO RIVER AUTHORITY'S  
REPLY TO THE RESPONSES TO ITS MOTION FOR REHEARING**

**TO THE BOARD OF DIRECTORS OF THE LOST PINES GROUNDWATER  
CONSERVATION DISTRICT:**

COMES NOW, the Lower Colorado River Authority (LCRA), and files this its Reply to the Responses to Its Motion for Rehearing.

**I. Introduction**

LCRA's November 22, 2021, Motion for Rehearing raised nine points of error. On February 16, 2021, the Board of Directors granted LCRA's Motion. In response to the request of the Counsel for the Board, five protesting parties and the General Manager (GM) filed responses to issues presented by LCRA's Motion for Rehearing. Only the General Manager and the Brown Landowners addressed all the points of error presented by LCRA's Motion.

Before turning to LCRA's specific responses on the arguments related to each of LCRA's points of error, LCRA cannot stress enough that one of the central issues in LCRA's Motion is whether any of the Board's modifications of the findings, conclusions, and recommendations of the Administrative Law Judges (ALJs) are authorized at all under Texas Water Code § 36.4165. Most of the parties gloss over this legal issue and instead wrongly claim that LCRA's Motion did not identify the specific findings of fact and

conclusions of law that it believed were improperly modified. While LCRA disputes this assertion, it is providing further detail in this Reply in Attachment 1<sup>1</sup>, which is a document comparing the Board's Final Decision and findings of fact and conclusions of law to the ALJs' Proposal for Decision and proposed findings of fact and conclusions. Attachment 1 clearly demonstrates that the District performed a wholesale revision and rewrite of the ALJs proposal without making *any attempt* to abide by the limitations set forth in Texas Water Code § 36.4165.

Another central issue woven throughout LCRA's Motion is that, as found by the ALJs, the best available science and other evidence in the record supports issuance of the full requested production of up to 25,000 acre-feet per year. To that end, this Reply provides as Attachment 2, a 10-page detailed analysis of Protestants' arguments for reducing authorized production from the 25,000 acre-feet per year and the record evidence that supported the ALJ's findings to the contrary.<sup>2</sup> Attachment 2 demonstrates that the Board's reduction of the annual production authorization to 8,000 acre-feet per year not only violates Texas Water Code § 36.4165, but also cannot be justified on the evidentiary record evaluated by the ALJs nor the District's underlying permitting authority.

For the most part, LCRA's remaining points of error involved questions of the Board's legal authority to impose various permit conditions particularly in light of the Board's revisions of the ALJs' proposal. While two of these points of error address

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<sup>1</sup> Attachment 1 was created by converting the PDF versions of the ALJs' March 31, 2020 Proposal for Decision and the Board's November 8, 2021 Final Decision to Word documents using Adobe Pro DC and then using the compare function on Word to create the redlined comparison. In order to obtain clear version that shows the changes, the cover pages and table of contents of the PDFs were removed, as well as the footnotes. After the conversion, additional manual changes were made to address formatting and to page numbers.

<sup>2</sup> This analysis was provided to Counsel for the board on August 19, 2021.

statutory violations related to conditions retained in the permits to produce only 8,000 acre-feet per year, LCRA in no way agrees or accepts the Board's decision to reduce LCRA's authorized production by over two-thirds from what the ALJ's had proposed. Indeed, LCRA maintains that it is entitled to permits to produce the full 25,000 acre-feet per year, with or without the special conditions related to phasing.<sup>3</sup>

**II. Point of Error 1: The District erred when it adopted the Final Decision and its Findings and Conclusions in violation of Texas Water Code § 36.4165.**

Contrary to the assertions by several of the Parties, LCRA *did* in fact identify in Point of Error 1 the specific findings and conclusions it took issue with when it stated that “this point of error addresses all of the Findings of Fact and Conclusions of Law in the PFD’s proposed order, and sections of the PFD that were added, deleted, and modified in the [Board’s] Final Decision and Permits.” **In other words, the error is global, applies to all changes, and does not pertain to any particular finding of fact or conclusion of law.**<sup>4</sup> Rather, the entire order and adopted findings and conclusions are objectionable as a matter of law because the issue is pervasive, as shown in Attachment 1. The Board did not include in its order, or disclose during any public “discussion,” the reasons for the changes it made to the ALJs’ proposal for decision or the findings and conclusions. Simply put, the District Board completely failed to comply with the legal standards set out by Texas Water Code § 36.4165, and thus **the Board’s Final Order and all findings and conclusions are invalid.**

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<sup>3</sup> See LCRA's Exceptions to PFD at Section V.

<sup>4</sup> LCRA's Motion for Rehearing provides cites to specific findings and conclusions for all other points of error, most of which are subject to Point of Error 1.

Section 36.4165 expressly limits what the Board can do with an ALJ's proposed findings and conclusions. It states:

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). See Tex. Water Code § 36.4165(b). The use of the word “only” makes this provision is mandatory, not permissive. Tex. Gov't. Code § 311.001; see *Office of Atty. Gen. of Texas v. Crawford*, 322 S.W.3d 858, 861 (Tex. App. – Houston [1<sup>st</sup> Dist.] 2010, pet. denied). This provision exists to ensure that the ALJs are the fact finders, because as “disinterested hearing officer[s]”, the ALJs are “better suited” to evaluate “conflicting evidence as to adjudicative facts . . . and determine how much weight to give each side’s evidence” and to make “credibility determinations” than the Board of Directors of the District. See *Hyundai Motor America v. New World Car Nissan, Inc.*, 581 S.W.3d 831, 838 (Tex. App. – Austin 2019, no pet.); *Flores v. Employees Ret. Sys.*, 74 S.W.3d 532, 539-40 (Tex. App. – Austin 2002, pet. denied).

A few parties would also have this Board believe that deletion of a finding or conclusion is not a “change” to those findings or conclusions. Whether the parties seriously believed this argument would fly, it finds no basis in caselaw. See, e.g., *Tex. Real Estate Comm’n v. Riekers*, 2020 WL 1026478, at \*11 (Tex. App. – Houston [14<sup>th</sup>],

no pet.) (invalidating agency's changes to a PFD, including deletion of a finding of ultimate fact).

Further, the Board is required to provide its reasons for making the changes to the findings and conclusions to the parties in some form to enhance the fairness of the adjudicative process for the parties appearing before the District and to ensure that a reviewing court can judge whether the District has followed the procedures set out in Section 36.4165 and the District's rules and statutes. *Flores*, 74 S.W.3d at 34. The Board must "articulate a rational" 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. The Board entirely failed to provide any reasons for the multitude of changes reflected in its final order and findings and conclusions as compared to the ALJs' PFD and proposed findings and conclusions either during the October 12, 2021 meeting when the Board made its decision, the November 8, 2021 meeting when the Board adopted the findings and conclusions, or in the order adopted by the Board (dated November 15, 2021).<sup>5</sup> The parties, and more importantly, a reviewing court are not required to read the collective minds of the Board members. A court will not presume

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<sup>5</sup> See Attachment 1. As shown in this Attachment, the Board adopted the PFD as its final order after making changes to almost every single section of the PFD. Some of these changes appear clerical in nature, other edits tweak the descriptions of the parties' arguments and testimony or the ALJs' analysis, summaries, and conclusions (e.g. pages 5,6,23,24,31, 35, 38, 40-41, 52, 53, 55, 58, 65) (even though the Board did not hear any of the party testimony directly), and in some cases, the Board has entirely eliminated any mention whatsoever of the ALJs evaluation of contested issues that were fully tried during the hearing (e.g. Section IV.G.1., IV.G.2., V.B.). In short, the Board's order reflects changes to almost every single page of the PFD. In addition, the adopted findings and conclusions depart substantially from the ALJs proposed findings of fact For instance, the Board order changed or deleted PFD Proposed Findings Nos. 3,6,10, 11, 29, 30, 42 (renumbered 47, 45-51, 53-56, 59, 60-65, 68, 76-78) and PFD Proposed Conclusions of Law Nos. 10-13 and the ALJs recommendations on Exceptions. It further added new Final Findings of Fact No. 53 and Conclusion of Law No. 11. Despite all of these changes, however, what is noticeably absent is ANY explanation of the basis for these changes and how such changes comport with the limitations set forth in Tex. Water Code. § 36.4165.

that the Board complied with Section 36.4165 when there is nothing in the record that describes why the Board made the changes it did. See *City of El Paso v. El Paso Elec. Co.*, 851 S.W.2d 896, 900 (Tex. App. – Austin 1993, writ denied). “It is [Board’s] burden to establish that [it] properly changed or disregarded the ALJs’ findings and conclusions.” *Tex. Health and Human Services Comm’n and Office of Inspector General v. Antoine Dental Center*, 487 S.W.3d 776, 797 (Tex. App. – Texarkana 2016, no pet.).

To agree with the GM and other parties that the Board is not required by Section 36.4165 to explain how its changes are necessary and allowed under that section effectively guts the provision and renders it meaningless. Taken to its logical end, the other parties’ interpretation would allow the Board to delete all of an ALJs’ findings and conclusions, thus freeing it to determine that the applicant failed to meet its burden of proof (for lack of any supporting findings and conclusion), and deny the application, without articulating why the Board made the changes. “If the [Board] can simply disregard the findings of the ALJ[s], then there is a lack of meaningful review of the [Board’s] findings, in contravention of the Legislature’s express statutory provision for a SOAH hearing.” *Tex. Real Estate Comm’n v. Riekers*, 2020 WL 1026478, at \*11 (Tex. App. – Houston [14<sup>th</sup>], no pet.). In sum, the Board acted arbitrarily and capriciously when the Board failed to explain the reasons for the changes (including deletions) of the ALJs’ findings and conclusions. See *Flores*, 74 S.W.3d at 553. As explained, this error pervades the entire order as a matter of law; LCRA cannot identify errors in specific findings of fact or conclusions of law related to *why* the Board made these changes because the Board provided none.

**III. Point of Error 2: The Board erred by violating the Open Meetings Act when it made its decision to reject the PFD's recommendation to grant LCRA's Permits.**

Both the GM's and Brown Landowners' arguments in response to LCRA's Point of Error 2 miss the mark. LCRA recognizes the Board members' rights to express their opinions while receiving legal advice in closed session.<sup>6</sup> LCRA's fundamental complaint, however, concerns the complete and utter failure of the Board to explain the basis of its decision to reject significant portions of the ALJs' PFD regarding LCRA's permits *either* in its Order *or* during its meeting. As discussed under Point of Error 1 and elsewhere in this response, that failure denies LCRA and a reviewing court fair (or any) notice of the basis for the Board's decision and thus, the decision is fundamentally flawed and arbitrary and capricious. The Board can cure any Open Meetings concerns at the upcoming hearing by making sure that its reasons for any decisions it makes on LCRA's various points of error are discussed in open, reduced to writing, and *not* left to speculation as to whether the actual decision of the Board was made in closed session contrary to the Open Meetings Act, Texas Gov't Code § 551.102.

The Brown Landowners' use of the LCRA Board's recent adoption of amendments to the Highland Lakes Dredge and Fill Ordinance as an example of how governing bodies make decisions without public deliberation is only one of the many "ludicrous and hypocritical" arguments made by the Brown Landowners during this entire proceeding and completely contradicts the point that the Brown Landowners are trying to make. Specifically, in this case, the meeting minutes themselves prove the Brown Landowners

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<sup>6</sup> *Bd. of Trs. v. Cox Enters., Inc.*, 679 S.W.2d 86, 89 (Tex. App.—Texarkana 1984), *aff'd in part, rev'd in part on other grounds*, 706 S.W.2d 956 (Tex. 1986).

wrong on their face: “Staff responded to various questions from the Board throughout the discussion.” (See LCRA Jan. 19, 2022 Board Meeting Agenda, Item 9 (Minutes of Prior Meeting), at 35, *available at* <https://www.lcra.org/download/lcra-board-agenda-2022-01-19/?wpdmdl=25981>). In other words, LCRA Board members discussed their concerns in open session. Moreover, had the Brown Landowners bothered to look beyond the LCRA Board’s December meeting minutes, they would have seen that LCRA Board members engaged in extensive deliberations during open session before and after receiving legal advice in closed session. See Video Recording of Dec. 14, 2021 LCRA Board Meeting at <https://youtu.be/ft-ViO5x24> (Minute 9:53-40:30). Further, LCRA Board members spent over two hours spanning two days in November 2021 at both the Water Operations Committee (a committee-of-the-whole) and the Board meeting receiving public input, staff briefings, and engaging in extensive discussion during open session regarding adoption of the ordinance. See Video Recording of Nov. 17, 2021 LCRA Board Meeting at <https://youtu.be/Efb9nWhtLa0> (Minute 4:17-1:41:35); and Video Recording of Nov. 16, 2021 LCRA Water Operations Committee Meeting at <https://youtu.be/6CxlyqPIp3E> (Minute 28:21-57:25).

**IV. Point of Error 3: The District erred by limiting LCRA’s authorized production to 8,000 acre-feet per year and eliminating phased-in increases in production of up to 25,000 acre-feet per year.**

As can be seen by examination of Attachment 1, the red-line of changes implemented by the Board’s Final Decision, the ALJs’ Findings and Conclusions (specifically identified in the Motion for Rehearing) were extensively modified by the Board



without determining that those changes could be justified on one of the three bases allowed by Texas Water Code § 36.4165.

A review of the parties' responses to this Point of Error simply reflect that they continue to support the Board's re-weighing, re-evaluation, and in some cases entire disregard of the ample, reliable evidence LCRA presented in this case. Moreover, the Board's modification of the PFD is in contravention of established legal principles governing review of a proposal for decision that requires the District to defer to the factual determinations made by the ALJs. It is the ALJs who are directly charged with weighing the credibility of the evidence and witnesses, not the Board.

As mentioned earlier, Attachment 2 provides a tabular summary of the various issues argued by the parties as a basis for receiving less than 25,000 acre-feet per year since the PFD was issued, LCRA's response to each, and the evidence pertaining to the protestants' arguments. This tabular summary was provided to the Board's special counsel and is attached hereto, and incorporated herein, as Attachment 2. Similar information was included in LCRA's slide deck provided to the Board and parties as part of Board's July 14, 2021 special meeting (and attached to LCRA's legal brief filed on August 9, 2021 on the question of whether LCRA's proposed pumping would cause unreasonable impacts).

Specific responses to the arguments of the Brown Landowners, Aqua Water Supply Corporation (Aqua) and the City of Elgin (Elgin), Recharge Water, LP (Recharge), and the General Manager on LCRA's Point of Error 3 are discussed below.<sup>7</sup>

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<sup>7</sup> Environmental Stewardship's Response regarding Point of Error No. 3 adds nothing new. It endorses the responses of Brown Landowners, Aqua and Elgin, and the General Manager, and argues that the cumulative impact of LCRA pumping with all other permitted pumping will impact surface water resources, justifying both monitoring of surface water impacts and reduction of the production authorization. The

### Response to Brown Landowners

The Brown Landowners offer an after-the-fact rationale for the Board's decision that is nowhere reflected in the record of the Board's decision and, if accepted, reflects an improper application of District Rules and the Texas Water Code § 36.1132. In essence, the Brown Landowners hypothesize that the Board was reducing production to avoid exceeding the Modeled Available Groundwater (MAG) and the Desired Future Conditions (DFC). (Brown Response at page 3). There are at least two problems with this argument. First, it is entirely speculative because this rationale was nowhere identified by the Board in its order or at any of its meetings, and second, it is directly contradicted by the PFD and the proper application of governing law.

The PFD discusses at length the application of District Rule 5.2.D(8) to LCRA's applications, including both consideration of the MAG and achievement of the DFC. (PFD at 35-37). The ALJs properly concluded that the MAG is a limit on the total amount of water that can be produced on an average annual basis and still meet the DFC. (PFD Findings of Fact 33-37). It is *not* a cap on permitting nor a limit imposed on a single permittee. (PFD at 37).

### Response to Aqua WSC and Elgin

Aqua and Elgin position on this point of error focuses on the single Finding of Fact No. 29. That finding states:

The Special Conditions proposed by the General Manager 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.

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problems with Environmental Stewardship's argument are (a) it was not adopted by either the ALJs or the Board, and (b) is actually contradicted by the PFD, since it recognizes the potential impact but does not recommend reduction of the production authorization.

(Emphasis added). Aqua and Elgin argue that Finding of Fact No. 29 addresses only the impact of the General Manager's special conditions, not LCRA's level of production. (Aqua and Elgin Response at 3-4). However, much like Aqua & Elgin's argument regarding Water Code § 36.4165, the argument does not withstand a more specific comparison to the actual provisions of the statute or findings.

This finding includes consideration specifically related to "LCRA's proposed use," thus clearly refuting Aqua and Elgin's argument. Again, LCRA's proposed use is 25,000 acre-feet per year. Further, Finding No. 29 also refers to special conditions for "phased production tiers" – the permit conditions that establish how LCRA may increase production over time up to *LCRA's proposed use of 25,000 acre-feet per year*. Thus, Aqua and Elgin's argument simply does not work and must be rejected. The finding definitely addresses *both* the permit's special conditions *and* the production of 25,000 acre-feet per year.

#### Response to Recharge

Recharge seems to think that simply by labeling an issue "no evidence," they can escape the reach of Texas Water Code § 36.4165. While Recharge is working with a legitimate legal principle, its application of that principle is seriously misguided. Recharge basically claims that there is "no evidence" to support the ALJs' findings or conclusions whenever the ALJs decided an issue in favor of LCRA and did not fully discuss every argument in detail that Recharge made at the hearing. That is NOT the standard for a "no evidence" challenge.

As LCRA has previously argued,<sup>8</sup> a PFD is not required to present “a neutral, detailed reflection of the evidence.” Instead, it provides a summary of the evidence and the ALJ’s recommendation regarding the just result of the dispute. *Graff Chevrolet Co., Inc. v. Texas Motor Vehicle Bd.*, 60 S.W.3d 154, 159 (Tex. App. – Austin 2001, review denied). An analysis of each of the arguments presented by Recharge shows that they are not “no evidence” points. Rather, there was conflicting evidence on the statutory issue involved and the ALJs rejected Recharge’s arguments, without extensive discussion, as is permissible and appropriate. Specifically, contrary to Recharge’s assertions, the evidence shows that LCRA’s wellfield will not unreasonably affect existing permit holders. Recharge argues that LCRA did not design its wellfield to minimize impacts on other well owners, especially Recharge. The ALJs understood, addressed, and rejected this argument. (PFD at 32-35). Moreover, Attachment 2 ( pp. 4, 6, 8 and 10) identifies the evidence referred to by Recharge’s argument and the ALJs’ basis for rejecting those arguments.

Additionally, the ALJs relied on LCRA’s evidence, which demonstrates that LCRA’s permits will minimize the drawdown of the water table or the reduction of artesian pressure, and will lessen interference between wells. Nonetheless, Recharge continues to argue that there is “no evidence” of the local impacts of LCRA production because: (1) the GAM is a regional model, incapable of modeling local impacts; and (2) the GAM cannot model LCRA’s production and impacts because of errors in the GAM for the Griffith League Ranch (GLR) property. Again, these issues were the subject of extensive

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<sup>8</sup> Aug. 19, 2021 Letter from Emily Rogers to Greg Ellis at n. 1.

evidence and Recharge's arguments were rejected by the ALJs. The Board cannot ignore the ALJs evidentiary findings.

The ALJs examined the evidence and the parties' contentions regarding use of the GAM to predict local impact of LCRA's production. (PFD at 15-22). The ALJs concluded that Dr. Young's analysis using the new GAM was sufficient to determine that LCRA's production would not cause unreasonable impacts on groundwater resources or existing permit holders. *Id.* at 22. Similarly, page 5 of Attachment 2 summarizes the arguments by Recharge and others that the new GAM is incapable of modeling local impact, and the PFD's evidentiary basis for rejecting them. Finally, page 2 of Attachment 2 addresses the PFD's evidentiary basis for the ALJs' rejection of Recharge's continued objections to GLR transmissivity data.

As a final note regarding Recharges' arguments on this point – it would establish a dangerous precedent. If the Board agrees with Recharge that local impacts cannot be assessed using the GAM, then the inescapable result is that this Board must stop issuing even the smallest of permits if the only analysis presented is GAM modeling. LCRA's evidence on this point, which not only included GAM modeling but also available information about site specific geology and party well characteristics, was entirely consistent with (if not more detailed than) that considered by this Board for other permits and those now pending before the Board.<sup>9</sup> Moreover, Recharge ignores that, in lieu of a pre-application pump test, the PFD retained the recommendation that LCRA be required to do a pump test on each and every well before putting it into production, the results of

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<sup>9</sup> Indeed, the hydrogeologic analysis provided by the City of Bastrop in its pending permit applications is strikingly similar to the evidence provided by LCRA. It considered the GAM, site specific geologic information, and the results of pump tests performed in the area to assess potential impacts of pumping.

which might be used to reduce pumping if transmissivity concerns are discovered. (PFD at 35, 55). While this level of testing seems excessive for the authorized 8,000 acre-feet per year, the requirement applied to LCRA's requested 25,000 acre-feet per year is far more adaptive than anything Recharge is required to do as part of its 46,000 acre-feet production permits.

Finally, the evidence supports the issuance of permits for 25,000 acre-feet per year production from the Griffith League Ranch property (with or without phasing). Recharge attempts to counter this point by addressing some initial work by LCRA's prior consultants, which analyzed the possibility of producing smaller volumes of groundwater from the site. Recharge somehow believes that this supports their "no evidence" argument that LCRA can not produce 25,000 acre-feet per year from GLR. These same arguments, and the evidence offered by LCRA and considered by ALJs in rejecting Recharge's argument, are identified in Attachment 2 at pages 1, 2, 3, and 10.

Examining all of Recharge's "no evidence" arguments regarding Point of Error 3, it is quite clear that the record contains significant evidence on these issues, much of which is cited throughout Recharge's Response to the Motion for Rehearing. The problem for Recharge is that the ALJs rejected its arguments when they weighed the evidence on these issues and recommended ruling against Recharge. Rejecting Recharge's evidence and arguments does not create a "no evidence" issue and does not provide a basis for rejecting LCRA's Point of Error 3.

#### *Response to the General Manager*

The General Manager's Response to LCRA's Motion for Rehearing (GM Response) regarding Point of Error 3 largely addresses LCRA's Point of Error 1 because

the General Manager did not consider LCRA's Motion for Rehearing to provide "fair notice" of the basis for its objection in Point of Error 1.<sup>10</sup> The GM Response to Point of Error 3 does not specifically address the 8,000 acre-feet per year limitation, other than to indicate that the General Manager will (of course) accept whatever the Board decides to do.

The GM's response to LCRA's Point of Error 3 reflects a failed attempt to rationalize the changes identified by LCRA as problematic. Generally, the General Manager describes the changes as "non-substantive," apparently thinking that the deletion of a finding of fact or conclusion of law that was drafted to apply to LCRA's 25,000 acre-feet per year production is no longer relevant. In so doing the GM invites error. First, nothing in Section 36.4165 allows modifications (or deletions) of factual findings as "irrelevant." Further, elimination of findings that related to and supported LCRA's requested production of 25,000 acre-feet per year – an issue that was fully litigated – is unquestionably relevant and substantive. Similarly, modifications of the PFD findings that originally applied to the 25,000 acre-feet per year production to apply to production of 8,000 acre-feet per year, are unquestionably substantive changes to the ALJs' findings and a clear violation of Texas Water Code § 36.4165.

**V. Point of Error 4: The District erred when it violated Texas Water Code § 36.122(c) by imposing more restrictive permit conditions in the Permits than it has imposed on existing in-district permittees.**

*1. The General Manager admits the restrictive nature of the conditions.*

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<sup>10</sup> Significantly, and prudently, the GM Response does recommend that the Board amend its Final Decision to set out the basis under Texas Water Code § 36.4165 for changes to the PFD, Findings, and Conclusions. GM Response at 1.

LCRA appreciates that the General Manager agrees that it is appropriate to remove the monitoring well agreement and related requirements included in the draft permit as “no longer necessary” (GM Brief at 5-6). Simply put, besides recommending deletion of the special condition, the GM has admitted he “would not have recommended a draft permit with monitoring in a permit without phasing” and that its removal is “consistent with the other non-phased permits issued by the District.” (GM Brief at 7). Simply put, the GM has admitted that these conditions are more restrictive than in-district permits in contravention of Texas Water Code 36.122(c).

2. *The monitoring-related conditions are “restrictions.”*

In arguing that the requirement for surface water monitoring does not “restrict” the amount of water LCRA is authorized to pump, Environmental Stewardship ignores the plain meaning of the term “restrict” and the very terms of the permits approved by the Board. The term “restrict” generally means to restrain, preventing, or limit the exercise of an activity or the use or enjoyment of property. See *generally* Merriam-Webster Dictionary <https://www.merriam-webster.com/dictionary/restriction>; <https://www.merriam-webster.com/dictionary/restricts>; <https://www.merriam-webster.com/dictionary/restrain> (last visited March 22, 2022). While a “restriction” might affect the *quantity* of groundwater produced, “restriction” can also include conditions that affect the manner, timing, and costs of producing the groundwater.

The monitoring requirements as implemented in the Board-approved operating permits through Special Conditions (1) and (3) are clearly “restrictions” that limit LCRA’s ability to use and enjoy its property rights in groundwater. First, Special Condition (1) requires that LCRA and the District execute an agreement to monitor both groundwater



and surface water “prior to construction of a well authorized by this permit.” In other words, LCRA can’t produce a single drop of groundwater from any wells before that point. While the terms of the agreement have not been set, if they are anything like the voluntary groundwater monitoring agreements the District has executed with other permittees, it would require LCRA to fully fund the costs of design, engineering, materials, labor, construction and inspection of new monitoring equipment, transfer this equipment to the District, help secure continued access to the equipment, and cover certain future repair and replacement costs. (Recharge Ex. Nos. 2, 7). Permit Special Condition (3) requires LCRA to submit the data collected for analysis at the time of permit renewal and subjects LCRA to potential revisions to the permit based on such analysis. This condition is unique to LCRA’s permit (particularly when compared to in district permits), and hence “more restrictive.” Further, as argued in Section VI of this reply (and LCRA’s Motion for Rehearing Point of Error 5), inclusion of a restriction on permit renewal in the permit itself inappropriately circumvents the limits placed on the District’s authority under Texas Water Code §§ 36.1145 and 36.1146.

Collectively, these conditions clearly “restrict” the manner, timing, and amount of groundwater that the Board has allowed LCRA produce. And such terms are “more restrictive” than imposed on other in-district permittees, at least one of whom (Aqua) is collectively authorized to produce substantially more than the 8,000 acre-feet/year. (See, e.g., LCRA Ex. Nos. 49, 52, 73, and 74).

3. *Texas Water Code § 36.122 does not apply only to special conditions in a transport permit.*

Texas Water Code 36.122 does not say the restrictions have to be in the Transport Permit for them to be prohibited; if this were the case, then a groundwater conservation district could always evade the express prohibition by including restrictions in production permits held by those who also hold associated transport permits. Contrary to the Brown Landowners' argument that the evidence shows no linkage between the monitoring requirements and LCRA's transport permit, the fact is that the *only* permits issued by the District with monitoring-related permit conditions are associated with permittees who also hold transport permits (i.e. Gatehouse and Recharge). (E.g. Recharge Ex. Nos. 1, 2, 6, and 7). Thus, the restriction does not need to be placed in the transport permit. There is, however, evidence in the record that the District has *not* required such efforts of any in-district permittees. (LCRA Ex. Nos. 49, 52, 73, and 74) nor, by extension, tied renewal of such permits to submittal and analysis of monitoring data.

**VI. Point of Error 5: The District erred by including Special Condition (3) in the Operating Permits in violation of Texas Water Code § 36.1145.**

Little disagreement among the parties seems to exist on Point of Error 5, in which LCRA has argued that including restrictions on renewal of LCRA's permits is directly contrary to Texas Water Code § 36.1145, which requires automatic renewal except in very limited situations. Both the General Manager and Brown Landowners agree that the provision should be deleted if the permit is issued for 8,000 acre-feet per year. (General Manager's Response at 6; Brown Landowners' Response at 4)<sup>11</sup>. LCRA wants to stress,

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<sup>11</sup> The Brown Landowners would condition their agreement to deletion of Special Condition (3) upon LCRA agreeing to the 8,000 acre-feet per year production limitation. LCRA does not agree to the production limitation and points out that the volume of production is unrelated to Texas Water Code § 36.1145's automatic renewal requirement. As a legal matter, either the special provision is acceptable under § 36.1145 or it is not. The volume of production authorized has nothing to do with it, so long as it does not change.

however, that LCRA maintains that it proved it could produce the entire 25,000 acre-feet/year without causing unreasonable impacts. LCRA was willing to agree to these and other groundwater monitoring-related permit conditions included in the draft permits recommended by the ALJs that authorized the full amount of LCRA's requested production.

**VII. Point of Error 6: The District erred by requiring LCRA to enter into a monitoring well agreement and to construct and maintain a Monitoring Well System.**

Much like Point of Error 5, one can almost say that there is no disagreement to deletion of the Monitoring Well Agreement requirement at the 8,000 acre-feet per year level of production. LCRA's Point of Error 6 states that the District lacks authority, under the rules applicable to LCRA's application, to impose the requirement that LCRA enter a Monitor Well Agreement with the General Manager. This general proposition is confirmed by the Board's Final Decision, at page 47, recognizing that the District may not compel an applicant to enter into an agreement, the terms of which have not yet been negotiated. If LCRA's permitted production were 25,000 acre-feet per year, LCRA specifically agreed in its permit applications to accept special conditions similar to those in other large permits (i.e. Recharge and Gatehouse permits) even though the District had no specific rule related to monitoring at the time LCRA filed its applications. (LCRA Ex. No. 3-A-2). At less than one-third of Recharge's first phase of authorized production of 25,000 acre-feet per year and just slightly more than one-sixth of its maximum authorized production of 46,000 acre-feet per year (Recharge Ex. No. 1), the LCRA permits for 8,000 acre-feet hardly qualify as "large." While having its monitoring network improved at someone else's

expense would obviously benefit the District, there is no clear rationale or authority for including the requirement in permits that limit LCRA's production to 8,000 acre-feet per year. LCRA cannot justify that additional expense and the requirement has not been consistently required by the District at these production levels (even under the District's new rules that expressly contemplate monitoring requirements). Accordingly, they should be removed if the District continues to limit production to 8,000 acre-feet per year.

The General Manager agrees to deletion of the Monitor Well Agreement requirement at the 8,000 acre-feet per year production level. (GM Response at 7). The only other party addressing this point of error, the Brown Landowners, argue that LCRA's agreement to the Monitor Well Agreement was not clearly tied to a 25,000 acre-feet per year maximum production limitation. (Brown Landowners' Response at 4-5).

The Brown Landowners are incorrect regarding the scope of LCRA's consent to a Monitor Well Agreement requirement. As discussed above, the application's acceptance of such a requirement is clearly tied to the imposition of such a requirement on "other recent large permits." (Brown Landowners' Response at 5). With the Board's proposed reduction of production from 25,000 acre-feet per year to 8,000 acre-feet per year, LCRA is no longer a "recent large permit."

The Brown Landowner's reference to Mr. Hofmann's testimony that LCRA would comply with whatever conditions are included in the permit, is taken out of context, and was clearly addressing LCRA's commitment to abide by the terms of any *final* (and unappealable) *permit* issued by the District. That statement in no way waived LCRA's right to contest special conditions that it believes are unjustified or unauthorized as part of the rehearing and appeal process.

**VIII. Point of Error 7: The District erred by requiring LCRA to monitor surface water.**

LCRA has never disputed the District's authority and obligation to "consider" the impacts of LCRA's proposed use on surface water resources, but contrary to the arguments of both Environmental Stewardship and the General Manager, **that authority does not extend to require LCRA as a permit condition to implement monitoring of surface water impacts from district-wide groundwater pumping.** This requirement is not only beyond the Board's existing authority, *as LCRA has repeatedly argued*,<sup>12</sup> its particularly egregious in light of the factual determination by the ALJs that LCRA's pumping alone would not cause unreasonable impacts to surface water resources. (PFD at Finding of Fact No. 30).

As political subdivision of the state, groundwater conservation districts are only allowed such authority as is granted to them by their enabling act or other laws, such as Chapter 36. *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.). None of these statutes grant the District the authority it seeks to exercise with regard to LCRA's requested permits. While the District's Enabling Act grants to the District the powers granted under Texas Water Code Chapter 36, it contains no express authority related to monitoring or management of groundwater to protect surface water resources. *See Spec. Dist. Local Laws §§ 8449.101-8849.103.* While the District is charged with *considering* impacts to surface water resources as part of its permitting decision, Texas Water Code § 36.1131(b) prescribes the terms and conditions that a district is allowed to include in a permit. These

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<sup>12</sup> Contrary to ES's assertion, LCRA has previously questioned the legal authority of the District to impose this condition. *See, e.g., LCRA's Post-Hearing Closing Arguments, Section VI.A.3.a.iii.*

include no specific conditions related to surface water. Section 36.1131(b)(11) does allow a district to include “other terms and conditions as provided by Section 36.113”; however, section 36.113(c)(2) provides that “[a] district may require only” the items specifically listed in that subsection. None of the specific items set forth in subsection (c)(2) relate to surface water monitoring.

Rather, the only possible authority a groundwater district might rely on for such authority would be under subsection (c)(8), which allows a groundwater district to require “other information” if the requirement is:

- A) included in a rule of the district in effect on the date the application is submitted that specifies what information must be included in an application for a determination of administrative completeness; **and**
- B) reasonably related to an issue that a district by law is authorized to consider.

(Emphasis added). This District has not adopted any rule related to the collection or submittal of surface water monitoring information as part of its application requirements nor as part of its permitting conditions.<sup>13</sup>

Nor does Texas Water Code § 36.113(e) provide the requisite authority to the District in this case. That provision allows a district to impose more restrictive permit conditions on new permits. However, this District has not adopted any rules that apply to

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<sup>13</sup> This stands in contrast to District Rule 5.3.D, adopted after LCRA filed its applications, which specifically relates to inclusion of groundwater monitoring requirements for certain permits at the discretion of the General Manager, and the District’s Management Plan, which specifically addresses monitoring of aquifer levels. (GM 10, Guiding Principles, Dist. Policy 3 & 4, and Management Objectives 1.1. and 6.2). Because this rule was adopted after LCRA filed its application and because the requirement has not been consistently applied to new permit applications and amendments that increase use, LCRA also contests the District’s authority to include the groundwater monitoring requirements absent LCRA’s consent, particularly at production levels of 8,000 acre-feet. In such a case, the evidentiary record reflects no concerns regarding drawdown of the water table, reduction in artesian pressure, subsidence, well interference, or impacts to existing users. LCRA’s agreement to conduct monitoring was specifically tied to its request for permits with phased-in production for up to 25,000 acre-feet per year where LCRA’s phased-in production is conditioned on, among other things, aquifer conditions. (LCRA Ex. No. 3-A-2)).

new permits or permit amendments that request an increase in use. Further, more restrictive permit conditions on new permits are allowed only if the limitations:

(1) apply to all subsequent new permit applications and permit amendment applications to increase use by historic users, regardless of type or location of use;

(2) bear a reasonable relationship to the existing district management plan; and

(3) are **reasonably necessary** to protect existing use.

Tex. Water Code § 36.113(e) (emphasis added). In this case, none of these conditions are satisfied. First, the District has not imposed surface water monitoring requirements on any other new permits or permit amendments that increase production.<sup>14</sup> Second, as discussed already, the District’s management plan is essentially silent on surface water impacts. And third, there is no evidence that surface water monitoring is reasonably necessary to protect existing uses of either surface water or groundwater because: (1) contrary to Environmental Stewardship’s suggestion that they were the only party to offer “credible evidence” of impacts, the ALJs actually weighed that evidence against that offered by LCRA and found LCRA’s “showed that LCRA’s proposed pumping **will not**”<sup>15</sup> unreasonably affect existing surface water resources” (PFD Proposed Finding of Fact No. 30) (emphasis added);<sup>16</sup> and (2) the monitoring requirement in the permit is not used to remediate or address impacts of LCRA’s pumping on surface water (indeed the surface

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<sup>14</sup> The proposed permits for the City of Bastrop, for example, include no such requirement.

<sup>15</sup> Among the many examples of how the District has inappropriately re-weighed evidence to reach unsupported changes to the PFD’s findings of fact is its change of the word “will” to “should” in this finding. See Final Decision, Finding of Fact No. 30.

<sup>16</sup> ES’s assertion that it was the only party that submitted credible evidence on this point ignores the discussion of the evidence in the PFD (see PFD at 21-32), including evidence submitted by LCRA as summarized on pp. 26-29 (and outlined Attachment 1). See also LCRA’s Closing Arguments at Section IV.C.3 and LCRA’s Post-Hearing Reply to Closing Arguments at Section IV (including record cites therein).

water monitoring requirement has no impact whatsoever on LCRA's rate or amount of production). Instead, the District included this requirement because the ALJs found that pumping by *all* users (including LCRA) "has the potential to affect surface water resources" in the future (PFD Finding of Fact No. 32; PFD Order at 72, Final Decision Finding of Fact No. 32). The only effect of the provision is to provide the District with more data to inform *future* management decisions whether or not related whatsoever to LCRA's permits.

Not only is this requirement not allowed by statute, but its inclusion also imposes an unconstitutional condition. A government may not condition approval of a permit by 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) (invalidating District's denial of permit based on applicant's refusal to acquire, enhance, and transfer large wetlands property to District because the requirement was not roughly proportional to the impact of the project); and *Town of Flower Mound v. Stafford Estates*, 135 S.W.3d. 620 (Tex. 2004) (holding that developer was entitled to compensation for costs incurred in rebuilding a road that was not necessary to accommodate impact of subdivision). Here, the District's conditioning of the operating permits on LCRA's agreement to implement a surface water monitoring program would require LCRA to incur substantial costs to implement a program, such as costs of designing, acquiring, installing, and maintaining surface water monitoring equipment and acquisition of land rights to install and access the equipment. There is no nexus nor is there anything roughly proportional between the predicted



surface water impacts of LCRA's proposed groundwater production of up to 25,000 acre-feet per year, which the ALJs found were not unreasonable, and the unreasonable regulatory and financial burden that LCRA will incur to implement this requirement for the benefit of all those who rely on the aquifer.

As the steward of the Colorado River, LCRA has demonstrated its commitment to protecting this resource. (See LCRA Exceptions at 5-6 and record cites therein). This not only includes its longstanding commitment to providing funding for significant research on environmental flow needs *and* water to meet those needs, but also dedication of considerable resources to furthering our understanding of the complex relationship between groundwater and surface water by recently collaborating with the Texas Water Development Board, the District, and others on a pilot study. LCRA stands ready to cooperate with the District if it undertakes an effort to further our understanding of groundwater-surface water interactions in a meaningful way. Further efforts in this regard, however, need to reflect a systematic effort in which *all* potentially affected interests participate, and not result from an ad hoc decision from this Board to impose the burden on LCRA --- as the only river authority with groundwater permits issued by the District.

**IX. Point of Error 8: The District erred when it treated LCRA's applications differently than how the District has treated other large permit operation and transport requests.**

The GM, Recharge, and the Brown Landowners<sup>17</sup> misstate LCRA's position regarding its Point of Error No. 8. The District has issued permits to two entities that

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<sup>17</sup> The Brown Landowners cite to Andrew Weir's recollection of an email for its argument. LCRA objected to Andrew Weir's testimony as being testimony of a non-expert landowner. (Tr. 992-93). The ALJs rightly

include phasing, Recharge and Gatehouse. In keeping with that precedent set by those permittees and the District, LCRA requested permits that were phased. Now, without explanation, the District, has denied the same to LCRA. It does not matter that the Recharge and Gatehouse permits were issued pursuant to settlements and LCRA's application was contested. The Board eliminated the phasing requirements in the LCRA's permits and reduced the amount of groundwater from 25,000 acre-feet to 8,000 acre-feet, without explanation as to why or how LCRA's request differed from the previously issued phased permits of Recharge and Gatehouse. Moreover, Recharge's complaints about its own permits and the poorly negotiated or drafted provisions that it now wants to inflict on LCRA could not be addressed in LCRA's permitting case.

**X. Point of Error 9: The District erred when it failed to grant the Operating and Transport Permits as recommended by the ALJs, as modified by LCRA's exceptions, which correct unworkable and unlawful permit conditions.**

LCRA's Point of Error 9 outlines the additional changes LCRA believes need to be made to the permits if the District were to issue the permits as recommended by the ALJs after the granting of LCRA's Motion for Rehearing. LCRA has already thoroughly briefed these issues in its Post-Hearing Closing Arguments, its Post-Hearing Reply to Closing Arguments, its Exceptions to the Proposal for Decision, its Reply to Exceptions to the Proposal for Decision, its Motion for Rehearing, and this Reply to the Responses to the Motion for Rehearing. Those arguments and authorities are adopted herein.

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chose to not give weight to Mr. Weir's testimony and the Board may not reweigh the evidence and give his testimony weight that the ALJs did not give to his testimony.

## **XI. Conclusion**

The granting of LCRA's Motion for Rehearing has provided the Board of Directors a chance to reconsider and correct its flawed decision to disregard the PFD's recommendations and instead issue the permits as requested by LCRA, consistent with its legal authority. Moreover, the Board can avoid its previous errors by explaining the basis for whatever modifications it may ultimately makes to the PFD's Findings of Fact and Conclusions of Law and related permits, as required by Texas Water Code § 36.4165.

Should it fail to correct these errors, LCRA will seek the reviewing court's determination that the Board's Final Decision is contrary to law, arbitrary and capricious, not supported by substantial evidence, and that the Board's decision should be reversed by the court.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify by my signature below that on the 25<sup>nd</sup> day of March, 2022, a true and correct copy of the above and foregoing document was forwarded via email or First-Class Mail to the parties on the attached Service List.

*Emily W. Rogers*

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Emily W. Rogers

## SERVICE LIST

### **APPLICATION OF LCRA FOR OPERATING AND TRANSPORT PERMITS FOR EIGHT WELLS IN BASTROP COUNTY SOAH DOCKET NO. 952-19-0705**

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## ATTACHMENT 1

SOAH DOCKET NO. 952-19-0705

APPLICATION OF LOWER COLORADO RIVER AUTHORITY FOR OPERATING AND TRANSPORT PERMITS FOR EIGHT WELLS IN BASTROP COUNTY, TEXAS	§ § § § §	BEFORE THE <u>LOST PINES GROUNDWATER CONSERVATION DISTRICT</u> STATE OFFICE OF ADMINISTRATIVE HEARINGS
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~~PROPOSAL FOR~~ 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 ~~to Travis, Lee, and Bastrop Counties throughout its 35-county water service area.~~ The District’s General Manager (GM) issued Draft Operating Permits and Draft Transport Permits, ~~which contain provisions that LCRA and various other parties object~~ 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) ~~recommend~~ 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 ~~that monitoring the~~ 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 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 in order to "drought proof" supply<sup>3</sup>, 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 water proposed Purpose of Use for the permits 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 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. ~~Several Protestants disagreed with the issuance of the Draft Pennits, 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). ~~The ALJs also admitted~~ Aa group of landowners represented by a single attorney ~~was also admitted, and will be referred to as~~ (the "Brown Landowners"). ~~The ALJs admitted~~ Sseveral 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~~were substantive; some ~~are~~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.

## **B. Permits in the District**

The groundwater regulated by the District is in the Simsboro Formation, part of the larger Carrizo-Wilcox aquifer. Overlaying the Simsboro is the Calvert Bluff, and the Hooper Formation underlies the Simsboro Formation. 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.

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. 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. 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.

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, ~~which it over several years.~~ Recharge acquired its permits following years of ~~litigation~~ contested hearings and an agreed 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 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.

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, and the City of Bastrop (Bastrop), which is authorized to pump 2,000 acre-feet per year. 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. 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.

### 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.

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~~ 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 withdrawal~~ 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 binding commitment to provide at an authorized place of use. ~~contract (under the Draft Operating Pennits), 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~~ 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 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~~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 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. 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.

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 ~~or well operation. Both versions of the~~. The Revised 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 Pennits, 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~~The change in the Place of Use made the special condition in the Revised Draft Transport Permits that prohibits prohibiting transporting groundwater via the bed and banks of a river ~~remains in dispute~~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. 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].

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 ~~exempt wells~~groundwater produced pursuant to an exemption.

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

- (1) the application conforms to the requirements prescribed by [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.

The District has adopted similar rules for permit applications. 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.

Groundwater conservation districts may adopt rules regulating the spacing of wells and the production of groundwater. 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.

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.

#### 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 ~~the Mr.~~ 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 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 ~~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.”

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) 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 (3) that 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 pointed to another factor, which requires looking at District-wide pumping ~~to argue, arguing~~ that this factor envisions looking at District-wide pumping, as well.

#### **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 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).

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;
- 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.-

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~~The ALJs found Dr. Young’s ~~offered the only~~ definition of “unreasonably affects,” ~~the ALJs will not simply accept Dr. Young’s definition. Dr. Young is a hydrogeologist, not an expert on statutory construction. The ALJs find 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.

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”). ~~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 "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.

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. 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 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. 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. 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. 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.

#### **b. ALJs' Analysis**

Based on the overwhelming consensus of the evidence, the ALJs ~~find~~found 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. Nevertheless, LCRA ~~argues~~ argued that the New GAM should still be used to evaluate the effects: 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.”

The GM also ~~argues~~ 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.”

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. As discussed above regarding whose use should be 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.

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. He also testified that he updated his runs to improve the accuracy of the water level in Aqua's and Elgin's Simsboro wells. He testified that his analysis ~~factored in~~included well-design factors, such as pump settings, well constriction, and the location of the well screens for Aqua's and Elgin's wells.

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.

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. 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.

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. For Elgin's two wells in the outcrop, Dr. Young predicted that LCRA's pumping would cause less than one foot of drawdown. 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.

**a. Unreasonable Effects on Existing Surface Water Resources**

**b. ALJs' Analysis**

The ALJs agreed 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 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 ~~and phasing~~ aspects of the Revised Draft Operating Permits, which will be addressed below. 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 usePurpose of ~~water~~Use 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 argued 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 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.~~, which is why the Revised Draft Operating Permit proposed phases of increased pumping amounts.

The ALJs ~~find~~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 ~~posits~~posited that the best available science for evaluating impacts to surface water resources is the GAM. 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. 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%. 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.

Environmental Stewardship ~~argues~~argued that LCRA's analysis improperly excludes the cumulative impacts and looks only at LCRA's impacts to surface water. Environmental Stewardship ~~argues~~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 ~~in the context of the consistency~~consistent with the District Management Plan as required by District Rule 5.2.D.(4). Further, Environmental Stewardship ~~disagrees~~disagreed with ~~any reliance~~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 ~~take~~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, which showed the loss of surface water to the groundwater formations in Bastrop County. He used the surface water availability model (WAM) to examine ~~what~~ the impacts of the estimated losses of surface water ~~would be to~~on the reliability of senior water rights and to instream flow conditions in the Colorado River. 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.

Environmental Stewardship ~~urges~~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. Environmental Stewardship ~~argues~~argued that LCRA should not receive permits for even a portion of ~~it~~the total amount requested because it must meet the burden to prove the full amount of ~~water~~groundwater requested in the application or receive none at all. In the alternative, Environmental Stewardship ~~requests~~requested the permits (which include phases) to require District Board approval of any GM recommendation for LCRA to proceed past the second phase, ~~include~~including provisions for notice and an opportunity for protestants to have a hearing ~~on any decisions of the District.~~ Environmental Stewardship also ~~requests~~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. 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.

## **2. GM's Arguments**

Dr. Hutchison, the GM's expert, used the GAM to evaluate impacts to surface water resources. The GM ~~argues~~argued that the GAM is the best available science for conducting such evaluations and that ~~expert~~the model runs made by Dr. Hutchison using the New GAM indicated d

that pumping with the Base Case for the District will potentially reduce groundwater discharge to surface water.- 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 will recharge the groundwater. 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. 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.

However, the GM ~~argues~~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.- The GM ~~argues~~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. The GM ~~concludes~~concluded 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~~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.

### **3. LCRA's Arguments**

LCRA ~~states~~stated that ~~there is not specific guidance in~~ State law or District Rules does not provide specific guidance on the means by which~~how~~ a groundwater district should determine whether proposed permits will unreasonably affect surface water resources. 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. 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 ~~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 ~~concludes~~concluded that neither of his identified unreasonable conditions are possible.

LCRA is critical of Environmental Stewardship's approach; and the validity of Environmental Stewardship witness Mr. Trungale's findings ~~in particular.~~ LCRA ~~argues~~argued that Environmental Stewardship's overly stringent approach should be rejected because it has not been adopted in this ~~District,~~ or any other, ~~and should be rejected.~~ groundwater conservation district.

Regarding Environmental Stewardship's use of the GAM to estimate the impact of LCRA's proposed pumping on surface water resources, LCRA ~~argues~~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 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 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 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. LCRA ~~argues~~argued 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 believes that Mr. Trungale relied upon Mr. Rice's flawed inputs to conduct his ~~own~~-flawed analysis using the WAM. LCRA ~~states~~stated that Mr. Trungale's use of the ~~"Run 3"~~"Run 3" version of the WAM for his analysis significantly ~~understates~~understated the amount of water expected to be in the Colorado River and therefore ~~overstates~~overstated modeled impacts of LCRA's pumping on the surface water. LCRA attributes the over-stated impacts to "Run 3," not accounting for ~~historical~~al 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 ~~concludes~~concluded that Mr. Trungale's use of the WAM to examine pumping impacts on instream flow requirements is overly simplistic and flawed. LCRA ~~claims~~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.

#### **4. ALJs' Analysis**

The ALJs ~~conclude~~d 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~~d 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 ~~may~~might be additional conditions that would constitute unreasonable effects, but agreed that either condition would constitute unreasonable effects on surface water resources.

~~There is no requirement in~~Neither statutory law ~~or~~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~~Therefore, surface water monitoring is essential 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~~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. Environmental Stewardship also argued that such losses would be a greater percentage of the flows (up to 8%) during low flow conditions. 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.

#### **c. Cumulative Effects**

The ALJs ~~find~~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 ~~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 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.-

Because the ALJs ~~did~~did not find that the GAM is accurate enough to predict the loss of surface water with sufficient certainty or precision, the ALJs ~~did~~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 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.

### **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 ~~argues~~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 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 anticipated. 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. ~~It notes~~ 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.

Recharge, whose permitted wells will be close to LCRA’s proposed well field, ~~argues~~argued that LCRA failed to establish that its Applications will minimize as far as practicable the interference between wells. Recharge ~~argues~~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 ~~argues~~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. 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.

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 d that lessening drawdown and interference should be addressed by monitoring and mitigation.

The GM ~~argues~~argued that ~~his~~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 ~~argues~~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 note that this Rule requires an inquiry into the terms of the Draft Permits, not just the Applications.

The ALJs agreed d that the Revised Draft Operating Permits contain sufficient terms to lessen well interference. In particular, they ~~find~~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 Final Operating Permit also allows the GM to restrict the rate of withdrawal and will also require LCRA to file amendment applications to increase the authorized withdrawal amount

~~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 at one or more specified future times.”

The 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
- (5) yearly precipitation and production patterns.

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.”

It is undisputed that if LCRA and all the other permit holders pumped their full permitted

amount, the total pumping 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.”

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 argues argued that this use of the MAG as a permitting tool is consistent with 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.-

### **2. ALJs' Analysis**

While noting the Hernandezes' frustration, the ALJs find 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 Water Code does not anticipate the MAG being a hard permitting cap, as evidenced by amendments adopted in 2015 to Water Code §36.1132 to change the MAG from a permit cap to a production limit. Rather, the MAG is one factor in the permitting analysis. The ALJs find that the evidence shows the GM appropriately considered the factors. Instead, the MAG is one factor in the permitting analysis. 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 ~~argues~~argued that provisions contained in previous permits reflect District policy and, thus, must be included in the Draft Permits. Alternatively, they ~~argue~~argued 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~~argued that the same District policy considerations require that the following conditions be ~~placed~~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 ~~F~~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 Final Revised Draft Operating Permits also require incorporated some of these items, including end-user contracts, monitoring-well agreements, and tiered phasing of production that the GM may require future cutbacks.~~

~~Recharge also argues that if the Draft Pennits are issued without these provisions, its pennit (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~~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.” It then ~~argues~~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. ~~It argues~~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.” Finally, Recharge ~~also argues~~argued 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.”

The GM disagrees, as does LCRA. The GM ~~argues~~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 ~~conclude~~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~~argued that LCRA's requested production should be reduced, as well. Such an approach would be inconsistent with the balancing analysis required by 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 ~~between the time~~after the permits for Recharge's three wells were issued and before LCRA's Applications. Under the current rules, the ~~rules for~~ spacing required between wells belonging to one party ~~are~~is different from the ~~rules addressing~~ spacing required 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 existence of the rule, that is, in essence, what Recharge is arguing.~~ The ALJs ~~are~~were not convinced that the District has a separate well-spacing policy, aside from its spacing rule, that should apply here.

## 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<sup>d</sup> 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 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. ~~This 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.

Moreover, the Brown Landowners do not clearly describe the historic use that they argued<sup>d</sup> must be considered. They argued<sup>d</sup> 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 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<sup>d</sup> 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].”

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 ~~find~~found that GM’s understanding is consistent with Water 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. It also prohibits a district from requiring that additional information be included in an application for it to be considered administratively complete.-

The Brown Landowners do not offer a competing definition of administrative completeness, nor do they indicate what it requires. They only arguedd that they do not think the Application satisfies it. To the extent that the Brown Landowners arguedd that the Application is not administratively complete because of the factors set out in the Water Code or the District’s Rules, the discussion of that argument is set out in the sections discussing the substantive portions of the Water Code or Rules. Otherwise, the ALJs ~~are~~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 ~~also~~argued that athe District should add some sort of geographic limitation ~~should be added~~ to the Draft Permits. In essence, they arguedd 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 ~~are~~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 ~~argues~~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 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~~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.”~~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. The permits would expire if LCRA did not have any binding contracts before the anniversary of five years from the Phase II date. 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. 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**

~~LCRA states that it has met all requirements of District Rule 5.1.B(S) because it has identified its existing and future customers as the end users. LCRA also contends that a requirement for "binding contracts" goes beyond the requirements of District Rule 5.1.B(S) and exceeds the District's authority. 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. LCRA argues that there is no basis to hold groundwater to a higher standard than surface water.~~

~~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.~~

~~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.~~

~~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 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.~~

### **~~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(e) 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 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. 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. 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. Therefore, there is not a compelling reason to include the requirement for "binding contracts."~~

~~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 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. 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.—LCRA argues that the current DFC should be used for the life of the pennit. It argues that keeping the current DFC is "consistent with the notion that DFC compliance should not be borne solely by a single permittee."~~

#### **~~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 fonnula, 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.~~

~~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.~~

#### **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." 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 d about certain aspects of this Special Condition as it relates to monitoring groundwater. As discussed above, the ALJs also ~~find~~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 ~~has been~~is 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~~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.

### 2. Parties' Arguments

LCRA first objects to the 180-day deadline to enter into a Monitoring Well Agreement. LCRA ~~argues~~argued 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 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.-

LCRA ~~argues~~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 be prevented from increasing~~not be allowed to increase~~ its pumping unless it complies. LCRA also argues~~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 d are needed before Permittee may increase its pumping [to the requested phase]” be added to the Draft Operating Permit.-

The GM argues~~argued~~ that negotiation of a monitoring well agreement cannot be delayed until after production, particularly since monitoring wells are used to analyze local impacts, such as those that have been contested in this case. The GM also argues~~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 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 d 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. 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 ed adopting LCRA’s proposed change to extend the deadline to enter into a Monitoring Well Agreement. The ALJs ~~are~~were convinced that a flexible deadline, rather than a 180-day deadline, will~~would~~ better allow LCRA and the GM to take any new pumping into account. Additionally, the ALJs agreed d 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. 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 all other authorized pumping groundwater production in the District. 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 which would relate 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.-

The ALJs find found that, in light of the fact that the GAMs show potential impacts to surface water resources caused by LCRA and District-wide pumping, any the monitoring well system 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.

The ALJs have did not include Environmental Stewardship's recommended changes to the permits incorporating the Dr. Young's work plan created by Dr. Young. While the ALJs agreed d that adoption of a surface water plan (like the work plan created by Dr. Young's or some other work plan the District has approved) may might be beneficial for the purposes of in 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~~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 ~~that is adopted during~~added to the District's water management ~~planning process~~plan.

### **I. 36-Hour Pump Test**

LCRA ~~argues~~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. ~~No issues involving the 36-hour pump test remain to be resolved by the ALJs. Accordingly, the Final Operating Permit includes the agreed modifications.~~

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

LCRA ~~argues~~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 completion is completed~~, should be removed.

The GM concedes that a similar special condition is not in other permits. He ~~argues~~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 ~~find~~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 ~~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 ~~service area~~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.~~

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 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. 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 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.~~ Accordingly, the Final Operating Permits allow all beneficial uses

authorized by 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.

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 ~~set up~~ adopt rules, or require production fees, that could be used for a mitigation fund. But the Protestants have did not ~~presented the any~~ authority that would allow the ~~under which~~ District ~~could to~~ require the establishment of a mitigation fund, nor have they ~~presented~~ 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.

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

Pursuant to District Rule 6.1, a transport permit is required to convey groundwater ~~out of~~ beyond the District's boundaries, which are coextensive with the boundaries of Bastrop and Lee counties. LCRA's Amended Applications ~~initially~~ requested transport permits to use the requested 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~~ authorize 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).**

LCRA's applications for transport permits meet the requirements of Section 6 of the District's Rules and Water Code § 36.122(f), ~~and the ALJs agree~~. The Applications met each of the filing requirements under District Rule 6.2.

In reviewing a proposed transfer of groundwater out of the District, 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 Board 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.~~ For the first 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. The Region K and Region G Water Plans identify water supply shortages~~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. 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.

## **~~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. 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. 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."~~

~~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. 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. Therefore, he argues, the possibility of transport of the groundwater via the bed and banks is not foreclosed. The GM will recommend the District include such a provision in all future transport permits.~~

~~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. 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.~~

~~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.~~

## **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(e) 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." Instead, the transporter maintains legal possession and ownership of the groundwater for later diversion even after it is discharged.~~

~~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 groundwater. The cases include: *City of JC01pus 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 'non 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).<sup>23</sup> 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.~~

~~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.~~

### **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's 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 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. 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.~~

~~The GM states that it 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.~~

## I. CONCLUSION

~~The ALJs recommend issuance of the Revised Draft~~ 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 the Draft 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. ~~the following changes;~~

- ~~1. That Special Condition I 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 Board provides the following Findings of Fact and Conclusions of Law.

## 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~~ 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 ~~municipal, industrial, recreational, irrigation and agricultural purposes~~ 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, ~~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~~ 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 as certain production plateaus and conditions are met, 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 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 statesstated 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 ~~will~~should not unreasonably affect existing surface water resources.
31. The modeling also showed that LCRA's proposed pumping, when combined with other ~~pumping~~groundwater production, has the potential to affect existing surface water resources.
32. Because LCRA's proposed ~~pumping~~production, when combined with other ~~pumping~~groundwater production, has the potential to affect existing surface water resources, the ~~Revised Draft~~Final 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~~The Special Conditions contained in the ~~Revised Draft~~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 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**

- ~~4238~~. 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.
- ~~4440~~. 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.
- ~~4541~~. Under the Revised Draft Operating Permits, the GM can restrict ~~pumping the rate of~~

withdrawal if the 36-hour pump tests reveal that impacts from pumping are worse than anticipated.

4642. The Special Conditions regarding the 36-hour pump tests, ~~phasing~~, and monitoring wells in the ~~Revised Draft~~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

43. The District has not adopted rules or policies ~~of reducing~~requiring an applicant to reduce the initial amount of water requested ~~by an applicant or of requiring~~ permittees to provide financial mitigation for adverse impacts caused by production in ~~Bastrop County~~the District.
44. The District has not adopted a rule or 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. The Special Condition ~~15~~ in the ~~Revised Draft~~Final Operating Permits, which requires LCRA to provide well design specifications before drilling, is appropriate and 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 and 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.~~

~~50.53. Pumping water without beneficially using it ~~would violate~~ is a violation of the ~~Revised Draft~~ Final 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.~~

~~5158. Special Condition 5 of the Revised Draft The Special Condition of the Final Operating Permit ~~Special Condition 5~~ that 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."~~

~~5259. The parties admitted at this hearing are affected persons; and have ~~an~~ interests beyond those of 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.~~

53. 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.

54.69. LCRA did not submit well design specifications with its Applications.

55.70. The GM is authorized to require LCRA to provide design specifications.

56.68. A Special Condition of the Revised Draft Operating Permit requires LCRA to provide the GM with design specifications before drilling a new well.

57.71. ~~Revised Draft~~ The Final Operating Permits authorize “[a]ll beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B).”

58.72. 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~~ Final Operating Permits provide for that flexibility.

## Monitoring Wells

59.61. Special Condition 1 of the ~~Revised Draft~~ Final Operating ~~Permit requires~~ 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 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.

60.62. A Special Condition ~~4~~ of the ~~Revised Draft~~ 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.

~~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.~~
- ~~71. Revised Draft Operating Permits authorize "[a]ll beneficial uses authorized by Texas Water Code § 36.001(9)(A)-(B)." and the revision offered by the GM allows for that flexibility.~~

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

- 61.73. 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.
62. The Regional Water Plans and LCRA's existing contract demonstrate a need for the water in the receiving area.
- 63.74. In reviewing LCRA's Applications for Transport Permits, the GM considered the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence.
- 64.75. 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.
- 65.76. 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 pennit and from discharging to any surface water.~~
- 66.78. Under the ~~Draft~~ 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.
- ~~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 ~~that wereas~~ amended on 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 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.
- ~~7.6.~~ 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.
- ~~8.7.~~ The District is not required to consider historic use in evaluating LCRA's Applications. Tex. Water Code § 36.116(b).
- ~~9.8.~~ Neither the Texas Water Code nor the District Rules authorize the District to unilaterally impose a requirement that an applicant ~~recreate~~create a mitigation account to pay other well owners for the impacts from the applicant's drilling.
- ~~10.9.~~ 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).~~

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.~~13. After weighing the factors under Texas Water Code § 36.113(d) and the District Rules, the District ~~should approve~~ approved the ~~GM's Revised Draft~~ Final Operating Permit and the ~~Draft~~ Final 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.~~

## ATTACHMENT 2

**CLAIMS ABOUT FULL PERMIT REQUEST OF 25K**

Protestant Argument	LCRA Rebuttal		PFD
<p><b>LCRA didn't like Bob Harden's advice and ignored his recommendations, instead arbitrarily deciding to ask for 25,000 acre-feet/year</b></p>	<p>LCRA Reply Brief at 9-10, 25-26</p>	<p>Bob Harden's report concluded that his “work effort results in a plan for a GLR groundwater supply ultimately producing 25,000 acre-feet per year.” (LCRA Ex. 72). LCRA Ex. 72 is the Preliminary Engineering Report for water supply from the Griffith League Ranch. It includes a memorandum by R. W. Harden reflecting both the phased development of a 25,000 af/yr supply and a wellfield configuration that matches the one in LCRA’s applications. Contrary to Recharge’s statement that this report was “discredited” by Mr. Hofmann’s testimony, Mr. Hofmann simply testified earlier in the hearing that he “did not recall” a report addressing production of 25,000 af/yr. (Tr. 174:16-21).</p>	<p>The ALJs "decline[d] to read anything sinister into LCRA's decision to change experts." (PFD at 35)</p>
		<p>LCRA Exec. V.P. of Water, John Hofmann, testified about Harden's role, noting that “RW Harden was hired to look at a variety of technical issues associated with the exploration on the property,” and that, “We made a decision go with [the consultants'] recommendation” on the amount to request. (Tr. 113:3-6 ; Tr. 113:19 to 114:5; 146:15-17)</p>	
		<p>Harden's work was reflected in LCRA’s Application when it summarized the potential impacts to the aquifer as an average of 65 feet of drawdown in artesian pressure (LCRA Ex. 3-A-2 at 6).</p>	
<p><b>LCRA's testifying experts were not asked to support viability of 25k</b></p>	<p>LCRA Reply Brief at 9-10, 25</p>	<p>Dr. Young testified that he and Mr. Kelley “were asked to specifically look at impacts, and all impacts, all aquifers, all wells around surface groundwater . . . We were asked to look at every – every aspect . . . of the 25,000 acre --- acre-feet. . .”) (Tr. 443:2-6)</p>	<p>The PFD generally summarizes LCRA's testimony that the full 25,000 will not cause</p>

**CLAIMS ABOUT FULL PERMIT REQUEST OF 25K**

Protestant Argument	LCRA Rebuttal		PFD
		<p>Dr. Young testified as to the impacts and availability of the full 25k in his direct testimony and during the live hearing. (LCRA Ex. 28 at 22-41 &amp; 47-48, LCRA Exs. 37, 38, 40, &amp; 42; Tr. 574:21-575:16) (Young))</p> <p>Mr. Hofmann testified that LCRA relied on advice from our project hydrogeologists (LCRA Ex. 1 at 15:14-17; Tr. 72:25 to 73:2 (“We used the models that were referred to us by our consultants on the project, yes.”); Tr. 113:9-11 (Mr. Harden’s scope included “a number of things, including potential impacts to the wells – to LCRA’s potential wells and to existing users within proximity.”); and Tr. 145:1 to 146:20 (discussing LCRA’s reliance on the modelers)).</p>	<p>"unreasonable effects" (PFD at 14-22)</p> <p>The PFD also acknowledged that Protestants argued for reductions in permitted amount ranging from 6,000-10,000. (PFD at 11)</p>
<p><b>GAM assumptions of transmissivity are wrong (too high)</b></p>	<p>LCRA Reply Brief at 20-22</p>	<p>Dr. Young repeatedly disavowed reliance on the transmissivity data from the Lost Pines Power Park and clarified that based on his own analysis, 9,000 ft<sup>2</sup>/day was the correct transmissivity for GLR. (E.g., Tr. 1650:6-8 &amp; 20-24)</p> <p>Dr. Young further noted that this transmissivity value was <b>higher</b> than the transmissivity values used by the old or the new GAM, and thus <b>he predicts less actual drawdown than predicted by the models.</b> (Tr. 1669:20 to 1670:2, 1672:3-6 and 19-21; Tr. 1673:6-10).</p> <p>Recharge's own expert conceded that both Recharge's and LCRA's wells are located in some of the most transmissive portions of the Simsboro (Recharge Ex. 14, Tr. 1655: 6-21 (Thornhill))</p>	<p>The PFD considered parties' disputes over use of GAM to evaluate impacts, including local impacts (PFD at 12, 19)</p> <p>The PFD concluded that the overwhelming consensus of evidence supported use of the new GAM that Dr. Young used to analyze impacts. (PFD at 18-19, FOF 26).</p>



**CLAIMS ABOUT FULL PERMIT REQUEST OF 25K**

Protestant Argument	LCRA Rebuttal		PFD
<p><b>LCRA will desaturate the aquifer or cause "devastating effects" on the aquifer and local wells</b></p>	<p>LCRA Reply Brief at 27-28</p>	<p>LCRA's and the GM's experts all testified that the Harden graphs depict analysis of potential for drawdown within LCRA's <b>own</b> proposed wells and not the aquifer, under a series of different assumed future pumping scenarios for LCRA <b>and others</b>. This analysis informs on design considerations like energy costs, well depths and screening, but <b>does not demonstrate that LCRA's proposed pumping will desaturate the aquifer</b> or exceed the DFC. ((Tr. 266:24 to 268:25 (Kelley); Tr. 1420:9 to 1421:7 (Hutchison); Tr. 1654:6-20 (Young)).</p> <p>LCRA's expert, Dr. Young, testified that desaturation of the Simsboro in the vicinity of the GLR would require over 1,000-1,200 feet of drawdown – nowhere close to any estimate of drawdown caused by LCRA's proposed pumping in that area. (Tr. 548:22-25 (Young)).</p>	<p>PFD concluded that Dr. Young's modeling was "sufficient" and that this modeling showed "the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders" Recognizing that real-world effects can differ from modeling, the ALJs further recognized such effects could be addressed by the permit conditions (phasing, monitoring, pump tests, and curtailment). (PFD at 22, FOF 26-30, 42)</p>

**CLAIMS ABOUT LOCAL IMPACTS & WELL INTERFERENCE**

<b>Protestant Argument</b>	<b>LCRA Rebuttal</b>		<b>PFD</b>
<p><b>LCRA did not “minimize” interference with Recharge’s wells and instead “maximized” impact to Recharge’s wells by locating the wells close to the property line</b></p>	<p>LCRA Reply Brief at 20-21, 25-26</p>	<p>Dr. Young testified that the Impact to Recharge’s not-yet-designed-or-drilled wells is comparable to the impact of Recharge's wells on LCRA (LCRA Ex. 55 at 40).</p>	<p>PFD agreed with LCRA that “The standard is not whether interference between wells will be minimized as far as practicable, but rather whether it will be lessened” and requires an inquiry into both the applications and the draft permit terms. (PFD at 34).</p> <p>PFD clearly considered, understood, and rejected Recharge’s arguments over well field design. (PFD at 33).</p> <p>The PFD concluded that the Draft Permits contain sufficient terms and conditions, such as pump tests, monitoring, and curtailment, to lessen well interference. (PFD at 22 &amp; 35, FOF 26-30, 38-42).</p>
		<p>Dr. Young testified that, because Recharge hasn't actually drilled any wells, Recharge can take into account anticipated effects on LCRA's pumping to address any impacts it might choose to avoid ((Tr. 1245:24 to 1246:3); LCRA Ex. 55 - 40:2-12)).</p>	
		<p>Dr. Young testified that moving well further away but into less transmissive, shallower part of the aquifer could result in greater impacts to Recharge and more impacts to Aqua or Elgin. (LCRA Ex. 28 – 16:1-16, 19:20 to 20:2; LCRA Exs. 30 &amp; 31; LCRA Ex. 55 – 18:6-14, 24:20 to 25:1; LCRA Ex. 57; Recharge Ex. 14; Tr. 542:2-6, 1655:6-21 (Young))</p>	

**CLAIMS ABOUT LOCAL IMPACTS & WELL INTERFERENCE**

<b>Protestant Argument</b>	<b>LCRA Rebuttal</b>		<b>PFD</b>
<b>The GAM can't be used to look at local impacts and isn't reliable</b>	LCRA Reply at 16 notes 7-8	Protestants have cherry-picked excerpts from GAM report and ignored other key evidence in the record and in the GAM report itself about its use.	<p>The PFD evaluated use of the GAM, concluding that the "overwhelming consensus of evidence" supported use of the new GAM. (PFD at 16-18, FOF 26).</p> <p>The PFD considered the Protestants opposition to use of the GAM to evaluate effects on wells but agreed with Dr. Young's testimony that the GAM "is an appropriate tool to evaluate" these impacts and that this modeling showed "the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders" Recognizing that real-world effects can differ from modeling, the ALJs further recognized such effects could be addressed by the permit conditions (phasing, monitoring, pump tests, and curtailment). (PFD at 22, FOF 27-30, 42).</p> <p>The PFD considered and rejected Aqua and Elgin's arguments over impacts and agreed with Dr. Young's criticism of Mr. Keester's approach. (PFD at 19-22).</p>
	Reply Brief at 14-15	The GAM was expressly recognized as the best available tool by Dr. Young (LCRA's expert) (LCRA Ex. 28 – 25:3-26:2), Dr. William Hutchison (GM's expert) (GM Ex. 11 – 11: 7-9, 14: 22-23), Mr. George Rice (Brown Landowners' expert) (ES Ex. 100 – 6:44-45), Mr. Thornhill (Recharge's expert) (Recharge Ex. B – 18; Tr. 1487:11-19), and Mr. Michael Keester (Elgin's and Aqua's expert) (LCRA Ex. 56 –13).	
	LCRA Reply Brief at 15-16	Dr. Young testified that, in developing the Revised GAM, the high production areas in the Simsboro in Bryan/College Station and around Alcoa were used to develop model equations and calibrate the model. Accordingly, the GAM still provides a high level of confidence in the predictive drawdowns in the Bastrop area (perhaps slightly lower than in Bryan/College Station area) (Tr. 603-04 (Young)).	
	LCRA Reply Brief at 16	Dr. Young explained that the sorts of revision or additional computations recommended in the TWDB GAM Report had been made subsequent to submission of the GAM to TWDB, and that those additional computations were incorporated in the GAM analyses submitted in his rebuttal testimony. (Tr. 480-484; LCRA Ex. 55 – 18:4-20:10).	
	LCRA Reply Brief at 17-22.	Dr. Young testified that the model he used had been revised to address the model grid issues Keester raised and that, with those revisions and other refinements similar to those used by Aqua's and Elgin's experts, the GAM still showed no unreasonable impacts to Aqua and Elgin. (LCRA Ex. 55 - 18:4-20:10, 23:4-6, 19-21, & 25:6-9, 25:21 to 26:3).	

**CLAIMS ABOUT LOCAL IMPACTS & WELL INTERFERENCE**

<b>Protestant Argument</b>	<b>LCRA Rebuttal</b>		<b>PFD</b>
<b>LCRA didn't look at impacts to existing users or put on evidence of well interference</b>	LCRA Reply Brief at 17-22	Dr. Young's direct testimony specifically analyzed Estimated Drawdown and Available Drawdown for each Party well. (LCRA Ex. 28:28:15 to 35:2; LCRA Exs. 34-43).	The ALJs acknowledged LCRA's targeted analysis and concluded that Dr. Young's modeling showed "the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders" Recognizing that real-world effects can differ from modeling, the ALJs further recognized such effects could be addressed by the permit conditions (phasing, monitoring, pump tests, and curtailment). (PFD at 22, FOF 27-30, 42).
	LCRA Reply Brief at 18-19	Dr. Young evaluated impact on Aqua's and Elgin's wells (LCRA Ex. 55 at 21-26 and LCRA Exs. 58 & 59), described modeling of impacts on Aqua wells under the former and Revised GAM, with baseline pumping, baseline plus LCRA pumping, and alternative levels of production by Aqua, with adjustments made to reflect the localized impacts of Aqua's own pumping similar to those made by Mr. Keester. Using best available science, Dr. Young demonstrated and concluded that LCRA's proposed use did not unreasonably affect Aqua wells. (LCRA Ex. 55 – 23:19 to 24:2, 25:21 to 26:3).	
	LCRA Reply Brief at 19	LCRA evaluated impacts to Hernandez well and the Brown Landowners' wells. (LCRA Ex. 55-28:9 to 30:6). While Dr. Young did not have access to the same level of information he had for the Elgin and Aqua wells, his analysis showed no unreasonable impacts based on objective criteria. (LCRA Ex, 55–29:1-3 & 30:1–6).	
	LCRA Reply Brief at 19	Dr. Young demonstrated that, with Elgin and Aqua, the largest impact on water level in the wells is their wells' own production. (LCRA Ex. 60, 61).	
	LCRA Reply Brief at 20	Dr. Young testified that the Impact to Recharge's not-yet-designed-or-drilled wells is comparable to the impact of Recharge's wells on LCRA. (LCRA Ex. 55 at 40).	

**CLAIMS ABOUT LOCAL IMPACTS & WELL INTERFERENCE**

<b>Protestant Argument</b>	<b>LCRA Rebuttal</b>		<b>PFD</b>
<b>LCRA deliberately chose not to conduct pump tests on GLR</b>	LCRA Reply Brief at 22-23.	LCRA is not avoiding a pump test. In fact, it will conduct a pump test on <u>every well</u> prior to placing the well into production. (Revised Draft Operation Permit Special Condition 14.) The draft permit's special conditions, including phased production limits, a 36-hour pump test for each well, and the GM's ability to curtail production, if necessary, provide superior protection, much better than a single 36-hour pump test prior to filing the application.	PFD recognized District rules allow the GM to provide special conditions in the permit in lieu of a pump test and recommended inclusion of Special Condition 14. (PFD at 8, 35, 55, FOF 29, 41, 67).
<b>LCRA and the ALJs ignored the impacts of Alcoa pumping</b>	LCRA Reply Brief at 15	Dr. Young testified that, in developing the Revised GAM, the high production areas in the Simsboro in Bryan/College Station and around Alcoa were used to develop model equations and calibrate the model. Accordingly, the GAM still provides a high level of confidence in the predictive drawdowns in the Bastrop area (perhaps slightly lower than in Bryan/College Station area) (Tr. 603-04 (Young)).	PFD concluded that Dr. Young's analysis was sufficient to demonstrate no unreasonable impacts and that the permits conditions would minimize drawdown, reduction in artesian pressure, and lessen well interference. (PFD at 22, 34-35, FOF 27-30, 42).
<b>LCRA relied solely on the District's spacing requirements to address well interference</b>	LCRA Reply Brief at 20-21, 22-23	LCRA's wells not only comply with and even exceed spacing requirements, it has agreed to other special conditions and limitations in the <i>permits</i> to address well interference. LCRA will perform a pump test on <i>every well</i> and the GM can reduce production rate if impacts are more severe than predicted. The permits also subject LCRA to phasing, monitoring, and curtailment of production. (Revised Draft Operating Permit Special Conditions 1, 3, 11, 14).	The PFD recognized that requirements beyond well spacing were considered by LCRA and further addressed by the permit conditions (phasing, monitoring, pump tests, and curtailment). (PFD at 22, 34-35 FOF 27-30, 38-42).
<b>LCRA limited Young's scope of work to only using the GAM.</b>	LCRA Reply Brief at 18-19	Dr. Young testified that he looked at all aspects of the impact of the permits and that he was given freedom to do the sort of analysis he thought was appropriate. (Tr. 435: 15-22) Dr. Young used not only the GAM, but also looked at specific local geologic conditions and did well-specific adjustments nearly identical to those proffered by Aqua's and Elgin's expert to evaluate impacts at wells where the design information was available. (LCRA Ex. 55 21-26, LCRA Ex. 59).	The PFD acknowledged LCRA testimony that looked at factors besides modeling with the GAM and more refined analytical modeling. (E.g. PFD at 21-22, 32, FOF 27-28, 40 (discussing LCRA testimony about aquifer characteristics and consideration of operational flexibility)).

**CLAIMS ABOUT LOCAL IMPACTS & WELL INTERFERENCE**

<b>Protestant Argument</b>	<b>LCRA Rebuttal</b>		<b>PFD</b>
<p><b>LCRA didn't provide site specific information</b></p>	<p>LCRA Closing Brief at 22-28</p>	<p>Dr. Young's testimony included a thorough evaluation of available water quality data, geophysical logs, fault locations, groundwater availability modeling, and specific hydrogeologic data at the Griffith League Ranch. (LCRA Ex. 28, at 14-21; LCRA Exs. 30-33, LCRA Ex. 55, at 33, LCRA Ex. 62).</p> <p>Dr. Young looked at the impact of the proposed pumping across the District, and the predicted drawdown and amount of remaining available groundwater beneath each party well. (LCRA Ex. 28, at 32-34, 37; LCRA Exs. 40-42, LCRA Ex. 55, at 28-30).</p>	<p>The PFD concluded Dr. Young's modeling showed "the proposed pumping would not cause unreasonable effects on existing groundwater resources or permit holders" and that permit conditions (phasing, monitoring, pump tests, and curtailment). would minimize drawdown, reduction in artesian pressure, and lessen well interference. (PFD at 22, 34-35 FOF 27-30, 38-42).</p>

**WELL FIELD DESIGN CLAIMS**

Protestant Argument	LCRA Rebuttal		PFD
<p><b>Recharge's spacing amounts to 2/3 acre-ft/acre</b></p>		<p>Recharge's expert admitted that he included large swaths of land over which Recharge has no authority or control to create Recharge Exhibit 13. (Tr. 940: 4-12) (Thornhill). That invalidates this calculation. In his deposition, the expert described the exhibit as "cartoonish." (Tr. 937:10-24) (Thornhill).</p>	<p>PFD considered and rejected Recharge's many arguments over spacing requirements to that of LCRA. (PFD at 33-35, 38-40)</p>
<p><b>LCRA could have placed wells anywhere on property</b></p>	<p>LCRA Reply Brief at 23-25</p>	<p>The agreement with the owner Griffith League Ranch (Boys Scouts of America Capital Area Council (BSCAC) includes specific requirements that <i>require</i> LCRA to place its well field within a "Preferred Groundwater Development Area." (LCRA Ex. 3-A-3, Water Rights General Warranty Deed p. 2 &amp; Exhibit A "Preferred Groundwater Development Area"; Infrastructure Easement Agreement dated Jan. 9, 2015, p. 2, and Partial Release of Easement, Exhibit A thereto).</p>	<p>The PFD acknowledged the limitations of this agreement affected LCRA's well placement. (PFD at 32)</p>
	<p>LCRA Reply Brief at 23-25</p>	<p>The BSCAC agreement also places a variety of limitations on how LCRA can construct and operate its project, including limits based such things as property access using existing roads, construction of new roads, utility placement, lighting, tree removal, and the Boy Scouts' own obligations related to the Houston Toad. (e.g. LCRA Ex. 3-A-3, Infrastructure Easement Agreement dated Jan. 9, 2015 pp. 5-6, Ex. A "Additional Terms and Conditions" ¶¶ 2-4, 6 &amp; Ex. B "Restrictions on LCRA Ranch Operations Consistent with BSA/CAC HCP;" Tr. 177:18-24, 220:24 to 221:13 (Hofmann)).</p>	
<p><b>LCRA's project won't impact the endangered Houston Toad</b></p>	<p>LCRA Reply Brief at 24-25</p>	<p>LCRA's authorization from the U.S. Fish and Wildlife Service under the Endangered Species Act includes <b>requirements to site the wells, pipeline, and access roads</b> in the portion of the property that was affected by the 2011 Bastrop fires, and adherence to strict restrictions on vegetation clearing, installation of exclusionary fencing during construction and operation, lighting and noise restrictions. (Brown Ex. 38 at 3, 7 &amp; Appendix B; Tr. 177:18-24, 220:24 to 221:13).</p>	<p>The PFD acknowledged the limitations of LCRA's agreement with the Boy Scouts (which also included limitations related to the Houston Toad) . (PFD at 32)</p>
	<p>LCRA Reply Brief at 24</p>	<p>Recharge's own expert has recognized that protection of the Houston Toad involves requirements to avoid construction impacts. (Recharge Ex. 23 at p. 5)</p>	

**WELL FIELD DESIGN CLAIMS**

Protestant Argument	LCRA Rebuttal		PFD
<p><b>LCRA did not rely on an expert to design well field configuration</b></p>	<p>LCRA Reply Brief at 25-26</p>	<p>LCRA relied on Bob Harden to design the well field - both <b>before and after closing on the purchase</b>. (1) Brown Ex. 31 at 1 (describing Mr. Harden’s work “regarding the identification for the most appropriate area(s) for developing a groundwater supply at Griffith League Ranch”) and at 2 (“the initial purpose of this work is to determine the suitability of developing a groundwater supply on GLR in accordance with the Houston Toad Habitat Conservation Plan (HCP) agreement between LCRA and the U.S. Fish and Wildlife Service.”); (2) Brown Landowners’ Ex. 38, Appendix A; LCRA 72 (noting that well field layout “coincide with the preferred development corridor that LCRA has developed in conjunction with the Fish &amp; Wildlife Service for best protection of the Houston Toad habitat”); (3) Tr. 72:1, 13-17 (Hofmann); Tr. 72:25 to 73:2 (Hofmann) (“We used the models that were referred to us by our consultants on the project, yes.”); (4) Tr. 113:9-11 (Hofmann) (Mr. Harden’s scope included “a number of things, including potential impacts to the wells – to LCRA’s potential wells and to existing users within proximity.”); (5) Tr. 145:1 to 146:20 (Hofmann) (discussing LCRA’s reliance on the modelers)).</p>	<p>The PFD considered evidence from all the parties on the well field design and concluded that LCRA’s proposed design, combined with the permit conditions, would minimize drawdown, reduction in artesian pressure, and lessen well interference and further concluded that the proposed pumping would not cause unreasonable effects. (PFD at 22, 32-35, FOF 27-30, 38-42).</p>
	<p>LCRA Reply Brief at 23-27</p>	<p>LCRA relied on a team of technical experts to site the wells and evaluate feasibility (not only hydrogeology but several other factors. (Tr. 177:10-14, 180:11 to 182:6 (Hofmann)).</p>	
	<p>LCRA Reply Brief at 26</p>	<p>Dr. Young affirmed that he would have configured the wells the same way as proposed. (Tr: 574:21-575:16).</p>	
	<p>LCRA Reply Brief at 25-26</p>	<p>LCRA’s proposed well locations corresponds to the deepest portion of the aquifer on the property with high transmissivities, the greatest available drawdown, and access via an existing GLR road. (LCRA Ex. 28 – 16:1-16; LCRA Exs. 30, 31, and 57; Recharge Ex. 14; Tr. 1655:6-21, 1673:6-10 (Young)).</p>	