

**SOAH DOCKET NO. 582-14-3427  
TCEQ DOCKET NO. 2013-2228-MWD**

<b>APPLICATION OF DHJB</b>	<b>§</b>	<b>BEFORE THE STATE OFFICE</b>
<b>DEVELOPMENT, LLC FOR</b>	<b>§</b>	<b>OF</b>
<b>A MAJOR AMENDMENT TO</b>	<b>§</b>	<b>ADMINISTRATIVE HEARINGS</b>
<b>TPDES PERMIT NO. WQ0014975001</b>	<b>§</b>	

**COMBINED EXCEPTIONS OF THE APPLICANT, DHJB DEVELOPMENT LLC, &  
THE JOHNSON RANCH MUNICIPAL UTILITY DISTRICT TO THE ALJ'S  
PROPOSAL FOR DECISION**

**TO: The Honorable Sarah G. Ramos, Administrative Law Judge:**

COMES NOW, DHJB Development LLC, Applicant in the above referenced proceeding, and Aligned Party, Johnson Ranch Municipal Utility District (collectively the "Applicant") and file this their Combined Exceptions to the Proposal For Decision in the matter of the Application to Amend TPDES Permit No. WQ0014975001 to increase its flow and authorize a discharge, and would show the ALJ as follows:

**I.  
INTRODUCTION**

The Applicant files these exceptions to the Administrative Law Judge's recommendation to deny the permit amendment based upon erroneous conclusions that the discharge under the amended Permit will not be into a "watercourse" and that the discharge would have a negative impact on the adjacent landowners' use and enjoyment of their property and/or an adverse impact on their cattle. The Applicant's burden of proof is to demonstrate by a preponderance of the evidence, not a clear and convincing standard, that the amendment if granted will comply with all applicable laws.

The Applicant, and the proposed amended Permit authorizing the discharge of treated effluent, demonstrates compliance with all applicable law including the fact that the discharge

will be into a watercourse and that the discharge of treated effluent, which meets all state statutory and regulatory standards, will not unreasonably impair or impact either the neighboring property owners' use and enjoyment of their property or their cattle. Set forth below Applicant identifies both its exceptions to the findings and conclusions in the ALJ's proposed Order, as well as presents argument supporting the exceptions and justification for the Administrative Law Judge to modify her Proposal for Decision to recommend granting of the proposed Permit amendment as recommended by the Executive Director.

The exceptions to the ALJ's PFD and corrections to the Findings of Fact and Conclusions of Law stem from the ALJ's narrow construction of the law applicable to waters of the state and watercourses. Traditionally, state water is defined very broadly to include all water of the ordinary flow, underflow, and tides of every flowing river, natural stream and lake, and every bay or arm of the Gulf of Mexico, and the stormwater, floodwater, and rainwater in every river, natural stream, canyon, ravine, depression, and watershed in the state. *See* TEX. WATER CODE § 21. Pursuant to this definition, the Applicant's proposed discharge into the unnamed tributary of Cibolo Creek would make its effluent the water of the state.

Instead, they ALJ has accepted what the Austin Court of Appeals described as the "Classic NIMBY."<sup>1</sup> Similar to what the court faced in the *Domel* case, the Protestants in this case seek to prevent the state from causing water to flow along and through their property through a watercourse. The testimony and evidence of record demonstrate that the discharge route is a watercourse and the state's authority to use it to transport water is "sufficiently established to be unquestioned." *Id.* at 359 (citing *City of Corpus Christi v. City of Pleasanton*, 276 S.W.2d 798 (Tex. 1955)). While the state may not own land underlying nonnavigable waterways, it does not need title to use the bed and banks of a watercourse for its defined

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<sup>1</sup> An acronym for the phrase "Not in My Backyard." *See Domel v. Georgetown*, 6 S.W.3d 349, 361 n. 7 (Tex. App. – Austin 1999, pet. denied).

purpose of transporting water. The state has a right to transport water through watercourses for a public purpose without permission from any riparian landowners. The bed and banks of a watercourse are burdened with the flow of water through that watercourse regardless of who holds actual title. The state has the right to use the channel of the watercourse to meet its constitutionally mandated duty to conserve and develop the state's water resources. *See Domel v. Georgetown*, 6 S.W.3d 349, 358 (Tex. App. – Austin 1999, pet. denied).

As the Austin court noted in the *Domel* decision, if the state does not have the right to use the channels of watercourses to transport water, any use of a nonnavigable stream in Texas would constitute a taking where that water crosses private property. *Id.* at 359. The court concluded that that is not and never has been the law in Texas. *Id.*

The *Domel* case is also very similar to the instant case with respect to the character of the stream bed and watercourse. In *Domel*, the landowner complained that the tributary was not a watercourse but rather a "drainage area." *Id.* at 356. According to the Austin court, the *Hoefs* decision by the Supreme Court holds that "a water course may have a bed and banks that are entirely absent in some instances." *Id.* at 356, *citing Hoefs*, 273 S.W. at 787. Similar to the watercourse in *Domel*, the watercourse in the instant case is not a wide valley or draw like the El Paso Court of Appeals analyzed in *Turner v. Big Lake Oil Co.*<sup>2</sup> Like *Domel*, the unnamed tributary of Cibolo Creek in this case flows whenever there is significant rain. Mr. Graham testified to this at numerous points in the case.

## II. APPLICANT'S EXCEPTIONS TO THE PFD

Applicant excepts to the ALJ's conclusion that its discharge will not be into a "watercourse" under Texas law, including excepting to the ALJ's Findings of Fact Nos. 28, 31-35, 40, 85-96, and Conclusions of Law Nos. 9-18.

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<sup>2</sup> *See* 62 S.W.2d 491 (Tex. Civ. App. – El Paso 1933), *aff'd*, 96 S.W.2d 221 (Tex. 1936).

The Applicant's burden of proof in this case is by a preponderance of the evidence that its discharge will be into a watercourse which gives the state superior authority to use the same for purposes of transmitting state water, including wastewater discharges once placed in the watercourse. The Applicant not only met its burden of preponderance of the evidence, the overwhelming evidence, including multiple admissions by the Protestants, is that the discharge route on, over, across and through the Protestants' property is a watercourse. With all due respect, the ALJ has misinterpreted both the testimony as well as the Courts' decisions in *Hoefs v. Short*, 273 S.W. 785 (Tex. 1925), and *Domel v. Georgetown*, 6 S.W.3d, 349 (Tex. App. – Austin 1999, pet denied).

Texas law authorizes the discharge of wastewater into or near waters of the state pursuant to a state issued permit. See Texas Water Code § 26.027. In this case, the Applicant and the Executive Director both testified that the discharge would be into a watercourse both on the Applicant's property as well as continuing along that watercourse as it passed through the Protestants' property in route to Cibolo Creek. The discharge on the Applicant's property and as it crossed Protestants' property was into an "unnamed tributary of Cibolo Creek," however, the Federal Emergency Management Agency (FEMA) has designated those watercourses as tributary number 20 and tributary number 21 as they cross through the Applicant's and Protestants' property in route to Cibolo Creek.

The record is replete with evidence supporting the conclusion that the discharge route is a watercourse, including numerous admissions by the Protestants and the Protestants' experts. Attached hereto as Appendix "B" are tables delineating the numerous locations where evidence and testimony was provided during the course of the hearing related to the fact that this is a watercourse, creek, and/or stream, entitling the state to a superior right to have wastewater discharged pursuant to a TPDES permit flowed through notwithstanding the fact that the bed and

banks of the watercourse may be privately owned. *See Domel v. Georgetown*, 6 S.W.3d 349, 358-359 (Tex. App. – Austin 1999, pet. denied).

Moreover, the Executive Director's witness responsible for determining the issue of whether or not the discharge was in a watercourse, Ms. Brittany Lee, testified that after she visited the site and walked the creek, she was even more convinced that the same was a watercourse. Exhibit ED-20 at pp. 18-19, 24-25 (prefiled testimony of Ms. Lee). The ALJ also misconstrued and misinterpreted the conclusions related to the SWCA Aquatic Resource Delineation Report for Johnson Ranch included as Protestants' Exhibit 1.9. The purpose of that report was to identify and/or delineate the existence of "wetlands" on Johnson Ranch in response to a citizen's inquiry to the U.S. Army Corps of Engineers related to alleged unauthorized discharge into waters of the United States. The report clearly states that SWCA's review "suggested the property only contained watercourses and artificial waters, and no wetlands." *See* Protestants' Exhibit 1.9, p. 4. The report described the existence of aquatic resources including "ephemeral watercourses." *See id.* at p. 4. The report does not define the term "ephemeral watercourses," however, its use is consistent with the concept of intermittent watercourses, as delineated on USGS maps, which flow primarily after rainfall events. The fact that a watercourse may be ephemeral or intermittent in its character, however, does not preclude the conclusion that as a matter of law it is still a watercourse to which the state has a superior right to flow wastewater as well as the fact that any waters flowing in the watercourse are "state water" as that term is defined in Section 11.021, Texas Water Code. *See Domel v. Georgetown*, 6 S.W.3d 349, 358-359 (Tex. App. – Austin 1999, pet. denied). As the purpose of the SWCA study relied upon as Protestants' Exhibit 1.9 was *not* to delineate watercourses and/or their character, the ALJ's citation and reliance upon Protestants' Exhibit 1.9 as support for concluding that the watercourses and creeks shown are not watercourses within the meaning of state law is

unsupported, particularly in light of the overwhelming testimony of all parties to the proceedings. *See* Appendix B.

In addition to the enumerated citations in the record to the reference to the discharge route as watercourse, creek or stream, identified in Appendix "B" attached hereto, the following examples show that Protestants' acknowledge in the testimony of lead Protestant, Terrell Graham, and expert George Rice, that the unnamed tributary of Cibolo Creek into which the highly treated effluent will be discharged is a watercourse:

**Testimony of Terrell Graham, Tr. Vol. 2. Page 90, Lines 1-4**

A. There's fruit trees that grow along that strip on both sides of the creek

**Testimony of Terrell Graham, Vol. II, Tr. Page 100, Line 24 through Page 104, Line 12**

**Q. You've expressed in your testimony concern about water standing in the creek; is that correct?**

A. Generally, yes, sir.

**Q. Am I correct that you recently constructed a dam across the creek?**

A. In March I constructed a dam across the creek pretty much at the location in my Exhibit 1.4, in 3 between the two mesquite trees, off to the right.

**Q. And was this photo taken before or after the dam was constructed?**

A. Taken well before the dam was constructed. This photo, I believe, was May; and my testimony was taken in May of last year, 2013.

**Q. Can you refer to page 3, lines 27 through 31 of your testimony. And in that testimony you're talking about that except in extreme rainfall events, you could cross the dry creek?**

A. Yes, sir, that is correct.

**Q. And so during these extreme rainfall events, there's a high level of water in the creek?**

A. In some instances it's not contained within the creek. It's out over-banking onto our property.

**Q. But if it's over-banking, then, the creek is full; is that correct?**

A. Yes, sir.

**Q. And how deep is the creek in that area?**

A. In which area?

**Q. The area you're describing in your testimony.**

A. I'm not describing a specific area in my testimony.

**Q. The area where the over-banking would occur.**

A. Along the entire dry creek.

**Q. And what are the depths of the creek?**

A. I would say in areas from 2 to 4 feet. And then down near the southern end, on Margie Hastings' property, there some areas that are well over my head, 10 feet, 8 feet; and that's more on the east bank. On the west bank, where the cattle are standing, there's not much of a bank.

**Q. So there's a lot of water present during the event --**

A. During --

**Q. -- the rainfall?**

A. -- extreme rainfall events, there's a lot of water present.

**Q. Okay. And your testimony goes on to say that after those events, the creek became very dry again?**

A. Yes, very rapidly.

**Q. There wasn't any pooling of water from those events?**

A. Yes, at times.

**Q. At times there was pooling?**

A. Yes, for more than just a day, for sometimes extending out to a week or more, I guess. There are so many variables with weather. In the wintertime water will tend to pool more than it will in the summertime.

**Q. So in the wintertime the pooling might last a week or ten days?**

A. Yes, just because the evaporative effect is much less in the wintertime than the summertime.

**Q. But in these hot, hundred-plus-degree summer days, it would evaporate relatively quickly?**

A. Generally, yes, sir.

**Ex. 1 – Graham’s Prefiled, Ex 1, page 6, Lines 5-21**

**Q: Please describe how the dry creek changes as it runs south on your property**

A: As the dry creek runs south, it begins to show more defined banks but becomes narrower. The soils disappear and the bottom is rocky. At the far south of our property (Pat’s and mine) the smooth banks and grassy swale area becomes narrower and more V-Shaped

**Q: Based on your observations of the dry creek, please describe the estimated depth and width of the creek, beginning at the northernmost portion of the dry creek (i.e., where the creek intersects the Johnson Ranch property) and moving south to you and your wife’s southernmost property line.**

A: The depth and width of the dry creek vary widely. In some places it is V-shaped, with the top of the bank approximately 8- to 10-feet wide. In other places it is a grassy swale with relatively smooth banks. In these areas, it may be 20- to 30-feet wide and from 2- to 4- feet deep. On the east side of the dry creek the banks are generally lower, allowing the dry creek to overbank on our property. Once what is noted as Cibolo Tributary #20 on FEMA maps joins the dry creek the banks on the east side of the dry creek become noticeably higher. Most of the banks on the west side of the dry creek are relatively lower. Most of the western banks are fairly shallow as depicted in Exhibit 1.2. This picture is taken looking south with the western bank off to the right in the picture.

**Graham’s Prefiled, Ex 1, page 7, Lines 15-23**

**Q: Please describe the surface characteristics of the dry creek, beginning at the northernmost portion of the dry creek (i.e., where the creek intersects the Johnson Ranch property) and moving south to you and your wife’s southernmost property line.**

A: At the northernmost portion of the dry creek it is covered by good soils that grow grass. Moving south along the dry creek the creek becomes rockier. In the middle portion of the dry creek where it is narrower and rocky, grasses do not grow. In the southern portion of the dry creek there are grasses and some wild plum trees. The dry creek is wider with fairly shallow banks on the western side.

**Graham’s Prefiled, Ex 1, page 7, Lines 24-29**

**Q: Can you identify the picture marked as Protestant Exhibit 1.7?<sup>3</sup>**

A: Yes. Exhibit 1.7 is a picture of the creek my wife took in March 2014.

**PROTESTANT OFFERS PROTESTANT EXHIBIT 1.7 INTO EVIDENCE.**

**Q: Can you please describe what you see in this picture?**

A: This is a picture of where the Johnson Ranch development meets our property. The misalignment of the rerouted channel with the existing creek is apparent.

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<sup>3</sup> A copy of Protestants’ Exhibit 1.7 is attached hereto as Appendix “B.”

**Graham's Prefiled, Ex 1, page 8, Lines 23-31, page 9, Lines 1-6.**

**Q: Based on your familiarity with and observations of Ms. Margie Hastings' property, please describe the estimated depth and width of the creek, as well as any particular features of the dry creek, beginning at you and your wife's southernmost property line and moving south through Ms. Hastings' property.**

A: The creek changes from rocky bottom to having grasses and soils present again at the southern end (the last 300 feet of her property or so). Just south of our property, the creek is still very narrow in width. But then in the southern portion of the creek on Margie's property, it becomes rather wide, and it does have a defined bank on the east side of the dry creek. On the west side there aren't any discernable banks. This is where the cattle

**PREFILED TESTIMONY OF PROTESTANTS' WITNESS GEORGE RICE:**

**Page 11 Line 12- thru Page 10, Line 12**

**Q: Let's talk about the dry creek on the Graham-Hastings property. Where is it on their property and is it within the Edwards Aquifer recharge zone?**

A: The dry creek borders the western side of their property. The distance from the point where the creek enters the Graham-Hastings property, to its confluence with Cibolo Creek, is about 1/2 mile. This entire 1/2 mile long reach is on the Edwards recharge zone. (Loomis, 2013).

**Q: Please describe the characteristics of the dry creek on the Graham-Hastings property.**

A: I walked along the creek bed with Mr. Terrell Graham on October 15, 2014. The bed appeared to be quite permeable. Much of the creek bed was composed of cobbles, gravel, and coarse sand (alluvium). Many rocks in the creek bed were 'honeycombed', i.e., they contained solution channels formed by water. These honeycombed rocks probably originated from upstream outcrops of the Glen Rose Formation.

**Q: Would you identify Protestant Exhibit 3.7?<sup>4</sup>**

A: Yes, those are photographs that I took on October 15, 2014, walking along the Graham's dry creek. Within the exhibit 3.7, I have labeled them GR1-GR4.

**PROTESTANT OFFERS PROTESTANT EXHIBIT 3.7 INTO EVIDENCE.**

**Q: What is the significance of the sand and gravel creek bed and the honeycombed rock?**

A: The presence of sand and gravel means that water will readily infiltrate into the creek bed. Honeycombed rock is characteristic of karst. It means there are karst features in the area. G4 from Exhibit 3.7 is a close up photo of a honeycombed rock.

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<sup>4</sup> A copy of Protestants' Exhibit 3.7 is attached hereto as Appendix "C."

**The photographs from Protestants' Exhibit 1.9 (attached hereto as Exhibit "D") reflect the "creek" and establish that the discharge route is a watercourse, i.e., Photograph Nos. 2-4, 7, and 8.** (Photo 2 was taken upstream of the discharge point and clearly illustrates bed and banks of the water course even 1500' upstream of the discharge point- the drainage basin for the watercourse is more significant than this area in the area from the discharge point down to the Graham property boundary. Photo 3 shows the discharge route watercourse looking downstream at the property boundary fence where the Applicant's property meets the Protestant's property. The person in the creek gives some perspective for what appears to be a dimension of approximately 4-5 feet deep and 20 feet wide from top of banks on each side. This photo of the creek bed at the property line did not have any modifications from development construction. Photo 4 looks upstream from the Graham/ DHJB property boundary line in the discharge route watercourse. Photo 7 looks downstream in the discharge route watercourse between the discharge route and the Graham/ DHJB property boundary. Photo 8 is also taken in the discharge route watercourse between the discharge point and the Graham/DHJB property boundary. Cumulatively, these photos – particularly photos 3 and 4 – illustrate that the discharge route is a water course when it leaves DHJB's property.)

Protestants' Exhibit 3.7 in the prefiled testimony of George Rice is a photograph that reflects a creek bed on the Graham property also consistent with the conclusion that it is a watercourse. Moreover, Applicant's consulting expert witness, Tracy Bratton's testimony, including Exhibit 3.2, providing a detailed analysis of the effluent discharge versus the watercourse capacity, is clear and convincing evidence that the discharge route is in fact a watercourse, particularly once it reaches the Graham's property. The photographs included as Exhibit 3.2, which are photographs taken by the Protestants, clearly reflect the existence of a distinctive bed and banks for the creek on Protestants' property. *See* DHJB Exhibit 3.2 at pp. 10-22.

Moreover, in his letter ( DHJB Exhibit 3.2), Mr. Bratton discusses the fact that this tributary/watercourse historically carries approximately 1,400 cfs stormwater flow events in predevelopment conditions at Johnson Ranch. This is substantially less than the maximum .54 cfs flows authorized by the proposed permit amendment.

Finally, in addition to the unequivocal testimony of Ms. Lee, the USGS map Ms. Lee discussed in her prefiled testimony clearly showed the discharge route. *See* ED Exhibit 20 at

p26; see ED 28. Ms. Lee's delineation or "marking" of the blue line on the map (ED 28) to clearly show the location of the watercourse was due to the fact that the map was in black and white, no color, rather than due to the non-existence of evidence of an intermittent stream on the map. Ms. Lee was not using the highlighter to mark a guess as to where the stream was, but was enhancing a dashed line signifying the discharge route, a line placed by USGS which was hard to recognize in black and white. A color version of this map can be seen as ED Exhibit 42, a copy of which has been attached as Exhibit "E." This map shows the outfall location, as signified by a red dot along a blue line, the same line Ms. Lee marked, which is the discharge route.

Moreover, in Executive Director's Exhibit ED 13, response to comments on the proposed permit, specifically, the ED's response to Comment No. 14 beginning on page 13 (000155) of ED 13 goes through the analysis of all the points set forth in the *Domel* case and determines that in fact the creek is a watercourse over which the state has a superior right to flow waters of the state, including the wastewater discharge from the proposed permit. The photographs included in Protestants' expert prefiled testimony of Mr. Dunbar, Exhibits 4.4 and 4.5, also show clearly delineated creek bed and banks, including existing erosion that had occurred even before any discharges have occurred from the plant.

The other findings and conclusions to which Applicant excepts, including ALJ's Findings of Fact Nos. 31-41, 43-45 and Conclusions of Law Nos. 5 and 8 related to findings of impairment to the use and enjoyment of the Protestant's Property; and ALJ's Findings of Fact Nos. 42, 81-84 and Conclusion of Law No. 5 related to findings of adverse impacts to the cattle on the property; also stem from the erroneous conclusion that Applicant's discharge will not be into a watercourse.

The ALJ's findings include the fact that erosion is an historically occurring event due largely to rainfall events that occur with water running into the watercourse and eroding away

the walls of the bed and banks of the watercourse. Protestants' expert, Mr. Dunbar, testified to this effect too. *See* Protestants Exhibit 4.0, pg. 5. Mr. Graham's testimony about his belief that historically the walls had been reinforced as part of a flood control, erosion control project is also consistent with the historic erosion issues. Graham's testimony, including his letter incorporated as Exhibit 2.3 of his testimony, demonstrates that the storm flow velocities of 1400 cfs, far in excess of the .54 cfs discharge that will occur from the wastewater treatment plant support the conclusion that the proposed discharge into a watercourse will not impair the Protestants' use of their property due to erosion. Again, the state's superior right to use the watercourse to carry and support the highly treated effluent is superior to the Protestants' rights.

With respect to access to the narrow strip of land on the other side of the creek due to the possible presence of a wastewater flow for that portion of the effluent that may reach the Protestants' property, this is another "NIMBY" issue. The state has a superior right, as concluded by the Court of Appeals in the *Domel* decision (*Domel, supra* at 358-359) to move waters of the state through its watercourses as part of its conservation and development of the water resources of the state. As the discharge is into a watercourse, not across private property, the state's superior right negates any impacts to the Protestants in that regard. Similarly, Protestants' complaints, and the ALJ's findings regarding potential erosion of vegetation and/or soils are all historically present and, with respect to the use of the watercourse to transport the effluent, subject to the state's superior right to use the watercourse for that transport purpose. The impact, if any, is not an unreasonable impact, particularly in light of the state's superior rights.

The Protestants' concerns regarding additional erosion caused by the nominal flow of wastewater in the watercourse is speculative. With respect to impairment of use by the cattle, or threat to the health of the cattle, this too is speculative. Protestants put on no expert testimony or other superior evidence that would overcome the presumption and favor of the state water quality

standards adopted as part of Chapter 307. Not only are the criteria in the proposed Permit among the most stringent in the state, designed to provide a source of water to be included in public water supplies, authorized for contact recreation by humans, fit for high quality aquatic life, they are also protective of not only aquifers, but in this instance, the Edwards Aquifer, one of the most important and prolific water supplies in the state of Texas. Moreover, the criteria established for this Permit has components which are set at even higher standards than those prescribed by Chapter 213 of the Commission's Rules for the Edwards Aquifer. Protestants' complaints about the water and the water quality and the impacts to cattle are speculative in nature and do not form the basis for a finding or a conclusion that the discharge if consumed by the cattle will have an unreasonable and adverse effect on the cattle.

Further, in TCEQ Executive Director's Response to Public Comments (TCEQ ED Exhibit 13, page 4 Response #1) the Executive Director states "As specified in the TSWQS, water in the state must be maintained to preclude adverse toxic effects on aquatic life, terrestrial life, livestock and domestic animals resulting from contact, consumption of aquatic organisms, or consumption of water. The Commission does not have specific water quality based effluent limitations for water consumed by livestock or wildlife. However, the TCEQ Water Quality Assessment Section has determined that the proposed permit for the facility meets the requirements of the TSWQS, which are established to protect human health, terrestrial and aquatic life. Aquatic organisms are more sensitive to water quality components than terrestrial organisms. Therefore, wildlife and cattle would not be negatively impacted by the discharge from this facility if the Applicant maintains and operates the facility in accordance with TCEQ rules and provisions in the proposed permit." The response further states "The Water Quality Division has determined that the proposed permit complies with the Texas Surface Water Quality Standards (TSWQS)."

With respect to the impacts to diminish the opportunity to enjoy wild plums and enjoy the coolness of the dry creek bed in the summer, the ALJ's conclusion at page 14 of the PFD that this will be due to "changes in vegetative growth." is unsupported by the record and speculative. The fact that the Grahams may no longer feel "comfortable allowing children to play in the area of discharge" is not a basis for a finding of unreasonable impairment or loss of use of enjoyment of the property. Mr. Hill testified how he allowed his children to play in the waters of Cibolo Creek immediately downstream from a wastewater treatment plant operated by the City of Boerne with effluent levels less stringent than those in the proposed amendment. Similarly, a conclusion that flowing effluent will impair access to the property to repair a fence is also unwarranted. The Grahams testified that they access the property for purposes of repairing the fence from a gate downstream on Ms. Hastings' property, not by crossing the stream. Also, approximately seven inches of flow, added to the deepest point in the narrowest confines of the bed of the creek as discussed in Exhibit 2.3, Mr. Bratton's explanation of the flows resulting from the wastewater treatment plant, did not support a finding of adverse impact or impairment. Again, there may be some "inconvenience" to the downstream landowners by the fact that water flows through the watercourse, however, the state's superior exercise of its rights in this instance trumps this NIMBY posture and argument by the Protestants.

Finally, the ALJ's conclusion at page 15 that "there was no evidence that it is safe for children to play in or drink effluent treated at the levels Applicant has proposed" is directly contrary to the purpose and conclusions in Chapter 307 (30 TAC), state water quality standards are designed to address these things. As noted, the level of effluent treatment prescribed for Applicant's wastewater discharge makes the water fit for inclusion in a public water supply, fit for direct human contact and recreation, which assumes and includes the possible consumption of the effluent, as well as high quality aquatic life and preservation of the groundwater quality in

the aquifers. The state water quality findings, and the standards to be imposed in Applicant's Permit are evidence, the only evidence in this case, of the fact that the effluent would be safe for contact and play by the children. If the TCEQ were to be bound by the ALJ's PFD as originally drafted, the TCEQ will be unable to ever grant another TPDES permit if there is a possibility of nearby cattle or children. According to the PFD, the effluent criteria in Chapter 307 and 213 which are designed to provide a source of water to be included in public water supplies, authorized for contact recreation by humans, and be fit for high quality aquatic life, are somehow not protective enough for children to play in or cattle to drink.

Finally, Mr. Urrutia, Head of Water Quality Services for the Guadalupe-Blanco River Authority, Class A Wastewater Operator, testified as to the stringent levels of treatment contemplated by Applicant's permit and the safety factor and the quality of the discharge that would come from the plant. Protestants presented no evidence that countered Mr. Urrutia's testimony in this regard. Additionally, Exhibit ED-13, the Executive Director's responses to comments on the proposed permit when originally issued, address each of these issues and include evidence supporting the issuance of the Permit.

### **III.**

#### **PROPOSED FINDINGS OF FACT & CONCLUSIONS OF LAW**

Attached hereto as Appendix "A" are the Applicant's revised proposed Findings of Fact and Conclusions of Law for the ALJ's consideration. The modifications from the Applicant's initially proposed Findings and Conclusions are offered in response to the arguments presented by the Protestants, OPIC and the Executive Director. The Applicant reserves the right to modify or amend its proposed Findings of Fact and Conclusions of Law based upon the responses to Closing Arguments received from the other Parties, and/or the ALJ's Proposal For Decision.

**IV.**  
**CONCLUSION & PRAYER**

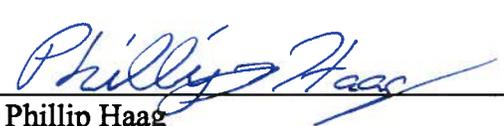
For the foregoing reasons, Applicant DHJB Development LLC, along with aligned party Johnson Ranch Municipal Utility District pray the ALJ will amend the Proposal For Decision as outlined in Appendix "A," propose the Permit be granted, deny any and all requests of Protestants, and grant Applicants any other relief deemed appropriate.

**Respectfully submitted,**

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**CERTIFICATE OF SERVICE**

I hereby certify that a true and complete copy of the above and foregoing Combined Exceptions to the Proposal for Decision (was electronically filed with SOAH and the Clerk of the Texas Commission on Environmental Quality,) as well as sent via e-mail and/or facsimile transmission as available and/or by Regular U.S. Mail to the following attorneys and/or party representatives on this the 30<sup>th</sup> day of March, 2015.

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Patricia Lux Graham et al, Protestants

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Johnson Ranch MUD

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By: 

Edmond R. McCarthy, III

## APPENDIX "A"

### REDLINE REVISIONS TO ALJ's FINDINGS OF FACT /CONCLUSIONS OF LAW/ORDERING PROVISIONS

#### FINDINGS OF FACT

1. On August 20, 2012, Applicant applied to TCEQ to amend its Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQOO 1497500.
2. TCEQ's ED received the permit application on September 24, 2012, and declared it administratively complete on November 7, 2012.
3. The Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI) was published on November 21, 2012 in the *New Braunfels Herald-Zeitung*.
4. The application was declared technically complete on May 2, 2013.
5. The Notice of Application and Preliminary Decision (NAPD) was published on May 17, 2013 in the *New Braunfels Herald-Zeitung*.
6. The combined Spanish language NORI/NAPD was published in the *La Voz* newspaper on August 30, 2013.
7. The public comment period ended on September 30, 2013.
8. The ED's Final Decision Letter and Response to Comments was mailed on November 21, 2013.
9. The hearing request period ended on December 23, 2013.
10. Patricia Graham timely requested a hearing.
11. By Interim Order dated April 21, 2014, TCEQ referred the application to SOAH to consider four issues:
  - Whether the proposed permit will adversely impact use and enjoyment of adjacent and downstream property or create nuisance conditions;
  - Whether the discharge route has been properly characterized;
  - Whether the proposed permit complies with TCEQ siting regulations found in 30 Texas Administrative Code (TAC) Chapter 309; and
  - Whether the treated effluent will adversely impact the cattle that currently graze in the area.

12. TCEQ's Chief Clerk certified that the Notice of Hearing was mailed on June 26, 2014 to the individuals on the mailing list maintained by the Chief Clerk for this matter.
13. The notice stated the time, date, and place of the hearing; the legal authority and jurisdiction under which the hearing was to be held; the particular sections of the statutes and rules involved; and the matters asserted.
14. The Notice of Hearing was published in the *New Braunfels Herald-Zeitung* on July 1, 2014.
15. At the preliminary hearing held on August 19, 2014, Terrell Graham, Patricia Graham, Margie Hastings, Asa Dunn, and the Greater Edwards Aquifer Alliance requested and were granted party status opposing the permit; Johnson Ranch MUD was granted party status and was aligned with DHJB.
16. Ms. Graham, Ms. Hastings, and Mr. Dunn own property that is adjacent on the east or downstream of the proposed discharge route where effluent would flow.
17. The Greater Edwards Aquifer Alliance is a 501 (c)(3) nonprofit corporation.
18. The hearing on the merits, held at the SOAH offices at the William Clements Building, 300 West 15th Street, Austin, Texas 78701, began November 1, 2014, and concluded November 19, 2014.

#### **Requested Permit**

19. Applicant applied to TCEQ for a major amendment to its Permit No. WQ0014975001 to authorize an increase in the discharge of treated domestic wastewater from a daily average flow not to exceed 75,000 gallons per day to a daily average flow not to exceed 350,000 gallons per day (GPD).
20. The major amendment would convert the existing permit from authorizing Applicant to dispose of treated effluent via subsurface drip irrigation under a Texas Land Application Permit (TLAP) to authorizing Applicant to dispose of treated effluent via discharge into water in the state via a TPDES permit.
21. The TLAP permit authorizes the disposal of treated domestic wastewater via a public access subsurface drip irrigation system with a minimum area of 750,000 square feet.
22. This permit amendment would not continue the authorization for Applicant to use a subsurface drip irrigation system.
23. Applicant currently collects wastewater at its wastewater treatment plant site and has the same hauled off-site by an authorized "pump and haul" operator for disposal of wastewater.
24. An amended permit would authorize a wastewater discharge from a treatment plant that will be an activated sludge process plant operated with extended aeration.

25. The wastewater treatment facility is located approximately 0.7 mile north of Farm-to-Market Road 1863 and 0.5 mile east of U.S. Highway 281 in Comal County, Texas 78163.
26. Applicant intends for the plant to serve residential customers at a residential subdivision being developed by Applicant.
27. The parties referred to the proposed subdivision as Johnson Ranch.
28. Applicant proposes to discharge the treated effluent at an outfall on Applicant's property into what Applicant described as an unnamed tributary of Cibolo Creek and what was sometimes referred to as Tributary 21.
29. Johnson Ranch overlies the Edwards Aquifer contributing zone, except for the southern 50 acres which overlie the Edwards Aquifer recharge zone.
30. Outfall from the proposed water treatment plant site would be over the Edwards Aquifer contributing zone.
31. The distance from the discharge point to the boundary of the mapped Edwards Aquifer recharge zone is less than 565 feet.
32. A portion of the discharge route on the Johnson Ranch is in the Edwards Aquifer recharge zone.
33. The entire portion of the discharge route on the Graham-Hastings-Dunn properties is in the Edwards Aquifer recharge zone.

#### **Impact on Protestants' Property**

34. The distance along the watercourse from the discharge point to the Graham-Hastings property is approximately 1,900 feet (about 0.4 miles).
35. The distance along the watercourse from the discharge point to Cibolo Creek is approximately 0.8 miles.
36. If the effluent is discharged in the watercourse at the rate of 350,000 GPO, the effluent will reach the Grahams-Hastings Property.
36. Protestants' complaints about the Applicant's proposed discharge into watercourse passing through the Protestants' property is the classic NIMBY ("Not in My Back Yard." *Domel v. Georgetown*, 6 S.W.3d 349, 361 (Tex. App. – Austin 1999, pet denied).
37. Discharged effluent from the proposed facility will moisten or saturate soils enalong the watercourse including the areas of the watercourse across Protestants' Property.
38. The moistened soils willin the watercourse may inhibit vegetative growth on Protestants' property.

39. The flow of effluent will increase the potential for exposed soils to erode in the watercourse as has occurred historically.
40. Applicant has concretized a channel it plans to use for the discharge of effluent to avoid erosion at a bend in the watercourse, ~~and the channel is aimed directly at and very near to Ms. Graham's property line.~~
41. Erosion on the Graham-Hastings property as historically occurred and will impacted the Grahams' use and enjoyment of the property.
- ~~42. Erosion on the Graham-Hastings property will cause the loss of pastureland used for cattle grazing.~~
- ~~43. The proposed permit amendment will diminish Protestants' opportunities to walk along their property and to eat the wild fruits that grow there.~~
44. Access by the Grahams and Ms. Hastings to their western property line to tend to fence repairs and other property management issues will be made more difficult because of the presence of discharged effluent into the watercourse.
45. The proposed permit amendment authorizing the discharge of effluent return flows to the watercourse will not unreasonably impair the Protestants' access to and enjoyment of the western portion of the property.

#### **Buffer Zones**

46. Applicant's wastewater treatment plant site and all wastewater treatment plant units are more than 150 feet from the nearest property line.
47. The wastewater treatment plant unit is protected from inundation and damage during a flood event.
48. The wastewater treatment plan unit is not located in wetlands.
49. The wastewater treatment plant unit is not located within 500 feet of any public water supply well.
50. The wastewater treatment plant unit is not located within 250 feet of any private water well.

#### **Effluent Limits**

51. The proposed discharge outfall is within 0 and 5 miles of the Edwards Aquifer recharge zone. Accordingly, the effluent limits of 30 TAC § 213.6(c)(1) apply.
52. The proposed effluent limits for any permit based on a 30-day average would be: 5 milligrams per liter (mg/l) 5-day carbonaceous biochemical oxygen demand (CBODS), 5 mg/l total suspended solids (TSS), 2 mg/l ammonia nitrogen (NH<sub>3</sub>-N), 0.5 mg/l total phosphorus, 126 *E. coli* colony forming units (CFU) or most probable number per 100 ml, and 4.0 mg/l minimum dissolved oxygen.

53. The effluent must contain a chlorine residual of at least 1.0 mg/l, and not more than 4.0 mg/l, after a detention time of at least 20 minutes based on peak flow.
54. The pH limit in the permit is 6-9.
55. The proposed limit for total phosphorus is more stringent than the standard TPDES permit effluent limits for domestic wastewater treatment plants in both Segment No. 1908 of the Upper Cibolo Creek and on the contributing zone of the Edwards Aquifer, which is where the plant will be located.

### **Surface Water Quality Standards**

56. Pursuant to the Texas Surface Water Quality Standards (TSWQS), the specified uses for any unassigned tributary of Cibolo Creek (Segment 1908) include contact recreation, high aquatic life use, public drinking water supply, and aquifer protection.
57. To protect and maintain a stream's high aquatic life use, TCEQ evaluates a discharge's effect on the dissolved oxygen in the receiving stream.
58. The dissolved oxygen criterion for the unnamed tributary of Cibolo Creek is 5.0 mg/l.
59. The proposed effluent limits of 5.0 mg/l CBOD<sub>5</sub>, 2.0 mg/l NH<sub>3</sub>-N, 1 and 4.0 mg/l minimum dissolved oxygen are adequate to ensure that the dissolved oxygen level in the receiving stream will be maintained above the 5.0 mg/l criterion and, therefore, the high aquatic life use will be maintained and protected.
60. The proposed discharge will not violate the dissolved oxygen standards for a tributary of Cibolo Creek.
61. Compliance with the recreational use standard is evaluated solely through application of the bacteria standard.
62. For freshwater, the geometric mean of *E. coli* should not exceed 126 CFUs per 100 milliliters of water, which is the same as the specific numeric criteria for unnamed tributaries of Cibolo Creek.
63. For stream segments that are classified as a public water supply, TCEQ evaluates the discharge to ensure that it will not prevent a public water supplier from treating the surface water through conventional treatment methods to drinking water standards and evaluates the presence of toxic materials.
64. The TSWQS establish numeric criteria for toxic materials, and those criteria apply regardless of whether they are in the permit.
65. Applicant's proposed discharge does not require inclusion of specific effluent limits on toxic materials because its proposed permitted average flow would be less than one million gallons per day (MGD), it will not have an approved pretreatment program, it is not an industrial facility, and it will serve residential customers, and it will not likely have any industrial facilities discharging into the proposed plant.

66. Applicant must provide notice to the ED if there is a substantial change in the volume or character of the wastewater, including the introduction of toxic materials by an industrial user of Applicant's plant.
67. The proposed discharge meets the TSWQS and the Edwards Aquifer rules necessary to maintain the public water supply use, allow for contact recreation and high aquatic life use, and the toxic pollutant numeric criteria, and provide for aquifer protection.
68. All TPDES permits must be reviewed for compliance with the TSQWS antidegradation policy.
69. Tier 1 of an antidegradation review confirms that the effluent quality is consistent with the designated uses of the receiving stream segment and that no in-stream surface water quality standards (either numeric or narrative) will be exceeded.
70. A Tier 2 review is conducted on waterbodies with intermediate, high, or exceptional aquatic life uses to ensure that the water quality will not be diminished.
71. A Tier I and Tier 2 antidegradation review found that no significant degradation of water quality is expected in the receiving water and that the existing uses will be maintained and protected.
72. The proposed discharge would not impact Cibolo Creek's ability to meet the TSWQS.

#### **Bacteria and Chlorine**

73. To meet the bacteria limits for the proposed plant, Applicant will disinfect the effluent using chlorination and will expose the effluent to the chlorine for at least 20 minutes.
74. With the proper dosage of chlorine for the proper detention time, the bacteria levels will be reduced to levels that comply with TCEQ requirements.
75. Applicant must monitor the chlorine residual levels five times per week by grab sample and monitor the bacteria levels once a week by grab sample.
76. Applicant must submit plans, specifications, and a final engineering design report to TCEQ for review and approval to ensure that the facility is designed to meet the permitted limits, including disinfection requirements and the bacteria limits.
77. The proposed discharge would not contribute excess bacteria to a tributary of Cibolo Creek.

#### **Additional Public Use and Enjoyment Issues**

78. Ms. Grahams, Ms. Hastings, and Mr. Dunn currently lease their property to a rancher for cattle ranching.
79. Approximately twenty head of cattle are ranched on the property currently.

- 80. The discharge route is the only source of shade in the pasture near the watercourse on the Grahams-Hastings property.
- 81. The cattle seek shade and protection from colder winds along in the creek bed that is the proposed discharge route.
- 82. The high quality discharged effluent will become an additional new source of water for the cattle to drink.
- 83. Cattle will drink water that is available to them, regardless of its source.
- 84. ~~Undiluted~~ The proposed effluent treatment standards designate the discharged effluent as is not a high quality source of water for cattle suitable for public water supply, high contact recreation, high aquatic life use, and aquifer protection.

**Discharge Would ~~Not~~ Be to a Watercourse**

- 85. ~~What may appear to be a~~ Portions of the watercourse on some maps of Protestants' property were historically reinforced with a is actually a rock wall to present erosion and control used for either stormwater control or and provide soil conservation.
- 86. ~~Although some maps indicate that Cibolo Tributary 21 is an intermittent stream, it is not depicted at all on a large number of the maps.~~ The unnamed tributaries of Cibolo Creek into which the discharge would occur have been designated on the FEMA (Federal Emergency Management Agency) Flood Insurance Rate Maps (FIRM) as FEMA Tributary 20 and Tributary 21.
- 87. The grassy swale at the property line between Applicant and Protestants' properties has native grasses growing in it.
- 88. Grasses and some wild plum trees grow along the southern portion of Protestants' property where effluent would flow.
- 89. On the southern end on Ms. Hastings' property, the soil is relatively flat, and there is no regular flow of water.
- 90. Photographs of Johnson Ranch from 2012 do not show any beds or banks at the proposed outfall location.
- 91. Aquatic resources on the Johnson Ranch include ephemeral watercourses, an artificial waterbody, upland vegetates swales, and areas of diffuse surface drainage, as well as the watercourse that is the proposed discharge route.
- 92. ~~No aquatic resources on~~ From and beyond the property line of Johnson Ranch at the Graham property and continuing through Ms. Hastings' property and continuing to Cibolo Creek is a watercourse with a defined bed and banks, are relatively permanent, rather they are ephemeral with flows being infrequent as evident by the broken, fitful nature.

- ~~93. High water mark indicators on Johnson Ranch are inconclusive, unreliable, misleading, and otherwise not evident along many areas because of the infrequent flows.~~
- ~~94. Historical agricultural practices have either attenuated all ordinary flows or completely severed connectivity.~~
- ~~95. Discharged effluent passing over these portions of the Johnson Ranch property would be diffuse surface water.~~
- ~~96. Only a short segment in an area designated for discharge has high water marks, but these are interrupted by large areas of disturbance.~~

### **Transcript Costs**

97. The cost for recording and transcribing the hearing on the merits by a court reporter and producing transcripts for Applicant, the ALJ, and the Commission totaled \$4,931.40.
98. Johnson Ranch MUD is a municipal utility district, a governmental entity with limited resources.
99. Applicant is a residential development company while Protestants are individual landowners and, in the case of the Greater Edwards Aquifer Alliance, a 501 (c)(3) nonprofit corporation.
100. Protestants ordered a copy of the transcript for which they paid \$1,000.
101. Applicant had the burden of proof and would benefit the most from having the ability to cite to the transcript.
102. ~~A favorable ruling for Protestants on the application will mean that Protestants may return to life without the discharge requested.~~ A favorable ruling for Applicant would provide the significant financial benefit of having a permit to operate its facility.
103. Except for the copy of the transcript ordered by Protestants, Applicant should pay court reporting and transcription costs.
104. Applicant should be ordered to pay \$4,931.40 for these costs.

### **CONCLUSIONS OF LAW**

1. The Commission has jurisdiction over this matter. Texas Water Code chs. 5 and 26.
2. SOAH has jurisdiction over this hearing process and the authority to issue a proposal for decision with findings of fact and conclusions of law. Texas Water Code §§5.31 and 26.021; Texas Gov't Code ch. 2003.
3. Under 30 TAC § 80.17(a), Applicant has the burden of proof, by a preponderance of the evidence, on the referred issues.

- 3A. Texas Water Code § 26.027 authorizes the Commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.
4. Pursuant to 30 TAC § 307. I , it is the policy of this state and the purpose of Chapter 307 to maintain the quality of water in the state consistent with, among other things, public health and enjoyment and protection of terrestrial life. All reasonable methods are to be used to implement this policy.
  5. If a permit is issued to Applicant, it will not impair the use and enjoyment of the Graham- Hastings-Dunn properties and would provide water that ~~has not been deemed safe for cattle consumption.meets high quality standards deemed appropriate for public water supplies. contact recreation. high aquatic life use, and the protection of aquifers.~~
  6. The TSWQS apply to surface water in the state and are set by the Commission at levels designed to be protective of public health, aquatic resources, terrestrial life, and other environmental and economic resources and are supplemented by the applicable Commission rules protecting the Edwards Aquifer in the contributing zone and recharge zone published in 30 TAC ch. 213 (the Edwards Aquifer rules).
  7. The TSWQS establish specific uses for each classified water body in the state and provide numeric criteria for each classified stream.
  8. In accordance with TCEQ's regulations implementing the TSWQS at 30 TAC ch. 307, Applicant's discharge under the terms of the revised Draft Permit will ~~not~~ comply with all the general criteria, antidegradation policy, toxic material provisions, and site-specific uses and criteria ~~because of the and, therefore, will not have an unreasonable adverse impact on Protestants' use and enjoyment of their property.~~
  9. A watercourse has a well-defined channel with well-defined banks and bed, *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785 (Tex. 1925).
  - ~~10. A watercourse generally contains little, if any, vegetation. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785 (Tex. 1925).~~
  - ~~11. The location of a channel and banks in a watercourse are not ephemeral in character. They are, in some form, more or less defined, in their present location, in every part of the stream. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785, 786 (Tex. 1925).~~
  12. The channel of a watercourse has a denuded condition, absence of soil and vegetation, and presence of boulders and gravel. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785, 786 (Tex. 1925).
  13. A watercourse must be of such substantial, stable, and permanent character that its existence is easily recognized, and that rainfall on its watershed in sufficient quantities will produce a flow of water in this channel. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785, 787 (Tex. 1925).
  - ~~14. A watercourse has an absence of soil and vegetation in the channel bottom, *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785 (Tex. 1925).~~

15. As a general rule, ravines, swales, soughs, and marshes are not watercourses, but they sometimes are. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785, 787 (Tex. 1925). [W]hile the rule as ordinarily expressed is that a watercourse must have a well defined channel, bed, and banks, yet there may be instances where these are slight, imperceptible, or absent, and still a watercourse exists. *Id.*
16. Portions of the ~~so-called~~ Cibolo Tributary 21 ~~were part~~ may have been reinforced as part of a stormwater control project, soil conservation project, or were otherwise man-made to prevent erosion.
- ~~17. Many United States Geological Survey topographical maps and aerial images from 1929 to 2011 do not include Cibolo Tributary 21 at all.~~
18. For a watercourse to have a permanent source of supply, the stream must be such that similar conditions will produce a flow of water, and these conditions must recur with with some regularity. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785 (Tex. 1925). This source includes reoccurring stormwater events, with the stream being dry for long periods in between. *Id.*
105. The "unnamed tributary," also sometimes referred to as Tributary 21, is ~~not~~ a watercourse of the state. *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785 (Tex. 1925).
106. The discharge route in the proposed permit has ~~not~~ been properly characterized as a watercourse.
- 106A. Texas law recognizes treated wastewater as a valuable resource, just as naturally flowing waters. *Domel v. Georgetown*, 6 S.W.3d 349, 360 (Tex. App. – Austin 1999, pet. denied).
- 106B. Texas statutes and case law make no distinction between natural and "man-made" flows of water in a watercourse. *See Domel v. Georgetown*, 6 S.W.3d 349, 360 (Tex. App. – Austin 1999, pet. denied). Once wastewater return flows are returned to a watercourse, they become part of the normal flow of the watercourse. *Id.*; see TEX. WATER CODE §§ 11.042(b), 11.046(a), (c); 30 TAC § 297.1.
19. In accordance with TCEQ's regulations regarding Domestic Wastewater Effluent Limitation and Plant Siting at 30 TAC ch. 309, Applicant's discharge under the terms of the revised Draft Permit will ~~not~~ comply with all the general criteria, antidegradation policy, toxic material provisions, and site-specific uses and criteria.
20. In accordance with TCEQ's regulations regarding the Edwards Aquifer at 30 TAC ch. 213, Applicant's discharge under the terms of the revised Draft Permit will comply with the general criteria, antidegradation policy, applicable aquifer protection requirements, and site-specific uses and criteria relating the contributing zone and recharge zone of the Edwards Aquifer.
21. Allocating court reporting and transcription costs of \$4,931.40 to Applicant is a reasonable allocation of costs under the factors set forth in 30 TAC § 80.23(d).

**NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, IN ACCORDANCE WITH THESE FINDINGS OF FACT AND CONCLUSIONS OF LAW THAT:**

1. The application of DHJB Development, LLC for Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0014975001 is ~~denied~~granted.
2. In accordance with 30 TAC § 50.117, the Commission issues this Order and the attached permit as its single decision on the permit application. Information in the agency record of this matter, which includes evidence admitted at the hearing and part of the evidentiary record, documents the ED's review of the permit application, including that part not subject to a contested case hearing.
3. All other motions, requests for entry of specific Findings of Fact or Conclusions of Law, and any other requests for general or specific relief, if not expressly granted herein, are hereby denied.
4. The effective date of this Order is the date the Order is final, as provided by Tex. Gov't Code § 2001.144 and 30 TAC § 80.273.
5. The Commission's Chief Clerk shall forward a copy of this Order to all parties.
6. If any provision, sentence, clause, or phase of this Order is for any reason held to be invalid, the invalidity of any provision shall not affect the validity of the remaining portions of this Order.

**APPENDIX "B"**

Tables with references to Creek and Watercourse

**Chart – Creek & Watercourse References – Hearing Vol. 1**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
79	14-16	Hill	Specifically at the very top left edge, the contours have been adjusted to reroute that creek around the wastewater plant site.
81	8-11	Hill	A couple of purposes: One to visually screen the treatment facility as well as protect it from water from that - drain it from that creek coming into the wastewater plant site.
81	14-16	Irvine	And would I be incorrect in characterizing it as the berm kind of was built on top of the natural creek channel?
81	17-20	Hill	Not in the entirety. There's a part where it jutted into a part of the creek channel. The outfall, the discharge outfall goes in right at where the natural creek channel was.
82	8-10	Irvine/Hill	(I:) And then, as it curves around the berm and gets to the end of the berm, it rejoins the natural creek channel? (H:) That's correct.
134-135	P134 L24- P135 L22	Irvine/Gregory	(Entire line of questioning repeatedly talks about the "creek")
159	3-7	McCarthy/Gregory	(M:) Okay. And that manmade ditch then flows into a creek? (G:) Yes. (M:) Is that creek on the Johnson Ranch property? (G:) It starts there.
159	14-16	McCarthy/Gregory	(M:) Okay. With it being directed by a manmade ditch into the water force (sic, should be course), into the creek? (G:) Correct.
175	All	Irvine/Bratton	(Both men refer to the "creek" and "stream" repeatedly)
176	2-4	Bratton	In my judgment, with almost 2000 feet of stream between the discharge point and the property line...

181	22-24	Irvine	And so we're trying to look at the cross-section of the channel and then figure out: How deep will that volume of water be in that channel?
189	3-4	Bratton	No, in my opinion, the Discharge Route is a watercourse within the definition used in TCEQ Rules.
211-212	P211 L5- P212 L 4	Bratton/McCarthy	(Multiple references to "watercourse" and "stream.")
213	2-4	Bratton	I'm familiar with the plans that were done up there. I have not walked that watercourse since the berms were partially constructed.
220	11-16	McCarthy/Bratton	(M:) We refer to this watercourse as an unnamed tributary of Cibolo Creek. In your work and modeling that you've described, are there any other names assigned to this watercourse? (B:) Yes. FEMA has designated this watercourse on the flood insurance rate maps as "Unnamed Tributary 20" and "Unnamed Tributary 21" of Cibolo Creek.

**Chart – Creek & Watercourse References – Hearing Vol. 2**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
50	3-5	Irvine	Have you visited or looked at the creek after it crosses over the property line onto Protestants' property?
50	9-10	Irvine	Do you have any opinions about the nature of the stream down there, the creek?
50	11	Urrutia	It's a dry creek.
50	12	Irvine	A dry creek...
51	5-12	Irvine/Urrutia	(I:) Have you done any assessment of whether there are intermittent pools anywhere along the discharge root(sic, should be route)? (U:) No. The times I went and looked at the creek I did not see any pools. (I:) Was the creek flowing? Was it damp? Was there any water in it? (U:) No water in it.
77	all	McCarthy/Graham	(Multiple references to "creek" or "dry creek")
85-86	P85 L22- P86 L1	McCarthy/Graham	(M:) Is that the creek? (G:) I guess...appears to be that extra force to the creek.
90	3-4	Graham	There's fruit trees that grow along that strip on both sides of the creek...
90	17-21	McCarthy/Graham	(M:) Are there any roads across that creek to the strip of land? (G:) We have driven across out on Margie's property in the past to do fence repairs and stuff where the creek goes away from the fence line?
91	7-10	McCarthy/Graham	(M:) And to the immediate east of that is the strip of land we've been talking about; and then to the east of that is the creek, correct? (G:) Yes.

97-98	P97 L24 – P98 L3	McCarthy/Graham	(M:) Are you familiar with the fact that the waste product of your cattle during rainfall events would go into the creeks? (G:) It does flow – it would float into the creeks.
100	21-23	McCarthy/Graham	(M:) You’ve expressed in your testimony concern about water standing in the creek; is that correct? (G:) Generally, yes, sir.
100-101	P24 L24- P101 L3	McCarthy/Graham	(M:)Am I correct that you recently constructed a dam across the creek? (G:) In March I constructed a dam across the creek pretty much at the location in my Exhibit 1.4, in between the two mesquite trees, off to the right.
101	18-21	McCarthy/Graham	(M:) And so during these extreme rainfall events, there’s a high level of water in the creek? (G:) In some instances it's not contained within the creek. It’s out over-banking onto our property.
102	6	Graham	Along the entire dry creek
102	7-11	McCarthy/Graham	(M:) And what are the depths of the creek? (G:) I would say in areas from 2 to 4 feet. And then down near the southern end, on Margie Hasting’s property, there some areas that are well over my head, 10 feet, 8 feet...
102	20-22	McCarthy/Graham	(M:) Okay. And your testimony goes on to say that after those events, the creek became very dry again? (G:) Yes, very rapidly.
113	17-20	Irvine/Graham	(I:)Mr. McCarthy...between the creek and Johnson Ranch property line. (G:) (Witness nods head)
114	3-4	Irvine	And do you have to cross the creek to maintain that portion of the fence?
114	5-7	Graham	Yes, on that whole length of the fence, just about - well, from the creek, south, we have to cross the creek to maintain the fence.
115	all	Graham/Irvine	(multiple “creek” references)

118	6-10	McCarthy/Graham	(M:) Survey stakes, pieces of pipe, lumber from home-building construction are the types of materials you saw in the creek coming from – that you believe came from Johnson Ranch, correct? (G:) Yes
121	12-13	Ross	The creek that connects the Johnson Ranch discharge point to Cibolo Creek.
121	17-19	McCarthy/Ross	(M:) And you've observed the watercourse that you're describing as the creek? (R:) Yes
121	20-24	McCarthy/Ross	(M:) And have you been on the property from the point where the - I believe the NW point of the Graham property is adjacent to Johnson Ranch on the head of the creek? (R:)Yes
206	18-20	McCarthy/Dunbar	(M:) And have you walked the creek on the Graham property? (D:) Yes
206	21-23	McCarthy	And can you describe for me where you started...in that creek bed?
206	24-25	Dunbar	Pretty much right where the creek crosses the Johnson Ranch to the Graham Ranch or the fence there.
207-208	P207 L23- P208 L8	Dunbar	Well, there's places where it's clearly defined...is not quite as clearly defined
209	9-11	Dunbar	Well the creek begins to, I'll say kind of widen and open up because it's beginning to get into entering Cibolo Creek.
210	15-17	McCarthy/Dunbar	(M:) Did you dig into the creek and see how deep the soils were in the creek bed? (D:) No
215	17-19	McCarthy/Dunbar	(M:) When you were walking the creek bed, did you observe any historic erosion in the creek? (D:)Yes
215	23	Dunbar	...As I walked the creek bed with Mr. Irvine and

			Terrell, he described and I observed apparent recent erosion along the creek bank...
218	3-5	Dunbar	...There has probably been erosion over the period of time that the creek existed. That's usually how creeks tend to get formed.

**Chart – Creek & Watercourse References – Hearing Vol. 3**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
48	17-18	Irvine	Okay. On page 11 of your (Lee) testimony, could you explain what is meant by an "unnamed tributary"?
49	16-18	Irvine/Lee	(I:) Okay. And you determined that the stream type was intermittent with pools? (L:) Yes, sir.
51	3-7	Lee	My perception of the stream previously was that it was a clearly defined stream, not necessarily grassy swales, and there are some areas where there are grassy swales along this discharge route.
55	10-13	Lee	At some point during the review process, it was pointed - or brought to my attention that future rerouting of the stream that exists there currently would happen.
62	23-24	Lee	Phosphorus upstream on upper Cibolo Creek, but not in the exact receiving stream.
65	21-23	Irvine	And you would confirm with me that you did not see any water flowing in the stream, the receiving stream, when we did the site visit?
71-72	P71 L 25-P72 L3	Irvine/Lee	(I:) And you testified that if you follow, I guess it would be stream length, you measured 565 feet to the recharge zone? (L:) Yes.
79	15-17	Lee	If drought conditions were the normal conditions, the stream would then be called intermittent only, and the terms would be less stringent.
84	2-3	Rudolph	He put a very trivial amount of base flow of the unnamed tributary.

**Chart – Creek & Watercourse References –Graham Prefiled**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
3	25-31	Questioner/Graham	(Q:)You mentioned a dry creek along the western property line. How would you describe the dry creek during this time period of the early 1990s? (G:)It was dry nearly all of the time. We could get across the dry creek...I only saw the creek flow with water a couple of times
4	19-27	Questioner/Graham	(Q:)Let's return to the dry creek on the Comal County property. How many times have you observed the dry creek over the past ten years? (G:) (Long answer frequently referring to the dry creek)
5	1-12	Questioner/Graham	(Q:)Please describe what the creek currently looks like and how it appears, moving from north to south, on your family's property? (G:) (Long description with frequent references to the "creek.")
6	5-8	Questioner/Graham	(Q:)Please describe how the dry creek changes as it runs south on your property. (G:) As the dry creek runs south it begins to show more defined bed and banks but becomes narrower...becomes narrower and more V-shaped.
6	9-21	Questioner/Graham	(Q:)Based on your observations of the dry creek...southernmost property line? (G:) (Long answer with multiple references to the "creek.")
7	15-23	Questioner/Graham	(Q:)Please describe the surface characteristics of the dry creek...property line? (G:)(another long answer with multiple references to the "creek.")
8-9	Pg 8 L23- Pg 9 L6	Questioner/Graham	(Q:)Based on your familiarity...Hastings' property? (G:) (Long description of "creek" on Hastings property, including high banks and sixty feet in width)
9	9-18	Questioner/Graham	(Q:)Have you ever seen the dry creek flood? (G:) (Long answer with references to the "creek" flooding.)

19-20	Pg 19 L28- Pg 20 L4	Questioner/Graham	(Q:)And what do you mean when you say that DHJB plans to use the dry creek on your property as the discharge route for their wastewater treatment plant? (G:) DHJB's...But the pending major amendment application authoriazes discharge into a dry creek that flows southeast from the Johnson Ranch property and on to my family's property. The effluent will then flow down the dry creek described above through our property and Margie's property into Cibolo Creek
20	28	Graham	Yes, a few times. The MUD is currently attempting to condemn the dry creek on our...
21	17-23	Graham	I was doing some work...We were also seeing a lot of construction debris and soil silt being deposited in the dry creek...and into Cibolo Creek
22	15-16	Graham	It shows the channelization of the dry creek adjacent to our property.
24	29-30	Graham	This photograph (ex1.30) is of the property line where the creek passes under the fence and onto my property from the Johnson Ranch.
26	24-25	Graham	There is evidence in the picture of silt from the construction site flowing into the dry creek on our property.
27	25-27	Graham	As a result...the Johnson Ranch creek meets our property have been reduced.
29	2-4	Graham	Erosion...and enjoyment of the dry creek on our property
29	9-22	Graham	(Multiple references to the "creek")
29-30	Pg 29 24- Pg 30 L7	Graham	(Multiple references to the "creek")
30	9-13	Graham	Fourth, I am concerned that the dry creek does not...substantial
31	26-31	Graham	Yes...to discharge using the dry creek on my family's property...their own property

35	27-29	Graham	They are not discussing undiluted wastewater treatment plant effluent as would be present in the dry creek if this permit is granted.
36	7	Graham	I have many concerns about the wastewater discharges into our dry creek.
36	13-16	Graham	The dry creek...hoof rot
36	25	Graham	Third, when the cattle drink from the creek...
37	2-3	Graham	If there was a water source in the creek, then the cattle would stay down there and not come into good visibility.

**Chart – Creek & Watercourse References –Lee Prefiled**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
10-11	Pg 10 L17- Pg11 L9	Lee	(Long description of her process identifying the watercourse)
11	11-14	Lee	An unnamed tributary is a stream that is on a USGS topographical map or is visible through aerial photography; however, it does not have a name and is hydrologically connected to another stream. Essentially, an unnamed tributary is a branch off of a large body of water.
11	15-17	Questioner/Lee	(Q:)What are the uses of the unnamed tributary? (L:) The unnamed tributary in the review for DHJB has a limited aquatic life use, assumed contact recreational use, incidental fisheries use.
18	8-12	Lee	I conducted the site visit to verify that the characteristics of the unnamed tributary were as I described in my worksheet. The review conducted by desktop has some questionable areas that I accounted for by suggesting there are pool/pools within the tributary. The visit also allowed me to see the areas that were tree lined in the aerial imagery.
18	16-19	Questioner/Lee	(Q:) Did you walk in the actual stream bed? (L:) We did for a while, then we walked along the stream bank on DHJB's property. The stream bed became inaccessible once we reached the Graham's property boundary.
18-19	Pg 18 L21- Pg 19 L5	Lee	I observed a dry creek most of the duration of the site visit...Several areas upstream of the concrete culvert do not depict a defined bed and banks of a channel, however, slope and vegetation patterns indicated that water flowed in a general direction. These areas could be considered to be more like swales than a defined stream.
19	6-10	Questioner/Lee	(Q:) Does this change your determination that the discharge route is to an unnamed tributary then to Upper Cibolo Creek in Segment 1908 of the San Antonio River Basin? (L:)No. The unnamed tributary characterization encompasses the features mentioned and the uses still protect those aforementioned features.

19	14-16	Lee	My determination of what is there now is an intermittent tributary. After visiting the site and seeing the tributary, the tributary currently would be considered intermittent
22-23	Pg 22 L 22-Pg 23 L 3	Questioner/Lee	(Q:)What did DHJB state the discharge route would be? (L:)The discharge route was described as starting from the plant site to an unnamed tributary of the Upper Cibolo Creek; then to Upper Cibolo Creek (segment 1908) of the San Antonio River Basin.
23	4-5	Questioner/Lee	(Q:)Do you agree? (L:)Yes. (Q:)Did you do an independent verification? (L:)Yes
24	1-14	Questioner/Lee	(Q:)How did you determine the stream characterization? (L:) The applicant characterized the receiving water in Item 5, pages 15 and 16 of Domestic Technical report 2.0. The applicant described the receiving water body as a dry creek in a natural area with “no usage.” However, I performed my own review of the receiving water and developed my own characterization...Based upon this I characterized the unclassified stream as intermittent with perennial pools.
29	15-17	Lee	My opinion remains the same because the discharge is still into the unnamed tributary. The distance to the next waterbody minimally changed, but the waterbody itself remained the same.
29	18-22	Questioner/Lee	(Q:) In your professional opinion is the discharge route correctly characterized as: to an unnamed tributary; thence to Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin? (L:) Yes it is.

**Chart – Creek & Watercourse References – Rice Prefiled**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
3	5-8	Rice	I visited...we walked along the length of the dry creek on the Graham and Hastings property. We also crossed FM 1863 and looked at the area where the dry creek joins Cibolo Creek. Cibolo Creek was also dry.
9	15-16	Rice	But the bigger concern, in my opinion, for infiltration to groundwater is actually the dry creek bed.
10	21-26	Rice	I disagree. Wastewater will be continuously discharged to the creek...what conditions exist along the creek bed that would prevent significant amounts of wastewater from infiltrating the root zone and into the underlying aquifer?
11	12-17	Questioner/Rice	(Q:) Let's talk about the dry creek...recharge zone? (R:) The dry creek borders...on the recharge zone.
11	18-24	Questioner/Rice	(Q:) Please describe the characteristics of the dry creek on the Graham-Hastings property? (R:) I walked along the creek bed...Glen Rose Formation.
11	26-27	Rice	Yes, those are photos that I took on Oct 15, 2014, walking along the Graham's dry creek.
12	1-2	Rice	The presence of sand and gravel means that water will readily infiltrate into the creek bed.
12	4-10	Questioner/Rice	(multiple references to the "creek" and "creek bed" in this series of questions and answers)
13	16-17	Rice	Wastewater that infiltrates through the creek bed may migrate to the underlying aquifer and be drawn into the wells.

**Chart – Creek & Watercourse References – Ross Prefiled**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
2	23-25	Ross	Based on a map on page DHJB APP-0060 of the application, wastewater is proposed to be discharged from the final treatment unit into a channel that runs generally southeast across the Johnson Ranch property and then south toward Cibolo Creek.
3	7-10	Ross	Most of my time was engaged, however, making observations in the channel that would convey wastewater effluent...adjacent to Johnson Ranch.
3	13	Ross	Upon my arrival, at the most northern part of the channel...
3	18-19	Ross	It (ex 2.2) is the view I had of the Johnson Ranch channel that I just described.
3	23-25	Ross	On the day that I observed the creek on the Graham and Hastings property, the creek bed below the rock berm was either damp or dry. The bottom of the creek is open. In many places clean, limestone rock or cobble is exposed.
4	1-2	Ross	This clean bottom character, without the presence of or indications of algae, is consistent with low nutrient conditions found in Texas Hill Country streams.
4	10-13	Ross	The photograph illustrates a use and enjoyment of the current channel...quality of the channel and limits its access.
5	4-6	Ross	The photograph illustrates the impact of this sediment and water discharge on what was previously the clean rock bottom character of the channel. This impact and degradation in the character and quality of the creek bottom over a period...
5	15	questioner	Let's discuss the impacts of the proposed wastewater discharge on the dry creek on...
6	1-2	Ross	The proposed Johnson Ranch wastewater effluent discharge of 350000 gallons per day will dominate the flow regime of the channel that flows...

6-7	Pg 6 L30- Pg 7 L3	Ross	Nutrient concentrations... are similar to those I would expect in the channel proposed to receive the effluent discharge. These photographs represent changes that would likely occur in the Graham-Hastings ranch channel should the permit amendment be approved.
7-8	Pg 7 L24- Pg 8 L3	Ross	(offers analysis of the stream by comparing it to several other creeks in Texas, shows she treats it as watercourse)
10	2-4	Ross	This increase in nitrate nutrient concentrations below the City of Boerne wastewater discharge will also be experienced in this channel throughout the Graham and Hastings property...
10	10-11	Ross	In my opinion, a similar pattern of extremely low natural phosphorus concentrations is exhibited in Texas Hill Country streams.
11	1-4	Ross	This allowable concentration would be higher than expected concentrations in the Graham-Hastings channel during flow conditions by a factor of more than 10. Based on research in a similar Texas Hill Country Stream...
11	9-10	Ross	Because of the absence of flow and naturally low nutrient state, channels like the one that crosses the Graham-Hastings ranch...
11	24	Ross	Referencing natural Texas Hill Country streams (again comparing this stream to other Texas watercourses)
13	7-11	Questioner/ Ross	(Q:)Are perennial pools likely to develop along this currently dry creek...? (R:) Yes. The wastewater discharge would create a continuous flow of water down the dry creek, and thus perennial pools would develop along the stretch of creek on the Graham-Hastings property. I observed areas of the creek bed...
17	8-10	Ross	The proposed...into a usually dry channel from Johnson Ranch onto the Graham-Hastings ranch property.
23	18-19	Ross	Yes, Protestants Exhibit No. 16 is a photo I took showing the alluvial nature of the bed and banks of the Graham-Hastings ranch channel.

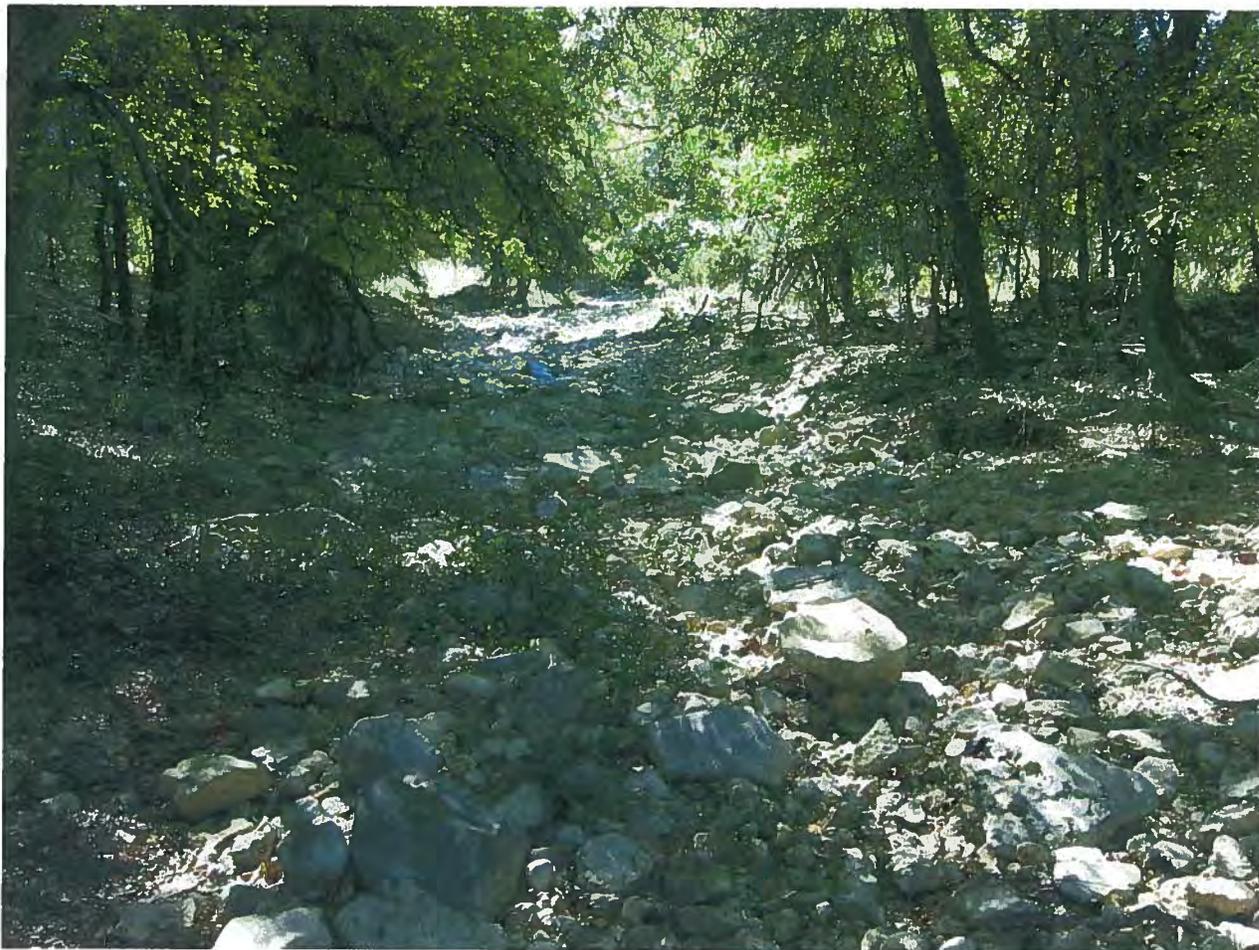
23	21-26	Questioner/ Ross	(Q:) Does the dry creek absorb the effluent and does this effluent seep down into subsurface aquifer or aquifers? (R:) The Graham-Hastings ranch channel...into the subsurface.
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**Chart – Creek & Watercourse References –Rudolph Prefiled**

<b>PAGE</b>	<b>LINE</b>	<b>Speaker</b>	<b>QUOTE</b>
5	13-15	Questioner/Rudolph	(Q:)What watershed is the proposed discharge into? (R:) The proposed discharge will be into the watershed of the Upper Cibolo Creek (Segment 1908)
5	16-24	Questioner/Rudolph	(Q:) Is segment 1908 on the Clean Water Act, Section 303(d) list? (R:)Yes. At the time of the modeling analysis, the 2010 303(d) list was in effect. On the 2010 303(d) list, Segment 1908 was listed for elevated...entire segment

**APPENDIX "C"**

**Protestants' Exhibit 3.7**



**GRI**



**GR2**



**GR3**



**GR4**

**Exhibit "D"**

**Photographs from Protestants' Exhibit 1.9**

## Appendix B — Photographic Log



**Photo 1.** Downslope view of WW1; Representative of similarly situated low-frequency flow, non-relatively permanent, ephemeral headwater drainages (e.g. WW3, WW16, and WW17); Yellow lines represent approximate OHWM.



**Photo 2.** Upslope view of WW2 from Property boundary; Yellow lines represent approximate OHWM.

Appendix B — Photographic Log

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**Photo 3.** Downslope view of WW4 from Property boundary; Yellow lines represent approximate OHWM.



**Photo 4.** Upslope view of WW4 from Property boundary over area of potential affect (toward location of Photo 5); Yellow lines represent approximate OHWM.

## Appendix B — Photographic Log



**Photo 5.** Roadway crossing of WW4; Review of high-resolution imagery (0.5- to 3.3-foot pixels) suggests the crossing occurred in a vegetated swale segment.



**Photo 6.** Upslope view of WW4 from road crossing; Yellow lines represent approximate OHWM.

## Appendix B — Photographic Log



**Photo 7.** Downslope view of WW4 from confluence with vegetated swale segment of WW5; Yellow lines represent approximate OHWM.



**Photo 8.** Upslope view of vegetated swale segment of WW4 from confluence with vegetated swale segment of WW5. Physical OHWM characteristics are not evident.

**Exhibit "E"**

**Executive Director's Exhibit 42**

