



December 19, 2016

John Dupnik, P.G.
General Manager
Barton Springs Edwards Aquifer Conservation District
1124 Regal Row
Austin, Texas 78748
e-mail: john@bseacd.org

Re: BSEACD's preliminary decision to issue a Regular Production Permit to Needmore Water, LLC.

Mr. Dupnik:

The Trinity Edwards Springs Protection Association ("TESPA"), submits these comments regarding the Barton Springs Edwards Aquifer Conservation District's ("BSEACD" or "District") preliminary decision to issue a Regular Production Permit to Needmore Water, LLC ("Needmore"). Furthermore, under Rule 4-9.13 of BSEACD's rules, TESPAs requests a contested case hearing related to this matter before the State Office of Administrative Hearings ("SOAH").

Background

House Bill 3405, which became effective on June 19, 2015, extended BSEACD's jurisdiction to include unregulated areas of the Trinity Aquifer in Hays County. Prior to passage of the law, Needmore Ranch, a 5,000 acre ranch along the Blanco River in Hays County, was outside BSEACD's jurisdiction. House Bill 3405 created a process where landowners operating a well prior to passage of the law, could apply to BSEACD for a production permit for the "maximum production capacity" of the well.

On September 19, 2015, Needmore applied to BSEACD for a Temporary Permit to produce 289,080,000 gallons of groundwater a year from the Trinity Aquifer. This volume of groundwater is what Needmore determined is the maximum production capacity of the well on the ranch. House Bill 3405 prohibited BSEACD from conducting a hearing on the Temporary Permit. At that time, TESPAs submitted comments to BSEACD maintaining that for various reasons, BSEACD lacked authority to issue the Temporary Permit and recommending that BSEACD deny it.

BSEACD is now going through the procedural process under House Bill 3405 of converting this Temporary Permit into a Regular Permit and has issued a proposed permit to Needmore for

289,080,000 gallons a year – the maximum production capacity of the well. As described below, TESPAs contends that the District lacks authority to issue a Regular Permit to Needmore, that the District should deny the permit, and that if the District issues the permit, many landowners who are members of TESPAs will be adversely affected. Consequently, TESPAs, on behalf of its members is requesting a contested case hearing on this matter.

Potential Injuries of Landowners

TESPA is a non profit organization founded to protect the Trinity and Edwards Aquifers and the property rights of landowners overlying these aquifers. TESPAs has over one hundred members and supporters. As an association, TESPAs has standing to contest DSWSC's permit amendment on behalf of its members. *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 343 (1977); *Tex. Ass'n of Bus.*, 852 S.W.2d 440, 447 (Tex. 1993). Individuals who are members of TESPAs own property near the proposed well described in Needmore's application. The Trinity Aquifer underlies all of these landowners' properties. The following landowners and members of TESPAs listed below stand to be adversely affected by the permit for the well on Needmore Ranch:

Sheryl Davis
(Sheryl C. Davis Bypass Trust & Sheryl C. Davis Survivor's Trust, Sheryl C. Davis Trustee)
1525 Red Hawk Road
Wimberley, Texas 78676

David and Ellen Berman
1471 Red Hawk Road
Wimberley, Texas 78676

Letha Birkholtz Cole
1430 Red Hawk Rd
Wimberley, Texas 78676

David and Mary Welp
2050 Red Hawk Rd
Wimberley, TX 78676

Lloyd and Judy Provost
2000 Red Hawk Road
Wimberley, TX 78676

Scott Mitchell
300 Little Arkansas Road
Wimberley, TX 78676

Peter Way (Wimberley Point, Ltd., Way Rent, LCC)
987 Fox Road
San Marcos TX 78666

Robert and Donna Elkins
1401 Red Hawk Rd.
Wimberley, TX 78676

Wendy Phillips
2595 Flite Acres
Wimberley, TX 78676

Needmore is seeking a permit from the District to pump 289,080,000 million gallons per year of groundwater from Well D on Needmore Ranch. The District's own modeling predicts that within seven years pumping from Well D will cause 140 feet of drawdown in the Trinity Aquifer as far as two miles from Well D. The District states that pumping from Well D could lower the water level below the top of the Middle Trinity Aquifer, putting the water level within 20 feet of the District's monitoring well pump located approximately two miles west of Well D. Additionally, the aquifer test conducted by Wet Rock Groundwater Services LLC resulted in fourteen feet of drawdown from the Amos monitoring well 1.95 miles from Well D on Needmore Ranch. This is not a projected drawdown. This is actual drawdown caused by pumping from Well D. Moreover, TESPAs own hydrogeologist independently confirmed that based on BSEACD's projections, within seven years there will be fifty feet of drawdown as far as four miles from Well D. Based on these analyses and results, therefore, pumping from Well D will result in drawdown beneath the landowners' properties listed above and drainage of groundwater from beneath the landowners' land.

These landowners hold legally-protected, justiciable interests in the groundwater beneath their land. Section 36.002(a) of the Texas Water Code provides that, "[t]he legislature recognizes that a landowner owns the groundwater below the surface of the landowner's land as real property." Additionally, the Texas Supreme Court held in *Edwards Aquifer Authority v. Day* that, "land ownership includes an interest in groundwater in place." These interests will be adversely impacted by the pumping for which Needmore seeks authorization in the proposed permit at issue. The drainage caused by pumping from Well D will result in the diminution and potential elimination of groundwater that is a valuable asset held by Landowners.

Ms. Davis, Ms. Cole, Ms. Phillips, the Bermans, the Provosts, the Elkins, and the Welps all own property approximately two miles from Well D on the north side of Needmore Ranch. Please see Attachment A. The Trinity Aquifer underlies their property. Ms. Davis, the Bermans, and the Welps rely on groundwater wells on their property for household use. Ms. Phillips uses her well to provide water to livestock on her property. If the proposed production permit is approved by BSEACD, these landowners will be injured. Pumping from Well D on Needmore Ranch will cause the wells on these landowner's properties to cease flowing or flow less efficiently forcing them to drill deeper wells, if this is even possible, at a substantial expense. Furthermore, these landowners wish to leave some of the groundwater they own under their property in place either for use in the future or for conservation purposes but pumping from Well D under the proposed permit will result in their groundwater, which they own in place as real property, being drained from beneath their land.

Additionally, in the near future, Ms. Phillips intends to apply to the Hays Trinity GCD for a permit for an agricultural well to irrigate a small vineyard. She is concerned that pumping from Well D will drain the groundwater from beneath her land, affect her ability to drill a well, and the use and enjoyment of her property. Ms. Cole, the Provosts (on their southern property), the Bermans (on the other two properties they own), and the Elkins do not have wells on their property, but they desire to conserve the groundwater beneath their land in place. In an effort to conserve the groundwater beneath their land, Ms. Cole, the Provosts, and the Elkins rely exclusively on rainwater for their household needs. These landowners are concerned that pumping from Well D on Needmore Ranch

will result in the drainage of groundwater, a valuable asset, from beneath their land and a decrease in their property values.

Mr. Mitchell owns an approximately 225 acre farm and ranch adjacent to Needmore Ranch. The Trinity Aquifer underlies Mr. Mitchell's property. Mr. Mitchell has two wells on his property that are used for household and farming purposes, limited lodging, and ranching. One of Mr. Mitchell's wells is slightly more than one mile from Well D, closer than the Amos monitoring well, which experienced 14 feet of drawdown during aquifer testing and which BSEACD projects will experience 140 feet of drawdown in seven years as a result of pumping from Well D on Needmore Ranch. Mr. Mitchell's own hydrogeologist analyzed the data from BSEACD and Needmore and independently concluded that Mr. Mitchell's wells will be affected by pumping from Well D. Please see Attachment B. Pumping from Well D will result in the groundwater beneath Mr. Mitchell's, land, which he owns as real property and which is a valuable asset, being drained from beneath his land. Please see Attachment C. Mr. Mitchell's property is also adjacent to the Blanco River, therefore, he has riparian rights to use surface water from the Blanco River. Mr. Mitchell is concerned that pumping from the well on Needmore Ranch will decrease base flows to the Blanco River and adversely affect and interfere with his his legal rights to use this surface water.

Mr. Way owns a 457 acre ranch on the Blanco River downstream of Needmore Ranch. Mr. Way is concerned that pumping from the well on Needmore Ranch will decrease base flows to the Blanco River and adversely affect his riparian rights to use this surface water. Furthermore, the majority of Mr. Way's Ranch is under a conservation easement held by the Nature Conservancy. In addition to one mile of Blanco River frontage, several seeps are present on the ranch as well as important wildlife habitat for the golden cheek warbler. Mr. Way's intent in placing a conservation easement on his property was to conserve groundwater in the Trinity Aquifer beneath his ranch by prohibiting development on the ranch. The conservation easement recognizes the significant value that the Trinity Aquifer provides to sustaining surface water flow in the Blanco River, to contributing to spring flow, and to maintaining habitat for wildlife. If BSEACD grants Needmore's permit, not only will Mr. Way's personal property interests be adversely affected, the public interest in preserving these types of conservation lands also will be jeopardized.

All of the landowners have particularized injuries described above that will result if BSEACD approves Needmore's permit. Under state law, these landowners own the groundwater beneath their land and have property rights and interests in their groundwater. Some of the landowners also have riparian rights to surface water in the Blanco River. The proposed permit will interfere with these rights. Furthermore, these rights and interests are not common to members of the public and will be adversely affected by the proposed production from Well D on Needmore Ranch, which BSEACD has authority to regulate.

As described below, TESPAs contends that BSEACD lacks authority to approve the proposed permit, and should, therefore, deny the permit.

HB 3405 is Unconstitutional and Contradicts Chapter 36 of the Water Code

TESPA contends that portions of House Bill 3405, which limit BSEACD's authority to issue a production permit to Needmore Ranch, are unconstitutional and violate Chapter 36 of the Texas Water Code. Consequently, BSEACD should deny Needmore's request for a production permit because granting it would be contrary to the law and BSEACD lacks authority to do so.

Article 16, section 59 of the Texas Constitution (the Conservation Amendment) states, “The conservation and development of all of the natural resources of this State, ... and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto.”¹ Groundwater Conservation Districts in Texas have a constitutional duty to balance the conservation and development of groundwater.

BSEACD Can't Consider Impacts to Surface Water

When deciding whether to grant or deny a groundwater production permit, therefore, groundwater conservation districts must consider several factors designed to ensure that groundwater is conserved. Section 36.113(d)(2) of the Water Code states, “Before granting or denying a permit, or a permit amendment...the district shall consider whether the proposed use of water unreasonably affects existing groundwater and surface water resources or existing permit holders.”

House Bill 3405 prohibits BSEACD from considering the impact that production from Well D on Needmore Ranch will have on surface water. The law limits BSEACD’s authority to two considerations: whether the production will cause (1) a failure to achieve the applicable adopted desired future conditions for the aquifer; or (2) an unreasonable impact on existing wells. In the technical memo analyzing the impacts of pumping from Well D, BSEACD staff states that impacts to area streams and springs were not addressed.²

The Trinity Aquifer provides base flow to the Blanco River, and the Blanco River is less than two miles from Well D, yet BSEACD is unable to consider any effects pumping from Well D could possibly have on the Blanco River. Furthermore, the District is unable to consider the impact the proposed permit will have on Fern Bank Springs. Fern Bank Springs is approximately two miles from Well D on Needmore Ranch and is home to a federally listed endangered species, the Comal Springs Dryopid Beetle. In 2013, the U.S. Fish and Wildlife Service (“the Service”) designated Fern Bank Springs as critical habitat.³ The Service has stated that the Trinity Aquifer may contribute flow to Fern Bank Springs.⁴ BSEACD is proposing to issue a substantial groundwater production permit in close proximity to a federally protected spring. The law, however, prohibits the District from considering the impact the proposed permit will have on spring flow and prohibits the District from reducing the permit if the District believes that spring flow will be affected. House Bill 3405, therefore, has created a situation where the District’s permitting decision could potentially result in the take of an endangered species under Section 9 of the Endangered Species Act.

Because House Bill 3405 prohibits the District from considering impacts to surface water, it violates Section 36.113(d)(2) of the Water Code and the District lacks authority to issue the permit.

¹ TEX. CONST. art. XVI, § 59(a).

² BSEACD Technical Memo, page 4, November 2016.

³ 62 Fed. Reg. 66,297 (Dec. 18, 1997)

⁴ U.S. Fish and Wildlife Service, News Release, SERVICE REVISES CRITICAL HABITAT FOR THREE ENDANGERED COMAL INVERTEBRATES (October 23, 2013).

Additionally, because House Bill 3405 prohibits BSEACD from considering the environmental impact and of its permitting decisions, it contradicts Article 16, Section 59 (the Conservation Amendment) of the Texas Constitution. House Bill 3405 thwarts the District's ability to fulfill its responsibilities under the Texas Constitution and Chapter 36 of the Water Code; therefore, the District lacks authority to issue the permit.

Maximum Production Capacity

Because House Bill 3405 requires BSEACD to issue the Regular Production Permit for the maximum production capacity of the well, the law restricts the District's ability to consider whether the proposed use is proportionate to the amount of groundwater Needmore has requested.

Needmore's request for 887 acre feet of groundwater a year for agricultural purposes is excessive and is a misrepresentation. This amount of water would cover the 5,000 acre ranch in about 2 inches of water. It is enough water for over 39,000 head of cattle at 20 gallons per day per head. This magnitude of withdrawal is equivalent to 792,000 gallons a day, which would provide for 5,280 households assuming a daily average household usage of 150 gallons a day.

Section 36.113(c)(3) of the Water Code permits groundwater conservation districts to require applicants to include a statement of the nature and purpose of the proposed use and the amount of water to be used for each purpose. Under BSEACD's normal rules, before approving or denying a permit, BSEACD must consider whether "there are reasonable assurances of definite, non speculative plans and intent to use the water for specific beneficial uses during the Production Permit term." Rule 3-1.6(2). In doing so, BSEACD applies "industry and regional standards for permitted usage to assure prospective use is commensurate with reasonable, non-speculative demand." Rule 3-1.6(3).

This consideration is important because under Section 36.1132(b) of the Water Code, BSEACD must ensure that its permitting decisions are consistent with the desired future condition ("DFC") for the Trinity Aquifer in this area. To accomplish this, BSEACD uses the Texas Water Development Board's ("TWDB") modeled available groundwater ("MAG") number as a guide in permitting decisions, ideally not issuing permits beyond this number. By requiring applicants to demonstrate that the amount of groundwater requested is commensurate with its intended use, the District can ensure that groundwater is available for future users and is not over allocated. However, with respect to Needmore's application, House Bill 3405 prohibits BSEACD from making this consideration because it requires BSEACD to issue a permit for the maximum production capacity of the well. This restriction is contrary to the permitting procedures and goals established in Chapter 36 of the Water Code.

No Beneficial Use

Under Section 36.113(d)(3) of the Water Code, before granting or denying a permit, a groundwater conservation district must consider whether the proposed use of water is dedicated to any beneficial use. BSEACD's rules require this same consideration. All permit holders must demonstrate that the proposed use of water is dedicated to a beneficial use at all times. Rule 3-1.55.2(D)(7) requires applicants to demonstrate in their application for a Temporary Permit that the produced water will be dedicated to a beneficial use at all times. If a use is not beneficial, the Water Code and BSEACD

Rules consider it to be waste. Waste is defined as “the flowing or producing of wells from a groundwater reservoir if the water produced is not for a beneficial purpose.”⁵

It is impossible for Needmore to beneficially use the amount of water they are requesting. Therefore, BSEACD should determine that Needmore’s request is Waste under the Water Code.

Furthermore, Needmore is pumping groundwater from Well D, conveying it through a pipe into a creek on the ranch, discharging it into Sycamore Creek where it is transported about a mile down the creek into an impoundment. Under state law, to retain ownership of the groundwater it transports in a state watercourse, in this case Sycamore Creek, Needmore must obtain authorization from the TCEQ under Section 11.042 of the Water Code in the form a bed and banks permit. Because Needmore has not obtained this authorization, the water in Sycamore Creek and ultimately the water in the lake on the ranch has lost its legal status as privately owned groundwater and is considered surface water.⁶ Therefore, the end use cannot be considered beneficial, as the water in the lake is actually state owned surface water and not privately owned groundwater. Consequently, pumping from Well D should be classified as Waste since the water produced is not for a beneficial purpose and BSEACD should deny the permit.

BSEACD Lacks Subject Matter Jurisdiction to Consider the Regular Permit

Evidence that Well D was not in operation on or before June 19, 2015

BSEACD lacks authority to approve the Regular Permit because the Temporary Permit should never have been granted in the first place. BSEACD’s rules under 3-1.55.1(A) describe the eligibility criteria for temporary permits as follows: “(1) The person is operating an existing nonexempt well on or before June 19, 2015.” According to BSEACD’s Application Summary and Staff Review, the pump in the well was removed in September 2015. The District states, “A documented video log provided to the District confirms the well is currently damaged and in deteriorated condition and is therefore considered an abandoned well pursuant to State law and District rules.” The District goes on to say that “the well is incapable of production in this current condition.”

This past September BSEACD filed a complaint with the Texas Department of Licensing and Regulation (TDLR) maintaining that the driller had failed to properly drill, case, and cement the annular space of the well on Needmore Ranch as required by law. The well was drilled in October 2012. Downhole video footage of Well D from September 4, 2015, documented a lack of casing and significant damage of the PVC casing. Additional footage documented an obstruction in the well, which BSEACD concluded to be the lower part of the casing string that parted and fell to the bottom of the borehole. The evidence suggests that since the damage to the well was so extensive, it existed prior to June 19, 2015. In fact, BSEACD concluded that the damage to the well was attributed to improper well construction, which occurred in 2012.

Based on the facts presented by BSEACD, there is evidence that the well had been inoperable prior to passage of House Bill 3405; therefore, Needmore was not eligible to apply for a Temporary Permit, and the District should have denied their request.

⁵ Tex. Water Code 36.001(8)(B); BSEACD Rule 2-1.

⁶ See *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

Needmore Materially Misrepresented Facts

Moreover, there is evidence that Needmore misrepresented information to the District, which the District relied on in granting the Temporary Permit. On September 30, 2015, the District requested supplemental information from Needmore. Specifically, the District asked the Applicant to confirm that the well was constructed as the final completion for permanent production. In response to this request, Needmore stated in a supplemental letter dated October 9, 2015, “It is our understanding that the well is completed to final completion for the intended beneficial purposes described in the applications.” The District also asked Needmore to provide information on the type of pump installed in the well. In response, Needmore stated, “the pump currently installed in the well is Grundfos 475S500-6A.” Needmore did not mention that the pump had recently been removed.

The District also requested that Needmore provide more detail regarding the nature and purpose of the existing uses, which on the application Needmore claimed was agricultural irrigation. In response to this request, on October 9, 2015, Needmore described in detail the work the landowner has done to restore pastureland, including removing cattle, letting pastures remain fallow, fencing overgrazed pastures, and planting native seeds throughout the property. Nowhere, in this lengthy description did Needmore mention that the well was currently not in operation.

BSEACD Has Not Analyzed Impacts to DFC

Section 36.1132(a) of the Water Code states that groundwater conservation districts “shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition. Section 36.1132(b) of the Water Code states that groundwater conservation districts “shall manage total groundwater production on a long-term basis to achieve an applicable desired future condition.” BSEACD Rules 3-1.55.4(B)(4)(a) states, “Before issuing a Regular Production Permit, the District shall consider whether the production volume set forth in the Temporary Production Permit will cause a failure to achieve the applicable adopted DFC for the aquifer.

In its preliminary decision, BSEACD determined that “The requested permitted pumpage volume would not exceed the Modeled Available Groundwater estimate for the Middle Trinity Aquifer and therefore, will not likely cause a failure to achieve the applicable desired future condition.” In the technical memo, BSEACD states that impacts to Desired Future Conditions were not addressed” due to a lack of numerical models. Desired Future Conditions are based on total pumping from an aquifer on a regional basis. Yet based on the District’s statements, it appears that it did not consider the cumulative impacts of pumping throughout the Trinity Aquifer when determining whether pumping from the Needmore well would impact the DFC. The Modeled Available Groundwater for the Trinity Aquifer in GMA 10 is 2,860 acre feet. Needmore has requested almost one third of the MAG. Although this specific amount of pumping does not exceed the MAG, when considered with pumping throughout GMA 10, there is a possibility that the DFC would not be achieved. However, the District did not make this evaluation as required by Chapter 36, and therefore, lacks authority to approve the proposed permit.

BSEACD Should Deny the Regular Permit

BSEACD has authority to deny Needmore’s Regular Permit. Under Section 4(i) of House Bill 3405, “A person who relies on the temporary permit granted by this section to drill, operate, or engage in

other activities associated with a water well assumes the risk that the district may grant or deny, wholly or partly, the permit application when the district takes final action after notice and hearing to issue a regular permit pursuant to the application.” BSEACD should deny the Regular Permit because as described above, it lacks authority to approve the Regular Permit.

Proposed Production Will Cause Unreasonable Impacts

BSEACD rule 3-1.55.4(B)(4) states that “Before issuing a Regular Production Permit, the District shall consider whether the production volume set forth in the Temporary Production Permit will cause an unreasonable impact on existing wells.” House Bill 3405 states that the District “shall issue an order granting the regular permit authorizing groundwater production in the amount set forth in the temporary permit unless the district finds that authorizing groundwater production in the amount set forth in the temporary permit will cause: (1) a failure to achieve the applicable adopted desired future conditions for the aquifer; or (2) an unreasonable impact on existing wells.

At a minimum, BSEACD should reduce Needmore’s requested volume as staff has concluded that 289,080,000 gallons a year will cause unreasonable impacts to existing wells. According to BSEACD’s preliminary decision, “After considering the findings of the evaluation of the Aquifer Science Team (see Technical Memo for further detail), the GM has determined that the modeled projections of drawdown attributed to pumping from Well D at maximum production capacity indicate that some wells will cease to yield water at the ground surface or will experience the lowering of water levels below a reasonable pump intake level. Therefore, the GM has determined that the proposed groundwater production, under modeled conditions, will cause unreasonable impacts to existing wells.”

Rather than reduce the permit at the outset as contemplated by House Bill 3405, BSEACD has opted to temporarily reduce production from the well if measured impacts are observed at the monitoring well. The result is that nearby landowners may experience impacts to their wells and privately owned groundwater before Needmore will be required to cutback pumping. To sufficiently protect these landowners’ interests, at the very least BSEACD should reduce Needmore’s request from the outset.

Contested Case Request

For the reasons described above, TESPAs submits this protest to BSEACD’s preliminary decision to grant Needmore a Regular Permit and requests that SOAH conduct the contested case hearing. TESPAs’s mailing address is PO Box, 160971, Austin, Texas 78716.

Thank you for your time and consideration of these comments, and please contact me if you need any additional information.

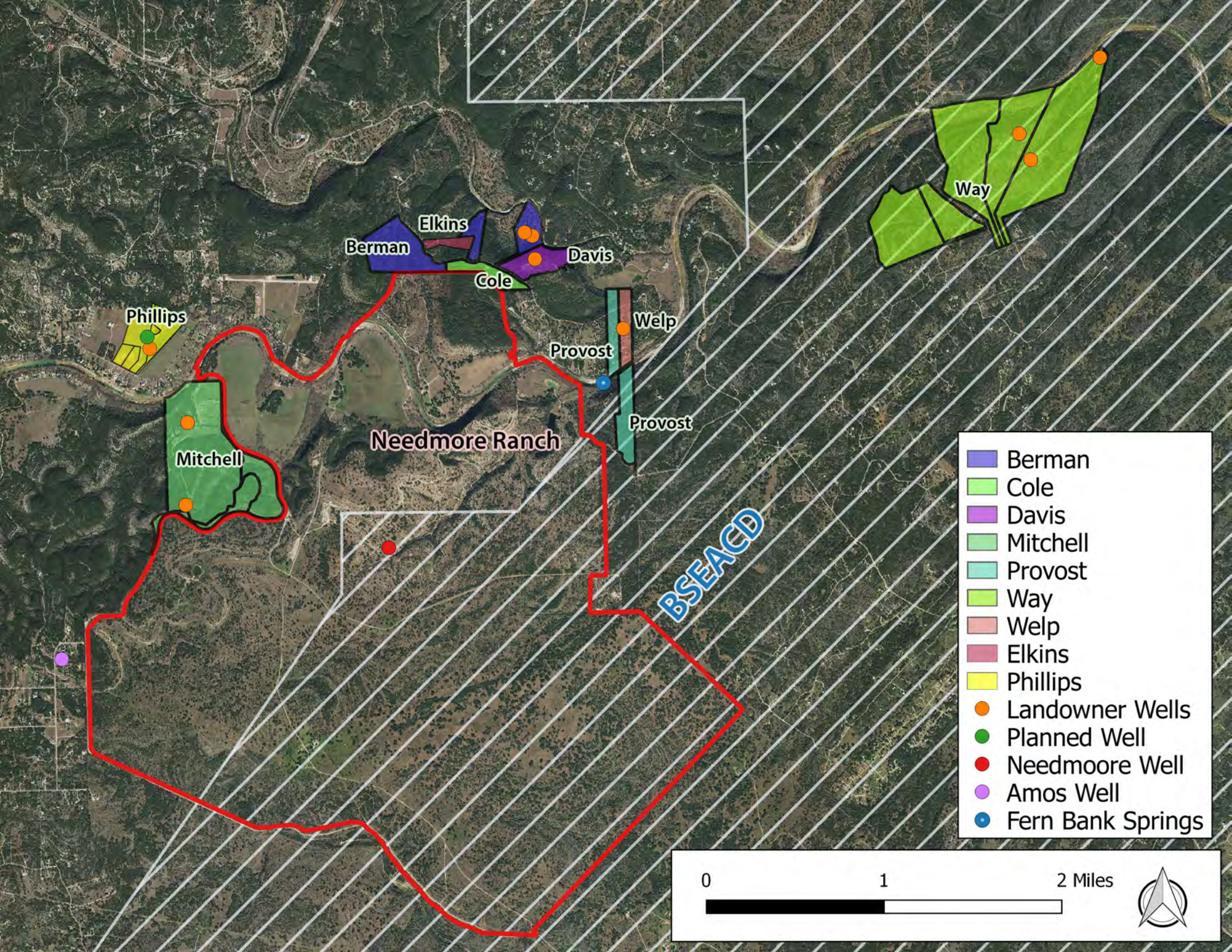
Respectfully,



Vanessa Puig-Williams
Executive Director and General Counsel, TESPAs
www.tespatexas.org

Attachments: **A.** Map of properties and wells owned by TESPAs members.
B. Blue Creek Consulting LLC report for Montesino Ranch
C. Letter from Brenda & Scott Mitchel, Montesino Ranch

ATTACHMENT
A



Berman
Elkins
Cole
Davis

Way

Phillips

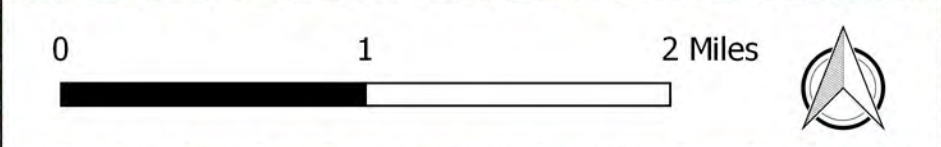
Mitchell

Needmore Ranch

Provost
Welp
Provost

BSEACD

- Berman
- Cole
- Davis
- Mitchell
- Provost
- Way
- Welp
- Elkins
- Phillips
- Landowner Wells
- Planned Well
- Needmoore Well
- Amos Well
- Fern Bank Springs



ATTACHMENT
B

Blue Creek Consulting LLC
400 Blue Creek Ranch Road
Dripping Springs, TX 78620
Texas Geoscience Firm #50541

December 14, 2016

Mr. Scott Mitchell
Montesino Ranch
300 Little Arkansas Road
Wimberley, TX 78676

Subject: Affected Water Wells – Montesino Ranch

Dear Mr. Mitchell,

Pursuant to your request, Blue Creek Consulting LLC (BCC) has prepared this letter report to present our opinion if two water wells located at Montesino Ranch will be affected by the proposed groundwater pumping permit application under consideration by the Barton Springs Edwards Aquifer Conservation District (BSEACD) for the adjacent Needmore Ranch. The proposed permit application includes maximum annual pumpage of 289,080,000 gallons per year from the Middle Trinity Aquifer. Sources of information used in this analysis include:

- Hydrogeologic Report of Needmore Water, LLC Well D, prepared by Wet Rock Geological Services, L.L.C. (WRGS), (March, 2016),
- Staff Administrative Completeness Review – Needmore Water LLC, prepared by BSEACD, November 15, 2016)
- Texas State Well Records

The two water wells evaluated are located on the Montesino Ranch and are referred to as Well 1 (SWR #157229) and Well 2 (#157232). Well locations are shown on Figure 1. The proposed Needmore pumping permit included the pumpage of 550 gpm, 24 hours per day, 365 days per year or 289,080,000 gallons per year from Needmore Well D. Water will be withdrawn from the Middle Trinity aquifer. A pump test was performed on Well D in January, 2016 and the test documented in the previously referenced WRGS report. The lowering (drawdown) of water levels in area wells was measured. Several of those wells (Well D, Catfish Pond Well and Amos Well) are shown on Figure 1 and pertinent well information is included on Table 1. Wells 1 and 2 were not measured during the test.

There are two important factors to analyze to determine if Wells 1 and 2 will be affected by the proposed pumpage from Well D:

- Are Wells 1 and 2 completed in the same zone (Middle Trinity Aquifer) as Well D, and
- Were the wells within the cone of depression created by pumping Well D during the pump test.

According to the WRGS report, Well D is completed in the Middle Trinity Aquifer, including the Cow Creek Formation. Wells monitored during the pump test, Catfish Pond and Amos wells, are also completed in the Cow Creek Formation. A review well logs indicate all of the wells either partially or fully penetrate the Cow Creek (Table 1). The elevation of the top of the Cow Creek at each well is included on Table 1. Based on the geologic cross section (Figure 7) included in the WRGS report, the Cow Creek dips down from top of the Cow Creek at Wells 1 and 2 and Catfish wells are nearly identical, indicating all of the wells are completed within the same zone.

Table 1. Well Information

Well	Latitude	Longitude	Land Surface Elevation (ft. MSL)	Total Depth (ft. bgs)	Elevation Top of Cow Creek (ft. MSL)	Distance from Needmore Well D (ft.)	Drawdown During Pump Test (ft)**
Montesino Well 1	29° 58' 50.27 N	98° 03' 10.65 W	838	580*	288	7017	not measured
Montesino Well 2	29° 58' 25.95 N	98° 03' 11.45 W	1075	830	275	6120	not measured
Needmore Well D	29° 58' 12.99 N	98° 02' 2.99 W	936	800	206	0	35.3
Catfish Pond Well	29° 58' 12.70 N	98° 03' 7.90 W	1070	810	270	5717	15.9
Amos Well	29° 57' 41.80 N	98° 03' 55.08 W	1132	868	309	10313	14.2

* total drilled depth – 600 ft.

** Pump Test Performed by WRGS

Note: Data for Wells 1 and 2 obtained from State Well Reports

A review of the lithology from the State Well Reports (Attachment 1) indicates Wells 1 and 2 terminates in brown sand or brown sandstone. This is a typical description of the lithology of the upper part of the Cow Creek Formation (Wierman, et. al., 2010).

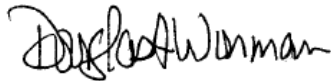
Total drawdown of water levels at the Amos Well and Catfish Pond Well during the WRGS pump test were 14.2 ft. and 15.9 ft., respectively. Water levels at these wells were still declining when the pumping portion of the test concluded. Wells 1 and 2 were not measured during the pump test. The distance from pumping Well D to the Amos Well 10,313 ft. and the distance to the Catfish Pond Well is 5,717 ft. The distance between Well D and Well 1 and Well 2 are 7,017 ft. and 6,120 ft., respectively. Both Well 1 and 2 are at a similar distance from Well D as the Catfish Pond Well and should experience similar drawdown. Wells 1 and 2 would have been within the cone of depression created by Well D.

The BSEACD analyzed the data from the WRGS pump test and estimated the drawdown could be as much as 140' at the Amos Well if a longer time frame and natural fluctuations in water levels due to drought were considered.

Based on the wells formation of completion (Cow Creek member of the Middle Trinity Aquifer), distance from Well D and the drawdowns measured during the pumping test, Wells 1 and 2 will be affected by the pumpage of Well D at the rate proposed in the permit application.

If you have any questions, please contact me at 512-826-2729 or dawierman@aol.com.

Sincerely,
Blue Creek Consulting LLC
Texas Geoscience Firm #50541



Douglas A. Wierman, P.G.
Texas Professional Geoscientist #4062



Attachments:
Figure 1. Well Locations
State Well Reports
References

Figure 1. Well Locations

State Well Reports 157229 and 157232

Figure 1. Well Locations

Montesino Well 1

STATE OF TEXAS WELL REPORT for Tracking#157229

Owner:	Scott Mitchell	Owner Well #:	#1
Address:	300 Little Arkansas Road Wimberley, TX 78676	Grid #:	68-08-2
Well Location:	300 LittleArkansas Road Wimberley, TX 78676	Latitude:	29 58 50.27
Well County:	Hays	Longitude:	-98 03 10.65
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 5/20/2006 Drilling End Date: 5/23/2006

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	580
Drilling Method:	Air Rotary		
Borehole Completion:	Open Hole		

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	10
	110	140	10

Seal Method: Hand Mixed	Distance to Property Line (ft.): No Data
Sealed By: Kutscher Drilling	Distance to Septic Field or other concentrated contamination (ft.): n/a
	Distance to Septic Tank (ft.): No Data
	Method of Verification: No Data

Surface Completion: Surface Sleeve Installed

Water Level:	160 ft. below land surface on 2006-05-23	Measurement Method: Unknown
Packers:	2 Rubber 140',160'	
Type of Pump:	Submersible	Pump Depth (ft.): 372
Well Tests:	Estimated	Yield: 15GPM with 440 ft. drawdown after .75 hours

	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
Water Quality:	No Data	Good
		Chemical Analysis Made: No
	Did the driller knowingly penetrate any strata which contained injurious constituents?: No	

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Kutscher Drilling, LTD**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher** License Number: **54746**

Comments: **\$dfs**

Lithology:	Casing:
DESCRIPTION & COLOR OF FORMATION MATERIAL	BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>	<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
0	10	Top Soil	4.5	New	PVC SDR17	0 300
10	30	Yellow/White Limestone				
30	140	Blue Limestone (water @ 1 gpm)				
140	400	Blue/Gray Limestone				
400	550	Blue Limestone (water @ 4 .9Pm)				
550	600	Brown Sand/Limestone-water @15gpm				

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

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Well Report Tracking Number 157220

Oorto ? nf

Montesino Well 2

STATE OF TEXAS WELL REPORT for Tracking#157232

Owner:	Scott Mitchell	Owner Well #:	#2
Address:	300 Little Arkansas Road Wimberley, TX 78676	Grid #:	68-08-2
Well Location:	300 Little Arkansas Road Wimberley, TX 78676	Latitude:	29 58 25.95
Well County:	Hays	Longitude:	-98 03 11.45
		Elevation:	No Data
Type of Work: New Well		Proposed Use: Domestic	

Drilling Start Date: 5/24/2006 Drilling End Date: 6/6/2006

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	830
Drilling Method:	Air Rotary		
Borehole Completion:	Open Hole		

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	10
	280	300	10

Seal Method: Hand Mixed	Distance to Property Line (ft.): No Data
Sealed By: Kutscher Drilling	Distance to Septic Field or other concentrated contamination (ft.): No Data
	Distance to Septic Tank (ft.): No Data
	Method of Verification: No Data

Surface Completion: Surface Sleeve Installed

Water Level:	380 ft. below land surface on 2006-06-06	Measurement Method:	Unknown
Packers:	2 Rubber 340', 360'		
Type of Pump:	No Data		
Well Tests:	Estimated	Yield: 20 GPM with 450 ft. drawdown after .75 hours	

	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
Water Quality:	No Data	Good
		Chemical Analysis Made: No
	Did the driller knowingly penetrate any strata which contained injurious constituents?:	No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Kutscher Drilling, LTD**
3810 Hunter Road
San Marcos, TX 78666

Driller Name: **Daniel Kutscher** License Number: **54746**

Comments: **\$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.)	New/Used	Type	Setting From/To (ft.)
0	10	, Top Soil	4.5	New	PVC SDR17	0 380
10	30	Yellow/White Limestone				
30	320	Blue Limestone (water 320 ft 1 gpm)				
320	800	Blue Limestone				
800	830	Brown Sandstone (water 800 ft 20gpm)				

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING
CONFIDENTIALITY**

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Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

12/14/2016 8:57:44 AM

Well Report Tracking Number 157222

References

References

Wet Rock Geological Services, (March, 2016) Hydrogeologic Report of Needmore Water, LLC Well D

Staff Administrative Completeness Review of a Temporary/Regular Production Permit Application – Needmore Water LLC, prepared by BSEACD, (November 15, 2016)

Wierman, D. A., Broun, A. S., Hunt, B. B., 2010, Hydrogeologic Atlas of the Hill Country Trinity Aquifer, Blanco, Hays, and Travis Counties, Central Texas. Hays-Trinity Groundwater Conservation District, United States

***ATTACHMENT
C***

December 16, 2016

To: Barton Springs Edwards Aquifer Conservation District

1124 Regal Row,
Austin, TX 78748
(512) 282-8441
bseacd@bseacd.org

Fr: Brenda and Scott Mitchell

Montesino Ranch
Wimberley, Texas 78676
512-923-2650
info@montesinoranch.com

Re: Pumping Permit Application for Needmore Ranch

BSEACD,

My wife and I own the 225 acre, Montesino Ranch, at 300 Little Arkansas Rd., located adjacent to the Needmore Ranch in Wimberley.

We have owned our ranch for 19 years. We raise miniature Hereford cattle, we have operated a nine acre organic farm for six years that is currently being re-organized. We also lease the ranch to seasonal outdoor weddings (over the last four years - we've hosted about 12 weddings per year.) Additionally we offer five rooms for overnight "farm stays."

Water is a precious resource at the ranch especially for our farm operations. We have sprinkler and drip irrigation systems for watering a large variety of fruits and vegetables. Our produce has been distributed to several farmers markets, local restaurants and our local CSA farm basket program.

In addition to our produce, we sell grass-fed beef to the Wimberley Community. Our customers order custom packages of 1/4 or 1/2 cow, processed in Johnson City or Smithville, which the customers then store in their own freezers.

We are quite proud of our long term reputation in the community and we have enjoyed and shared the beauty of Montesino with many friends and visitors for these many years.

The Needmore application to pump such a volume of water out of the same aquifer that serves Montesino is a grave concern. The very idea of it threatens Montesino's existence. Attached is a summary illustration of our two wells and the challenge we face with this immense pumping proposition next door to us.

The intent of the Needmore proposition is not evident in the permit application. If the stated purpose is "agriculture" one could rule out farming due to the thin soil and rocky terrain. If one considers ranching cattle on the Needmore Ranch, then 550 gallons per

minute would be enough to water 40,000 cattle. The land, however, is considered *unimproved pasture* by Hays County Appraised District for purposes of qualifying for ID-1 agricultural exemption. Hill country unimproved pasture supports one cow unit per 15 acres according to Hays County guidelines. One cow unit is equal to a producing cow with a seasonal calf. On 5,600 acres, the land may support 374 cow units and more with some improved pastures in the lower valley. If a calf counts as 1/2 cow you could say Needmore could manage 560 cows and round it up to 1,000 because of some improved pasture support. At 20 gallons per day per cow, 1,000 cows would need 20,000 gallons of water per day. The cows would need a total of 14 gallon per minute across the ranch.

If the conservation district allowed one more well equivalent to this permit, the aquifer would likely be gone in 20 years. Thus, not only would we lose our water at Montesino, the pumping at Needmore would end.

In the past 10 years, the water tables in our wells have descended 25 feet. I understand the Middle Trinity is a finite reservoir with little chance of replenishment. Many small users like us are already affecting the 100 year horizon of our segment of the "cow creek" Middle Trinity.

But, this incomprehensible request sets a short course to the demise of our groundwater and that of many neighbors. To grant such a request to one user would expose the district and all of us vulnerable landowners to a precarious precedent. The futures value of our land would hinge on the next applicant in a hurry to use up our reservoir.

If I may ask, please approach this issue with caution and respect.

Most Sincerely,

A handwritten signature in cursive script that reads "Scott Mitchell". The signature is written in dark ink on a white background.

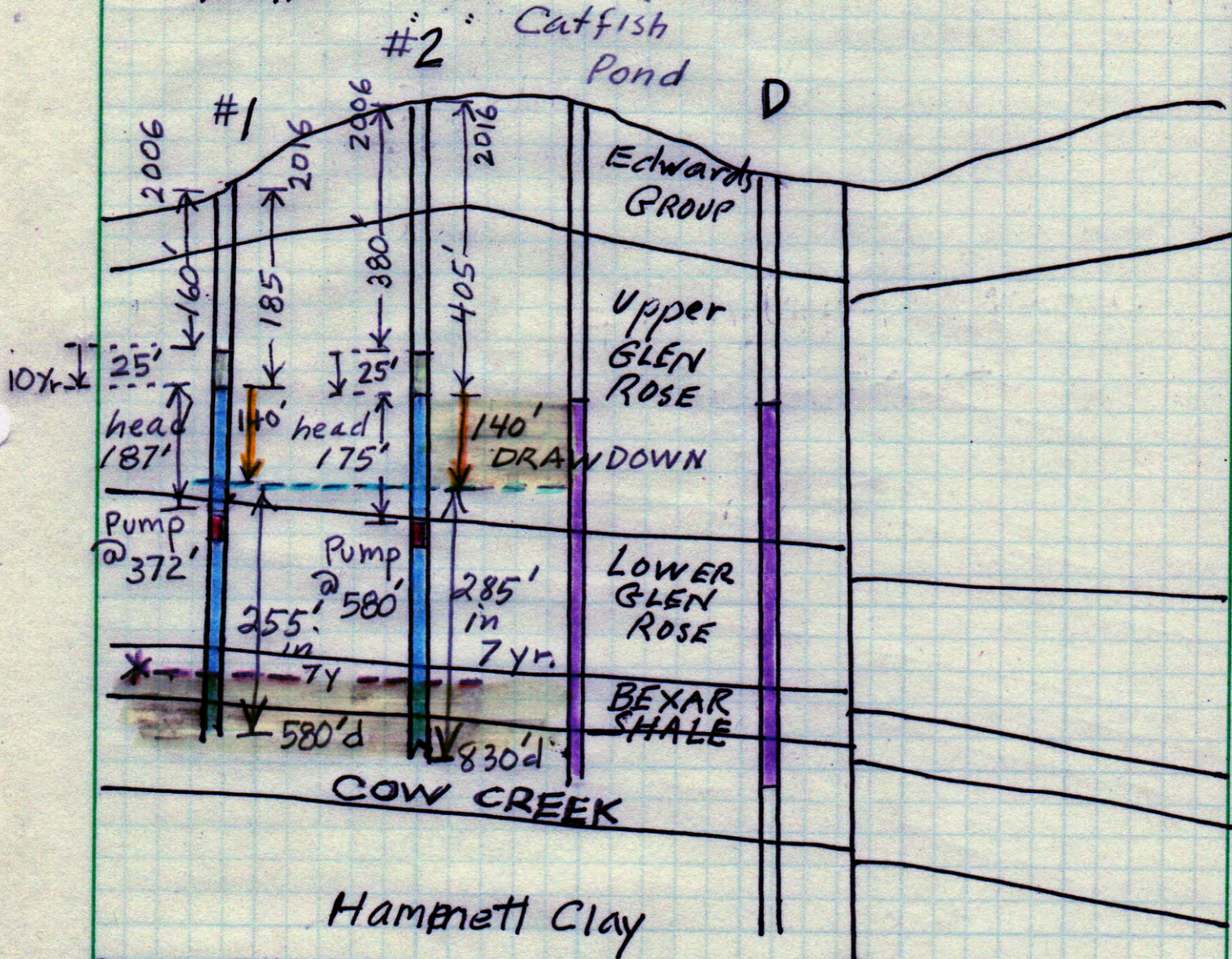
Scott Mitchell

Montesino Ranch

MONTESINO WELLS

MONTESINO Wells

Need more Wells



* 2ND potential drawdown from future equivalent applicant 140' plus 20 year current depletion rate = 50' = 190' (65' Remaining in #1, 95' Remaining in #2)