



June 25, 2018

Board of Directors
Barton Springs Edwards Aquifer Conservation District
1124 Regal Row
Austin, Texas 78748
e-mail: bseacd@bseacd.org

Re: The General Manager's Statement of Position on Electro Purification LLC's (EP) Permit Application

The Wimberley Valley Watershed Association (WVWA) has worked for over twenty years to protect the flow of Jacob's Well Spring and Cypress Creek as the central feature, lifeblood and economic engine of the Wimberley Valley. The Association is headquartered on 16 acres directly adjacent to Jacob's Well, which is located within a five-mile radius of EP's wellfield. The water flowing from the spring provides up to 95% of the base flow of Cypress Creek and issues from the Cow Creek formation of the Middle Trinity aquifer.

We are very alarmed by the District's proposed decision on the Electro Purification (EP) permit to pump 2.5 million gallons per day (MGD) from the Cow Creek formation of the Middle Trinity. There is no question that a large pumping project like this will have a damaging impact on Jacob's Well flow as well as other surface water resources in the Wimberley Valley. WVWA, Hays County, and City of Wimberley have invested millions of dollars to protect Jacob's Well and Cypress Creek for the enjoyment of residents and the hundreds of thousands of tourists who visit the area every year. The economy, quality of life, and ecosystems of the Wimberley Valley will be imperiled by the proposed volume of groundwater production.

We have the following concerns related to the District's recommendation: We do not believe that the District's proposal will serve to protect the our precious natural resources because it will allow Electro Purification to unreasonably drain the groundwater that supplies the flow of the springs and creeks in the Wimberley Valley. To protect these treasured public assets, the District should limit EP's permit volume to an amount that will confine drawdown to the boundaries of property owned or leased by EP.

In addition, rather than granting EP a permit for the full 2.5 MGD request, the District should either deny the EP permit or issue a permit for a reduced amount that will not result in impacts to surrounding surface water resources both in the



short term and the long term. The District should grant EP only that amount of groundwater that will not be damaging to other landowners both public and private.

While we support the intent of the District's Special Conditions that include protections against long-term unreasonable impacts of decreased spring flow or baseflows of surface streams as well as the triggers ensuring that the confined Cow Creek and Lower Glen Rose formations not be dewatered, we believe those provisions must be strengthened by the identification of specific springs and surface water ways hydrologically connected to those formations including Jacob's Well, Cypress Creek, Fern Bank Springs, Pleasant Valley Springs, and the Blanco River. All of these are hydrologically connected to and contribute to the spring flow of Barton Springs, most especially during drought and low-flow conditions. We believe that identifying these spring and surface water resources for monitoring and as additional triggers is absolutely necessary to prevent dewatering the Cow Creek and Glen Rose formations upon which these springs and streams depend for their continued flow. Maintaining the flow of these springs and waterways is imperative to ensuring the health of the Middle Trinity aquifer and Barton Springs Edwards aquifer that support this regional interconnected groundwater and surface water system.

The EP permit also grants an amount of water far in excess than the Hays County Subdivision regulations would allow a Public Groundwater System to pump based on minimum lot sizes required in the Edwards Aquifer Recharge Zone, 1.5 acres. EP owns 1,500 acres of land, so if they were a subdivision they would be able to build a maximum of 1,000 homes. The amount of water to serve such a neighborhood would be approximately 330,000 gallons per day based on average daily household water consumption of 330 gallons per day. However, EP will be allowed to pump more groundwater—500,000 gallons per day in the proposed first phase alone—than a subdivision would be granted in total. EP is pumping the groundwater to serve a subdivision. Further, since 25% or more of the estimated drawdown is predicted to occur within the boundaries of the Hill Country Priority Groundwater Management Area where minimum lot size is 6 acres, a subdivision on 1,500 acres would require only 82,500 gallons per day. Why, then, should EP be allowed to play by a different set of rules simply because they are a private water supplier and piping the water 15 miles away? Such an extreme advantage for a single user is grossly unfair. The District should not grant this permit until these concerns are addressed and should only consider a permit between 82,500 and 300,000 gallons per day to comply with current County and TCEQ rules.

Wimberley Valley



Watershed Association

David Baker, Executive Director
Malcolm Harris, President
Pokey Rehmet, Treasurer
Jason Pinchback, Secretary
Dorothy Knight
Parc Smith
Vanessa Puig-Williams

Barton Springs Edwards Aquifer Conservation District has been a leader and innovator in conserving groundwater to protect surface water flows for decades. We most strongly urge the District to live up to its reputation by very substantially reducing the volume of water that Electro Purification LLC is allowed to produce and sell and that monitoring and triggers for these specific springs and waterways be included in the Special Conditions for the EP permit.

Respectfully,

David Baker
Executive Director
Wimberley Valley Watershed Association
P.O. Box 2534
Wimberley, TX 78676
(512) 785-8950
davidbaker@wimberleywatershed.org

WVWA fully endorses the comments submitted by Trinity Edwards Springs Protection Association (TESPA) and Hill Country Alliance (HCA) attached below.

The Mundy Firm PLLC

4131 Spicewood Springs Rd, Suite O3
Austin, Texas 78759
512-334-4300
jeff@jmundy.com

June 23, 2018

Via email to: bseacd@bseacd.org

Barton Springs Edwards Aquifer Conservation District
1124 Regal Row
Austin, Texas 78748

**Re: Contested Case Request – Board Hearing Requested
Electro Purification’s Groundwater Proposed Production Permit**

Dear BSEACD:

The Trinity Edwards Springs Protection Association (“TESPA”) appreciates the opportunity to submit comments regarding Electro Purification’s (“EP”) proposed production permit, and wishes to thank the District Staff, General Manager, current and former, and Board for the tremendous efforts that have gone into creation of the proposed permit. We recognize the tremendous amount of labor, and sincere efforts to balance sometimes seemingly irreconcilable duties imposed by the legislature, courts, and the expectations of the community.

We respectfully submit these comments on behalf of the members of TESPA, who potentially will be impacted by this proposed permit.

TESPA opposes the issuance of the proposed permit to Electro Purification.

TESPA requests a contested case hearing before the Board of Directors.

TESPA has standing and should be a party. More than 100 members of TESPA have indicated they own wells within or near the two-mile impact zone and requested that TESPA oppose this permit on their behalf. Additional members are beyond the two-mile impact zone, but based on the District’s projections, they too potentially are impacted by this permit. Further, District staff member Mr. Smith indicated that there may be potential impacts to Jacob’s Well and Pleasant Valley Springs, and TESPA’s mission includes protection of springs and public water resources such as Jacob’s Well and Pleasant Valley Springs.

CRITICAL OMISSION REQUIRING FURTHER WORK **There Is Inadequate Planning if a Home Loses Water**

In the event a home loses water, the proposed permit allows at least 30 days before EP is required to fix the lack of water to the home. Without water, a home will be uninhabitable. What is the family supposed to do to flush toilets, shower, cook, or drink? Even a disruption of a single day or two will cause major disruptions, particularly for families with children, elderly, or those with limited financial resources who cannot simply go stay in a hotel until the District and EP agree on a remediation plan.

An emergency response plan must be required so that water is supplied to the home so the families are not forced out of their homes. This portion of the proposed plans is the single most critical flaw in the permits and absolutely must be corrected before this project is allowed to proceed any further. This omission very reasonably causes fear to all of the homeowners. The District and EP say this scenario will never occur. If it believes that, EP should be willing to agree to truck in water to supply the home to operate and remain habitable. The amount supplied should be in line with the District's well studied estimates of the average user requirements per person per day for this area.

The current proposed permit is completely and utterly devoid of any emergency response plan.

Introduction

EP has applied to the District for a groundwater production permit for almost a billion gallons a year. This request is the largest that has ever come before this district and is the largest permit request to produce groundwater from the Trinity Aquifer in Hays County.

EP's requested amount is equal to over half of ALL existing pumping in Hays County going to one permittee. Total groundwater pumping in Hays County in 2013 was estimated at 5,061 acre-feet.¹ Even more inexplicable and bewildering, Table 1 to the Groundwater Management Area 10 Explanatory Report, says the Modeled Available Groundwater is 3,557 acre-feet for Hays

¹ Groundwater Management Area 10 Explanatory Report, Table 2. <http://bseacd.org/uploads/Trinity-Final.pdf>

County.² The District's calculation is 3,846 acre-feet.³ Yet, EP's proposed permit is 2,800 acre-feet on top of the already existing permits. Attached, is the Modeled Available Groundwater chart attributed to creation by the District, which shows **THIS SINGLE PERMIT WILL GIVE AWAY ALL OF THE REMAINING MODELED AVAILABLE GROUNDWATER IN THIS DISTRICT TO EP.** This unprecedented and grossly disproportionate amount to one permittee is not for the benefit of the permittee's land upon which the wells will produce, but to export the water out of the area. The water is drawn from hundreds of other landowners' properties without compensation to them, despite Texas law granting them a vested property right to the water under their land.

The current framework of the District which ostensibly allows water to be taken by EP for its profit from other landowners, in which they have a recognized property right, is an unconstitutional taking without compensation. The taking is far more than a de minimis taking incidental to the permit. Indeed, the projections of the District show that EP will be taking water – property – from 1,500+ other landowners for miles around without any compensation from either the District or EP. Some of TESPAs's members were approached by EP to sell or lease their water rights and refused. So, what rights they refuse to grant voluntarily to EP, the District proposes to take and convey to EP without consent and without compensation. Thus, the very framework upon which the permitting is conducted is fundamentally unconstitutional, similar to the unconstitutional framework of financing school systems that dogged the State for years.

While the District is not the cause of the insane, inconsistent, indefensible, and unconstitutional labyrinth of Texas water law, the EP permit request is a warning flashing wildly calling out the Texas Legislature and/or Supreme Court to abolish the court-created rule of capture for water and the bizarre and indefensible labyrinth of policy and laws still trying to allow it to continue. EP's grossly disproportionate request should be sufficient to drown the rule of capture in Texas, the last state in the United States to allow the rule of capture for water. The rule of capture for water is indefensible, and in violation of the Conservation Amendment to Constitution of the State of Texas passed by voters after the Supreme Court created the rule of capture. The framework of permitting to try to manage vested property rights recognized in *Day v. Edwards Aquifer Authority* requires a fundamental transformation of perspective in how permitting is conducted. TESPAs recognizes the District lacks authority to overrule the decision of the

² Same GMA 10 Report at Table 1.

³ See, three charts/tables received from the District with its MAG's.

Supreme Court of Texas, but EP is advised that TESPAs and its members object on this ground and intend to pursue this protest to the Supreme Court and request the abolition of the pernicious and unjust rule of capture for water, which is inconsistent with the concept that groundwater is property of the landowner.

While it is apparent that the District has spent considerable time developing proposed permit conditions, TESPAs members still have numerous serious concerns related to EP's proposed permit. In general, the proposed permit does not protect the long-term sustainability of the Trinity Aquifer. Thus, the production jeopardizes the rights and interests of over one thousand landowners who potentially will be impacted by EP's permit, many whom are members of TESPAs.

Therefore, TESPAs submits these comments in opposition to EP's proposed permit.

Background

In July of 2017, EP applied for a groundwater production permit with the District for a Middle Trinity Aquifer well field in Hays County. The permit application indicates that pumping rates will be phased in over time with a maximum permitted pumping rate of 2.5 million gallons per day (MGD), or approximately 912 million gallons per year, pumped from seven wells located on the Odell and Bridges properties. EP has indicated that it will export the requested water via pipeline out of the area to supply a contract with Goforth Special Utility District to purchase water from EP. **The District has projected that pumping this amount of groundwater will cause 300-500 feet of drawdown in the Cow Creek Aquifer within one year and after seven years could result in dewatering of the Cow Creek Aquifer.**⁴

As a result, in February 2018, the District determined that potentially "unreasonable impacts" will occur to residential wells in the vicinity of the well field as a result of EP pumping its requested volume.

The District's rules at page 24 define "unreasonable impacts" as:

"Unreasonable Impacts"— a significant drawdown of the water table or reduction of artesian pressure as a result of pumping from a well or well field, which contributes to, causes, or will cause:

⁴ BSEACD, 2018. Evaluation of the Potential for Unreasonable Impacts from the EP Well Field, Hays County, Texas. BSEACD Technical Memo 2018-0219.

1. well interference related to one or more water wells ceasing to yield water at the ground surface;
2. well interference related to a significant decrease in well yields that results in one or more water wells being unable to obtain either an authorized, historic, or usable volume or rate from a reasonably efficient water well;
3. well interference related to the lowering of water levels below an economically feasible pumping lift or reasonable pump intake level;
4. the degradation of groundwater quality such that the water is unusable or requires the installation of a treatment system;
5. the Desired Future Condition (DFC) to not be achieved;
6. depletion of groundwater supply over a long-term basis, including but not limited to chronic reductions in storage or overdraft of an aquifer;
7. a significant decrease in springflow or baseflows to surface streams including a decrease that may cause an established minimum springflow or environmental flow rate to not be achieved; or
8. land subsidence.

The District staff determined that the permit as requested by EP potentially would cause some surrounding wells located within two miles of EP's wellfield to cease to yield water, have significantly decreased yields, or experience the lowering of water levels below a reasonable pump intake. As a result, pursuant to the District's rules, EP submitted a compliance monitoring plan, an impact avoidance plan, and a mitigation plan to cure these potential unreasonable impacts.

On May 21, 2018, BSEACD staff issued a Statement of Position and recommendation to the Board of Directors (essentially a proposed permit) to grant EP's permit application with special conditions. Staff recommended that pumping volumes be phased in over four phases and recommended special provisions to be included in the permit designed to avoid and mitigate unreasonable impacts to wells and the aquifer.

Technical staff at the District concluded: "Evaluation of the aquifer-test data and modeling of the proposed pumping of 2.5 MGD of groundwater from the existing well field results in substantial drawdown in the Cow Creek and also possibly the Lower Glen Rose."⁵ Staff determined that modeled drawdown after one year of pumping from EP's wellfield ranges from 300 feet to 500 feet in five

⁵ BSEACD, 2018. Evaluation of the Potential for Unreasonable Impacts from the EP Well Field, Hays County, Texas. BSEACD Technical Memo 2018-0219

observation wells and “longer periods of pumping will cause even greater drawdown” and “modeling 7 years of drawdown effectively shows de-watering of the Cow Creek.”⁶

The Trinity Aquifer is Already Declining

The EP permit will result in further water level declines in the Trinity Aquifer, and even the phased approach recommended by staff still results in significant drawdown. By approving EP’s permit, the District is permitting overdraft of the Aquifer – where withdrawals exceed recharge. This result is defined in the District’s rules as an “unreasonable impact,” even with all of the special conditions and phased production. So, in addition to violating the District’s rules prohibiting “unreasonable impacts,” the permit as proposed also is prohibited by the Conservation Amendment of the Texas Constitution.

Permitting aquifer overdraft violates the Texas Constitution Conservation Amendment. Thus, the permit should be denied or restricted to the lowest amount needed to achieve the purpose of the permit, not the greatest amount.

The Constitution of Texas, Article 16, section 59(a), mandates: “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...”

Water levels in the Middle Trinity Aquifer declined between 3 and 54 feet between 1980 and 1997.⁷ A historical observation well near Wimberley shows a decrease in water levels of more than 100 feet since the mid-1980s.⁸ Additionally, water wells near the Blanco River show substantial water-level declines during drought when pumping is typically higher. For example, a well in Blanco near the Blanco River showed more than 80 feet of water-level decline during drought periods.⁹ Adding to the vulnerability of the Trinity Aquifer is the fact that it is

⁶ *Id.*

⁷ Jones et al., 2011. Groundwater Availability Model: Hill Country Portion of the Trinity Aquifer of Texas.

TWDB Report 377.

⁸ TWDB (Texas Water Development Board), accessed 2018a, Groundwater Data Viewer for Well 68-08-109):

<http://www2.twdb.texas.gov/apps/waterdatainteractive//GetReports.aspx?Num=6808109&Type=GWDB>

⁹ Wierman et al., 2018. Groundwater Level Monitoring Results for HTGCD Transducer Wells and Wimberley Valley Public Water Supply Well, Hays County, Central TX. Meadows Center for Water and the Environment, Texas State University at San Marcos, TX.

thought to recharge very slowly. The water in the Cow Creek Aquifer that EP has requested to pump is likely thousands of years old.

Hydrogeologists studying the Trinity Aquifer recognize the significance of its connection to surface water throughout the Hill County – specifically in Hays County near the EP well field, which is located between the iconic spring Jacob’s Well and the groundwater fed Blanco River. According to scientists, “The Trinity Aquifer serves as the...source of baseflows to the streams that cross the Hill Country. The Cow Creek also provides substantial Blanco River baseflows through Jacob’s Well and Pleasant Valley Springs (both artesian springs). These baseflows ultimately recharge the Edwards Aquifer down gradient.”¹⁰

Groundwater under artesian conditions in the Cow Creek section of the Middle Trinity Aquifer provides the majority, if not all, of the base flow at Jacob’s Well.¹¹ Hydrogeologists have also documented that the Trinity contributes a significant amount of water as recharge for the Edwards and that the Trinity fed Blanco River recharges both San Marcos Springs and Barton Springs.¹² Recent studies have confirmed previous understandings about recharge to the Edwards Aquifer and recognize, for the first time, recharge to the Middle Trinity along Onion Creek and the Blanco River. According to the study, “both diffuse and discrete recharge along streams are important processes for the Middle Trinity.”¹³ The EP permit will exacerbate water level declines in the Trinity Aquifer, ultimately impacting surface water flows. District staff has stated that in the long-term, if EP pumps the maximum volume of 2.5 MGD, there is a potential that spring flow could be impacted.

¹⁰ Smith et al., 2014. Hydrologic Influences of the Blanco River on the Trinity and Edwards Aquifers Central Texas, USA. In: Andreo B, editor. Hydrogeological and environmental investigations in karst systems. Environmental Earth Sciences 1, Springer-Verlag Berlin Heidelberg, p. 153–161.

¹¹ Wierman et al 2008. Cypress Creek/JWS Hydrogeologic Report. Hays Trinity Groundwater Conservation District

¹² Smith et al., 2015. Surface water–groundwater interactions along the Blanco River of central Texas, USA. Environmental Earth Science, DOI 10.1007/s12665-015-4630-1.

¹³ Hunt et al., 2017. Surface-water and Groundwater Interactions in the Blanco River and Onion Creek Watersheds: Implications for the Trinity and Edwards Aquifers of Central Texas. South Texas Geological Society Bulletin Volume LVII, Issue Number 5.

The Proposed Permit Should Limit EP To The Least Amount of Groundwater It Reasonably Needs In Order to Protect Impacted Landowners' Property Rights.

Texas Water Code § 36.002(a) provides that, “[t]he legislature recognizes that a landowner owns the groundwater below the surface of the landowner’s land as real property.” The Texas Supreme Court held in *Edwards Aquifer Authority v. Day* that, “land ownership includes an interest in groundwater in place.”¹⁴ Under Texas Water Code § 36.0015, the State created groundwater conservation districts “***in order to protect property rights***, balance the conservation and development of groundwater to meet the needs of this state, and use the best available science in the conservation and development of groundwater...” How can EP with approximately 1,000 surface acres take water from 1,500+ landowners with wells without compensation to them?

The District is abundantly empowered to limit EP to the least amount of water it needs, proportionately to its share of the area of the neighboring landowners, rather than the maximum it can pump – in order to protect the vested property rights of adjacent landowners. “More importantly, however, the Court observed in *Elliff* that “correlative rights between the various landowners over a common reservoir of oil or gas” have been recognized through state regulation of oil and gas production that affords each landowner “the opportunity to produce his fair share of the recoverable oil and gas beneath his land.”

Edwards Aquifer Auth. v. Day, 369 S.W.3d 814, 830 (Tex. 2012).

Here is the explanation of correlative rights by the Supreme Court in *Elliff*:

The landowner is privileged to sink as many wells as he desires upon his tract of land and extract therefrom and appropriate all the oil and gas that he may produce, so long as he operates within the spirit and purpose of conservation statutes and orders of the Railroad Commission. These laws and regulations are designed to afford each owner a reasonable opportunity to produce his proportionate part of the oil and gas from the entire pool and to prevent operating practices injurious to the common reservoir. In this manner, if all operators exercise the same degree of skill and diligence, each owner will recover in most instances his fair share of the oil and gas. This reasonable opportunity to produce ***his fair share*** of the oil and gas is the landowner's

¹⁴ See *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

common law right under our theory of absolute ownership of the minerals in place. But from the very nature of this theory the ***right of each land holder is qualified***, and is limited to legitimate operations. Each owner whose land overlies the basin has a like interest, and each must of necessity ***exercise his right with some regard to the rights of others***. No owner should be permitted to carry on his operations in reckless or lawless irresponsibility, but ***must submit to such limitations as are necessary to enable each to get his own***.

Elliff v. Texon Drilling Co., 146 Tex. 575, 582, 210 S.W.2d 558, 562 (1948)(cited with approval in multiple places in the *Day* opinion).

If EP wants to pump a higher volume of groundwater than what it can pump without impacting other landowners, then EP should lease the groundwater rights from additional properties or be required to compensate them for their proportionate share of water taken without their consent. It is important to note that EP's wells are primarily drilled near the boundaries of the properties it has leased, rather than in the center of these properties, reflecting a deliberate mindset to take from the neighbors despite their objections. The water that EP is pumping, therefore, is most certainly being drained from adjacent tracts of land from which EP has not leased the groundwater rights and to which the other landowners have not and do not consent. EP should be required to distribute the proceeds of the sale of the water produced and exported proportionately to the other landowners from whom EP is taking water without their permission. If EP walked into their homes, grabbed a TV and walked out, every single court in the state would view that seriously and require compensation – at a minimum. Why is water which is critical to being able to live in the home different? Are TV's more important to protect under Texas law than a landowner's water? The Supreme Court and Legislature have clearly and forcefully stated that the water under a person's land is their property. EP should not be allowed to take other's property without their permission and without fair and just compensation.

The Constitution of Texas, Article 16, section 59(a), mandates: "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**;"... (emphasis added). Thus, the Constitution of Texas in the Conservation Amendment provides such powers to all state entities, and in addition to authorizing such powers, goes further and **mandates such action**.

Here, BSEACD fills the same role, with the same rights and duties, as the EAA and the same role as the Railroad Commission does in oil and gas regulation. *Day* explains: “Similarly, one purpose of the EAAA's regulatory provisions is to afford landowners their fair share of the groundwater beneath their property. In both instances, correlative rights are a creature of regulation rather than the common law. In 1904, when *East* was decided, neither groundwater production nor oil and gas production were regulated, and we indicated that limiting groundwater production might impede public purposes. The State soon decided that regulation of oil and gas production was essential, adopting well-spacing regulations in 1919, and it has since determined that the same is true for groundwater production, as for example, in the EAAA.”

Edwards Aquifer Auth. v. Day, 369 S.W.3d 814, 830–31, 178 Oil & Gas Rep. 817, 55 Tex. Sup. Ct. J. 343, 2012 WL 592729 (Tex. 2012).

The District Has Not Considered Impacts to Surface Water Resources in Violation of the Water Code.

Texas Water Code § 36.122(d)(2) requires groundwater districts to consider impacts to groundwater and surface water resources before issuing a permit. EP’s request to produce almost a billion gallons of groundwater a year (approximately 2,800 acre-feet) from the Cow Creek, Middle Trinity Aquifer in Hays County is unprecedented. The District and hydrogeological consultants do not know what the long-term consequences this amount of pumping will have on the aquifer or the springs which it feeds. The District states in the proposed permit, “Because of limited historical data and modeling tools...the District is unable to evaluate the long-term, regional” impacts associated with the EP permit. The Water Code requires groundwater conservation districts to consider impacts to groundwater and surface water resources before issuing a permit, yet the District has clearly stated that it has not done so and cannot do so.

The District Has Not Considered the MAG Determined by the Executive Administrator

Texas Water Code § 36.1132 mandates:

(a) A district, to the extent possible, shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition under Section 36.108 .

- (b) In issuing permits, the district shall manage total groundwater production on a long-term basis to achieve an applicable desired future condition and consider:
- (1) the modeled available groundwater determined by the executive administrator;
 - (2) the executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by district rules and Section 36.117 ;
 - (3) the amount of groundwater authorized under permits previously issued by the district;
 - (4) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district; and
 - (5) yearly precipitation and production patterns.
- (c) In developing the estimate of exempt use under Subsection (b)(2), the executive administrator shall solicit information from each applicable district.

The proposal explains that the Hill Country Groundwater Availability Model (GAM) for the Trinity Aquifer was not extended to include GMA 10 and that “[c]urrently, no numerical models for calculating the MAG for the Trinity Aquifer are available in GMA 10. Additionally, the District states, “the Texas Water Development Board has not updated and provided the District with an official MAG for the recently annexed ‘shared territory,’ and so consequently, “the General Manager has determined a MAG using the GMA 10 Hays County MAG.”

The proposed permit never references the MAG that was calculated so the public has no way of knowing whether and to what extent the EP permit impacts the MAG. This omission raises notice concerns with regard to the permit. The larger concern, however, is that the District has not complied with Texas Water Code § 36.1132(b), which requires Districts in issuing a permit to manage groundwater on a *long-term* basis by considering the MAG *determined by the executive administrator*. The District has stated that an updated MAG for this area of the Trinity Aquifer has not been finalized and therefore, the GM calculated its own MAG. Nowhere in the Water Code is a groundwater district permitted to make up its own MAG to use in a permit evaluation.

The District Has Not Considered the Amount of Groundwater Authorized under Previously Issued Permits or Permits Issued in HTGCD

The District has not considered impacts from Needmore Water LLC’s Temporary Permit as required by Texas Water Code § 36.1132(b)(3). Needmore’s permitted 180,000,000 gallons of water a year is among of the largest

permits in the district's boundaries, yet does not appear to be factored into the models to consider long-term impacts to the DFC, which is mandatory.

The Compliance Monitoring Plan and Well Network Are Inadequate to Protect the Aquifer

The Compliance Monitoring Plan and associated monitoring well network, as proposed by the District, are inadequate to protect the Aquifer. Section 3 of the Proposed Special Conditions – “Permit Compliance Actions” requires EP to reduce pumping by certain percentages when drawdown in the Rolling Oaks Index Well reaches certain trigger levels. For example, “When drawdown in the Rolling Oaks Index Well reaches a sustained average water level that is equal to or greater than 400 ft below land surface (bls) for the Lower Glen Rose **and** 660 ft bls for the Cow Creek,” EP is required to reduce pumping by 20% of the authorized volume.

For all Permit Compliance Levels, the “**and**” between the Lower Glen Rose and Cow Creek ***should be “or,”*** indicating the response action is to occur when drawdown in *either* formation is reached, not both at the same time.

To provide maximum protection to the aquifer, when drawdown reaches a trigger level, the District should require EP to reduce the rate of its *actual* pumping volume that was occurring when the triggering event occurred, rather the authorized pumping volume. These two volumes could be the same, or they could be different if for some reason EP was not pumping at the maximum authorized amount. If EP is already pumping less than the authorized volume, then the curtailment associated with the trigger level may not result in an adequate decrease in pumping volume to counteract the triggering conditions.

The trigger levels allow EP to unreasonably drawdown the aquifer taking the highest quality water for export, and leaving lower quality water for the residents. The first trigger is set at 350 feet below land surface for the Lower Glen Rose and 500 feet below land surface for the Cow Creek – this is approximately a 110 foot drawdown in the Lower Glen Rose and 250 feet in the Cow Creek. When water levels reach these levels, under the District's proposal, Staff will evaluate impacts, but will allow EP to continue to pump without any reductions. The District's proposal allows EP to drawdown the Lower Glen Rose approximately 160 feet and Cow Creek aquifer approximately 400 feet without any requirements to reduce pumping.

Future changes in water quality due to EP pumping cannot be addressed in the avoidance plan, but should be addressed in the mitigation plan which addresses

unanticipated impacts after the well field is operating. Contingencies for unanticipated water level declines are included in the mitigation plan, ***but not potential changes in water quality***. The proposed monitoring plan provides for some water quality monitoring, but it is not sufficiently robust to protect all of the potentially affected well owners. The mitigation plan needs to include provisions/criteria for determining if water quality changes have occurred and if so, what remedial actions will be taken. ***TESPA requests a standard that an unacceptable change in water quality shall be deemed to have occurred if there are exceedances of TCEQ's maximum contaminant level or secondary standards described in 30 Texas Admin. Code 290.104(b) and 290.118(b)***.

The District should clarify statements in the proposed EP permit regarding trigger levels in the Lower Glen Rose and Cow Creek aquifers. The trigger levels set for the Rolling Oaks Well are expressed in feet below ground surface. Due to the varying land surface elevations in the area, determining impact avoidance or mitigation responses at private wells using depth below ground surface (i.e. Trigger Level 4 or 500' or 700' bgs) may not be adequate. Using a trigger level elevation may account for differing well head elevations across the area. Another possible approach would be to set the trigger levels at a set distance above a critical point in the aquifer, such as the top of the Cow Creek. Perhaps the District and the third-party administrator could consider a combination of all three criteria in determining avoidance or mitigation actions.

The District should require continuous water level monitoring and set trigger levels in the EP pumping wells in addition to the other triggers. Utilizing the Rolling Oaks Well is in effect a lagging indicator of potential dewatering of the aquifers whereas measuring water levels and setting trigger levels in the pumping wells is a more direct and responsive method of preventing dewatering of the aquifer.

The proposed number and distribution of monitoring wells in the monitor well network is inadequate given the predicted scope of the cone of depression/impacts to area wells. The plan anticipates only one Upper Glen Rose and one Lower Glen Rose monitoring well to assess impacts over a many square mile area of impact. Although there are more wells in the Cow Creek, they are generally located very close to the wellfield. The proposed monitoring well network does not include any wells to the north, east and south of EP's wellfield. Consequently, it will not be possible to determine potential asymmetry of the cone of depression within the two-mile impact area and beyond. With the current monitoring program, any potential impacts outside of the narrow area of proposed

monitoring wells will have to be assessed using projections and models, not actual data. Pursuant to the permit, the District should attempt to locate an adequate number of existing wells or should require EP to install additional monitoring wells. Additionally, based on community concerns about potential impacts to the shallow Edwards/Upper Glen Rose aquifers, additional wells should be monitored in these shallower zones.

Additionally, pumping curtailments based on the existing District drought plan should be applied to actual pumping rates, not just permitted pumping volumes. Depending on actual pumping rates at the time of curtailment, EP may not have to reduce actual pumping, so actual pump rates should be an additional factor to monitor and consider. Finally, trigger level curtailments should be mandatory regardless of potential external conditions such as drought or nearby pumping by others whether within the BSEACD or HTGCD.

The Proposed Impact Avoidance Plan and Mitigation Plan Do Not Protect Landowners' Property Rights

The Trinity Aquifer serves as the sole water supply source for much of the central Texas Hill Country. The District has estimated that there are over 1500 households that will be impacted by production from EP's wellfield. The District's proposal, however, fails protect the property rights of these landowners near EP's wellfield because it allows EP to unreasonably drain groundwater from beneath these landowners' property.

The District's proposed Impact Avoidance Plan and Mitigation Plan prevent landowners from being able to access the groundwater that they own and have historically used. Under the District's proposal, landowners will have to lower pumps on their wells, re-drill deeper wells or buy alternative water supplies wells so that EP can pump an excessive amount of groundwater and sell it to other people to use miles away. The District may be requiring EP to pay for these measures, but by doing so, the District is allowing EP to take one person's locally sourced water supply – water that they own beneath their land – and give it to someone else to use. The entire concept of the Impact Avoidance Plan and Mitigation Plan infringe upon landowner's property rights because they permit EP to drain groundwater from beneath other landowners' properties.

It is the District's responsibility to prevent impacts – not to mitigate them. Rather than granting EP a permit for the full 2.5 MGD request, the District should

issue EP a permit for a reduced amount that will not result in impacts to surrounding wells both in the short term and the long term. The District should grant EP only that amount of groundwater that will not harm other landowners, not require landowners to go through a lengthy process to have their pumps lowered just so that EP can pump and sell all of the water above.

As stated above, if EP wants to pump a higher volume of groundwater than what it can pump without impacting other landowners, then EP should lease the groundwater rights from additional properties.

The Impact Avoidance and Mitigation Plans Put Landowners in a Vulnerable Position.

In addition to TESPAs position that the Impact Avoidance and Mitigation Plans infringe upon landowners' property rights, TESPAs is concerned that the plans will leave landowners vulnerable to financial burdens and water supply issues. For example, as stated above, the General Managers recommendation does not provide adequate emergency safeguards in the event a landowners well goes dry after EP begins pumping. Under the proposed Mitigation Plan, it could be at least thirty days before the General Manager is required to make a decision on whether EP is responsible for the unreasonable impact and then longer before EP would remedy the situation. Unless a landowner purchases alternative water supplies, lowers the pump on her well or drills a deeper well at her own expense, she would be without water this entire time. The Mitigation Plan must require EP to immediately address this type of situation, which is a public health concern, by providing a landowner (at EP's expense) with an alternative, temporary water supply until impacts to the landowners well can be mitigated.

The Mitigation Plan leaves room for EP to argue that it is not responsible for impacts to wells after production from EP's project begins. EP will likely argue that pumping from its wellfield is not reasonably attributed to the impacts landowners will experience. If a well is located within the Potential Impact Area, then the District should require EP to mitigate impacts. Although under the Mitigation Plan the General Manager and the third-party administrator determine whether unreasonable impacts are reasonably attributed to pumping from EP's wellfield, the Mitigation Plan does not address a situation where EP disagrees with this determination. The Plan states that if EP fails to comply with provisions of the Mitigation Plan, then the General Manager may immediately require temporary cessation of pumping, but this is discretionary. EP could prolong the mitigation process by disputing the General Managers determination, during which time,

many landowners could be without water or forced to undertake costly measures on their own to ensure they have access to water.

Both the Impact Avoidance Plan and the Mitigation Plan place major financial risks on landowners that may deter them from participating. Under the Impact Avoidance Plan and the Mitigation Plan, if a landowner does not know the production zone in which her well is completed and there are no records available on the well completion, EP is responsible for the cost associated with an investigation. However, if after the investigation, it is determined that the well is not in the Cow Creek or Lower Glen Rose formation, the landowner will be responsible for all costs associated with pulling the pump. This is a significant cost that may keep landowners from participating. EP should bear the costs of determining well eligibility for impact avoidance or mitigation (pump pulling, geophysical logging), regardless of whether or not the well is determined to be eligible. It is EP's project that is causing these costs to be incurred, not the well owners.

The Mitigation Plan does not address impacts to the water quality of wells that are caused by EP's project. The District's rules define an unreasonable impact as "Degradation of water quality in other wells such that the native water is unusable for its current purpose." In the Potential for Unreasonable Impact evaluation, the District states, "This condition is not determinable on the basis of existing information, but its likelihood is probably spatially variable." While EP may not be able to address water quality impacts proactively in the Impact Avoidance Plan, the District can certainly require EP to address water quality impacts in the Mitigation Plan once EP begins pumping. Contingencies for unanticipated water level declines are included in the Mitigation Plan, but not potential changes in water quality. The proposed monitoring plan provides for some water quality monitoring, but this is not sufficiently robust to protect all of the potentially affected well owners. The Mitigation Plan needs to include provisions and criteria for determining if water quality changes have occurred and if so, what remedial actions will be taken. The only listed EP mitigation options are: lowering the submersible pump, deepening a well, connecting to an existing water purveyor, reimbursement or monetary settlement. Treatment is not listed as a mitigation option.

The Lack of Opportunity to Object to Phase Increases in Proposed Permit Prevents Landowners from Protecting their Property Rights

In its public presentation on June 18th, the District stated that it expected to see trigger levels reached somewhere between 1.5 and 2.0 MGD. Yet, the proposed permit as written in conjunction with the District rules do not allow for potentially impacted landowners to have a right to object before the District grants EP, what is in practice an amendment to increase its pumping rate. The community is forced to fight this permit right now, even if some were willing to live with the 0.5 MGD, when the proposed permit prohibits the right to object later to increases from one phase to the next higher level. When the District foresees production curtailments being triggered at 1.5 – 2.0 MGD, the landowners should have a right to be heard.

The District has determined that landowners within two miles of EP's wellfield may experience unreasonable impacts, yet the District's proposal prevents these landowners from utilizing a legal process to protect their property that will be impacted. Under the phased proposal, the General Manager may authorize EP to increase pumping volumes without a hearing or afford neighbors a right to object. This means that landowners whose property may be negatively impacted by this increase in pumping will be unable to submit comments or protest the District's decision. In contrast, when the District decides to initiate a permit amendment to reduce the permitted volume EP can pump, a hearing is held.

Thus, the procedures in the proposed permit constitute unreasonable restrictions on potentially impacted parties exercising their right to petition government under the First Amendment to the Constitution of the United States, as well as due process protections under both the Constitutions of the United States and the State of Texas, and last under the Open Courts provision in the Constitution of the State of Texas.

Specifics Regarding Associational Standing

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 several hundred members and supporters. As an association, TESPAs has standing to contest EP's permit application 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 wellfield described in EP's application. In February 2018, the District determined that individuals who own property within the vicinity of EP's wellfield will be unreasonably impacted by production from EP's wellfield. *See* Exhibit A. EP is seeking a permit to pump almost a billion gallons a year from the Cow Creek, Middle Trinity Aquifer. **The District has projected that pumping this amount of groundwater will cause 300-500 feet of drawdown within one year and after seven years could result in dewatering of the Cow Creek Aquifer.**

Over 100 members of TESPAs will impacted by EP's permit and asked TESPAs to object on their behalf. The Trinity Aquifer underlies all of these landowners' properties and the majority of these landowners (with the exception of a few who utilize rainwater) rely on groundwater from their domestic well for their water supply needs. The landowners listed in Exhibit B are members of TESPAs that have asked it to object on their behalf. The District has determined that EP's permit application has the potential to unreasonably impact many of these landowners' wells, therefore, these landowners stand to be adversely affected by EP's permit.

The landowners listed in Exhibit B 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." The proposed permit will adversely affect and interfere with the interests and rights of the landowners listed in Exhibit B. 4-9.13(B)(3). The drainage caused by pumping from EP's wellfield will result in the diminution and potential elimination of groundwater that is a valuable asset held by landowners in addition to decreased property values.

As detailed above in TESPAs comments, if the proposed production permit is approved by the District Board of Directors, the over 100 landowners listed in Exhibit B and depicted in Exhibit C and D will be injured in addition to countless of their neighbors. 4-9.13(B)(2). Pumping from EP's wellfield will cause the wells on these landowner's properties to cease flowing or flow less efficiently. The District is requiring EP to lower pumps in wells or possibly re-drill wells for landowners who will be impacted by pumping from EP's wellfield. As we explained above, however, there is considerable risk and burdens on landowners associated with this process – and the end result is that EP will be pumping

groundwater from beneath *other* landowners' properties. EP does not own or lease the groundwater rights from these impacted properties, yet with the District's permission, it will be pumping this groundwater and selling it for a profit. If EP's permit is approved, the result will be that many landowners will be unable to access the groundwater that they have historically used and will be prevented from utilizing this groundwater – their private property – in the future.

Furthermore, many of these landowners, such as the Wimberley Valley Watershed Association or landowners along Lone Man Creek, own property located along creeks that are fed by seeps and springs from the Trinity Aquifer. The EP permit has the potential to drawdown the aquifer and dry up these important surface water features, which will result in these landowners' property values decreasing in addition to adverse ecological impacts. 4-9.13(B)(2).

Pursuant to Rule 4-9.13(B)(5), the landowners listed in Exhibit B have particularized injuries described above that will result if the District approves EP's permit. Under state law, these landowners own the groundwater beneath their land and have property rights and interests in their groundwater as well as their overlying land. These rights and interests are not common to members of the public and will be adversely affected by the proposed production from EP's wellfield, which the District has authority to regulate.

Conclusion

For the reasons provided, TESPAs on behalf of its members and the community, respectfully requests the District to decline to grant the production permit as proposed. Instead, the application should be sent back to staff for further consideration of these comments and the comments of the community.

Respectfully submitted,

Jeff Mundy

Attorney for TESPAs

Texas Bar No. 14665575

The Mundy Firm PLLC

4131 Spicewood Springs Road

Suite O-3

Austin, Texas 78759

jeff@jmundy.com

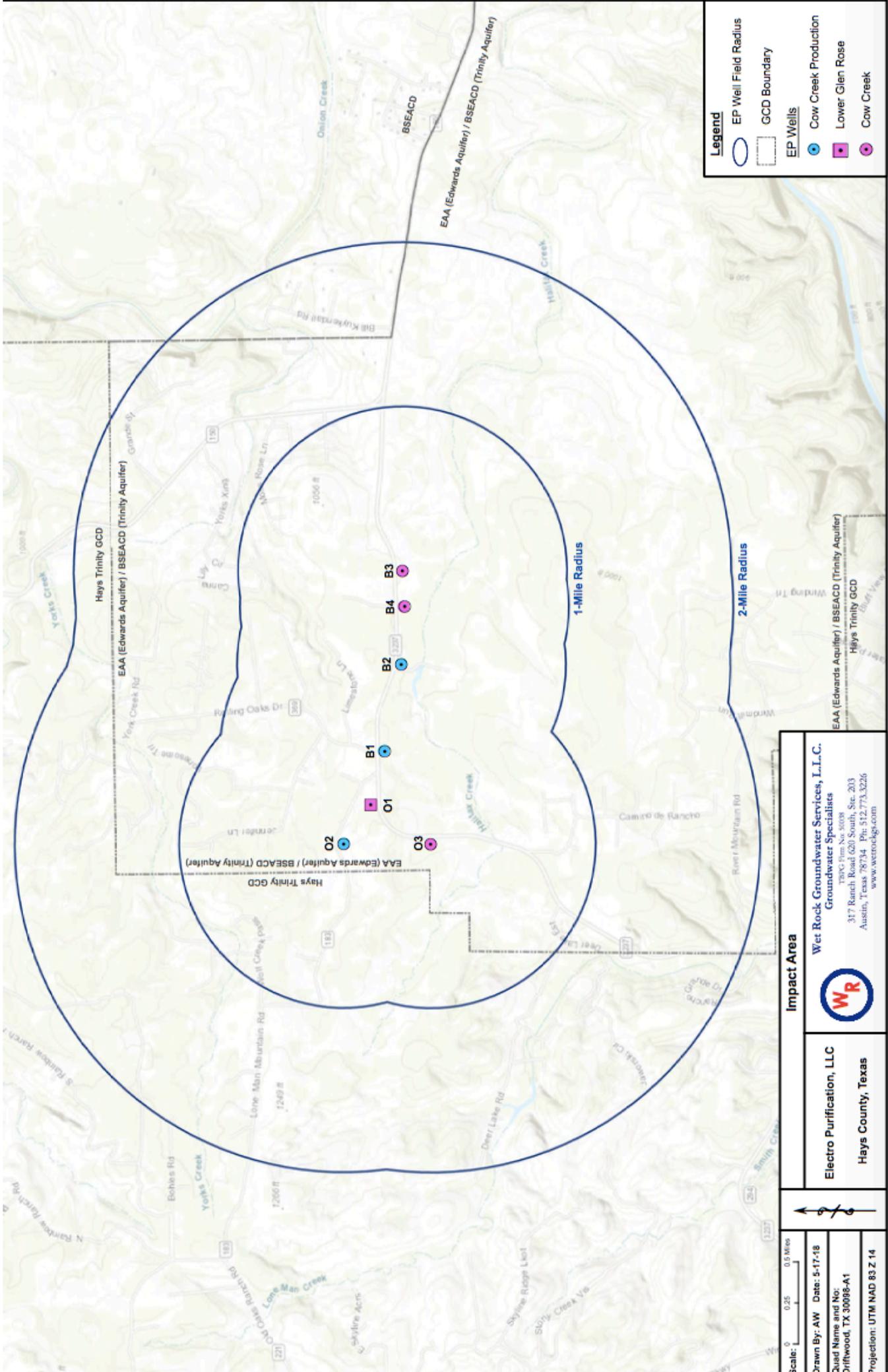
512-334-4300 work
512-750-5913 cell

Vanessa Puig-Williams
Attorney for TESP
PO Box, 160971
Austin, Texas 78716
vanessa@tespatexas.org
512-826-1026

C: Bill Dugat, Attorney for BSEACD
bdugat@bickerstaff.com

Ed McCarthy, Attorney for Applicant
ed@ermlawfirm.com

EXHIBIT A – Impact Area Map



Legend

- EP Well Field Radius
- GCD Boundary
- EP Wells**
 - Cow Creek Production
 - Lower Glen Rose
 - Cow Creek

Impact Area

Wet Rock Groundwater Services, L.L.C.
 Groundwater Specialties
 TRPV Firm No: 5008
 317 Ranch Road 620 South, Ste. 203
 Austin, Texas 78734 Ph: 512.773.3226
 www.wetrockgs.com



Electro Purification, LLC
 Hays County, Texas

Scale: 0 0.25 0.5 Miles

Drawn By: AW Date: 5-17-18

Quest Name and No: Driftwood, TX 30098-A1

Projection: UTM NAD 83 Z 14

**EXHIBIT B – Affected landowners who are
members of TESP**

<u>Name</u>	<u>Address</u>	<u>Background Info</u>
Marianna Airhart	800 Rolling Oaks Driftwood 78676	Well depth 600', Trinity aquifer. Second non-functioning well at 580'. Does not rely on rainwater.
Elizabeth Albarado	161 Rocking A Drive Driftwood 78619	Well depth unknow, aquifer unknown
Kendrick Anderson	112 Carril Vaquero Wimberley78676	Well depth is 950 feet, unknown aquifer.
David Ash	516 Deer Lake Cove Wimberley 78676	Well - 200-300 feet
Donna Bailey	60 York Creek Road Driftwood 78619	Well depth ~550', Trinity aquifer, does not rely on rainwater.
Annette Berry	9800 FM 150 W Driftwood 78619	Well depth 200', unknown aquifer. Does not rely on rainwater.
Jeffrey Binder	125 York Creek Road Driftwood 78619	Well depth unknow, aquifer unknown
Jim Blackburn	Deer Lake Road Wimberley 78676	Well depth unknown, unknown aquifer.
Mary Louise Bond	1200 Todo Lane Driftwood 78619	Well is 333 feet deep.
John Booth	707 Deerlake Road Wimberley 78676	Well depth unknown, Trinity aquifer. Does not rely on rainwater.
Nick Bradshaw	605 Deer Lake Road Wimberley 78676	Well depth of 400', Hays Trinity district
Clark Burnett	115 Carril Vaquero Wimberley 78676	Well depth is 520 feet deep
Robert Burris	165 Limestone Lane Driftwood 78619	Well depth 700', unknown aquifer, does not rely on rainwater.
Wendy Chelette	250 Mount View Wimberley 78676	Well is at 660 feet.

Jim Chisholm	PO BOX 2281 403 Jaworski Circle Wimberley 78676	We have four wells on our property, 430', 96', 340', 349' . Unknown aquifer.
Jimmie Clubb	701 Buckskin Pass Driftwood 78619	Well depth 362', unknown aquifer. Does not rely on rainwater.
Cathy Cochran	820 Bluffview Drive Wimberley 78676	Well depth is 650', unknown aquifer. Does not rely on rainwater.
Richard Corder	1218 Water Park Rd Wimberley 78676	Well depth and aquifer unknown, does not rely on rainwater.
Travis Cox	8940 FM 150 Driftwood 78619	Well depth 890', Trinity aquifer. Supplemental rainwater.
Lisa Crane	4301 Lone Man Mountain Road Wimberley 78676	Well depth is 730'. Middle Trinity aquifer.
Charles David	2201 Windmill Run Wimberley 78676	well depth 800', unknown aquifer. Does rely on rainwater.
Sarah Davis	1805 Lone Man Mtn. Rd Wimberley 78676	Well depth 600', Glen Rose aquifer, does not rely on rainwater.
John Deones	379 Windmill Cove Wimberley 78676	Well depth 800', Middle Trinity aquifer, does not rely on rainwater.
Diane Drew	1851 Windmill Run Wimberley 78676	Well depth 960', Trinity aquifer. Does not rely on rainwater.
Caroline Duchscher	105 Limestone Ln Driftwood 78619	Well depth is 438', Glen Rose aquifer
Ellen Edwards	1101 River Mountain Road Wimberley 78676	Well depth is 1000', Glen Rose aquifer
Janice Gainey	6000 Water Park Wimberley 78676	Well depth is 950ft. deep, our pump is at 600ft. Trinity aquifer, does not rely on rainwater.

Susan Gates	598 Lame Hoss Lane Driftwood	Well depth 500'. Registered with BSEACD.
George Giere	801 Rolling Oaks Drive Driftwood 78619	Two wells, 670' (functioning) and 110-120' (non functioning). Edwards aquifer, does not rely on rainwater.
John Grayum	6919 FM 3237 Driftwood 78619	Well depth unknown, Trinity aquifer. Does not rely on rainwater
Michael Hanson	120 Silla Sendero Wimberley 78676	Well depth is 500', Trinity aquifer. No rainwater.
Jeff Hill	827 Jennifer Lane Driftwood 78619	Well depth 480', pump at 380', unknown aquifer. Does not rely on rainwater.
Malone Hill	910 Flite Acres Road Wimberley 78676	
Doug Holberg	820 Camino de Rancho Wimberley 78676	Well depth unknown, aquifer unknown, does not rely on well water.
Paul Howard	1000 Lonesome Trail Driftwood 78619	Well depth 580', Upper Glen Rose aquifer, does not rely on rainwater.
Jacquelin Hyman	301 Limestone Lane Driftwood 78619	Well depth ~480', Glen Rose - BSEACD aquifer.
Sarah Jackson	905 Jennifer Lane Driftwood 78619	Hays Co CAD ID for my place at 905 Jennifer Lane: R94997. 2.7 acres.
Richard Jordan	251 Limestone Lane Driftwood 78619	Well depth 445', Glenn Rose aquifer, does not rely on rainwater.
Flemming Jorgensen	560 Bluffview Dr. Wimberley 78676	Well depth 904', unknown aquifer. Does not rely on rainwater.

Kevin Karvas	106 Carrill De Circulo Wimberley 78676	No well, exclusively on rainwater.
Ken Kellogg	670 Jennifer Ln Driftwood 78619	Unknown depth, unknown aquifer.
Martha Kinscherff	100 Bill Kuykendall Rd Kyle 78640	Well depth 70', Upper Trinity aquifer. Do not rely on rainwater.
Joan Lawson	105 Camino De Roble Wimberley 78676	
Susan Lazarus	1201 Deer Lake Rd Wimberley 78676	Unknown well depth, unknown aquifer. Does not rely on rainwater.
Kent Lenertz	131 Camino Derecho Wimberley 78676	~650', unknown aquifer. Does not rely on rainwater.
Lamont Lewis	262 Wolf Creek Pass Wimberley 78676	Well depth 850', unknown aquifer. No rainwater.
Nick Marinos	1050 Lonesome Trail Driftwood 78619	Unknown well depth. unknown aquifer, does not rely on rainwater.
David McCully	501 Buckskin Pass Driftwood 78619	Well depth ~400 ft, Upper Trinity aquifer.
Douglas & Gilda Moore	201 Limestone Lane Driftwood 78619	Depth of well unknown, BSEACD. Does not rely on rainwater.
Roey Munoz	401 Rainbow's End Wimberley 78676	Depth is unknown, aquifer unknown
Estelle Murchison	1201-1231 Water Park Road Wimberly 78676	Does not own a well, does not rely on rainwater.
Stephanie Nestlerode	650 Jennifer Lane Driftwood 78619	Well depth unknown, Cow Creek aquifer. Supplemental rainwater.
Judy Nichols	320 Mountain View Wimberley 78676	Well Depth 900 feet
Chad Norris	1101 Jennifer Ln Driftwood 78619	Well depth ~360', Top of Glen Rose aquifer

Sheri Overton	950 Lonesome Trail Driftwood 78619	Depth of well unknown, aquifer unknown. Supplemental rainwater.
Pape Dalton & Peggy (Life Estate)	6790 FM 3237 Driftwood 78619 (1 acre)	Well depth unknown, unknown aquifer
Dennis Pape	FM 3237 Driftwood 78619 (R16093 and R16094)	One well, unknown depth and aquifer
Dennis Pape & Dana Pape-Salas	6792 FM 3237 Driftwood 78619 (R16096, R17075, R16092)	Owens three wells, between 250- 350'. Upper Glen Rose and Upper Trinity. Does not rely on rainwater
Sandra Pedrazas	990 Windmill Run Wimberley 78676	Unknown if relies on well, unknown if relies on rainwater.
Jeff Peterson	2251 Windmill Run Wimberley 78676	Well depth 990', glen rose aquifer
Cynthia Pickens	851 Jennifer Lane Driftwood 78619	Well depth 420', Trinity aquifer
Constance Quigley	700 Todo Lane Driftwood 78619	Well depth 420', Trinity aquifer. Supplemental rainwater.
Renee Rainey	501 Grande street Driftwood 78619	Well depth ~280', Glen Rose aquifer. Does not rely on rainwater.
Daniel Rainwater	117 Carril Vaquero Wimberley 78676	Unknown depth, unknown aquifer. Does not rely on rainwater.
Phil Rankin	1112 River Mountain Road Wimberley 78676	Well depth ~903', Trinity aquifer. No rainwater.
Eva Reed	333 Windmill Cove Wimberley 78676	We have an 800 foot well into the Trinity Aquifer. Supplemental Rainwater.
David Reid	401 Deer Lake Road Wimberley 78676	Well depth is 350' deep, aquifer unknown. No rainwater collection.

Jeff Ringelman	900 Camino De Rancho Wimberley 78676	Well depth of 700', producing at 550-600'. Unknown aquifer, does not rely on rainwater.
Annette Spanhel	1081 Lonesome Trl Driftwood 78619	On rainwater. Well no longer working.
Walter Stewart	70 Bols Road Wimberley 78676	Well depth 602', unknown aquifer. Does not rely on rainwater.
Mike Sullivan	101 S. Rainbow Ranch Rd Wimberley 78676	Well depth 400', unknown aquifer
Robert Swindle	1150 Jennifer Lane Driftwood 78619	Well depth ~580', unknown aquifer. Does not rely on rainwater.
Ron Symecko	120 Curva Bonita Wimberley 78676	Well depth ~700', Middle Trinity aquifer, does not rely on rainwater.
John Tanzillo	251 Windmill Cove Wimberley 78676	Well depth is 700 ft, unknown aquifer. Supplemental rainwater.
Suzanne Teshera	100 Misti Lane Driftwood 78619	Unknown depth (maybe around 550'), unknown aquifer. Supplemental rainwater.
Linda Thomas	301 Misti Lane Driftwood 78619	Well depth 345', unknown, does not rely on rainwater.
Joel Triplett	479 Jennifer Lane Driftwood 78619	Well depth 460', unknown aquifer, does not rely on rainwater.
Melissa Uroda	351 Winding Trail Wimberley 78676	Well depth 500 feet, Glen Rose aquifer, no rainwater.
Jon Vann	802 Rolling Oaks Dr. Driftwood 78619	Well depth is 450', Upper Trinity aquifer.
Betty Vaughan	234 Limestone Lane Driftwood 78619	Well depth unknown, Glen Rose aquifer

Trey Von Gonten	101 Windmill Cv Wimberley 78676	Well depth ~600', unknown aquifer
Ron Weiss	409 Deer Lake Road Wimberley 78676	Well depth 350', unknown aquifer. Does not rely on raintwater.
Linda Wilkin	5001 Loneman Mountain Wimberley 78676	Well depth 580', Glen Rose aquifer, does not rely on rainwater.
Janet Wilson	600 Misti Lane Driftwood 78619	Unknown depth of well, unknown aquifer, does not rely on rainwater.
Pat Davis/Barbara Foss	1079 Rolling Oaks Drive Driftwood 78619	Unknown well depth, unknown aquifer.
Wimberley Valley Watershed Assoc.	1405 Mount Shart Rd Wimberley 78676	Owns property adjacent to Jacob's and Cypruss Creek
Bob Wingo	1237 Water Park Rd. Wimberley 78676	Well depth 755', unknown aquifer.
Scott Woodward	2050 Windmill Run Wimberley 78676	Well depth 540', Glen Rose aquifer. Does not rely on rainwater.
Andrew Wray	100 Camino Derecho Wimberley 78676	Well depth is 720', unknown aquifer. Not on rainwater.
Nancy Weaver	515 Limestone Lane Driftwood 78619	Well depth is 400'.
Ronald Dunkin	8900 FM 150 Driftwood 78619	Well depti is 725', Glen Rose aquifer. Not on rainwater
Karol Hujsak	505 Deer Lake Rd Wimberly 78676	Well depth 180', Glen Rose aquifer. Supplemental rainwater.
Hector Flores	244 Buckstinn Pass Driftwood 78619	Well depth 460', unknown aquifer
Stephen Tittle	451 Jennifer Lane Driftwood 78619	Well depth 450+', Trinity Glen rose

Chris & Sue Elliot	300 Buckskin Pass Driftwood 78619	Well depths 770' (Trinity) and 380' (Glen Rose). No rainwater
Irene Biggins	601 Buckstin Pass Driftwood 78619	Well depth 210-320', Glen Rose aquifer. No rainwater
Brad Thigpen	7001 Water Park Road Wimberly 78676	Well depth 650', pump at 550', Trinity (Lower GlenRose?)
Rose Penzerro	101 Misti Ln Driftwood 78619	Well depth 550', Trinity aquifer
Joseph Horne	450 Misti Lane Driftwood 78619	Well depth 480', Trinity aquifer. No rainwater
Timon & Mary Agobe	118 Carril Vaquero Wimberly 78676	Unknown well depth and aquifer
Martha Dodds & David Anderson	503 York Creek Road Driftwood 78619	Well depth ~325', Gen Rose aquifer
Ryan Marks	101 Bee Gee Road Driftwood 78619	Well depth 700+ (Glenn Rose) and 300+ (Edwards)
Gregory Womble	801 Billie Brookes Driftwood 78619	Well depth 149', Upper Trinity aquifer
Katie and Michael Robbins	715 Bee Gee Driftwood 78619	Well depth 500', Glen Rose aquifer
MaryAnn & Stephen Overby	185 Trails End Rd Driftwood 78619	Well depth unknown, aquifer unknown, does not rely on well water.
Lea & Stephen Westberg	7015 FM 3237 Driftwood 78619	Well depth ~450', BSEACD
Darren Masur	101 Corua Bonita Wimberly 78676	Well depth 500', aquifer unknown.
Donald Kurtz	101 Via De Noria Wimberley 78676	Well Depth 242', Trinity Aquifer

EXHIBIT C – Landowners’ Addresses Map



Wimberley Valley Watershed Assoc. 181
Wimberley 2325
Woodcreek 182
Winters Mill Pkwy 12
221
220
3237
180

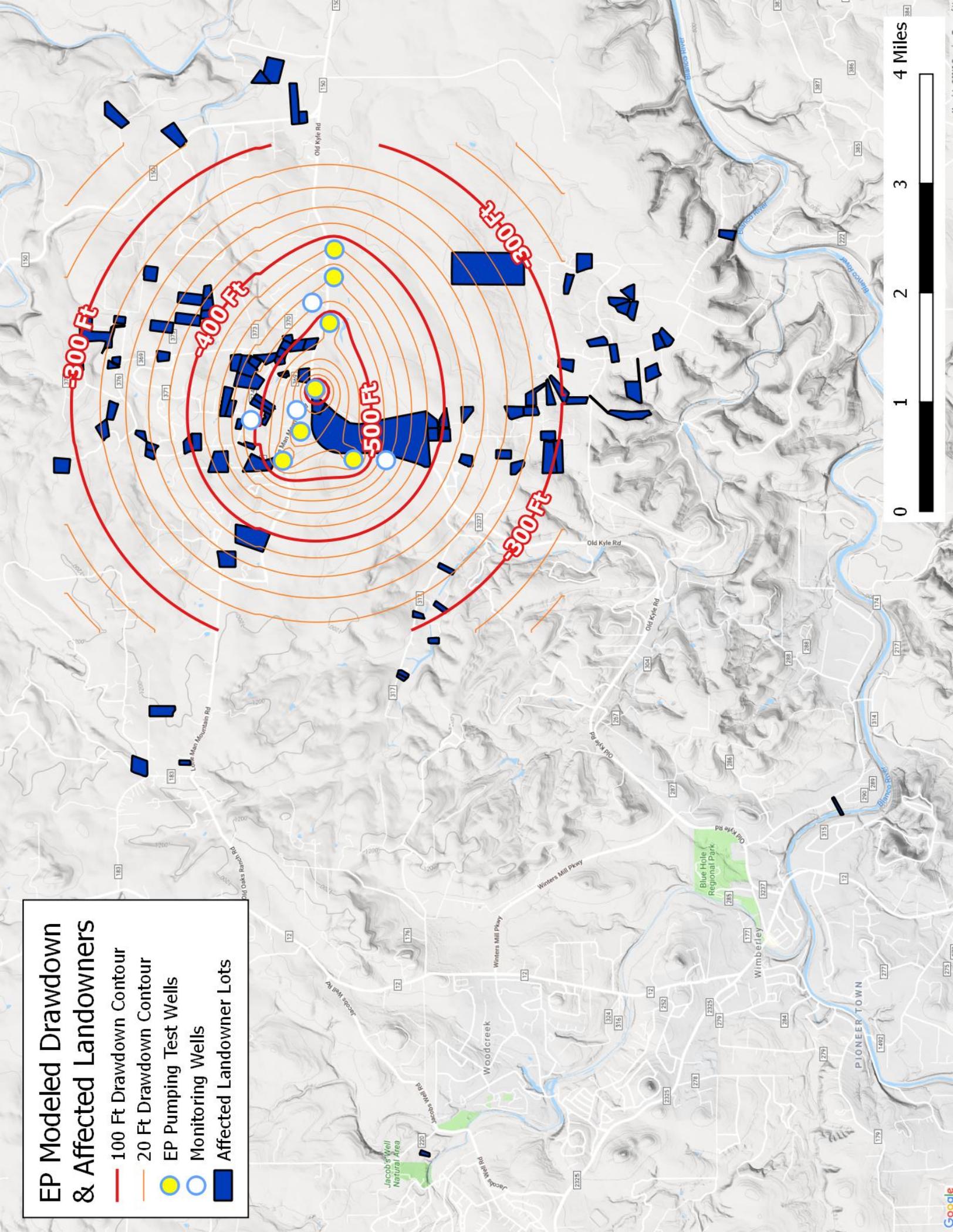
Mary Louise Bond
Constance Quigley
Jeffrey Binder
Stephen Tittle
Joel Triplett
Stephanie Nestlerode
Lamont Lewis
Lisa Crane
Paul Howard
Odell 1
Odell 2
Odell 3
Sarah Davis
Mike Sullivan
Susan Lazarus
John Booth
Nick Bradshaw
David Ash
Ron Weiss
Jim Chisholm
Susan Lazarus
John Booth
Nick Bradshaw
David Ash
Ron Weiss
Jim Chisholm
Daniel Rainwater
Clark Burnett
Timon & Mary Agobe
Kevin Karvas
Joan Lawson
Ron Symecko
Andrew Wray
Doug Hölberg
Eva Reed
Ellen Edwards
Brad Thigpen
Diane Drew
Melissa Uroda
Wendy Chelette
Richard Corder
Charles David
Geff Peterson
Judy Nighols
Malone Hill
Flemming Jorgensen
Cathy Cochran

Martha Dodds & David Anderson
Elizabeth Albarado
Ryan Marks
Rose Pegzero
Susan Gates
Joseph Horne
Joseph Mann
Jeff Hill
Robert Swindle
George Gieré
Gregory Womble
Hays
Nancy Weaver
Martha Kipscherff
Bridges 1
Bridges 2
Bridges 3
Renee Rainey
Annette Berry
Martha Kipscherff
Ronald Dunkin
Renee Rainey

EXHIBIT D – Drawdown map with affected
properties

EP Modeled Drawdown & Affected Landowners

- 100 Ft Drawdown Contour
- 20 Ft Drawdown Contour
- EP Pumping Test Wells
- Monitoring Wells
- Affected Landowner Lots



0 1 2 3 4 Miles

Exhibit E – BSEACD MAG Chart

	gallons/year	acre-ft/year	MGD
Trinity MAG (Shared and Exclusive)	1,253,222,946	3,846	
Exempt Pumpage Estimate			
Current Trinity permitted pumpage	611,016,117	1,875	
EP Phase 1	182,500,000	560	0.5
EP % of Total MAG	15%	15%	
EP + Current Trinity	793,516,117	2,435	
% of Total MAG	63%	63%	
EP Phase 2	365,000,000	1,120	1
EP % of Total MAG	29%	29%	
EP + Current Trinity	976,016,117	2,995	
% of Total MAG	78%	78%	
EP Phase 3	547,500,000	1,680	1.5
EP % of Total MAG	44%	44%	
EP + Current Trinity	1,158,516,117	3,555	
% of Total MAG	92%	92%	
EP Phase 4	912,500,000	2,800	2.5
EP % of Total MAG	73%	73%	
EP + Current Trinity	1,523,516,117	4,675	
% of Total MAG	122%	122%	

Needmore at 289M

June 25, 2018

Barton Springs Edwards Aquifer Conservation District Board of Directors
1124 Regal Row
Austin, Texas 78748

RE: Public Comments for Electro Purification LLC -- Production Permit in Middle Trinity Management Zone Application for 2.5 million gallons per day of groundwater

Dear Barton Springs Edwards Aquifer Conservation District Board of Directors,

Hill Country Alliance (HCA) and its supporters recognize and appreciate the critical work that the Barton Springs Edwards Aquifer Conservation District (the District) Board and staff perform in their charge of protecting the common resource upon which countless water well owners rely as their sole source of household water. We also recognize the tremendous value that the District gives in the protection of the iconic and life supporting Trinity Aquifer and the Barton Springs segment of the Edwards Aquifer.

Furthermore, we recognize the perilous and largely underfunded position that most groundwater districts face when seeking to protect historic exempt domestic and livestock well owners in the face of well-financed industrial scale permit applications. At least five high-profile cases are being contested in Texas that seek to test the strength of local groundwater districts' ability to protect the production capabilities of their most senior rights holders.

Electro Purification LLC (applicant), a for-profit wholesale water supply company based in Houston Texas has applied for permit to pump 2.5 million gallons of groundwater per day (912.9 million gallons per year) from the Trinity Aquifer's Cow Creek formation in Hays County. Hill Country Alliance (HCA) staff have reviewed the proposed *Electro Purification -- Production Permit in Middle Trinity Management Zone Application* and its supporting documentation and appreciates the District Executive Director's caution in crafting a permit with multiple safeguards designed to protect the resource from overdraft, while considering the production rights of all users.

HCA urges the District's Board of Directors to consider implementing the following supplemental measures to further safeguard the historic property rights of existing well owners; and the perpetual high-quality and quantity of the water system comprised of the Trinity, the Edwards, and their surface flow interactions.

Financial Protections for Well Owners

Though Avoidance and Mitigation protections are well thought out, HCA would request that the mitigation fund as described in Section 9 be available for *all* well failure oriented financial burdens incurred by harmed well owners due to the applicant's pumping activities. These should include the cost of supplemental water supply and delivery in the event of water quality degradation, well or pump failure, or for the additional electrical cost to pump water from greater depth.

Financial remedies for Avoidance and Mitigation protections should be expanded to include potable rainwater harvesting systems for those seeking alternatives to participation in damaged well remediation. Those systems should be built to deliver the same quantities of water as the wells that they replace.

In order to protect well owners from the potential financial liabilities of disabled wells due to the applicant's production as specified in Section 9, the applicant's *Financial Commitment for Mitigation Actions* should be expanded from \$50,000 to a dollar amount that reflects the actual financial burdens associated with the cost of reworking multiple wells. This enlarged sum would constitute a reservation fund to remedy multiple well failures and protect well owners against the potential bankruptcy of the applicant.

Additionally, HCA recommends expansion of Section 2.17 to protect the District and its well owners from any change of applicant ownership, and to protect well owners against any potential bankruptcy actions or settlements of the applicant or its successors.

Collective Well Owner and District Board Input On Phased Production Increases

While HCA is satisfied that the District has backed its phased production system (and attended Special Provisions) with the most vigorous application of scientifically based criteria, the permit allows the District's General Manager sole discretion to direct phased production changes. HCA recommends that decision be subject to the approval of the District's elected Board of Directors with the opportunity for a public hearing and public comment.

Water Quality Protection

HCA recommends that the Water Quality Sampling – Annual Fund Contribution of \$1500 for annual water quality sampling and analysis of wells in the immediate area of the applicant's well field, be expanded in both amount and scope to springs and seeps that contribute to surface water flows.

Surface Water Supply Protection

HCA recommends that the District implement strict spring water quality and flow guidelines to protect surface water flows that serve downstream users, fish, and wildlife, and ultimately Edwards Aquifer recharge. Those guidelines may be attached to the creation and implementation of a Management Zone for appropriate Cow Creek or Lower Glen Rose springs and a Lone Man Creek Management Zone.

Impact Determination Timing of Damaged Wells

Section 7 requires that within 30 days following the GM's determination of the existence of *an unreasonable impact, more likely than not attributable to the production of groundwater from the applicant's well field, the applicant shall implement the mitigation steps*. HCA recommends that, due to the immediate domestic needs of the damaged well owner, the permit specify a 7-day maximum period for impact determination.

Financial Protections for Future Well Owners

In both the *Edwards Aquifer Authority v. Day* and *Edwards Aquifer Authority v. Bragg* cases, the Supreme Court of Texas has explicitly stated that groundwater is a vested private property right in place, subject to governmental taking. Section 9's Financial Commitment for Mitigation Actions clause should provide for takings compensation provisions for property owners who find themselves unable to produce water in the future because the applicant's production has damaged the aquifer's ability to produce water.

Our comments reflect the collective vision of our Hill Country supporters, stakeholders, businesses and elected officials for the protection of the Hill Country's natural resources for current and future generations. Thank you for your consideration of these comments. If you have questions or concerns, please contact me at (512) 694-1121.

Sincerely,

Charlie Flatten
Water Policy Program Manager
Hill Country Alliance
512.694.1121

CC: Garry Merritt, Board President, HCA; Katherine Romans, Executive Director, HCA