

ELECTRO PURIFICATION LLC
(Trinity Production Permit)

PROPOSED SPECIAL PROVISIONS
Revised May 30, 2019

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SECTION 1. BACKGROUND

Electro Purification LLC (EP) drilled seven Middle Trinity test wells between 2013-2015 to conduct a hydrogeological evaluation of the aquifer to assess prospective public water supply use. The wells were drilled on private property (Bridges Tract and Odell Tract) in central Hays County. In February 2015, Wet Rock Groundwater Services, LLC (WRGS) produced a report of findings and reported a maximum daily well field production rate of 2.5 million gallons per day (MGD). The well field is located within the Edwards Aquifer Authority's (EAA) jurisdictional boundary where the Trinity Aquifer was previously unregulated. The legislature passed H.B. 3405 on June 19, 2015 adding this territory, shared with the EAA, into the jurisdiction of the Barton Springs/Edwards Aquifer Conservation District (BSEACD).

H.B. 3405 and District rules adopted in July 2015 require all nonexempt, non-Edwards wells to be permitted and provide a three-month period to apply for an interim authorization under a Temporary Permit before conversion to a Regular Permit. EP submitted a Temporary Permit application for 100 ac-ft/year (32,590,000 gallons/year) on September 18, 2015. The General Manager issued the Temporary Permit in November 2015, but in March 2016, EP withdrew the Regular Permit application and instead submitted a General Permit to conduct an aquifer test. In October 2015, District staff began a rule making effort that focused on defining a process for assessing potential unreasonable impacts, and the District Board adopted the rules on April 28, 2016.

EP conducted an aquifer test prior to submitting a Production Permit application. Beginning on October 31, 2016, WRGS performed a series of aquifer tests on three of the existing EP test wells (Bridges No. 1, Bridges No. 2, and Odell No. 2). The three wells were acidized prior to testing and because the wells were not permanently completed, a packer was set to isolate production to the Cow Creek Member of the Trinity Aquifer (Cow Creek), which is the ultimate target production zone. A hydrogeologic report that ultimately satisfied the District's *Guidelines for Hydrogeologic Reports and Aquifer Tests* was submitted in July 2017 along with a Production Permit application.

In response to this application, the General Manager proposed Special Provisions to authorize up to 0.5 MGD (182,500,00 gallons per year) in an initially authorized production Phase 1. The General Manager determined that this Phase I production volume has very little to no potential to cause unreasonable impacts. The General Manager will consider authorizing additional phases of production from this well field, conditioned on the Permittee requesting the next higher phase of production as described in the proposed special permit provisions, and on its satisfying the permit-specified requirements to receive authorization for the higher production rates in each phase. The authorized production in each phase will be the basis for assessing production fees and for applying mandatory curtailments under the District's drought management program.

SECTION 2. INTRODUCTION

The special provisions set forth in this document serve to protect the private property rights of all groundwater users by conserving, protecting, and managing the groundwater resources within the District. These permit provisions are considered to be a “living document” and are subject to change based upon the General Manager’s further evaluations using best available science, tools, and data. Due to the potential for unreasonable impacts at the higher volumes of pumping, this permit includes additional measures described herein to monitor actual aquifer conditions, and to avoid or mitigate unreasonable impacts.

1. **Production Phases.** These provisions designate the use of a phased permit structure with conditional volume increases. The General Manager will consider authorizing additional phases of production from this well field, conditioned on the Permittee satisfying the permit-specified requirements to receive authorization to advance the higher production volumes in each phase. The authorized production in each phase will be the basis for assessing production fees and for applying mandatory curtailments under BSEACD’s drought management program. The production phases are:
 - Phase I 500,000 gallons per day (0.5 MGD) = 182,500,000 gallons per year
 - Phase II 1,000,000 gallons per day (1.0 MGD) = 365,000,000 gallons per year
 - Phase III 1,500,000 gallons per day (1.5 MGD) = 547,500,000 gallons per year
 - Phase IV 2,000,000 gallons per day (2.0 MGD) = 730,000,000 gallons per year
 - Phase V 2,500,000 gallons per day (2.5 MGD) = 912,500,000 gallons per year
2. **Compliance Monitoring Plan (CMP):** These provisions designate the use of a CMP, which prescribe the protective measures and details relating to designated index well(s), permit compliance triggers, mandatory compliance response actions, and a monitor well network with installation of monitoring wells. These provisions further describe the details of the index well(s) to be employed and the associated Response Actions for each Trigger/Permit Compliance Level. Planning and implementation of all permit compliance actions shall be closely coordinated with the GM to ensure that the described measures are implemented consistently with the GM’s expectations.
3. **Impact Avoidance Plan (IAP).** These provisions designate the use of avoidance measures prescribed in the IAP, which are the measures and commitments on the part of the Permittee to avoid *anticipated* unreasonable impacts in priority areas with a greater risk for impacts. Avoidance measures include preemptive well modifications such as lowering pumps, replacing pumps, and drilling replacement wells. Planning and implementation of all avoidance actions shall be closely coordinated with the GM to ensure that the described measures are implemented consistently with the GM’s expectations.
4. **Mitigation Plan (MP):** These provisions designate the use mitigation measures prescribed in the MP, which are the contingency measures and commitments on the part of the Permittee to respond to and mitigate *unforeseen, unanticipated* unreasonable impacts. Mitigation actions include well modifications such as lowering pumps, replacing pumps, and drilling/replacement of wells. Planning and implementation of all mitigation measures shall be closely coordinated with the GM to ensure that the described measures are implemented consistently with the GM’s expectations.
5. **Adaptive Management:** The adaptive management elements inherent and outlined within these provisions are a critical management tool that enables the General Manager to effectively conserve, protect, and manage the groundwater resources within the District. The conditional nature of the

production phases provides the Permittee with an authorization to produce a reasonable amount of groundwater while allowing the General Manager to develop further scientific evaluations based on monitoring actual aquifer responses and collecting data. These prescribed monitoring and data collection efforts will inform continuous and repeatable evaluations using the best available science and tools.

These provisions are structured such that the General Manager can adapt the management of this permit and modify the plans based on the use of actual data and new scientific evaluations. Throughout these provisions there are safeguard guard elements that are designed to avoid or mitigate unreasonable impacts. These safeguards also serve to protect all well owners and ensure that they will have reliable access to groundwater resources. Priority areas are designated where there is a potentially higher risk for unreasonable impacts and the implementation of avoidance or mitigation measures is required of the Permittee to prevent or remedy unreasonable impacts. Further scientific evaluations and monitoring data will inform the proactive expansion of all priority areas such that all well owners will always be protected and provided reliable access to groundwater resources.

It is General Manager's intent to protect the groundwater resources by the sustainable production of the aquifer and to prevent unreasonable impacts. At any time during the life of this permit, the General Manager may reopen these permit provisions and amend the requirements as necessary to avoid or prevent unreasonable impacts. Production volume increases beyond Phase 1 are not certain to occur and at any point during the life of the permit any authorized production can be reduced or ceased by the General Manager.

SECTION 3. DEFINITION OF TERMS

“Adequately Completed Well” – a well that is equipped, maintained, and completed to withstand natural water level variability and drawdown attributed to drought conditions, seasonal increases in local pumping, normal pumping usage, and pumping from neighboring wells in the area of influence.

“Avoidance” - any proactive measures taken by a Permittee to prevent, reduce, or remedy potential unreasonable impacts on an operational well, which was adequately completed to withstand natural variability. The potential unreasonable impacts are reasonably anticipated and may be avoided through reasonable avoidance measures.

“Avoidance Priority Areas” – A geographically and hydrogeologically delineated area that is identified as having a potentially higher risk for unreasonable impacts such that it is a priority for the implementation of avoidance or mitigation measures.

“Compliance Monitoring Plan” - a document that captures the purpose, description, and details of the compliance monitor well network and index well trigger levels. This plan serves to provide data needed to assess the actual impacts of a Permittee’s groundwater production on the aquifer over time, and compliance with permit conditions in place to avoid unreasonable impacts.

“Impact Avoidance Plan” - a document that captures the purpose, description, and details of the avoidance measures to which the Permittee has committed. Those avoidance measures may include:

- a. reduction of authorized permit volume and/or pumping rate,
- b. phased permit volumes with conditional increases,
- c. ongoing aquifer monitoring,
- d. one or more index wells with defined compliance levels and prescribed responses,
- e. temporary pumping curtailments,
- f. permanent permit volume reductions,
- g. mitigation measures if applicable, and
- h. other reasonable measures necessary to avoid the occurrence of unreasonable impacts.

“Index Well(s)” - a designated observation or monitoring well or wells that is used to measure the water level and/or quality of water within the aquifer. For the purpose of these provisions, “Rolling Oaks Index Well” is designated as the primary index well for compliance. Details describing the index well are found in Appendix A, Section 1 of these provisions.

“Mitigation” - any reactive measures taken by a Permittee to reduce or remedy actual or imminent unreasonable impacts on an operational well, which was adequately completed to withstand natural variability. The imminent unreasonable impacts were unanticipated at the time that groundwater production was authorized and are avoidable through reasonable mitigating measures.

“Mitigation Plan” - a document that captures the purpose, description, and details of the mitigation action and measures to which the Permittee has committed. The measures described in a plan serve as a contingency response to the occurrence of unreasonable impacts that are unanticipated or unavoidable through reasonable avoidance measures.

“Overdraft” or “Condition of Long-term Overdraft” - the condition of a groundwater aquifer basin or sub-basin in which the amount of water withdrawn results in negative effects or unreasonable impacts. Overdraft can be characterized by groundwater levels that decline over a period of years and never fully recovers, even in wet years.

“Permit Compliance Level” - a water-level threshold also referred to as a “trigger” that requires mandatory response actions from the Permittee for permit compliance.

“Response Action(s)” - a mandatory measure that the Permittee must comply with and implement per the terms and conditions of this permit and its special provisions. Specific response actions are described in Appendix A, Section 3 of these provisions.

“Response Team” – designated representative(s), selected by the GM, that perform administrative and technical tasks including but not limited to well owner communication, coordination of response actions, coordination of implementation activities, drafting technical opinions, hydrogeological interpretations and coordination/oversight of well service contractors related to the implementation of the Impact Avoidance Plan and Mitigation Plan. The Response Team designated representative(s) may include a third-party contractor and/or designated District staff personnel.

“Trigger” - a designated water level in an index well that prompts a response action once the measured water level is reached. For compliance purposes, the measured water level shall be calculated as a 10 - day rolling average of the daily minimum depth to water level (maximum water level elevation) (measured depth to water, in feet, from land surface) measurements. Once a Trigger has been reached, the Permittee must implement the appropriate response action. Specific Triggers are described in Section 4 of these provisions.

“Unreasonable Impacts” - the term has the meaning as defined in District Rule 2-1.

SECTION 4. GENERAL PROVISIONS

1. **Production Fees.** After the effective date of permit issuance and upon receipt of the initial permit certificate and invoice, the Permittee must submit timely payment of production fees on the authorized amount of production. Likewise, upon the effective date of each approved permit phase authorization and receipt of the phased permit certificate and invoice, the permittee must submit timely payment of production fees on the new authorized production. Permittee may render payment in monthly or quarterly installments, or in an annual lump sum. Nonpayment of fees following a past-due notice may result in revocation, termination, cancelation, modification, or amendment of the permit pursuant to District Rule 3-1.13; and may also result in the assessment of late fees.
2. **Texas Commission on Environmental Quality (TCEQ) Public Water Supply (PWS) - Documentation.** Prior to producing any groundwater from the well(s), the Permittee must submit documentation from the TCEQ authorizing the Permittee to operate the well(s) as a TCEQ-approved Public Water System, if an authorization is required by TCEQ.
3. **User Drought Contingency Plan (UDCP).** Permittee shall sign and submit a Drought Target Chart within 30 days of permit issuance. Permittee must submit an updated Drought Chart within 30 days of authorization and approval of each phase.
4. **Export Outside of the District.** Transport outside of the District is not authorized under this permit. The Permittee shall follow the standard permit process and shall submit an amendment application if any portion of the existing or future production volumes are to be transported outside of the District. Prior to transporting of groundwater, a permit amendment application for transport will be processed in accordance with District Rule 3-1.4 and Rule 3-1.3.1, as amended. The permit amendment will be considered by the Board after notice and opportunity for hearing. If approved, additional transport fees will apply, and the permit term may be amended.
5. **Customer Contracts - Change in Existing Contract.** Permittee is required to submit written notification to the GM of any new contracts or cancellation, termination, modification, or amendment of existing contracts that change or affect the volume of water supplied by Permittee. The notification must be provided within 30 days after such change. If the Permittee's current customer contract (Goforth contract submitted and referenced in the 7/13/17 application materials) expires, terminates, or is no longer effective, then the Permit will expire without notice and hearing.
6. **Change in Ownership.** Permittee is required to submit written notification to the GM informing the GM of any change affecting the ownership interests of the Permittee, including but not limited to any new lease agreements; or cancellation, modification, or amendment of existing lease agreements. The notification and documentation demonstrating an ownership interest must be provided within 30 days after such change. Any permit revisions or adjustments to the permit provisions that are necessary to be consistent with the groundwater ownership interests, must be approved by the Board through a permit amendment.
7. **Infrastructure.** Within three years of permit issuance, Permittee shall provide documentation satisfactory to the GM that the physical infrastructure is in place necessary to deliver water authorized by this permit to Permittee's wholesale customer. If the Permittee is unable to produce

documentation deemed acceptable by the GM by the end of the three-year period, the permit will automatically expire without notice and hearing upon the three-year expiration date unless an extension is requested by the Permittee and granted by the Board. The Permittee may submit to the Board a written request for an extension of time to satisfy this requirement. The request for an extension must be submitted at least ten days before the end of the three-year period. The written request must include a report explaining the status of completion of the physical infrastructure and other relevant information to support an extension. The Permittee's request for an extension may be denied or granted by the Board.

8. **Reports.** The Permittee will provide a monthly data report on each production well in operation. The report should include any continuous water-level data for the well, the average monthly pumping rate (gpm) for the well, and any water quality results collected from the well.
9. **Permit Compliance.** District rules and policies that are implemented, adopted or amended after the effective date of this permit shall apply to this permit. Special provisions of this permit shall be revised as deemed necessary by the General Manager. If the Permittee fails to satisfy any of the permit provisions, the GM will pursue enforcement actions, including but not limited to seeking a Board Order to revoke, suspend, terminate, cancel, modify, or amend the permit in whole or in part pursuant Rule 3-1.13 (A).
10. **Aquifer Testing Evaluations.** At the time that the permittee is required to perform a TCEQ-required pump test on any of the seven proposed production wells, the permittee will provide a 60-day written advanced notice to the General Manager, and will coordinate the logistics and timing of the aquifer test with District staff.
 - a. The Permittee shall conduct an aquifer test of all of its existing public water supply wells, such that groundwater is produced simultaneously from those production wells, and at a duration (no less than 36 hrs) and at rate that is representative of three times the Phase 1 volume (0.5 MGD) from that well field;
 - b. The Permittee shall coordinate with the General Manager on any monitoring (water level, water quality sampling) that will take place during the aquifer test;
 - c. The Permittee shall continuously monitor all of its own pumping and non-pumping wells during the aquifer test and routinely collect water quality samples;
 - d. The Permittee shall complete all the public water supply wells, in accordance with the District's well construction standards prior to commencing the aquifer testing of any of those public water supply wells;
 - e. The permittee shall permanently complete all of the monitor wells described in Appendix A, Section 4, in accordance with the District's well construction standards prior to commencing the aquifer testing.

Documented data that is collected during this testing process may be evaluated by the GM and utilized to further refine or adjust these special provisions. Based on further evaluation of new data, the GM may amend or adjust these special provisions as necessary without notice and hearing. However, if the Permittee disagrees with the proposed adjustments, then Permittee may request a GM-initiated amendment to be considered by the District Board.

11. **Occurrence of Unreasonable Impacts.** If the GM determines through evaluations and investigations, using best available science, that production from the permitted wells is causing "unreasonable

impacts” then the GM may consider mitigation measures proposed by the Permittee pursuant to any agreement in effect between the District and the Permittee related to mitigation, to timely remedy the unanticipated unreasonable impacts. Such mitigation measures shall be reserved only after all reasonable preemptive avoidance measures have been exhausted, and shall serve as a contingency for the occurrence of unreasonable impacts that were unanticipated and unavoidable through reasonable measures.

Alternatively, if mitigation measures described in Appendix C are not in place, are inadequate, or are inappropriate for effectively remedying all unreasonable impact(s) as described in District Rule, then the GM may require immediate cessation of pumping until the Board, after notice and opportunity for hearing, approves a GM-initiated amendment to permanently reduce the Permittee’s full permit volume to a rate that will reasonably avoid recurrence of unreasonable impacts. Special provisions of the permit will be adjusted when the permit is amended to avoid the recurrence of unreasonable impacts.

12. **Prevailing Requirements.** Where there may be inconsistency between District Rules and these permit provisions, the more stringent of the requirements apply.

13. **Declaration of Compliance.** Due to the conditional nature of the production phases and the provisional adaptive management described throughout the permit provisions, any groundwater production authorized by this permit shall not be considered by the Permittee as a firm water supply. Therefore, immediate threats to public health and safety or other emergencies of the customers are not valid reasons to continue production during District-declared drought nor are they valid reasons to for the Permittee to violate compliance with any of these permit provisions. Prior to producing any groundwater from the well, the Permittee will certify and provide a declaratory statement acceptable to the District demonstrating that its customer(s) have Alternative Water Supplies to meet their service requirements.

SECTION 5. RE-EVALUATION OF DESIRED FUTURE CONDITIONS (DFC)

1. The amount of groundwater authorized under this permit for purposes of determining achievement of the applicable DFC is Phase I – (0.5 MGD) = 182,500,000 gallons per year.
2. Prior to advancing to the next phased production volume, the GM will assess the potential for impacts to the DFC.
3. This permit does not authorize a reservation of the DFCs or the associated modeled available groundwater (MAG) in the volumes associated with future phases. Prior to advancing to the next phased-production volume, the GM will reevaluate the production from the permitted well field at the authorized production in the new phase along with the then-total authorized pumping associated with the applicable DFC to assess whether there are current or potential effects to the aquifer that would cause or would be a major contributor to a failure to achieve the then-applicable DFC. This evaluation will include a review of the factors listed and conditions described under Texas Water Code (TWC) section 36.1132, as amended, that exist at the time of the evaluation. The District will utilize the best available science, data and most current tools to perform this evaluation, including but not limited to applicable numerical models, analytical models, water levels, spring flow data, river gauge data and Texas Water Development Board (TWDB) exempt use estimates.
4. If at any time the GM determines that production under the current phase of the permit is causing or is a major contributor to a failure to achieve the applicable DFC existing at the time of production, then the GM may initiate an amendment after notice and opportunity for hearing, for the Board to consider reducing or curtailing the authorized production volume.

SECTION 6. PRODUCTION PHASES

Authorized Production Volume

Upon the initial permit issuance effective date, the Permittee is authorized to commence production of groundwater at the Phase I volume. All applicable drought curtailments will apply to the authorized Phase 1 volume.

- Phase I 500,000 gallons per day (0.5 MGD) = 182,500,000 gallons per year

Phased volume increases are contingent upon the satisfaction of conditions outlined in these permit provisions.

- Phase II 1,000,000 gallons per day (1.0 MGD) = 365,000,000 gallons per year
- Phase III 1,500,000 gallons per day (1.5 MGD) = 547,500,000 gallons per year
- Phase IV 2,000,000 gallons per day (2.0 MGD) = 730,000,000 gallons per year
- Phase V 2,500,000 gallons per day (2.5 MGD) = 912,500,000 gallons per year

Prerequisites Conditions for Phased Volume Increases

1. Water levels in the index well must not have reached a Compliance Level 3 Trigger due to the Permittee's pumping activity.
2. Permittee must have produced a 6 month average of at least 70% of the current phase annual permitted volume.
3. Permittee must be actively producing groundwater for at least 6 calendar months prior to the request.
4. Permittee must have executed contracts in place that will support use of all of the next phase permit volume.
5. Permittee must have water-supply infrastructure in place and in operation for the distribution of groundwater to contracted customers.
6. Permittee must have implemented avoidance measures to the District's satisfaction.
7. Permittee must have mitigated to the District's satisfaction any unanticipated unreasonable impacts that may have occurred during the existing authorized phase.
8. Permittee's existing production must be in compliance with the applicable DFC.

Process for Phased Volume Increases

All future phases of production will be subject to the District Rules and Management Plan in place at the time that the phase increase request is made to the District. The GM may grant authorization and approval for the Permittee to advance to the next phase of production, without public notice and hearing. Approval may be delayed if the District is in a declared drought stage. Before proceeding to the next phase of production from an existing phase, the following provisions shall be satisfied:

1. Permittee Submits Request for Volume Increase

- a. The Permittee must notify the GM in writing of its request to move to the next volume phase and shall submit an administrative fee of \$1500, for reviewing and evaluating new information related to the volume increase request. In accordance with the District's fee schedule additional special fees may be assessed for extraordinary time and effort required for technical and administrative review.
- b. Using recently collected data from previous phases, the permittee shall submit a written hydrogeologic evaluation that addresses whether there will be unreasonable impacts due to the new proposed production. The evaluation should address each factor as defined in the term

“unreasonable impacts.” The evaluation should use numerical models if available and analytical models to project the extent of any impacts. The Permittee shall provide any data that was used to support that evaluation including an estimate of wells that may potentially be impacted.

2. General Manager Response and Request for Information

The General Manager will acknowledge receipt by responding to the Permittee’s written request and may request additional information and data from the Permittee.

3. Evaluation of Impacts and Technical Review

Within 120 days of receiving the written request, the General Manager will perform an evaluation of the proposed production from the permitted well field in the new phase to assess whether there are current or potential effects to the aquifer that would cause an unreasonable impact as defined in District Rules.

4. Revisions of Plans in Permit Special Provisions.

Within 240 days of receiving the written request, the Permittee and the District will coordinate and complete final revisions to the plans (*Compliance Monitoring Plan, Mitigation Plan, Impact Avoidance Plan*), if the GM determines those revisions to be necessary to address documented aquifer conditions projected to be caused by the Permittee’s production in the next phase.

- a. Updated plans must be consistent with District Rules in place at the time of the request and agreed upon by the General Manager.
- b. Updated plans that describe mitigation measures, must be agreed upon by both the Permittee and the District.
- c. Updated plans shall consider the additional area and extent of potential impacts given the scope of the next production phase.
- d. Updated plans shall consider additional avoidance actions necessary to prevent or reduce impacts.
- e. Updated plans shall incorporate additional monitoring wells and/or additional index wells and any expansion of the avoidance priority areas. If an additional index well is necessary, the General Manager and technical staff will identify appropriate triggers for each index well.

5. Advancement to Next Phase. The General Manager will issue an approval letter and a revised permit stating that the Permittee is authorized to produce the next Phase volume once the GM has determined that all monitoring, avoidance or mitigation measures have been completed by the Permittee to the satisfaction of the GM. Upon receiving the revised permit provisions, the Permittee shall implement any monitoring, avoidance or mitigation measures prescribed within the revised permit provisions. The Permittee shall not produce the new phase volumes of groundwater until the General Manager has issued a written formal statement describing that all monitoring, avoidance or mitigation measures have been completed by the Permittee to the satisfaction of the GM.

SECTION 7. PRODUCTION CHART: MONTHLY ALLOCATIONS AND DROUGHT CURTAILMENTS

The Permittee will be issued an initial production chart by the GM for the Phase I volume of the permit. The production chart will reflect the target monthly allocations as well as the applicable drought curtailments. As the permit is advanced with increased production phases, the Permittee will be provided information to produce an updated production chart reflecting the new authorized and curtailed volumes, and provide it to the GM.

When drawdown in the primary index well reaches a Lower Glen Rose or Cow Creek Compliance Level Trigger, the Permittee will be issued a revised production chart that reflects the permit compliance production curtailments that are in effect as a result of reaching that Compliance Level Trigger. This revised production chart shall replace all other previous production charts in place. Upon receipt of a mailed notification letter and the production chart, the Permittee must comply with the curtailed monthly pumping allocations to begin on the first day of the month following notification. The GM will assess whether drought curtailments are in effect at the time of the production chart revision and will select with whichever curtailment is more stringent at the time.

As the drawdown in the primary index well recovers to a water level more shallow than a particular Compliance Level Trigger, then the Permittee will no longer be required to comply with the revised production chart and may return to a production chart reflecting previous allocations and non-curtailment volumes.

SECTION 8. RESPONSE TEAM

The District will use its discretion to designate additional staffing resources or contracted consultants to carry out the tasks associated with the administration of this permit. Designated Response Team personnel, selected by the GM, will perform administrative and technical tasks including but not limited to well owner communication, coordination of response actions, coordination of implementation activities, drafting technical opinions, hydrogeological interpretations and coordination/oversight of well service contractors related to the implementation of monitoring, avoidance and mitigation efforts. Additionally, the Response Team will establish guidelines for the implementation of the avoidance and mitigation work. The Response Team designated representative(s) may include a third-party contractor and/or designated District staff personnel.

SECTION 9. FINANCIAL COMMITMENTS

The District in cooperation with the Permittee will commit the resources necessary to support and administer these permit provisions. The District has established a robust monitoring network and has installed a sophisticated multiport index well in preparation of monitoring efforts associated with this permit. The Permittee shall demonstrate a financial commitment to adequately fund the measures described in this permit, that for the District, are extraordinary and beyond the District's normal administrative operations, services, or budget. The provisions within this section describe the time, labor, equipment, tasks, resources, and costs associated with the continued administration of this permit and the associated prescribed phasing, monitoring, avoidance and mitigation measures.

1. **Response Team**

Within 30 days of permit issuance, the Permittee shall make a resource commitment to the District in the amount of \$250,000 for the first year expenses of the Response Team who will perform the tasks outlined in Section 8. After the initial contribution, sixty (60) days prior to each annual permit renewal, the General Manager will reassess these administrative and technical resource needs and will make commensurate and necessary adjustments to these financial commitments. Following that reassessment of the resource needs, the Permittee will submit the appropriate monetary resource commitment to the District in the amount determined by the GM no later than 30 days prior to each annual permit renewal. This reassessment will occur for the first 3 years that the permit is in effect, prior to each annual permit renewal or with each permit amendment. After the third year, the reassessment will occur every other year prior to annual permit renewal or with each permit amendment.

The District will use its discretion to designate additional staffing resources or a Third-party Contractor as its Response Team to carry out the tasks associated with the administration of this permit. The designated Response Team, selected by the GM, will perform administrative and technical tasks including but not limited to well owner communication, coordination of response actions, coordination of implementation activities, drafting technical opinions, hydrogeological interpretations and coordination/oversight of well service contractors related to the implementation of monitoring, avoidance and mitigation efforts. Specifically, the Permittee's financial commitment will fund the Response Team's time and effort to conduct the following:

- b. **Administrative oversight and coordination** (well owner communication, coordination of response actions, coordination of implementation activities related to avoidance or mitigation measures);
- b. **Field work** (sampling, measurements, equipping, installation, data collection, data retrieval, data processing and QAQC for hosted data); and
- c. **Technical review and evaluations** (analytical or numerical modeling, evaluations, technical opinions, hydrogeological interpretations).

To administer these functions the District may consider one of the following three Administrative Options to effectively implement the efforts described within these provisions. For the GM's consideration, the Permittee may submit a list of proposed Third-Party Contractor(s) who can oversee and carry out hydrogeological interpretations, technical opinions and oversight/coordination of well service contractors that provide well services, well repairs, well construction, and/or well equipment replacement.

Administration Options

1. **Full Administration by District** - The discretion of the GM would be to hire 1 to 2 full-time staff persons dedicated to the administration, oversight, and tasks described in these provisions.
2. **Partial Administration by District and Third-party Contractor(s)** - The discretion of the GM would be to hire 1 full-time or 1 part-time staff person dedicated to the partial administration, oversight and tasks described in these provisions. In addition to the internal staff person, the District would also utilize contracted consultant(s) to provide support with the partial administration, oversight and tasks described in these provisions.
3. **Full Administration by Third-party Contractor(s)** - The discretion of the GM would be to utilize a contracted consultant(s) to lead the full administration, oversight and tasks described in these provisions.

2. Investigation Work, Avoidance Work, and Mitigation Work.

In addition to the costs associated with implementing the administration, oversight, and tasks described in these provisions, the Permittee will be responsible for all costs associated with investigation work, avoidance work, and mitigation work. Investigation work may involve both a desktop review of databases and well records, and on the ground well investigations to verify the completion and pump-setting depth through tools and methods such as geophysical logs, down hole video, or pulling the pump. Any costs associated with the requirements of the Impact Avoidance Plan and the Mitigation Plan shall be incurred in full by the Permittee. The Permittee will be responsible for covering all costs associated with the work of other service contractors such as well logging companies, well drillers and pump installers. The Permittee will be directly invoiced for the work of these well service contractors.

3. New Monitor Wells

Within 6 months of permit issuance, or prior to the TCEQ pump test, whichever comes first, the Permittee shall permanently complete and fund the installation/ equipping of the following monitor wells:

- EP Cow Creek Monitoring Well (Western Well) – Permittee will cover the costs of drilling and completing a new Cow Creek well and equipping the well with monitoring equipment. The General Manager will select the appropriate monitoring equipment.
- EP Lower Glen Rose Monitoring Well (Odell Well No. 1) - Permittee will cover the costs modifying this well and equipping the well with monitoring equipment. The General Manager will select the appropriate monitoring equipment.
- EP Upper Glen Rose Monitoring Well - Permittee will cover the costs of drilling a new well and equipping the well with monitoring equipment. The General Manager will select the appropriate monitoring equipment.

4. Equipment

Within 30 days of permit issuance, the Permittee shall make a one-time initial resource commitment to the District in the amount of \$10,000 to cover costs associated with equipping and installing monitoring equipment. After the initial commitment, thirty (30) days prior to each annual permit renewal, the Permittee will make an annually recurring resource commitment to the District in the amount of \$2,500. The funds shall be used at the discretion of the General Manager and will be

applied to the purchase of the following items for the General Manager to continue administration of monitoring functions associated with the well monitoring:

- a. Multiport Transducers - A specialized transducer that is capable of monitoring multiple zones in the multiport well which serve as the index well. (Average cost: \$18,000 per unit).
- b. New or Replacement Standard transducer – A continuous data logging probe. (Average cost: \$700 - \$1000 per unit).
- c. WellNTell - Affordable low-cost monitoring equipment (e.g., WellNTell™) to be installed on potential monitor wells in the immediate area of the Permittee's well field. The District will help install and maintain the data, which will be made publicly available. Water-level data will be used by the District to monitor changes, if any, over time with production. (Average cost: \$900-\$1100 per unit).
- d. New or Replacement Elines (Average cost: \$700-\$900 per unit).
- e. New or Replacement probes (i.e. water quality probes, conductivity pressure transducers) to collect water quality data (Average cost: \$2100 -\$2200 per unit)

5. Well Services to Retrofit or Establish a Monitoring Well

Thirty (30) days prior to the annual permit renewal, the Permittee will make an annually recurring resource commitment to the District in the amount of \$3,500. The funds shall be used at the discretion of the District and will be applied to the administrative costs associated with extending the monitoring network and the well modifications or retrofitting work required to conform select wells for monitoring purposes.

6. Sampling Expenses

Thirty (30) days prior to the annual permit renewal, the Permittee will make an annually recurring resource commitment to the District in the amount of \$3,500. The funds shall be used at the discretion of the District and will be applied to the covering the administrative expenses associated with water quality sampling lab costs and analysis of monitor wells. Water quality sampling results will be used by the District to monitor water chemistry changes, if any, over time with production.

5. Telemetry, Software, Data Hosting

All Index wells (and its relevant multiport zones) identified in this permit and other priority monitor wells, identified by district staff, shall be equipped with telemetry equipment and set up with the appropriate data hosting software and platform such that data is publicly available in an online format. The Permittee shall be responsible for all necessary costs associated with purchasing/reimbursement, installing, maintaining, repairing, and replacing all telemetry monitoring equipment such as pressure transducers, related telemetry equipment, and cell/web hosting fees. All materials and equipment shall be new, free from defects, and fit for the intended purpose. These costs are associated with equipping select wells that serve as a critical monitoring location for this permit. Any expenses for the above described work will be incurred by the Permittee at no cost to the District or will be reimbursed to the District within 30 days of the District incurring the expense.

Thirty (30) days prior to the annual permit renewal, the Permittee will make an annually recurring resource commitment to the District in the amount of \$2,000. The funds shall be used at the discretion of the District and will be applied to cover associated with data hosting software and online platforms. The purchase of additional software is necessary because the District does not have the software functionality that is necessary to manage the data collection and processing associated

with this permit. The required software should be designed specifically for time series monitoring purposes and should have functionality for processing data and displaying data.

APPENDIX A: COMPLIANCE MONITORING PLAN

- SECTION 1. PURPOSE
- SECTION 2. MONITOR WELL NETWORK
- SECTION 3. MONITORING OBJECTIVES
- SECTION 4. TIMELINE FOR INSTALLATION OF MONITOR WELLS
- SECTION 5. MONITOR WELL ACCESS
- SECTION 6. MAINTENANCE AND REPAIR OF MONITOR WELLS
- SECTION 7. PRIMARY INDEX WELLS
- SECTION 8. TRIGGERS AND RESPONSE ACTIONS

FIGURE A-1. MAP OF MONITOR WELL NETWORK

FIGURE A-2. DIAGRAM OF INDEX WELL TRIGGERS

SECTION 1. PURPOSE

This Compliance Monitoring Plan (CMP) serves to prescribe the protective measures and details relating to designated index well(s), permit compliance triggers, mandatory compliance response actions, and a monitor well network with installation of monitoring wells. These provisions further describe the details of the index well(s) to be employed the associated Response Actions for each Permit Compliance Level. Planning and implementation of all permit compliance actions shall be closely coordinated with the GM to ensure that the described measures are implemented consistently with the GM's expectations.

SECTION 2. MONITOR WELL NETWORK

The District has established a robust monitoring network and has installed a sophisticated multiport index well in preparation for monitoring efforts associated with this permit. The District will continue to maintain an adequate monitor well network, and coordinate the installation of monitoring equipment in select wells from the District's monitor well network. However, the Permittee will be responsible for purchasing or reimbursing the District for any costs associated with equipping, maintaining, repairing, and replacing all monitoring equipment such as pressure transducers, related telemetry equipment, and cell/web hosting fees. Wells identified in the monitor well network are subject to change due to access or other circumstances beyond the control of the District or the well owner, and may be replaced by alternate monitoring sites. Figure A-1 depicts the monitor well network.

SECTION 3. MONITORING OBJECTIVES

The compliance monitoring plan objectives for this permit focus on establishment of a monitor well network and the collection of data and information from the various aquifers, for the purpose of informing evaluations and decisions pertaining potential unreasonable impacts. In addition, the data will be used to better characterize the hydrogeology for the aquifers and ultimately improve modeling tools. The designated methods for implementing these objectives and achieving an adequate monitoring program for this permit include but are not limited to the following:

1. **Prioritize the establishment of an index well system with compliance triggers that are protective of the formations with the highest vulnerability for unreasonable impacts.**
 - a. Highest Risk – Cow Creek Formation (Middle Trinity Aquifer)
 - b. Moderate Risk – Lower Glen Rose Formation (Middle Trinity Aquifer)
 - c. Low Risk – Upper Glen Rose Formation (Upper Trinity); and Sligo (Lower Trinity Aquifer)

2. **Continue data collection and expansion of the monitor well network.** In general the planned data collection efforts will be tiered with more emphasis focused on the areas and formations that have a higher risk for unreasonable impacts.
 - a. Monitor and measure - *Water Levels, Water Quality, Well Yields*
 - b. Prioritize, establish, and maintain an adequate level of monitoring locations that are spatially and hydrologically representative of areas that have the highest vulnerability for unreasonable impacts:
 - i. Geographic Areas
 - o Higher Risk – neighborhoods within the priority areas (*Rolling Oaks, Las Lomas, Sierra West, Escondida, River Mountain Ranch, Loneman Mt* etc)
 - o Lower Risk – neighborhoods beyond the priority areas; neighborhoods East of EP well field
 - ii. Hydrologic Formations
 - o Higher Risk – Cow Creek Formation (Middle Trinity Formation)
 - o Moderate Risk – Lower Glen Rose Formation (Middle Trinity)
 - o Lower Risk – Upper Glen Rose (Upper Trinity); Sligo (Lower Trinity)
 - c. Instrument select wells for continuous monitoring, with telemetry and hosted data
 - d. Instrument select wells for continuous monitoring, with periodic data downloads
 - e. Identify select wells for periodic or as needed manual monitoring (i.e. drought, aquifer testing)

3. **Establish monitoring efforts for springs and rivers.**
 - a. Establish or drill new monitor wells up gradient of Jacobs Well Spring (JWS) and develop correlation to spring flow.
 - b. If necessary, perform additional monitoring efforts beyond the currently existing USGS flow monitor stations.
 - c. Cooperatively collaborate with other entities to establish a new monitoring well near JWS.

4. **Continue collection and evaluation of data.**
 - a. Employ various methods for data collection (*telemetry, transducers, sonic, manual eline*).
 - b. Collect data at appropriate frequency and adjust frequency during key situations (i.e. drought, aquifer testing).
 - c. Routinely retrieve, process, evaluate data and summarize conclusions.
 - d. Assess regularly reported water levels, pumping rates and water quality from the Permittees’s production wells.
 - e. Make data publically available in an online format.

SECTION 4 .TIMELINE FOR INSTALLATION OF MONITOR WELLS

Within 6 months of permit issuance, or prior to the TCEQ pump test, whichever comes first, the Permittee shall fully complete and fund the installation and equipping of the following monitor wells:

1. EP Cow Creek Monitoring Well (Western Well) – Permittee will cover the costs of drilling a new Cow Creek well and equipping the well with monitoring equipment. The General Manager will select the appropriate monitoring equipment.
2. EP Lower Glen Rose Monitoring Well (Odell Well No. 1) - Permittee will cover the costs of modifying this well and equipping the well with monitoring equipment. The General Manager will select the appropriate monitoring equipment.
3. EP Upper Glen Rose Monitoring Well - Permittee will cover the costs of drilling a new well and equipping the well with monitoring equipment. The General Manager will select the appropriate monitoring equipment.

Within 6 months of permit issuance, or prior to the TCEQ pump test, whichever comes first, the Permittee shall fully fund the installation of monitoring equipment at the following wells:

1. Primary Index Well – The Permittee will cover costs associated with equipping and installing monitoring equipment in the Primary Index well. The General Manager will select the appropriate monitoring equipment.
2. EP Public Water Supply Wells - The Permittee will cover costs associated with equipping and installing monitoring equipping in all the public water supply wells. The PWS wells shall be equipped with a flow cell device capable of measuring water quality parameters. The General Manager will select the appropriate monitoring equipment.

All monitoring wells and equipment shall be installed within 6 months of permit issuance or prior to the TCEQ pump test, whichever comes first. The District is responsible for compiling, collecting, and archiving data from the monitor wells. The Permittee is responsible for compiling, collecting, and archiving data from its pumping and non- pumping wells.

SECTION 5. MONITOR WELL ACCESS

1. The Permittee agrees to ensure 24-hour access by authorized District personnel to each monitoring well within the Permittee’s well field, and will cooperate with the District in its efforts to secure the right to 24-hour access to third-party owned monitoring wells, for data collection and water quality sampling.
2. If there are not an adequate number of existing wells and landowners willing to cooperate and allow wells to serve as monitor wells, then the Permittee shall be responsible for drilling and completing an adequate number of monitoring wells necessary to monitor the effects of pumping on different aquifer formations.

SECTION 6. MAINTENANCE AND REPAIR OF MONITORING WELLS

1. The domestic monitor well owner(s), not the Permittee nor the District, are responsible for normal wear and tear, well maintenance, pump servicing, or other repairs resulting from the owners' normal use of the well.
2. The Permittee shall be responsible for repairing and replacing any part of its own monitor wells and equipment. If repairs or replacement of any part of those wells are reasonably necessary or convenient for the continuous and adequate performance of the well, the General Manager shall provide notice and the Permittee shall make repairs and replacements as soon as practicable.
3. The Permittee shall be responsible for expenses and/or reimbursement for maintaining, repairing, and replacing all monitoring equipment such as pressure transducers, related telemetry equipment, and cell/web hosting fees. All materials and equipment shall be new, free from defects, and fit for the intended purpose.

SECTION 7. PRIMARY INDEX WELL

The District has designed and incurred full costs to install a sophisticated multiport monitoring well. This multi port well is designated a primary index well (Rolling Oaks Index Well) for the purpose of monitoring aquifer conditions in the Middle Trinity Aquifer and for establishing Permit Compliance Levels. The Rolling Oaks Index Well is completed as a multiport scientific monitoring well with multiple monitoring zones in the Upper and Middle Trinity Aquifer. The well is located in Hays County (30.0508417, -98.0220833) approximately 0.25 miles from the Permittee's well field. These provisions further define the Permit Compliance Levels, Response Actions, and Triggers specific to the primary index well (see Figure A-2).

Based on additional science and data that becomes available, such as through the TCEQ aquifer test, if the primary index well is determined to no longer be an adequate or accessible well for compliance purposes and requires change, the permit may be amended by the GM, after consultation with EP, without public notice and hearing, to designate a new or additional primary index well(s). The Permittee may be required to cover in full or in part, all costs associated with establishing a new or an additional adequate index well.

1. Within 6 months of permit issuance, or prior to the TCEQ pump test, whichever comes first, the Permittee shall fully fund the installation of monitoring equipment at the Primary Index well.
The Permittee, in coordination with the GM, shall be responsible for purchasing and ensuring the proper installation of monitoring equipment necessary to collect and transmit water level data to a website accessible to the Permittee and the GM for the purpose of evaluating compliance with the Trigger/ Permit Compliance Levels.
2. The District will operate and maintain the index well and equipment. The Permittee shall be responsible for repair and replacement costs for all monitoring equipment such as pressure transducers, related telemetry equipment, and cell/web hosting fees. All materials and equipment shall be new, free from defects, and fit for the intended purpose. Any expenses for the above-described work will be incurred by the Permittee at no cost to the District.

3. The District is responsible for normal wear and tear, well maintenance, *Westbay* monitoring equipment, or other repairs resulting from the District's normal use of the well.
4. The District and Permittee may consider cost sharing the repairs or replacement of any part of the index well that is reasonably necessary or convenient for the continuous and adequate performance of the well for monitoring purposes.

SECTION 8. TRIGGERS AND RESPONSE ACTIONS

The following Permit Compliance Levels, Response Actions, and Triggers apply to the Rolling Oaks Index Well, the designated primary index well. If data collected from the index wells has been determined by the GM to be inaccurate, that data shall not be used to determine compliance with these permit provisions.

When the water level in the primary index well approaches a designated Trigger, the GM will conduct an evaluation of the data to assess the actual data and actual impacts on the aquifer as compared to the modeled effects and impacts of pumping. The GM will coordinate with the Permittee to schedule a meeting and to review the data. This meeting will also serve to communicate details about the relevant Response Actions in place, as well as to communicate the need for the Permittee to prepare for the upcoming Response Actions that will be required if deeper Triggers are subsequently reached.

When the water level in the primary index well reaches a designated Trigger, the GM will notify the Permittee via certified mail within ten business days of reaching the Trigger. This notification will include the revised production chart following mandatory curtailments applied to the authorized volume. Upon receipt of the notification and the revised pumping chart, the Permittee must provide the GM with a signed revised pumping chart and must comply with the curtailed monthly pumping allocation to begin on the first day of the month following notification.

Permit Compliance Level 1 – Evaluation

Trigger 1 - A 10-day rolling average of the daily minimum to depth water level, that is equal to or greater than 350 ft below land surface (bls) for the Lower Glen Rose or 500 ft bls for the Cow Creek.

Response Action - When drawdown in the Rolling Oaks Index Well reaches the 10 day average water level that is equal to or greater than 350 ft below land surface (bls) for the Lower Glen Rose or 500 ft bls for the Cow Creek, the District will conduct an evaluation of the data to assess the actual impacts of pumping. The District will have a technical meeting with the Permittee to discuss the evaluation. The evaluation will utilize best available science and methods to consider factors and data including, but not limited to:

- a. Manual confirmation of water level data,
- b. Calibration and drift of pressure transducer,
- c. Actual pumping rate and associated drawdown,
- d. Drought conditions,
- e. New local interference from pumping both inside and outside of the District,

- f. Water-level trends in other monitor wells, and
- g. Revised aquifer parameters (e.g. transmissivity, storativity).

Permit Compliance Level 2

Trigger 2 - A 10-day rolling average of the daily minimum to depth water level, that is equal to **or** greater than 400 ft below land surface (bls) for the Lower Glen Rose or 660 ft bls for the Cow Creek.

Response Action - When drawdown in the Rolling Oaks Index Well reaches the 10 day average water level that is equal to or greater than 400 ft below land surface (bls) for the Lower Glen Rose or 660 ft bls for the Cow Creek, the Permittee shall comply with a temporary monthly curtailment of 20% of authorized permit volume. When the drawdown in the Rolling Oaks Index Well recovers to a 10-day rolling average water level that is less than 400 ft below land surface (bls) for the Lower Glen Rose or 660 ft bls for the Cow Creek, the mandatory temporary monthly curtailment of 20% shall be completely relaxed to 0%. Upon that recovery, authorization for the full current phase permit volume will be restored, provided that drought-triggered curtailments do not apply.

Permit Compliance Level 3

Trigger 3 - A 10-day rolling average of the daily minimum to depth water level, that is equal to **or** greater than 450 ft below land surface (bls) for the Lower Glen Rose or 680 ft bls for the Cow Creek.

Response Action - When drawdown in the Rolling Oaks Index Well reaches the 10 day average water level that is equal to or greater than 450 ft below land surface (bls) for the Lower Glen Rose or 680 ft bls for the Cow Creek, the Permittee shall comply with a temporary monthly curtailment of 40% of authorized permit volume. When the drawdown in the Rolling Oaks Index Well recovers to a 10-day rolling average water level that is less than 450 ft below land surface (bls) for the Lower Glen Rose or 680 ft bls for the Cow Creek, the mandatory temporary monthly curtailment of 40% shall be relaxed to 20%. Upon that recovery, authorization for the full current phase permit volume will be restored, provided that drought-triggered curtailments do not apply.

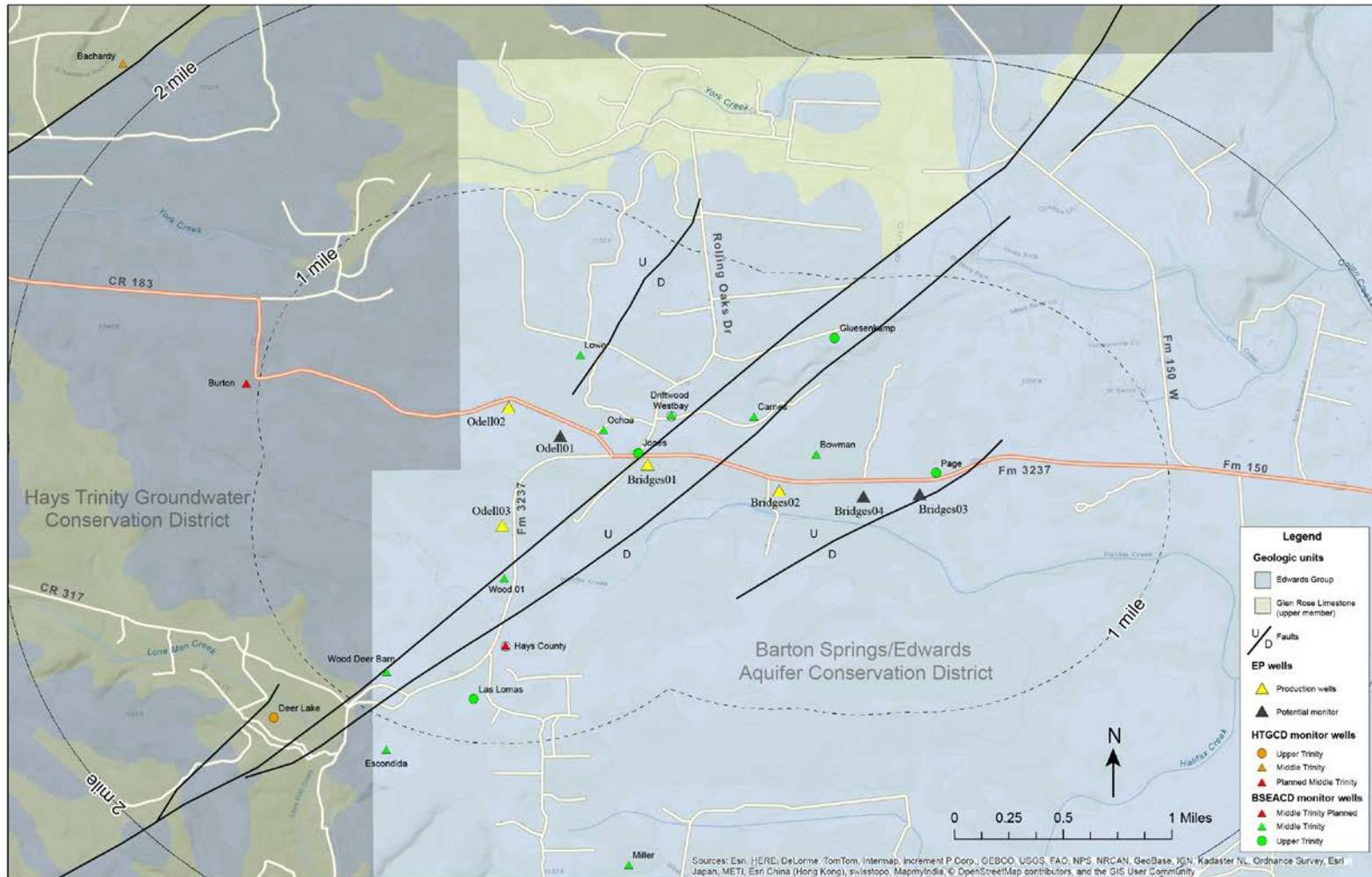
Permit Compliance Level 4

Trigger 4 - A 10-day rolling average of the daily minimum to depth water level, that is equal to **or** greater than 500 ft below land surface (bls) for the Lower Glen Rose or 700 ft bls for the Cow Creek.

Response Action - When drawdown in the Rolling Oaks Index Well reaches the 10 day average water level that is equal to or greater than 500 ft below land surface (bls) for the Lower Glen Rose or 700 ft bls for the Cow Creek, the Permittee shall comply with a temporary monthly curtailment of 100% of authorized permit volume. When the drawdown in the Rolling Oaks Index Well recovers to a 10-day rolling average water level that is less than 500 ft below land surface (bls) for the Lower Glen Rose or 700 ft bls for the Cow Creek, the mandatory temporary monthly curtailment of 100% shall be relaxed to 40%. Upon a full recovery above Trigger 1, authorization for the full current phase permit volume will be restored, provided that drought-triggered curtailments do not apply.

FIGURE A-1. MAP OF MONITOR WELL NETWORK

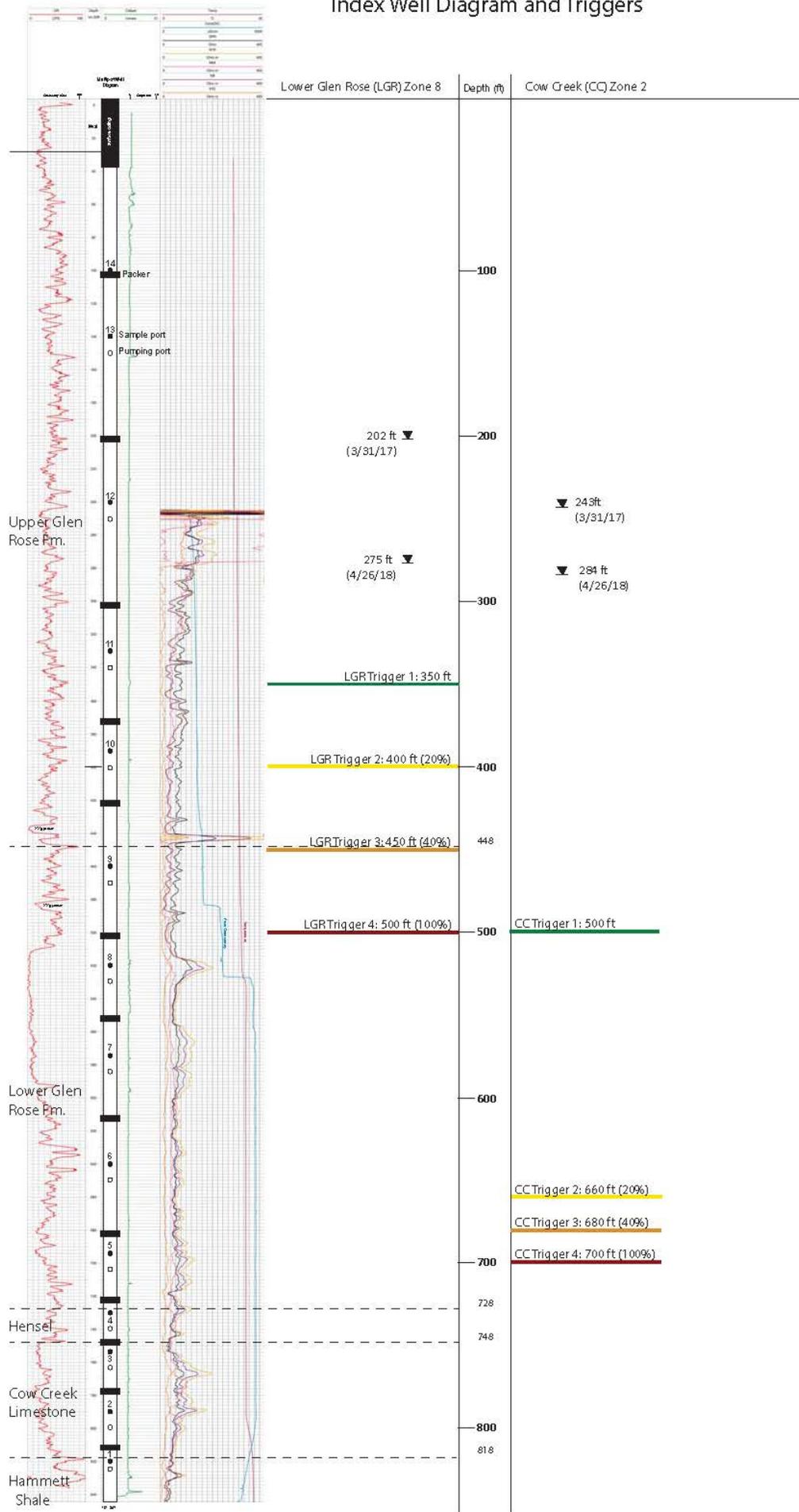
Central Hays County Monitor Well Network Map



Note: Monitor wells shown are instrumented to record frequent water level measurements, or visited frequently for manual measurements. The BSEACD full monitoring network is not shown, nor additional monitor wells with less frequent data. BSEACD map date May 5, 2019.

FIGURE A-2. WELL DIAGRAM OF INDEX WELL TRIGGERS

Index Well Diagram and Triggers



APPENDIX B. IMPACT AVOIDANCE PLAN

- SECTION 1. PURPOSE
- SECTION 2. ELIGIBILITY CRITERIA
- SECTION 3. PROCESS FOR ELIGIBILITY REVIEW
- SECTION 4. TIMELINE FOR INVESTIGATIVE WORK AND AVOIDANCE WORK
- SECTION 5. IMPLEMENTATION OF INVESTIGATIVE WORK AND AVOIDANCE WORK
- SECTION 6. POSSIBLE AVOIDANCE MEASURES FOR ELIGIBLE WELLS

FIGURE B-1. MAP OF THE AVOIDANCE PRIORITY AREAS

SECTION 1. PURPOSE

This Impact Avoidance Plan (IAP) serves to prescribe the protective measures and commitments required of the Permittee to avoid *anticipated* unreasonable impacts in priority areas with a greater risk for impacts. Avoidance measures include preemptive well modifications such as lowering pumps, replacing pumps, and drilling replacement wells. Planning and implementation of all avoidance actions shall be closely coordinated with the GM to ensure that the described measures are implemented consistently with the GM's expectations.

The use of *Avoidance Priority Areas* is a critical adaptive management tool that will enable the District to evaluate data and anticipate potential impacts so that the District can proactively provide the public with avoidance measures in advance of on any impact occurrence. The District will rely on actual monitoring data to inform the designation or expansion of priority areas. Avoidance measures will be implemented in areas where data supports the potential for impacts to occur. Wells located outside of a priority area have a low risk for unreasonable impacts to occur during the authorized production phase and therefore preemptive avoidance measures are not necessary. In the event that a well owner experiences an unreasonable impact, the mitigation measures described in Appendix C of these provisions will be implemented.

The *Avoidance Priority Areas* are described below and are subject to expansion upon each authorized phase or at any point during the life of the permit if the GM determines through evaluations and investigations, using best available science, that production from the permitted wells has a potential to cause "unreasonable impacts" in an extended area. The GM may amend these special provisions and expand the priority areas, without notice and opportunity for hearing if the GM anticipates a new or increased potential risk for additional wells, expanded geographic areas or hydrogeological areas to experience an unreasonable impact.

SECTION 2. ELIGIBILITY CRITERIA

All existing wells that meet the eligibility criteria set forth herein shall be considered to be "Eligible Wells" for investigative and/or avoidance measures during the term of the permit. Factors to be considered in determining eligibility include but are not limited to:

1. **Well Registration** - A well owner must have registered the allegedly impacted well or must be willing to immediately register their well such that timely avoidance measures can be provided. Wells

located outside of District boundaries are not required to be registered with the District but will be eligible for avoidance if all criteria are met.

2. **Natural Variability in Water Levels** - The well must have been in an operational condition such that it was adequately completed and adequately equipped to account for water-level drawdown attributed to drought conditions, seasonal increases in local pumping, normal pumping usage, and pumping from neighboring wells in the area of influence.
3. **Time of Occurrence** - The well was capable of producing groundwater and functioning as an adequately completed operational well prior to the Permittee commencing the authorized production.
4. **Avoidance Priority Areas** – An Avoidance Priority Area is a geographically and hydrogeologically delineated area that is identified as having a potentially higher risk for unreasonable impacts such that it is a priority for the implementation of avoidance or mitigation measures. These priority areas are described below.
 - a. **Avoidance Priority Area 1 (all wells investigated)** - The location of the eligible well is within Priority Area 1 generally reflected on the map included as Figure B-1. All wells within Priority Area 1 are eligible for investigative work if key data and well records are not available for that well. Wells that are located outside of the District boundaries, including wells within Hays Trinity Groundwater Conservation District, will be eligible for the prescribed investigative work as described in Sections 4 and Section 5 below.

In addition to any appropriate investigation work that is to be completed on eligible wells, some wells in Avoidance Priority area 1 are also eligible to receive avoidance work as described in Section 6. Depending on information that is collected in the investigation on the total depth of the well and the production zones in which the well is completed, certain wells as described below will be eligible for avoidance work in addition to the investigation work.

- i. Upper Glen Rose Wells - these wells are eligible for investigation work only.
 - ii. Lower Glen Rose Wells - these wells are eligible for both investigation work and avoidance work.
 - iii. Cow Creek Wells - these wells are eligible for both investigation work and avoidance work.
 - iv. Hybrid Well Completions – Wells completed into and producing from multiple formations as outlined below are eligible for both investigation work and avoidance work.
 - A well completed into Upper Glen Rose and Lower Glen Rose formations.
 - A well completed into Upper Glen Rose, Lower Glen Rose, and Cow Creek formations.
 - A well completed into Lower Glen Rose and Cow Creek formations.
- b. **Avoidance Priority Area 2 (avoidance for Cow Creek wells)** - The location of the eligible well is within Priority Area 2 generally reflected on the map included as Figure B-1. Certain wells within Priority Area 2 that are located outside of the District boundaries, including wells within Hays Trinity Groundwater Conservation District, will be eligible for the prescribed avoidance work for Priority Area. The well is eligible only if there is documentation to support and confirm that the

well depth is into the Cow Creek formation. Hybrid wells completed into the Cow Creek formation and producing from multiple production intervals are eligible as well.

SECTION 3. PROCESS FOR ELIGIBILITY REVIEW

Before implementing investigation work or avoidance work in the priority areas the following process must be completed to the satisfaction of the GM in order to verify eligible wells and potentially eligible wells.

1. Step 1: Public Notification and Well Registration

Timeline: Permittee will complete within 60 days of permit issuance. The permittee will coordinate with the General Manager on all related tasks.

- a. The General Manager shall have an opportunity to review and comment on any template notices that the Permittee mails out to well owners.
- b. The Permittee will provide public notices by mail to all property owners within the designated avoidance priority areas, including well owners known to have wells potentially impacted by the Permittee's groundwater production. The Permittee will coordinate with the GM to develop a list of such landowners from the Hays County Appraisal District.
- c. The Permittee will publish in a newspaper in general circulation in Hays County, a public notice for well owners to register wells as the first step to potentially receive avoidance work.
- d. The GM will provide a copy of the Permittee's IAP on the District website and at the District Office.
- e. The Permittee will provide signs for the following neighborhoods within a two-mile radius of the Permittee's well field: *Las Lomas, Rolling Oaks, Sierra West, River Mountain, and Escondida*.
- f. Permittee shall provide the GM with copies of documentation evidencing the Permittee's outreach attempts to the well owner(s).
- g. The District will host a well registration event in the priority areas.

2. Step 2: Review Data on Eligible Wells

Timeline: Permittee will complete within 120 days of permit issuance. The permittee will coordinate with the District on all related tasks.

- a. The General Manager will provide all well registration datasets to the Permittee for its review and further compilation in verifying eligibility.
- b. The General Manager's designated Response Team will review and compile lists of all confirmed eligible wells per the eligibility criteria of each avoidance priority area.
- c. For registered wells in which there are no well records to confirm well depth, pump depth, and well completion information, the Permittee will assess the existing information and will do due diligence to search state well records and conduct desktop evaluations to determine the well depth, pump depth, and well completion of each registered well within the two priority areas.
- d. For registered wells for which no complete well records could be found, the Permittee in coordination with the General Manager's designated Response Team shall coordinate appropriate investigative work and appropriate avoidance work as described in Section 4 below.

SECTION 4. TIMELINE FOR INVESTIGATIVE WORK AND AVOIDANCE WORK

If the Permittee fails to comply with the timeline and implementation schedule of the two priority areas, the GM may pursue enforcement actions, including but not limited to seeking a Board Order to immediately revoke, suspend, terminate, cancel, modify, or amend the permit in whole or in part pursuant Rule 3-1.13 (A).

1. Avoidance Priority Area 1(all wells investigated)

Upon permit issuance, the Permittee shall implement the investigative work and avoidance work in Priority Area 1, prior to commencing any groundwater production. After all of the Priority Area 1 investigative work and avoidance work has been completed to the satisfaction of the GM, the Permittee may proceed with commencing Phase 1 groundwater production.

All wells within Priority Area 1 are eligible for investigative work if key data and well records are not available for that well. In addition to any appropriate investigation work that is to be completed on eligible wells, some wells in Avoidance Priority area 1 are also eligible to receive avoidance (see *Section 2 Eligibility Criteria*).

The Permittee in coordination with the General Manager's designated Response Team will coordinate well owner communication and on the ground well investigation work as prescribed for the priority area. Where a coordinated investigation is necessary due to a lack of well records or well completion information on the registered well, such efforts will be coordinated by the General Manager's designated Response Team and with the cooperation of the well owners. An on the ground well investigation will be performed to verify the completion and pump-setting depth through tools and methods such as geophysical logs, downhole video, or pulling the pump. Once the investigative effort is complete, the appropriate avoidance work will be implemented and any costs associated with that additional avoidance work shall be covered in full by the Permittee.

The well owner and Permittee shall agree in writing, that the Permittee will directly cover all necessary costs to investigate the well owner's well completion and provide the appropriate avoidance work. The General Manager shall have an opportunity to review and comment on any template agreements that the Permittee mails out to well owners.

2. Avoidance Priority Area 2 (avoidance work for Cow Creek Wells)

The Permittee shall implement and complete the avoidance work in Priority Area 2, within the first 6 months of commencing Phase 1 groundwater production. Only after all of the Priority Area 2 avoidance work has been completed to the satisfaction of the GM, may the Permittee proceed with a volume increase request.

a. Registered Wells Confirmed to be Eligible Cow Creek Wells

The Permittee in coordination with the District's designated Response Team will coordinate well owner communication and on the ground avoidance work for eligible wells (confirmed Cow Creek wells) as described in the eligibility criteria for this avoidance priority area.

b. Registered Wells with Unconfirmed Total Depths (potentially eligible Cow Creek wells)

Where a coordinated on the ground investigation is necessary to determine total well depth, production zone or pump setting, due to a lack of well depth records or well completion

information on the registered well, the owner of the potentially eligible well shall be provided with the following options to consider:

Options for Registered Wells (in Priority Area 2) with Unconfirmed Total Depths

Option 1 – The Permittee and well owner split investigative expenses. In the case that a well owner is willing to equally split the costs associated with investigative efforts, the Permittee shall agree in writing with the well owner to equally split the total cost to investigate the well completion. Under the oversight of the GM’s Response Team, an on the ground well investigation will be performed to verify the completion and pump-setting depth through tools and methods such as geophysical logs, down hole video, or pulling the pump. Such efforts will be coordinated by the District’s designated Response Team and with the cooperation of the well owners. Once the total depth is known, the appropriate avoidance work will be implemented for confirmed Cow Creek wells and any costs associated with that additional avoidance work shall be covered in full by the Permittee.

- i. By agreement the Permittee and the well owner, shall split costs such that the Permittee shall enter into an agreement for each party to directly pay for their portion of the work.
- ii. By agreement the Permittee and the well owner, will split the costs associated with the investigative work, equipment or components (e.g. replacement pump, additional drop pipe, work related to well houses, temporary water supplies etc.) that are necessary to sufficiently complete the investigative work. Following the investigative work the well shall be restored to its original state or avoidance work will be implemented on the well as appropriate, and costs for that avoidance work will be covered in full by the Permittee.
- iii. An agreement between the Permittee and well owner, to perform investigative work will not be a guarantee that the well owner will receive avoidance work. Avoidance work will only be implemented as appropriate for that well and as determined by the General Manager.

Option 2 – The Permittee covers expense of mitigation when warranted. To avoid upfront costs, the well owner can forgo any investigative work, meaning that the well will continue to have a lack of well depth records or well completion information. Should an actual unreasonable impact occur, that can be reasonably attributed to the Permittee’s production, then mitigation actions will be implemented and all expenses will be fully paid by the Permittee. The District will rely on actual monitoring data to inform the designation or expansion of priority areas so that avoidance work can be implemented before an impact occurs. Avoidance measures will be implemented in areas where data supports the potential for impacts to occur. Wells located outside of a priority area have a low risk for unreasonable impacts to occur during the authorized production phase.

SECTION 5. IMPLEMENTATION OF INVESTIGATIVE WORK AND AVOIDANCE WORK

1. Step 1: Notification to Accept Investigative and/or Avoidance Work

- a. After a review of the eligibility criteria is completed, the Permittee in coordination with the District’s designated Response Team, will provide written notification letters, through certified mail, to any registered well owner that is determined to have a well that is eligible or is potentially eligible for investigative work and/ or avoidance work. The written notification letter

will describe the possible investigative and/or avoidance work, the intended timeline, and scope of work that the Permittee is required to provide to the well owner. **A well owner who receives this notice, must timely respond in writing to the Response Team and willing enter into an agreement with the Permittee in order to receive investigative/avoidance work.**

- b. The Response Team will develop a list of any well owners that have indicated they are not agreeable to receive investigative and/or avoidance work, or that have failed to timely respond to the notification.
- c. The District shall have an opportunity to review and comment on any template correspondence or template agreements that the Permittee enters into with well owners.

2. Step 2: Implementation of Investigative and/or Avoidance Work

- a. The Response Team in cooperation with the well owner will decide which investigative and/or avoidance work is appropriate and will timely schedule completion of the work.
- b. The Permittee will be responsible for all costs associated with the investigative and/or avoidance work prescribed in the IAP, equipment or components (e.g. replacement pump, additional drop pipe, work related to well houses, temporary water supplies etc.) that are necessary to sufficiently complete the work.
- c. The Permittee shall provide investigative and/or avoidance work for all well owners that are known to have eligible wells and are cooperative and willing to receive the work.
- d. The Response Team will provide regular status updates to the GM and Permittee related to the avoidance work efforts and investigations that take place.
- e. The Response Team in cooperation with the well owner will deem when the investigative and/or avoidance work is satisfactorily complete. There shall be documented warranties in place for all work completed by contractors.

SECTION 6. POSSIBLE AVOIDANCE MEASURES FOR ELIGIBLE WELLS

1. Lowering the Submersible Pump

If the well is deep enough but the submersible pump is not set deep enough to accommodate projected water level impacts, the Permittee will fund the cost for a licensed wells service contractor to cause the existing submersible pump to be lowered. Pumps shall be set at an adequate level no less than 30 ft below the top of the water-bearing formation in the aquifer and below Level 4 Compliance Triggers. If lowering the existing pump will cause it to operate outside manufacturer's specifications, the Permittee will provide, at its cost, an appropriately sized submersible pump. The Permittee will not be responsible for bringing a well into compliance with State or District standards except as necessary and as part of the scope of avoidance work.

2. Drilling a Replacement Well

If the existing well is not deep enough to lower the submersible pump to accommodate for projected water level impacts, the Permittee, at its cost, will drill a replacement well to accommodate water level impacts attributed to the Permittee's production. A well owner may have the option to drill to a deeper formation. After the replacement well is completed and operable, the existing well will be plugged in accordance with applicable state and local regulations regarding abandoned wells.

3. Connection to an Existing Water Purveyor

In an instance where drilling a replacement well is necessary, but not feasible, the Permittee will provide the affected well owner the opportunity to connect to an existing public water supply

purveyor. The Permittee will pay for the initial cost of connection to the potable water service. Monthly bills from the water purveyor shall be paid by the affected well owner.

4. Monetary Settlement

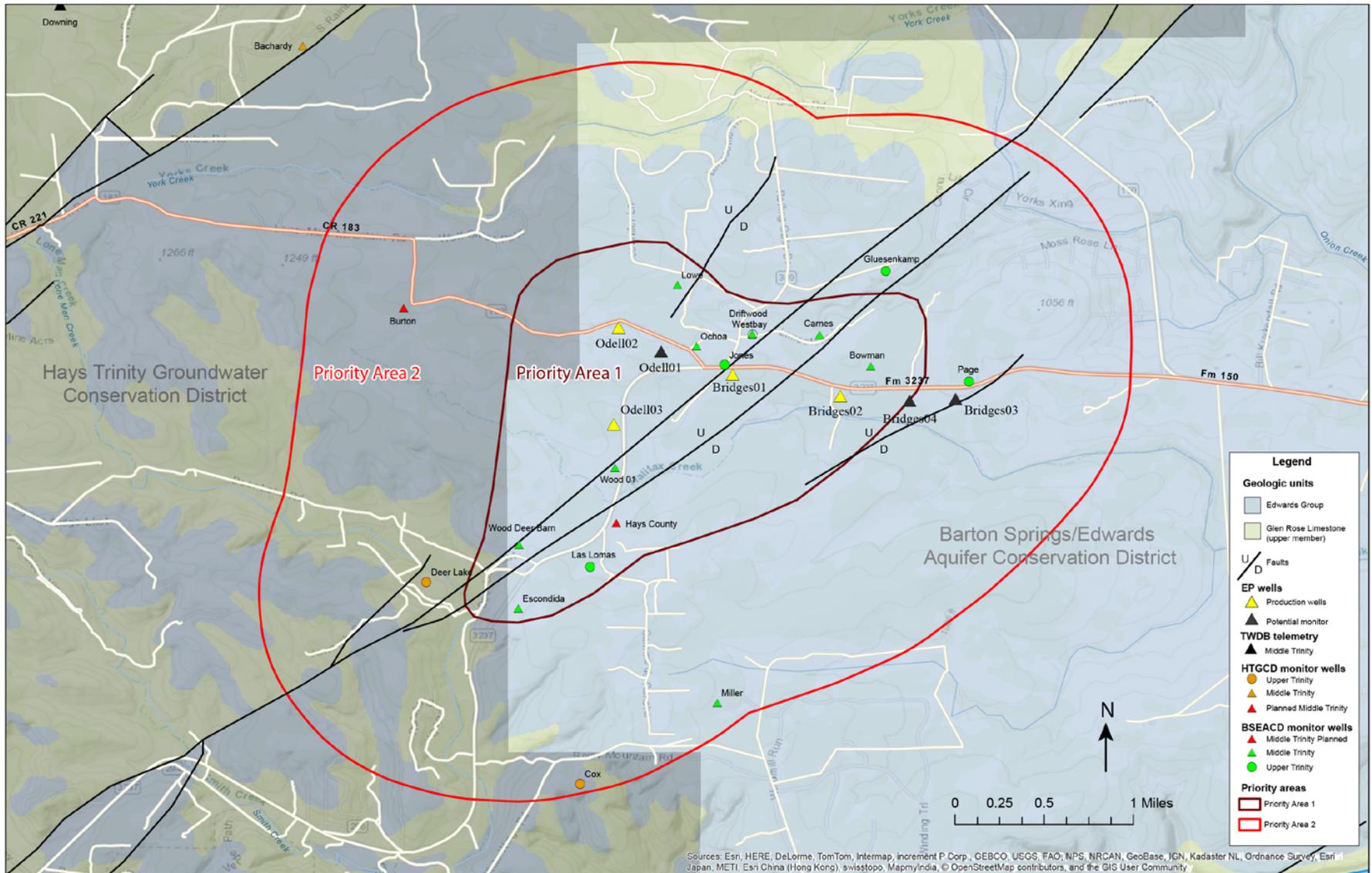
The Permittee may elect to provide a monetary settlement to an affected well owner unreasonably impacted by groundwater production from the Permittee's well field in lieu of the Permittee hiring a licensed well service contractor to undertake modifications performed on their well to make it capable of accommodating projected water level impacts attributed to the Permittee's pumping. Monetary settlements will be provided only to address issues relating to water level fluctuation or water quality issues. A well owner and the Permittee may cooperatively elect for a monetary settlement in lieu of other avoidance measures. Any monetary settlement will be sufficient to cover all costs associated with the replacement of the existing well. The affected well owner must agree in writing to a monetary settlement in lieu of work being undertaken by a licensed contractor.

5. Rainwater Collection System

Well owners may elect to have a rainwater harvesting system installed for domestic/potable water supply in lieu of other avoidance measures. The permittee will be responsible for all costs associated with installing a new rainwater harvesting system, including adequate equipment, storage and treatment.

FIGURE B-1. MAP OF THE AVOIDANCE PRIORITY AREAS

Central Hays County Monitor Well Network and Priority Areas



Note: Monitor wells shown are instrumented to record frequent water level measurements, or visited frequently for manual measurements. The BSEACD full monitoring network is not shown, nor additional monitor wells with less frequent data. Priority Area 1 corresponds to the 100 ft drawdown contour from the EP aquifer test, and Priority Area 2 is 1 mile buffer from Priority Area 1. BSEACD map date May 5, 2019.

APPENDIX C. MITIGATION PLAN

SECTION 1.	PURPOSE
SECTION 2.	ELIGIBILITY CRITERIA
SECTION 3.	PROCESS FOR REVIEW OF MITIGATION ELIGIBILITY
SECTION 4.	WELL OWNER SELF REMEDY
SECTION 5.	MITIGATION MEASURES
SECTION 6.	FINANCIAL COMMITMENT FOR MITIGATION ACTIONS
SECTION 7.	STIPULATIONS RELATED TO MITIGATION ACTIONS

SECTION 1. PURPOSE

The General Manager found that the permit when granted in full could have an unreasonable impact on existing wells over the long term. Consistent with the Permittee's understanding of the District's desire to manage total groundwater production on a long-term basis in a manner to avoid the occurrence of any such unreasonable impacts, the Permittee has submitted plans to avoid and address the potential for any such unreasonable impacts. The Permittee's plans were developed in cooperation with the GM and staff to eliminate the potential for unreasonable impacts and considered all of the following:

1. Evaluations of the potential for unreasonable impacts using the best available science to anticipate such impacts;
2. Incorporation of a ongoing monitoring and data collection efforts to measure the actual impacts of the pumping project on the aquifer(s) over time once the Permittee commences production under its Permit,
3. Incorporation of specific response measures (temporary adjustments to groundwater production) to be triggered by prescribed aquifer conditions and implemented as a requirement to avoid unreasonable impacts.
4. Incorporation of specific provisions from the Permittee's proposed Impact Avoidance Plan (IAP) that serve to avoid or limit the potential for an unreasonable impacts through reasonable measures.
5. Incorporation of specific provisions from the Permittee's proposed Mitigation Plan (MP) that serves as a contingency response plan in the event of an occurrence of any unanticipated or unavoidable unreasonable impact through reasonable measures.
6. Incorporation of phased permitting structure that allows for a lower rate of groundwater production that can be incrementally increased if unreasonable impacts can be avoided or mitigated.

The Permittee's Mitigation Plan is intended and designed to address unanticipated unreasonable impacts to existing groundwater users caused by the Permittee's production of groundwater. Unanticipated unreasonable impacts are unforeseen in nature because through evaluations of the best available science and data, the scientific information indicates that there is little to no risk for an unreasonable impact to occur. However, this Mitigation Plan is in place to serve as a contingency response in the event that an unreasonable impact does occur even with preemptive avoidance and monitoring efforts in place. The

Permittee will work with the GM and the designated Response Team to implement its MP in a timely and consistent manner fair to affected private water-well owners.

If the Permittee fails to have in place or comply with the provisions of this Mitigation Plan and the commitments described herein in full, then the GM may immediately require temporary cessation of pumping until the Board, after notice and hearing, approves a staff-initiated amendment to partially reduce the full permit volume to a rate that will reasonably avoid recurrence of unreasonable impacts.

SECTION 2. ELIGIBILITY CRITERIA

Whether any alleged unreasonable impact to a well is more likely than not attributable to the Permittee's groundwater production, and whether the well owner is entitled to receive mitigation under the Permittee's Mitigation Plan, will be determined by the Response Team recommendation and GM's final approval, on the basis of actual aquifer conditions, well-data collection, previously documented hydrogeologic modeling tools, the proximity of the allegedly affected well(s) to the Permittee's well field, and other relevant information including data related to other known groundwater-producing wells and projects in the area of the alleged impacted well(s).

The designated Response Team will review existing data and determine if there is a compelling hydrogeological basis and adequate well-diagnostic data to support the impact complaint. If data can support that the unreasonable impact is reasonably attributable to the Permittee production then mitigation will be provided to that well regardless of the well location. Wells located outside of the District boundaries, including wells within Hays Trinity Groundwater Conservation District may receive mitigation if determined eligible by the Response Team. Other factors to be considered in determining eligibility include, but are not limited to, the following:

1. **Well Registration** - A well owner must have registered the allegedly impacted well, or must be willing to immediately register their well at the time of submitting the well impact complaint form. Wells located outside of District boundaries are not required to be registered with the District but will be eligible for mitigation if all criteria are met.
2. **Natural Variability in Water Levels** - The well must have been in an operational condition such that it was adequately completed and adequately equipped to account for water-level drawdown attributed to drought conditions, seasonal increases in local pumping, normal pumping usage, and pumping from neighboring wells in the area of influence.
3. **Time of Occurrence** - The well was functioning as an adequately completed operational well. The well issue occurred after the commencement of the Permittee's groundwater production.
4. **Well Construction and Completion** - The Permittee will not be responsible for bringing a well into compliance with State or District standards except as necessary when the scope of avoidance work involves lowering a pump, drilling a new well or deepening a well. Hybrid well completions and comingling of water from different formations does not make the well ineligible for mitigation.

SECTION 3. PROCESS FOR REVIEW OF MITIGATION ELIGIBILITY AND IMPLEMENTATION

STEP 1. WELL OWNER – Contractor Diagnostics and Well Impact Complaint Form

If a well owner experiences well impacts related to any of the following:

- a well ceasing to yield water at the ground surface,
- a decrease in well yield that results in the well owner being unable to obtain either an authorized, historic, or usable volume or rate from a reasonably efficient water well,
- the lowering of water levels below a feasible pumping lift or reasonable pump intake level, or
- the degradation of groundwater quality such that the water is unusable for its intended purpose or requires the installation of a treatment system.

The well owner should call a licensed well service contractor or driller to complete a well diagnostic assessment. The District expects the well owner to take all reasonable measures to first determine if the problem may be attributed to the normal maintenance of the well and/or well equipment. If the well contractor cannot attribute the problem to normal maintenance or mechanical issue, the well owner may elect to submit a Well Impact Complaint form (the “Complaint Form”) to the General Manager’s designated Response Team.

The complaint form must be submitted to the GM within 10 days of experiencing a well issue. A copy of the District approved Complaint Form shall be publically available on the District’s website. The licensed well service contractor or driller will be required to document their diagnostic findings on the complaint form, and verify the following as-built characteristics of the allegedly impacted well:

- total depth of the well,
- the static water level, and
- pump setting.

This diagnostic assessment shall be signed by both the well owner and licensed well service contractor. All complaint forms will be processed in a timely manner by the designated Response Team.

STEP 2. PERMITTEE - Temporary Emergency Water Supply

If a well owner experiences well impacts in which the well is ceasing to yield water at the ground surface or the degradation of groundwater quality is such that the water is non-potable (not safe to drink) and the diagnostic assessment determined that the well issue cannot be attributed to a normal maintenance or mechanical issue, the well owner will be eligible for a temporary emergency water supply.

The permittee is responsible for all cost associated with the temporary emergency water supply and shall provide the emergency water supply within 36 hours of GM notice. The emergency supply shall consist of installing storage tanks, hauling water, paying for reasonable alternative housing or hotels, or another remedy acceptable to the well owner. Emergency supplies should last until the GM can confirm that one of the following conditions are satisfied:

- The well issue is fully mitigated and resolved after the investigation determined the impact can be reasonably attributed to groundwater production from the Permittee; or

- The well owner was notified in writing that the investigation determined the impact cannot be reasonably attributed to groundwater production from the Permittee. The well owner will have 15 days to restore their own water supply and will be responsible for remedying their own well.

Step 3. RESPONSE TEAM REVIEW - Verification of Diagnostics and Inspection

1. Once the GM's Response Team receives a Complaint Form and temporary emergency supplies have been provided as appropriate, the Permittee will receive a copy of the Complaint Form and any supporting documentation provided by the well owner. The Response Team will verify the documentation included with the completed well diagnostic assessment and the Complaint Form.
2. If the allegedly impacted well(s) is located outside of the avoidance priority areas (Figure B-1) then the designated Response Team will review existing data and determine if there is a compelling hydrogeological basis and adequate well-diagnostic data to support the complaint before proceeding with an initial inspection.
3. Within 7 days of receiving a Complaint Form, the designated Response Team will set up a time to meet with the well owner and perform a site inspection of the well. During the inspection, the investigating representative will perform the following steps:
 - verify the existence, location, and operational status of the allegedly impacted well,
 - collect a static water level reading and a pumping level reading,
 - take photographs and GPS coordinates of the allegedly impacted well,
 - collect copies of any information pertaining to the allegedly impacted well(s), e.g., state well reports, driller invoices, geophysical logs, and registration documentation, obtain additional necessary information including but not limited to, a geophysical log or downhole video survey, and
 - consider whether installing well monitoring equipment is feasible.

STEP 4. RESPONSE TEAM REVIEW - Investigation Report, Technical Opinion & Verification of Eligibility for Mitigation

1. Within 30 days of conducting the inspection, the Response Team shall complete an investigation report that includes inspection details and a technical opinion. The technical opinion shall include an evaluation of monitor well data in the vicinity of the allegedly impacted well, drought conditions, and the production data from the production wells in the Permittee's well field.
2. In the investigation report, based upon review of all the information and data collected, the designated Response Team will determine if the unreasonable impact can be reasonably attributed to the groundwater production from the Permittee's well field and if the well owner is eligible for mitigation. If there is any dispute between the GM and the Response Team regarding the mitigation eligibility the GM will review the facts and make the ultimate and final determination.

STEP 5. DISTRICT NOTICE - Notification of Unreasonable Well Impact Determination & Mitigation Plan Implementation

1. If the District and/or the District's designated Response Team finds, through an evaluation of data and through their technical opinion that an unreasonable impact attributable to groundwater production from the Permittee's well field occurred, then a notification letter will be mailed to the Permittee. The notification letter will include all relevant data and information relating to the complaint, the affected well, staff inspection reports and evaluation data, and the determination. The notification letter will also provide instruction to the Permittee to begin implementation of their Mitigation Plan pursuant to the conditions and requirements of its permit.
2. If an unreasonable impact can be reasonably attributed to the groundwater production from the Permittee's well field, and it is determined that the well owner is eligible for mitigation, then the Permittee is responsible for the cost of any investigative work that was done on the well, and the well owner is eligible for mitigation and reimbursement.
3. If an unreasonable impact cannot be reasonably attributed to the groundwater production from the Permittee's well field, and/or it is determined that the well owner is not eligible for mitigation, then the well owner will not be eligible for mitigation or reimbursement and will be responsible for cost to remedy their own well.
4. If the Permittee fails to have in place or comply with the provisions of this Mitigation Plan and the commitments described herein in full, then the GM may immediately require temporary cessation of pumping until the Board, after notice and hearing, approves a staff-initiated amendment to partially reduce the full permit volume to a rate that will reasonably avoid recurrence of unreasonable impacts.

SECTION 4. WELL OWNER SELF REMEDY

If a well owner submits a Complaint Form and has elected to immediately self-remedy its well by assuming costs and expenses associated with lowering the pump, arranging for temporary water supplies, or deepening their well, then those measures on the well owner's part should be documented with receipts and invoices in order to receive possible reimbursement. Reimbursement will only be granted and required in situations where an unreasonable impact can be reasonably attributed to groundwater production from the Permittee's well field. Self-remedy expenses are eligible for reimbursement and may be limited to the amount reasonably necessary to restore the well owner to the level of water quality and/or quantity prior to the occurrence of the unreasonable impact.

SECTION 5. MITIGATION MEASURES

Within 30 days following the GM's determination of the existence of an unreasonable impact the Permittee shall implement the mitigation steps outlined in its plan or negotiate an alternative agreement with the affected well owners. These negotiated agreements, which are a contractual commitment entered into by and between the Permittee and the affected well owners, shall be reduced to writing and signed by both parties. A copy of the agreement, or a memorandum of the agreement if the agreement terms are negotiated to be confidential, shall be filed with the District and included in the Permittee file.

The response measures outlined in a mitigation agreement are solely intended for impacts attributed to the Permittee's production. Acting through the GM's designated Response Team, the Permittee shall ensure all mitigation measures shall be diligently pursued to completion. The GM shall be notified upon

completion of the mitigation action(s). Among the mitigation measures that the Permittee may elect to take to address the impacts are the following:

1. Lowering the Submersible Pump

If the well is deep enough but the submersible pump is not set deep enough to accommodate projected water level impacts, the Permittee will fund the cost for a licensed wells service contractor to cause the existing submersible pump to be lowered. Pumps shall be set at an adequate level no less than 30 ft below the top of the water-bearing formation in the aquifer and below Level 4 Compliance Triggers. If lowering the existing pump will cause it to operate outside manufacturer's specifications, the Permittee will provide, at its cost, an appropriately sized submersible pump.

2. Deepening an Existing Well/Drilling a Replacement Well

If the existing well is not deep enough to lower the submersible pump to accommodate for projected water level impacts, the Permittee, at its cost, will drill a replacement well or extend the existing well deep enough to accommodate water level impacts attributed to the Permittee's production. In an instance where the existing well could not be deepened or a replacement well could not be drilled in the existing formation then, the well owner may have the option to drill to a deeper formation. After the replacement well is completed and operable, the existing well will be plugged in accordance with applicable state and local regulations regarding abandoned wells.

3. Connection to an Existing Water Purveyor

In an instance where drilling a replacement well is necessary, but not feasible, the Permittee will provide the affected well owner the opportunity to connect to an existing public water supply purveyor. The Permittee will pay for the initial cost of connection to the potable water service. Monthly bills from the water purveyor shall be paid by the affected well owner.

4. Reimbursement

Affected well owner(s) that have had self-remedy work performed on their wells in order to accommodate unreasonable water level impacts determined to be attributable to the Permittee's pumping, will be eligible for a full reimbursement subject to the conditions in Section 6. The affected well(s) owner must have submitted a Complaint Form and gone through the review process (Steps 1-5) for a reimbursement claim to be considered. Well owners seeking reimbursement should be prepared to provide receipts and invoices that substantiate the work and equipment expenses incurred by the well owner. Reimbursement will only cover expenses necessary to modify the well to accommodate unreasonable impacts attributable to the production of groundwater from the Permittee's well field, and any related diagnostic work that was necessary to review the well impact complaint. Self-remedy efforts completed by the well owner may include costs and expenses associated with lowering the pump, arranging for temporary water supplies, or deepening their well. The well owner will be reimbursed by the Permittee. The Permittee will not reimburse the replacement or upgrading of equipment or level of service that is elective and not necessary to remedy an unreasonable impact.

3. Monetary Settlement

The Permittee may elect to provide a monetary settlement to an affected well owner unreasonably impacted by groundwater production from the Permittee's well field in lieu of the Permittee hiring a licensed well service contractor to undertake modifications performed on their well to make it capable of accommodating projected water level impacts attributed to the Permittee's pumping.

Monetary settlements will be provided only to address issues relating to water level fluctuation or water quality issues. Approved modifications may include deepening the existing well, lowering the pump in the existing well, or a combination of both actions. If the existing well cannot be modified in a manner that will achieve appropriate mitigation measures, the Permittee may elect to provide a monetary settlement for drilling a replacement well to a sufficient depth to account for the water level decline attributable to the Permittee's pumping. Any monetary settlement will be sufficient to cover all costs associated with the necessary mitigation measures. The affected well owner must agree in writing to a monetary settlement in lieu of work being undertaken by a licensed contractor.

4. Rainwater System Installation

Well owners may elect to have a rainwater harvesting system installed for domestic/potable water supply in lieu of other mitigation actions. The permittee will be responsible for all cost associated with installing a new rainwater harvesting system, including adequate equipment, storage and treatment.

SECTION 6. FINANCIAL COMMITMENT FOR MITIGATION MEASURES

Separate from any costs associated with the Permittee's contractual agreements with Response Team, the Permittee will make timely payments for all invoices presented for mitigation efforts authorized by this Mitigation Plan. The Permittee will make payments within 20 days of receipt of written receipts and invoices documenting the mitigation effort.

Bonded Funds

To guarantee full and timely payment of any such mitigation effort-related expense, in the unanticipated failure of the Permittee to make full and timely direct payments of invoices, the Permittee shall establish and maintain a mitigation fund or bond that will be available and accessible for District use to fund the payment of Permittee's implementation of its Mitigation Plan. Specifically, the Permittee will either (i) fund a trust identifying the District as the beneficiary, or (ii) in circumstances where Permittee fails to timely pay mitigation related expenses, secure a bond payable to the District in the amount of not less than \$150,000 to support its financial commitment to pay for the Mitigation Plan. If necessary, the funding of the trust or bond will be replenished as needed when the account reaches a threshold of \$10,000, as a condition to the renewal of its Permit. This trust fund will be established and maintained to cover the costs associated with the implementation of the Mitigation Plan actions during the life of the permit. These funds may be administered solely by the District's GM to reimburse mitigation efforts performed on a well that was found to have an unreasonable impact that was more likely than not attributed to the groundwater production from the Permittee's well(s).

SECTION 7. STIPULATIONS RELATED TO MITIGATION ACTIONS

1. The mitigation activities administered as part of the response efforts are considered "one time only" actions that are designed to address unreasonable water level impacts attributed to the production of groundwater from the Permittee's well field.
2. The Permittee's mitigation activities shall not be deemed an admission of cause and effect, and the well owner(s) receiving mitigation shall not hold the expectation that all well/pump maintenance and

operational problems that arise in the future (post-mitigation) are either due to, or to be remedied in perpetuity by the Permittee.

3. If the Permittee fails to have in place or comply with the provisions of this Mitigation Plan and the commitments described herein in full, then the GM may immediately require temporary cessation of pumping until the Board, after notice and hearing, approves a staff-initiated amendment to partially reduce the full permit volume to a rate that will reasonably avoid recurrence of unreasonable impacts.