

Post Oak Savannah Groundwater Conservation District

Groundwater Well Assistance Program (GWAP)



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Adopted January 9, 2018

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Acronyms and Abbreviations

DFC	Desired Future Condition
GAM	Groundwater Availability Models
GANA	GWAP Annual Needs Assessment
GCD	Groundwater Conservation District
GMA	Groundwater Management Area
GWAP	Groundwater Well Assistance Program
POSGCD	Post Oak Savannah Groundwater Conservation District
TWC	Texas Water Code
WARF	Well Assistance Request Form
WAWOF	Well Assistance Work Order Form

1.0 Introduction

The Post Oak Savannah Groundwater Conservation District (POSGCD) mission is to adopt and enforce Rules consistent with State law and based on best available science, which provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater, while supporting the ownership of groundwater and the owner's right to assign or produce that property.

Among the important considerations in managing groundwater in POSGCD are statutory requirements in the Texas Water Code (TWC) that require a balance between groundwater production and protection. TWC Section 36.0015 (b) states that one purpose of a groundwater conservation district (GCD) is "to protect property rights, balance the conservation and development of groundwater to meet the needs of the state, and use the best available science in the conservation and development of groundwater." In addition, TWC Section 36.108 (d)(d-2) states that the desired future conditions (DFC) development through the joint planning process for districts "must provide a balance between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater and the control of subsidence in the management area."

A potential consequence associated with providing for the highest practicable level of groundwater production and respecting groundwater as a property right is that groundwater pumping may cause water level declines resulting in the water level dropping below the pump in some wells. Therefore, POSGCD has established the Groundwater Well Assistance Program (GWAP) in order to assist well owners whose wells met the eligibility criteria established in this document and are projected to experience water level declines in their wells below the pump during typical operations as a result of groundwater production in Groundwater Management Area (GMA) 12.

2.0 Objectives

The GWAP has two main objectives. One objective is to identify high-priority wells in the District that are projected to experience water level declines below the pump during typical operations as a result of groundwater production in GMA 12. Another objective is to provide technical and/or financial assistance in preventing the loss of water supply in high-priority wells that met the eligibility criteria established in this document. This assistance may include restoring a water supply to those well owners should an emergency situation arise where the water level in a well has dropped below the pump before corrective action has been taken.

3.0 Annual Assessments

The District will take a proactive approach to assessing projected impacts to existing wells in the District. Beginning in 2019, the District will annually perform evaluations. The evaluations will be updated annually using information gathered from the District's Well Monitoring Network, results from District hydrogeological studies, District updates to the Groundwater Availability Model (GAM), and recent GAM simulations presented at GMA 12.

The annual evaluation shall be known as the GWAP Annual Needs Assessment (GANA), and be performed by the District's hydrogeologist. The results of this evaluation shall be organized into a report, and presented to the Board at a regular or called public meeting, at or before the December monthly Board meeting, and published on the District's website within 30 days of acceptance by the Board. The report shall identify high-priority wells that are projected to experience water level declines below the pump within the next 10 years.. The projections will be based on an integration of two sources of information. One source will be water level predictions from the GAM. The other source will be corrections to GAM model predictions based on an assessment of the potential biases in the GAM simulations. For example, a mismatch between modeled water levels and water levels measured in the POSGCD monitoring program would indicate a potential bias in the GAM simulations that needs correction. A mismatch between modeled aquifer transmissivity and transmissivity measured during a field aquifer test would also warrant correction. These biases may occur because of errors associated with the GAM model calibration, estimated historical pumping rates, assumed future pumping rates, locations of wells, and estimated aquifer properties. This additional assessment allows POSGCD to identify and focus corrective actions on true high-priority wells.

For wells without proper well construction and pump setting information, the GANA evaluation will use conservative assumptions for these values to determine if these wells qualify to be categorized as high-priority wells. For example, if no pump elevation is available, the pump elevation would be assumed to be at the top of the well screen.

The report generated from the GANA shall be used to establish the annual budget for the projected needs of the Groundwater Well Assistance Program (GWAP) Fund, and may also be used in establishing guidelines for completions of water wells in certain areas of the District in the future.

4.0 Corrective Actions

The high-priority wells identified in the GANA report will be candidates for District grants to assist with paying for corrective actions. Corrective actions supported by the GWAP to an affected well owner could entail, but are not limited to, lowering a pump in a well, modifying the construction of an existing well, or drilling a new well. In most cases, these actions shall result in the pump being set at a depth that will exceed the anticipated 50-year water level declines as identified by the GANA evaluations. If lowering a pump to the 50-year water level is not feasible due to poor water quality, local pumping effects or other concerns, alternative corrective actions will be considered. In some situations, corrective actions may include installation of a solar powered pump system, providing a connection to a local water supply corporation or municipal water supply, or digging a stock pond.

5.0 Investigation to Determine Options for Corrective Actions and Amount of Financial Assistance

The District will provide financial assistance for corrective actions to wells that are identified as high priority wells in the GANA and that meet the eligibility requirements listed in Section 8.0. The type of corrective action and the amount of financial assistance will be based on an investigation performed by the District's Water Resource Management Specialist with input from with the District's hydrogeologist.

Each investigation will be tailored to address specific well conditions, but in general, will include the following tasks:

- 1) POSGCD contacts the well owner of an identified high-priority well to discuss the GANA findings and to schedule a well inspection.
- 2) POSGCD performs well inspection to gather information (well construction, etc.) required to continue the investigation.
- 3) POSGCD gathers information on nearby wells to determine how local pumping could impact the water levels in the high-priority well.
- 4) .
- 5) .
- 6) POSGCD evaluates the condition of the well and pump and the adequacy of the well design.
- 7) POSGCD documents why the well is unable to produce an adequate amount of groundwater. If multiple causes, POSGCD will rank these in order of importance for corrective action.
- 8) POSGCD assesses the options for corrective actions and discusses these options with the well owner.
- 9) POSGCD documents recommendations for the type of corrective action and amount of financial assistance to the well owner and provides these recommendations to the POSGCD Board for consideration.
- 10) POSGCD meets with the well owner to discuss a path forward based on the decision of the POSGCD Board.

In the event the well owner chooses a more costly corrective action than approved by the District, the District will provide one hundred percent (100%) of the financial assistance offered in the POSGCD Board decision.

6.0 GWAP Funding

The District shall maintain a GWAP Fund that is exclusively for the purpose of fully funding production of the GANA report, providing technical assistance to well owners, and performing corrective actions at eligible wells. The monies committed to that fund shall remain encumbered for that purpose. Funding to support activities as outlined in this manual shall be funded by fees collected by the District on permitted amounts for the production and/or transport of groundwater. The amount of funding to be maintained by the District in the GWAP Fund shall be

determined by the most recent GANA evaluations performed for this purpose. The projections of wells requiring assistance shall be evaluated to establish the amount of funding necessary to accomplish the purposes of the GWAP. To offset the possibility of unforeseen events resulting in the projected annual funding for the GWAP Fund exceeding available funding in any given year, the District shall, in its annual budgeting, budget to collect fees as necessary to fund and maintain twice the amount indicated as necessary for that year according to the most recent GANA evaluation.

The GWAP shall be a stand-alone program of the District, independent of all other programs in the District's Budget. The GWAP shall be fully funded from fees collected by the District to accomplish the purpose of the program. Funds committed to the GWAP may only be expended on the GWAP, and funds budgeted for the GWAP may only be reduced by a budget amendment approved by a 2/3 majority vote of the Board after public hearings, posted with at least 10 days notice.

7.0 Administration of the Groundwater Well Assistance Program

The GWAP will be administered by the General Manager, working in coordination with the Water Resource Management Specialist and the District's hydrogeologist. The primary responsibility of the Water Resource Management Specialist is to verify eligibility, oversee the investigation and evaluation of any application, and recommend appropriate action.

In situations where the water level in the well has dropped below the pump due to drawdowns caused by aquifer-wide pumping (excluding Yegua-Jackson Aquifer and river alluvial or terraced formations), District staff will endeavor to respond to requests for assistance within 24 hours and proceed with an expedited investigation.

All necessary evaluations and investigations must be completed for a well to qualify for funding. These evaluations may include, but not be limited to, an inspection of the well and equipment, including acquiring water level measurements, and considerations of water level data from nearby wells. If the evaluation indicates that a reported problem is a result of well/equipment age, owner neglect or pumping effects from the well itself, the well will not qualify for GWAP funding.

8.0 Eligibility Requirements for Assistance from the Groundwater Well Assistance Program

The District will maintain a database of registered and permitted wells to establish eligibility of qualifying wells. Information maintained will include a valid and complete Well Driller's Log, as submitted to the State of Texas, and when appropriate, to the District. If a valid and complete Well Driller's Log is not available, ownership, well construction, pump settings, and measured water levels by POSGCD, must be established for these wells before GWAP funding is provided.

To be eligible for assistance in the GWAP, a well must meet the following qualifications:

1. Well must be located in Milam or Burleson counties
2. Well must be functional and registered with the District
3. Well must be accessible for monitoring by POSGCD staff.

4. Well must be either a low-capacity non-exempt permitted well that produces less than 50 gallons per minute OR an exempt well used for domestic and/or livestock use as defined in the District's Rules
5. Well must be completed in any aquifer in the District other than the Yegua-Jackson Aquifer and river alluvial or terraced formations.
6. Well may not be covered by a mitigation agreement included in a permit issued by the District or required by the State of Texas.
7. The well needs to a part of the District's monitoring well network

9.0 Appeals of Decisions of District Staff

Any well owner may appeal the decision of District Staff or consultants, concerning the choice of possible corrective actions for their well. Such appeal shall be made by the well owner to the Board of Directors.

Any appeal of evaluation by District's consultants shall be handled as follows: The District will maintain a list of independent and appropriately licensed professional geoscientists who are familiar with the geologic formations and aquifers of the District from which the well owner may select to evaluate an appeal at the District's expense not to exceed \$5,000. If a well owner chooses another person or entity to fulfill this role of evaluation of appeal, the person(s) performing the evaluation must be licensed professional geoscientists in the State of Texas, and their services shall be paid for by the well owner. This appeal will be considered by the District's hydrogeologist, and if disagreement remains, the matter shall be decided by the Board of Directors.

A well owner can only appeal the evaluation of the District one time.

10.0 Groundwater Well Assistance Program Contact Information

The POSGCD Water Resource Management Specialist will be the primary point of contact for the well owners. The Water Resource Management Specialist contact information for the GWAP is listed below:

Post Oak Savannah Groundwater Conservation District
Water Resource Management Specialist
310 East Avenue C
Milano, Texas 76556

Phone: 512.455.9900
Toll-free: 800.231.8196
Fax: 512.455.9909
Email: gwap@posgcd.org

8.1 Handling Requests for Assistance

All requests for assistance from the GWAP must be reviewed and pre-approved by the District and all work must be completed by the District's pre-approved contractors. No work will be conducted on wells which fail to qualify for the GWAP. All requests shall be submitted to the District on the Well Assistance Request Form (WARF). A copy of the WARF is included in Appendix A.

In an emergency situation, such as an incident that occurs on a weekend or holiday, verbal approval from the District to the District's approved contractors shall suffice in lieu of a completed WARF, and the WARF shall be completed as soon as possible. All work performed shall be reported to the Board at the next regularly scheduled meeting.

10.0 Agreements and Scheduling

10.1 Well Assistance Agreement

Prior to beginning any well assistance work, the well owner must sign the Well Assistance Work Order Form (WAWOF) accepting the corrective strategy selected and approved by the District. After the owner signs the WAWOF, POSGCD will sign to commit funding from the GWAP Fund to implement the corrective action. These funds will be released to the contractor after the work has been completed.

10.2 Contractor Scheduling

A well owner may select from the list of pre-qualified water well drillers to conduct well assistance work. If the selected water well driller is unable to accept the work at the time of selection due to other obligations, the well owner may either select another pre-qualified water well driller or a water well driller who agrees to the rates identified in the Unit Cost Schedule, and meets all other criteria as outlined in this GWAP and necessary to perform the corrective and approved work. Prior to the selection of a driller, a timeline for performing the work will be negotiated and become a part of the contract with the driller.

10.3 Well Corrective Work

The District shall issue the selected water well driller a completed WAWOF that describes the work to be performed and the pre-determined costs to complete the work. If, during the course of the approved work, unforeseen conditions occur that require changes in the

negotiated scope of work, a water well driller must first get an amendment to the WAWOF approved by the District before conducting the changed scope of work. All work must be completed to the satisfaction of POSGCD in order for the water well driller to receive payment.

10.4 Standard Practices

All water well drillers contracted for work with the District shall be properly licensed and use standard practices acceptable to the Texas Department of Licensing and Regulation for Water Well Drillers and Water Well Pump Installers.

11.0 Groundwater Well Assistance Fund Driller's Contract

The terms and conditions governing the work performed by the driller shall be spelled out in a GWAP Driller's contract. Such terms will include but not be limited to qualifications, unit costs, insurance and liability as well as payment provisions. A sample contract is available from the District.

12.0 Groundwater Well Assistance Program Fund Management

The District has an investment policy which is in compliance with various provisions of Texas law relating to the investment and security of funds of districts. Sections 36.155 and 36.156 of the TWC and Chapters 2256 and 2257 of the Government Code are applicable to the investment of the District's funds, including the investment funds associated with the GWAP. The investment policy addresses the methods, procedures, and practices that must be used to ensure effective and judicious fiscal management of the District's funds. The District purchases various insurance policies, including the bonding of all directors and employees of the District.

13.0 Recordkeeping and Reporting

The District shall maintain records and supporting documentation for all GWAP Fund work in accordance with the District Bylaws. By January 31st of each year following the creation and initial funding of the GWAP Fund, the District shall make available to the public an accounting of GWAP Fund revenues and expenses, information regarding the water well drillers qualified to perform work on behalf of the District, and a report summarizing the well assistance claims that were inspected, evaluated or completed.

APPENDIX A: WELL ASSISTANCE REQUEST FORM



Post Oak Savannah Groundwater Conservation District Well Assistance Request Form

Date: _____

Name of Well Owner: _____

Address of Well Owner: _____

Phone Number: _____

Well Location: _____

Driller Log Available (y/n): _____

Date Drilled: _____

Well Depth: _____

Pump Depth: _____

Well Screen Information: _____

Aquifer/Formation: _____