

2024 Agricultural Water Conservation Grant Application

- 1(a). Post Oak Savannah Groundwater Conservation District (District)
- 1(b). 310 East Avenue C, PO Box 92, Milano, Texas 76556
- 1(c). Post Oak Savannah Groundwater Conservation District (POSGCD) was created by the 77th legislature through House Bill 1784. The bill was passed on June 16, 2001 and took effect on September 1, 2001.
- 1(d). Federal Tax ID: 32034066723
2. Ward Roddam, POSGCD Board of Directors, President. PO Box 92 Milano, Texas 76556
3. Gary Westbrook, 310 East Avenue C, General Manager, 512-455-9900
4. See attached affidavit.
5. The District Management Plan as amended on December 12, 2023 is attached. It may also be viewed online at <https://posgcd.org/wp-content/uploads/2024/02/Amended-Management-Plan-12-12-2023.pdf>

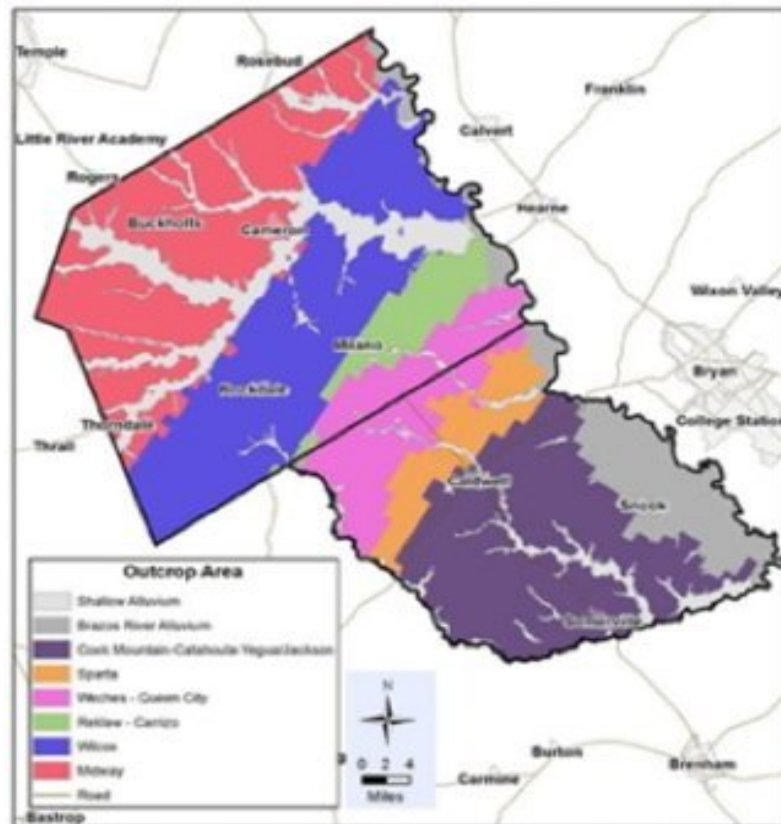
Section II. Project Information

6(a). Title: Agricultural Production Metering. The grant would be used to purchase approximately thirty meters throughout the District for wells on a first come first served basis. The District Rules currently require irrigators to report water usage, but do not require the installation of flow meters. Most water use reports are calculated by using an estimated flow rate and running time. While the resulting reports of production are useful to producers and the District, these reported amounts could be more accurate if a flow meter were to be used to acquire production amounts.

This cost-share assistance program will provide an incentive to install irrigation flow meters on wells that will provide accurate water production data to the farmer for on-farm

water management decisions as well as to the District for District-wide water management. The District will sponsor educational workshops in conjunction with Texas A&M AgriLife Extension for the producers who will participate in the program that will cover utilizing the flowmeters for irrigation management and other water conservation practices such as cover crops and minimum tillage for improved soil health.

6(b). Project area: The District consists of all of Milam and Burleson Counties. This project will focus on the wells developed in the Little River Alluvium and Brazos River Alluvium.



6(c). Staff experience: Gary Westbrook, General Manager, has over 20 years of experience in managing the District. Gregory Perry, Water Resources Specialist, has more than one year experience with the District and has oversight of the District's Abandoned Well Plugging and the Groundwater Well Assistance Programs. These two personnel will administer a cost-share program which is similar in content to the TWDB Agriculture Conservation Grant Program. This will include accepting and approving cost-share applications, processing payments, administration of contracts with producers who are

awarded, and compiling production information to be used in reporting. Once installation for an application is complete, the District will inspect installations for compliance with manufacturer's specifications and collect water use data for reports and future use.

7.(a). The District is requesting \$30,000 from TWDB for a total project budget of \$60,000. Propeller flow meters for irrigation systems cost approximately \$1,500 - \$1,600 depending on line size. Consequently, this program would fund between thirty and thirty-five irrigation flow meters. This cost-share opportunity would provide a needed incentive for producers to participate in the project, improve compliance with district measurement rules, and gain educational insight on better water management practices. The District has identified a need for irrigation flow meters for improved irrigation water management in the District.

7.(b). Post Oak Savannah GCD has budgeted \$30,000 for the meter cost in addition to \$30,000 in TWDB funds. Producers will be responsible for the cost of installation of the meter only, which will provide incentive to participate in the program as well as insure commitment of the producer to the program. Salaries and expenses associated with monitoring and reporting of the well information has been and will continue to be included in the regular yearly salary and budget as part of Water Resource Specialist duties. This would be considered an additional in-kind match that is not tracked in the project budget.

7.(c). Expense Budget

<u>TASK BUDGET</u>		
<u>TASK</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
1.	Flow Meter Cost Share Assistance	60,000.00
TOTAL		60,000.00

<u>EXPENSE BUDGET</u>		
<u>CATEGORY</u>	<u>LOCAL MATCH</u>	<u>TWDB AMOUNT</u>
Post Oak Savannah GCD - Cost Share Assistance (Cash)	\$30,000.00	\$0.00
TWDB - Cost Share Assistance (Cash)	\$0.00	\$30,000.00
Subtotal	\$30,000.00	\$30,000.00
TOTAL	\$60,000.00	

8.(a). The task of the project is to establish a one-year irrigation flow meter cost-share program to monitor production of groundwater in the project area while promoting conservation. District staff will assist producers in the correct specifications of meter installation, including size, type, pipe wall thickness and appropriate run distances. District staff will aid in assuring the installation and maintenance of these meters along with producers and local irrigation dealers. These meters will be read at least twice annually, and staff will then calculate yearly water use across the District. These reported amounts will then be compared to previous years production as well as to production estimated by producers in the area which continue to use the alternate method of reporting allowed in the District Rules. This will yield a comparison of reported amounts which will allow an estimate of groundwater conserved.

8.(b). Total water use shall be reported to TWDB on a yearly schedule. This project would continue beyond the expiration date of the contract. The District requests one year to install all equipment and begin to report findings. The TWDB will receive an annual financial report as well as quarterly progress reports indicating the size and number of meters installed.

8.(c). Education: Upon the successful award of this proposal, POSGCD will work with meter manufacturers to provide instruction to District staff and dealer installers for correct installation to manufacturer's specifications to ensure accuracy of measurement as well as longevity of the meters and requirements of accuracy included in the District Rules.

Producers will be provided with information on how to use the meter as a management tool for improved irrigation management. POSGCD will also work with AgriLife Extension Agronomists to conduct workshops on management practices such as cover crops and minimum tillage to improve soil health for water conservation in the District.

In addition, POSGCD administers several conservation programs that will be complementary to this metering program including Rainwater Harvesting, proper Well Abandonment Plugging, and other Groundwater Well Assistance Programs. This meter cost-share program will also be promoted at the annual Groundwater Summit held in the district as an educational program for local groundwater users.

9.(a). Milam and Burleson Counties are in located in Region G of the State Water Plan.

As stated in the 2022 Water Plan for Region G, the primary water source for the region is the **Brazos River Alluvium Aquifer**. The Brazos River Alluvium Aquifer is comprised of floodplain and terrace deposits of the Brazos River along the eastern boundary of Milam and Burleson counties. The Brazos River Alluvium Aquifer occurs only as an unconfined aquifer in POSGCD, and the majority of it exists in Burleson County. The Brazos River Alluvium supplies freshwater to many irrigation wells and several domestic wells. For the most part, the water discharges from the alluvium mainly through flow to the Brazos River, evapotranspiration, and production by wells.

The District's mission is to manage, protect, and conserve the groundwater resources of the District for the citizens, economy, and environment while protecting personal property rights and promoting constructive and beneficial uses of the available groundwater in the District. Each of those plans can be reviewed on the Texas Water Development Board website.

(b) The approval of this grant will enable the District to have a more widespread and uniform metering of production as well as providing an additional community outreach service. This cost-share program will incentivize the adoption of metering and facilitate its use as a management tool in irrigated agriculture. Increasing the number of meters used in the District will provide the essential data to the District for inclusion in the Brazos Region G Water Plan and groundwater management within the District.

9(c). Water savings would be calculated in the same manner as the existing TWDB meter programs and as discussed earlier in this application. Water use data from these meters would also influence decisions made by the District Board of Directors that could result in adjustments to maximum production limits. Other similar programs in the Texas Panhandle have resulted in water savings of approximately 10% - just from the adoption of using the meter in irrigation. When irrigators have initiated using meters as a management tool, they inevitably use less water to grow the same crops.

10. Not applicable.