

TO: Board Members

THROUGH: Kevin Patteson, Executive Administrator
Robert E. Mace, Deputy Executive Administrator, Water Science & Conservation

FROM: Cameron Turner, Team Lead, Agricultural Water Conservation

DATE: July 9, 2015

SUBJECT: Approval of Fiscal Year 2015 Agricultural Water Conservation Grants

ACTION REQUESTED

Authorize the Executive Administrator to negotiate and execute grant contracts in a total amount not to exceed \$379,600 from the Agricultural Water Conservation Fund for the recommended Fiscal Year 2015 agricultural water conservation projects.

BACKGROUND

Senate Bill 1, Rider 25, as passed in 2013 by the 83rd Texas Legislature, appropriated \$3,000,000 from General Revenue in fiscal years 2014 and 2015 to be deposited into the Agricultural Water Conservation Fund for the purposes of making agricultural water conservation monitoring grants to groundwater conservation districts with promulgated rules requiring metering. TWDB is currently under contract or in contract negotiations for projects previously approved by the Board worth a sum total of \$2,670,400 in Rider 25 funds (Attachment A).

On April 29, 2015, the Texas Water Development Board approved a request for applications for Fiscal Year 2015 agricultural water conservation monitoring grants. The request for applications included up to \$379,600 in available grant funding. This amount represents the \$329,600 in unobligated funds from Senate Bill 1, Rider 25 appropriations plus another \$50,000 available from the TWDB regular agricultural water conservation grants program.

The request for applications included only two categories: (1) agricultural water conservation monitoring grants for groundwater conservation districts with promulgated rules requiring metering, and (2) agricultural water conservation monitoring grants for all eligible entities.

Our Mission	:	Board Members
To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas	:	Bech Bruun, Chairman Carlos Rubinstein, Member Kathleen Jackson, Member
	:	Kevin Patteson, Executive Administrator

KEY ISSUES

TWDB Contract Administration Division received five applications in response to the request worth a total of \$444,150 in requested cost-share assistance (Attachment B). Staff reviewed applications based upon the Agricultural Water Conservation Fund eligibility criteria identified in 31 Texas Administrative Code §§367.8–367.9 and as specified in the request for applications. Upon review, staff determined that three of the five applicants are eligible for funding in Category 1. The two other applicants are eligible for funding out of Category 2.

The following is a listing of the applications received, amounts requested, and recommended funding amounts. Each of these projects involves cost-share assistance for agricultural water conservation monitoring devices. These projects further support implementation of agricultural water conservation strategies identified in the state and regional water plans.

<u>Applicant</u>	<u>Requested Funding</u>	<u>Recommended Funding</u>
<u>Category 1</u>		
Edwards Aquifer Authority	\$ 22,050.00	\$ 22,050.00
Mesa Underground Water Conservation District	\$ 12,500.00	\$ 12,500.00
North Plains Groundwater Conservation District	\$ 329,600.00	\$ 295,050.00
<u>Category 2</u>		
Lower Neches Valley Authority	\$ 50,000.00	\$ 30,000.00
South Plains Underground Water Conservation District	\$ 30,000.00	\$ 20,000.00
Totals	\$ 444,150.00	\$ 379,600.00

RECOMMENDATION

The Executive Administrator recommends approval of this item.

This recommendation has been reviewed by legal counsel and complies with applicable statutes and Board rules.

Les Trobman, General Counsel

Attachment(s):

- A: Summary of Existing Rider 25 Funding Commitments
- B: Summary of Applications

Attachment A

Summary of Existing Rider 25 Funding Commitments

Contract Number	District Name	Commitment Amount
1413581736	High Plains Underground Water Conservation District	\$617,500
1413581750	Mesquite Groundwater Conservation District	\$150,000
1413581751	Panhandle Groundwater Conservation District	\$107,500
1413581752	North Plains Groundwater Conservation District	\$600,000
1413581753	Coastal Bend Groundwater Conservation District	\$25,000
1513581820	Brewster County Groundwater Conservation District	\$10,000
1513581857	Brush Country Groundwater Conservation District	\$10,000
1513581858	Coastal Bend Groundwater Conservation District	\$200,000
1513581859	Mesquite Groundwater Conservation District	\$150,000
1513581860	North Plains Groundwater Conservation District	\$800,400
Total Rider 25 Funding Commitments to date		\$2,670,400

Attachment B

Summary of Applications

Edwards Aquifer Authority

Agricultural Water Conservation Grant Fund Category:

Agricultural Water Conservation Monitoring – metering rules required (Category 1)

Proposed Project Funding:

Total Study Costs	\$46,404
Amount requested from TWDB	\$22,050
Local cash or in-kind (52.5%)	\$24,354

Participants:

The Edwards Aquifer Authority manages, maintains, and funds all aspects of their metering program including metering equipment purchase and installation. The project will result in meter installations on participating agricultural producers’ wells.

Project Area:

The project is located within Region L, South Central Texas, across the Authority’s territory covering all or parts of Uvalde, Medina, Bexar, Atascosa, Comal, Hays, Guadalupe, and Caldwell counties.

Project Summary:

The Authority requires the installation of meters on all wells that are permitted to withdraw groundwater from the Edwards Aquifer. There are approximately 1,200 metered wells in the region (municipal, industrial, and irrigation), over 600 of which are agricultural irrigation meters owned and maintained by the Authority. This pilot-project will involve replacement of several aging propeller-type flowmeters with ultra mag meters to facilitate automated meter reading and real-time data collection. This information will be available to the Authority and to the participating producers to improve on-farm water use efficiency through adoption of irrigation scheduling best management practices. The Authority estimates a projected water savings of 2,848 acre-feet per year as a result of this project.

This project supports implementation of an irrigation conservation water management strategy in the state and regional water plans.

Project Duration:

7 – 8 years (to be determined during contract negotiations)

TWDB typically allows two to three years for purchase and installation of equipment for metering projects. Following installation, the Authority will report at least five full years of metered irrigation data and estimates of water use efficiency improvements or water savings.

Mesa Underground Water Conservation District

Agricultural Water Conservation Grant Fund Category:

Agricultural Water Conservation Monitoring – metering rules required (Category 1)

Proposed Project Funding:

Total Study Costs	\$25,000
Amount requested from TWDB	\$12,500
Local cash or in-kind (50.0%)	\$12,500

Participants:

The Mesa Underground Water Conservation District manages a water use measurement program with participating irrigated agricultural producers.

Project Area:

The District's territory covers all of Dawson County in the Llano Estacado Regional Planning Area (Region O).

Project Summary:

The District will purchase and install meters on participating producers' wells located within designated Production Management Zones. Producers in these areas are required to allow the District to provide and install water measuring devices on their irrigation systems. The District also operates a voluntary metering program currently covering 173 metered sites. This project will increase that number to 200 sites. The District states that metered irrigation water use data improves upon groundwater availability models, provides a basis for comparison against the modeled available groundwater, and helps to implement the desired future conditions of the Ogallala Aquifer. The District will utilize funds provided through this project for cost-share of meter purchases on wells requiring metering.

This project supports implementation of multiple irrigation conservation water management strategies in the state and regional water plans.

Project Duration:

7 – 8 years (to be determined during contract negotiations)

TWDB typically allows two to three years for purchase and installation of equipment for metering projects. Following installation, the District will report at least five full years of metered irrigation data and estimates of water use efficiency improvements or water savings.

North Plains Groundwater Conservation District

Agricultural Water Conservation Grant Fund Category:

Agricultural Water Conservation Monitoring – metering rules required (Category 1)

Proposed Project Funding:

Total Study Costs	\$659,200
Amount requested from TWDB	\$329,600
Local cash or in-kind (50.0%)	\$329,600

Participants:

Participating irrigated agricultural producers will purchase metering equipment and benefit from a 50 percent reimbursement of eligible expenses through the District.

Project Area:

The District is located in the northernmost Texas Panhandle, encompassing Dallam, Hansford, Lipscomb, Ochiltree, and Sherman counties, as well as parts of Hartley, Hutchinson, and Moore counties in the Panhandle Regional Planning Area (Region A). Their territory covers approximately 4.7 million acres and includes an estimated 1 million acres irrigated primarily from the Ogallala Aquifer.

Project Summary:

The District’s rules require meters on all wells in existence prior to October 14, 2003 which are reworked for increased production and all wells drilled after that date. Through this project, the District will reimburse meter purchases from participating producers meeting the metering requirements set forth in their rules.

This project supports implementation of an irrigation conservation water management strategy in the state and regional water plans.

Project Duration:

7 – 8 years (to be determined during contract negotiations)

TWDB typically allows two to three years for purchase and installation of equipment for metering projects. Following installation, the District will report at least five full years of metered irrigation data and estimates of water use efficiency improvements or water savings.

Lower Neches Valley Authority

Agricultural Water Conservation Grant Fund Category:

Agricultural Water Conservation Monitoring – all eligible entities (Category 2)

Proposed Project Funding:

Total Study Costs	\$150,000
Amount requested from TWDB	\$50,000
Local cash or in-kind (66.7%)	\$100,000

Participants:

The Lower Neches Valley Authority is the regional supplier of freshwater to numerous municipal, industrial, and agricultural users in the lower Neches River Basin and Trinity River Basin throughout Jefferson County and the eastern portion of Chambers and Liberty counties. The Authority provides irrigation water to about 39,000 irrigated acres annually through their canal system, the majority of which is delivered to irrigated rice producers in the region.

Project Area:

The project is located in the East Texas Regional Water Planning area (Region I). Project activities will occur in Liberty, Chambers, and Jefferson counties.

Project Summary:

The Authority will purchase and install agricultural meters at water diversion structures within their canal systems. A data logger will accommodate each flow meter to provide the Authority with continuous flow monitoring data through their remote monitoring system. The remote capabilities of the system allows canal riders to monitor water deliveries and billing staff to monitor and document water use at a regular frequency to ensure data quality and management.

At the end of the agricultural irrigation season, the Authority provides water users with detailed information regarding their water consumption by month, water order type, and duration per irrigation event. The historical data in the system helps the Authority to educate farmers about their past water usage and to predict future water usage. The Authority reports that the use of meters, along with a conservation-oriented rate structure, results in on-farm rice irrigation conservation savings of 1.16 acre-feet per irrigated acre farmed.

This project supports implementation of a conservation water management strategy in the state and regional water plans.

Project Duration:

7 – 8 years (to be determined during contract negotiations)

TWDB typically allows two to three years for purchase and installation of equipment for metering projects. Following installation, the Authority will report at least five full years of metered irrigation data and estimates of water use efficiency improvements or water savings.

South Plains Underground Water Conservation District

Agricultural Water Conservation Grant Fund Category:

Agricultural Water Conservation Monitoring – all eligible entities (Category 2)

Proposed Project Funding:

Total Study Costs	\$85,000.00
Amount requested from TWDB	\$30,000.00
Local cash or in-kind (64.7%)	\$55,000.00

Participants:

Participating irrigated agricultural producers would purchase metering equipment and benefit from a 65 percent reimbursement of eligible expenses. The District would contribute 15 percent of the cost of the meters to meet the 50 percent meter equipment cost-share rate set forth in the request for applications. The District's proposal further quantifies additional local match in the form of installation and administrative costs.

Project Area:

The District is located in the Southern High Plains in Terry and Hockley counties overlying the Ogallala Aquifer in the Llano Estacado Regional Planning Area (Region O). There are an estimated 6,000 irrigation wells within the boundaries of the District.

Project Summary:

The District has a cooperative network of agricultural producers metering irrigation water use that began through participation in a TWDB Agricultural Water Conservation Loan in 2002. Through that program, participating producers received low-interest loans to purchase new center pivot irrigation systems. As a part of that program, the District required participating producers install meters to quantify the conservation benefits of the new systems. Those producers continue to meter and report irrigation water use on a voluntary basis. Many of those meters however, are now in need of replacement. Through this project, the District proposes to replace several irrigation flow meters.

This project supports implementation of a conservation water management strategy in the state and regional water plans.

Project Duration:

7 – 8 years (to be determined during contract negotiations)

TWDB typically allows two to three years for purchase and installation of equipment for metering projects. Following installation, the District will report at least five full years of metered irrigation data and estimates of water use efficiency improvements or water savings.