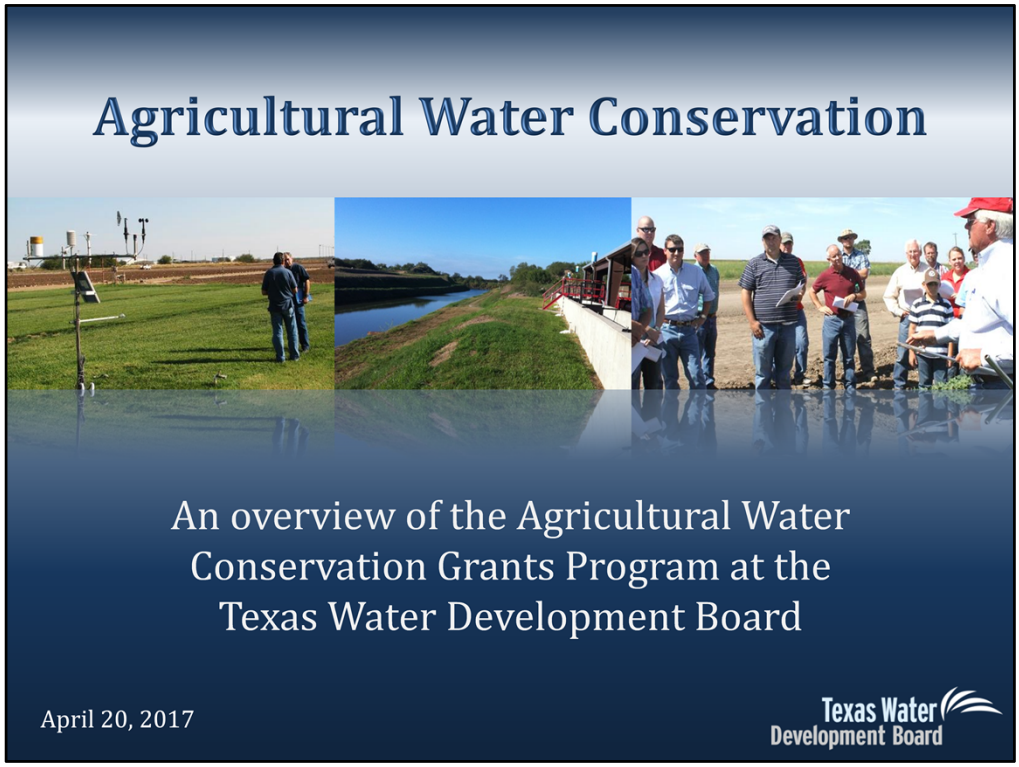
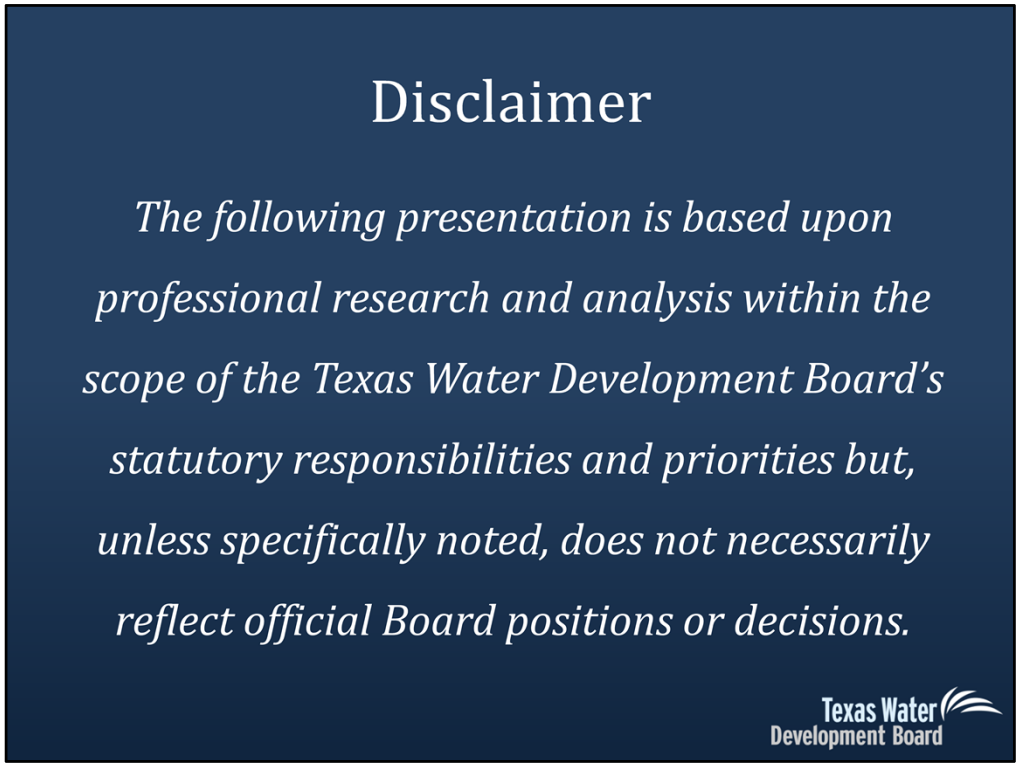


This presentation provides an overview of the Agricultural Water Conservation Program at the Texas Water Development Board.

Outline

- TWDB Agricultural Water Conservation Program
- Ag Grants Program
- Examples of previous projects
- Requests for applications
- Tips and contract terms

The presentation covers a brief overview of the agricultural water conservation grants program, give some examples of previous projects, and explains the application process.



Disclaimer: the following presentation does not necessarily reflect official Board positions or decisions.

Texas Water Development Board

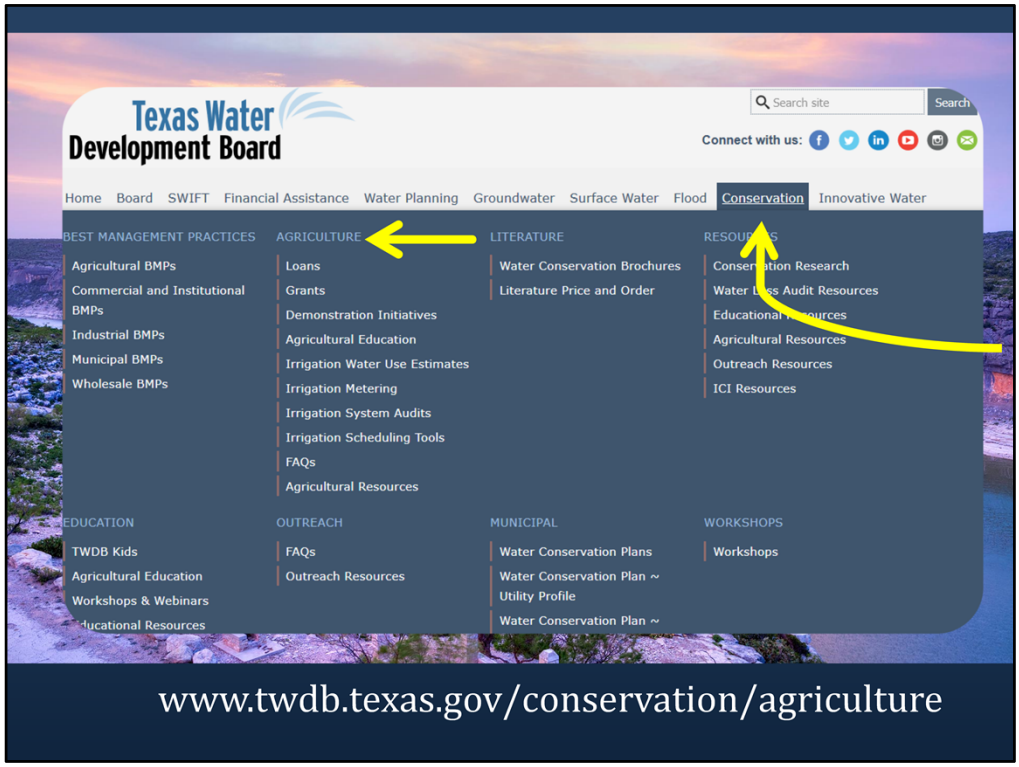
The mission of the TWDB is to provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas.

Agricultural Water Conservation

- Irrigation Estimates
- Education & Outreach
- Demonstration Projects
- Grants & Loans

www.twdb.texas.gov/conservation

The Agricultural Water Conservation Team at the Texas Water Development Board is responsible for developing annual irrigation water use estimates; providing education, outreach, and technical assistance to the public upon request; providing assistance to other areas of the agency in their management of the agricultural water conservation loans program; and managing the agricultural water conservation grants program, including several demonstration projects.



Where can you find us…

Here – www.twdb.texas.gov/conservation/agriculture

On our Ag Grants webpage, you can scroll, search, and sort to view all agricultural water conservation projects funded by TWDB since 2004. Projects requiring final reports include a hyperlinked contract number.

Agricultural Water Conservation Grants

TWDB provides funding for projects that research, educate, demonstrate, and implement proven best management practices to conserve water and increase irrigation water use efficiency

www.twdb.texas.gov/conservation/BMPs

With our ag grants, we focus in large part on projects that lead to the adoption of Best Management Practices (BMPs), both on the farm and in-district. Here are a few examples:

We have funded cost share of metering equipment to numerous entities across the state. Meters are proven to be a useful tool that aid producers in managing their irrigation water and provides local entities with useful data. Irrigation scheduling tools help producers to apply irrigation in the right amount, at the right time. Irrigation system audits help producers to better understand their irrigation system, and potentially improve efficiency and save money. Volumetric measuring and conservation pricing help irrigation districts and other water suppliers to promote and incentivize conservation with their agricultural customers. Irrigation system improvements, such as supervisory control and data acquisition (SCADA) and automated gates help irrigation districts to better manage their system and save water.

These are the sort of BMPs that we typically focus on. We want to target those that help to achieve the goal of saving water in agricultural operations.

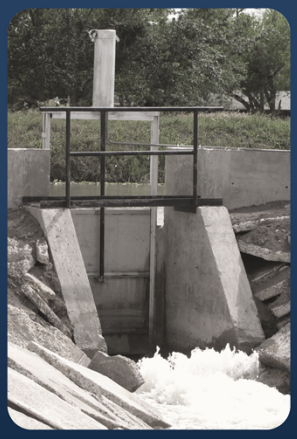
Eligible Entities

- *Eligibility is defined in the request for applications, and may differ from the general eligibility defined through the program.*
- General program eligibility:
  - State agencies
  - Political subdivisions
    - examples:
      - groundwater conservation districts
      - irrigation districts
      - water improvement districts
      - state university systems

The eligibility of our ag grants program is limited to state agencies, public universities, and political subdivisions of the state.

Examples of Ag Grant Projects

- Irrigation Improvements
- Evapotranspiration Networks
- Education and Research
- Demonstration Projects
- Equipment Cost Share



Here are a few examples of the types of projects that we've recently funded: numerous metering contracts, several on education of irrigation technologies, and other demonstration type projects, just to mention a few. The next couple of slides will show some examples of actual projects.

Some of our ag grant recipients have received awards for their projects. The Harlingen Irrigation District in Cameron County is one example. The Texas Project for Ag Water Efficiency focused on conserving water by integrating on-farm applications and district delivery systems. According to the district's [former] General Manager, Wayne Halbert, "This project proved that proper management, regardless of the method of irrigation, actually can produce increased yields with less water." He added that, results from the project "can be replicated across Texas and the entire world."

Although this is a larger project than what can be expected from a typical ag grant, it illustrates how local entities can utilize TWDB funding to save water in agriculture without sacrificing profit.

Texas Alliance for Water Conservation

Texas Tech University, Texas A&M AgriLife, High Plains Water District, irrigation equipment dealers, crop consultants, & agricultural producers in the Southern High Plains

→ Mission: *To conserve water with practices and technologies that reduce depletion of groundwater while enhancing economic opportunities*

www.tawc.us

This long-term project began in 2005 with a grant provided to Texas Tech University. The project cooperators are working to demonstrate and evaluate cost-effective technologies that will increase water conservation and water use efficiency in agriculture. The goal is to identify, demonstrate, and quantify the water saving agricultural production practices and technologies that reduce the depletion of groundwater from the Ogallala aquifer while maintaining agricultural production and economic opportunities. The project has received recognition at the local, state, and national level, winning several awards for their efforts in promoting agricultural water conservation in Texas.

The North Plains Groundwater Conservation District's 200-12 Project is another example of an award winning project. The district received a Texas Environmental Excellence Award, as well as a Blue Legacy Award in Agriculture for their efforts. Although this particular project ended, the district and their agricultural producers remain committed to the goal of maintaining productivity while saving water through other projects and programs.

Irrigation Metering Program

- Participating groundwater conservation districts
- Over 1,000 meters cost-shared since 1999

- Meters help to quantify pumping, providing valuable data for local groundwater management decisions
- "Talking with producers, meters may result in an average of 5% estimated irrigation water savings."

  → resulting in cost-savings to the producer

TWDB began administering a voluntary irrigation metering program in 1999. The program provides cost share reimbursement of metering equipment to agricultural producers, through the participation of local districts. Here is a testimony from one such participating district, C.E. Williams with the Panhandle Groundwater Conservation District on his district's involvement in the irrigation metering program: "We got started back in 1999. Our first grant was through the regional planning group, and back when we first started in the '90's, a meter was a dirty word to most agricultural producers, but it's amazing when you give it to them or cost share it with them, how much more willing they are to accept the technology, especially considering nobody likes to be first or last in anything they do. So, it was an excellent way for us to break the ice, so to speak, and to start getting wells metered. We've had several other grants through time. We target our higher decline areas, and still today we'll furnish the meters free to the farmers in those areas if they'll adopt the technology before the actual cutbacks in our regulatory program kicks in. So, its been a really valuable tool to us in our overall program. Plus it gives us a much better basis to review the [draft irrigation] water use estimates that are sent out by the TWDB [annually for our comments and revisions]. These two pieces are extremely important in getting a good handle on exactly what's going on in irrigated agriculture."

This is a good example of how our ag grants are helping to facilitate implementation of metering as a best management practice. It provides a useful tool to the producer, the district, and the state!

Cost-Share of Irrigation Meters

Flowmeter on a producer's center pivot funded through the voluntary participation of a local groundwater conservation district.

Here is a picture from the Mesa Underground Water Conservation District showing their data collection device and a typical flowmeter installation in Dawson County. This single-county groundwater district has been participating in the TWDB voluntary irrigation metering program for over decade. The district was one of the first in the state to ask producers to voluntarily sign-up to put meters on their irrigation systems. They have over 170 metered center pivot irrigation systems in the district, providing a representative sample of the irrigation systems in the county.

Requests for Applications

- At least once a year, TWDB issues a request for applications through the Agricultural Water Conservation Grants Program
- The amount of funding available and types of projects vary from year to year
- Announcements are advertised on our *Stakeholder Opportunities* webpage, when funding is available: http://www.twdb.texas.gov/about/contract_admin/request/

TWDB typically publishes a request for applications at least once a year. Categories and amounts available vary from year to year. For more information on current funding opportunities, visit the Stakeholder Opportunities webpage at http://www.twdb.texas.gov/about/contract_admin/request

Application Instructions

Don't just stand around and talk about it. Fill it out and turn it in!

You may contact *agconservation@twdb.texas.gov* if you are having difficulty downloading or locating the application instructions.

Please contact agconservation@twdb.texas.gov for a copy of the application instructions.

Tips

1. Include references to the appropriate irrigation conservation water management strategies in the most recent state or regional water plan.
2. Follow the instructions and answer all questions in the order provided.
3. Task and Expense Budget totals should match.
4. Include a scope of work, detailing the activities of each task.
5. Submit the required printed copies & an electronic version.
6. Don't miss the deadline!
7. Call or email if you have any questions.

Tips- Follow the application instructions and mind your p's and q's! Closely review the request for applications for eligible activities and prioritization criteria. Don't miss the deadline; late or incomplete applications are typically excluded from funding consideration.

Contract Terms

- Contract duration varies, depending on the type of project
  - Typically, projects involve installations of equipment during the first few years, and then data reporting, education, and outreach during the next three to five years
- Water savings reports are required for all projects
- Payments are processed on a reimbursement basis

Once the projects are underway, the ag grant recipient (or "contractor") must report back on their progress, usually on a quarterly basis. Each contract agreement has some form of reporting requirements. Invoicing is usually tied to these reporting requirements and payments are processed on a reimbursement basis. For example, metering contracts have a two year period of financial reporting during the equipment purchase and installation phase. During the first two years, the contractor is required to submit an annual report with all invoices, proof of payment, and a meter installation progress report. After the installation period is complete, the district provides annual reports of metered data and water savings estimates. Other contracts typically involve quarterly progress reports and often include a comprehensive final report requirement at the end of the project. Typical Ag Grant projects last about four or five years, although some may be slightly shorter or significantly longer, depending upon the type of project.

Contact us, via phone or email, anytime. Thanks!