MISSION OF TWDB

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas.

BOARD OF DIRECTORS

The following presentation is within the scope of the Texas Water Development Board’s statutory responsibilities and priorities but, unless specifically noted, does not necessarily reflect official Board positions or decisions.
WORK OF TWDB

• Planning
• Financing
• Science & Conservation
REGIONAL WATER PLANNING GROUPS

• 16 Regional Water Planning Areas
• Develop region-specific water plans every 5 years
• 23 Members & 12 Interests Represented
WHY CONSERVATION?
DATA BY USAGE TYPE (ACRE-FEET/YEAR)
WHY CONSERVATION?
DATA BY USAGE TYPE (ACRE-FEET/YEAR)
WHY CONSERVATION?
DATA BY USAGE TYPE (ACRE-FEET/YEAR)

Needs (Potential Shortages) by Usage Type (acre-feet/year)

DEMANDS  EXISTING SUPPLIES  NEEDS (POTENTIAL SHORTAGES)  STRATEGY SUPPLIES

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CONSERVE, CREATE, CONSIDER

• **Conserve** by promoting and demonstrating best management practices in water conservation, and providing funding for proven conservation tools

• **Create** opportunities for education and engagement within the agricultural community

• **Consider** and research new, innovative technologies and alternative production systems
AG WATER CONSERVATION
AGENCY INITIATIVES
AG WATER CONSERVATION AGENCY INITIATIVES

• Irrigation Water Use Estimates
• Collaborate with Stakeholders
• Ag Conservation Loans
• Ag Conservation Grants
• Demonstration Projects
• Education & Outreach
Water use estimates form the basis for developing irrigation demand projections in regional water plans.
IRRIGATION WATER USE ESTIMATES

Staff produce annual estimates of irrigation water use, by crop – for all counties in the state.

<table>
<thead>
<tr>
<th>CropNum</th>
<th>CropName</th>
<th>Acres</th>
<th>Inches-Acre</th>
<th>Acre-Feet</th>
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<td>COTTON</td>
<td>56,770</td>
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<td>CORN</td>
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<td>RICE</td>
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<td>9</td>
<td>SOY_OIL</td>
<td>6,170</td>
<td>9</td>
<td>4,620</td>
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<td>10</td>
<td>VINEYARD</td>
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<td>11</td>
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<td>OTHER</td>
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<td>-</td>
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<td>16</td>
<td>GOLF_COURSES</td>
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<td>-</td>
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</tr>
<tr>
<td>17</td>
<td>FAILED</td>
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<td>4</td>
<td>2,497</td>
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COLLABORATE WITH STAKEHOLDERS
COLLABORATE WITH STAKEHOLDERS

WATER CONSERVATION ADVISORY COUNCIL
NRCS STATE TECHNICAL ADVISORY BOARD
INDUSTRY GROUPS
STAKEHOLDER GROUPS
COLLABORATE WITH STAKEHOLDERS
WATER CONSERVATION ADVISORY COUNCIL

BEST MANAGEMENT PRACTICES

EXAMPLES

• Crop Residue Management & Conservation Tillage
• Irrigation Scheduling
• Drip-Irrigation System
• LEPA & LESA
• Replacement of Irrigation District Canals & Lateral Canals with Pipelines
• Nursery Production Systems
AG CONSERVATION LOAN PROGRAM
AG CONSERVATION LOAN PROGRAM

• Applications may be submitted by a political subdivision at any time, but funding is subject to availability
• Eligible practices include improvements to district-owned infrastructure, or as loans to individuals for improvements to existing irrigation systems
• Low, fixed-interest rates (same rate as U.S. Treasury Note)
• Up to 10-year repayment terms
AG CONSERVATION GRANT PROGRAM
AG CONSERVATION GRANT PROGRAM

- Up to $600,000 available, annually
- Political subdivisions & state agencies eligible to apply
- Producers eligible to participate in projects
- Local match requirements vary, but usually 50%
- Funding typically limited to $150,000 - $200,000 per project, though subject to Board approval
AG CONSERVATION GRANT PROGRAM

CATEGORIES

- Cost-share of equipment
- Demonstrations
- Planning, design, & irrigation system improvements
AG CONSERVATION GRANT PROGRAM

CATEGORY USE CASE | COST-SHARE, EQUIPMENT

EXAMPLES

• Edwards Aquifer Authority provides grants to agricultural producers for irrigation efficiency improvements

• High Plains Water District’s Assistance in Irrigation Management (AIM) program provides cost share to agricultural producers for irrigation control and monitoring systems
Several groundwater conservation districts and other water authorities have purchased and installed, or provided participating agricultural producers with access to cost share funding for irrigation metering equipment.

The meters provide the districts and agricultural producers with a tool to make informed water management decisions.

TWDB benefits from receiving data on actual irrigation water use, which informs the annual irrigation water use estimates and improves upon the irrigation demand projections used in the regional water planning process.
AG CONSERVATION GRANT PROGRAM

CATEGORY USE CASE | DEMONSTRATION OF INNOVATIVE & ALTERNATIVE SYSTEMS

• Narrow border flooding
  – 33% less water applied
  – Higher profitability

• Partial root-zone drying
  – 40% less water applied
  – maintains fruit quality & yield

• Alternative water supplies for citrus
DEMONSTRATION PROJECTS
TEXAS PROJECT FOR AG WATER EFFICIENCY

HARLINGEN IRRIGATION DISTRICT

- Collaborative project with Texas A&M AgriLife Research and Extension and Texas A&M University-Kingsville (2005-2015)
- BMPs in the Lower Rio Grande Valley
- TEXASAWE.ORG

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TEXAS ALLIANCE FOR WATER CONSERVATION
TEXAS TECH UNIVERSITY

- Collaborative Project (2005-Present)
- BMPs in the Southern High Plains
- WWW.DEPTS.TTU.EDU/TAWC
OUTREACH & EDUCATION PROGRAMS
TEXAS A&M AGRILIFE RESEARCH & EXTENSION

• Support education, outreach, and demonstration projects related to efficient irrigation practices
• Audience: agricultural producers and irrigation district personnel
OUTREACH & EDUCATION

FARM SHOWS & FIELD DAYS

• Promote TWDB resources and programs directly to producers
• Offer technical assistance related to grant program at Field Days organized by partners
IRRIGATION SYSTEM IMPROVEMENTS
IRRIGATION SYSTEM IMPROVEMENTS

• Example project types:
  – Canal lining & pipeline replacement
  – SCADA & automated gates

• Example project partners:
  – Cameron County Irrigation District #6
  – Harlingen Irrigation District, Cameron County #1
  – Hidalgo County Water Improvement District #19
  – Santa Cruz Irrigation District #15
STAY IN TOUCH!

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