

Agricultural Irrigation Conservation Education and Demonstration Program

Section I. Administrative Requirements

Official name and address of the applicant

Texas A&M AgriLife Extension Service
400 Harvey Mitchell Parkway, Suite 300
3578 TAMU
College Station, TX 77845

Constitutional and statutory authority creating the applicant and under which the applicant currently operates

Texas A&M AgriLife Extension Service (formerly the Texas Cooperative Extension) is established as the State Cooperative Service Agency in Texas. It is administered by the Board of Regents of The Texas A&M University System under the State Law and the Federal Statute assigning cooperative extension agencies to the land grant college or university established in each state in accordance with the Smith-Lever Act of 1914.

Vendor ID number

The Federal Identification Number for Extension is 74-6000537.

Names and addresses of the individual or individuals with the legal authority to perform the acts of the entity, and title of position

Contract Office Contact:

Julie Bishop, Associate Executive Director Sponsored Research Services
400 Harvey Mitchell Parkway, Suite 300
3578 TAMU
College Station, TX 77845
Phone: 979-458-8760 Email: jbishop@tamu.edu

Name, address, and title of the designated representative; also include phone number and email addresses

Julie Bishop, Associate Executive Director Sponsored Research Services
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An affidavit from the individual with the authority to act on behalf of the applicant, or a certified copy of a resolution adopted or minutes approved by the governing body with the authority to act on behalf of the applicant, which:

- a. Identifies the amount that the applicant is requesting:
- b. Authorizes the submission of an application on behalf of the entity
- c. Designates an authorized representative to submit the application and perform all reasonable and necessary action in support of the application and, if approved by the TWDB, to perform the terms and conditions of the award of money from the Fund.

Letter of commitment for Texas A&M AgriLife Extension Service attached at the end of this application.

Description of the applicant's commitment to water conservation

Texas A&M AgriLife Extension plays a critical role with its education programs to encourage and facilitate the grower adoption of water conservation strategies. The Texas A&M AgriLife Extension Service Strategic Plan demonstrates the commitment of Extension to water conservation. Water conservation is included as a strategy in four of the plan's five Imperatives and is a major component of Goal 2.1 as shown below:

- Strategy 1.4.3 Conduct educational programming for turfgrass professionals and homeowners on the management and selection of water-efficient landscapes and irrigation systems
- Goal 2.1 Consumers, homeowners, agricultural producers, communities, and irrigation districts understand and adopt best management practices to protect water quality and enhance conservation so water supplies will meet future water needs in Texas that are essential for expanding agricultural growth, jobs, and the economy in both rural and urban areas.
- Strategy 2.1.1 Develop educational programs to promote efficiency and effectiveness of irrigation through improved timing and application of irrigation water on crop and forage land.
- Strategy 2.1.2 Demonstrate conservation tillage strategies to manage and conserve soil water
- Strategy 2.1.7 Develop and deliver education programs describing water resources and proper management of these resources.
- Strategy 2.1.9 Develop and deliver education programs on groundwater resources and management for clientele in groundwater conservation districts
- Strategy 3.1.7 Develop educational programs and resources for coastal communities focused on improving water quality and reducing water consumption through resilient, resource-efficient WaterSmart landscapes
- Strategy 5.4.1 Provide educational opportunities, such as programs, conferences, camps, newsletters for youth natural resource education (including water and wildlife).

Further, the project teams extensive experience in research, education and extension programs focusing on irrigation water conservation, as well as outreach programs with producers in Texas. The PI and co-PIs have published numerous articles on these subjects, presented at local, national, and international conferences and managed many grant projects related to this field. The PIs have a proven track record with grant/project management, including TWDB projects, meeting expected deadlines for quarterly reports, with appropriate outcomes to establish change among growers.

Section II. Project Information

Project Title: Agricultural Irrigation Conservation Education and Demonstration Program

Project Need

According to the 2016 Region M Water Plan, an additional supply of 797,344 acre-feet per year will be needed in 2070 to support the municipal, irrigation and other water needs in the LRGV that are driven by an expected population increase of 106 percent in by the year 2070. With increased municipal demands and less reliable water delivery from the Rio Grande, significant unmet irrigation needs are projected. Agricultural irrigation water demand is the largest share of current demands but is projected to decrease due largely to urbanization. Irrigation district and on-farm water conservation is expected to provide 43 percent of future needs (347,730 ac-ft/yr).

The 2016 Region G Water Plan projects additional supplies of 625,561 per year will be needed by 2070 to support future demands. Between 2020 and 2070, regional population is expected to grow by 83 percent. Planned transfer of agricultural irrigation to municipal and industrial uses combined with reductions in available supply will lead to some unmet irrigation needs. Conservation is expected to provide 14,514 ac-ft/yr by 2070 in the Region G planning area.

Further, both regions are impacted by degraded water quality which is partially contributed to by agricultural runoff. Water quality and water quantity, and their importance are inseparable and intricately linked in numerous studies. Therefore, improved irrigation water management is expected to conserve water and improve water quality.

In the LRGV, a multi-pronged approach is ongoing to improve water conservation and water quality. The Texas Water Resources Institute, with funding from the Texas State Soil and Water Conservation Board, is providing educational programs on irrigation and water quality best management practices and cost

share programs to support implementation to producers in the Valley. The Texas State Soil and Water Conservation Board also provides technical and financial assistance to producers to improve water quality and irrigation efficiency. The Texas Water Resources Institute successfully led a consortium to acquire \$3 million in additional federal USDA-NRCS cost share funding for producers to improve nutrient and irrigation water management through the Regional Conservation Partnership Program and has requested an additional \$3 million to continue management practice implementation. Irrigation districts, such as the Cameron County Irrigation District #2, Delta Lake Irrigation District, and Hidalgo Irrigation District #1, are working to improve delivery system efficiency by converting open canals to pipelines, installing automated gates, lining open canals, and implementing other conservation measures with funding from U.S. Bureau of Reclamation, TWDB SWIFT funds, and local sources. The Texas Water Development Board and Harlingen Irrigation District recently ended a decade long effort on affordable and achievable methods for conserving water by integrating on-farm applications and district delivery systems (i.e. Ag Water Efficiency or Texas AWE). Given that most water rights reside with the Irrigation Districts, it is fundamental to have a partnership of irrigation farmers and Irrigation Districts. Further, Texas A&M AgriLife and Texas A&M University Kingsville continue to work to develop, demonstrate, and release new methods for improving water resource management in this important region of the state. This proposed project will be integrated with each of these activities to leverage and enhance the impacts of the programs collectively.

Project Description

The proposed project will include two distinct components: 1) delivery of irrigation training programs, and 2) an irrigation technology and management demonstration project in the LRGV that will implement technologies that can potentially mitigate challenges growers face when attempting to optimize irrigation efficiency. The primary goal of the project is to promote water conservation strategies among

growers regarding benefits and advantages of water conservation and water use efficiency of various on-farm irrigation management practices when compared to conventional practices.

The Texas Water Resources Institute will coordinate and administer the project in conjunction with Texas A&M AgriLife Extension Service, local partners including Delta Lake Irrigation District, Post Oak Savannah Groundwater Conservation District, cooperating growers, Rubicon Water, and a variety of others. At least three grower education programs will be delivered by the project team in the LRGV and three will be delivered in the Lower and Middle Brazos River Basin. At each educational event, water conserving technology and practices, irrigation scheduling, available cost share opportunities (i.e. EQIP, WQMPs), and other relevant information will be discussed. These programs will address the need for increased awareness regarding advances in irrigation water management and technology and will serve to address irrigation conservation needs identified in respective Regional Water Plans. Best management practices for conserving water will be the primary focus of discussion during programs and adoption incentives will be discussed in an effort to promote practice adoption.

Continued demonstration of technologies and management practices with potential to enhance irrigation water conservation in the LRGV is needed to provide valuable performance, economics, and conservation information to irrigation districts and growers alike. Conversations with growers irrigating row crops in the valley where furrow irrigation is most common, point to inconsistent irrigation flow rates as a significant challenge faced when attempting to optimize irrigation schedules. This is largely a function of the irrigation water delivery system in the LRGV, but tools exist that may mitigate these issues to a large extent. Automated devices that monitor and adjust automatically to maintain consistent flow volumes throughout the duration of an irrigation event exist. One company, Rubicon Water, provides various technologies that provide significant operational efficiency improvements when implemented individually. Pairing multiple devices further enhances operational efficiencies and can largely solve problems experience with flow variations. A number of Rubicon Water's components are

already being used in the LRGV, thus integration of new components can be compounded in certain areas. This project will focus on demonstrating the Rubicon Water PikoMeter® between the irrigation district delivery network and the growers field. This device is an integrated flowmeter and automated valve that is designed to maintain a near constant ($\pm 2.5\%$) flow rate as programmed by the user. This meter can also be integrated to communicate with automated flow control devices within irrigation districts to further optimize water delivery from the district to the field. Demonstrations that feature PikoMeter® operation both integrated with irrigation district automation and as a stand-alone device will be carried out. Fields will also be instrumented with automated soil moisture monitoring devices to inform appropriate irrigation end times. Demonstrations will be conducted to highlight the functional benefits of the device (and its integration with irrigation district devices), economic considerations, and operation and maintenance needs. The PikoMeter® demonstration will also consist of a considerable education and outreach component to ensure that potential users receive adequate training on installation, programming, operation, and maintenance of the devices. This program will increase technology awareness regarding advances in irrigation water management and technology and will serve to address irrigation conservation needs identified in the Region M Water Plan.

Project Location

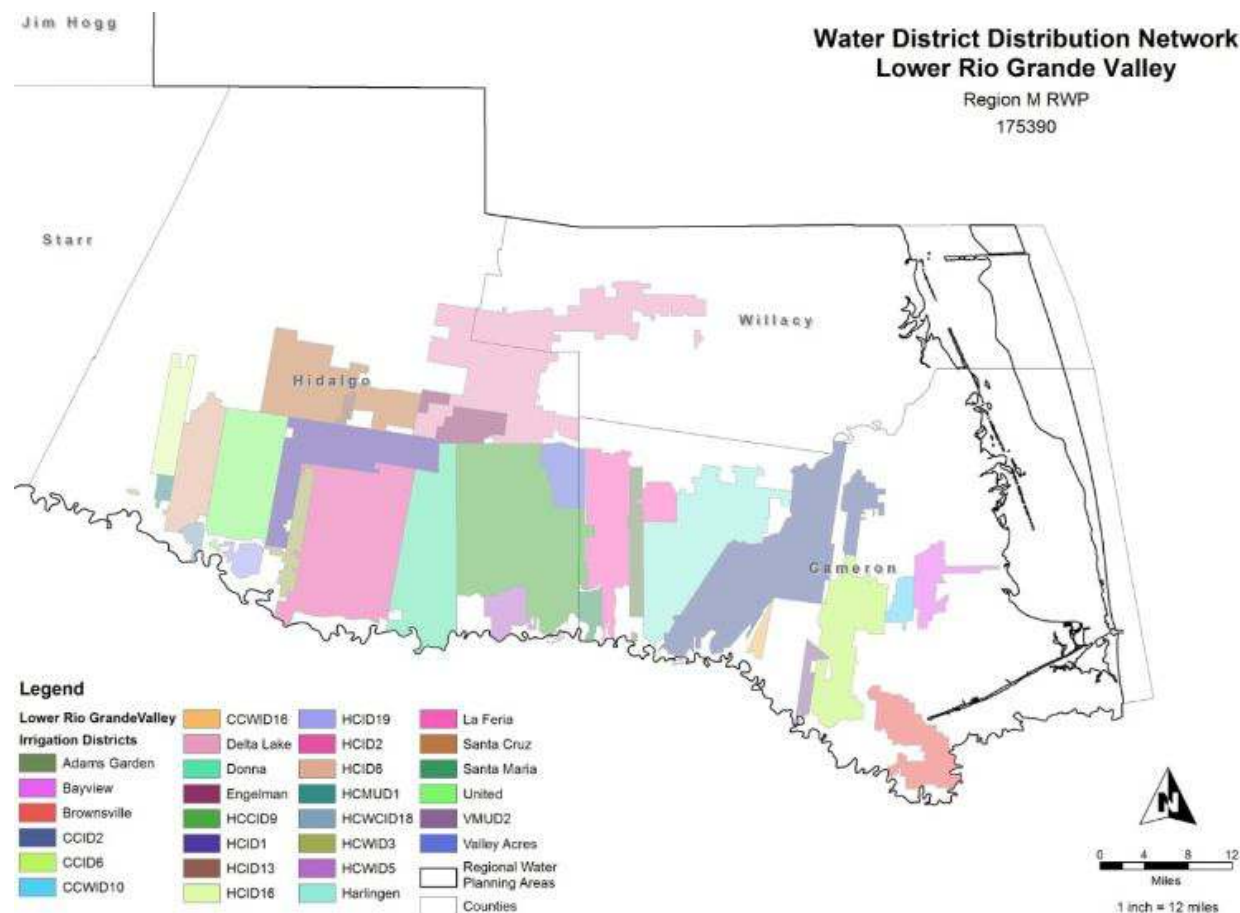
The proposed project will be conducted partially in the Lower Rio Grande Valley (LRGV) region and in the irrigated portion of the Middle and Lower Brazos River Basin (Brazos, Burleson, Falls, Grimes, Milam, Robertson, and Washington counties). The LRGV region is part of the Rio Grande Regional Water Planning Group (Region M). There are 28 Irrigation Districts in Region M (Figure 1). Agricultural irrigation water demand makes up the largest share of current water demands. To encourage agricultural irrigation conservation education and demonstrations will be conducted across the LRGV area.

The portion of the Lower and Middle Brazos River Basin that this project focuses on lies within the Brazos G Regional Water Planning Group (Region G). Irrigation water use makes up the second largest

water use demand and currently accounts for approximately 40% of all water demand in Region G.

Future irrigation demand is projected to decrease by 14% through increased conservation and conversion to other uses, but is still projected to make up a significant portion of total water demand.

AgriLife Extension and AgriLife Research are authorized to, and already do, conduct activities across the state, including the LRGV.



Qualifications of Technical Staff

Dr. Lucas Gregory is a PI for TWRI where he currently serves as a senior research scientist and quality assurance officer. He has extensive experience with successful project leadership and management, GIS, data analysis, ag systems management and water resources management. TWRI is extremely involved in addressing water issues in the Valley and currently manages eight projects that address water

conservation and water quality across the region. Dr. Gregory will lead the irrigation technology demonstration and assist in program development and delivery. It is estimated that he will spend 2% effort annually for this project.

Dr. Allen Berthold is a PI for TWRI where he currently serves as a senior research scientist. He has extensive experience with successful project leadership and management, water resources conservation and management, and program evaluation assessments. Dr. Berthold will lead program evaluation efforts to understand knowledge gained and quantify water savings. He will also assist in program development and delivery. It is estimated that he will spend 2% effort annually for this project.

Dr. Samuel Zapata is an Assistant Professor and Extension Economist located at the Texas A&M Research and Extension Center in Weslaco serving the 20-county area of the South Extension District. Dr. Zapata develops and coordinates Extension educational programs and applied research related to Farm Management and Marketing by providing technical expertise and educational materials for producers, Extension agents, specialists, clientele, and organizations. It is estimated that he will spend ~5% effort annually for this project.

TWRI Extension Irrigation Specialist. TWRI is hiring an Extension Irrigation Specialist that will play an integral role in the development and delivery of educational programming, technology demonstration, and program evaluations for this and other projects statewide. It is estimated that this person will spend 40% effort annually for this project.

Mr. Victor Gutierrez, TWRI Extension Associate will support educational program planning and delivery for irrigation programs in the LRGV. Mr. Gutierrez will also provide necessary field support locally for the irrigation technology demonstration conducted in the Delta Lake Irrigation District. It is estimated that he will spend 15% effort annually for this project.

Other key project collaborators include the Delta Lake Irrigation District; Post Oak Savannah Groundwater Conservation District; Bluebonnet Groundwater Conservation District; Brazos Valley Groundwater Conservation District; Dr. Dana Porter, Professor, Extension Program Leader, and Associate Department Head in the Department of Biological and Agricultural Engineering (BAEN), Texas A&M AgriLife Extension Service who focuses on agricultural water management and irrigation; Dr. Guy Fipps, Professor and Texas A&M AgriLife Extension Service Agricultural Engineer for Irrigation and Water Management who leads the Irrigation Technology Program, Texas A&M School of Irrigation, TexasET Network and website, and other irrigation programs and activities; ; Dr. Jason Krutz, Irrigation Specialist and Mississippi State Water Resources Institute Director conducts row-crop irrigation conservation programming throughout the Mississippi Delta in areas very similar to the Brazos and Lower Rio Grande Valleys and County Extension Agents.

Budget Information

The total cost

The projected costs for this project are \$150,000.

b. The cost of each significant element of the program or project

TASK	DESCRIPTION	AMOUNT
1	Administration	
2	Grower Education Programs	
3	Irrigation Technology Demonstration	
4	Public Education & Outreach	
TOTAL		

CATEGORY	LOCAL MATCH	TWDB AMOUNT
Salaries & Wages		
Fringe		
Travel		
Other Expenses		
Equipment		
Subcontract Services		

TOTAL		
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Local Matching Funds

Total in-kind matching provided is \$79,500 as follows:

- In-Kind Rubicon Water service provided
 - PikoMeter® Installation (\$3,000)
 - PikoMeter® User Training (\$3,000)
 - 1 year of SCADAConnect Live® (\$3,500)
- In-Kind Delta Lake Irrigation District
 - Labor for demonstration installation (\$2,000)
 - Technology for PikoMeter® integration into Delta Lake infrastructure (\$2,000)
- In-Kind Post Oak Savannah Groundwater Conservation District grower conservation incentives
 - Up to \$50,000 depending on number and efficiency upgrades implemented
- In-Kind Brazos Valley Groundwater Conservation District grower conservation incentives
 - Up to \$15,000 depending on number and efficiency of upgrades implemented

Project Timeline

Task	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1. Administration	X	X	X	X	X	X	X	X	X	X	X	X
2. Grower Education		X				X				X		
3. Irrigation Demonstration		X	X	X	X	X	X	X	X	X	X	
4. Education & Outreach	X	X	X	X	X	X	X	X	X	X	X	X

Scope of Work

Task 1. Project Coordination, Administration, and Reporting

1.1 The Texas Water Resources Institute will coordinate and administer the project. An experienced team has been organized to successfully deliver this project. This team consists of numerous Texas A&M AgriLife Extension Service personnel and a variety of local partners from the Brazos and Lower Rio Grande Valleys.

1.2 Quarterly conference calls. To ensure timely completion of proposed work, quarterly conference calls with the project team will be held to discuss and coordinate project activities, project schedule, communication needs, deliverables, and other requirements.

1.3 Quarterly reports. TWRI will work with the project team to develop and submit quarterly activity reports to TWDB.

1.4 Develop and Submit Draft and Final Report. TWRI will work with the project team to develop a Final Report that summarizes activities completed and conclusions reached during the project and describe the extent to which project goals were achieved.

Task 2. Grower Education Programs

In partnership with select irrigation districts and groundwater conservation districts, at least six grower education programs will be delivered by the project team; three in the LRGV and three in irrigated areas of the Middle and Lower Brazos River (potentially in Marlin, Hearne, and Mumford) on an annual basis. These programs will promote the adoption of water conservation practices and technologies that improve irrigation efficiency by engaging agricultural producers and through educational outreach in the form of field days, workshops, seminars, and demonstrations in classroom settings and on farms.

Delivery of irrigation training workshops. The TWRI and AgriLife Extension will coordinate at least three Irrigation Training Programs in each area (Brazos Valley & LRGV). These programs will be delivered in cooperation with local irrigation districts and County Extension Agents and will consist of specialists that will present on various topics including, but not limited to:

- Economics of conservation practice adoption
- Irrigation scheduling
- Irrigation technologies and conservation practices
- Water quality issues
- Crop-specific guidelines
- Conservation incentive programs

Materials will be printed and provided to participants. Extension Irrigation Specialists and Economist, and others will assist with the Irrigation Training Programs coordinated by the TWRI. Workshops will emphasize on-farm water conservation practices. Economic considerations and cost-share programs available will be presented as well.

In the Brazos Valley, the Brazos Valley and Post Oak Savannah Groundwater Conservation Districts plan to encourage producers in their respective jurisdictions to participate in educational programming by offering financial assistance for upgrading existing irrigation technology to growers that attend program these programs. Local funding will be used for these incentives and will be used to match grant dollars.

Task 3. Irrigation Technology Demonstration

In cooperation with the Delta Lake Irrigation District, Rubicon Water, and local growers in the LRGV, TWRI will conduct an irrigation technology demonstration to address grower needs for improving on-farm irrigation conservation. This task will implement technology that is not currently employed in the LRGV and aims to promote the adoption of innovative agricultural irrigation technology and allow users increased control over irrigation start/stop times and flow rates through the use of automated technology.

Demonstration. PikoMeters® from Rubicon Water will be installed in two locations within the Delta Lake Irrigation District to evaluate their ability to maintain consistent flow rates into grower's fields during the course of an irrigation event. One unit will be tested independent of other automated irrigation delivery (on-farm, or in-district) and the other unit will be tested in conjunction with automated flow control systems already present within the irrigation district. Water conservation and economic potential of these units will be evaluated over the course of two growing seasons.

Field Day and Training. As a component of this demonstration, a field day and grower training session will be hosted during the second growing season. The mechanics and function of the PikoMeter®, performance information, water savings and economic potential and personal experience with these

units will be highlighted. Additionally, an in depth and hands-on training component will be provided to growers and irrigation managers regarding proper installation, operation, and maintenance of these units. PikoMeter® operation and programming will be demonstrated in the field during this field day.

Task 4. Public Education & Outreach

Media and Public Relations. The TWRI Communications Team will provide media and public relations support to the project team for news stories, event promotions, editorials, telling success stories, etc. within and beyond agricultural media. TWRI will work with AgriLife Extension and Research to develop applicable messaging regarding water conservation and management. The TWRI media platforms (website, Facebook, Twitter, Instagram, etc.) AgriLife Today, partner media platforms, local media, trade magazines, and other avenues as appropriate will be used to disseminate project information and educational materials. This will serve to further the reach of in-person program delivery and will promote water conservation in irrigation to a wider audience around the project region and state.

Project Activities and Deliverables

- At least six irrigation conservation focused grower education programs including promotional materials, agendas, number of attendees, and program materials
- One field day and grower training on the use of the PikoMeter® including promotional materials, agendas, number of attendees, and program materials
- Irrigation Technology Demonstration results included in the final report
- News releases and articles highlighting upcoming irrigation training events and irrigation conservation
- Press releases
- Quarterly reports
- Draft and final reports

Achievement of Solicitation Goals

This project is designed to directly achieve goals one, two and four described in the grant's request for applications. Agricultural producers will be engaged throughout the program through educational events, technology demonstration field days and technology trainings. These educational programs and demonstration specifically promote the adoption and tout the benefits of existing and innovative water

conservation practices and technologies with an ultimate goal of encouraging producers to enhance their irrigation systems due to knowledge gained during program delivery. Additionally, planned programs will be developed in consultation with and delivered with support from local and regional partners. These partners are also committing in-kind financial resources to further expand the reach of these programs and further promote conservation practice adoption.

Water Conservation Benefits

Water Conservation Water Management Strategy Identified in the Regional Water Plan

Improving water management and conserving water through on-farm irrigation application strategies is of great importance for the LRGV water plan (2016 Region M Water Plan). Specifically, water management strategies described in 5.2.8, *On-Farm Irrigation Conservation*, are supported through this project. Further, the Region M Planning Group Making states that better use of available water is critical to helping farmers through drought, and thus recommends continued research, education, demonstration, and large-scale implementation of these and any other irrigation conservation measures that farmers find to be appropriate. Finally, in 8.4.1, Region M recommends “Educational programs for farmers, Irrigation District Boards of Directors, and Irrigation District employees are recommended and should be supported by the TWDB, TCEQ, and the universities in Texas.” This project will seek to help achieve these strategies by conducting irrigation conservation focused education programs and a technology demonstration that aims to enable growers to be more efficient with on-farm furrow irrigation.

Irrigation water conservation The 2016 Brazos G Regional Water Plan states in section 8.3 that “Research indicates that there is a strong relationship between knowledge of water sources and a willingness to conserve. Conservation is the most cost-effective means of securing future water supply. Brazos G believes strongly that water education is important and supports water conservation and public awareness programs at the state and local level.” This project seeks to achieve these strategies by

conducting irrigation conservation focused education programs supported by financial incentives to implement water conservation practices and technologies from local partners.

How Proposed Grant Implements These Strategies

The proposed grant consists of educational programs and technology demonstration that will lead to increased adoption of irrigation water conserving practices thus supporting implementation of the Region G and M Water Plans, conserving water needed water for future growth, ensuring continued vitality of agriculture in the LRGV and Brazos Valley, and positively impacting them economically and environmentally. Specific water savings realized are not known, but will be calculated based on practices implemented or planned for implementation following education programs. Local incentive programs will provide a financial stimulus to irrigators in these regions to implement water conserving technologies further expanding the impact of delivered education programs.

Estimated Baseline Water Usage

Estimated irrigation water usage in the project's focus areas is significant. Cameron, Hidalgo, and Willacy counties in the LRGV are the focus area for this project and are the three largest irrigation use counties in the Region M Water Planning area. The 2016 Region M Water Plan reported irrigation base-year demands for 2005 to 2009 which served as a basis for planning in their regional plan. Projected irrigation demands for 2020 are higher than the baseline usage however projected demands in 2070 are less.

Table 1. Regional Water Plan Usage and Demands

County	Irrigation Use/Demand (ac-ft/yr)		
	Baseline Usage (2005 – 2009 average)	2020 Demand	2070 Projected Demand
Cameron	311,800	355,962	288,601
Hidalgo	558,138	639,676	502,563
Willacy	58,198	69,253	68,741
LRGV Total	928,136	1,064,891	859,905
	2010 Historical Use	2020 Demand	2070 Projected Demand
Brazos	35,541	26,050	20,438
Burleson	27,099	22,855	18,469
Falls	6,847	4,301	3,658
Grimes	275	0	0
Milam	3,494	5,081	4,875

Robertson	79,613	63,420	55,124
Washington	300	299	299
Brazos Valley Total	153,169	122,006	102,863

In the Brazos Valley, irrigation demands are significantly less than the LRGV due to in part to larger average annual rainfall totals, crops grown, and irrigated acreage. Decreasing irrigation demand over time is also projected in these counties and is primarily due to increasing demands from other water uses.

Expected Water Savings

An evaluation approach will be used to measure both knowledge and behavior changes of individuals participating in education programs. A pre-test/post-test evaluation strategy will be implemented at the beginning and end of select training programs. The pre-test will ask knowledge-based questions and the post-test will measure knowledge change of participants. In addition, the post-test will include 'intentions to change' questions that will focus on behaviors that participants should adopt based on what they have learned. A six month follow-up survey instrument will also be administered to participants via online survey technology. Emails will be sent to program participants to determine which practices were adopted sixth months after the program. For those individuals that do not have email, traditional mailing techniques will be used to collect these data.

Construction Activities

No TWDB funding is requested for the construction of a conservation project. The Delta Lake Irrigation District has agreed to contribute necessary construction needs for installing components of the irrigation demonstration in their district as in-kind services.



TEXAS A&M SYSTEM
**Sponsored Research
Services**

February 15, 2016

Mr. David Carter
Texas Water Development Board
Stephen F. Austin Building, Room 61 OD
1700 North Congress Avenue
Austin, Texas 78701

Reference: Maestro Proposal 1602440 -- "Lower Rio Grande Valley Irrigation Education and Outreach Program"

The purpose of this letter is to confirm the intent of Kevin Wagner, Principal Investigator at Texas A&M AgriLife Extension Service, to submit an application for the Texas Water Development Board's Water Conservation Education Grants.

This application will take the form of a two-year award from Texas Water Development Board in the total amount of \$150,000. Project dates are 6/1/2016 - 5/31/2018. The budget and budget justification are enclosed along with the statement of work.

Should Texas Water Development Board decide to fund this proposal, Texas A&M AgriLife Extension Service will ensure compliance with all pertinent sponsor regulations and guidelines.

Administrative questions should be directed to Tanya Gamez (979-845-6273 or tgamez@tamu.edu), Senior Contract Negotiator, Sponsored Research Services. Questions of a programmatic or technical nature may be addressed to Kevin Wagner at 979-845-1851 or klwagner@tamu.edu.

Sincerely,

A handwritten signature in blue ink, reading "David Hollingsworth". The signature is written in a cursive, flowing style.

David Hollingsworth
Director, Contracts and Grants