

Texas Water Resources Institute

Implementing Agriculture and Rural Management Measures in the Update to the Arroyo Colorado Watershed Protection Plan (ACWPP) 2017 to Address NPS Pollution and Impairments

**FY 2019 CWA §319(h)
TSSWCB 19-05**

EPA State Categorical Program Grants – Workplan Essential Elements

FY 2011-2015 EPA Strategic Plan Reference

Strategic Plan Goal – Goal 2 Protecting America’s Waters

Strategic Plan Objective – Objective 2.2 Protect and Restore Watersheds and Aquatic Ecosystems

Quarter no. 1 from 10/1/2019 through 12/31/2019

I. Abstract

This Quarter the Extension Associate continued to invest significant effort in meeting with County Extension Agents, NRCS personnel, TSSWCB staff, AgriLife Extension Specialists and AgriLife Research scientists to see where TWRI could help and assist with distributing educational information to producers. The Extension Associate collaborated with TSSWCB, NRCS, and County Extension Agents to add new producers to the direct mailing list for this year’s programs. TWRI assisted with a small acreage and socially disadvantaged Ag committee, to coordinate and facilitate this year’s educational outreach programs. The Extension Associate also continued to assist producers with getting financial and technical assistance for Water Quality Management Plans by sending out 319 funding updates via emails. The Extension Associate, TSSWCB personnel, and USDA–NRCS demonstrated the rainfall simulator, to demonstrate sediment run-off. The Arroyo Colorado Watershed Coordinator and the Extension Associate coordinated and facilitated an ACW steering committee meeting to update stakeholders on on-going and recently completed projects as well as upcoming events. They also informed the stakeholders on updating the ACW website and solicited input/suggestions for improving the website. Both the watershed coordinator and Extension Associate attended the Environmental Coalition Summit. Next quarter, the Extension Associate will continue to promote Best Management Practices, and Financial and Technical assistance at the producer Workgroup meetings held by the County Extension Agents.

II. Overall Progress and Results by Task

TASK 1: Project Administration

Subtask 1.1: TWRI will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July and October. QPRs shall be distributed to all Project Partners.

The following actions have been completed during this reporting period:

- a. The year 1, quarter 1 report was completed and sent to TSSWCB on January 15, 2020.

5% Complete

Subtask 1.2: TWRI will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.

The following actions have been completed during this reporting period:

- a. As of October 14, 2019, a total of \$9,478.52 or 3% of total project funding has been expended.

5% Complete

Subtask 1.3: TWRI will host coordination meetings or conference calls, at least quarterly, with Project Partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. TWRI will develop lists of action items needed following each project coordination meeting and distribute to project personnel.

The following actions have been completed during this reporting period:

- a. The Extension Associate held regular communications with project partners at the TSSWCB Harlingen Regional office and the NRCS county field offices.

5% Complete

Subtask 1.4: TWRI will develop a Final Report that summarizes activities completed, conclusions reached during the project and discusses the extent to which project goals and measures of success have been achieved.

The following actions have been completed during this reporting period:

- a. No activity has been done.

0% complete

TASK 2: Conduct Education and Outreach to Increase Landowner Participation in BMPs and Incentive Programs

Subtask 2.1: The Extension Associate will continue to maintain and develop a mailing list of producers in the Arroyo Colorado Watershed and updated the mailing list as needed.

The following actions have been completed during this reporting period:

- a. The Extension Associate has added new producers to current mailing list via email.

5% Complete

Subtask 2.2: The Extension Associate will periodically distribute emails to producers identified in Subtask 2.1. Direct mailings and personal contact will be geared toward highlighting the availability of and involvement in available incentive programs. Also, emails and news releases will advertise upcoming educational opportunities. Further, AgriLife Extension will engage producers through personal contact. Direct contact will be made with individuals identified in Subtask 2.1 as well as attendance at SWCD meetings (twice annually at each SWCD).

The following actions have been completed during this reporting period:

- a. TWRI has let producers know that applications for 319 funding are available through the TSSWCB.

5% Complete

Subtask 2.3: The Extension Associate will use information in the USDA-NRCS Field Office Technical Guide (FOTG) to develop educational materials that highlight specifications, beyond descriptions, about various BMPs that are of interest to producers. The Extension Assistant will work with AgriLife Extension Department of Agricultural Economics to incorporate information on the economics of BMPs as a primary driver for adoption. Materials will be distributed at the various educational events in the following subtasks. Also, materials that educate producers on technical and financial assistance will be updated and delivered at educational events to further encourage the adoption of BMPs through assistance programs.

The following actions have been completed during this reporting period:

- a. TWRI and the Agricultural Economics Specialist are collaborating to prepare a pasture, range, and forage decision tool for producers.

5% Complete

Subtask 2.4: The Extension Associate will coordinate an Irrigation Training Program that will be held once annually. This program will consist of specialists that will present on various topics including, but not limited to:

- *Economics of BMP adoption*
- *Irrigation scheduling*
- *Irrigation technologies and BMPs*
- *Water quality issues*
- *Crop-specific guidelines*

Materials will be printed and provided to participants.

The following actions have been completed during this reporting period:

- a. TWRI and CEA's coordinating an irrigation program focused in Cameron and Hidalgo Counties specifically on irrigation BMPs, water quality issues, and Irrigation Scheduling.

5% Complete

Subtask 2.5: The Extension Associate will coordinate with SWCDs, NRCS, HRO, and cooperating producers to host one educational meeting annually, specifically dedicated to promoting technical and financial assistance programs. The Extension Assistant will utilize previously developed materials as well as develop technical materials that highlight the specifications of BMPs in the NRCS FOTG (subtask 2.3).

The following actions have been completed during this reporting period:

- a. The TWRI Extension Associate, TSSWCB HRO personnel and CEA's worked together to coordinate and facilitate the 3rd annual RGV forage field day for producers demonstrating Best Management Practices.
- b. TWRI, NRCS, and HRO, worked together to update educational materials for upcoming events.

5% Complete

Subtask 2.6: AgriLife Extension will coordinate with SWCDs, NRCS, HRO, and cooperating producers to host field tours that demonstrate benefits of BMPs and WQMPs. At least one field tour will be held annually. Demonstrations will include the use of equipment to illustrate the efficacy of BMPs.

The following actions have been completed during this reporting period:

- a. The Extension Associate, NRCS personnel, TSSWCB, and CEAs held a field tour at the San Luis Ranch in San Manuel TX. to demonstrate brush control and invasive grasses.
- b. TWRI, NRCS, and TSSWCB demonstrated soil and nutrient run off to students using the rainfall simulator at the Wild in Willacy event in Raymondville TX.

5% Complete

Subtask 2.7: The Extension Associate will host workshops targeting small acreage producers and beginning farmers that cover range/pasture management, prescribed grazing, and water conservation.

The following actions have been completed during this reporting period:

- a. The TWRI Extension Associate and the CEAs, facilitated and coordinated value added to range management on harvesting game animals and what to do with harvested meats.

5% Complete

Subtask 2.8: The Extension Associate will support, promote, and participate in at least one annual field day, demonstration, site tour, or education event sponsored by NRCS, HRO, and/or SWCDs for the Arroyo Colorado watershed, as appropriate. Extension Assistant will host workshops targeting small acreage producers and beginning farmers that cover range/pasture management, prescribed grazing, and water conservation.

The following actions have been completed during this reporting period:

- a. The Extension Associate participated in a NRCS sponsored soil and water conservation educational event at Hilltop Gardens located in Raymondville TX.

5% Complete

TASK 3: Support and Facilitation of ACWPP Update Implementation and Coordination of Watershed Steering Committee and Workgroups

Subtask 3.1: Watershed Coordinator Continuation — TWRI will continue to employ an Arroyo Colorado Watershed Coordinator (WC) to engage and facilitate the Arroyo Colorado WSC, watershed stakeholders, and entities identified in the Arroyo Colorado WPP. The WC will be stationed in the watershed area and serve as the primary conduit for interaction with landowners, citizens, and entities to facilitate the implementation of the WPP. Funding for the Watershed Coordinator will not be funded until the last 3.6 months of this contract.

The following actions have been completed during this reporting period:

- a. TWRI Extension Associate has worked with the ACW watershed coordinator to facilitate the implementation of the ACWPP.

5% Complete

Subtask 3.2: Workgroup & Watershed Steering Committee Facilitation — TWRI will facilitate public participation and stakeholder involvement in the watershed planning process, specifically by hosting semi-annual meetings of the Arroyo Colorado Workgroup and quarterly Steering Committee meetings. TWRI will assist with agenda development and facilitation as needed. TWRI will coordinate meetings, secure meeting locations, and prepare and disseminate meeting notices and agendas. Meeting summaries will be prepared and posted to the project website. Meeting summaries will include: agenda, meeting summary, attendance list, and meeting materials.

The following actions have been completed during this reporting period:

- a. The Extension Associate worked with the ACW watershed program coordinator to facilitate and coordinate the ACW steering committee meeting to inform the stakeholders about past projects and new upcoming projects held on November 14th, 2019.

5% Complete

Subtask 3.3: Coordination with critical watershed groups — TWRI will attend and participate in other public meetings as appropriate to communicate project goals, activities, and accomplishments to affected parties. Such meetings may include, but are not limited to, county commissioners' courts, Clean Rivers Program, Basin Steering Committee and Coordinated Monitoring meetings, local SWCDs, groundwater conservation districts, Lower Rio Grande Valley Development Council, Region M Water Planning Group, International Boundary and Water Commission Public Forum meetings, and other appropriate meetings of critical watershed stakeholder groups. Coordination activities will be documented in the Quarterly Progress Reports.

The following actions have been completed during this reporting period:

- a. The Extension Associate handed out and announced technical and financial assistance availability from TSSWCB and USDA-NRCS at the Environmental Coalition Summit in Brownsville Texas.
- b. The ACW program coordinator attended and participated at the Region M meeting on December 8, 2019 in Weslaco TX.

5% Complete

Subtask 3.4: Contribute agricultural information to Annual Newsletters — TWRI will develop, publish, and distribute annual newsletters that are designed to keep landowners and entities informed of ongoing WPP implementation activities, including water quality data collection and progress toward achieving milestones in the ACWPP Update. The newsletter will be distributed to individual landowners and entities in the watershed. TWRI will solicit content matter for the newsletters from project partners as appropriate. TSSWCB must approve all project-related content in any informational materials and promotional publications prior to distribution.

The following actions have been completed during this reporting period:

- a. The Extension Associate assisted with the development of the fall 2019 ACW annual newsletter. The newsletter contained updated information on past educational programs that highlight progress toward achieving milestones in the ACWPP Update happening within the ACW.
- b. The newsletter was completed and printed by the end of November 2019 with the help of Kathy Wythe from TWRI's Communications team then the EA & WC, began distributing the newsletter in December 2019.
- c. TWRI delivered the ACW annual newsletter to each County Extension office and USDA Center in the tri county area, and sent it out to Stakeholders via email in December 2019.

5% Complete

III. Related Issues/Current Problems and Favorable or Unusual Developments

- None this quarter.

IV. Projected Work for Next Quarter

- Continue work on developing educational materials on BMPs
- Continue working to advertise the RCPP program, TSSWCB WQMP program and EQIP
- Distribute project fact sheets
- Continue work to schedule the field tours
- Continue development of an evaluation for assessing educational program impacts
- Continue to meet with FSA and NRCS to expand the mailing list
- Continue to work with CEA's on promoting BMPs and helping producers
- Attend more SWCD meetings, and irrigation district board meetings