

Texas Water Resources Institute

Implementing Educational Components of the Arroyo Colorado Watershed Protection Plan Focused on Agricultural Nonpoint Source Pollution FY 2010 CWA §319(h) TSSWCB 10-11

Quarter no. 2 From 1/1/11 Through 3/31/11

I. Abstract

Work this quarter consisted primarily a project personnel meeting in Weslaco on January 10th. The project timeline and project activities were discussed and the process for hiring an extension assistant began. Internal hold ups have delayed this process and thus delayed the project but project personnel are actively working at resolving the issue. Work planned for early next quarter is first hiring an extension assistant. Secondly, an Ag Issues Workgoup meeting will be held as well as an Arroyo Colorado Partnership Steering Committee meeting.

II. Overall Progress and Results by Task

TASK 1: Project Administration and Coordination

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 posted on the project website and distributed to all project partners.

The following actions have been completed during this reporting period:

- a. The year 1, quarter 2 report was completed and sent to the TSSWCB on April 8, 2011.

16% 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. Currently, a total of \$0 or 0% of total project funding has been expended.

0% Complete

Subtask 1.3: TWRI will host coordination meetings, conference calls, or TTVN meetings, 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. On January 10, 2011 the project team held a meeting in Weslaco and discussed project activities and timelines.

16% Complete

Subtask 1.4: AgriLife Extension will oversee an Extension Assistant who will be responsible for coordinating with County Extension Agents to implement this project. The Extension Assistant will serve as the primary conduit for coordination with project partners and landowners on agricultural NPS outreach and education activities in the watershed. The Extension Assistant shall be stationed in the Arroyo Colorado watershed.

The following actions have been completed during this reporting period:

- a. Given internal difficulties of posting a position in relation to budget cuts, the project has been slightly delayed. Project personnel are working to resolve the issue.

16% Complete

Subtask 1.5: TWRI and AgriLife Extension will participate in the Arroyo Colorado Watershed Partnership, Steering Committee, and Agricultural Issues Workgroup in order to communicate project goals, activities and achievements to affected parties and to obtain direction and input on the development of outreach and education materials for this project.

The following actions have been completed during this reporting period:

- a. TWRI provided the Arroyo Colorado Watershed Partnership, Steering Committee with agricultural updates at the February 10, 2011 meeting. The next Ag Issues Workgroup meeting and Steering Committee Meeting is scheduled for April 21, 2011.

16% Complete

Subtask 1.6: TWRI will continue to host and maintain <http://www.arroyocolorado.org/> and develop a project webpage that contains information on Tasks 2-4.

The following actions have been completed during this reporting period:

- a. The project website is currently being constructed.

15% Complete

Subtask 1.7: TWRI, with assistance from AgriLife Extension, will develop a final report for the project, assessing effectiveness of the education program including programmatic outcomes such as number of producers reached, number of soil samples collected and potential nutrient (N and P) savings.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

TASK 2: Increase Landowner Participation in Technical and Financial Assistance Programs

Subtask 2.1: Using data developed in TSSWCB projects 06-10 and 09-09, the Extension Assistant will compile (Months 1-6) a list of producers, categorized by priority areas identified in the Arroyo Colorado WPP, in the watershed that are not currently participating in technical and/or financial assistance programs through the local SWCDs, HRO, or NRCS. AgriLife Extension will update the list semi-annually (Months 7-36).

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 2.2: The Extension Assistant will develop and periodically distribute direct mailings (at least once per year) to producers identified through Subtask 2.1. Further, AgriLife Extension will engage producers through personal contact. Direct mailings and personal contact shall be geared towards highlighting the availability of and encouraging participation in technical and financial assistance programs. Direct mailings must be coordinated with project partners. The TSSWCB must approve all direct mailings prior to distribution.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

TASK 3: Develop Educational Program Materials

Subtask 3.1: The Extension Assistant will inventory and assess educational and related materials developed through similar efforts in Texas and other states addressing water quality BMPs and cost-share programs.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 3.2: The Extension Assistant will develop (Month 1-6) a survey tool to evaluate barriers to BMP adoption by agricultural producers. The survey tool should build upon the survey conducted by SUMA/Orchard Social Marketing, Inc. which was used in the development of the WPP. The survey tool will be initially distributed (Months 6-9) to landowners identified in Subtask 2.1. The survey will continue to be applied to newly identified producers and to participants in field days and workshops in Task 4. The TSSWCB must approve the survey tool prior to distribution.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 3.3: The Extension Assistant will develop additional materials to educate producers on technical and financial assistance programs, WQMPs and BMPs that impact water quality. In order to foster cooperative conservation across the Arroyo Colorado watershed, these materials will be designed to provide a common message for use by AgriLife Extension, NRCS, SWCDs, and HRO. Materials will include:

- *a one-pager and a standard presentation on the agricultural NPS components of the Arroyo Colorado WPP and goals established by the stakeholders*
- *fact sheets and a standard presentation that describe the applicability and eligibility of different technical and financial assistance programs available to producers within the Arroyo Colorado Watershed*
- *Fact sheets on individual BMPs that extol the water quality benefits of each*
- *Fact sheet on the BMP effectiveness study from TSSWCB project 06-10 (Task 7)*

AgriLife Extension will collaborate with NRCS, SWCDs, and HRO to develop these materials. The TSSWCB must approve all educational materials prior to distribution.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 3.4: The Extension Assistant will work with AgriLife Research to develop materials that incorporate and highlight outcomes from TSSWCB project 06-10 regarding the quality of delivered irrigation water. The Extension Assistant will provide these materials to Irrigation Districts in order to facilitate discussion regarding encouraging producers to take into account “free” nutrients in delivered irrigation water, thereby decreasing fertilizer application rates and abating agricultural NPS nutrient runoff.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

TASK 4: Conduct Education and Outreach

Subtask 4.1: AgriLife Extension will coordinate with SWCDs, NRCS, and HRO, to host one educational meeting annually specifically dedicated to promoting technical and financial assistance programs.

The following actions have been completed during this reporting period:

- a. No Activity to report at this time.

8% Complete

Subtask 4.2: AgriLife Extension will coordinate with SWCDs, NRCS, HRO, and cooperating producers to host field tours that demonstrate benefits of BMPs and WQMPs. At least 2 field tours will be held annually. Demonstrations will include the use of equipment to illustrate the efficacy of BMPs. For example, a soil compaction probe will be used to demonstrate the efficacy of the no-till BMP.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 4.3: AgriLife Extension will coordinate with SWCDs, NRCS, and HRO to include at least one presentation on technical and financial assistance programs in the following regular meetings held once per year:

- *1 cotton production meeting*
- *1 sorghum production meeting*
- *1 sugarcane production meeting*
- *1 citrus production meeting*
- *1 nutrient management meeting including the soil testing campaign kickoff*
- *Irrigation district trainings*

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 4.4: To encourage the use of soil testing in support of nutrient management, AgriLife Extension will host a soil testing campaign for agricultural producers in Cameron, Hidalgo and

Willacy counties. The soil testing campaign will be offered in the fall/winter of 2010, 2011, 2012. Producers will be encouraged to soil test to determine nutrient application needs and AgriLife Extension will provide follow-up educational assistance to interpret soil test results.

This project will pay up to \$10 per soil test sample taken within the Arroyo Colorado watershed; this project will pay for all soil tests necessary to comply with soil testing frequencies consistent with the NRCS practice standard for Nutrient Management (590). Soil tests and shipping paid for with project funding must be completed by a public soil testing laboratory, such as the AgriLife Extension Soil, Water and Forage Testing Laboratory. AgriLife Extension will work with producers to geo-reference each soil test sample location (i.e., to the field-scale as identified from aerial imagery or preferably coordinates from a GPS receiver).

The following actions have been completed during this reporting period:

- a. The soil testing campaign has been kicked off and is currently under way. The number of soil samples is currently being determined.

16% Complete

Subtask 4.5: The Extension Assistant will develop and distribute flyers, news releases and other appropriate promotional publications to 1) educate agricultural producers about availability of financial assistance programs, 2) promote the soil testing campaign, and 3) advertise workshops and field tours. The Extension Assistant will coordinate with HRO, SWCDs, and NRCS on materials being developed through TSSWCB project 09-09. The TSSWCB must approve all promotion materials prior to distribution.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 4.6: The Extension Assistant, in coordination with CEAs, NRCS, HRO, and SWCDs, will work with Irrigation Districts to educate their customers on the water quantity conservation benefits of implementing WQMPs and participation in financial assistance programs.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 4.7: The Extension Assistant will work with commodity organizations, such as Texas Citrus Mutual, Rio Grande Valley Sugar Growers, Texas Vegetable Association, and Texas Farm Bureau, to educate their members on the opportunity to enhance the value of their

operation and achieve water quality goals for the watershed at the same time by participating in technical and financial assistance programs.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 4.8: The Extension Assistant will work with TAMU-K to develop materials that incorporate and highlight outcomes from TSSWCB project 06-10 regarding the degree to which pollutant assimilation is occurring in drainage ditches. The Extension Assistant will provide these materials to Drainage Districts in order to facilitate discussion regarding the management of vegetation in drainage ditches to contribute to agricultural NPS pollution abatement.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

Subtask 4.9: The Extension Assistant will support, promote, and participate in, as appropriate, any field days, demonstrations, site tours, or education events sponsored by NRCS, HRO, and/or SWCDs for the Arroyo Colorado watershed.

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

0% Complete

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

- Difficulty in hiring an Extension Assistant has delayed the project. The internal process has held up the position posting and project personnel are actively working to resolve the issue.