

**Texas AgriLife Research  
Texas AgriLife Extension Service  
Texas A&M University College of Agriculture and Life Sciences  
Texas Water Resources Institute**

**Arroyo Colorado Watershed Protection Plan Implementation  
FY 07 CWA 319(h)  
TCEQ Agreement No. 582-7-77045**

Quarter no. 14 From 6/1/10 Through 8/31/10

## **I. Abstract**

Work during this quarter consisted of the continuation meeting and updating the various workgroups of activities associated with the implementation of the WPP. Sustainability of the Arroyo Colorado Watershed Partnership was a big topic during the quarter as a 501(c)3 is in the process of being set up. With this status, the Watershed Coordinator will be able to actively seek funds in the private sector for continued implementation efforts. Lastly, a grant proposal that will aid in the sustainability of the Partnership was turned in to TCEQ. Work next quarter will consist of Workgroup and Steering Committee meetings during the last two Thursdays of October.

## **II. Overall Progress and Results by Task**

### **TASK 1: Project Administration**

*Subtask 1.1: Project Oversight – TWRI will provide technical and fiscal oversight to ensure Tasks and Deliverables are acceptable and completed as scheduled and within budget.*

The following actions have been completed during this reporting period:

- a. TWRI has provided guidance and assistance to Watershed Coordinator in developing meeting agendas, summaries, an agency resolution, and facilitation of various meetings.
- b. TWRI requested and received a no-cost extension through 8/31/11 to ensure proper expenditure of funds and completion of deliverables

**76% Complete**

*Subtask 1.2: Quarterly Progress Reports (QPRs) – TWRI, with the assistance of the Arroyo Colorado Watershed Coordinator (ACWC) and Arroyo Colorado Grant Writer/Water Quality Analyst (ACGC), will submit QPRs to TCEQ by the 15th of the month following each state fiscal quarter for incorporation into the Grant Reporting and Tracking System (GRTS). The Reports will include:*

- *status of deliverables for each Objective and Task*
- *narrative description of activities for each task outlined in this Scope of Work in Progress Report format*

The following actions have been completed during this reporting period:

- a. Submitted Year 4, Quarter 1 Report on October 15, 2010.

### **76% Complete**

*Subtask 1.3: Quarterly TTVN or Teleconference – To facilitate good communication between project participants, a quarterly TTVN (Trans-Texas Videoconference Network) or teleconference will be scheduled and hosted by TWRI.*

The following actions have been completed during this reporting period:

- a. TWRI and Watershed Coordinator and Project Manager maintain regular communication on a weekly basis.
- b. TWRI met with watershed coordinator and the TCEQ project manager in the Weslaco on August 11, 2010 to discuss project activities.
- c. TWRI participated in workgroup and steering committee meetings either via teleconference or in person.

### **76% Complete**

*Subtask 1.4: Arroyo Colorado Website – TWRI will maintain and improve the Arroyo Colorado website.*

The following actions have been completed during this reporting period:

- a. The Web site continues to receive updates including promoting activities which contribute to the progress of the WPP
- b. Continually add and update upcoming events on homepage.

### **76% Complete**

*Subtask 1.5: Reimbursement Forms – Texas Cooperative Extension will submit reimbursement forms by the last day of the month following each state fiscal quarter*

The following actions have been completed during this reporting period:

- a. An invoice was submitted to TCEQ for \$15,260.76 on May 31, 2010.
- b. Total Balance Remaining to date: \$176,882.76 or 37% of total project budget left.

### **63% Complete**

*Subtask 1.6: Final Report – TWRI, with assistance of the ACGC and ACWC, will provide TCEQ and EPA with a comprehensive report on the activities and success of the WPP conducted during the course of this project. An assessment of data collection and analysis efforts conducted under Task 5 of this scope of work will also be included in the final report.*

The following actions have been completed during this reporting period:

- a. No activity to report at this time.

### **0% Complete**

## **TASK 2: Steering Committee and Work Group Facilitation**

*Subtask 2.1: Facilitate and Coordinate Meetings – The ACWC will facilitate the Arroyo Colorado Watershed Steering Committee and Work Group meetings by working with the chairman and work group leaders. Specifically, the ACWC will be responsible for:*

- *Developing agendas, arranging meeting facilities and sending E-mail notices for Quarterly Steering Committee meetings*
- *Assisting all individual work groups with facility arrangements, developing and distributing agendas, and developing meeting summaries as requested by the Work Group Leaders; Work Group meetings will be held as needed, but, at least, semi-annually*
- *Providing information requested by work group leaders prior to and following work group meetings*
- *Attending all individual work group meetings*
- *Compiling and submitting all individual work group meeting agendas and meeting summaries to the TWRI project manager (these will be attached to QPRs and submitted to the TCEQ contract manager and posted on the webpage)*
- *Coordinating efforts of the individual work groups and the Watershed Steering Committee to facilitate the integration of the different components of the Watershed Protection Plan implemented by each workgroup*
- *Updating all Steering Committee meeting participants on the progress of individual workgroups (and/or arranging for individual workgroup leaders to provide these updates) and of the overall implementation of the Watershed Protection Plan*
- *Facilitating a forum for open discussion among Steering Committee meeting participants and interested parties attending the meetings*
- *Arranging presentations by guest speakers offering useful information to Steering Committee participants*
- *Preparing and disseminating summaries of Watershed Steering Committee meetings to all participants*

The following actions have been completed during this reporting period:

- a. Developed agenda, arranged meeting facilities and sent E-mail notices for a AC-AG Issues Workgroup meeting held on July 13, 2010.
- b. Developed agenda, arranged meeting facilities and sent E-mail notices for a AC-O&E Workgroup meeting held on July 13, 2010.
- c. Developed agenda, arranged meeting facilities and sent E-mail notices for a Habitat Workgroup meeting held on July 22, 2010.
- d. Developed agenda, arranged meeting facilities and sent E-mail notices for a ACWP Steering Committee meeting held on July 22, 2010.
- e. Meeting summaries for SC and workgroup meetings are included in Appendix B. All summaries will be posted to the Project website.
- f. Attended all workgroup meetings, provided information requested by work group leaders and conducted follow-up activities as noted in the meeting summaries.
- g. Updated Partnership on overall implementation of the ACWPP at SC meeting on July 22, 2010.

**76% Complete**

*Subtask 2.2: Provide Bi-Monthly Updates – The ACWC will provide e-mail updates to TWRI, TCEQ and the Arroyo Colorado Watershed Partnership on progress made in implementation of the ACWPP at least twice monthly.*

The following actions have been completed during this reporting period:

- a. Bi-monthly updates were distributed to the Arroyo Colorado Watershed Partnership members via the Arroyo Colorado listserv on June 16, 2010; June 28, 2010; July 6, 2010; July 16, 2010; and August 27, 2010. Copies of updates are provided in Appendix C.

**76% Complete**

*Subtask 2.3: Provide Membership Lists – The ACWC will provide TWRI updated lists of the Steering Committee and their contact information for posting on the project website.*

The following actions have been completed during this reporting period:

- a. The latest membership list has over 715 individuals (some members were replaced by new employees, list membership has remained the same).
- b. The updated work group member list still needs to be added and updated on Project Web site.

**76% Complete**

*Subtask 2.4: Engage Stakeholders – The ACWC will encourage participation and involvement of key stakeholders in the implementation of the WPP.*

The ACWC conducted the following actions during this reporting period:

- a. June 2, 2010, attended RGR Water Authority and RGR Water Planning Group meetings
- b. June 4, 2010, met with Dr. Benavides to discuss ACWP sustainability.
- c. June 18, 2010, attended ACWP Sustainability meeting.
- d. June 21, 2010, attended the RGV Environmental Summit Agenda Meeting.
- e. June 23, 2010, attended the RGV Environmental Summit SC Meeting.
- f. June 24, 2010, attended LRGV Development Council meeting.
- g. July 6, 2010, attended LRGV Storm Water Task Force LID grant meeting.
- h. July 20, 2010, Conference call on Port of Harlingen wetland project.
- i. July 21, 2010, attended the RGV Environmental Summit SC Meeting.
- j. July 26, 2010, attended Port of Harlingen wetland project meeting with Butch Palmer, Dr. Heise and 2 UTB students.
- k. August 10, 2010, met with Arthur Talley, Allen Berthold and San Benito officials to discuss wetland project.
- l. August 12, 2010, taped television interview on the Arroyo Colorado at KGBT Channel 5 studios.
- m. August 16, 2010, attended LRGV-Storm Water Task Force O&E meeting.
- n. August 23-24, 2010, attended/hosted Wetland Operation and Maintenance Workshop.
- o. August 25, 2010, attended AC-AG issues project planning meeting.
- p. August 26, 2010, attended LRGV Development Council meeting.

**76% Complete**

### **TASK 3: Facilitate Watershed Protection Plan Implementation**

*Subtask 3.1: Facilitate and Coordinate Implementation of Education and Outreach Measures as Outlined in ACWPP*

The ACWC conducted the following actions during this reporting period:

- a. *Watershed Demonstration Model Record is included as Appendix D*
- b. July 13, 2010, attended /hosted AC O&E meeting.
- c. July 26, 2010, Laguna Atascosa Wildlife refuge, Bayview, TX., gave AC presentation to a summer environmental studies class, consisting of 35 juniors and seniors and 2 teachers and hosted by the Edinburg World Birding center.
- d. July 27-28, 2010, Planning the next TX Stream Team Volunteer Monitor Training Workshop, to be held at the Estero Llano Grande World Birding Center, Weslaco, TX., The workshop is scheduled for October 16, 2010.
- e. August 9, 2010, pick up “new” AC physical watershed model from Paul Bond.
- f. August 16, 2010, attended Storm Task Force O&E.
- g. August 23-24, 2010, attended/hosted Wetland Operation and Maintenance Workshop.

**76% Complete**

*Subtask 3.2: Facilitate and Coordinate Implementation of Agricultural Pollution Control Measures as Outlined in ACWPP*

The following actions have been completed during this reporting period:

- a. Developed agenda, arranged meeting facilities and sent E-mail notices for an AC-AG Issues Workgroup meeting held on July 13, 2010.
- b. Submitted grant for additional funds for the 2010 soil testing campaign.
- c. July 15, 2010, planning for booth setup for the ACWP at the AG Irrigation Expo to be held at the Mercedes LRGV Livestock Show Grounds in October.
- d. July 15, 2010, telephone conversation with Pamela Casebolt, TSWWCB, to discuss different incentives we can offer Ag producers in an attempt to get them to attend AC Ag Issue’s Workgroup Meeting coming up in July. Also discussed upcoming AG Irrigation Expo and AC-AG Issues workgroup meeting to be held at the expo on October 21, 2010 from 9:30 am-12:00 pm.
- e. August 25, 2010, met with Allen Berthold, Brad Cowan, Enrique, Ruben Saldana to discuss AG issues and upcoming grant cycles and possible grants.
- f. August 27, 2010, met with Dr. Juan Enciso about AG/AC grant for upcoming grant cycle.

**76% Complete**

*Subtask 3.3: Facilitate and Coordinate Implementation of Recommended Measures Described in the Habitat Component of the ACWPP*

The following actions have been completed during this reporting period:

- a. July 23, 2010, met with Javier Mendez, Cameron Co. Parks, to discuss a Resaca Restoration Project in the city of Los Fresnos.
- b. July 12-15, 2010, Planning Wetlands Operation and Maintenance Workshop.
- c. July 10, 2010, met with Arthur Talley, Allen Berthold and San Benito city officials at the San Benito Wetland site to observe construction activities.
- d. August 23-24, 2010, attended/hosted Wetland Operation and Maintenance Workshop.

### **76% Complete**

*Subtask 3.4: Facilitate and Coordinate Implementation of Wastewater Infrastructure Pollution Control Measures as outlined in the ACWPP.*

The following actions have been completed during this reporting period:

- a. Continued collecting data on WWTP water reuse numbers, number of colonia's and residents hooked up to WWTP and tracking upgrades of all WWTP facilities.
- b. Cities Wetland Project update:
  - San Benito WWTP wetland project was completed by end of August, 2010.
- c. The City of Alamo conducted a wetland feasibility study and is currently seeking funding to upgrade their wastewater treatment facility and the development of wetlands on their old lagoonal type treatment plant.
- d. Worked with Dr. Clapp, TAMUK, to coordinate monitoring of WWTP outfalls in the AC Watershed. Sampling to begin in September.
- e. Working on developed agenda, arranged meeting facilities and sent E-mail notices for a Wastewater Infrastructure Workgroup meeting that will be held in December 2010

### **76% Complete**

*Subtask 3.5: Semi-annual Newsletter Publication.*

The following actions have been completed during this reporting period:

- a. Working on articles for the spring newsletter. Newsletter should be delivered during August 2010.

### **76% Complete**

#### **TASK 4: Resource Identification and Grant Writing**

**Subtask 4.1:** *Track Grants and Assist Partners in Grant Applications – In coordination with TWRI, the Arroyo Colorado Grant Coordinator/Water Quality Analyst (ACGC), with assistance from the ACWC, will: 1) actively seek and pursue funding opportunities for watershed protection and restoration projects, 2) track appropriate grants that fund activities outlined in the WPP and assist Arroyo Partners in the grant application process and 3) link appropriate partners and projects.*

The following actions have been completed during this reporting period:

- a. Nothing to report at this time.

### **76% Complete**

*Subtask 4.2: Lead proposal development to request/acquire funding for Implementation of Measures as Outlined in ACWPP. A minimum of 10 grant proposals will be developed during the project period by the ACGC, in cooperation with the ACWC, TWRI, and project partners. Upon completion, the grant proposals will be submitted by either project partners or TWRI/TCE, whichever is most appropriate. Potential proposals may include, but not limited to funding requests to:*

- *Implement recommendations of the Outreach and Education Work Group.*

- *Produce an educational video.*
- *Increase wastewater and surface water infrastructure development within cities and public utility systems for colonias.*
- *Design and construct individual and/or regional enhanced biological treatment projects.*
- *Conduct feasibility studies and final engineering designs for development of individual and regional constructed wetland demonstration projects throughout the watershed.*
- *Establish individual and regional constructed wetland projects.*
- *Conduct feasibility studies for modifying the drainage channels to maintain moist soils to sustain wetland plants for treatment of nonpoint source pollution.*

The following actions have been completed during this reporting period:

- a. This task is complete.

**100% Complete**

### **TASK 5: Data Gathering and Analysis to Assess Effects of Water Quality Protection Plan**

*The ACGC will assemble and maintain a data clearinghouse for all data collected in the Arroyo and from that data, evaluate changes in BOD, TSS, fecal bacteria, and nutrient loading to Segments 2201 and 2202 of the Arroyo Colorado. Data collection will include:*

- *Pollutant removal effectiveness of enhanced treatment projects through effectiveness monitoring conducted by participating cities.*
- *Wastewater permit holders self reporting data to better characterize loading of nutrients from WWTPs to the Arroyo Colorado*
- *Data collected through the Arroyo Colorado Agricultural Nonpoint Source Assessment Project'*
- *Texas Clean Rivers Program.*

The following actions have been completed during this reporting period:

- a. Nothing to report at this time.
- b. We will be making changes to this task in an upcoming amendment.

**35% Complete**

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

None to report at this time.

### **IV. Projected Work for Next Quarter**

#### **Task 1**

- Continue improving Web site including development of database per task 5.
- Maintain regular weekly communication with project personnel.
- Facilitate meetings focusing on the sustainability of the Partnership.
- Submit quarter 15 report on December 15, 2010.

#### **Task 2**

- Post meeting summaries for the workgroup and Steering committee meetings to Project website.

- Facilitate (draft agenda, gather meeting location, and announce meeting to workgroup members) an habitat workgroup meeting on October 28, 2010.
- Schedule and facilitate a Steering Committee meeting for October 28, 2010. Draft and distribute agenda and meeting summaries.
- Schedule and facilitate an Ag Issues workgroup meeting for October 21, 2010. Draft and distribute agenda and meeting summaries.
- Attend work group meeting and coordinate work group efforts.
- Arrange for guest speakers at Steering Committee meeting.
- Production and distribution of bi-monthly updates.
- Continue to engage key stakeholders.
- Finalize work group member lists and update/correct on project Web site.

### **Task 3**

- Demonstrate the physical Arroyo watershed model.
- Work with TWRI to develop appropriate news releases.
- Participate in the LRGV TPDES Storm Water Task Force Meetings.
- Continue participation in the USIBWC Citizen Forum, Region M planning, Rio Grande Regional Water Authority, and the Lower Rio Grande Water Committee meetings.
- Continue facilitation of work for the development of a regional wetland system.
- Meet with personnel regarding the WWTP water quality monitoring project conducted by LRGVDC.

### **Task 4**

- Continue to submit and facilitate submission of proposal for funding of activities related to the Arroyo Colorado.
- Identify additional funding opportunities to pursue.

### **Task 5**

- Post static graphs on Web site.

# Appendix A

## Workgroup and Steering Committee Agendas

# Arroyo Colorado Watershed Partnership Agricultural Issues Workgroup

Texas AgriLife Extension Center Conference Room  
2401 E. Expressway 83  
Weslaco, Texas

July 13, 2010                      9:00am – 12:00 pm

## MEETING AGENDA

**Welcome and Introductions**..... Andy Garza, TSSWCB

### Arroyo Colorado Watershed Protection Plan

Review of Components Addressing Agricultural NPS Pollution ... Pamela Casebolt, TSSWCB

Watershed Protection Plan Implementation Status ..... Jaime Flores, TWRI

**Status of the Agricultural Issues Workgroup** ..... Pamela Casebolt, TSSWCB

**Texas Irrigation Expo 2010**..... Jaime Flores, TWRI

**Arroyo Colorado Watershed Partnership Sustainability** ..... Jaime Flores, TWRI

**Grant Update and Future Funding Needs and Sources** ..... Pamela Casebolt, TSSWCB

### Project Updates/Discussion

Best Management Practice Implementation ..... Ronnie Ramirez, TSSWCB

Agricultural Nonpoint Source Assessment ..... Juan Enciso, Texas AgriLife Extension Service  
Venki Uddamari, TAMUK

Integrated Farm Management Education Program ..... Brad Cowan,  
Texas AgriLife Extension Service

Pesticide Education in the Coastal Zone of the Arroyo Colorado Watershed ..... Brad Cowan,  
Texas AgriLife Extension Service

**Other Business**..... Pamela Casebolt, TSSWCB

Next Meeting Date ..... January 2011

Adjourn

**Arroyo Colorado Outreach and Education Workgroup**

Texas AgriLife Extension Conference Room  
Texas A & M Agricultural Research and Extension Center  
2401 E. Hwy 83, Weslaco, Texas 78596

July 13, 2010 3:00 pm to 5:00 pm

### **Meeting Agenda**

**Welcome and Introductions** ..... Jaime Flores, TWRI

#### **Project Discussion:**

New O&E Materials/Event Planning..... Jaime Flores, TWRI

Road Signage Project Update ..... Jaime Flores, TWRI

#### **Arroyo Colorado Outreach Activities:**

Classroom Presentations ..... Jaime Flores, TWRI

Estero Llano Grande-Upcoming O&E Events ..... Kyle Ohaver, TPWD

#### **O&E Project Updates:**

Texas Stream Team Monitor Workshop..... Jaime Flores, TWRI

Storm Water Task Force Scholarships & Teacher Stipends..... Javier Guerrero, TAMUK

#### **Upcoming Grants and Potential Projects**

Grants Update ..... Amanda Engledow, TWRI

New Proposals ..... Amanda Engledow, TWRI

**Other Business**..... Jaime Flores, TWRI

**Next Meeting Date/Adjourn**..... Jaime Flores, TWRI

# Arroyo Colorado Habitat Work Group

Estero Llano Grande World Birding Center  
3301 S. FM 1015, Weslaco, Texas 78596

July 22, 2010                      2:00 pm - 4:00 pm

## MEETING AGENDA

**Welcome and Introductions** .....Dr. Jones, TAMUK

### **Arroyo Colorado Watershed Protection Plan**

ACW Protection Plan Implementation ..... Jaime Flores, TWRI

### **Project Updates and Discussions:**

Wetland Operations Workshop..... Jaime Flores, TWRI

Los Fresnos Resaca Restoration Project.....Javier Mendez, Cameron Co.

LID Project.....Javier Guerrero, TAMUK

Cameron Co. Wetland Delineation Project ..... Dr. Jones, Martin Alcala, TAMUK

**Available Grants/Potential Studies** ..... Allen Berthold, TWRI

**Other Business**..... Jaime Flores, TWRI

**Next Meeting Date/Adjourn**..... Jaime Flores, TWRI

# Arroyo Colorado Steering Committee/Partnership Meeting

Estero Llano Grande World Birding Center  
3301 S. FM 1015, Weslaco, Texas 78596

July 22, 2010                      4:30 p.m. - 7:00 p.m.

## MEETING AGENDA

### **4:30 Social – Snacks and Refreshments**

**5:00 Welcome and Introductions**.....Jude Benavides, UTB (Steering Committee Chair)

**5:05 USGS Monitoring Capabilities**.....Larry Thomas, USGS

### **5:30 Work Group Updates** (10 minutes each)

Agricultural Issues ..... Andy Garza, TSSWCB

Habitat Issues .....Dr. Jones, TAMUK

Water Quality Monitoring..... Rocky Freund, Nueces RA

Education and Outreach..... Jaime Flores, TWRI

**6:10 Long-Term Partnership Sustainability** ..... Jaime Flores, TWRI

**6:20 Grants Update**..... Allen Berthold, TWRI

**6:30 Other Business** ..... Jaime Flores, TWRI

**6:45 Adjourn**.....Jude Benavides, UTB (Steering Committee Chair)