

**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. 9 From 03/01/09 Through 05/31/09

I. Abstract

Program activities for WPP implementation are picking back up as the watershed coordinator is becoming more familiar with the project. An excellent relationship has been built with the LRGV-TPDES Stormwater Task Force and as a result, the two groups are able to combine and share resources for outreach and education activities. For example, the Task Force liaison and the Arroyo Colorado Watershed Coordinator have been conducting classroom presentations at a number of Elementary, Middle and High schools throughout the Rio Grande Valley. Over five thousand students have participated in the presentations, which consists of a power point that outlines watersheds and their purpose, the water cycle and how pollutants affect the watershed and follows with a demonstration using the Arroyo Colorado Watershed model. Teachers, Principals, Science curriculum directors and Superintendents have all expressed very positive responses from this outreach. Also, as a result of this relationship, we had an excellent turnout at the steering committee this quarter. Several members of the stormwater Task Force participated in the meeting. It was nice to have the opinion and outlook of city personnel regarding water quality issues at the steering committee meeting. Finally, over 1,000 stormdrain markers were installed this quarter by local citizens to raise awareness of protecting and preserving the Arroyo Colorado Watershed.

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 2/28/10 to ensure proper expenditure of funds and completion of deliverables. Project will likely go beyond February end date and there is potential for funds to carry through an additional 2 to 3 months.

- c. A schedule of deliverables to track project activities and contract status is included in Appendix A.

75% 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 3, Quarter 1 Report on June 30, 2009.

75% 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 Grant Writer(s) maintain regular communication on a weekly basis.
- b. TWRI met with watershed coordinator in the Arroyo Colorado watershed in April 2009 to discuss project activities.
- c. TWRI participated in workgroup and steering committee meetings either via teleconference or in person.

75% 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 two new projects under the project section will be added during the next quarter.
- b. A new presentation (the presentation that was given to local schools by the watershed coordinator and the stormwater task force liaison) will be posted on the website during the next quarter.
- c. Continually add and update upcoming events on homepage.

75% 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 \$23,145.05 covering all expenses from March 1, 2009 through May 31, 2009.
- b. Total invoiced expenditures to date: \$219,775.42 or 70% of total project budget.

70% 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 quarterly O&E workgroup meeting held on April 14, 2009.
- b. Developed agenda, arranged meeting facilities and sent E-mail notices for a quarterly SC meeting held on April 27, 2009.
- c. Meeting summaries for SC and workgroup meetings are included in Appendix B. All summaries will be posted to the Project website.
- d. Attended all workgroup meetings, provided information requested by work group leaders and conducted follow-up activities as noted in the meeting summaries.
- e. Updated Partnership on overall implementation of the ACWPP at SC meeting on April 27, 2009.

75% 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 March 24, 2009; April 15, 2009; May 6 and 27. Copies of updates are provided in Appendix C.

75% 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 (26 new members need to be added to list).
- b. The updated work group member list still need to be added and updated on Project Web site.

90% 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. March 5, 2009, attended Nueces River Authority Steering Committee meeting at TAMUCC.
- b. March 23, 2009, met with Dr. Jones and Dr. Clapp to discuss the WPP implementation, grant opportunities and gave an AC presentation to Dr. Jones' graduate environmental science class.
- c. April 2, 2009, met with Butch Palmer to discuss ACWPP implementation and Solar Bee technology.
- d. April 6, 2009, spoke to Alan Johnson about aeration weirs and Solar bee application in AC.

- e. April 27, 2009, met with Butch Palmer, Roger Miranda and Solar Bee reps to discuss possibility of using Solar Bee technology in the AC.
- f. April 28, 2009, attended IBWC-Clean Rivers Annual Coordinated Monitoring Meeting.
- g. May 27, 2009, met with Ernesto Hinojosa, Cameron County Engineer, Joe Hinojosa and Javier Guerrero to discuss MS-4 permits, AC WPP implementation and upcoming meeting with Cameron County Commissioners Court.

75% 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. April 14, 2009, Developed agenda, arranged meeting facilities and sent E-mail notices for a quarterly O&E workgroup meeting.
- b. April 15, 2009, LRGV-TPDES Storm Water Task Force and ACWP coordinating several Earth Day activities throughout watershed.
- c. April 17, 18, Participated, with the LRGV-TPDES Stormwater Task Force, in multiple Earth Day events around the watershed and assisted local city and county personnel as well as citizens install over 1,000 storm drain markers that read, “No Dumping, Drains to Laguna Madre.”
- d. May 8, 2009, coordinated meeting with ACWP, TDA, LRGV-TPDES Storm Water Task Force and City of Pharr officials to discuss grant workshop scheduled for August.
- e. The Arroyo Colorado Watershed model and display booth was presented at the following events:
 - March 14-17, 2009: LRGV Livestock Show and Rodeo (500 citizens)
 - March 21, 2009: International Museum for Art & Science for World Water Day (30 participants)
 - April 18, 2009, McAllen “Vida Verde” Earth Day Festival at the Quinta Mazatlan World Birding Center (50 participants)
- f. In addition to adult outreach efforts, the watershed coordinator in conjunction with the LRGV-TPDES Storm Water Task Force conducted classroom presentations at a number of Elementary, Middle and High schools throughout the Rio Grande Valley. The presentations consist of a power point that outlines watersheds and their purpose, the water cycle and how pollutants affect the watershed. After the power point presentation, we conduct a demonstration using the Arroyo Colorado Watershed model. The presentations, which typically involve an audience of approximately 20 students,. made during this quarter include:
 - March 6, 2009-La Joya High School, La Joya, TX.
 - March 12, 2009-San Benito ISD Administration Building “Lunch with the Greyhound’s”. Taped AC presentation, San Benito, TX.
 - March 27, 2009-South Texas College Pecan campus, McAllen, TX.
 - April 3, 2009- South Texas College Weslaco campus, Weslaco, TX.

- May 18, 2009-Lopez High School, Brownsville, TX.
- May 19, 2009-Porter High School, Brownsville, TX.
- May 20, 2009-Faulk Middle School, Brownsville, TX.
- May 21, 2009-Rivera High School, Brownsville, TX.
- May 27, 2009- Stell Middle School, Brownsville, TX.

75% 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. Soil testing campaign numbers for the 2008-2009 campaign were totaled and 380 total samples were submitted.
- b. Agricultural education events continue and occur on a regular basis in the watershed as part of 3 separate projects. The TSSWCB funded project, Education of Agricultural BMPs, wrapped up during this quarter and two new projects, "Pesticide Education in the Coastal Zone of the Arroyo Colorado Watershed" and "Integrated Farm Management Education Program," began activity during this quarter. Efforts related to these projects will be tracked by the watershed coordinator and reported here.
- c. May 4, 2009, Attended meeting regarding the new agricultural education projects at AgriLife Extension Conference room.

75% 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. Developed agenda, arranged meeting facilities and sent E-mail notices for a quarterly Habitat workgroup meeting to be held on April 27, 2009. Meeting was cancelled because workgroup leaders were unable to attend.
- b. Arranged for SolarBee to speak at April 27 Steering Committee meeting and arranged a site visit for company personnel to tour watershed and recommend possible solutions. Provided follow up to meeting and working with researchers to find a grant program to fund demonstration unit(s) in the watershed.

75% 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. 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:

- The La Feria wetlands project has commenced with them breaking ground the first week of February. They are 50% complete
 - San Benito WWTP wetland project is 45% complete.
 - The city of San Juan has broken ground on their individual wetland project and are 25% complete.
- c. The City of Alamo is currently conducting a feasibility study to determine if the City will upgrade their wastewater treatment facility that would include the development of wetlands on their old lagoonal type treatment plant.

75% Complete

Subtask 3.5: Semi-annual Newsletter Publication.

The following actions have been completed during this reporting period:

- a. Drafted and finalized stories for the spring newsletter. Newsletter should be delivered during June 2009.
- b. Developed or tracked the following news releases:
 - 3/19/09: *San Juan to construct Wetland* - The Monitor;
 - 3/27/09: *Texas A&M Kingsville part of efforts that led to Stormwater management plans for Rio Grande Valley Cities* - TAMUK Newsrelease;
 - 4/9/09: *Engineering College at A&M Kingsville goes to Harlingen for earth Day celebration April 18 at Centennial Park* - TAMUK Newsrelease;
 - 4/16/09: *Earth Day Celebration to Educate Public* - Valley Morning Star;
 - 4/21/09: *No Dumping Storm Drain Markers Highlight Earth Day* - AgNews;
 - 4/22/09: *Storm Drain Markers Highlight Earth Day* - The Monitor

75% 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. Worked with Lower Rio Grande Valley Development Council, TAMUK and UTB on the development of a work plan to monitor the water quality of wastewater treatment plant outfalls in the watershed. Assisted the LRGVDC in developing the proposal and budget.
- b. Worked with TAMUK on the development of an EPA Regional Wetland proposal to map coastal wetlands for use in restoration efforts.
- c. Worked with General Land Office to revise a proposal for the development of public service announcements in the Arroyo Colorado.

- d. Had extensive discussion and meetings regarding the first annual Arroyo Colorado Grant Workshop. Collaborators include the ACWP, TDA, LRGV-TPDES Storm Water Task Force and City of Pharr. Workshop will be held August 11 and 12, 2009.

75% 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. Facilitated the submission of a proposal to TCEQ under their 604b program, *Monitoring of Wastewater Treatment Plants – Phase I*, \$89,468. A program to monitor water quality of wastewater treatment plants in the watershed. The Lower Rio Grande Valley Development Council was the lead with subcontracts set aside for TAMUK and UTB.
- b. Facilitated the submission of a proposal to EPA Regional Wetland Program. *Mapping of Lower Texas Coast to Assist Wetland Restoration Efforts*, \$134,403. A TAMUK program to map coastal wetlands for use in restoration efforts.
- c. Submitted a proposal to General Land Office for Coastal Management Program Non Point source program, *Developing PSAs in the Arroyo Colorado Watershed*, \$53,034. Project will develop public service announcements in both English and Spanish to encourage public involvement in protecting the Arroyo Colorado.
- d. Total number of proposals to date submitted on behalf of the implementation of the Arroyo Colorado Watershed Protection Plan include 13 full proposals and 4 pre-proposals led by TWRI and 8 proposals led by other entities (TAMUK-4 UTPA-1; LRGVDC-2 and City of McAllen-1).
- e. Proposal workplans for the submitted proposals are available upon request.

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.

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.
- The Web site continues to receive updates including two new projects under the project section will be added during the next quarter.
- A new presentation (the presentation that was given to local schools by the watershed coordinator and the stormwater task force liaison) will be posted on the website during the next quarter.
- Facilitate meetings focusing on the sustainability of the Partnership.
- Submit quarter 10 report on September 15, 2009.

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 E&O workgroup meeting on July 14, 2009.
- Facilitate (draft agenda, gather meeting location, and announce meeting to workgroup members) an ag issues workgroup meeting on July 27, 2009.
- Facilitate (draft agenda, gather meeting location, and announce meeting to workgroup members) a WWI workgroup meeting on July 17, 2009.
- Schedule and facilitate a Steering Committee meeting for July 27, 2009. 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.
- Finalize the development of an O&E evaluation instrument.
- Develop an evaluation instrument for distribution to the Arroyo Colorado SC.
- 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.
- Facilitate efforts regarding a large constructed wetland system at the shrimp farms.
- Work with and attend the Texas Stream Team event, “How Clean is the Arroyo Colorado?” on June 20, 2009
- Meet with personnel regarding the development of a treatment wetland at the Port of Harlingen for the new habitat project funded by GLO
- Meet with personnel regarding the WWTP water quality monitoring project conducted by LRGVDC.
- Newsletter should be delivered during June 2009.

Task 4

- Host Arroyo Colorado Grant Workshop on August 11 and 12, 2009.
- Identify additional funding opportunities to pursue.

Task 5

- Post static graphs on Web site.
- Begin adding other databases including, but not limited to Texas Stream Team data and possibly, TPWD data.

Appendix A
Schedule of Deliverables and Status

Deliverable	Due Date	Date Submitted	Comments
TASK 1			
Quarterly Progress Reports	7/15/2007	7/16/2007	Submitted via email & posted on Site
	9/15/2007	9/14/2007	Submitted via email & posted on Site
	12/15/2007	12/13/2007	Submitted via email & posted on Site
	3/15/2008	3/13/2008	Submitted via email & posted on Site
	6/15/2008	6/17/2008	Submitted via email & posted on Site
	9/15/2008	9/16/2008	Submitted via email & posted on Site
	12/15/2008	12/15/2008	Submitted via email & posted on Site
	3/15/2009	3/30/2009	Submitted via email & posted on Site
	6/15/2009	6/30/2009	Submitted via email & posted on Site
	9/15/2009		
	12/15/2009		
	3/15/2010		
Special release (supplement) to WPP (status of WPP)			Not in contract
Draft Final Report	2/28/2010		
Final Report	3/31/2010		
Quarterly Meetings	Jul-07	7/9/2007	in CS
	Oct-07	9/25/2007	in CS
	Jan-08	1/24/2008	in AC
	Apr-08	3/4 & 4/24	in AC
	Jul-08	8/21/2008	Meeting delayed due to Hurricane Dolly (site visit to AC in June '08)
	Oct-08	10/23/2008	
	Jan-09	--	No meeting occurred as TWRI PM was out on maternity leave
	Apr-09	4/27/2009	in AC
	Jul-09		
	Oct-09		
	Jan-10		
Reimbursement Forms	7/30/2007	7/16/2007	reimbursed 9/25/07
	9/30/2007	9/28/2007	
	12/30/2007	1/14/2008	Cory: unpaid as of 3/31/08, see Mary
	3/31/2008	3/24/2008	Jen: given to Mary, mistake in match sheet noted
	6/30/2008	6/26/2008	took to 7/15 meeting; given to Mary 7/15; discussed all invoices at 7/15 meeting

	9/30/2008	10/3/2008	
	12/30/2008	12/15/2008	
	3/31/2009	3/26/2009	
	6/30/2009	6/25/2009	
	9/29/2009		
	12/29/2009		
	3/30/2010		
Website Updates	7/15/2007	--	Files were transferred from Sea Grant to TWRI
	9/15/2007	9/1/2007	Web site went online at http://www.arroyocolorado.org
	12/15/2007	12/15/2007	Added projects in the watershed and related information
	3/15/2008	3/15/2008	Added 'About the Watershed' section
	6/15/2008	6/15/2008	Checked; new presentation and news item added
	9/15/2008	9/15/2008	Added ecotourism luncheon presentation; txH2O story
	12/15/2008	12/15/2008	
	3/15/2009	3/15/2009	
	6/15/2009	6/15/2009	Made changes per TWRI administration change; updated activities & news releases
	9/15/2009		
	12/15/2009		
	3/31/2010		
TASK 2			
Quarterly Steering Committee Meetings	7/24/2007	7/24/2007	Minutes submitted in QPR/posted on Web site
	10/25/2007	10/25/2007	Minutes submitted in QPR/posted on Web site
	1/24/2008	1/24/2008	Minutes submitted in QPR/posted on Web site
	4/24/2008	4/24/2008	Minutes submitted in QPR/posted on Web site
	7/24/2008	8/21/2008	(July mtg delayed due to Hurricane Dolly) Minutes submitted in QPR/posted on Web site
	10/23/2008	10/23/2008	
	1/26/2009	1/26/2009	Minutes submitted in QPR/posted on Web site
	4/27/2009	4/27/2009	Minutes submitted in QPR/posted on Web site
	7/27/2009		
	10/26/2009		
	1/25/2010		
Bi-Annual Habitat Restoration Workgroup Meeting	7/24/2007	7/24/2007	Minutes submitted in QPR/posted on Web site
	1/24/2008	1/24/2008	Minutes submitted in QPR/posted on Web site
		6/12/2008	Participated in wetland tour to Vista site in Victoria, TX (no mtg notes)
	7/24/2008	8/14/2008	(July mtg delayed due to Hurricane Dolly) Minutes submitted in QPR/posted on Web site
	1/26/2009	1/26/2009	Minutes submitted in QPR/posted on Web site
	7/27/2009	6/25/2009	
	1/25/2010		

Bi-Annual Ag Workgroup Meeting	7/24/2007	7/24/2007	Minutes submitted in QPR/posted on Web site
	1/24/2008	1/24/2008	Minutes submitted in QPR/posted on Web site
	7/24/2008	8/20/2008	(July mtg delayed due to Hurricane Dolly) Minutes submitted in QPR/posted on Web site
	1/26/2009	1/26/2009	Minutes submitted in QPR/posted on Web site
	7/27/2009		
	1/25/2010		
Bi-Annual Wastewater Infrastructure Workgroup Meeting	9/20/2007	9/20/2007	Minutes submitted in QPR/posted on Web site
	12/17/2007	12/17/2007	Minutes submitted in QPR/posted on Web site
		4/9/2008	Combined with water quality monitoring meeting
	7/24/2008	6/12/2008	Participated in wetland tour to Vista site in Victoria, TX (no mtg notes)
	1/26/2009	12/16/2008	Minutes submitted in QPR/posted on Web site
	7/27/2009		
	1/25/2010		
Bi-Annual Outreach & Education Workgroup Meeting	7/16/2007	7/16/2007	Minutes submitted in QPR/posted on Web site
	9/11/2007	9/11/2007	Minutes submitted in QPR/posted on Web site; Add. meeting 10-16-07
	1/15/2008	1/15/2008	Minutes submitted in QPR/posted on Web site
	4/15/2008	4/15/2008	Minutes submitted in QPR/posted on Web site
	7/15/2008	7/15/2008	Minutes submitted in QPR/posted on Web site
	10/14/2008	10/14/2008	Minutes submitted in QPR/posted on Web site
	1/13/2009	1/13/2009	Minutes submitted in QPR/posted on Web site
	4/14/2009	4/14/2009	Minutes submitted in QPR/posted on Web site
	7/14/2009		
	10/13/2009		
	1/12/2010		
Agendas & Summaries submitted with QPRs			Also posted on Web site
Update workgroup & steering committee membership list	Aug-07	9/15/2007	Provided SC opportunities to review information for posting
	Aug-08	8/21/2008	Handed out workgroup/SC list at mtngs for review. Revised listing will be posted Sept 08
Post workgroup & steering committee membership list on Website	Oct-07	10/8/2007	SC list has email contact info; workgroup lists - no contact info;
	bimonthly		Posted on the Website (TCEQ note: not always bimonthly but saved on I drive and as paper files - 2007: June 5, 25; July 19, 31; Aug 15, 31; Sept 18; Oct 1, 12, 24; Nov 16, 30; Dec 14.
Bi-monthly email updates	until 3/31/10		2008: Jan 2, 22; Feb 7, 27; March 12, 31; April 17; May 1,31; June 17; July 1, 18, 31; Aug 18, Sept 5; Oct 20; Nov 3, 17; Dec 2, 18, 2008: Jan 6, 21; Feb 9, 25; Mar 24; April 15; May 6, 27; June 15, 30;

TASK 3		
Conduct at least one presentation per month to different targeted audiences	Ongoing (in QPR)	

	7/15/2007	7/23/2007	
	9/15/2007	9/17/2007	see QPR
	12/15/2007	12/13/2007	see QPR
	3/15/2008	3/12/2008	see QPR
	6/15/2008	6/17/2008	see QPR
	9/15/2008	9/16/2008	see QPR
	12/15/2008	12/15/2008	see QPR
	3/15/2009	3/15/2009	see QPR
	6/15/2009		
	9/15/2009		
	12/15/2009		
	3/15/2010		
Meet face-to-face with at least 4 community leaders per month to deliver basic facts on the Arroyo Colorado and discuss progress in implementing the ACWPP.	Ongoing (in QPR)		
	7/15/2007	7/23/2007	
	9/15/2007	9/17/2007	see QPR
	12/15/2007	12/13/2007	see QPR
	3/15/2008	3/12/2008	see QPR
	6/15/2008	6/17/2008	see QPR
	9/15/2008	9/16/2008	see QPR
	12/15/2008	12/15/2008	see QPR
	3/15/2009		
	6/15/2009		
	9/15/2009		
	12/15/2009		
	3/15/2010		
Contingent upon approval by TXDOT, install roadway signage by the end of the two year contract	3/31/2009		sign contractor confirmed April 2008 and design and locations being decided as of 4/24/08; Ordered and installed 10 signs in November 2008. Shared design with City of McAllen and stormwater taskforce who is interested in installing signs at additional sites around the valley (4 in McAllen).
Have storm drains stenciled in at least six cities and communities within the Arroyo Colorado watershed.	3/31/2009		metal plates decided as of 4/24/08. Worked with stormwater task force to place bulk order. Received markers in December 2008. Installed over 1,000 markers valley-wide in Earth Day Celebration on 4/17/09 and 4/18/09.
Implementation status of education and outreach measures, agricultural pollution control measures, habitat restoration measures, and wastewater infrastructure pollution control measures.	QPRs		
	7/15/2007		
	9/15/2007		
	12/15/2007		
	3/15/2008		
	6/15/2008	7/15/2008	TWRI is combining this with task 3 for a partnership update

	9/15/2008	8/21/2008	Provided SC with implementation schedule updates; included in QPR
	12/15/2008	10/23/2008	Provided SC with implementation schedule updates; included in QPR
	3/15/2009	--	no activity to report for this quarter
	6/15/2009	--	no activity to report for this quarter
	9/15/2009		
	12/15/2009		
	3/15/2010		
Media press releases (1 per quarter required)	7/15/2007		
	9/15/2007		
	12/15/2007		
	3/15/2008		
	6/15/2008	6/15/2008	4/14/08: <i>International museum displaying model demonstrating Arroyo Colorado Watershed</i> ; 4/20/08: <i>Children celebrate Earth Day at IMAS</i> – McAllen Monitor 7/11/08: Richard Moore produced and aired video on ABC affiliate KRGV-TV-5 highlighting AC and the effort to improve it (http://www.richardmooreoutdoors.org . DeLa Garza assisted; 7/11/08: <i>Preparing for Schoolyard habitat gardens</i> - McAllen Monitor; 7/13/08: <i>Planning Ecotourism Luncheon</i> - McAllen Monitor; 7/16/08: <i>Arroyo Colorado Watershed Meeting Scheduled for July 24</i> - AgNews, Media Newswire on 7/21/08; 2008: <i>Cities to Build Effluent Polishing Wetlands</i> - TRA Newsletter (Vol 6, Issue 1); 7/21/08: <i>Arroyo Colorado Watershed Meeting Set August 21</i> - Texas Farm Bureau Ag Headlines 10/3/08: Texas AgriLife Program Saves Growers Millions while Protecting Water - AgNews, PR Newswire Policy & Public Interest on 10/3/08 and 11/2/08, Media NewsWire on 10/6/08, Extension on 10/7/08, Crop Life and HighPlains Midwest Journal on 10/10/08, Hutchison County Highlights on 10/08, Valley Morning Star on 10/11/08, Southwest FarmPress on 10/28/08, Fresh Plaza on 11/8/08, North Texas e-News on 12/06/08; 10/12/08: <i>EcoExposure: McAllen Festival Promotes Sustainable Living Options</i> - McAllen Monitor; 10/22/08: Meeting Slated to implement Arroyo Colorado improvement plan - AgNews, PR Newswire Policy & Public Interest on 10/22/08; 11/06/08: <i>Soil Testing Saves Farmers Millions</i> - PR Newswire Policy & Public Interest; 11/7/08: <i>Texas Watershed Steward in the Arroyo Colorado</i> - AgNews, Farm Bureau on 11/12/08; 11/7/08: <i>Public Invited to Arroyo Watershed Workshop</i> - PR Newswire Policy & Public Interest, AgNews on 11/7/08, Ag Headlines on 11/12/08, High Plains Journal on 11/17/08; 11/13/08: <i>STC to hold two-day environmental conference</i> - The Monitor; 11/18/08: <i>Jaime Flores appointed new Arroyo Colorado Watershed Coordinator</i> - AgNews, PR Newswire Policy & Public Interest on 11/18/08, Valley Morning Star on 11/30/08. 12/01/08: <i>New Road Signs Denote Arroyo Colorado Watershed</i> - AgNews, PR Newswire Policy & Public Interest, Cotton Gin & Oil Mill Press; 1/22/09: <i>Arroyo Colorado Watershed Steering Committee Meets January 26</i> - AgNews, Southwest Farm Press on 1/23/09, Media Newswire on 1/26/09; 02/16/09: <i>San Benito Turns Sewer Ponds into Wetlands</i> - McAllen Monitor;
	9/15/2008	9/15/2008	
	12/15/2008	12/15/2008	
	3/15/2009	3/15/2009	

3/19/09: San Juan to construct Wetland - The Monitor; 3/27/09: Texas A&M Kingsville part of efforts that led to Stormwater management plans for Rio Grande Valley Cities - TAMUK Newsrelease; 4/9/09: Engineering College at A&M Kingsville goes to Harlingen for earth Day celebration April 18 at Centennial Park - TAMUK Newsrelease; 4/16/09: Earth Day Celebration to Educate Public - Valley Morning Star; 4/21/09: No Dumping Storm Drain Markers Highlight Earth Day - AgNews; 4/22/09: Storm Drain Markers Highlight Earth Day - The Monitor;

6/17/09: How Clean is the Arroyo, Stream Team discusses Arroyo Colorado Water Quality Data - TWRI, KGBT, KVEO, and KGBT Video coverage;

making due date changes upon contract extension and this survey is aimed for completion by 8/31/09

making due date changes upon contract extension and this survey is aimed for completion by 8/31/09

previous newsletters on the website, include: 6/2005, 1/2006, 8/2006

Distributed to over 600 ind (596 direct + 54 hand distribution)

Distributed to over 700 individuals

Distributed to over 700 individuals

Distributed to over 700 individuals

contingent upon funding availability

contingent upon funding availability

Evaluation instrument (survey) for targeted audiences at select events

Evaluation instrument (survey) for SC and Partnership

Summary of evaluation instrument (survey) results

Semi-Annual Newsletter

6/15/2009 6/15/2009

9/15/2009

12/15/2009

3/15/2010

8/31/2009

8/31/2009

QPRs

Oct-07

10/20/2007

Apr-08

4/1/2008

Oct-08

11/15/2008

Apr-09

6/15/2009

Oct-09

Mar-10

TASK 4

10 Grant Proposals

Summary table of grant application status

QPRs

7/15/2007

--

9/15/2007

9/15/2007

Submitted with QPR & distributed at SC meeting

12/15/2007

12/15/2007

Submitted with QPR & distributed at SC meeting

3/15/2008

3/15/2008

Submitted with QPR & distributed at SC meeting

6/15/2008

6/15/2008

Submitted with QPR & distributed at SC meeting

9/15/2008

9/15/2008

Submitted with QPR & distributed at SC meeting

12/15/2008

12/15/2008

Submitted with QPR & distributed at SC meeting

3/15/2009

--

No grant table distributed to SC meeting given TWRI personnel did not travel down for meeting

6/15/2009

--

No grant table distributed to SC meeting, but upcoming grant opportunities were discussed.

9/15/2009

12/15/2009

3/15/2010

TASK 5

Data summary report	11/30/2008	11/30/2008 Updated 7/15/08	Cory: Need to review and discuss with TWRI; Jen: Mark updated and current static graphs on the website are available for NRA, others to come
Data clearinghouse including monitoring update	11/30/2009 7/15/2007 9/15/2007 12/15/2007 3/15/2008 6/15/2008 9/15/2008 12/15/2008 3/15/2009 6/15/2009 9/15/2009 12/15/2009 3/15/2010	7/15/2008	7 monitor sites have increase to 12; this deliverable will be modified upon contract extension Posted monitoring sites and static graphs on website to be accessible to the public no changes no changes no changes

Appendix B

Steering Committee and Workgroup Meeting Summaries

Arroyo Colorado Outreach and Education Workgroup
April 14, 2009 3:00 pm to 5:00 pm

Meeting Summary

Attendees:

Heidi Moltz, Texas Stream Team	Jaime Flores, TWRI
Javier Guerrero, Stormwater Taskforce	Megan Meier, TWRI
Laura de la Garza, Comite Resources	Amy Spalding, VLF
Roy Jimenez, City of Weslaco	Don Hockaday, UT Pan-Am

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

Project Discussion:

- New O&E Materials Jaime Flores, TWRI
 - Caps (sell them?)
 - Buttons (like from Pachanga)
 - Pamphlets (“Little Waterway with Big Job”)
 - Bumper Stickers/Decals
 - Literature for parks/refuges
 - Hold workshop and invite cities
 - Ask for sponsorships to pay for materials (could use as match for grants)
 - Mini-versions of watershed model
 - Suggested local government money as match
 - RDF grant with city of McAllen; EPA added outreach component of conducting workshops for cities about State Revolving Fund (local governments like loans) and how SRF could be used for RDF
 - John Deere dealer in Weslaco interested in having information to distribute to customers/farmers at local stores

Arroyo Colorado Outreach Activities:

Stock Show Booth Jaime Flores, TWRI

IMAS World Water Day Jaime Flores, TWRI

Earth Day Activities Jaime Flores, TWRI

- Task Force met this morning to get word out (working with Kathy, Jason and local schools)
- Activities on Sat. April 18 and on Earth Day, April 22
- Schools are busing students over for activities
- Hands-on activities, face painting, demonstrations, installation of markers
- Weslaco having own event with exhibits, music, food
- Most cities in task force having events

Additional Road Signage-Storm Water Task Force Abel Garza, TAMUK

- Cities making additional signage in shop and providing Task Force money to purchase signs as well (could use as match)

Texas Stream Team Update..... Heidi Moltz, Stream Team

- 6 actively monitored sites from McAllen to Laguna Madre
- Compiling and analyzing data from volunteers and professionals; present results on June 20th at Estero Llano Grande State Park

- Hosting teacher workshop at Hidalgo High School and certifying them as water quality monitors to be able to teach their students
- Texas Stream Team “meeting of the monitors” on July 17-19
- Might use model at some of these events

O&E Project Updates:

- 4 Cities Wetland Update..... Jaime Flores, TWRI
 - San Juan has broken ground
 - San Benito has started building and La Feria
 - Mercedes still working on permit amendments
 - Possibly City of Alamo
- Storm Water Task Force Scholarships Abel Garza, TAMUK
 - Offering 4 year scholarships (4 in Hidalgo and 4 in Cameron County) to ISDs participating with Task Force
 - Working with liaison within ISDs
 - Way for Task Force to give back
 - Have to apply to Env't. or Civil Engineering at TAMUK

Upcoming Grants and Potential Projects

- GLO Proposal..... Megan Meier, TWRI
 - TWRI sent GLO 3 project ideas (similar to the proposals submitted to EPA Environmental Education Program) and they chose the PSAs for funding
 - Proposed to develop 2 PSAs (in English and Spanish)
- BWET Grant UpdateDon Hockaday, UTPA
 - Have not received any information on funding status; if funded, would pay for second watershed model

Other Business

- Jaime Flores, TWRI
 - Possible newsletter article: what schoolteachers are doing following AC presentations by Jaime and Javier
 - May 14th is Dragonfly Days at Estero Llano Grande
 - Drop boxes on leveled agricultural fields; farmers need cost-sharing for this practice
 - Steering Committee meeting on 27th

Next Meeting Date/Adjourn

- Jaime Flores, TWRI
 - July 14, 2009

Arroyo Colorado Steering Committee/Partnership Meeting

April 27, 2009 4:30 p.m. - 7:00 p.m.

MEETING SUMMARY

Attendees:

Willy Cupit, TPWD
 Rocky Freund, Nueces River Authority
 David Day, Casa Engineering
 Laura De La Garza, Comite Resources
 Joe Hinojosa, City of Brownsville
 Chris Hathcock, TPWD
 Kim Jones, TAMUK
 Ronnie Ramirez, TSSWCB
 Narayanan Kannan, AgriLife Research
 Albert Maldonado, City of Alton
 Julio Villarreal Jr., City of Alamo

Rick Cuevas, City of Alamo
 Roger Miranda, TCEQ
 David Salinas, City of Weslaco
 Javier Guerrero, TAMUK
 George Quilantan, OMI
 Filemon Olvera, OMI
 Lorenzo Barron, City of Mission
 Tony Hernandez, City of San Juan
 Tony Reisinger, Texas SeaGrant
 Alex De La Rosa, City of Alamo
 Mario Zanelli, Moody Brothers Inc.

Joel Bleth, SolarBee, Inc.
Chris Knud-Hansen, SolarBee, Inc
Joanna Sanchez, STU/City of McAllen
Liz Verdecchia, IBWC
Martha Viada, City of Harlingen

Harvey Hibl, SolarBee, Inc.
Ken Moody, Moody Farms
Jaime Flores, TWRI
Cecilia Wagner, TWRI

4:30 Social – Snacks and Refreshments Provided by Solar Bee Inc.

5:00 Welcome and Introductions Jaime Flores, TWRI

5:10 Solar Bee Inc.....Presentation on Solar powered Long Distance Water Circulators

- Presentation will be provided and posted on AC Web site
- Estimated cost per mile to purchase: \$240K/mile. This is for 4 units and it would cover 2 miles. 1 mile upstream of the Rio Hondo Bridge & 1 mile downstream
- Estimated cost per mile to rent for 1 yr: \$180K/mile. This is to rent 4 units and it would cover 2 miles. 1 mile upstream of the Rio Hondo Bridge & 1 mile downstream
 - o If we decide to purchase later, SolarBee will apply the rent price to the purchase price

5:40 Work Group Updates:

Agricultural Issues.....Andy Garza, TSSWCB

- TSSWCB WQMP project: wrapping up the current 319 project implementing BMPs and developing WQMPs and are working on starting new one
- TSSWCB Education project, Ag assessment project and SWAT Model project: abstracts from most recent QPR were distributed.
- Roger Miranda asked about including the data collected from the ag assessment project in the SWAT model. It is the intent to do so upon completion of the ag assessment project
- Kannan provided a presentation on the SWAT model and the BMP mapping effort in conjunction with the Ag assessment project. **Presentation to be posted on AC Web site.**
 - o BMP Map update: maps denote where certain BMPs are installed; there was discussion about quantifying the acreage per the BMP as the data is point data rather than polygon. The acreage data is not included in the map, but the acreage data is available and we can get it as a supplemental tool for quantifying BMPs installed and for SWAT model
 - o SWAT Model update: Simulated/predicted most parameters; current problem is overestimating nitrates and underestimating ammonia; still have to look at Phosphorus and DO
 - o Kannan will get future BMP scenarios from TSSWCB to assess water quality impairment
 - o Roger brought up an issue with the irrigation rates that Kannan used in SWAT model. Kannan used irrigation applied data from Enciso; Roger feels the data is underestimating the amount of irrigation applied.

Habitat Issues Dr. Kim Jones, TAMUK
Tony Reisinger, Texas Sea Grant Extension

- Two recent habitat grants (San Benito & Rio Hondo) for wetland restoration/building were not funded
- Currently proposing a project thru TAMUK to EPA regional wetland development program to work (groundtruth) LIDAR data for developing/accessing wetland areas
- Some research is showing (paper out of Florida) that rather than one large wetland, targeting pockets of smaller wetlands in an area can have water quality impact. Supports recent efforts of developing multiple small wetlands rather than one large wetland. Also, land availability and willingness to cooperate also supports effort of numerous small wetlands rather than one large one.
- 3 Cities wetland project: La Feria and San Juan are under construction; San Benito is dewatering and should begin soon.
- Grant (from IBWC) for potential wetland in Weslaco was not funded (lack of funding). **But IBWC has some funds now and may be able to partially fund something now.**
- Jim Tabak can not make Mondays; Habitat workgroup would like to meet more often and possibly need to move from Mondays. **Jaime to email group and propose alternate meeting date – possibly Tuesday (the morning after the SC meeting?)**

Water Quality Monitoring Rocky Freund, Nueces RA

- Rocky (Nueces River Authority) provided handouts of water quality data;
- Had Coordinated Monitoring Meeting on April 17, 2009;
- Chris Caudle will add a site at the sugargrowers dock at the Port
- TPWD requested a monitoring station in the North Floodway (El Sauz Ranch?)
- NRA continuing special study evaluating e.coli as indicator bacteria in tidal portion of the Arroyo Colorado. Have had 4 monitoring events to date (monitoring monthly). Provided data in handout of Jan, Feb and Mar data. Funding will end in August, but it is possible that CRP funds may continue it thru Dec.

Education and Outreach Jaime Flores, TWRI

- Met on April 14; 2009
- Discussing new ideas for outreach/education materials (caps, buttons, etc.)
- **Need more education fact sheets (brochures, Take a Walk on the Arroyo, WPPs)**
 - o Roger requested TWRI get a quote to print more plans (~1,000 more plans)
 - o Also it was requested to redo the brochures (Little waterway with a big job)
- Had a request for ag related educational materials from Barbee-Neuhaus Implement. For example, info on ag BMPs and cost share programs available. Neuhaus would be willing to distribute at their stores
- Cameron County will be installing watershed boundary signs for the arroyo. They are offering to put our signs on their pole.
- City of Weslaco is able to produce road signs in house; the SWTF has about \$3700 for extra signs.

6:20 Long-Term Partnership Sustainability Jaime Flores, TWRI

- Possible board members identified: Joe Hinojosa and David Day. With 3 members, we can be able to draft the paperwork for filing 501c3 status
- Conduct assessment of whether we do something like the SWTF (a fee based thing) or 501c3
- **Need to have a meeting of the long-term sustainability task group soon (Laura, Jaime, Jude, Joe, David, Javier, Ken Jones, Cecilia). Jaime initiate time.**

6:40 Grants Update Cecilia Wagner, TWRI

- TWRI sent GLO 3 project ideas (similar to the proposals submitted to EPA Environmental Education Program) and they chose the PSAs for funding. Proposed to develop 2 PSAs (in English and Spanish)
 - o **Arroyo PSA Grant idea: talk to John Jacob about Don Aguas (Mr. Water) – he is a local celebrity so to speak**
- TWRI also worked with TAMUK and UTB to develop a proposal to collaborate with LRGVDC to monitor WWTPs. If funded, this will be funded by TCEQ 104b funds.

6:50 Other Business Jaime Flores, TWRI

- IBWC Coordinated Monitor Meeting in Harlingen - 1 to 3 on April 28
- Next steering committee meeting on July 27
- Ag Issues Workgroup Meeting on July 27
- E&O Workgroup Meeting on July 14
- **Habitat workgroup meeting will need to meet sometime in July (Coordinate date with Jim Tabak since Mondays do not work for him)**
- **Wastewater Infrastructure workgroup will also need to meet sometime in July (Perhaps schedule day of SC meeting in the afternoon in the afternoon slot that the habitat group used to use)**
- IBWC got funds for levee improvement – they want to include us on reviewing Environmental Assessment for the stretch of Arroyo
- Grant Workshop scheduled for July 24 in Pharr for cities to attend (SWTF sponsored) – more info to come

7:00 Adjourn Jaime Flores, TWRI

Appendix C**Bi-Monthly Updates March 2009 through May 2009**

March 24, 2009; April 15, 2009; May 6 and 27

March 24, 2009

Hello Arroyo Partners:

Spring is officially here. Most of the trees have sprouted new leaves and there are flowers and citrus blossoms blooming everywhere. Spring break is over, college students are back in school and we should be seeing migrating hummingbirds very soon.

Over the last few weeks, the Arroyo Colorado watershed model was busy making the rounds at the Fiesta De La Feria, the Rio Grande Livestock Show and the International Museum of Arts & Science.

Here are some events that you might be interested in attending:

The Valley Land Fund would like to invite everyone to the Concert for Conservation to be held March 26th at El Rancho Charco on Walker Lake. This event is this week so don't forget. The music will be provided by Texas Heat and special guests, Boneyard, from 7:00-10:00 pm. I saw members of Texas Heat performing at the Stockshow and they are really good. For more information call the VLF at 686-6429.

The Estero Llano Grande World Birding Center will be having a Full Moon Party on April 9th from 8-10 pm. You will look for owls, bats, frogs and any other type of critter that comes out at night. They plan on having these Full Moon Parties once a month every time there is a full moon.

The City of McAllen would like to invite everyone to their 2nd Annual Green Family Festival "Vida Verde" on April 18th from 9:00 am to 4:00 pm at the Quinta Mazatlan McAllen wing of the World Birding Center.

The Arroyo Colorado Partnership and the LRGV-TPDES Task Force will be having several storm drain marker installation activities on April 18th, throughout the Valley to celebrate Earth Day. The time and place for these events will be announced in the next Bimonthly update and in the local papers very soon.

There will be two webcasts coming up that some of you might be interested in:

Stormwater Permitting - Current Developments and Future Outlook WEF® Distance Learning Webcast Series. To register go to <http://www.wef.org/ConferencesTraining/Webcasts/StormwaterPermitting/>.

On April 15, 2009, EPA's Watershed Academy will present a Webcast entitled, "Watershed Central: A New Gateway to Watershed Information." I have included an attachment on for this webcast and how to register.

I hope to see many of you at these great events.

Looking ahead,

Jaime Flores

April 15, 2009

Hello Arroyo Partners:

There quite a few Earth Day events that will be taking place over the next week. Hopefully you will find an event close to you. It is really exciting to see so many cities and organizations hosting so many different events. Scheduled activities include:

April 17:

- *City of Pharr Public Works Department and Fire Department and the Pharr Elementary School students will install markers near the school. Other festivities include planting grass, flowers and trees.*

April 18:

- *City of San Benito and Girl Scout Troops will install markers at 10 a.m. at the San Benito Municipal Building, 401 N. Sam Houston*
- *City of La Joya and La Joya High School science class will install markers at 10 a.m. at the La Joya Municipal Park on Coyote Boulevard.*
- *City of Weslaco is sponsoring "Green Family Festival" 8 a.m. to noon at the City Hall, 255 South Kansas Ave. Volunteers will be installing storm water markers and planting flowers. There will be live entertainment, food and refreshments.*
- *City of San Juan and Pharr-San Juan-Alamo High School National Honor Society students will meet at 8 a.m. at City Hall to begin installing markers. The targeted area will be between Business 83 and Hall Acres Road and between Wyoming Street and San Antonio Street.*
- *City of Harlingen and Harlingen Independent School District students will meet at 10 a.m. at the city's new Centennial Park to kick-off the marker installation. The city will also have vehicles on display from Public Works, Harlingen Water Works, the Fire Department, and Police Department. Information on recycling, water conservation, native plants, composting, and other green living ideas will be provided by Harlingen Proud, Valley Proud Environmental Council, Texas Water Development Board, and Harlingen Park and Recreation. Texas A&M University-Kingsville's Javelina Express Mobile Go Center, a 42-foot trailer that provides outreach to prospective students, will be staffed by the A&M-Kingsville College of Engineering faculty, students and staff.*
- *The City of McAllen would like to invite everyone to their 2nd Annual Green Family Festival "Vida Verde" on April 18th from 9:00 am to 4:00 pm at the Quinta Mazatlan McAllen wing of the World Birding Center.*
- *STC will be holding an Environmental Education Fair at their Mid Valley Campus on April 18th from 10 am-2 pm. They will have several guest speakers and numerous activities.*

April 22:

- *City of Alton and Alton Junior High School students will install markers at 9:30 a.m. on the Alton Junior High campus, 521 S. Los Ebanos Blvd.*

In a precursor to Earth Day, the city of Mission and volunteers installed storm drain markers and picked up trash April 4 as part of its 2009 Mission Trash Bash.

More than 1,000 markers will be installed throughout the Lower Rio Grande Valley during these events with 20,000 markers eventually installed over the next several years.

I would also like to remind everyone that a Habitat Workgroup meeting and Steering Committee meeting will be held on April 27th. I will send out reminder e-mails with more information next week.

*Looking ahead,
Jaime Flores*

May 6, 2009

Hello Arroyo Partners:

The Earth Day events and activities were informative, fun and a success! I was especially excited to see how many involved raising awareness regarding storm waterpollution prevention. Despite the economic crisis, the Lower Rio

Grande is still experiencing rapid growth and area cities are dealing with these issues on a daily basis. Outreach and education efforts that address all sources of pollution that enter the Arroyo Colorado play a big role in ensuring our work is successful. I want to congratulate and thank everyone that helped make these events possible. To read up on the events go to: <http://agnews.tamu.edu/showstory.php?id=1144> and <http://www.tamuk.edu/news/2009/april/stormwater/>

We just held a Steering Committee meeting on April 28th. Thank you to all who attended. Attendees watched a presentation about Solar Bees, which are solar powered, long distance water circulators that are installed in water bodies to improve dissolved oxygen and the overall habitat. Solar Bee representatives, who toured the Port of Harlingen area while they were here, acknowledged the complex water quality issues we face in the Arroyo Colorado and stated it was unlike any water body that they had dealt with. While they can not guarantee total success, the company feels they have a lot to offer the watershed and would like to install some Solar Bees in the tidal portion of the Arroyo. I encourage everyone to look at their website (<http://www.solarbee.com/>). This type of green engineering may be a way to help restore DO levels during these upcoming critical months.

Steering Committee members were also given an update on agricultural activities in the Arroyo Colorado. Specifically, maps detailing installed best management practices in the watershed are now complete and acreage for each BMP will be added next. In addition to completing the maps, Dr. Narayanan Kannan with AgriLife Research has also been busy updating and validating the SWAT model. His data taken in the field held up to the calculated amounts derived with the model program and his next step will be to begin running specific scenarios to determine loadings.

We are in the process of looking for external funds to support the installation of a Solar Bee; we would need to include instream water quality monitoring to assess its effectiveness. Anybody interested in collaborating with us? Two grant programs we are currently looking at for Solar Bee and for other aspects of implementing the WPP include the US EPA Source Reduction Assistance Grant Program and the WERF Paul L. Busch Award. The latter program is an award for a researcher who is in the early to mid point of their career and is doing innovative “out-of-the-box” research in stormwater, watersheds, wastewater, etc. Please email me (jflores@ag.tamu.edu) if you have interest in working with us – we’ll gladly help you put together the proposal to seek these funds.

Two proposals were submitted recently and hopefully, have a good chance of receiving funds. TAMUK and UTB collaborated with the LRGVDC to develop a proposal to conduct monitoring at permitted waste water treatment plants in the watershed. Also, the partnerships proposed to develop two public service announcements (in English and Spanish) to enhance outreach. Speaking of outreach efforts, unfortunately, the three Environmental Education grants we submitted to US EPA were not funded. We’ll try again next year.

Here are a couple of events you might be interested in:

Municipal Pollution Prevention/Good Housekeeping Webcast, May 14, 11 am to 2 pm: On May 14 at the Citrus Center auditorium, TAMUK and the Arroyo Colorado Watershed Partnership will host a webcast that focuses on Municipal Pollution Prevention/Good Housekeeping, which is one of the minimum management measures associated with Phase II of the NPDES MS4 permit program. This webcast will feature practical guidance on developing and implementing an effective municipal pollution prevention/good housekeeping program. One will hear about simple methods that can be used to assess and improve your municipal operations and about how to make the most of your pollution prevention/good housekeeping efforts.

Grant Opportunity Workshop: City of Pharr Convention Center, July 24, 8:30 am to 4 pm: The Arroyo Colorado Watershed Partnership, Rural Economic Development Group of the Texas Department of Agriculture, the LRGV TPDES Stormwater Task Force, TAMUK and the City of Pharr will host a grant opportunity workshop that will feature speakers and presenters from over a dozen state, federal, local and private agencies. These speakers will promote available grant funding from their respective agencies, provide guidance, identify other workshops, and distribute grant solicitations and applications. The workshop is available to all Arroyo Colorado stakeholders, local governments and any interested entity. Lunch will be provided, several outreach booths from invited agencies will be on location, and the seminar is free. I want to encourage everyone to attend this workshop. We can all use some rain. I hope we get some soon. But make it rain...not a hurricane!

Looking ahead,

Jaime Flores

May 27, 2009

Hello Arroyo Partners:

The Rio Grande Valley finally got some much needed rain. It seemed like nature exploded with colors overnight. How great is rain? It is almost beyond words, the effect of a good rain. I hope we get a little more.

I would like to thank everyone that responded to our request for a boat to help Dr. Deyoe and Paul Duke conduct a study on the Arroyo Colorado. Paul sent me this message "Thanks to the ACWP, I have acquired a canoe for the sampling trips thanks to Mr. & Mrs. Bergh who responded to the message we sent out to the Arroyo partners. I really appreciate their help and extend my thanks to all those who also responded to our plea!!"

I was notified that the grant to conduct monitoring at permitted waste water treatment plants in the watershed will likely receive funding. I would like to congratulate TAMUK, UTB and the LRGVDC for the hard work that went into putting together that proposal. TCEQ is negotiating the contract and work will probably begin October 1 of this year. We have a couple more proposals that are currently being developed. I will keep you informed once they become more concrete.

Here are a couple of events you might be interested in:

--EPA Watershed Academy Webcast: Wetlands: Reconnecting Youth with Nature – May 28, 12 to 2 PM. (<http://epa.gov/watershedwebcasts/>) The Webcast will explore how we as a society, and especially our children, have become increasingly disconnected from the natural world. Richard Louv, chairman of the /Children and Nature Network and renowned author; Suzanne Pittenger-Slear with Environmental Concern, Inc.; and Davon Kenneth Johnson with the Earth Conservation Corps will talk about efforts to change this trend and discuss the unique role that wetlands can play in reconnecting young people with nature.

--Texas Seagrass Conservation Plan Review Workshop– June 11-12, 2009, Corpus Christi. (<http://www.cbbep.org/seagrass/Workshop09.html>) Texas Parks and Wildlife Department, in partnership with the Coastal Bend Bays and Estuaries Program and the Port of Corpus Christi, will host the 2009 Seagrass Conservation Workshop.. This workshop will provide a comprehensive look at the accomplishments of the original Seagrass Conservation Plan, identify unfulfilled and new objectives, and explore future actions and partnerships to further the protection and conservation of seagrass communities along the Texas coast. A goal of the workshop is to seek partnerships and cooperation from organizations who share in the mission of the Seagrass Conservation Plan. Join us in guiding the future of Texas seagrasses. For further details visit: [or call Annette Paulin, logistics coordinator, at 512-754-9179. Registration deadline: June 5, 2009](mailto:Annette.Paulin@txstate.edu)

--Texas Stream Team is sponsoring a review of water quality data in the Arroyo Colorado at Estero Llano Grande State Park on June 20. This presentation will include analysis of volunteer and professionally collected water quality data in the Arroyo Colorado and a tour of the State Park. The specific time is to be determined and I will forward a flyer once details are finalized. For more information, contact at hm1079@txstate.edu <<mailto:hm1079@txstate.edu>> or 512.618.1051 (toll free 877.506.1401).

--Arroyo Colorado Grant Opportunity Workshop: City of Pharr International Convention Center, July 31st, 8:30 am to 4 pm: The Arroyo Colorado Watershed Partnership, Rural Economic Development Group of the Texas Department of Agriculture, the LRGV TPDES Stormwater Task Force, TAMUK and the City of Pharr will host a grant opportunity workshop that will feature speakers and presenters from over a dozen state, federal, local and private agencies. These speakers will promote available grant funding from their respective agencies, provide guidance, identify other workshops, and distribute grant solicitations and applications. The workshop is available to

all Arroyo Colorado stakeholders, local governments and any interested entity. Lunch will be provided, several outreach booths from invited agencies will be on location, and the seminar is free. I want to encourage everyone to attend this workshop.

We can use a little more rain. It worked the last time, so I will ask again.

Looking ahead,

Jaime Flores
