

# Report - Water Conservation Conference for Far West Texas Water Plan Region E

## Interlocal Agreement between Rio Grande Council of Governments and El Paso Water Utilities Public Service Board.

### Executive Summary

This report summarizes the work done under Study #4: Municipal Water Conservation Education Program found on the interlocal agreement between the Rio Grande Council of Governments (RGCG) and El Paso Water Utilities Public Service Board (EPWU). It includes the purpose of study, background information, methodology, results and recommendations, of the conference held October 17, 2008 at both El Paso Tech20 Center and Ft. Stockton Extension Center.

### Purpose of Study

The main goal for the conference was technology and information transfer based on EWPU success. EPWU wanted to share its experiences related to the implementation of conservation programs and incentives. The information presented at the conference was not specifically designed as part of the long range Far West Texas Regional Water Plan of 2011 but as an ongoing intraregional cooperative effort to share information so that regional water purveyors can implement programs that fit their needs in their planning strategies.

### *Background Information*

For more than seventeen years, EPWU has dedicated its efforts and resources to developing and implementing successful water conservation programs. In 1991, our objective was to reduce consumption from an initial 200 gallons per capita per day (gpcd) to 160 gpcd by the end of 2000. As such, consumption dropped to 159 gpcd. Our new goal of reaching 140 gpcd by 2010 was surpassed at the end of 2004 when we reached 139 gpcd. Last year (2008), water consumption reached 133 gpcd. Maintaining a 140 gpcd through 2010 is our new goal. This incredible achievement is attributed to the implementation of best management practices; such as education programs, system audits, rebates and incentives, rate structures, mandatory ordinances and supply side conservation for the complete management of water resources.

Staff from EPWU participated in the Water Conservation Implementation Task Force created by the 78<sup>th</sup> Texas Legislature under Senate Bill 1094 to review, evaluate and recommend optimum levels of water use efficiency and conservation for the state. As a result, the Water Conservation Best Management Practices Guide was created. The conservation program described in this document incorporates some of the BMP's found on the guide relevant to municipal water users.

In December 2007, EPWU staff requested Far West Texas Water Planning Group Members submit ideas for topics in order to develop relevant conservation training for the water utilities in the Far West Texas Region. The following topics were suggested.

- *Training on the options open to small suppliers for using/selling their WWTP effluent. How do they market it? What are legal use options? How did the purple pipe program get started, funded, and what is involved?*
- *Water conservation programs and best management practices recommended by the Texas Water Development Board and the Water Conservation Implementation Task Force. Including education programs, supply side water conservation, system water audits, landscape water efficiency and xeriscape principles.*

A one day conference was proposed; the conference included two concurrent tracks. The Utility Staff Track was designed for the technical staff of water purveyors. This track incorporated sessions regarding BMP's found on the state guide and on the contract requirements between EPWU and the RGCG.

The Community Outreach Track was planned for those who help utility staff disseminate educational presentations into the community such as extension agents, teachers and master volunteers. This track introduced many of the available school curriculum programs on water conservation. The track included hands-on activities that can be used at school settings and community events. Attending teachers received professional credit hours for their participation in the conference.

### **Methodology**

The conference took place Friday October 17, 2008. Recognizing that the driving distance between the counties in Region E might become a problem; we proposed to offer different venues for this conference.

1. The El Paso site (Tech<sub>2</sub>O Center) hosted the one-day conference with two tracks, the Utility Staff Track and the Community Outreach Track.
2. An EPWU facilitator and an Extension Agent were sent to Ft. Stockton site (Extension Center) to host the Community Outreach Track. Both sites were linked via long-distance conferencing and video.
3. In addition, the Utility Staff Track pre-recorded presentations were made available through a link to the El Paso Water Utilities Webpage. This option was offered for those attendees that were interested in such track but couldn't drive to El Paso.

There was no registration cost for the conference. The most important benefits, by offering the conference in the previously described format, were cost savings and work schedule flexibility by minimizing lost work time and expenses due to travel. Additionally, teachers that attended the Community Outreach Track received, at no cost to them, 6

hrs of professional CEU's. Copies of presentations and the conference program are included on attachment "A" at the end of this report.

As per expenses, a description of such along with in-kind donation received, are included on attachment "B" at the end of this report.

An electronic invitation to "save the date" was emailed to a list of members provided by RGCG and TWDB staff. The same printed invitation was mailed to those members with no electronic mail. Such invitations were distributed at the extension service during their fall district meeting. Following the invitation, a conference program was mailed. Registrations were handled via emailed and regular mail. A total of 55 registrations were received; 32 for the Community Outreach Track for both sites, Ft. Stockton (12) and El Paso (20) and 23 for the Utility Track in El Paso. Subsequently, EPWU Webmaster reported 140 web link requests from the link that contained the conference presentations. Such requests were measured during the time the link was available, October 14, 2009 to December 30, 2009. Copies of sign-in sheets included on attachment "C" at the end of this report.

## **Results**

We experienced minor video and audio glitches during the simultaneous broadcasting of the Community Outreach track between El Paso and Ft. Stockton site however; we did receive positive comments from attendees.

We only collected evaluation forms from attendees of the Community Track. We did not collect any evaluation forms from the Utility Track attendees. A total of 45 evaluation forms were received from both sites, El Paso and Ft. Stockton, the majority from 3-5 grade teachers. These teachers were mainly rural (10), suburban (2) and urban (7). The majority work at public schools. The following table indicates how attendees rated the Community Outreach track.

How strongly do you agree or disagree with the following statements?	Strongly agree (1)	2	3	4	5	6	Strongly disagree (7)
I acquired new skills at the workshop	14	1	3	4			
The workshop increase my knowledge of how to use water resources as the context for interdisciplinary teaching and learning	13	5	1	3			
Students/participants will learn from Project WET activities	16	3	1	1		1	
The facilitator showed ways to integrate activities into my program	15	3	1	2	1		
The facilitator was well prepared	17	2	1	1	1		
The facilitator demonstrated ways to modify activities	16	2	1	1	1	1	
The facilitator was knowledgeable	17	4	1			1	
It was worth my time to come today	15	4	1	1		1	
I'm excited to use Project WET	16	3		1		1	1

The resources and materials provided at the workshop are useful	16	2	1		1	1	
I will recommend this workshop to colleagues and friends	16	2	3		1		
Overall the workshop was excellent	17	2	1	1		1	

The following are comments from conference attendees:

- I will use some of the ideas to plan future professional development units
- Provided me new ways to use content
- Will incorporate activities
- I will be more interactive
- I became more excited to schedule more programs
- I need a Willie Bingo
- Learned hands-on experiments
- Gave great resources
- Need more information on wastewater treatment, hydrogen fuel cell, methane gas and energy production
- I learned about water conservation
- This workshop meet my expectations
- I learned about water waste through leaks
- I learned about local area issues
- Is there a "friends" organization for the Rio Grande?
- Teleconfercing glitches were only slightly unproductive
- I learned to spend more time in lesson preparation
- I learned a lot! I did not knew
- Tour of the desalination plant would be nice
- Include a vocabulary list
- The information was helpful, relevant for children
- Conference was helpful
- Include more information about pathogens, airborne diseases
- Conference was fun, I'm anxious to use the program in my class
- Add more background information to every presentation
- I usually don't worry about water issues but I'm starting to see all the work it takes to harvest it and to keep it clean
- Give me more ideas to use in my class
- I got a lot more than I planned, thank you very much
- Add more hands-on activities
- Excited to present this in afterschool programs
- Thank you for the conference. This was exactly what we needed and I want to be able to duplicate some of the things ya'll have accomplished. Once again the meeting was very informative.

### **Recommendations**

As stated previously, the conference was designed as a way to transfer information and experiences from a successful conservation program in El Paso, not specifically designed as part of the long range Far West Texas Regional Water Plan of 2011. The information and examples of programs presented at the conference could be used as a model by other water purveyors in the region when designing their own future conservation programs. Based on comments received, the conference was a success.

**ATTACHMENT "A" Copies of Presentations on separate CDROM**

**ATTACHMENT A-1 Conservation Conference Program**

Registration		
	Utility Staff Track	Community Outreach Track
7:30 am - 8:30 am		
8:30 am - 9:00 am	<p align="center"><b>Welcome and Introductions</b>                      Bill Hutchison (EPWU)</p>	<p align="center"><b>Welcome and Introductions: Icebreaker: Raining Cats &amp; Dogs</b>                      State Coordinator/Facilitator</p>
9:00 am - 9:45 am	<p align="center"><b>Conservation Program - El Paso's Experience</b>                      Anai Padilla (EPWU)</p>	<p align="center"><b>Introduction to Project WET</b>                      Workshop Objectives                      Bringing Teachers to the table                      State Facilitator</p>
9:45 am - 10:00 am	<p align="center">Morning Break</p>	
10:00 am - 10:30 am	<p align="center"><b>System Water Audit-Identify the losses (water and revenue)</b>                      John Balliew (EPWU)</p>	<p align="center"><b>Project WET Activities:</b>                      The Incredible Journey                      Get the Groundwater Picture                      Discover a Watershed-Rio Grande/Rio Bravo                      It All Adds Up</p>
10:30 am - 11:30 am	<p align="center"><b>Pricing and Rate Structures</b>                      Michael Cortez (EPWU)</p>	
11:30 am - 12:30 pm	<p align="center">Lunch Break - Lunch on your own                      Visit the Exhibit Hall</p>	
12:30 pm - 1:30 pm	<p align="center"><b>Reclaimed water - benefits, marketing strategies. El Paso's Experience</b>                      Irazema Solis (EPWU)</p>	<p align="center"><b>Introduction to: Investigating Water Curriculum</b>                      Opposites Attract                      Sink or Swim                      List of additional programs and links                      Extension Service Staff</p>
1:30 pm - 2:45 pm	<p align="center"><b>Landscape Irrigation, golf courses and athletic fields.</b>                      Ray Bader (Extension)</p>	<p align="center"><b>Easy and inexpensive activities to increase public participation:</b>                      Well in a Cup - Demonstration                      Indoor Water Audits (residential)</p>
2:45 pm - 3:30 pm	<p align="center"><b>Outdoor conservation-Xeriscape Principles and Irrigation Audits</b>                      John White, Curator Botanical Garden UTEP</p>	

## ATTACHMENT "B" Expenses

### *Loaded Salaries and Wages*

			\$
40	Lorraine Sanchez	\$14.08	563.20
			\$
40	Shawn Smith	\$14.08	563.20
			\$
45	Virginia Galarza	\$13.02	585.90
			\$
45	Diane Perez	\$21.52	968.40
			\$
60	Anai Padilla	\$34.89	2,093.40
<b>Total</b>			<b>\$ 4,774.10</b>

### *Travel to Ft. Stockton*

			\$
	La Quinta (Hotel)		134.47
			\$
	John Chihuahua's (Meals)		21.23
			\$
	Town & Country (Gasoline 2 tanks)		112.52
<b>Total</b>			<b>\$ 268.22</b>

### *Other Expenses*

			\$
	Wal-Mart (Plastic bowls)		17.58
			\$
	Family Dollar (Color pencils)		5.00
			\$
	Family Dollar (Color markers)		15.00
			\$
	Glue, tape, paper and scissors		17.92
			\$
	Steve Spangler Science (Magnets)		33.41
			\$
	Wal-Mart (Scissors and glue)		17.92
			\$
	Hobby Lobby (Stickers)		11.94
			\$
	Sam's (Snacks)		104.56
			\$
	Wal-Mart (food for presenters)		39.78
			\$
50	Investigating Water (books) AgriLife Extension Bookstore		1,945.43
3,650	Copies		\$

	365.00
	\$
<b>Total</b>	<b>3,573.54</b>

**Overhead**

	\$
Tech20 Center	750.00
	\$
IT staff and webcasting connection	500.00
	\$
Security	162.24
	\$
<b>Total</b>	<b>1,412.24</b>
<b>Grand Total</b>	<b>\$ 10,028.10</b>

**In-kind Donations**

Qty	Category	Total Amount
		\$
50	Project WET (staff, books)	1,400.00
		\$
57	Discover a Watershed Books	1,450.00
		\$
150	Brochures (Planting guide, plant wheel, sunscape etc)	3,000.00
		\$
	AgriLife conference room	300.00
		\$
	<b>Total</b>	<b>\$ 6,150.00</b>

**ATTACHMENT "C" Copies of Sign-in Sheets**

## Corrections Note

Corrections and recommendations listed on email dated April 29, 2009 from Connie Townsend related to Study #4 have been made and or included on this report. All review comments included file attached to the same email have been addressed on this report. They include:

1. Contract Scope of Work (SOW) Task 2-3 Deliverables section states that the report will include the following sections: Executive Summary, Purpose of Study, Methodology, Results and Recommendations.
  - Report has been formatted to comply with this comment.
2. Please clarify what "members" are referred to throughout this report.
  - Members are described on page 1 paragraph 5 as "Far West Texas Water Planning Group Members".
3. Page 1: Please document and discuss how this study supports regional water planning in the Purpose section of the report, as per the contract SOW Task 2.
  - Purpose section has been reviewed to address this comment.
4. Please document and discuss under the Methodology section of the final report outlining the conservation training program developed and provide all of the conference materials developed as per contract SOW, Task 1. (Attachment A's list of conference topics does not appear to be adequate to meet this task deliverable).
  - Copies of all the presentations and promotional materials developed for the conference are included on a separate CDROM electronic attachment "A". Conference program is included on this report as attachment "A-1"
5. Please document the number of web link requests received and all of the entities that participated in the conference, as per SOW Task 2-3 deliverables.
  - Number of web link request received included on report, top of page 3.
  - List of participating entities included on attachment "C"
6. Provide the table of Utility Track attendee evaluations and provide summary discussion on results of program based on all of the feedback received for both training tracks. Statistics on the evaluation item scores is an example of how to present this type of summary data in the final report.
  - EPWU did not receive any evaluation forms from the Utility Track. Comments received are included on this report on page 3.

**Attachment A-1**  
**Power Point Presentations**