

**Meeting Summary of the Arroyo Colorado Habitat Restoration Workgroup of the  
Arroyo Colorado Watershed Steering Committee  
Texas A&M University Kingsville – Citrus Center  
October 18, 2005**

**ATTENDING WORKGROUP COMMITTEE MEMBERS**

Laura De La Garza – Arroyo Colorado Watershed Coordinator  
Kay Jenkins – TPWD State Parks  
Randy Blankinship – TPWD Coastal Fisheries  
Olivia Gomez – TPWD Coastal Fisheries  
Roger Miranda - TCEQ  
Earlene Lambeth – TCEQ  
Mary Lou Campbell – Sierra Club  
Tim Noack – Alan Plummer Associates  
Kim Jones – Texas A&M Kingsville  
Loretta Mokry – Alan Plummer Associates  
Ernesto Reyes – USFWS Ecological Services  
Tony Reisinger, Texas Sea Grant, Cameron County Marine Agent  
Marco Pedraza – McAllen Public Utility  
Javier Hinojosa – McAllen Public Utility  
Mike Myers – NRS Engineers  
Chris Rakestraw – Coalition to Save Arroyo Colorado, Lower Laguna Madre Foundation  
Gary Jones – IBWC  
Frank Martinez – IBWC  
Chris Hathcock – TPWD State Parks, World Birding Center  
Lisa Williams – Nature Conservancy of Texas  
Sam Patten – TPWD Wildlife  
Harold Burgess – Citizen

**CALL TO ORDER/WELCOME/INTRODUCTIONS**

Kay Jenkins (TPWD) opened the seventh meeting of the Habitat Restoration Workgroup meeting held in Weslaco on October 18, 2005. The workgroup members in attendance introduced themselves. Copies of the August 4, 2005 meeting summary and of the revised draft outline for the habitat components of the Watershed Protection Plan were made available to attendees.

**PRESENTATIONS**

Mike Myers with NRS Engineers presented the proposed Arroyo Channel Weirs project for Harlingen area. Mr. Myers said that the City of Harlingen was the project sponsor and the holder of the Corps of Engineers permit for the project. The project involves the construction of three rock weirs in the Arroyo Colorado channel near Baker Potts Road, Tony Butler Golf Course and Loop 499. The weirs would be approximately 20 feet wide at the top with a top elevation about one and one-half feet above normal water level.

Loretta Mokry with Alan Plummer Associates, Inc. presented a discussion document for the workgroup that is the second deliverable for the Feasibility Study for Habitat Restoration/Modification to Improve Water Quality in the Arroyo Colorado, in accordance with their contract with Texas Parks and Wildlife Department (TPWD). The document contained a list of potential facilities, programs, and strategies along with brief descriptions, schematics, photographs, and additional information from reference sources as cited. The list of strategies was developed from the strategies previously identified by TPWD staff and Habitat Workgroup members within the funding and time constraints of the contract. Ms. Mokry summarized the fifty strategies in the document. She also presented an updated reference list and summaries of the literature that Alan Plummer Associates Inc. have compiled regarding habitat and water quality in the Arroyo Colorado, management policies of managing entities, and strategies involving habitat for improving water quality. The updated list included the addition of several references since the original list of references was delivered to Texas Parks and Wildlife Department on September 14, 2005.

## **AGENDA ITEMS**

### General Topics

There were several discussions about various topics during and after both presentations summarized above. Gary Jones, with IBWC, reported that the City of Harlingen would still need a license from IBWC for the proposed weir project and that the City's application for a license would be coordinated with federal and state resource agencies. He also said that the Corps of Engineers had a license from IBWC to place riprap along the Arroyo channel from FM 491 South through Harlingen.

Loretta Mokry explained the difference between constructing wetlands for tertiary treatment of wastewater for purely water quality improvement versus constructing them for fish and wildlife habitat. Constructed wetlands that need serve only for water quality improvement are usually constructed with less than 20% open water components whereas constructed wetlands for wildlife habitat are usually constructed with approximately 50% open water. Therefore, if constructed wetlands are to serve both water quality improvement and wildlife habitat purposes, then more land would be required than if they are to serve just water quality improvement purposes.

In response to questions from workgroup members about the amount of flow in the Arroyo Colorado, Ms. Mokry stated that the average flow at Harlingen during the period 1989-1999 was 355 cfs or approximately 230 mgd, but that the average flow during May-October months was 236 cfs or 152 mgd, reflecting dry weather flows only.

### Habitat Restoration Plan Development

Kay Jenkins requested suggestions from the Habitat Workgroup on how to process the proposed Arroyo channel weirs in the habitat chapter development. There was much discussion about the need for more information about the potential habitat or estimated water quality improvements from the project and about how environmental concerns would be addressed. The workgroup members agreed that since all of the fifty strategies developed by Alan Plummer Associates Inc. as part of their feasibility study had been

generic and not site specific, that channel weirs as a generic strategy would be added to the list of fifty potential strategies for the Workgroup members to prioritize for further study by Alan Plummer Associates, Inc.

Kay Jenkins requested that Workgroup members participate with Tim Noack to prioritize the long list of strategies presented by Alan Plummer Associates, Inc., including Arroyo channel weirs so that that Alan Plummer Associates Inc. would have ten strategies to concentrate on for the remainder of the feasibility study in accordance with their scope of work in the contract. Mr. Noack provided each meeting attendee with ten dots to use to choose strategies. He grouped some of the similar strategies together so that in the end there were thirty-six strategies to rank. Each person was allowed to use only one dot per strategy. A table summarizing the results of the workgroup members' ranking of potential strategies is provided on the following page.

## CLOSURE

Expectations for the next meeting are to have a presentation by Alan Plummer Associates on the top ten strategies chosen by the workgroup members for habitat and water quality improvement on the Arroyo Colorado and to further refine the habitat components of watershed protection plan components. The next meeting is expected to be held in December 2005.

Arroyo Colorado Habitat Workgroup Meeting  
October 18, 2005  
Top Ten Strategies

Major Category	Sub-Category	Strategies	Vote Tabulation
Non-point Source Treatment Systems	Ponds	Micropool extended detention ponds	15
		Multiple pond systems	
		Wet extended detention ponds	
		Wet pond	
	Stormwater runoff wetland treatment systems	Series of wetland cells within small drainage	13
		Wetland swales	
		Extended detention shallow wetland	12
		Pocket wetland Pond/wetland systems	
	Bank/slope stabilization/erosion control	Bioengineering with vegetation	12
	Filtration	Filter strip buffer zones	7
Channels	Wet swale/wetland channel	6	

Point Source Treatment Systems	Constructed wetlands for tertiary treatment following mechanical or lagoon treatment plants	Regional wetland systems polishing flows from multiple wastewater treatment plants in close proximity	11
		At individual wastewater treatment plants (municipal, industrial, agriculture, aquaculture)	6
Collective (non-point source and point source)	Large-scale constructed wetland system	On-channel wetland system	12
		Off-channel regional wetland system	11