

Arroyo Colorado Watershed Partnership Agricultural Issues Workgroup

August 20, 2008

3:00 pm – 5:30 pm

MEETING SUMMARY

ATTENDEES:

Laura De La Garza
Cecilia Wagner
Pamela Casebolt
Andy Garza
Alex Nunez
Ray Prewett
Richardo Chapa
Brad Cowan

Xavier Peries
Ronnie Rameriez
Stan Reinke
Patrick Conner
Juan Enciso
Venkatesh Uddameri
Sonny Vela

Welcome and Introductions Andy Garza, TSSWCB

Arroyo Colorado Watershed Protection Plan

Review of Components Addressing Agricultural NPS Pollution... Pamela Casebolt, TSSWCB
Components Addressing Agricultural NPS Pollution in the Arroyo Colorado

The goal of the ACWPP is to reduce the addition of pollutants such as oxygen-demanding substances, nitrogen, phosphorus, and sediment to the Arroyo Colorado and to improve natural habitat to the degrees necessary to meet the uses designated by the State of Texas and specified in the State's Water Quality Standards.

To reduce pollutant loading from agricultural nonpoint sources in the Arroyo Colorado watershed, state and federal governments are working with local stakeholders in the watershed to focus state and federal technical and financial assistance and educational programs on agricultural issues in the AC watershed. The programs encourage and support the voluntary adoption of BMPs to reduce suspended sediment levels resulting from cropland erosion, oxygen demanding organic material (BOD) from runoff of crop residue and N and P fertilizer runoff from irrigated cropland fields.

Over the first 5 years of the Plan (by 2010), the goal is to encourage the voluntary implementation of conservation plans on 33% of the irrigated cropland in the watershed (100,000 acres). Our long term goal by 2015 is to encourage the voluntary implementation and maintenance of conservation plans on at least 50% of the irrigated cropland in the watershed (approximately 150,000 acres).

**** Based on the new draft LULC map, we could potentially be closer to our goal depending on the number of acres that are irrigated cropland. If the % of irrigated cropland is less than estimated (300,000 acres), then we will be closer to achieving our goal. Our original estimate*

was based on the 1998 LULC map which was made in 2005 and is the true “starting point” from the WPP.

Watershed Protection Plan Implementation Status.....Laura De La Garza, TWRI

Project Updates/Discussion:

Best Management Practice Implementation Andy Garza, TSSWCB

- Requested no-cost extension thru 8/31/2009
- Current report showed 121 WQMPs certified on 6,273 acres
- Full report showed 326 WQMPs certified on 36,662 acres from §319
- If you combine §319 and SB 503 funding with NRCS EQIP program, there have been 670 WQMPs certified on 65,766 acres
- Hoping to obtain future funding for technical assistance and additional practice implementation with future §319 programs

Best Management Practice EducationBrad Cowan, Texas AgriLife Extension Service

- Strong Master Gardener Program and urban education efforts
- Continued cotton, grain, sorghum, and pesticide safety trainings as well as field days
- Arranging waste collection event with TCEQ in October
- Planning nutrient management program in late October – will announce soil testing campaign at the program
- New IPM agent – Lee Roy Rock

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

- Xavier provided update on project (Task 7 – edge of field monitoring)
- Will request a 1 yr no-cost extension to accommodate sampling next year
- Presented potential sign to be placed at irrigation sites:
 - o Suggested to put the entire sign bilingual or put 2 signs
 - o Also suggested to contact irrigation district as they know who & when irrigation will be taking place – a possible backup to make sure Juan and Xavier are aware of the irrigations.
- Venki provided update on project (Task 6 – Drainage ditch monitoring)
- In year 1 of sampling. Did have to change 1 site on the QAPP due to site accessibility and drainage contributions.
- Preliminary results
 - o Temperature and pH very buffered/consistent
 - o Salinity and conductivity varies between ditches
 - o Turbidity varies within ditches
 - o DO also very variable (lower post-Dolly than pre-Dolly)
 - o Results are too preliminary at this point to develop sound results.
 - o Ammonia and TKN – below detection level; ortho-P & nitrate+nitrite are high
 - o Irrigation runoff/tailwater return, average ranged 15-18% of applied water volume
- Provided preliminary maps of BMPs from Kannan
- Provided hard copy of draft LU/LC map (hope to have it available online once it is approved) – See Appendix A

SWAT Model Simulation of the Arroyo Cecilia Wagner, TWRI

- Data collection almost complete

- Will begin validation/calibration soon
- Project ends 3/1/2009 so will likely have more info at January meeting

Review Follow up Items from Jan 2008 Ag Meeting Pamela Casebolt, TSSWCB

- Raised cost share rate to \$15,000
- One time cost share rule remained in place
- TSSWCB passed out cost-share/incentive table of what practices are currently being cost-shared (see Appendix B), which
 - o Many of the practices (revegetating Las Palmas; restoration of wetlands; purchase of land for development) fall under TPWD restitution funds (funds collected from fish kills or pollution events). Funds are available to individuals or partnerships; Money has to be spent in a fiscal year. Open application at all times; Recommends applying to start project in September since money has to be spent in fiscal year; Pot of money is county based – each county has its own money (Alex Nunez from TPWD said he could give presentation on the program)
 - o Laura brought up adding wetland development to the list. Sonny Vela suggested the Wetland Reserve Program thru NRCS which could possibly pay for wetland development
 - o Stan Reinke from Environmental Defense Fund – SAFE (State Acres for Wildlife Enhancement) – Program thru the NRCS and FSA; Available to any private landowner; Is a cost-share program and a land rental program; Have money available for 5,000 acres and they want to be selective in where this land gets put in; the goal of the program is restoration of ocelot habitat (planting of woody shrubs – in corridors or whole field) – this fits many of the BMPs on the list. To obtain funds – contact NRCS or FSA in these counties. (Stan also stated he could give a presentation on this program.)
- Targeted outreach plan for specific producers, information on BMPs – use map generated from ag nonpoint source assessment project to put together a newsletter for where have we been and where are we going
- What about getting our articles in other newsletters such as from NRCS and FSA?

Discuss/Prioritize Future Funding Needs and Sources Cecilia Wagner, TWRI

- Funded program to begin 9/1/2008:
 - *Integrated Farm Management Program* (funded through EPA Strategic Ag Initiative Grants). Program proposes to provide education to growers in the AC watershed on the following topics: 1) crop-specific production practices, 2) effective and efficient nutrient, irrigation and pesticide applications, and 3) implementing whole farm management systems that use integrated pest management practices. The purpose of the education program will be for growers to learn and implement best management practices that to reduce potential nonpoint source loadings to the AC watershed.
- Possible funded program to begin 12/1/2008 (awaiting on final contract from GLO)
 - *Pesticide Education Program for Cameron County* (funded through GLO National Oceanic and Atmospheric Administration Funds). Program will enhance existing education program funded under the EPA grant and focus even more on teaching growers to practice proper pesticide applicator safety regulations.
- TSSWCB §319(h) grant for technical assistance, cost share (December 2008 RFP)

Other Business Pamela Casebolt, TSSWCB

Next Meeting Date.....In conjunction with next Partnership Meeting

- Jan 22, 2009
- Possible Speakers
 - o Alex Nunez from TPWD provide presentation on restitution funding
 - o Sonny Vela provide Farm Bill update
 - o Jim Tabak provide conservation program for private landowners
 - o Stan Reinke provide a presentation on SAFE funds

Adjourn

Appendix A

Draft LU/LC Map for Arroyo Colorado

Legend

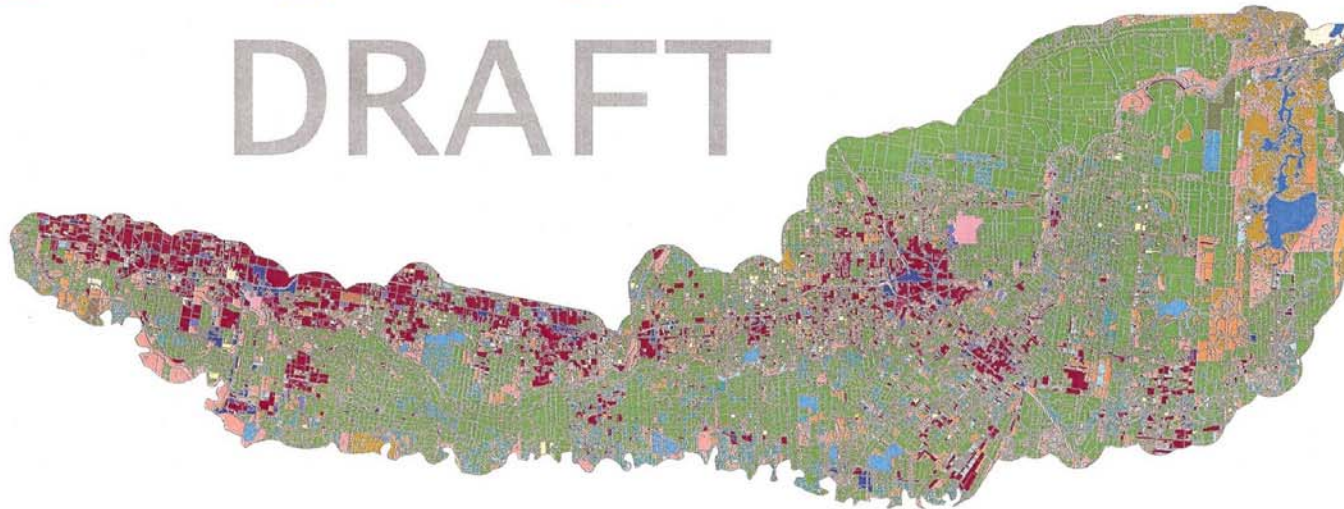
ArroyoColorado_LULC

<all other values>

CLASS_DESC

 Agricultural Business	 Entertainment and Recreational	 Quarries/Strip Mines/Gravel Pits
 BARE	 Flats	 Reservoir
 Bare Rock/Sand	 Forested	 Residential
 Bay/estuary	 Heavy Industry	 Shrub land
 Canal/ditch	 Herbaceous Vegetation	 Single family Residential
 Citrus	 Institutional	 Stream/river
 Commercial/Light Industry	 Lake/pond	 Sugar Cane
 Communications and Utilities	 Mixed Urban	 Transitional Bare
 DEVELOPED	 Multi family Residential	 Transportation
 Disposal	 Natural Herbaceous	 VEGETATED
 Emergent Herbaceous Wetlands	 Non managed Citrus	 Vegetated Wetland
	 Non residential Developed	 WATER
	 Pasture/Hay	 Woody Vegetation
	 Planted/Cultivated Herbaceous	 Woody Wetland

Arroyo Colorado LULC



Aug 2008

APPENDIX B –Cost Share Practice List (includes those currently being funded by TSSWCB or NRCS as well as those not currently funded)

No.	Name	WPP Priority BMPs	WPP Wish List BMPs	WQMP Essential Practice for Irrigated Cropland	Practices Approved for Cost-share				Program Funding Eligibility		
					TSSWCB	SWCD 319	SWCD 349	SWCD 350	503	CWA §319 Nonpoint Source Grant Project 05-12	EQIP
328	Conservation Crop Rotation	x		x	N/A				N/A	N/A	N/A
344	Residue Management, Seasonal	x		x	N/A				N/A	N/A	N/A
393	Filter Strip	x			√	√		√	C/S	C/S	P/R
410	Grade Stabilization Structure	x			√	√	√	√	C/S	C/S	P/R
430	Irrigation Water Conveyance, Pipeline	x			√	√	√	√	C/S	C/S	P/R
441	Irrigation System, Microirrigation	x			√	√	√	√	C/S	C/S	P/R
442	Irrigation System, Sprinkler	x			√			√	C/S	C/S	P/R
443	Irrigation System, Surface	x			√			√	N/A	N/A	N/A
447	Irrigation System, Tailwater Recovery	x			√	√		√	N/A	C/S	
449	Irrigation Water Management*	x		x	N/A				N/A	N/A	Incentive
464	Irrigation Land Leveling	x			√	√	√	√	C/S	C/S	P/R
512	Pasture and Hay Planting	x			√	√	√	√	C/S	C/S	P/R
590	Nutrient Management	x		x	N/A				N/A	N/A	Incentive
595	Pest Management	x		x	N/A				N/A	N/A	Incentive
606	Subsurface Drain	x			√	√	√	√	C/S	C/S	P/R
322	Channel Bank Vegetation		x		N/A				N/A	N/A	
332	Contour Buffer Strips		x		√				N/A	N/A	
342	Critical Area Planting		x		√	√	√	√	C/S	C/S	P/R
348	Dam, Diversion		x		N/A				N/A	N/A	
350	Sediment Basin		x		√				N/A	C/S	P/R
378	Pond		x		√	√	√	√	C/S	C/S	P/R
390	Riparian Herbaceous Cover		x		√				N/A	N/A	
391	Riparian Forest Buffer		x		√				N/A	N/A	P/R
395	Stream Habitat Improvement and		x		N/A				N/A	N/A	
396	Fish Passage		x		N/A				N/A	N/A	

412	Grassed Waterway		x		√	√	√	√	C/S	C/S	P/R
484	Mulching		x		N/A				N/A	N/A	
554	Drainage Water Management		x		N/A				N/A	N/A	
555	Rock Barrier		x		N/A				N/A	N/A	
562	Recreation Area Improvement		x		N/A				N/A	N/A	
570	Runoff Management System		x		N/A				N/A	N/A	
584	Channel Stabilization		x		N/A				N/A	N/A	
587	Structure for Water Control		x		N/A				N/A	N/A	P/R
601	Vegetative Barriers		x		N/A				N/A	N/A	
610	Toxic Salt Reduction		x		N/A				N/A	N/A	
612	Tree/Shrub Establishment		x		√				N/A	N/A	P/R
633	Waste Utilization		x		N/A				N/A	N/A	
643	Restoration and Management of Declining		x		N/A				N/A	N/A	
644	Wetland Wildlife Habitat Management		x		N/A				N/A	N/A	
645	Upland Wildlife Habitat Management		x		N/A				N/A	N/A	Incentive
646	Shallow Water Management for Wildlife		x		N/A				N/A	N/A	
647	Early Successional Habitat		x		N/A				N/A	N/A	
648	Wildlife Watering Facility		x		N/A				N/A	N/A	
656	Constructed Wetland		x		N/A				N/A	N/A	
657	Wetland Restoration		x		N/A				N/A	N/A	
658	Wetland Creation		x		N/A				N/A	N/A	
313	Waste Storage Facility				√				N/A	N/A	
314	Brush Management				√	√	√	√	C/S	C/S	P/R
316	Animal Mortality Facility				√			√	C/S	N/A	
317	Composting Facility				√				N/A	N/A	
324	Deep Tillage				√				N/A	N/A	
329	Residue Management, No-Till				N/A				N/A	N/A	Incentive
345	Residue Management, Mulch Till				N/A				N/A	N/A	Incentive
346	Residue Management, Ridge Till				N/A				N/A	N/A	Incentive
351	Well Decommissioning				√				N/A	N/A	P/R
359	Waste Treatment Lagoon				√				N/A	N/A	P/R
360	Closure of Waste Impoundments				√				N/A	N/A	
362	Diversion				√	√	√	√	C/S	C/S	P/R
382	Fence				√	√	√	√	C/S	C/S	P/R
386	Field Border				√	√			C/S	C/S	P/R
436	Irrigation Storage Reservoir				√				N/A	N/A	
462	Precision Land Forming				√	√	√	√	C/S	C/S	P/R
516	Pipeline				√	√	√	√	C/S	C/S	P/R

521	Pond Sealing or Lining				√		√		N/A	N/A	
550	Range Planting				√	√	√	√	C/S	C/S	P/R
552	Irrigation Regulating Reservoir				√				N/A	N/A	P/R
558	Roof Runoff Structure				√				N/A	N/A	
560	Access Roads				√				N/A	N/A	
600	Terrace				√		√	√	C/S	N/A	
614	Watering Facility				√	√	√	√	C/S	C/S	P/R
634	Manure Transfer				√				N/A	N/A	
638	Water and Sediment Control Basin				√			√	C/S	C/S	
642	Water Well				√	√	√	√	C/S	C/S	P/R
---	Well Head Protection (component of 642)				√				N/A	N/A	

*	Will include one of the following practices: 430, 441, 442, 443, and 447.
**	Does not appear to be an approved practice in Texas
	Priority BMPs from Arroyo Colorado WPP
	"Wish List" BMPs from Arroyo Colorado
N/	Not Applicable
C/S	Cost-shared
P/R	Payment Rate