



**Texas State Soil and Water Conservation Board
 Clean Water Act §319(h) Nonpoint Source Grant Program
 FY 2009 Project Workplan 09-09**

NONPOINT SOURCE SUMMARY PAGE for the CWA §319(h) Agricultural/Silvicultural Nonpoint Source Grant Program						
Title of Project:	Implementing the Arroyo Colorado Watershed Protection Plan by Providing Technical and Financial Assistance to Reduce Agricultural Nonpoint Source Pollution					
Project Goals:	1) To foster coordinated technical assistance activities between the TSSWCB, local SWCDs, and NRCS; 2) To implement components of the Arroyo Colorado WPP addressing agricultural NPS pollution; 3) To promote the availability of technical and financial assistance to agricultural producers; 4) To provide technical and financial assistance to agricultural producers for the development of WQMPs and implementation of BMPs; 5) To conduct status reviews on WQMPs in order to track implementation success					
Project Tasks:	1) Project Administration; 2) Promotion of WQMP Program; 3) Development of WQMPs and Implementation of BMPs; 4) Tracking Implementation Success					
Measures of Success:	1) Landowners eligible for participation in the WQMP Program are identified; 2) Availability of technical and financial assistance is promoted through the distribution of appropriate publications; 3) Arroyo Colorado Watershed Partnership is kept informed of project activities and achievements; 4) Needed technical assistance is provided to agricultural producers for the development of WQMPs; 5) Minimum of 20 new WQMPs are certified on irrigated cropland; 6) Status Reviews are conducted on WQMPs developed through this project and on WQMPs certified prior to this project; 7) Reduction in nutrient and sediment loads from agricultural NPS pollution is documented; 8) Soil testing is conducted across the watershed consistent with the practice standard for Nutrient Management					
Project Type:	Implementation (X); Education (); Planning (); Assessment (); Groundwater ()					
Status of Water Body: 2008 Texas Water Quality Inventory and 303(d) List	<u>Segment ID:</u> Arroyo Colorado Tidal – 2201	<u>Parameter:</u> Bacteria	<u>Category:</u> 5c	Arroyo Colorado Above Tidal – 2202	Bacteria	5a
Project Location (Statewide or Watershed and County)	Arroyo Colorado Watershed in Willacy, Cameron, and Hidalgo Counties, Texas					
Key Project Activities:	Hire Staff (X); Surface Water Quality Monitoring (); Technical Assistance (X); Education (); Implementation (X); BMP Effectiveness Monitoring (); Demonstration (); Planning (); Modeling (); Bacterial Source Tracking (); Other ()					
Texas NPS Management Program Elements:	<ul style="list-style-type: none"> • Elements 1 and 2 • LTG Objectives 1, 2, and 3 • STG 2 Objectives A and B • STG 3 Objectives B and D 					
Project Costs:	Federal:	\$532,516	Non-Federal:	\$200,000	Total:	\$732,516
Project Management:	<ul style="list-style-type: none"> • Texas State Soil and Water Conservation Board • Southmost Soil and Water Conservation District • Hidalgo Soil and Water Conservation District 					
Project Period:	September 1, 2009 – October 31, 2013					

Part I – Applicant Information

Applicant							
Project Lead	Ricardo Chapa						
Title	Regional Office Coordinator						
Organization	Texas State Soil and Water Conservation Board, Harlingen Regional Office						
E-mail Address	rchapa@tsswcb.texas.gov						
Street Address	1824 W Jefferson, Ste A						
City	Harlingen	County	Cameron	State	TX	Zip Code	78550-5247
Telephone Number	956-421-5841			Fax Number	956-421-5853		

Project Co-Lead	Jose Ricardo Guerrero						
Title	Chairman						
Organization	Southmost Soil and Water Conservation District #319						
E-mail Address	southmostswcd@tx.nacdnet.org						
Street Address	2315 W Expressway 83, Ste 3						
City	San Benito	County	Cameron	State	TX	Zip Code	78586
Telephone Number	956-399-2522			Fax Number	956-399-0033		

Project Co-Lead	Larry Skloss						
Title	Chairman						
Organization	Hidalgo Soil and Water Conservation District #350						
E-mail Address	hidalgoswcd@tx.nacdnet.org						
Street Address	2514 South I Road, Suite 2						
City	Edinburg	County	Hidalgo	State	TX	Zip Code	78539
Telephone Number	956-383-3002			Fax Number	956-383-6088		

Project Partners	
Names	Roles & Responsibilities
Texas State Soil and Water Conservation Board (TSSWCB)	Provide state oversight and management of all project activities and ensure coordination of activities with related projects.
Texas State Soil and Water Conservation Board, Harlingen Regional Office (HRO)	Work with and assist SWCDs in the development, implementation, and maintenance of WQMPs. Responsible for technical review and certification of WQMPs. Conduct WQMP status reviews. Responsible for all project deliverables.
Southmost Soil and Water Conservation District (SWCD 319)	Supervise one Bookkeeper. Cooperate with HRO and SWCD 350 to develop, implement and maintain WQMPs.
Hidalgo Soil and Water Conservation District (SWCD 350)	Supervise one Technician. Cooperate with HRO, SWCD 319, and SWCD 349 to develop, implement, and maintain WQMPs. Conduct WQMP status reviews.
Willacy Soil and Water Conservation District (SWCD 349)	Cooperate with HRO and SWCD 350 to develop, implement, and maintain WQMPs.
United States Department of Agriculture – Natural Resources Conservation Service (NRCS)	Support SWCD Technician and TSSWCB- HRO in the development, implementation, and maintenance of WQMPs. Provide training as necessary.

Part II – Project Information

Project Type							
Surface Water	X	Groundwater					
Does the project implement recommendations made in a completed Watershed Protection Plan or an adopted TMDL or Implementation Plan?				Yes	X	No	
If yes, identify the document.		<i>A Watershed Protection Plan for the Arroyo Colorado Phase I</i>					
If yes, identify the agency/group that developed and/or approved the document.		Arroyo Colorado Watershed Partnership facilitated by Texas Commission on Environmental Quality and Texas Sea Grant		Year Developed		2007	

Watershed Information				
Watershed Name(s)	Hydrologic Unit Code (8 Digit)	Segment ID	305 (b) Category	Size (Acres)
Arroyo Colorado	12110208	2201 & 2202	5(c)	451,709

Water Quality Impairment		
Describe all known causes (pollutants of concern) of water quality impairments from any of the following sources: 2008 Texas Water Quality Inventory and 303(d) List, Clean Rivers Program Basin Summary, Basin Highlights Reports or Other Documented Sources.		
<u>Segment ID</u>	<u>Parameter</u>	<u>Category</u>
Arroyo Colorado Tidal – 2201	Dissolved Oxygen	5a
	Bacteria	5c
	DDE	4a
	Mercury	5c
	PCBs	5c
	Ammonia	Concern
	Chlorophyll-a	Concern
	Nitrate	Concern
	Orthophosphorus	Concern
	Total Phosphorus	Concern
Arroyo Colorado Above Tidal – 2202	Bacteria	5a
	DDE	4a
	Mercury	5c
	PCBs	5c
	Ammonia	Concern
	Chlorophyll-a	Concern
	Nitrate	Concern
	Orthophosphorus	Concern
	Total Phosphorus	Concern

Project Narrative

Problem/Need Statement

The Arroyo Colorado (Segment 2201 and 2202), an ancient distributary channel of the Rio Grande, extends about 90 miles from Mission, Texas to the Laguna Madre in the Lower Rio Grande Valley. Flow in the Arroyo Colorado is sustained by wastewater discharges, agricultural irrigation return flows, urban runoff, and base flows from shallow groundwater. Elevated levels of bacteria and low dissolved oxygen have severely impacted recreational use of the lower Arroyo Colorado for fishing and swimming. In 2002 the Texas Commission on Environmental Quality (TCEQ) determined in a Total Maximum Daily Load (TMDL) study that a 90 percent reduction of nutrients and biochemical oxygen demand (BOD) was needed to achieve healthy waters. This TMDL was not adopted.

To address the Arroyo Colorado's bacteria and dissolved oxygen impairment as well as nutrient concerns, the Arroyo Colorado Watershed Partnership developed *A Watershed Protection Plan for the Arroyo Colorado – Phase I*. Since the publication of the watershed protection plan (WPP) in January 2007, the Partnership has been working on implementation of management measures to improve water quality and natural habitat in the Arroyo Colorado. The objective of components of the Arroyo Colorado WPP addressing agricultural nonpoint source (NPS) pollution is to encourage the voluntary adoption of best management practices (BMPs) to reduce suspended sediment levels resulting from cropland erosion, BOD from runoff of crop residue, and nitrogen and phosphorus fertilizer runoff from irrigated cropland fields. The WPP concludes that approximately 300,000 acres of irrigated cropland lies within the Arroyo Colorado watershed. The WPP sets an interim goal to achieve the voluntary adoption of agricultural BMPs on 33% of the irrigated cropland (100,000 acres) by 2010 and a final goal of BMPs on 50% of the irrigated cropland (150,000 acres) by 2015.

Agricultural producers, along with SWCDs, TSSWCB, NRCS and EPA, have been collaborating to protect natural resources in Texas for decades. Through the TSSWCB's Water Quality Management Plan (WQMP) Program, farmers and ranchers routinely implement BMPs on their lands utilizing the cost-share and technical assistance programs of SWCDs, who receive state and federal funds from TSSWCB, EPA, and NRCS. A WQMP is a site-specific plan developed through and approved by SWCDs which includes appropriate land treatment practices, production practices, management measures, and technologies that prevent and abate agricultural and silvicultural NPS pollution. The BMPs prescribed in a WQMP are defined in the NRCS Field Office Technical Guide. SWCDs provide for technical assistance to producers seeking to develop a WQMP. TSSWCB and NRCS have various cost-share programs which provide financial assistance to producers in implementing a WQMP.

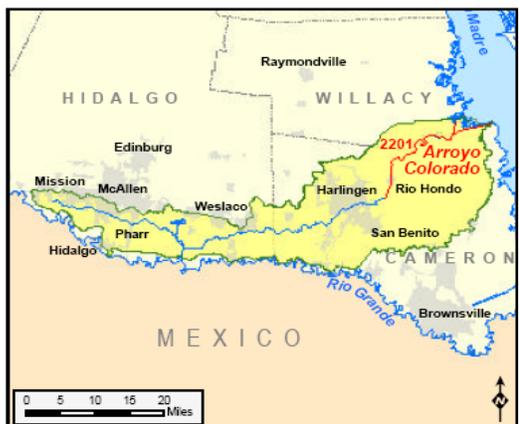
Reauthorized in the 2008 federal Farm Bill, the Environmental Quality Incentives Program (EQIP) is a voluntary conservation program that promotes production agriculture and environmental quality as compatible goals. EQIP is administered by the NRCS. Through EQIP, farmers and ranchers receive financial assistance to implement structural and management conservation practices on their land. EQIP is available to producers through 1) resource concern priorities established by Local Work Groups at the county level, and/or 2) State Resource Concerns established by the State Technical Advisory Committee. The State Resource Concern for Water Quantity-Irrigation in the Lower Rio Grande Valley is focused on improving the efficiency of irrigation systems in order to reserve more water for additional uses and to reduce inherent soil salinity problems. Note that more efficient irrigation systems also result in less irrigation return flows to the Arroyo Colorado thereby reducing nutrient, sediment and BOD loadings.

Specifically, in the Arroyo Colorado watershed, since 1999, the TSSWCB and local SWCDs have been developing WQMPs utilizing CWA §319(h) NPS grants (TSSWCB projects 99-03, *Arroyo Technical Assistance*, 02-12, *SWCD WQMP Development, Implementation, and/or Maintenance Assistance*, 02-16, *Implementation Support in the Arroyo Colorado Watershed*, and 05-12, *WQMP Implementation Assistance in the Arroyo Colorado Watershed*) and state appropriations (colloquially known as SB 503 funds). To date, a total of 370 WQMPs have been developed on approximately 37,000 acres. Including work done by NRCS through federal Farm Bill funding, a total of 680 farm plans have been developed in the Arroyo Colorado watershed covering over 66,000 acres. Changes in land use and land cover patterns have chiseled away at the acreage of irrigated cropland in the watershed making the 33% and 50% WPP goals more achievable. There continues to exist a need for technical and financial assistance to implement BMPs through WQMPs in order to achieve the goals in the Arroyo Colorado WPP to restore water quality.

Project Narrative

General Project Description (Include Project Location Map)

TSSWCB will administer federal CWA §319(h) funds through the HRO, SWCD 319, and SWCD 350 to provide technical and financial assistance to agricultural producers in developing and implementing WQMPs in the Arroyo Colorado watershed. HRO will employ a full-time Natural Resources Specialist (NRS), SWCD 350 will employ a part-time District Technician, and SWCD 319 will employ a part-time Bookkeeper. The NRS and the District Technician will develop plans and assist producers in acquiring cost-share assistance for the implementation of BMPs. This CWA §319(h) grant will improve and enhance the abilities of HRO and the SWCDs to assist area landowners in preventing and abating agricultural NPS pollution.



The NRS will be placed in the HRO and the District Technician will be placed in SWCD 350. The District Technician will work under direction of the SWCD, with assistance from HRO and NRCS, as needed. Both the NRS and the District Technician will work throughout the Arroyo Colorado Watershed; cooperative agreements will be established with SWCD 319 and SWCD 349.

The NRS and the District Technician will be critically important in promoting the components of this project, including WQMP development and cost-share availability, and encouraging participation from agricultural producers. The NRS and the District Technician will work with NRCS and Texas AgriLife Extension Service (AgriLife Extension) to educate producers about water quality issues and how WQMPs and BMPs address pollutant loadings from agriculture. The NRS and the District Technician will work with commodity organizations, such as Texas Citrus Mutual, Rio Grande Valley Sugar Growers, Texas Vegetable Association, and Texas Farm Bureau, to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time. Additionally, the NRS and the District Technician will work with the Irrigation Districts to educate their customers on this effort. The NRS and the District Technician will cooperate and communicate with the Arroyo Colorado Watershed Partnership in order to efficiently and effectively achieve project goals and to summarize activities and achievements made throughout the course of this project.

The NRS and the District Technician, with assistance from NRCS, will assist landowners in the development of WQMPs. WQMPs are developed according to the NRCS Field Office Technical Guide. By statute, WQMPs are developed so that their implementation achieves a level of pollution prevention or abatement that is consistent with State water quality standards. Once the WQMP is developed, it is sent to the appropriate TSSWCB regional office for technical review and certification. Upon certification of the WQMP, the NRS and the District Technician will work with the landowner to implement the BMPs prescribed in the WQMP.

The NRS and the District Technician, with assistance from NRCS, will assist landowners in applying for and obtaining cost-share funds to aid in implementation of BMPs prescribed in WQMPs. This project will provide cost-share through the TSSWCB WQMP Program with allocations to SWCD 319 and SWCD 350. The NRS and the District Technician will assist producers with WQMPs in acquiring EQIP financial assistance through 1) county-level funding and 2) the State Resource Concern for Water Quantity-Irrigation in the Lower Rio Grande Valley.

The NRS and the District Technician will annually conduct status reviews on all WQMPs developed and certified through the course of this project and on existing WQMPs in the watershed (15% each year) to ensure that the landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. The NRS and the District Technician will track utilization of obligated cost-share funds and assist landowners in utilizing obligated cost-share funds on schedule. The NRS and the District Technician will complete a final report which describes the success of the project including WQMPs developed, BMPs implemented, and cost-share obligated and utilized.

Tasks, Objectives and Schedules						
Task 1:	Project Administration					
Costs:	Federal:	\$13,731	Non-Federal:	\$0	Total:	\$13,731
Objective:	To effectively administer, coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status reports.					
Subtask 1.1	HRO will hire one full-time Natural Resources Specialist (NRS) to promote, develop, and implement WQMPs. SWCD 350 will hire one part-time District Technician to promote, develop, and implement WQMPs. SWCD 319 will hire one part-time Bookkeeper to assist with project accounting functions.					
	Start Date:	Month 1		Completion Date:	Month 3	
Subtask 1.2:	The HRO NRS will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. The SWCD 350 District Technician and the SWCD 319 Bookkeeper will collaborate with HRO to develop the QPRs. QPRs shall document all activities performed within a quarter and shall be submitted by the 15 th of January, April, July and October. QPRs shall be distributed to all project partners.					
	To ease the development of the Final Report (Subtask 1.5), quarterly updates to a template Final Report shall be submitted along with QPRs.					
Subtask 1.3:	The HRO NRS, SWCD 350 District Technician, and SWCD 319 Bookkeeper will perform accounting functions for applicable project funds and will submit appropriate Reimbursement Forms to TSSWCB at least monthly.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 1.4:	The HRO NRS will host coordination meetings or conference calls with the TSSWCB Project Manager, appropriate TSSWCB Field Representative, SWCD 350 District Technician, and SWCD 319 Bookkeeper at least quarterly to discuss project activities, project schedule, communication needs, deliverables, and other requirements.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 1.5:	The HRO NRS, with help from the SWCD 350 District Technician, will complete and submit a final report to TSSWCB at the culmination of the project. At a minimum the Final Report shall describe the success of the project including WQMPs developed, BMPs implemented, and cost-share obligated and utilized. This report will be provided in electronic and hard copy format. The TSSWCB Project Manager will provide a template Final Report. The TSSWCB Project Manager will set the appropriate due dates for this task.					
	Start Date:	Month 44		Completion Date:	Month 50	
Deliverables	<ul style="list-style-type: none"> • QPRs in electronic format, along with quarterly updates to template Final Report • Reimbursement Forms in hard copy format, and necessary documentation • Final Report 					

Tasks, Objectives and Schedules						
Task 2:	Promotion of WQMP Program					
Costs:	Federal:	\$20,827	Non-Federal:	\$0	Total:	\$20,827
Objective:	To promote the WQMP Program and the availability of technical and financial assistance. To encourage participation in the WQMP Program by agricultural producers in the Arroyo Colorado watershed.					
Subtask 2.1:	The HRO NRS and the SWCD 350 District Technician will identify landowners in priority areas in the Arroyo Colorado watershed to periodically distribute notifications announcing the availability of financial and technical assistance for developing and implementing WQMPs. The HRO NRS and the SWCD 350 District Technician will use results of TSSWCB projects 02-21, <i>SWAT Model Simulation of the Arroyo Colorado Watershed</i> , and 06-10, <i>Arroyo Colorado Agricultural Nonpoint Source Assessment</i> , to help in identifying landowners in priority areas.					
	Start Date:	Month 1		Completion Date:	Month 3	
Subtask 2.2:	The HRO NRS and the SWCD 350 District Technician will develop and distribute flyers, brochures, letters, news releases and other appropriate promotional publications to encourage participation from agricultural producers. The TSSWCB Project Manager must approve all announcements, letters, and publications prior to distribution.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 2.3:	The HRO NRS and the SWCD 350 District Technician will work with NRCS and AgriLife Extension to educate agricultural producers about water quality issues and how WQMPs and BMPs address pollutant loadings from agriculture. The HRO NRS and the SWCD 350 District Technician will support, promote, and participate in, as appropriate, any field days, demonstrations, site tours, or education events sponsored by NRCS and/or AgriLife Extension for the Arroyo Colorado watershed.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 2.4:	The HRO NRS and the SWCD 350 District Technician will work with commodity organizations, such as Texas Citrus Mutual, Rio Grande Valley Sugar Growers, Texas Vegetable Association, and Texas Farm Bureau, to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time. Additionally, the HRO NRS and the SWCD 350 District Technician will work with the Irrigation Districts to educate their customers on this project.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 2.5:	The HRO NRS and the SWCD 350 District Technician will meet monthly with SWCDs 319, 349, and 350 in order to efficiently and effectively achieve project goals; summarize activities and achievements made throughout the course of this project; and discuss project activities, project schedule, communication needs, deliverables, and other requirements.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 2.6	The HRO NRS and the SWCD 350 District Technician will cooperate and communicate with the Arroyo Colorado Watershed Partnership in order to efficiently and effectively achieve project goals and to summarize activities and achievements made throughout the course of this project. Specifically, the HRO NRS and SWCD 350 District Technician will, at least, participate in quarterly meetings of the Partnership's Steering Committee and semi-annual meetings of the Partnership's Agricultural Issues Work Group.					
	Start Date:	Month 1		Completion Date:	Month 50	
Deliverables	<ul style="list-style-type: none"> List of landowners, classified by priority area, eligible for participation in the WQMP Program, updated as needed Promotional and educational publications, as developed and distributed List of meetings attended and dates with brief summary of topics discussed and action needed. 					

Tasks, Objectives and Schedules						
Task 3:	Development of WQMPs and Implementation of BMPs					
Costs:	Federal:	\$457,123	Non-Federal:	\$200,000	Total:	\$657,123
Objective:	To provide technical assistance to agricultural producers in the Arroyo Colorado for the development and implementation of WQMPs. To provide financial assistance to support the installation of BMPs designed to achieve agricultural NPS pollutant load reductions in the Arroyo Colorado.					
Subtask 3.1:	The HRO NRS and the SWCD 350 District Technician, with assistance from NRCS as appropriate, will assist landowners in the development of WQMPs. The HRO NRS and the SWCD 350 District Technician will develop at least 20 WQMPs for agricultural operations on irrigated cropland in the Arroyo Colorado watershed. Noting that the 2015 goal of the Arroyo Colorado WPP is to have WQMPs on 50% of irrigated cropland in the watershed, the HRO NRS and the SWCD 350 District Technician shall strive to develop additional WQMPs beyond the minimum of 20; cost-share available for additional WQMPs is dependent upon outcomes of Subtask 3.2.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 3.2:	The HRO NRS and the SWCD 350 District Technician, with assistance from NRCS, will assist landowners in the Arroyo Colorado watershed in applying for and obtaining cost-share to aid in implementation of BMPs prescribed in WQMPs. This project provides \$310,143 in CWA §319(h) funding as cost-share through the TSSWCB WQMP Program with allocations to SWCD 319 and SWCD 350. Landowners shall be eligible to receive a maximum cost-share amount of \$15,000 from the TSSWCB §319(h) funds. The maximum cost-share rate shall not exceed 60% of the cost of implementation of the BMPs. The remaining 40% will be provided by the landowner. Cost-share will be based on actual cost not to exceed average cost of the practice.					
	<p>Practices that achieve nutrient, BOD, and sediment reductions on irrigated cropland that are eligible for cost-share include:</p> <ul style="list-style-type: none"> • Irrigation System (441, 442, 443) • Irrigation Tail Water Recovery (447) • Nutrient Management (590) (for establishment of 512, 393, 342 or 412 only) • Irrigation Land Leveling (464) • Subsurface Drain (606) • Irrigation Pipeline (430) • Grade Stabilization Structures (410) • Pasture and Hayland Planting (512) (for the conversion of cropland to pastureland only) • Filter Strip (393) • Critical Area Planting (342) • Grassed Waterway (412) 					
Subtask 3.3:	The HRO NRS and the SWCD 350 District Technician will prioritize WQMP development and cost-share applications consistent with the priority areas identified in the Arroyo Colorado WPP and results of TSSWCB projects 02-21, <i>SWAT Model Simulation of the Arroyo Colorado Watershed</i> , and 06-10, <i>Arroyo Colorado Agricultural Nonpoint Source Assessment</i> .					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 3.4:	The HRO NRS and the SWCD 350 District Technician will assist producers with WQMPs in acquiring financial assistance through the NRCS administered Environmental Quality Incentives Program (EQIP) through 1) county-level funding based on resource concern priorities established by Local Work Groups and 2) the State Resource Concern for Water Quantity-Irrigation in the Lower Rio Grande Valley.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 3.5:	The HRO NRS and the SWCD 350 District Technician will track utilization of obligated cost-share funds (primarily CWA §319(h) funds, but also EQIP funds) and, with assistance from the NRCS, will assist landowners in utilizing obligated cost-share funds on schedule.					
	Start Date:	Month 1		Completion Date:	Month 50	

Subtask 3.6:	To encourage the use of soil testing in support of Nutrient Management (590), the HRO NRS, with assistance from the SWCD 350 District Technician, will assist holders of WQMPs in the acquisition of current soil tests. This project will pay up to \$10 per soil test sample; this project will pay for all soil tests necessary to comply with soil testing frequencies described in each WQMP and consistent with the NRCS practice standard for Nutrient Management (590). Soil tests paid for with project funding must be completed by a public soil testing laboratory, such as the AgriLife Extension Soil, Water and Forage Testing Laboratory. Each soil test sample location shall be geo-referenced (i.e., coordinates from a GPS receiver).					
	Start Date:	Month 1		Completion Date:	Month 50	
Deliverables	<ul style="list-style-type: none"> • Summary sheets on certified WQMPs submitted with QPRs • Cost-share applications for obligated project funds • Summary of cost-share funds utilized per BMP • Map of project area showing soil test sample locations; map will not reveal the identity of any landowner. 					

Tasks, Objectives and Schedules						
Task 4:	Tracking Implementation Success					
Costs:	Federal:	\$40,835	Non-Federal:	\$0	Total:	\$40,835
Objective:	To track implementation of WQMPs to achieve water quality improvement.					
Subtask 4.1:	The HRO NRS and the SWCD 350 District Technician will annually conduct status reviews on all WQMPs developed and certified through the course of this project to ensure that the landowners implement BMPs as specified and agreed to in the WQMP implementation schedule.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 4.2:	The HRO NRS and the SWCD 350 District Technician will conduct status reviews on existing WQMPs (certified prior to this project) in the Arroyo Colorado watershed (15% each year) to ensure that the landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. To date, a total of 370 WQMPs have been certified in the Arroyo Colorado watershed. The HRO NRS and the SWCD 350 District Technician will document any follow-up technical assistance needed or necessary modifications to the WQMP implementation schedule.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 4.3:	The HRO NRS and the SWCD 350 District Technician will create a spreadsheet and map describing and showing the location of all WQMPs developed and BMPs implemented through this project. This map will not reveal the identity or exact location of any producer.					
	Start Date:	Month 1		Completion Date:	Month 50	
Subtask 4.4:	Since the beginning of the TSSWCB WQMP Program, the maximum cost-share allowed per WQMP was \$10,000. The TSSWCB made changes to program rules in July 2008 raising the cost-share cap to \$15,000. Through an analysis of status reviews of WQMPs certified prior to this project and discussions with agricultural producers, the HRO NRS will explore the need for cost-share parity between previously funded WQMPs and the new cost-share cap.					
	Start Date:	Month 1		Completion Date:	Month 50	
Deliverables	<ul style="list-style-type: none"> • Status reviews for WQMPs developed through this project (minimum of 20 reviews) submitted with QPRs • Status reviews for WQMPs certified prior to this project (minimum of 165 reviews) submitted with QPRs • Map of project area showing locations of WQMPs developed and BMPs implemented with a quantifiable breakdown for each BMP submitted with QPRs; map will not reveal the identity of any landowner • Assessment of the need for cost-share parity 					

Project Goals (Expand from NPS Summary Page)

1. To foster coordinated technical assistance activities between the TSSWCB and local SWCDs and the NRCS.
2. To implement components of the Arroyo Colorado WPP addressing agricultural NPS pollution.
3. To promote the WQMP Program and the availability of technical and financial assistance to agricultural producers in the Arroyo Colorado watershed.
4. To provide technical and financial assistance to agricultural producers in the Arroyo Colorado watershed for the development of WQMPs and implementation of BMPs designed to achieve pollutant load reductions.
5. To conduct status reviews on WQMPs in the Arroyo Colorado watershed in order to track implementation success to achieve water quality improvement.

Measures of Success (Expand from NPS Summary Page)

- Landowners in the Arroyo Colorado watershed eligible for participation in the WQMP Program are identified and classified by priority area.
- WQMP Program and technical and financial assistance is promoted in the Arroyo Colorado watershed through the distribution of flyers, brochures, letters, news releases and other appropriate publications.
- Arroyo Colorado Watershed Partnership is kept informed of project activities and achievements.
- Needed technical assistance is provided to agricultural producers for the development and implementation of WQMPs and BMPs.
- Minimum of 20 new WQMPs are certified on irrigated cropland in the Arroyo Colorado watershed.
- Status Reviews (minimum of 20) are annually conducted on all WQMPs developed through this project.
- Status Reviews are conducted on existing WQMPs (minimum of 15%) certified prior to this project (370 certified to date) in the Arroyo Colorado watershed.
- Reduction in nutrient and sediment loads to the Arroyo Colorado from agricultural NPS pollution is documented as a result of cost-share provided to agricultural producers in the watershed.
- Widespread soil testing is conducted across the Arroyo Colorado watershed at frequencies described in WQMPs and consistent with the NRCS practice standard for Nutrient Management.

2005 Texas Nonpoint Source Management Program Reference (Expand from NPS Summary Page)

Goals and/or Milestone(s)

Element One – Explicit short- and long-term goals, objectives and strategies that protect surface and ground water.

Long-Term Goal – Objective 1 – Focus NPS abatement efforts, implementation strategies, and available resources in watersheds identified as impacted by NPS pollution.

Long-Term Goal – Objective 2 – Support the implementation of state, regional, and local programs to prevent NPS pollution through assessment, implementation, and education.

Long-Term Goal – Objective 3 – Support the implementation of state, regional, and local programs to reduce NPS pollution, such as the implementation of strategies defined in WPPs.

Short-Term Goal Two – Implementation – Objective A – Work with regional and local entities to determine priority areas and develop and implement strategies to address NPS pollution in those areas.

Short-Term Goal Two – Implementation – Objective B – Develop and implement BMPs to address constituents of concern or waterbodies not meeting water quality standards in watersheds identified as impacted by NPS pollution.

Short-Term Goal Three – Education – Objective B – Administer programs to educate citizens about water quality and their potential role in causing NPS pollution.

Short-Term Goal Three – Education – Objective D – Conduct outreach...to facilitate broader participation and partnerships. Enable stakeholders and the public to participate in decision-making and provide a more complete understanding of water quality issues and how they relate to each citizen.

Element Two – Working partnerships and linkages to appropriate state, regional, and local entities, private sector groups, and federal agencies.

Estimated Load Reductions Expected (Only applicable to implementation projects)

Estimated load reductions expected from implementing BMPs through this project are based on information in the Arroyo Colorado WPP. The Arroyo Colorado WPP goals are to reduce suspended sediment levels resulting from cropland erosion, BOD from runoff of crop residue, and nitrogen and phosphorus fertilizer runoff from irrigated cropland fields. WQMPs to be implemented through this project only address agricultural NPS loadings from irrigated cropland operations. Based on SWAT modeling, the Arroyo Colorado WPP estimates load reductions from agricultural BMPs only for sediment, total nitrogen, and total phosphorus (Table 17 of the WPP).

Constituent	Estimated load reduction per treated acre
Sediment	2,000 lbs
Total nitrogen	0.567 lbs
Total phosphorus	0.0947 lbs

There are currently 370 WQMPs certified on approximately 37,000 acres in the Arroyo Colorado equating to an average of 100 ac per WQMP. In order to estimate financial assistance needed to implement the Arroyo Colorado WPP, an average of 185 ac per WQMP was assumed. Based on the *2007 Census of Agriculture*, conducted by the USDA National Agricultural Statistics Service, the average harvested cropland farm size for Cameron County is 247 ac, for Hidalgo County is 279 ac, and for Willacy County is 761 ac. To estimate load reductions expected from implementing BMPs through this project, the *2007 Census of Agriculture* farm size acreages will be used. As the percent of the Arroyo Colorado watershed in Willacy County is minimal, the average farm size for the Arroyo Colorado will be assumed to be the average of Cameron and Hidalgo average harvested cropland farm sizes (i.e., 263 ac). Therefore, to estimate load reductions expected from implementing BMPs through this project, each WQMP certified through this project will be assumed to cover 263 ac of irrigated cropland.

In order to calculate estimated load reductions expected, it is assumed that all load reductions achieved at the individual farm level (i.e., through individual WQMPs) translate to equivalent load reductions at the index monitoring site in the impaired reach of the Arroyo Colorado mainstem.

Extent of BMP Implementation	# WQMPs	Total acreage	Estimated Load Reductions Expected		
			sediment (tons/yr)	Total N (lbs/yr)	Total P (lbs/yr)
Full WPP Implementation	-	150,000	150,000	85,050	14,205
Project 09-09 Funded	20	5,260	5,260	2,982	498
Project 05-12 Reported*	21	1325	132	752	126

* Load reductions based on STEPL modeling for BMPs installed on WQMPs through project 05-12, as reported by TSSWCB in FY2008, are provided for reference.

Participation in the TSSWCB WQMP Program by individual farmers is voluntary. This decision to participate is based on a number of factors, including the producer's ability to provide the cost-share match (40% in this project). Adoption of BMPs and participation in the WQMP Program by producers is highly dependent on the success or failure of outreach and education initiatives and social marketing campaigns. Effectiveness of particular BMPs in reducing pollutants is dependent on a myriad of factors including natural weather phenomena and the ability of producers to correctly install, operate, maintain or manage the BMP. With these factors accounted for, the estimated load reductions to be expected, as presented above, should be regarded as the "best case scenario" with probability that actual load reductions will be less.

The mechanism for reporting pollutant load reductions achieved through implementation of BMPs funded with CWA §319(h) monies, is through the EPA Grants Reporting and Tracking System (GRTS). Actual load reductions achieved can only be reported after the BMPs are installed and operational. Currently, EPA Program Activity Measures (PAMs) only call for load reductions achieved for nitrogen, phosphorus, and sediment. Nitrogen, phosphorus, and sediment load reductions achieved through this project will be reported through GRTS.

Part III – Financial Information

Budget Summary			
Federal	\$ 532,516	% of total project	73%
Non-Federal	\$ 200,000	% of total project	27%
Total	\$ 732,516	Total	100%
Category	Federal	Non-Federal	Total
Personnel	\$ 173,142	\$ 0	\$ 173,142
Fringe Benefits	\$ 42,466	\$ 0	\$ 42,466
Travel	\$ 2,114	\$ 0	\$ 2,114
Equipment	\$ 0	\$ 0	\$ 0
Supplies	\$ 3,066	\$ 0	\$ 3,066
Contractual	\$ 1,200	\$ 0	\$ 1,200
Construction	\$ 301,807	\$ 200,000	\$ 501,807
Other	\$ 8,721	\$ 0	\$ 8,721
Total Direct Costs	\$ 532,516	\$ 200,000	\$ 732,516
Indirect Costs (≤15%)	\$ 0	\$ 0	\$ 0
Total Project Costs	\$ 532,516	\$ 200,000	\$ 732,516

The TSSWCB CWA §319(h) NPS Grant Program has a 60/40% match requirement. The cooperating entity will be reimbursed 60% from federal funds and must contribute a minimum of 40% of the total costs to conduct the project. The 40% match must be from non-federal sources and should be described in the budget justification. Reimbursable indirect costs are limited to 15% of total federal direct costs. The project budget generally covers a three year period.

Budget Justification (Federal) – TSSWCB Harlingen Regional Office		
Category	Total Amount	Justification
Personnel	\$ 165,256	One Natural Resources Specialist IV – 100% time for 4 yrs
Fringe Benefits	\$ 42,466	Benefits for NRS calculated @ 25.7% of Personnel
Travel	\$ 1,708	Travel for approximately 5 trips to Temple, TX for multiple day trainings at \$77/night for lodging and \$46/day for per diem
Equipment	\$ 0	N/A
Supplies	\$ 2,800	General office supplies @ ~\$37/mo for 4 yrs; 1 Computer @ \$1,000
Contractual	\$ 0	N/A
Construction	\$ 0	N/A
Other	\$ 8,700	Soil Sample Testing (150 samples @ \$10); Vehicle maintenance and fuel
Indirect	\$ 0	N/A

Budget Justification (Non-Federal) – TSSWCB Harlingen Regional Office		
Category	Total Amount	Justification
Personnel	\$ 0	N/A
Fringe Benefits	\$ 0	N/A
Travel	\$ 0	N/A
Equipment	\$ 0	N/A
Supplies	\$ 0	N/A
Contractual	\$ 0	N/A
Construction	\$ 0	N/A
Other	\$ 0	N/A
Indirect	\$ 0	N/A

Budget Justification (Federal) – Southmost Soil and Water Conservation District #319		
Category	Total Amount	Justification
Personnel	\$ 0	N/A
Fringe Benefits	\$ 0	N/A
Travel	\$ 0	N/A
Equipment	\$ 0	N/A
Supplies	\$ 208	General office supplies
Contractual	\$ 1,200	SWCD Financial Audit
Construction	\$ 236,917	SWCD financial assistance for 60% of cost of implementing BMPs
Other	\$ 0	N/A
Indirect	\$ 0	N/A

Budget Justification (Non-Federal) – Southmost Soil and Water Conservation District #319		
Category	Total Amount	Justification
Personnel	\$ 0	N/A
Fringe Benefits	\$ 0	N/A
Travel	\$ 0	N/A
Equipment	\$ 0	N/A
Supplies	\$ 0	N/A
Contractual	\$ 0	N/A
Construction	\$ 160,000	Landowner match for 40% of cost for implementing BMPs
Other	\$ 0	N/A
Indirect	\$ 0	N/A

Budget Justification (Federal) – Hidalgo Soil and Water Conservation District #350		
Category	Total Amount	Justification
Personnel	\$ 7,886	One Part-Time Technician – for 3 yrs @ \$2,629/yr
Fringe Benefits	\$ 0	N/A
Travel	\$ 406	Travel for overnight stays for Conservation Planner Training Course and TBET training in Temple
Equipment	\$ 0	N/A
Supplies	\$ 58	General office Supplies
Contractual	\$ 0	N/A
Construction	\$ 64,890	SWCD financial assistance for 60% of cost of implementing BMPs
Other	\$ 21	Vehicle maintenance and fuel
Indirect	\$ 0	N/A

Budget Justification (Non-Federal) – Hidalgo Soil and Water Conservation District #350		
Category	Total Amount	Justification
Personnel	\$ 0	N/A
Fringe Benefits	\$ 0	N/A
Travel	\$ 0	N/A
Equipment	\$ 0	N/A
Supplies	\$ 0	N/A
Contractual	\$ 0	N/A
Construction	\$ 40,000	Landowner match for 40% of cost for implementing BMPs
Other	\$ 0	N/A
Indirect	\$ 0	N/A