Texas Commission on Environmental Quality
CWA §319(h) Nonpoint Source Grant Program
FY 2011 Proposal 1.08

NONPOINT SOURCE SUMMARY PAGE for the CWA §319(h) Nonpoint Source Grant Program			
1. Title of Project:	1.08 Texas Stream Team (TST)		
2. Project Goals:	To assist water resource managers in maintaining and improving water quality through trained citizen monitor data collection; data action that reduces pollution loading; and improved nonpoint source (NPS) pollution awareness through education and stakeholder engagement; To support volunteer monitoring and NPS education statewide; To provide focused watershed services for targeted Total Maximum Daily Load (TMDL) and Watershed Protection Plan (WPP) watersheds that deliver volunteer water quality data, NPS pollution education, and other stakeholder outreach services tailored to satisfy the needs associated with the watershed planning process and achieving the goals of the completed plans through implementation.		
3. Project Tasks:	(1) Project Administration; (2) Publications; (3) Partner Coordination and Development; (4) Project Planning; (5) Quality Assurance Project Plan (QAPP) Development; (6) Data Management; (7) Statewide Citizen Monitoring Support; (8) Statewide Volunteer Education Activities; (9) Statewide Citizen Monitoring and NPS Education Events; (10) Targeted Watershed Monitoring and Outreach Projects; (11) Final Report.		
4. Measures of Success:	TST coordination and engagement of project partners, volunteers and stakeholders, will result in improved water quality and more knowledgeable stakeholders through the implementation of the program's efforts focused on citizen monitoring, NPS and watershed outreach, targeted stakeholder engagement, and data communications. The TST program is measured through successful implementation of scope of work and measured delivery of survey tools. Successful completion of the following main objectives will occur on time with high quality in accordance with the scope of work: 1) project administration requirements including reports; 2) utilization of Internet resources and effective use of publications; 3) maintenance and expansion of partnerships to enhance program capacity; 4) strategic, well thought out, and implemented project planning; 5) the QAPP is kept up to date and monitoring provides meaningful environmental information; 6) data management maintains accurate entries; data viewer is used; and monitor and partner data entry decreases direct data management resources; 7) citizen monitors collect useful data that is used to identify pollution sources and enhance TMDL, WPP, and other water-related projects; 8) NPS and watershed education implementation results in more heightened awareness, positive changes in attitudes, and beneficial behavior modifications to reduce NPS pollution; 9) statewide and/or regional volunteer monitoring and NPS education events occur; 10) activities targeting specific watersheds will bring capacity to TMDL and WPP projects and aide in project implementation; 11) the final report will accurately display TST program activities for this project.		
5. Project Type:	**Implementation (X); Education (X); Planning ( ); Assessment (X); Groundwater ( )**		
6. Status of Water Body: **2008 Texas Water Quality**	Gilleland Creek (1428C)	Bacteria (geomean) Bacteria (single sample) Nutrient Screening Levels	5a CN CS

Inventory and 303(d) List	Plum Creek (1810)	Bacteria (geomean) Nutrient Screening Levels Dissolved Oxygen Screening Levels	5c CS CS
	Arroyo Colorado (2201, 2202)	Bacteria (geomean) Dissolved Oxygen 24hr Min., Avg. Nutrient Screening Levels	5c 5a CS
	Oso Bay & Oso Creek (2484, 2485A)	Bacteria (geomean, single sample)	4a (Oso Bay), 5a (Oso Creek)
	Upper Cibolo Creek (1908)	Bacteria	5c
7. Project Location (Statewide or Watershed and County)	Statewide, and targeted watersheds included in the Texas Priority Watershed Report (of impaired waterbodies) from the Texas Nonpoint Source Management Program, which may include but are not limited tothe following watersheds: Gilleland Creek, Plum Creek, Arroyo Colorado, Oso Bay and Oso Creek, and upper Cibolo Creek. TXSTATE TST, in consultation with the TCEQ, may target watersheds included on the Texas Priority Watersheds Report based on current local needs order to better utilize TXSTATE TST's services during the course of this grant contract.		
8. Key Project Activities:	**Hire Staff ( ); Surface Water Quality Monitoring (X); Technical Assistance (X); Education (X); Implementation (X); BMP Effectiveness Monitoring ( ); Demonstration ( ); Planning (X); Modeling ( ); Bacterial Source Tracking ( ); Other ( )**		
9. Texas NPS Management Program Elements:	Element One (LTG Objectives 1, 2, 3, 5, 6, & 7; STG 1a-c, 1e, 2a, 2d, 3a, 3b, 3d, 3f) Element Two Element Three Element Five Element Eight Milestone F		

10. Project Costs:	**Federal:**	$	**Non-Federal:**	$	**Total:**	$
11. Project Management:	River Systems Institute, Texas State University – San Marcos					
12. Project Period:	December 1, 2011 – August 31, 2012; September 1, 2013-August 31, 2014					

Part I – Applicant Information

Applicant							
13. Project Lead	Andrew Sansom						
14. Title	Executive Director						
15. Organization	Texas Stream Team, River Systems Institute, Texas State University						
16. Federal ID No.	37547547549						
17. E-mail Address	andrewsansom@txstate.edu						
18. Street Address	601 University Drive						
City	San Marcos	**County**	Hays	**State**	TX	**Zip Code**	78666
19, Telephone No.	(512) 245-9200			**Fax No.**	(512) 245 -7371		

20. Project Partners	
Names	**Roles & Responsibilities**
Texas Commission On Environmental Quality (TCEQ)	Provide state oversight and management of all project activities and ensure coordination of activities with related projects and TSSWCB.
River Systems Institute	Event funding assistance, leadership, coordination assistance, in-kind contributions, program management assistance
The TST has an extensive list of project partners. The Partners list, including services provided, is available by request to the TCEQ.	

Part II – Project Information

Project Type							
21. Surface Water	**X**	**Groundwater**					
22. Does the project implement recommendations made in a completed Watershed Protection Plan or an adopted TMDL or Implementation Plan?				**Yes**	**X**	**No**	
23. If yes, identify the document.	Plum Creek Watershed Protection Plan; Arroyo Colorado WPP; Gilleland Creek I-Plan						
24. If yes, identify the agency/group that developed and/or approved the document.	TSSWCB, EPA; TCEQ, EPA; TCEQ			**25. Year Developed**	2009; 2007; 2011		

26. Watershed Information

Watershed Name(s)	Hydrologic Unit Code (8 Digit)	Segment ID	305 (b) Category	Size (Acres)
Gilleland Creek	12090301	1428C	5a	~ 48,000
Plum Creek	12100203	1810	5c	~250,000
Arroyo Colorado	12110208	2201, 2202	5c, 5a	~450,000
Oso Bay and Oso Creek	12110202	2482, 2485A	4a	~ 150,400
Upper Cibolo Creek	12100304	1908	5c	~ 48,640

27. 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.

IMPAIRMENTS (*2008 Texas Water Quality Inventory and 303(d) List*)
Segment 1428C: Gilleland Creek: Perennial stream and intermittent stream with perennial pools from the confluence with the Colorado River up to the spring source (Ward Spring) northwest of Pflugerville, in Travis County

	Impairment	Category	Year Listed
1428C_01: From the Colorado River upstream to Taylor Lane	bacteria (geomean)	5a	1999

CONCERNS (*2008 Texas Water Quality Inventory*)

		Level of Concern	
1428C_01	bacteria single sample	CN	(concern for near non-attainment)
	nutrient screening	CS	(concern screening levels)
1428C_02	bacteria geomean	CN	
	nutrient screening	CS	
1428C_03	bacteria geomean	CN	
1428C_04	bacteria geomean	CN	

2009 Basin Highlights Report; Lower Colorado River Authority
"Gilleland Creek, located in eastern Travis County, was first identified as impaired on the 1999 303(d) List due to high bacteria levels. In 2004, TCEQ contracted with LCRA to perform the Gilleland Creek TMDL project. In 2005, LCRA completed a historical data review, developed water quality monitoring and quality assurance plans, and conducted extensive monitoring at 10 locations on the creek… On April 19, 2009, EPA approved the TMDL paving the way for implementation…"

IMPAIRMENTS (2008 Texas Water Quality Inventory and 303(d) List)
Segment 1810: Plum Creek: From the confluence with the San Marcos River in Caldwell County to FM 2770 in Hays County

	Impairment	Category	Year Listed
1810_01: Confluence with San Marcos River to approx. 2.5 mi. upstream of the confluence with Clear Fork Plum Creek	bacteria (geomean)	5c	2004
1810_02: From approx. 2.5 mi. upstream of confluence with Clear Fork Plum Ck to approx. 0.5 mi upstream of SH21	bacteria (geomean)	5c	2004
1810_03: From approx. 0.5 mi. upstream of SH 21 to	bacteria (geomean)	NS	2004

upper end of segment

CONCERNS (2008 Texas Water Quality Inventory)

		Level of Concern	
1810_01	nutrient screening	CS	(concern screening levels)
1810_02	nutrient screening	CS	
1810_03	dissolved oxygen screening	CS	
	nutrient screening	CS	

2009 Basin Highlights Report; Guadalupe-Blanco River Authority
"The Plum Creek Watershed Partnership (PCWP) has completed the Watershed Protection Plan (WPP) for Plum Creek and its tributaries in Hays and Caldwell counties. In 2004, Plum Creek was identified as impaired for *E. coli* bacteria, with concerns for nutrients. The Texas State Soil and Water Conservation Board (TSSWCB) selected Plum Creek for the development of the WPP. The project was facilitated by the Texas AgriLife Extension Service. Load duration curve analysis indicated that both point and non-point sources contribute to the impairment. Based on stakeholder input and land use analysis, sources of the pollutants include urban sources, such as urban runoff and pet waste, as well as agricultural activities and wildlife sources (deer and feral hogs)…"

IMPAIRMENTS (2008 Texas Water Quality Inventory and 303(d) List)
Segment 2201: Arroyo Colorado Tidal: From confluence with Laguna Madre in Cameron/Willacy County to a point 100 meters (110 yards)downstream of Cemetery Road south of Port Harlingen in Cameron County
Segment 2202: Arroyo Colorado Above Tidal: From a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County to FM 2062 in Hidalgo County

	Impairment	Category	Year Listed
2201_03: Approx. 3 miles upstream to 2 miles downstream of Marker 27	bacteria (geomean)	5a	2006
2201_04: Approx. 1 mile upstream to 3 miles downstream of Camp Perry	dissolved oxygen (24 hr)	5a	1996
	bacteria (geomean)	5c	2006
2201_05: Upper 4 miles of segment	dissolved oxygen (24 hr)	5a	1996
	legacy pollutants fish tissue	4a, 5c	2008
	bacteria (geomean)	5c	2006
2202_01: Lower 4 miles of segment	legacy pollutants fish tissue	5c	2008
	bacteria (single sample, geomean)	5c	1996
2202_02: Approx. 11 miles upstream to approx. 4 miles downstream of US 77	legacy pollutants fish tissue	5c	2008
	bacteria (single sample, geomean)	5c	1996
2202_03: Approx 14 miles upstream to approx. 11 miles downstream of FM 1015	legacy pollutants fish tissue	5c	2008
	bacteria (single sample, geomean)	5c	1996
2202_04: Upper 19 miles of segment	legacy pollutants fish tissue	5c	2008
	bacteria (single sample, geomean)	5c	1996

CONCERNS (2008 Texas Water Quality Inventory)

		Level of Concern	
2201_01	nutrient screening	CS	(concern screening levels)
2201_02	nutrient screening	CS	
2201_03	nutrient screening	CS	
2201_04	dissolved oxygen	CS	
	nutrient screening	CS	
2201_05	dissolved oxygen	CS	
	nutrient screening	CS	
	bacteria single sample	CN	(concern for near non-attainment)
2202_01	nutrient screening	CS	

2201_02	nutrient screening	CS
2201_03	nutrient screening	CS
2201_04	nutrient screening	CS

2008 Basin Summary Report; Nueces River Authority
"Segment 2201 Arroyo Colorado Tidal: The segment has five AUs. AU_03, AU_04, and AU_05 are impaired for Enterococcus. AU_04 and AU_05 are impaired for low DO. A TMDL for DO has evolved into a Watershed Protection Plan (WPP) for the entire Arroyo Colorado watershed. N+N and chlorophyll-a are concerns for the entire segment. Ammonia and OP are concerns for AU_03, AU_04, and AU_05. Total phosphorus is a concern for AU_05 and has an increasing trend in AU_01. There are no problems with pH or TSS on this segment. The 2008 Assessment also indicates that AU_05 is impaired for mercury and polychorinated biphenyls in edible fish tissue.

Segment 2202 Arroyo Colorado Above Tidal: The segment has four AUs. *E. coli* is an impairment for the entire segment. Ammonia, N+N, OP, total phosphorus, and chlorophyll-a are concerns for the entire segment. All other parameters meet water quality standards. The WPP should address all of the impairments and concerns."

IMPAIRMENTS (2008 Texas Water Quality Inventory and 303(d) List)
Segment 2485: Oso Bay:
Segment 2485A: Oso Creek: From the confluence with Oso Bay in southern Corpus Christi to a point 3 miles upstream of SH 44, west of Corpus Christi in Nueces County

	Impairment	Category	Year Listed
2485_01: Upper bay (Holly Road to County Hwy 24)	dissolved oxygen (24 hr)	5b	1996
	DSHS shellfish restrictions	5a	2006
2485_02: Middle bay (State Park Road 22 to Holly Road)	dissolved oxygen (24 hr)	5b	1996
	DSHS shellfish restrictions	5a	2006
2485_03: Lower portion of bay (Ocean Drive to State Park Road 22)	dissolved oxygen (24 hr)	5b, 4a	1996
	bacteria (geomean, single sample)	5a	2008
	DSHS shellfish restrictions	5a	2006
2485A_01: Entire water body	bacteria (geomean, single sample)	5a	2002

CONCERNS (2008 Texas Water Quality Inventory)

		Level of Concern
2485_01	nutrient screening	CS (concern screening levels)
2485_02	dissolved oxygen (grab)	CS, CN (concern for near non-attainment)
	nutrient screening	CS
2485_03	nutrient screening	CS
2485A_01	nutrient screening	CS

2009 Basin Highlights Report; Nueces River Authority
"Oso Bay / Oso Creek Bacteria TMDL: TSSWCB projects are currently working to collect data in the Oso Creek watershed to determine more precisely the source of Enterococci from agricultural areas. Projects are examining soil, stream sediment, and groundwater. TMDL development for Oso Creek will proceed after the TSSWCB projects deliver information, anticipated to be towards the end of FY 2010. The Oso Bay TMDL was approved last year. The Water Quality Standards Team is planning for a UAA for the Blind Oso bird rookery area, which may adjust bacteria criteria in that area. TCEQ plans to develop a single Implementation Plan covering the bay and creek, after the creek information and TMDL are completed.

Oso Bay / Laguna Madre Low DO TMDL
TMDL studies completed circa 2005 verified low DO concentrations, but also concluded that to be due to natural characteristics of the water bodies, specifically high salinity and high seasonal temperatures. Revised criteria for Oso Bay and the Laguna Madre are being proposed based, in part, on the findings of the earlier studies."

IMPAIRMENTS (*2008 Texas Water Quality Inventory and 303(d) List*)

		Impairment	Category	Year Listed
SegID: 1908	Upper Cibolo Creek	bacteria	5c	2006

CONCERNS (2008 Texas Water Quality Inventory)

		Level of Concern
1908_01	habitat	CS
1908_02	ammonia	CS
1908_01	orthophosphorus	CS
1908_02	E.coli	NS

Area from the Missouri-Pacific Railroad Bridge west of Bracken in Comal County to a point 1.5 km (0.9 miles) upstream of the confluence of Champee Springs in Kendall County

1908_02 From approx. 2 mi. upstream of Hwy 87 in Boerne to upper end of segment

FROM THE 2010 SAN ANTONIO RIVER BASIN HIGHLIGHTS REPORT:
Upper Cibolo Creek originates in southern Kendall County and ends in southeast Comal County. The TCEQ's *Draft 2010 Water Quality Inventory* identifies the upper end of the segment above Bexar County as not meeting the contact recreation use designation due to elevated bacteria levels. This segment has also been identified as having concerns for dissolved oxygen, orthophosphorus, total phosphorus and impaired habitat. This segment has also been identified as "not supporting" for chloride. A review conducted by SARA of the past two years of data exhibits the presence of elevated chloride levels at Cibolo Creek southeast of Boerne (12853). This review also identified a concern for grab (samples) dissolved oxygen screening levels at Cibolo Creek 1.6KM upstream of State Highway 46 (16702). Total phosphorus has also been identified as a concern at these two sites. *(Table 3, pg 25)* SARA did not conduct any biological or habitat assessments in this segment for the Clean Rivers Program.

2009: Upper Cibolo Creek
The segment (1908) extends from the Missouri-Pacific Railroad Bridge west of Bracken in Comal County to a point 1.5 kilometers (0.9 miles) upstream of the confluence with Champee Springs in Kendall County.
• Fish Communities – Impairment
• Nutrients (ammonia nitrogen, orthophosphorus) – Concern
• Habitat – Concern

Project Narrative

28. Problem/Need Statement

Water resource management organizations need an actively engaged corps of trained citizen monitors to bring supplemental water quality data and NPS pollution reduction services to enhance existing and future efforts to maintain and improve water quality in Texas. These same organizations, which encourage meaningful stakeholder contributions, need informed participants to help guide WPP and TMDL outcomes.

The Texas State University (TXSTATE) TST is a statewide citizen water quality monitoring (CWQM) and stakeholder outreach program that collaborates with water resource decision-makers and the general public for improved environmental health and sustainable management. This project will support and enhance the public outreach objectives and priorities identified under the TCEQ's Federal 319(h) NPS Program, including projects identified by the TMDL Program, the Texas Clean Rivers Program (CRP), the Surface Water Quality Monitoring (SWQM) Program and other TCEQ programs. These programs expand the public's understanding of how human activity impacts water quality in Texas in order to influence individuals to adopt activities and behaviors that contribute to the improvement of water quality and prevention of NPS pollution. Although this project will support program activities across the state, priority will be placed on supporting volunteers, partners, and groups that meet TCEQ goals of promoting public involvement in priority watersheds included on the current State of Texas CWA §303(d) List of impaired waters.

Given existing gaps in current monitoring conducted by coordinating state, regional, and local organizations, trained citizen monitors provide valuable scientific information to supplement existing data used by water resource management decision makers. NPS pollution by its nature is episodic, difficult to predict, and emanates from many locations. Given the prevalence and growth of NPS pollution issues in Texas' 303d and TMDL segments, trained TST monitors serve as extra eyes and ears for rivers, reservoirs, bays, and other surface water resources. Citizen monitoring data can be used for problem identification, local decision-making, research, education, and other uses as deemed appropriate by the end user.

Between 1991 and 2008 TST (and Texas Watch) monitors spent more than 2.8 million minutes sampling Texas water resources. This is the equivalent of 7 hours per day, 365 days each year since 1991. This effort resulted in 26,850 sampling events from over 800 locations. Monitors routinely communicate their observations and data findings to program staff and local coordinators. While data production is very useful, often the monitors' physical presence at their established monitoring sites proves vital. By placing more "boots in the water" TST monitors effectively position themselves to occasionally be present during hard to detect NPS pollution episodes. Some recent examples of these successes include: Arroyo Colorado – monitors observe illicit dumping and communicate finding to local coordinator; Gilleland Creek – monitors discover area near the headwaters with high E.coli levels; they are now positioning new monitoring sites to track down the source(s) in the upper 0.25 miles of the stream; San Marcos River – on multiple occasions monitors discover illicit dumping that leads to high E.coli levels during dry weather; this information is communicated to local jurisdictions and the problem is now being tracked and traced by staff; Hamilton Pool, Travis County – monitor E.coli data is used to supplement other data and is exclusively employed on weekends when other services are not available; Colorado River basin – monitors discover sewage flowing from a wastewater manhole; and Houston – monitors observe elevated chlorine in a creek downstream a wastewater treatment plant and discover malfunction after most life in the creek is killed; monitors discover malfunctioning package wastewater treatment plant and report to officials; monitors actively track effectiveness of a stormwater mitigating wetland pond system. TST monitors are uniquely positioned to enhance the problem identification capacity of water resource management agencies.

Budget Reductions and Change in Effort within the Scope of Work
Overall program costs have decreased more than $166,000 from the FY09 grant scope of work reflecting some changes in tasks and improvements in program efficiencies. Budget reductions result from decreases in program activities related to communications plan development; dataviewer development, targeted watershed workshops, and the removal of Orange County from the targeted watersheds. Although the program's scope demonstrates growth of new program areas, expansion in services, and an emphasis on IT resources, overall program costs have decreased beyond costs specific to the communications plan development, dataviewer development targeted watershed workshops, and the removal of Orange County from the targeted watersheds. TST is accomplishing this through improved strategic planning, staff development, and increasing focus on Task 10 targeted watershed services for WPP and TMDL projects.

Efforts will include leveraging of current partnerships and development of new partnerships for the implementation of program resources developed under the TCEQ funding into existing and newly identified projects. Bringing program resources into these applied projects allow for the best use of limited program resources while creating partner cost-share opportunities which will lead to increased local ownership of citizen based volunteer and education and outreach programs. Most importantly, integrating program resources into applied programs will result in enhanced fulfillment of the organizational mission. Under this structure, Texas Stream Team will serve as an umbrella organization leveraging TCEQ's programmatic investment to developing and supporting locally based volunteer and education and outreach programs. TXSTATE TST will ensure that project deliverables are not counted towards any other grant, ms4, or permit requirements.

TST recognizes the increased need to focus efforts on training trainers to perform outreach functions and certified water quality monitoring sessions. Additionally, TST will continue its efforts to increase effective uses of technology related to IT and Internet capabilities as well as citizen monitors' ability to collect and document increasingly complex environmental information.

Focused resources will revise and distribute a new Trainers' Manual to include core parameters (dissolved oxygen, pH, specific conductivity, temperature, flow severity, Secchi disk, transparency tube (new method) and the NPS suite (nitrate nitrogen (new method), orthophosphate phosphorus (new method), turbidity (new method), flow (new method), and E.coli). TST invests resources into each new trainer by completing the CWQM training, individualized coaching on presentation style and approach, and completing the three-phase trainer in training process. Before becoming certified, the trainer in training assists with a training and then leads a training, both under the guidance of a certified trainer. This process takes a substantial time investment from the trainer and the trainee. Once the training is complete, the newly trained trainer may then be able to certify up to and over one hundred monitors annually. This will substantially increase the program's ability to service Texas more sustainably.

The second training component will formalize NPS watershed model trainings through the development of an organized structure and trainers' training program. The NPS watershed model provides an excellent platform for communicating basic and intermediate watershed functions and NPS pollution issues for a variety of ages ranging from kindergarten to elderly. Each new NPS watershed model facilitator will be able to present to hundreds of students each year and provide an essential foundation of knowledge. These efforts will be focused in Task 10 targeted watersheds primarily but will also be distributed statewide. Additional models will be made available for long and short-term checkout for trained facilitators.

TST is increasing trained citizen monitors' ability to serve as natural resource witnesses for a variety of priority issues of concern. These expansions include a substantially revised training program that incorporates a new NPS suite. The NPS suite is developed as an advanced training that takes place for CWQMs who have collected ten or more samples at designated sites. In addition to collecting new environmental data, the NPS suite will serve to incentivize CWQMs to participate more intensely for longer periods of time.

Additional watershed services are listed under Objective 10 and these activities are delivered based on watershed needs.

Additional minor changes include the following: 1) Unlike previous contracts, TST will be responsible for maintaining and updating the new data viewer. This will be done through a joint partnership with LCRA and TXSTATE IT services; 2) TST will annually present at a minimum of three CRP meetings instead of the five meetings in the previous SOW; 3) TST will host three regional meetings in lieu of the statewide Meeting of the Monitors. This change will allow the program to bring services to different regions in Texas and service participants closer to their monitoring location and region.

Project Narrative

29. General Project Description (Include Project Location Map)

The TST mission is to facilitate environmental stewardship by empowering a statewide network of concerned citizens, partners, and institutions in a collaborative effort to promote a healthy and safe environment through environmental education, data collection, and stakeholder action.

In general, the program will facilitate coordination of the volunteer CWQM Program and watershed-based NPS water pollution prevention education activities among water resource stakeholders throughout Texas. This will be accomplished through education of the public, students, volunteers, and resource managers about water quality, NPS pollution issues, and the characteristics of and relationship between watersheds.

The project educational strategies will emphasize direct contact with volunteers and partners through support of potential and active citizen monitoring programs, coordination of regional meetings, information sessions and presentations, workshops, field activities, recognition events, and partner meetings. These activities will address NPS pollution problems and solutions, local water quality issues, training needs, monitoring techniques, equipment use, quality control requirements, and other relevant topics. Outreach materials that support and enhance these activities including a periodic newsletter, curriculum resources, and comprehensive web site, will be prepared and made available.

In addition to continuing statewide citizen monitoring, NPS pollution outreach, and stakeholder engagement, the program will focus efforts in several key additional areas:

TST will expand and maintain Targeted Watershed Project activities in six priority water bodies. These areas include: 1) Gilleland Creek TMDL, 2) Plum Creek WPP, 3) Arroyo Colorado WPP, 4) Oso Creek/Bay TMDL, 5) upper Cibolo Creek WPP, and 6) one additional watershed to be determined (and approved by TCEQ).

. Citizen data collection, stakeholder outreach, and special events such as a watershed tour or watershed protection meeting will take place. The program continues to support and expand the capacity of local volunteer water quality monitoring organizations and assist with stakeholder outreach activities. See Objective 10 for more details.

Of the impaired watershed project areas, it is anticipated that three will have completed watershed plans by the project start date. The TST activities in these watersheds will be conducted to implement portions of the plans as applicable. No incremental implementation funds are being used for the TST FY09 project. However, the following activities are being conducted under the project towards the implementation of watershed based plans.

Plum Creek WPP
The TST is working with the Guadalupe Blanco River Authority (GBRA) and the Plum Creek Watershed Partnership to implement the Elementary School Water Quality Project outlined on page 97 of the Plum Creek WPP. Activities have included and will continue to include: NPS education events and water quality monitoring trainings to local elementary school teachers and students, along with supporting and participating in creek cleanup events.

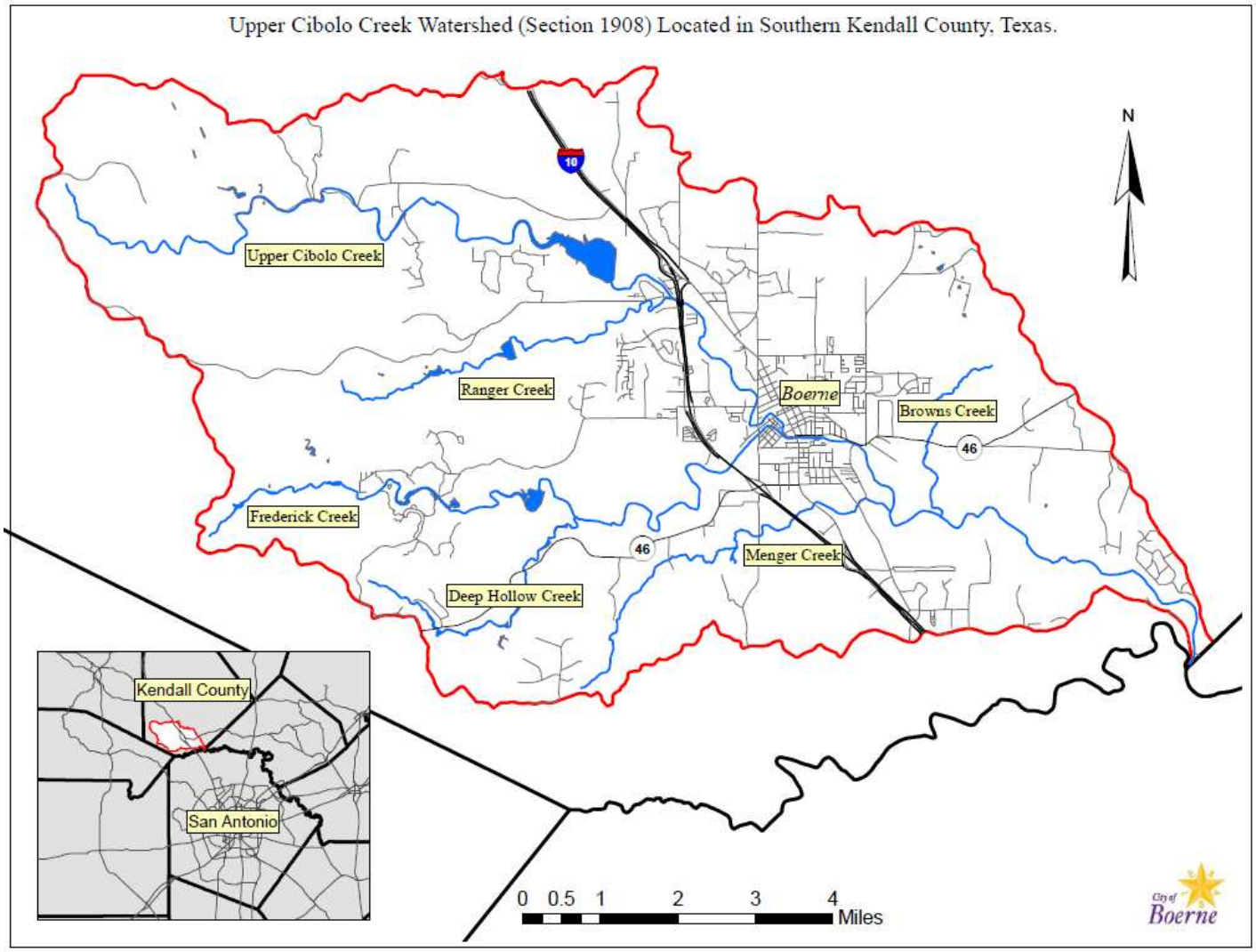
Arroyo Colorado WPP
The TST is working with the Arroyo Colorado Partnership to continue the implementation of the Arroyo Colorado Education and Outreach Plan: Strategy 5 - Create Micro-campaigns for Specific Target Audiences by working with the Partnership to create service learning curriculum for students, described on page 98 of the WPP, and Strategy 7 – Establish Volunteer Monitoring Programs on the Arroyo Colorado and Associated Drainages by supporting the education, training and maintenance of the volunteer monitoring program and ten monitoring sites in the watershed, described on pages 101 and 102 of the WPP.

Gilleland Creek TMDL Implementation Plan
The Implementation Plan (I-Plan) for Gilleland Creek is scheduled for review and approval by the TCEQ Commissioners in 2010. The activities conducted by the TST will support the I-Plan.

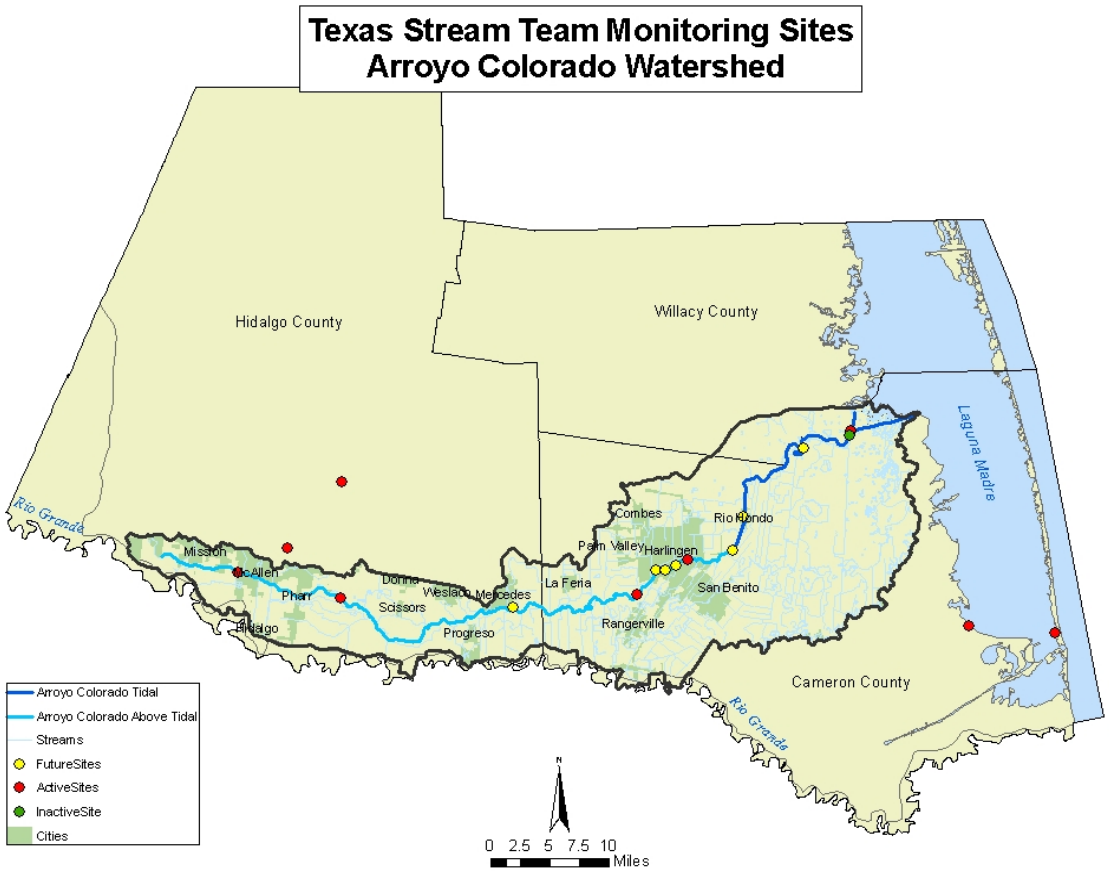
Upper Cibolo Creek WPP Development and Implementation
TST is working with the project manager, TCEQ, and stakeholders to conduct numerous activities related to citizen monitoring, NPS pollution outreach, intensive monitoring surveys, and long-term use of equipment and materials for distribution to local educators and coordinators. These activities will support the development of a WPP for the upper Cibolo Creek.
The result of these efforts include increased awareness of NPS pollution and reductions in the watershed and baseline volunteer monitoring data that will supplement professionally collected data to track the progress of implementation efforts towards improving water quality. No specific load reductions calculations will be associated with these efforts; however the prevention of NPS pollution and the tracking of loadings will be the results. Additional activities in these watersheds may be added based on the needs identified by the TST, the associated watershed partnerships/steering committees and the TCEQ.

Deliverables due at the end of year one will be due November 30, 2013. Deliverables due at the end of year two will be due August 31, 2014.

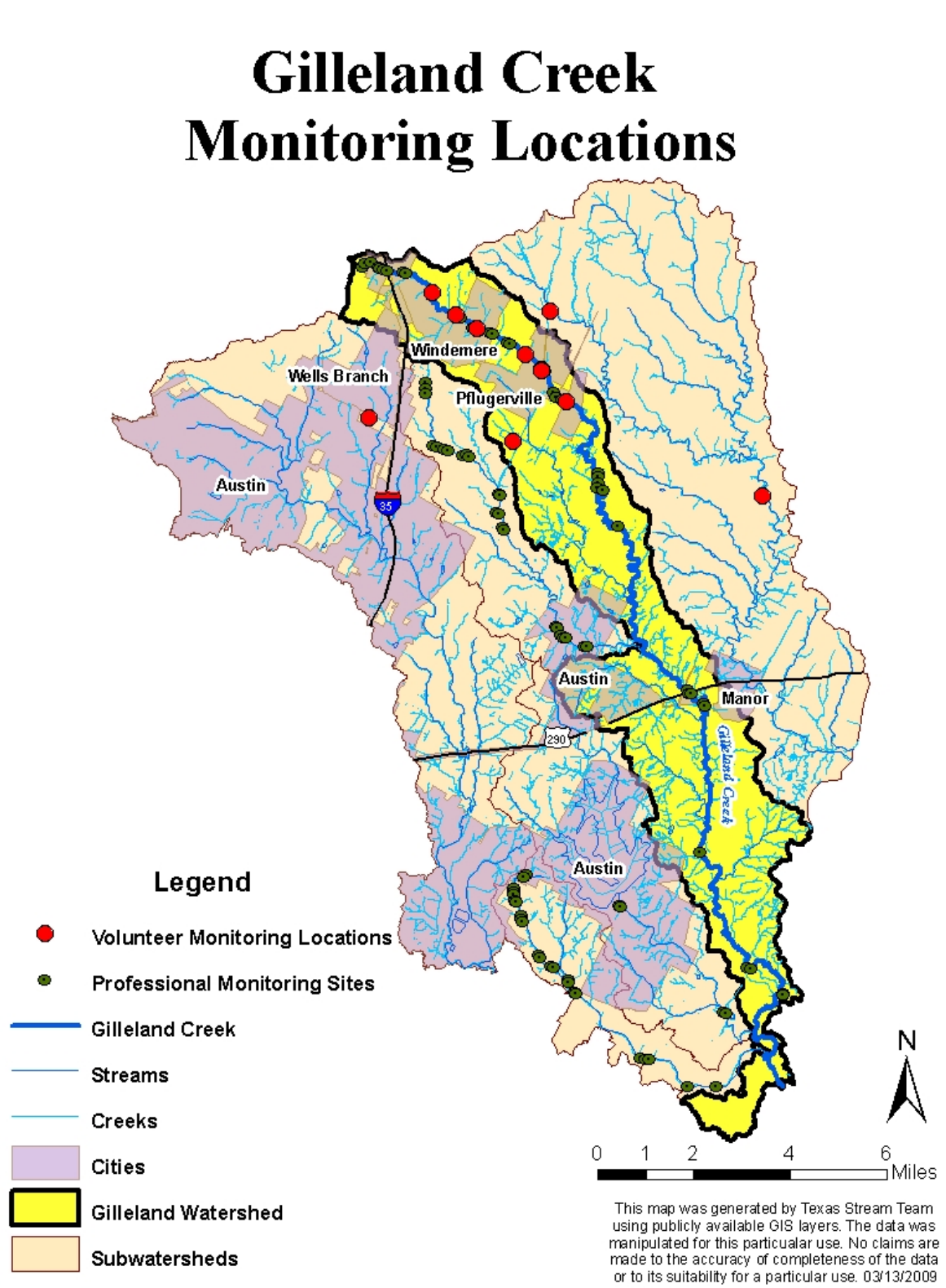
Targeted Watershed Project Area Maps:



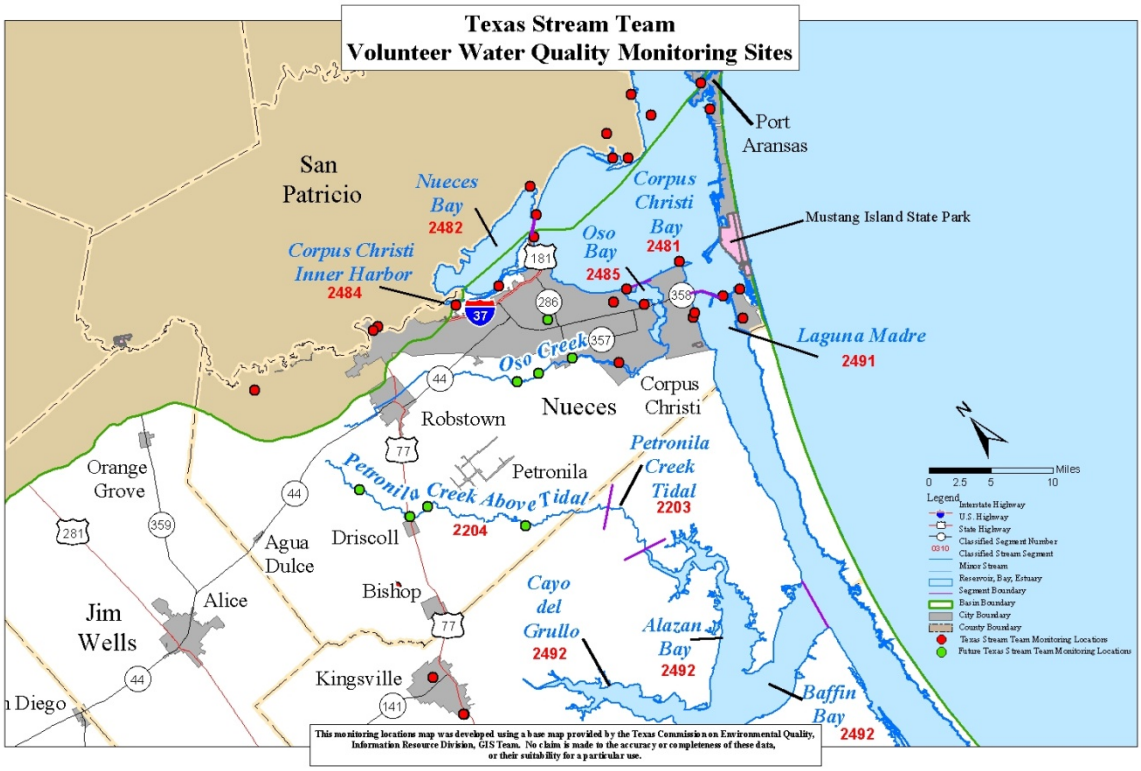
Upper Cibolo Creek WPP Project Area



Arroyo Colorado WPP Project Area

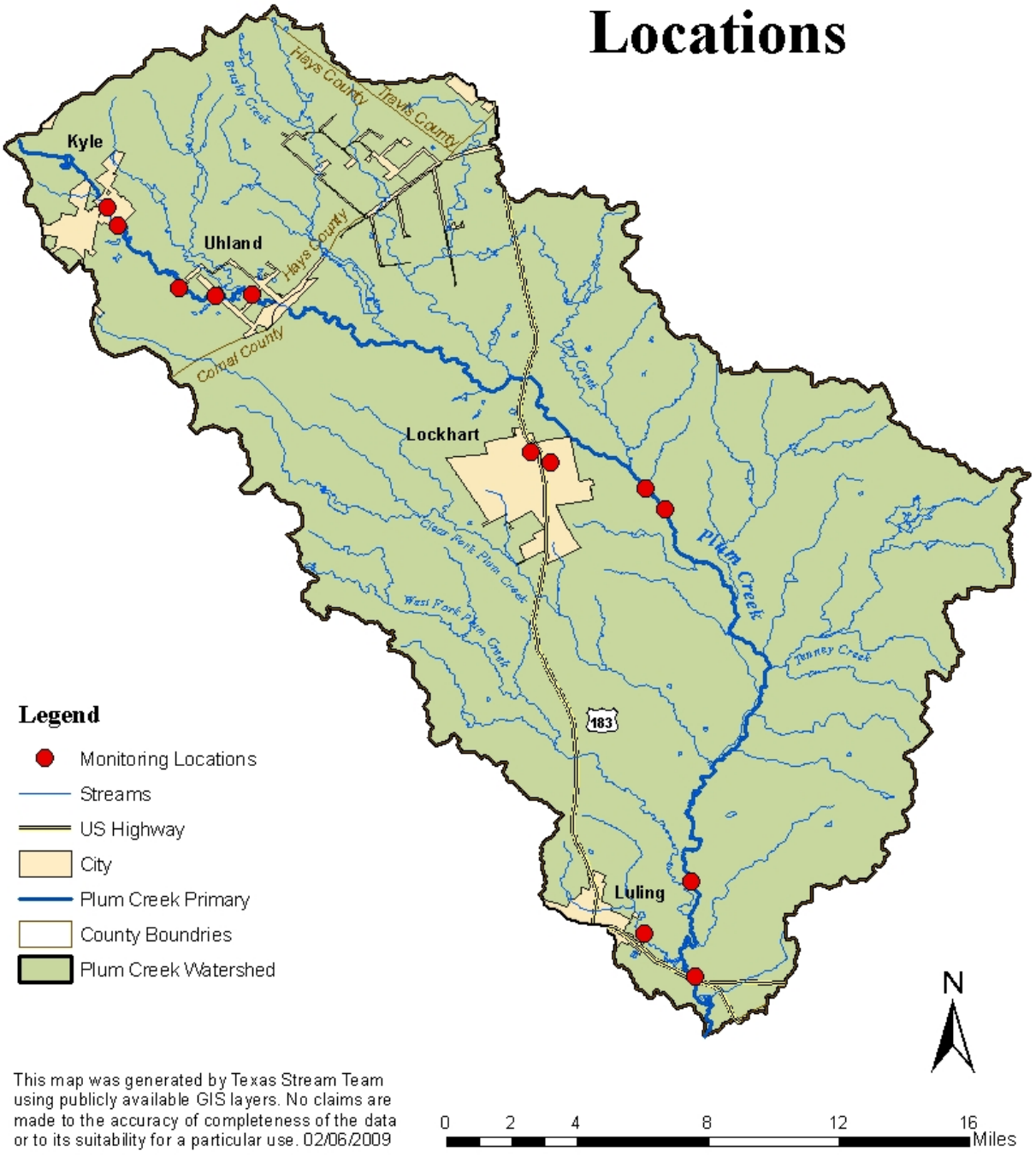


Gilleland Creek TMDL Project Area



Oso Bay/Oso Creek TMDL Project Area

Plum Creek Watershed Volunteer Monitoring Locations



This map was generated by Texas Stream Team using publicly available GIS layers. No claims are made to the accuracy of completeness of the data or to its suitability for a particular use. 02/06/2009

Plum Creek WPP Project Area

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 1:	**Project Administration**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
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:	**Project Oversight** – TXSTATE TST will provide technical and fiscal oversight of project staff and/or subgrantee(s)/subcontractor(s) to ensure Tasks and Deliverables are acceptable, and are completed as scheduled and within budget. With the TCEQ Project Manager's authorization, the TXSTATE TST may secure the services of subgrantee(s)/ subcontractor(s) as necessary for technical support, repairs, and training. Project oversight status will be provided to the TCEQ with the Quarterly Progress Reports (QPRs).					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 1.2:	**Quarterly Progress Reports (QPRs)** – The TXSTATE TST will submit QPRs to the TCEQ by the 15th of the month following each state fiscal quarter for incorporation into the Grant Reporting and Tracking System (GRTS). Progress reports will contain a level of detail sufficient to document the activities that occurred under each task during the quarter, and will contain a comprehensive tracking of deliverable status under each task. Progress reports will be distributed to all project partners.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 1.3:	**Reimbursement Forms** – The TXSTATE TST will submit Reimbursement Forms to the TCEQ by the last day of the month following each state fiscal quarter. For the last reporting period of the project, Reimbursement Forms are required on a monthly basis.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 1.4:	**Contract Communication** – The TXSTATE TST will participate in a post-award orientation meeting with TCEQ within 60 days of contract execution. TXSTATE TST will maintain regular telephone and/or email communication with the TCEQ Project Manager regarding the status and progress of the project in regard to any matters that require attention between QPRs. This will include a call or meeting each January, April, July, and October. Minutes recording the important items discussed and decisions made during each call will be attached to each QPR. Matters that must be communicated to the TCEQ Project Manager in the interim between QPRs may include: • Requests for prior approval of activities or expenditures for which the contract requires advance approval or that are not specifically included in the scope of work • Notification in advance when TXSTATE TST has scheduled public meetings or events, initiation of construction, or other major task activities under this contract • Information regarding events or circumstances that may require changes to the budget, scope of work, or schedule of deliverables. Such information must be reported within 48 hours of discovering these events or circumstances					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 1.5:	**Annual Report Article** – TXSTATE TST will provide an article for the NPS Annual Report upon request by the TCEQ. This report is produced annually in accordance with Section 319(h) of the Clean Water Act (CWA), and is used to report Texas' progress toward meeting the CWA § 319 goals and objectives, and toward implementing it's strategies as defined in the Texas Nonpoint Source Management Program. The article will include a brief summary of the project and describe the activities of the past fiscal year.					
	Start Date:	Month 1	**Completion Date:**	Month 21		

Deliverables	• QPRs • Reimbursement Forms • Post-Award Orientation Meeting Minutes • Quarterly Meeting Minutes • Annual Report Article (upon request by TCEQ)			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 2:	**Publications**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	To develop and update publications and the program web site to encourage communication with partners and volunteers, enhance partnerships with stakeholders and foster a public understanding of NPS pollution, watershed and water quality issues. The process will also help the public achieve a better understanding of land use activities and their impact on water quality. TST will update the website and enhance web-based technologies, update and produce publications as appropriate.					
Subtask 2.1:	**Website –** To encourage communication with partners and volunteers, TST will update the website and enhance web-based technologies as appropriate. TST will continue to develop and update the program's website including the program activities such as: • watershed projects information • publications • data viewer • maps • resources for monitors • calendar of events • volunteer spotlight pages and relevant links TXSTATE TST will also maintain the primary TST publications, including the TST manuals and forms, as portable document files (PDFs) on the TST web site. Additional details regarding this deliverable will be included in the communication plan.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 2.2:	**Newsletter –** TXSTATE TST will publish a newsletter three times per year from the date of contract execution. The newsletter will be distributed by utilizing updated e-mail lists. Subscriptions to the newsletter will be made available free of charge upon request. Copies of each newsletter will also be distributed to major program partners and will be made available upon request as supplies are available. The newsletter will also be made available as a PDF on the TST web site. A complete newsletter draft will be submitted to the TCEQ Project Manager for review and approval 30 days prior to publishing. Additional details will be included in the communication plan. Additional details regarding this deliverable will be included in the communication plan.					
	Start Date:	Month 1	**Completion Date:**	Month 21		

Subtask 2.3:	**Publications** – TXSTATE TST will be responsible for maintaining, revising, and making available copies of all TST publications and support materials necessary to meet the goals and activities and water quality monitoring QAPP requirements, including: • TST CWQM monitoring manual • Quality Assurance Officers (QAO) manual • Develop and update CWQM trainers manual • Update and distribute database/dataviewer training instructions • Update and distribute Communication Plan • All other program-related forms and certificates TXSTATE TST will be responsible for developing TST publications and support materials necessary to meet the goals and activities and water quality monitoring QAPP requirements, along with other publications agreed upon by the TCEQ and TXSTATE TST. Upon Request, TXSTATE TST will also distribute other publications that promote the Project Objectives. New publications will be distributed to program partners with the quarterly partner update packets.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 2.4:	**Publications Report** – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Deliverables	• Draft and Final Publications Report • Status of publications activities with QPRs • Submit a complete draft of each newsletter for review and approval • Publish, and distribute three (3) newsletters annually • Maintain TST publications, monitoring support materials, and equipment as necessary			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 3:	**Partner Coordination and Development**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	To strengthen and enhance partner network by conducting program planning and development activities, and participating in and attending partner meetings. All project planning and development, along with meeting attendance, will be coordinated in advance with the approval of the TCEQ Project Manager.					
Subtask 3.1:	**Partner Support** – TXSTATE TST will work with partners (including CRP Planning Agencies) to establish self-sufficient and sustainable partner networks that can support citizen monitoring, watershed education, and community action projects. TXSTATE TST will assist partners by promoting TST program resources and help coordinate local partner activities, focused on TST goals and objectives. Materials will be developed to facilitate co-branding as a way of increasing partner participation in all TST project areas. A minimum of one-half of total activities will be directed towards support of the specified Targeted Watershed Projects and their objectives as identified under Objective 10.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 3.2:	**Partner Meeting** – A minimum of one Statewide Partner Meeting will be held each year with the primary objective of gathering input and feedback toward TST's advancement of program objectives and improvement of volunteer and partner support efforts.					
	Start Date:	Month 1	**Completion Date:**	Month 21		

Subtask 3.3:	**Partner Development** – Through program coordination, planning, and development activities with partner entities, TXSTATE TST will investigate opportunities for recruiting additional TST partners and/or additional program support mechanisms for watershed and NPS education, outreach, and volunteer activities. TXSTATE TST will develop a contact database of volunteer categories (organized by area/region, volunteer activity type, monitoring locations, length of participation, etc) and will create GIS maps of volunteers and site locations. This information will be used to increase communication with active and monitors and contact inactive monitors to increase participation.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 3.4:	**Coordinated Monitoring Meetings** – TXSTATE TST will coordinate with the TCEQ CRP lead to present volunteer data and activities where applicable and promote citizen monitoring and TST services at CRP Steering Committee Meetings and/or Coordinated Monitoring Meetings (with a goal of five annually). In addition, the TST will promote and encourage participation of TST and other interested stakeholders and their issues of interest at Coordinated Monitoring Meetings. TXSTATE TST's intended participation at annual CRP Steering Committee meetings is communicated to the TCEQ Project Manager, the appropriate TCEQ CRP Project Manager, CRP Planning Agency and/or other applicable entities, at least two weeks prior to the meeting(s) date. Partner organizations may present volunteer water quality data in lieu of TST staff with approval from the TCEQ Project Manager.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 3.5:	**Watershed Planning Meetings** – TXSTATE TST will present volunteer data and activities at one watershed plan stakeholder meeting per targeted watershed where meetings are occurring plus one additional watershed (WPP and/or TMDL) on an annual basis. The TST will present in watersheds where both watershed planning and active citizen monitoring is occurring. In addition, the TST will promote and encourage participation of TST and other interested stakeholders and their issues of interest at watershed plan Stakeholder Group meetings. TXSTATE TST's intended participation in the stakeholder meeting will be communicated to the TCEQ Project Manager, the watershed plan project lead, the watershed plan Stakeholder Group, and/or other applicable entities, at least two weeks prior to the meeting(s) date. Partner organizations may present volunteer water quality data in lieu of TST staff with approval from the TCEQ Project Manager.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 3.6:	**Partner Meetings** – TXSTATE TST will attend Partners' program and public meetings when requested by the meeting coordinators, program partners or stakeholders, dependent upon program priorities and availability of funds.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 3.7:	**Partner Update Packets** – TXSTATE TST will distribute to active partners, all CRP Planning Agencies, the TCEQ TMDL Program and appropriate Stakeholder Groups, and other interested organizations a quarterly update packet including announcements about upcoming meetings, events, copies of new and/or revised publications, and other relevant news and information. The update packet will also provide the current Partner Activity Report forms used to document partner and volunteer activities.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 3.8:	**Water Quality Planning Division Coordination** – In support of and coordination with the state's CRP, SWQM and program partners, TXSTATE TST will investigate and identify options for utilizing volunteers to provide water quality and NPS pollution data. After identifying options for providing additional volunteer services, the TST will provide information and support for these volunteers, dependent upon program priorities and availability of funds.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 3.9:	**Enhanced Data Use** – TXSTATE TST will develop a data use guidance document that outlines potential valid data uses. TST will address TCEQ and stakeholder comments in document development			
	Start Date:	Month 1	**Completion Date:**	Month 21

Subtask 3.10:	**Partner Coordination and Development Report** – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Deliverables	• Draft and Final Partner Coordination and Development Report • Status of partner coordination and development activities with QPRs • Distribute Partner Update Packets and Activity Report • Contact database of volunteer categories (organized by area/region, volunteer activity type, monitoring locations, length of participation, etc) and GIS mapping of volunteers and site locations;Conduct statewide partner meetings (minimum one per year) • Participation in a minimum of three (3) CRP Steering Committee Meetings annually • Participation in a minimum of seven (7) Watershed Planning Stakeholder Group (TMDL or WPP) meetings annually • Produce and distribute the data use guidance document			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 4:	**Project Planning**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	To coordinate a planning and development process that maximizes the effectiveness of TST, its volunteer and partner efforts, and maintains open communication with TCEQ, USEPA, and program partners, in particular, NPS, TMDL and CRP Program partners and stakeholders.					
Subtask 4.1:	**Advisory Committee** – TXSTATE TST may maintain a TST Advisory Committee that would include representation from key individuals including TCEQ Water Quality Planning Division, USEPA Region 6, selected partners and/or volunteers, and the TXSTATE and TCEQ TST Project Managers. The responsibilities of the Committee will be to provide input toward: • Work Plan enhancement and development • Program priorities • Targeted Watershed Project development • Funding strategies • Regional and statewide organization development • Enhancement and expansion of partner relationships • Coordination of TST Programs with TCEQ and other state water quality programs The Committee will meet (or hold conference calls) on an as needed basis determined by the TCEQ and TXSTATE Project Managers.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 4.2:	**Technical Workgroup** – TXSTATE TST will maintain a Technical Workgroup to include partners or volunteers interested in providing input into technical aspects of the program. The responsibilities of the Workgroup will be targeted as technical topics, including the TST QAPP, updated certification procedures for trainers and quality assurance officers, and the protocols and training needed for adding additional water quality parameters to the QAPPs. The Technical Workgroup will meet on an as-needed basis when determined by TXSTATE and TCEQ Projects Managers. TXSTATE TST will periodically research new sampling methodologies and technologies that are of interest to TST volunteers and partners. TXSTATE TST may also purchase related supplies in order to evaluate effectiveness and applicability of new methods, and for developing operating procedures toward inclusion of additional monitoring parameters in the TST QAPP.					
	Start Date:	Month 1	**Completion Date:**	Month 21		

Subtask 4.3:	**Grant Work Plan** – TXSTATE TST staff will prepare a draft work plan that may be used as the basis for 319(h) FY13 Grant funding proposal process to fund the TST. The work plan will include tasks based on recommendations from the TST Advisory Committee (to include TXSTATE, TCEQ, USEPA, primary partners, and volunteers), and other entities involved in volunteer environmental monitoring in Texas and other States. The work plan proposal will also take into consideration factors including TST volunteer and partner resources and requirements, TCEQ state water resource management priorities, and measure of success results.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 4.4:	**Trainings and Conferences** – Contingent on available funding, TXSTATE TST staff may attend statewide and national conferences and training events that contribute to the goals and project objectives of the TST program. TXSTATE TST must obtain pre-approval in writing from the TCEQ Project Manager for staff attendance at conferences or workshops requiring overnight travel prior to any registration or travel expenditures being initiated.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 4.5:	**Special Fund** – TXSTATE TST may maintain the TST Special Fund to serve as a repository for contributions to the TST project. All contributions to the TST Special Fund will be used to support the activities of TXSTATE TST staff, volunteers, and partners. Funding sources will include TST partners and other state and private entities. Significant Special Fund activities will be summarized in the QPRs.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 4.6:	**Additional Funding Activities** – To ensure continued success of the TST program, TXSTATE TST will inform TCEQ of additional funding/grant activities that might impact this contract's activities. This would include grants or projects funded by sources other than this contract that might require participation of project staff or that might contribute to the goals and priorities identified in this contract.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 4.7:	**Project Planning Report** – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 4.8:	**Project Evaluation** – TXSTATE TST will update metrics and targets that will help quantify the success of the TXSTATE TST program.			
Deliverables	• Draft and Final Project Planning Report • Status of project planning activities with QPRs • Draft & Final FY12-14 Work Plan proposal • Project Summary for NPS Annual Report • Hold TST Advisory Committee Meeting(s) as necessary • Conduct Technical Workgroup meeting(s) as necessary • Project evaluation targets and metrics.			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 5:	**QAPP Development**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	

<table>
<tr><td>Objective:</td><td colspan="4">To support monitoring efforts, TXSTATE TST will maintain a QAPP to cover all TST environmental data operations. The QAPP will include all TST citizen monitoring parameters and sampling protocols, and will serve as the project's statewide quality assurance plan. The designated use of data collected under the QAPP will be used to support education and research, problem identification, local decision-making, and planning purposes. Any submitted data collected under the QAPP will be included on the TST Data Viewer. During this project three new parameters will be added to the current monitoring suite. TST is currently considering nitrate nitrogen, turbidity, and transparency tube.</td></tr>
<tr><td rowspan="2">Subtask 5.1:</td><td colspan="4">QAPP Planning Meeting – The TXSTATE TST will schedule QAPP planning meetings with the TCEQ Project Manager, Quality Assurance staff, technical staff, management, and contractors, to implement a systematic planning process, based on the elements of the TCEQ NPS QAPP Shell. The information developed during the planning meetings will be incorporated into a QAPP. Additional planning meetings may also be conducted to determine if any changes need to be made to an existing QAPP.</td></tr>
<tr><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 21</td></tr>
<tr><td rowspan="2">Subtask 5.2:</td><td colspan="4">Monitoring – Through the citizen monitoring network TXSTATE TST will maintain a citizen volunteer monitoring program, as outlined in the QAPP.</td></tr>
<tr><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 21</td></tr>
<tr><td rowspan="2">Subtask 5.3:</td><td colspan="4">QAPP – The GRANTEE will develop and submit to the TCEQ a QAPP with project-specific DQOs consistent with EPA Requirements for Quality Assurance Project Plans (QA/R5) format and the TCEQ NPS QAPP Shell 120 days prior to the initiation of any data collection. All of the monitoring procedures and methods prescribed in the QAPP will be consistent with the guidelines detailed in the TCEQ Surface Water Quality Monitoring Procedures, Volume 1 and 2. The GRANTEE will develop the QAPP with technical assistance from the TCEQ Project Manager, QA and technical staff, management, and contractors. The QAPP must be approved by the TCEQ.
Activities covered under this QAPP:
Data Acquisition
Map development
Data collection
Annually throughout the project period, the TXSTATE TST will provide input to TCEQ 60 days prior to the end of the effective period of the QAPP, and will develop annual QAPP revisions no less than 45 days prior to the end of the effective period of the QAPP.</td></tr>
<tr><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 21</td></tr>
<tr><td rowspan="2">Subtask 5.4:</td><td colspan="4">QAPP Amendments – Amendments to the QAPP and the reasons for the changes will be documented, and revised pages will be forwarded to all persons on the QAPP distribution list by the Contractor QAO. Amendments shall be reviewed, approved, and incorporated into a revised QAPP during the annual revision process or within 120 days of the initial approval in cases of significant changes. Using appropriate monitoring methods for citizen monitors, TXSTATE TST will develop new protocols and procedures for nitrates, turbidity, and transparency tube.</td></tr>
<tr><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 21</td></tr>
<tr><td rowspan="2">Subtask 5.5:</td><td colspan="4">Quality Control – Implement the CWQM quality control self-assessment program which was developed as an amendment to the previous grant work plan. This on-line resource will be made available to all monitors and partners to utilize as a QC component of the quality assurance program. TXSTATE TST will develop a program for the implementation of in-person QC checks and provide as protocols for network program group managers.</td></tr>
<tr><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 21</td></tr>
</table>

Deliverables	• QAPP Planning Meeting Minutes • Draft and Final QAPP • Draft and Final QAPP Annual Updates • Draft and Final QAPP Amendments • Water quality monitoring non-conformances will be reported to TCEQ Project Manager and included in QPRs • QC self-assessment implemented, and updates given in QPRs • Program implementation plan for in-person QC checks.			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 6:	**Data Management**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	All submitted data collected under the QAPP is entered into the volunteer database and is included in a newly developed and completed TST Data Viewer; data is assessed in data summary reports that inform on the status of water quality at reported monitoring sites.					
Subtask 6.1:	**Database / Dataviewer** – TXSTATE TST will manage and maintain the TST Volunteer Database which populates the TST Data Viewer within 60 days of data submission by volunteers. This is contingent upon the completion of Task 8.2. All volunteer data submitted to TXSTATE TST under the QAPP will be entered into the TST volunteer database. TXSTATE TST will audit the TST database annually in order to verify current volunteer/partner participation in TST monitoring activities. TXSTATE TST will maintain and update the database and data viewing system. This will be completed in coordination with Lower Colorado River Authority (LCRA) and TXSTATE IT resources. TXSTATE will host this resource and it will be maintained by LCRA.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 6.2:	**Data Summary Reports** – TXSTATE TST will compile and distribute by basin a series of volunteer data summary reports. The reports will use data collected under the QAPP for sites/segments/basins agreed upon by TXSTATE TST, TCEQ, volunteers and stakeholders, partners, and CRP Planning Agencies. TXSTATE TST will prioritize activities under this task to coordinate with similar efforts toward increasing public awareness and/or recruiting partners and stakeholder support in state identified priority watersheds and support of the specified Targeted Watershed Projects and their objectives as identified under Objective 10. The summaries will be provided to contribute to the development of watershed planning efforts, the regional coordinated monitoring process, and watershed education activities. The summary reports will be distributed to the respective basin CRP Planning Agencies, volunteers, and partners, as well as the appropriate CRP, SWQM, and TMDL Programs upon completion of each report. To allow adequate time for review and discussion, report results intended to be presented at any public meeting, reports must be distributed to all parties a minimum of one month prior to the meeting date.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 6.3:	**STORET Data Submittal** – TXSTATE TST will submit all data to the EPA STORET (STOrage and TRETrieval) Data Warehouse/WQX. TXSTATE TST will compile, document, and format data according to EPA requirements for submittal.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 6.4:	**Data Management Report** – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.					
	Start Date:	Month 1	**Completion Date:**	Month 21		

Deliverables	• Draft and Final Data Management Report • Status of data management activities with QPRs • Annual audit report of TST Volunteer Database verifying current volunteer/Partner participation in TST monitoring activities • A minimum of six (6) Data Summary Reports submitted to appropriate Partners, volunteers, CRP Basin Planning Agencies, TMDL Stakeholder Groups, and TCEQ CRP, TMDL, and SWQM Program annually • Maintain and update database and data viewing system • STORET data submittals			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 7:	**Statewide Citizen Environmental Monitoring Support and Activities**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	TXSTATE TST will work with existing and new partners on a statewide level to identify opportunities to engage volunteers with applied partner network water quality monitoring and watershed/NPS education projects. TST will provide the necessary volunteer training and certification through direct training or through network-based group members who are trained with the TST Trainer and Quality Assurance Officer (QAO) certification activities.					
Subtask 7.1:	**Monitoring Trainings** – TST supported water quality monitoring training will cover core parameters (dissolved oxygen, pH, conductivity, Secchi disk, transparency tube, field observations, field comments) and the NPS pollution suite (E.coli, nitrates, orthophosphates, flow, turbidity) parameters and methods addressed in the TCEQ approved TST QAPP. Trainings will emphasize watershed awareness through discussion and demonstration of the relationship between monitoring tests and field observations to corresponding NPS pollution issues. TXSTATE TST and TST certified trainers may conduct trainings anywhere in Texas with the specific locations of these training sessions reviewed by the TCEQ Project Manager. Although fewer numbers of potential volunteers will be trained, TXSTATE TST staff and partners will focus efforts on the implementation of follow up and additional recruitment/retainment activities for new monitor and volunteer trainees. This model has been shown to be more successful at retaining monitors than training large numbers of potential monitors without follow up or subsequent support. TXSTATE TST and TCEQ will ensure that training activities are not counted toward any other grant or ms4 or permit requirements deliverables. Core Training: TXSTATE TST will prioritize activities under this task to coordinate with similar TCEQ efforts toward increasing public awareness and/or recruiting partners and stakeholder support in TCEQ identified priority watersheds. Based on available resources, TXSTATE TST will also continue to assist groups and individuals who have no or minimal partner support. TXSTATE TST and TST certified trainers will schedule and conduct at least six (6) certification or technical trainings per year, (at least 3 conducted by TXSTATE TST Staff and up to 3 conducted by certified trainers). A minimum of two trainings will be directed towards support of Targeted Watersheds. NPS Suite: TXSTATE TST will prioritize activities under this task to coordinate with similar TCEQ efforts toward increasing public awareness and/or recruiting partners and stakeholder support in TCEQ identified priority watersheds. Based on available resources, TXSTATE TST will also continue to assist groups and individuals who have no or minimal partner support. TXSTATE TST and TST certified trainers will schedule and conduct at least three (3) certification or technical trainings per year (at least 2 conducted in priority watersheds).					
	Start Date:	Month 1	**Completion Date:**	Month 21		

Subtask 7.2:	**Monitors Support** – Based on available resources TXSTATE TST will provide ongoing support to active citizen monitors in an effort to decrease attrition and increase volunteer data submittal. This would include monitoring group development activities such as identifying funding sources for equipment, coordinating with trainers and trainers-in-training, pro-actively supporting citizen monitors as deemed feasible, and conducting volunteer recognition events and activities. TXSTATE TST will provide priority support to individuals and partners who support the TST project objectives including submission of data.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 7.3:	**Monitoring Supplies** – TXSTATE TST will maintain a stock of volunteer water quality monitoring kits for use by TST staff for special monitoring events, trainings, and quality control sessions. TXSTATE TST will maintain a reasonable supply of kits and replacement reagents to equip volunteers who do not currently have partner support or where partner funding is unavailable.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 7.4:	**Monitoring Trainers Training** – TXSTATE TST and TST certified trainers will develop and implement a CWQM Trainers-in-Training program to service CORE and NPS advanced suite parameters. A minimum of four (4) newly certified trainers annually.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 7.5:	**Statewide Citizen Environmental Monitoring Support and Activities Report** – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Deliverables	• Draft and Final Statewide Citizen Environmental Monitoring Support and Activities Report • Status of volunteer environmental monitoring support and activities with QPRs • Conduct or coordinate a minimum per year of six (6) Water Quality Training with a minimum of two (2) events supporting Objective 10 Targeted Watershed Projects • Conduct or coordinate a minimum of three (3) NPS Suite Water Quality Training events supporting Objective 10 Targeted Watershed Projects • Conduct or coordinate a minimum of 4 (four) new Trainers-In-Training events annually			
	Start Date:	Month 1	**Completion Date:**	Month 21

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 8 :	**Statewide Education Activities and Support**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	TXSTATE TST will continue to support teachers, schools, and partner organizations to increase awareness and disseminate information about watersheds and NPS pollution issues. TXSTATE TST will prioritize activities under this task to coordinate with similar TCEQ efforts toward increasing public awareness and/or recruiting partners and stakeholder support in TCEQ identified priority watersheds as well as Aquarena Center. These projects will be reviewed and approved by the TCEQ Project Manager (and other appropriate TCEQ staff as necessary). Emphasis will be placed on training educators to perform outreach functions and less emphasis will be placed on performing direct outreach functions outside targeted watershed areas.					

Subtask 8.1:	**Water Quality Presentations** – TXSTATE TST will respond to requests for presentations to groups by providing a program on NPS, water quality, and watershed issues and topics. Specific topics and style of presentation may vary depending on the age and interest of the audience. Efforts should be targeted for school audiences of a minimum of 12 persons. • TXSTATE TST will prioritize activities under this task to coordinate with similar TCEQ efforts toward increasing public awareness and/or recruiting partners and stakeholder support in TCEQ identified priority watersheds. A minimum of three (3) total activities will be directed towards support of the specified Targeted Watershed Projects and their objectives as identified under Objective 10 annually. • A minimum of six (6) total statewide presentations will be conducted annually.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 8.2:	**Teacher Workshops** – TXSTATE TST will conduct four (4) Teacher Workshops in order to promote and disseminate curriculum and other teacher resources through Teacher Education/Recruitment Sessions, Teacher In-Service Workshops, Teacher/Student Workshops at Aquarena Center, and Teaching Environmental Sciences (TES) Courses. Each workshop will be up to one-day in length and will consist of a review of available teacher resources and an explanation of how they are used in the classroom. Teacher Certification in the TST Water Quality Monitoring Program may also apply as a Teacher Workshop. • TMDL and WPP areas will be targeted as workshop locations and a tracking system will be established to determine the level of use by teachers and to remain in contact with teachers to provide follow-up support.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 8.3:	**TEEAC Certification** – TXSTATE TST will maintain certification through the Texas Education Agency's Texas Environmental Education Advisory Committee (TEEAC), the State Board of Education (SBEC), or Continuing Professional Education (CPE), which will provide teachers the option of receiving certification credit of nine (9) hours for completion of TST certification training. These projects will be reviewed and approved by the TCEQ Project Manager (and other appropriate TCEQ staff as necessary).			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 8.4	**Education Trainers Training** – TXSTATE TST will develop and implement a formal training program for educators implement NPS watershed model demonstrations. TST will facilitate NPS watershed models for short and long-term check out. An emphasis will be placed on targeted watershed areas.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 8.5:	**Statewide Education Activities Support Report** – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Deliverables	• Draft and Final Statewide Volunteer Environmental Monitoring Support and Activities Report • Status of volunteer environmental monitoring support and activities with QPRs • Annually conduct a minimum of six (6)Water Quality Presentations with a minimum of three (3) total events supporting Objective 10 Targeted Watershed Projects • Support four (4) Teacher Workshops annually			
	Start Date:	Month 1	**Completion Date:**	Month 24

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 9:	**Statewide Citizen Monitoring and NPS Education Events**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	

Objective:	To support and enhance program partners and stakeholders by recognizing ongoing efforts and volunteer service, supplementing education and coordination efforts, and targeting other priority information and coordination gaps identified by the TCEQ's Federal Clean Water Act 319(h) NPS Program.			
Subtask 9.1:	**Regional Stakeholder Outreach Meetings** – TXSTATE TST will coordinate three regional citizen monitoring/stakeholder training and outreach forums. These events will directly support citizen monitors, partners, and TMDL and WPP collaborators and will enhance attendees' water quality knowledge and ability to better understand watershed functions. Topics for the meeting will include priority issues for the TCEQ TMDL and WPP areas. Networking and other open sessions will generate discussion between TMDL and WPP projects and could potentially focus on project successes and barriers to success. TXSTATE TST will organize a volunteer recognition component in order to highlight the dedicated efforts of citizen monitors and partners. The recommended conference locations and dates will be submitted to the TCEQ Project Manager for final approval prior to publicizing the conference. Workshop dates will be posted on the TXSTATE TST Web site. Workshop announcements will be sent to all current monitors and project partners, as well as identify potential participants located within a minimum 30-mile radius of meeting locations.			
	Start Date:	Month 1	**Completion Date:**	Month 21
Subtask 9.2:	**Statewide Citizen Monitoring and NPS Education Events Report –** TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.			
	Start Date:	Month 1	**Completion Date:**	Month 21

Deliverables	• Draft and Final Regional Citizen Monitoring and NPS Education Events Report
	• Status of volunteer environmental monitoring and NPS education events with QPRs
	• Conduct three (3) regional citizen monitoring/stakeholder outreach forums
	• Measure of success results
	• Location and dates of regional meetings submitted for review and approval - minimum eight (8) weeks prior to proposed meeting date
	• Notice of workshops - minimum six (6) weeks prior to agreed meeting date
	  o Mailed notices to potential participants
	  o Notice posted on TST website			

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 10:	**Targeted Watershed Monitoring and Outreach Projects**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	To support and enhance watershed-based planning efforts toward increasing public education and awareness, recruiting partners and stakeholders, and providing volunteer data where data needs have been identified. Projects will be associated with identified TCEQ and TSSWCB NPS and TMDL projects in impaired watersheds, focusing on participation in the development and implementation of watershed based plans. TXSTATE TST's participation in these projects will expand the public's understanding of how human activity impacts water quality in order to influence individuals to adopt activities and behaviors that contribute to the improvement of water quality and prevention of NPS pollution.					

<table>
<tr><td>Subtask 10.1:</td><td colspan="4">Watershed Services – TXSTATE TST's general plan for targeted watersheds is to provide a wide array of watershed services and to coordinate with watershed planners, appropriate NPS and TMDL Project Managers and key groups to determine what services are most appropriate for the given area. Watershed services available to the targeted areas specified in this Task are listed in subtasks below, along with deliverables already specified under Objectives 7, 8 and 9. Services may also include other activities identified as priorities by State TCEQ and TSSWCB NPS and TMDL staff. This will include participation at pre-determined WPP, TMDL and TMDL I-Plan meetings to support public education/outreach and citizen monitoring components of the watershed based plans.

TXSTATE TST, in consultation with the TCEQ, will target watersheds included on the Texas Priority Watersheds Report based on current local needs. These watersheds may include, but are not limited the following: Gilleland Creek, Plum Creek, Arroyo Colorado, Oso Bay and Oso Creek, and upper Cibolo CreekTXSTATE TST will also submit comprehensive summaries of activities related to the Targeted Watershed Project and any other significant activities in impaired watersheds to the TCEQ and TSSWCB NPS, CRP, SWQM, and TMDL Project Managers and appropriate Targeted Watershed Project Stakeholder Groups on a quarterly basis.

Description of Targeted Watershed Activities:

The unique nature of each TMDL or WPP project requires specific actions and timelines to address and solve water quality impairments. TST provides a suite of watershed services for TMDL and WPP project managers and stakeholders. The following list of services will be offered for utilization within targeted watershed projects. These services include:

• assistance in developing monitoring plans:
• watershed tours
• assistance in conducting watershed surveys
• intensive monitoring surveys
• biological monitoring demonstrations
• GIS and map-based visual aides
• water quality communications
• grant and project development facilitation
• participation in special events
• river and lake clean up projects
• storm drain stenciling
• land use surveys
• other smaller-scale community action projects and/or watershed activities proposed by TCEQ, partners, and/or volunteers
•
• programmatic support, including technology resources, website development, dissemination of information, and facilitating partner networks
Activities that occur in each project area will be planned in coordination with project managers and stakeholders.</td></tr>
<tr><td></td><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 21</td></tr>
<tr><td>Subtask 10.2:</td><td colspan="4">Targeted Watershed Monitoring and Outreach Projects Report – TXSTATE TST will submit a final report detailing activities conducted under this Objective during the project period. The TST will address TCEQ comments and must receive TCEQ final approval of the report.</td></tr>
<tr><td></td><td>Start Date:</td><td>Month 1</td><td>Completion Date:</td><td>Month 24</td></tr>
<tr><td>Deliverables</td><td colspan="4">• Draft and Final Targeted Watershed Monitoring and Outreach Projects Report
• Status of targeted watershed monitoring and outreach projects activities with QPRs
• Produce annual Targeted Watershed Projects summary with measure of success results
• Comprehensive summary of Targeted Watershed Projects activities submitted to TCEQ and Targeted Watershed Projects Stakeholder Groups – on QPR schedule and in QPRs</td></tr>
</table>

Tasks, Objectives and Schedules (Replicate or modify table as needed)						
Task 11:	**Final Report**					
Costs:	**Federal:**		**Non-Federal:**		**Total:**	
Objective:	To provide the TCEQ and the EPA with a comprehensive report on the activities and success of the project conducted by the TXSTATE TST during the course of this project. The TXSTATE TST will also conduct an assessment of the data for this report.					
Subtask 11.1:	**Draft Report –** The GRANTEE will provide a draft report summarizing all project activities, findings, and the contents of all previous deliverables, referencing and/or attaching them as web links or appendices. This comprehensive, technical report will provide analysis of all activities and deliverables under this scope of work. The report will include the following information: • Title • Table of Contents • Executive Summary • Introduction • Project Significance and Background • Methods • Results and Observations • Discussion • Summary • References • Appendices					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Subtask 11.2:	**Final Report** – To revise the Draft Report to address comments provided by the TCEQ Project Manager. The final report will be submitted to the TCEQ Project Manager and subsequently to EPA.					
	Start Date:	Month 1	**Completion Date:**	Month 21		
Deliverables	• Draft • Final Report					
	Start Date:	Month 1	**Completion Date:**	Month 21		

31. Project Goals (Expand from NPS Summary Page)
To assist water resource managers in maintaining and improving water quality through trained citizen monitor data collection; data action that reduces pollution loading; and improved NPS pollution awareness through education and stakeholder engagement; To support volunteer monitoring and NPS education statewide; To provide focused watershed services for targeted TMDL and WPP watersheds that deliver volunteer water quality data, NPS pollution education, and other stakeholder outreach services tailored to satisfy the needs associated with the watershed planning process and achieving the goals of the completed plans through implementation.

32. Measures of Success (Expand from NPS Summary Page)
TST coordination and engagement of project partners, volunteers and stakeholders, will result in improved water quality and more knowledgeable stakeholders through the implementation of the programs efforts focused on citizen monitoring, NPS and watershed

outreach, targeted stakeholder engagement, and data communications.

The TST program is measured through successful implementation of scope of work and measured delivery of survey tools. Successful completion of the following main objectives will occur on time with high quality in accordance with the scope of work: 1) project administration requirements including reports; 2) effective publications are utilized; 3) partnerships will be maintained and expanded; 4) project planning is well thought out and implemented; 5) the QAPP is kept up to date; 6) data management maintains accurate entries; data viewer is developed and used; 7) citizen monitors collect useful data that is used to identify pollution sources; 8) NPS and watershed education results in more heightened awareness, positive changes in attitudes, and beneficial behavior modifications to reduce NPS pollution; 9) statewide and/or regional volunteer monitoring and NPS education events will occur; 10) activities targeting specific watersheds will bring capacity to TMDL and WPP projects and aide in project implementation; and 11) the final report will accurately display TST program activities for this project.

Participants and partners will complete surveys to measure the effectiveness of applicable activities and events. TST aims to that achieve eighty percent of respondents survey results will demonstrate participants gained knowledge of NPS pollution, ways to reduce NPS pollution, and will share their knowledge with others in their community. The surveys will be one to three pages long. In some cases, paper surveys are not practical. Program staff may engage participants in verbal or email conversations to better understand perspectives and ways to improve services. Regardless of the delivery method, this program will adapt to improve service delivery where pertinent.

Measures of Success will be accomplished through Subtask 4.8 through the use of metrics and targets to quantify success of the TXSTATE TST program.

33. 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 water.

LTG Objectives

- 1 – Focus NPS …available resources in watersheds identified as impacted by NPS pollution in the latest state approved *Texas Water Quality Inventory and 303(d) List.*
- 2 – Support the implementation of state, regional and local programs to prevent NPS pollution through assessment… and education.
- 3 – Support the implementation of state, regional, and local programs to reduce NPS pollution, such as the implementation of strategies defined in state-approved TMDL Implementation Plans and Watershed Protection Plans.
- 5 – Develop partnerships, relationships… to facilitate collective, cooperative approaches to manage NPS pollution.
- 6 – Increase overall public awareness of NPS issues and prevention activities.
- 7 – Enhance public participation and outreach by providing forums for citizens and industry to contribute their ideas and concerns about the water quality management process.

Short-term Goals

Goal One – Data Collection and Assessment: Coordinate with appropriate federal, state, regional and local entities, private sector groups, and citizen groups and target CWA §319(h) grant funds toward water quality assessment activities in high priority, NPS-impacted watersheds…

- Objective A – Identify surface waterbodies… from the Texas Water Quality inventory and 303(d) List… that need additional information to characterize non-attainment of designated uses and quality standards. This information is used during annual coordinated monitoring meetings and during special project planning to focus on high priority waters.
- Objective B – Ensure that monitoring procedures meet quality assurance requirements and are in compliance with EPA-approved TCEQ and/or TSSWCB Quality Management Plans.
- Objective C – Conduct special studies to determine sources of NPS pollution and gain information to target TMDL and BMP implementation activities.
- Objective E – Conduct monitoring to determine effectiveness of TMDL Implementation Plans, Watershed Protection Plans, and BMP implementation as appropriate.

Goal Two – Implementation: Coordinate and administer the NPS program to support the implementation of TMDL Implementation Plans and/or Watershed Protection Plans and other state, regional, and local plans/programs to reduce NPS pollution.

- Objective A – Work with regional and local entities to determine priority areas and develop and implement strategies to address NPS pollution in those areas.
- Objective D – Implement state-approved TMDL Implementation Plans and Watershed Protection Plans developed to restore and maintain water quality in water bodies identified as impacted by nonpoint source pollution.

Goal Three – Education: Conduct education… activities to help increase awareness of NPS pollution and prevent activities contributing to the degradation of water bodies… by NPS pollution.

- Objective A – Enhance existing outreach programs at the state, regional, and local levels to maximize the effectiveness of NPS education.
- Objective B – Administer programs to educate citizens about water quality and their potential role in causing NPS pollution.
- Objective D – Conduct outreach through CRP, Extension, SWCDs and others to facilitate broader participation and partnerships [that] 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.
- Objective F – Implement public outreach and education to maintain and restore water quality in waterbodies impacted by NPS Pollution.

Element Two – Working partnerships and linkages with appropriate state, … regional, and local entities, private sector groups and Federal agencies.

Element Three – Balanced approach that emphasizes both state-wide NPS programs and on-the-ground management of individual watersheds.

Element Five – The state program identifies waters and their watersheds impaired by NPS pollution and identifies important unimpaired waters that are threatened or otherwise at risk. Further, the state establishes a process to progressively address these identified waters by conducting more detailed watershed assessments and developing watershed implementation plans, and then by implementing the plans.

Element Eight - The state manages and implements its nonpoint source program efficiently and effectively, including necessary financial management.
Milestone F – Implement voluntary and regulatory actions in the watershed and adust the BMP implementation based on follow-up verification monitoring of effectiveness.

Part III – Financial Information

35. Budget Summary			
Federal		**% of total project**	
Non-Federal		**% of total project (at least 40%)**	
Total		**Total**	

Category	**Federal**	**Non-Federal**	**Total**
a. Personnel			
b. Fringe Benefits			
c. Travel			
d. Supplies			
e. Equipment			
f. Contractual			
g. Construction			
h. Other			
i. Total Direct Costs (sum a-h)			
j. Indirect Costs (48.75%)			
k. Total Grantee Costs (sum I & j)			
l. Other In-kind / Third Party			
m. Total Project Costs (sum k & l)			

36. Budget Justification Federal Portion		
Category	**Total Amount**	**Justification**

Personnel

For staff to implement project components (Tasks 1 through 11), achieve overall project goals and objectives, and expand capacity through partnerships and collaboration;

Title	Annual %	Annual Salary
TST Program Director		
Administrative Coordinator		
Grant Specialist		
Grant Specialist		
Grant Specialist		
Grant Specialist		
RSI Asst. Program Director		

Fringe Benefits

Fringe rate of 29% for staff benefits such as health care and insurance;

Travel

The travel budget has been slightly reduced from the previous project period. Funds to support travels costs for Tasks 1 through 11 to include mileage, rental reimbursements, majority of travel allocated to implement Tasks 7, 8, 9, and 10 (monitoring, outreach, annual events, targeted watersheds).

TXSTATE TST follows State reimbursement standards.

Purpose	Tasks	# Trips	Estimated Costs
Partner Coord/Development	Task 3	10	
Project Planning, Project Management, Publications	Task 1,2,4	6	
QA/Project Plan Development	Task 5	4	
Data Management	Task 6	5	
Volunteer Environmental Monitoring	Task 7	36	
Education Activities & Support	Task 8	12	
Volunteer Monitoring & NPS Education	Task 9	6	
Targeted Watershed Monitoring	Task 10	20	
Targeted Outreach Support	Task 10	15	

Equipment

NA

Supplies

To support office and monitoring equipment needs associate with implementing Tasks 1 through 11

Description of Supply	Cost
Monitoring equipment and supplies	
Office supplies	
Regional workshops	
Watershed services	
Total Supply Costs	

Contractual

Dataviewer and database updates and maintenance

Construction

NA

Other		<table><tr><th>Cost Item</th><th>Cost *</th></tr><tr><td>Telephone</td><td></td></tr><tr><td>Postage</td><td></td></tr><tr><td>Printing/Duplicating</td><td></td></tr><tr><td>Security service</td><td></td></tr><tr><td>Regional meeting and watershed services expenses</td><td></td></tr></table>
Indirect		(Negotiated) Indirect calculation of 18.75%

Budget Justification for Match Portion		
Category	**Total Amount**	**Justification**
Other in-kind		Citizen monitor documented time sampling and mileage rate on signed data sheets; partner and affiliate time as received in quarterly partner activity reports. Volunteer dollar per hour value calculation source: http://www.independentsector.org/volunteer_time
Indirect Costs		The match through indirect costs is obtained and documented through the calculated difference between TXSTATE standard indirect rate of 48.75% and the negotiated rate of 18.75%.