TEXAS STATE Soil & Water CONSERVATION BOARD

Texas State Soil and Water Conservation Board
Clean Water Act §319(h) Nonpoint Source Grant Program
FY 2022 Workplan 22-03

SUMMARY PAGE			
Title of Project	Medina River Below Medina Diversion Lake Watershed Protection Plan Development		
Project Goals	• Develop a local watershed committee to solicit input and encourage participation of local stakeholders • Complete assessment of pollutants by reviewing existing water quality data, conducting an inventory of point and non-point sources, land use data and known stressors influencing water quality • Develop a watershed protection plan, establishing goals and objectives, load allocations, strategies and timetables for implementation.		
Project Tasks	(1) Project Administration; (2) Quality Assurance; (3) Watershed Stakeholder Coordination; (4) Watershed Protection Plan Development		
Measures of Success	• Number of public stakeholder and workgroup meetings, number of meeting attendees • Compilation and analysis of existing data completed • Defined level of needed load reductions to achieve applicable water quality standards • Stakeholder approval and EPA acceptance of the developed WPP		
Project Type	Implementation ( ); Education ( ); Planning (X); Assessment ( ); Groundwater ( )		
Status of Waterbody on *2020 Texas Integrated Report*	Segment ID 1903_03 1903_04 1903_05 1912_01 1912A_01	Parameter of Impairment or Concern Bacteria in water (recreation use), Nitrate in water Nitrate in water Bacteria in water (recreation use), Nitrate in water, Total Phosphorus in water Nitrate in water, Total Phosphorus in water	Category 5c, CS CS CS 5c, CS CS
Project Location (Statewide or Watershed and County)	Bexar and Medina counties		
Key Project Activities	Hire Staff ( ); Surface Water Quality Monitoring ( ); Technical Assistance ( ); Education (X); Implementation ( ); BMP Effectiveness Monitoring ( ); Demonstration ( ); Planning (X); Modeling ( ); Bacterial Source Tracking ( ); Other ( )		
2017 Texas NPS Management Program Reference	• Component 1: LTG Objectives 1, 2, 6, 7, 8 STG 1 Objectives C and D; STG 3 Objectives B, D, and G • Component 2 • Component 3 • Component 4 • Component 5		
Project Costs	Federal $322,428	Non-Federal $214,952	Total $537,380
Project Management	• Texas A&M AgriLife Research, Texas Water Resources Institute		
Project Period	November 1, 2022 – October 31, 2025		

Part I – Applicant Information

Applicant							
Project Lead	Dr. Lucas Gregory						
Title	Associate Director						
Organization	Texas A&M AgriLife Research, Texas Water Resources Institute						
E-mail Address	LFGregory@ag.tamu.edu						
Street Address	1001 Holleman Dr. E, 2118 TAMU						
City	College Station	County	Brazos	State	TX	Zip Code	77840-2118
Telephone Number	979-314-2613			Fax Number	979-845-8554		

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 and TCEQ.
Texas A&M AgriLife Research, Texas Water Resources Institute	Provide project administration, coordination, quality assurance, water quality modeling, stakeholder facilitation, and WPP development.
San Antonio River Authority (SARA)	Provide assistance for stakeholder relations and support the development of task final reports and development of WPP.

Part II – Project Information

Project Type							
Surface Water	X	Groundwater					
Does the project implement recommendations made in: (a) a completed WPP; (b) an adopted TMDL; (c) an approved I-Plan; (d) a Comprehensive Conservation and Management Plan developed under CWA §320; (e) the *Texas Coastal NPS Pollution Control Program*; or (f) the *Texas Groundwater Protection Strategy*?				Yes		No	X
If yes, identify the document.	N/A						
If yes, identify the agency/group that developed and/or approved the document.	N/A			Year Developed	N/A		

Watershed Information				
Watershed or Aquifer Name(s)	Hydrologic Unit Code (12 Digit)	Segment ID	Category on 2020 IR	Size (Acres)
Medina River Below Medina Diversion Dam Lake	*121003020304-121003020305 121003020501-121003020508*	1903_03, 04, 05 1912_01 1912A_01	5c	347,155.2 acres

Water Quality Impairment

Describe all known causes (i.e., pollutants of concern) and sources (e.g., agricultural, silvicultural) of water quality impairments or concerns from any of the following sources: *2020 Texas Integrated Report*, Clean Rivers Program Basin Summary/Highlights Reports, or other documented sources.

Impairments

SegID 1903: Medina River Below Medina Diversion Lake: From the confluence with the San Antonio River in Bexar County to Medina Diversion Dam in Medina County

Parameter	Category	Year
Bacteria in water (recreation use)	5c	2010

1903_03: From the confluence with Lower Leon Creek upstream to the confluence with Medio Creek

SegID 1912: Medio Creek: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream of IH 35 in San Antonio in Bexar County

Parameter	Category	Year
Bacteria in water (recreation use)	5c	2018

1912_01: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream of IH 35 in San Antonio in Bexar County

Concerns

SegID 1903: Medina River Below Medina Diversion Lake: From the confluence with the San Antonio River in Bexar County to Medina Diversion Dam in Medina County

Parameter	Level of Concern
Nitrate in water	CS

1903_03: From the confluence with Lower Leon Creek upstream to the confluence with Medio Creek

1903_04: From the confluence with Medio Creek upstream to the confluence with Polecat Creek approximately 125 m upstream of FM 1604

SegID 1912: Medio Creek: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream of IH 35 in San Antonio in Bexar County

Parameter	Level of Concern
Nitrate in water	CS

1912_01: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream of IH 35 in San Antonio in Bexar County

Parameter	Level of Concern
Total Phosphorus in water	CS

1912_01: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream in IH 35 in San Antonio in Bexar County

SegID 1912A: Upper Medio Creek: From approximately 1.0 km (0.6 mi) upstream of IH 35 at San Antonio (Bexar County) to approximately 1.0 mi upstream of the Bexar/Medina County Line

Parameter	Level of Concern
Nitrate in water	CS

1912A_01: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream of IH 35 in San Antonio in Bexar County

Parameter	Level of Concern
Total Phosphorus in water	CS

1912A_01: From the confluence with the Medina River in Bexar County to a point 1.0 km (0.6 mi) upstream in IH 35 in San Antonio in Bexar County

Project Narrative

Problem/Need Statement

The 2020 303(d) List identified the Medina River below Medina Diversion Lake (Segment 1903) and Medio Creek (Segment 1912) as exceeding the contact recreation criterion for *E. coli* bacteria. The Medina River and Medina Lake have tremendous recreational value to local residents. They are used for swimming, fishing, kayaking and more throughout the year, and water from the Medina Diversion Lake is used for irrigation within the watershed and as potable water for the San Antonio Water System (SAWS). The Medina River contains multiple sensitive recharge features and contributes significant volumes of recharge to the Edwards Aquifer. Increasing development pressure expanding outward from the San Antonio metropolitan area is adding further environmental stress to the system by increasing landscape disturbance, the amount of impervious cover, and the amount of potential pollutant loading in the watershed. Each of these increases will undoubtedly affect the overall quality, health and function of the Medina River.

In 2015, the San Antonio River Authority (SARA) conducted a Medina River Holistic Watershed Master Plan on the entire watershed. The project focused on addressing common water quality, flood control, and ecosystem problems by identifying structural flood retention solutions, identifying potential parks and open spaces, and watershed and water quality best management practices (BMPs), low impact development (LID) concepts and conservation easements. Major issues identified in the plan include illegal dumping, flooding and erosion. This plan outlines implementation of BMPs and LID to protect areas where development and land use change is occurring rapidly. Issues identified in the master plan include water quality issues consistent with the 2020 Integrated Report and showed through monitoring that chloride and sulfate levels have been increasing, while dissolved oxygen levels have been decreasing.

In 2021, TWRI worked with TCEQ TMDL team to create a data summary report of the Medina River Watershed below Medina Lake. The report summarizes previous research in the watershed, analyzes historic water quality data, and identifies potential sources of pollution. The project also includes meetings with targeted stakeholders to discuss the next steps in the watershed and overall goals of stakeholders. Initial feedback from stakeholders during the data summary process indicate a preference for developing a WPP in the watershed instead of a TMDL.

The published master plan and data summary report serve as a great start in protecting the Medina River but do not fully address water quality challenges faced in the watershed. A WPP is needed to incorporate water quality management into this vision and establish the linkages between pollutant loads and instream water quality. Likewise, management recommendations must be related to expected water quality improvements. Together, the Medina River WPP and Holistic Watershed Master Plan will outline a clear path for improving water quality and enhancing the resilience of the Medina River ecosystem. Initial meetings during the data summary report project with stakeholders will help ensure participation from the community and support for the development of the WPP.

Project Narrative

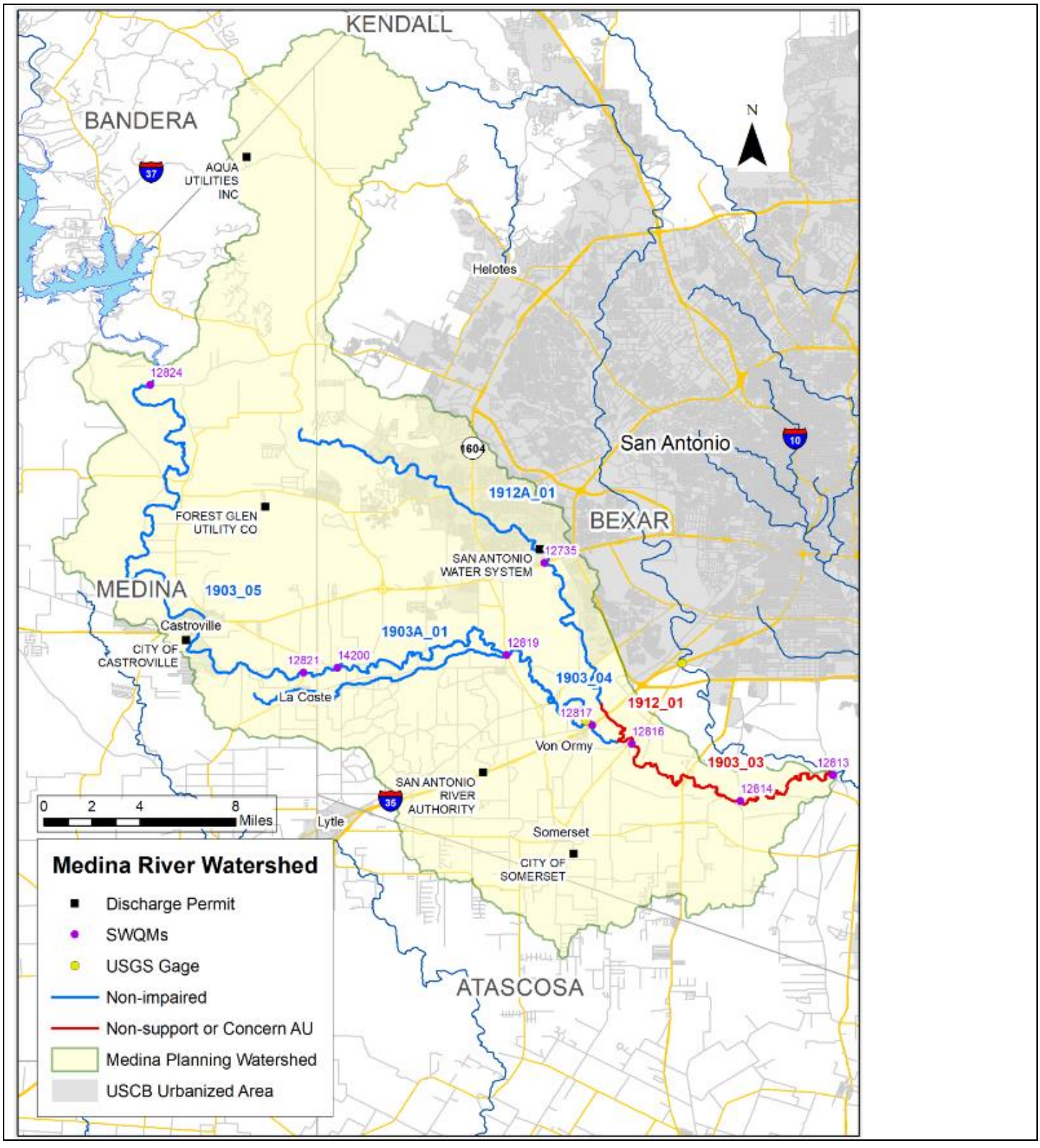
General Project Description (Include Project Location Map)

This project will result in the production of a stakeholder driven WPP developed with buy-in from local stakeholders and governmental entities. Stakeholder interest to develop a WPP to aid in protecting and preserving the river and its water quality has gained momentum in recent years. Groups engaged in discussions about local issues that affect water quality, instream habitat, and the need to mitigate future adverse effects include the Bexar Regional Watershed Management partnership, the Bandera County River Authority and Groundwater District, the San Antonio SALSA squad, Friends of the Medina River, local groundwater districts, and Bandera, Bexar, and Medina counties among others. We will work with local watershed stakeholders to establish water quality goals and targets for the watershed through the development of a watershed protection plan (WPP). In addition, the plan will work to address other water quality concerns present in the Medina River, specifically, sediment, nitrate, and total phosphorus levels.

Initially, efforts will be made to form a well-rounded stakeholder group that appropriately represents these and other interests in the watershed. This stakeholder group will be informed of local water quality impairments, potential causes and sources of pollution and needed levels of pollutant reduction to restore instream water quality. Educational resources will be delivered in the watershed to raise awareness of water quality issues. TWRI will work with SARA to guide the formed stakeholder group through the process to develop and deliver a WPP for the Medina River that address EPA's nine key elements for successful watershed-based plans. Stakeholders will play an integral role in WPP development process by providing local insight into issues affecting water quality, identifying critical sources of pollution in the watershed, identifying palatable management measures to include in the WPP and setting implementation and water quality goals and milestones. Ultimately, the WPP will include a comprehensive watershed approach which focuses efforts on the most significant pollution sources contributing to water quality impairments, but at the same time will look ahead at potential pollution sources from future growth and activity in the watershed.

TWRI will use the Medina River Holistic Watershed Master Plan, developed in 2015 by SARA, and the data summary report, developed in 2021 by TWRI, as a basis for providing relevant background, watershed conditions, water quality trends, identified issues, and stakeholder feedback to include in the WPP. Information in these documents will be synthesized and summarized for presentation to the WPP stakeholder group to allow them to make informed decisions regarding WPP development. Recommendations from the master plan that intersect with watershed planning include: (a) develop and maintain partnerships for watershed management and implementation; (b) encourage the use of ordinances and other programs to assure implementation of BMPs; (c) encourage nutrient removal at WWTPs; (d) encourage BMPs on agricultural lands; (e) pursue protection of rural land uses and riparian buffers; (f) reduce illegal dumping; and (g) develop park facilities. These recommendations will serve as a starting point for management measure discussions.

Following plan development, TWRI will work with watershed stakeholders and local professionals to develop conceptual WPP implementation project content. These documents will serve as a catalyst for future plan implementation and further funding acquisition to support continued WPP implementation locally. Local support to facilitate implementation will initially be provided by TWRI but will be transitioned to a local partner once implementation efforts are underway. Additionally, the existence of, and efforts by SARA to implement their Medina River Holistic Watershed Master Plan provides complimentary long-term support for continued implementation of items likely to be included in the Medina River WPP.


KENDALL
BANDERA
AQUA UTILITIES INC
Helotes
San Antonio
BEXAR
FOREST GLEN UTILITY CO
SAN ANTONIO WATER SYSTEM
MEDINA
Castroville
CITY OF CASTROVILLE
La Coste
Von Ormy
SAN ANTONIO RIVER AUTHORITY
Lytle
Somerset
CITY OF SOMERSET
ATASCOSA
12824
12735
12821
14200
12819
12817
12816
12813
12814
1912A_01
1903_05
1903A_01
1903_04
1912_01
1903_03
1604
N
0 2 4 8 Miles
Medina River Watershed
Discharge Permit
SWQMs
USGS Gage
Non-impaired
Non-support or Concern AU
Medina Planning Watershed
USCB Urbanized Area

Tasks, Objectives and Schedules						
Task 1	Project Administration					
Costs	Federal	$16,121	Non-Federal	$10,748	Total	$26,869
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	TWRI will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 1st of January, April, July and October. QPRs shall be distributed to all Project Partners.					
	Start Date	Month 1	Completion Date	Month 36		
Subtask 1.2	TWRI will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.					
	Start Date	Month 1	Completion Date	Month 36		
Subtask 1.3	TWRI will host coordination meetings or conference calls, at least quarterly, with Project Partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. TWRI will develop lists of action items needed following each project coordination meeting and distribute to project personnel.					
	Start Date	Month 1	Completion Date	Month 36		
Subtask 1.4	TWRI will develop a Final Report that summarizes activities completed and conclusions reached during the project and discusses the extent to which project goals and measures of success have been achieved.					
	Start Date	Month 1	Completion Date	Month 36		
Deliverables	• QPRs in electronic format • Reimbursement Forms and necessary documentation in hard copy format • Final Report in electronic and hard copy formats					

Tasks, Objectives and Schedules						
Task 2	Quality Assurance					
Costs	Federal	$6,449	Non-Federal	$4,299	Total	$10,748
Objective	To develop data quality objectives (DQOs) and quality assurance/control (QA/QC) activities to ensure data of known and acceptable quality are generated through this project.					
Subtask 2.1	TWRI will develop a QAPP for activities in Task #4 consistent with the most recent versions of *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* and the *TSSWCB Environmental Data Quality Management Plan*. All monitoring procedures and methods prescribed in the QAPP shall be consistent with the guidelines detailed in the *TCEQ Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods for Water, Sediment, and Tissue (RG-415)* and *Volume 2: Methods for Collecting and Analyzing Biological Assemblage and Habitat Data (RG-416)*. [Consistency with Title 30, Chapter 25 of the Texas Administrative Code, *Environmental Testing Laboratory Accreditation and Certification*, which describes Texas' approach to implementing the National Environmental Laboratory Accreditation Conference (NELAC) standards, shall be required where applicable.]					
	Start Date	Month 1	Completion Date	Month 3		
Subtask 2.2	TWRI will implement the approved QAPP. TWRI will submit revisions and necessary amendments to the QAPP as needed.					
	Start Date	Month 3	Completion Date	Month 36		
Deliverables	• QAPP approved by TSSWCB and EPA in both electronic and hard copy formats • Approved revisions and amendments to QAPP, as needed • Data of known and acceptable quality as reported through Task #4					

Tasks, Objectives and Schedules						
Task 3	Watershed Stakeholder Coordination					
Costs	Federal	$193,457	Non-Federal	$128,971	Total	$322,428
Objective	To develop, coordinate and facilitate stakeholder involvement in the watershed planning process that will enable local decision-making for the development of a WPP. This task will also provide educational programs and a plan for media outreach. This task will partially complete Element E of EPA's nine key elements for a WBP.					
Subtask 3.1	Identify Potential Stakeholder Group — TWRI will develop a spreadsheet of key stakeholders to engage in the WPP development. The list will be made of landowners, elected officials, agency representatives, industry groups and others as appropriate.					
	Start Date	Month 1	Completion Date	Month 4		
Subtask 3.2	**Stakeholder Group Development, Coordination and Facilitation —** TWRI will develop a group of stakeholders that represent a diverse cross section of the watershed's interested parties. TWRI will facilitate, at least quarterly, stakeholder group meetings during the planning process. Specifically, TWRI will be responsible for: • Developing agendas, arranging meeting facilities and sending e-mail notifications for meetings; • Providing information requested by stakeholders prior to and following meetings; • Updating stakeholders on progress of WPP development and/or implementation; and • Arranging presentations by guest speakers offering useful information to stakeholders. Agendas for stakeholder meetings will be submitted to the TSSWCB Project Manager for approval at least two weeks prior to distribution.					
	Start Date	Month 4	Completion Date	Month 36		
Subtask 3.3	**Education and Outreach —** TWRI will host public education and outreach events through existing statewide programs delivered in or near the project area as instructors are available. At least one event will be held annually and may include, but is not be limited to, the following programs: • Lone Star Healthy Streams workshop • Texas Well Owner Network training and well screening event • Texas Watershed Stewards workshop • Texas Riparian and Stream Ecosystem Education As part of one or more of these events, a hands-on stakeholder engagement/volunteer activity will be hosted in the watershed to reinforce principles taught at educational programs and demonstrate possible BMPs that can be implemented through the planning process. Participants will engage in activity that supports WPP implementation and provides a further learning opportunity regarding practice implementation in their communities. Potential activities may include a stream clean up, small-scale stream bank restoration, or other small-scale practice implementation. The decision on what activity will be undertaken will rely on acquisition of local funding support to provide needed supplies and materials to complete the activity.					
	Start Date	Month 4	Completion Date	Month 36		
Deliverables	• Stakeholder List • Agendas for stakeholder facilitation meetings • Copy of sign-in sheet from meetings • Documentation of education and events • Press releases • Webpage updates					

Tasks, Objectives and Schedules						
Task 4	Watershed Protection Plan Development					
Costs	Federal	$106,401	Non-Federal	$70,934	Total	$177,335
Objective	To develop a stakeholder-driven WPP that will present prioritized strategies for the implementation of watershed BMPs to restore and protect the water quality of the waterbody.					
Subtask 4.1	**WPP Development** — TWRI, in collaboration with project partners, will develop a WPP that is consistent with and satisfies the expectations of the EPA's nine key elements fundamental to WBPs as described in the latest EPA document, Nonpoint Source Program and Grants Guidelines for State and Territories. The WPP will be founded on decisions made by stakeholders through the watershed planning process and incorporate findings from project data, analysis and reports. TWRI will facilitate public review and stakeholder approval of the WPP. The WPP will: A. Identify and quantify existing pollutant loadings that need to be controlled; B. Determine pollutant load reductions needed to meet water quality standards; C. Identify management practices to achieve water quality standards; D. Estimate technical and financial assistance needed to implement the plan; E. Describe information and education components needed to implement the plan; F. Develop an implementation schedule; G. Describe interim measurable milestones for management measure implementation; H. Describe water quality evaluation criteria; and I. Describe the monitoring program to assess water quality conditions.					
	Start Date	Month 6	Completion Date	Month 24		
Subtask 4.2	**Development of WPP Demonstration/Implementation Project Ideas** — TWRI, in collaboration with project partners, will work with stakeholders to identify possible demonstration/implementation projects that could be implemented in the watershed. Possible projects may include, but are not limited to, riparian restoration work, creation of green stormwater infrastructure, and conservation plans. These catalyst projects will be linked with WPP identified practices. From the discussion, at least three high level one-pagers that further develop project concepts will be created describing implementation projects. The one-pagers will help promote and start the implementation process once the WPP is finalized and accepted. These documents will also serve as high-level project proposals that will be used as a basis for future funding acquisition.					
	Start Date	Month 24	Completion Date	Month 36		
Subtask 4.3	**Review and Approval Process —** TWRI will develop a timeline and stakeholder document review plan at the beginning of the project. The review plan will include submittal of multiple interim partial drafts for review by stakeholders and TSSWCB. Stakeholders and TSSWCB will approve the WPP before it is submitted to EPA for review. TWRI will work with stakeholders and TSSWCB to address any EPA comments. TWRI will release a draft of the WPP to the public and address any comments that may be received. TSSWCB will submit to EPA a Final WPP with all EPA comments addressed.					
	Start Date	Month 24	Completion Date	Month 36		
Subtask 4.4	**Executive Summary Creation —** TWRI will develop an executive summary style document, based on the WPP, which will serve as a public outreach tool to garner support for the implementation of the WPP and achieve long-term sustainability.					
	Start Date	Month 33	Completion Date	Month 36		
Subtask 4.5	**Executive Summary Distribution —**TWRI will publish and distribute the WPP and the executive summary style document to stakeholders.					
	Start Date	Month 33	Completion Date	Month 36		

Deliverables	• Development of demonstration project one-pages • Multiple interim partial WPP drafts to stakeholders and TSSWCB • Final WPP to stakeholders and TSSWCB • Draft WPP to EPA • Final WPP to EPA • Executive summary style public outreach document based on WPP

Project Goals (Expand from Summary Page)

The goals of this project are focused on the development of a WPP. The goal of the project includes development of a stakeholder group representative of the watershed, development of a plan that meets EPA's nine key elements, and efforts to secure implementation funding initiated.

To accomplish this goal, TWRI along with project partners will (1) identify and gather existing water quality and watershed data relative to potential pollutant loadings; identify data gaps and additional data needs to fully assess the current pollutant loading calculations and sources of bacteria; (2) increase awareness of water quality and watershed planning process; (3) establish current pollutant loads and determine needed pollutant loading reductions to meet applicable water quality standards; (4) coordinate watershed stakeholders; and (5) develop a WPP that achieves the EPA's Nine Key Elements for Effective WPPs.

Measures of Success (Expand from Summary Page)

(1) The coordination and engagement of a local watershed stakeholder group will be measured by the number of stakeholder group meetings held, number of participants, number of stakeholder groups represented by participants, and through post-planning evaluations.

(2) The number of education programs and number of attendees at education events will serve to measure the success of increasing awareness of water quality and watershed planning in the watershed.

(3) Compilation and analysis of existing data completed that clearly documents the current state of water quality, identifies and quantifies potential pollutant sources, estimates pollutant loading in the watershed, and defines the needed load reductions to achieve applicable water quality standards.

(4) Defined level of needed load reductions to achieve applicable water quality standards.

(5) The EPA acceptance of the final WPP will serve as a measure of success for WPP development.

2017 Texas NPS Management Program **Reference (Expand from Summary Page)**
Components, Goals, and Objectives
Component 1 – Explicit short- and long-term goals, objectives, and strategies to restore and protect surface and groundwater. • Long-Term Goal – Protect and restore water quality affected by nonpoint source pollution through assessment, implementation, and education. o Objective 2 – Support the implementation of state, regional, and local programs to prevent nonpoint source pollution through assessment, implementation, and education. o Objective 6 – Develop partnerships, relationships, memoranda of agreement, and other instruments to facilitate collective, cooperative approaches to manage nonpoint source pollution. o Objective 7 – Increase overall public awareness of nonpoint source issues and prevention activities. o Objective 8 – 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 Goal One – Data Collection and Assessment o Objective D – Develop TMDLs, I-Plans, and WPPs to maintain and restore water quality in water bodies identifies as impacted by nonpoint source pollution. • Short-Term Goal Three – Education o Objective B – Administer programs to educate citizens about water quality and their potential role in causing nonpoint source pollution. o Objective D – Conduct outreach through the CRP, AgriLife Extension, SWCDs, and others to 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. o Objective G – Implement public outreach and education to maintain and restore water quality in water bodies impacted by nonpoint source pollution.
Component 2 – Working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities, private sector groups, and federal agencies.
Component 3 – Combination of statewide nonpoint source programs and on-the-ground projects achieve water quality benefits; efforts are well-integrated with other relevant state and federal programs.
Component 4 – Description of how resources will be allocated between abating known water quality impairments from nonpoint source pollution and protecting threatened and high-quality waters from significant threats caused by present and future nonpoint source activities.
Component 5 - Identify waters and their watersheds impaired by NPS… Progressively address these identified waters by conducting more detailed watershed assessments and developing watershed plans (e.g., WPPs or TMDLs and Implementation Plans), and then by implementing the plans.

Estimated Load Reductions Expected (Only applicable to Implementation Project Type)
Not applicable. This project proposes planning only and will not result in any direct loading reductions. Planned implementation measures will result in loading reductions when implemented, but that will occur following plan development. Expected loading reductions from planned management measures will be estimated during plan development.

EPA State Categorical Program Grants – Workplan Essential Elements FY 2022-2026 EPA Strategic Plan Reference
Strategic Plan Goal – 5.0 Ensure Clean and Safe Water for All Communities
Strategic Plan Objective – 5.2 - Protect and Restore Waterbodies and Watersheds
This workplan supports Goal 5 (Ensure Clean and Safe Water for All Communities) and Objective 5.2 (Protect and Restore Waterbodies and Watersheds) by funding the Texas State and Soil Water Conservation Board's NPS Program for state and local planning, education, assessments, watershed restoration and protection, best management practices, and related water quality activities.

Budget Summary				
Federal	$	322,428	% of total project	60%
Non-Federal	$	214,952	% of total project	40%
Total	$	537,380	Total	100%

Category	Federal	Non-Federal	Total
Personnel	$ 165,014	$ 50,385	$ 215,399
Fringe Benefits	$ 58,294	$ 14,004	$ 72,298
Travel	$ 8,964	$ 0	$ 8,964
Equipment	$ 0	$ 0	$ 0
Supplies	$ 1,700	$ 0	$ 1,700
Contractual	$ 24,000	$ 16,000	$ 40,000
Construction	$ 0	$ 0	$ 0
Other	$ 22,400	$ 0	$ 22,400
Total Direct Costs	$ 280,372	$ 80,389	$ 360,761
Indirect Costs (≤ 15%)	$ 42,056	$ 134,563	$ 176,619
Total Project Costs	$ 322,428	$ 214,952	$ 537,380

Budget Justification (Federal)		
Category	Total Amount	Justification
Personnel	$ 165,014	Associate Director: $101,261 annually, 0.72 mo. (2% per year) – $6,448 Research Specialist III: $63,000 annually, 2.34 mo. (6.48% per year) – $13,002 TBD Research Specialist: $55,278 annually, 18 mo. (50% per year) – $85,429 TBD Research Assistant: $54,000 annually, 9 mo. (25% per year) – $41,727 TBD Program Manager: $71,467 annually, 3 mo. (8.33% per year) – $18,408 *named positions are budgeted with a 3% annual pay increase in all years; TBD positions and graduate students are budgeted with a 3% pay increase in years after year 1 *(Salary estimates are based on average monthly percent effort for the entire contract. Actual percent effort may vary more or less than estimated between months; but in aggregate, will not exceed total effort estimates for the entire project.) *cell phone allowances for project calls/emails during & after business hours & travel are occasionally factored into salaries & fringe, but again, will not exceed overall dollar amount.
Fringe Benefits	$ 58,294	Fringe for faculty and staff is calculated at 18.8% salary plus $825 per month. Fringe benefits for eligible students is calculated at 11% salary plus $560 per month. *(Fringe benefits estimates are based on salary the estimates listed. Actual fringe benefits will vary between months coinciding with percent effort variations; but in aggregate, will not exceed the overall estimated total.) *cell phone allowances for project calls/emails during & after business hours & travel are occasionally factored into salaries & fringe, but again, will not exceed overall dollar amount.
Travel	$ 8,964	Travel to stakeholder meetings and educational programs around the watershed throughout the project estimated at 16 trips, 1 person for 2 days and 1 night per trip and 410 miles per trip: - 32 total days @ at the state rate for per diem – $1,952 - 16 total nights @ the state rate for lodging – $2,032 - 6,560 total miles @ state rate per mile for state vehicles – $3,280 Travel to Texas Watershed Coordinator or other meetings around Texas to discuss the project throughout the project, estimated at 4 trips for 1 person, 2 days and 1 night per trip and 400 miles per trip: - 8 total days @ at the state rate for per diem – $472 - 4 total nights @ at the state rate for lodging – $428 - 1,600 total miles @ state rate per mile for state vehicles – $800
Equipment	$ 0	N/A
Supplies	$ 1,700	Meeting supplies, including, but not limited to, paper, toner, pens, name tags, etc. – $1,500 Supplies for stakeholder engagement activities, including, shovels, work gloves, tools, etc. – $200
Contractual*	$ 24,000	Subaward: San Antonio River Authority (SARA)
Construction	$ 0	N/A
Other	$ 22,400	Communications Services for press releases, media, marketing, report editing and format/design, etc. @ $100/hour – $11,500 Webpage maintenance fee @ $60/mo. – $1,800 Software (ArcGIS, Adobe, etc.) – $600 Printing (WPP printing) – $2,500 Facility Rental – $6,000
Indirect	$ 42,056	Per the RFP requirements, indirect costs are limited at 15% of total direct costs. $280,372 Total Direct Costs * 15% = $42,056

Budget Justification (Non-Federal)		
Category	Total Amount	Justification
Personnel	$ 50,385	TWRI Interim/Associate Director: $103,721 annually, 5.49 mo. (15.26% per year) – $50,385 *named positions are budgeted with a 3% annual pay increase in all years; TBD positions and graduate students are budgeted with a 3% pay increase in years after year 1 *(Salary estimates are based on average monthly percent effort for the entire contract. Actual percent effort may vary more or less than estimated between months; but in aggregate, will not exceed total effort estimates for the entire project.) *cell phone allowances for project calls/emails during & after business hours & travel are occasionally factored into salaries & fringe, but again, will not exceed overall dollar amount.
Fringe Benefits	$ 14,004	Fringe for faculty and staff is calculated at 18.8% salary plus $825 per month. Fringe benefits for eligible students is calculated at 11% salary plus $560 per month. *(Fringe benefits estimates are based on salary the estimates listed. Actual fringe benefits will vary between months coinciding with percent effort variations; but in aggregate, will not exceed the overall estimated total.) *cell phone allowances for project calls/emails during & after business hours & travel are occasionally factored into salaries & fringe, but again, will not exceed overall dollar amount.
Travel	$ 0	N/A
Equipment	$ 0	N/A
Supplies	$ 0	N/A
Contractual*	$ 16,000	Subaward: SARA
Construction	$ 0	N/A
Other	$ 0	N/A
Indirect	$ 134,563	Texas A&M AgriLife Research's federally negotiated indirect cost (IDC) rate is 51.5% of modified total direct costs (MTDC) for year 1 and 52.5% for years 2 and 3. MTDC includes personnel, fringe benefits, travel, supplies, other and up to $25,000 of each subcontract; it excludes tuition, facility rental and capital equipment over $5,000. <u>IDC on non-federal funds</u>: MTDC * 51.5% year 1 - $20,872 MTDC * 51.5% = $10,749 MTDC * 52.5% years 2 and 3 - $43,517 MTDC * 52.5% = $22,847 Total IDC on non-federal funds: $33,596 <u>Unrecovered IDC on federal funds</u>: MTDC – 15% TDC - IDC on MTDC: $102,304 MTDC * 51.5% = $52,687 - IDC on MTDC: $172,068 MTDC * 52.5% = $90,336 - IDC on TDC: $280,372 TDC * 15% = $42,056 Total Unrecovered IDC: $52,687 + $90,336 - $42,056 = $100,967 IDC on non-fed + Unrecovered IDC: $33,596 + $100,967 = $134,563

Budget Justification (Federal) – SARA		
Category	Total Amount	Justification
Personnel	$ 17,266	Staff time for Dr. Teague to attend and assist with up to 15 stakeholder meetings and 3 educational workshops
Fringe Benefits	$ 6,734	39% of personnel time
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 (Non-Federal) – SARA		
Category	Total Amount	Justification
Personnel	$ 11,511	Staff time for Dr. Teague to attend and assist with up to 15 stakeholder meetings and 3 educational workshops
Fringe Benefits	$ 4,489	39% of personnel time
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