

**Texas State Soil and Water Conservation Board
Clean Water Act §319(h) Nonpoint Source Grant Program
FY 2020 Workplan 20-08**

SUMMARY PAGE						
Title of Project	Coordinating Implementation of the Geronimo and Alligator Creeks Watershed Protection Plan					
Project Goals	<ul style="list-style-type: none"> • Facilitate continued implementation of management measures identified in the Geronimo and Alligator Creeks Watershed Protection Plan. • Conduct educational programs to stakeholders, provide updates on progress, and seek stakeholder input and recommendations on needed activities. • Assist the Partnership in identifying and developing proposals to acquire funding for implementation projects, and in managing and tracking implementation efforts. • Coordinate and/or conduct water resources and related environmental outreach/education efforts across the watershed. • Communicate water quality conditions to the public and the Partnership in order to support adaptive management and expand public knowledge and participation in the Geronimo and Alligator Creeks project. 					
Project Tasks	(1) Project Administration; (2) Facilitate and Promote Watershed Protection Plan Implementation					
Measures of Success	<ul style="list-style-type: none"> • Facilitate and promote watershed protection plan implementation • Provide technical assistance to the Geronimo Creek Partnership • Evaluate progress toward achieving milestones • Increase watershed stewardship among Geronimo and Alligator Creeks watershed stakeholders 					
Project Type	Implementation (X); Education (X); Planning (); Assessment (); Groundwater ()					
Status of Waterbody on 2014 Texas Integrated Report	<u>Segment ID</u> 1804A	<u>Parameter of Impairment or Concern</u> Bacteria Nitrate-nitrogen	<u>Category</u> 5c CN			
Project Location (Statewide or Watershed and County)	Geronimo Creek in Guadalupe and Comal Counties					
Key Project Activities	Hire Staff (); Surface Water Quality Monitoring (); Technical Assistance (X); Education (X); Implementation (X); BMP Effectiveness Monitoring (); Demonstration (); Planning (); Modeling (); Bacterial Source Tracking (); Other ()					
2017 Texas NPS Management Program Reference	<ul style="list-style-type: none"> • Component 1 LTG 1, Objectives 1, 3, 6, 7 • STG 2, Objective D • STG 3, Objective A, B, D, G 					
Project Costs	Federal	\$318,440	Non-Federal	\$212,294	Total	\$530,734
Project Management	Texas A&M AgriLife Extension Service, Department of Soil and Crop Sciences					
Project Period	February 22, 2021 – October 31, 2024					

Part I – Applicant Information

Applicant							
Project Lead	Jake Mowrer						
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Project Co-Lead	Annalee Epps						
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Organization	Texas A&M AgriLife Extension Service						
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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 Extension Service, Department of Soil and Crop Sciences (Extension)	Provide project management and oversight. Serve as watershed coordinator, project reporting, provide assistance for stakeholder relations, and support the implementation of the WPP. Provide coordination of ongoing implementation efforts.
Guadalupe-Blanco River Authority (GBRA)	Collaborate with Extension to facilitate the Partnership, provide educational opportunities in the watershed and to interpret and communicate water quality data collected through the Clean Rivers Program.
Geronimo and Alligator Creeks Watershed Partnership	Collaborate as critical local stakeholders and play a lead role in communicating with other local stakeholders.
Comal-Guadalupe Soil and Water Conservation District (SWCD 306)	Collaborate with SWCD 306 to track implementation of BMPs, and to provide equipment and technical assistance.

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 <i>Texas Coastal NPS Pollution Control Program</i> ; or (f) the <i>Texas Groundwater Protection Strategy</i> ?				Yes	X	No	
If yes, identify the document.		The Geronimo and Alligator Creeks Watershed Protection Plan					
If yes, identify the agency/group that developed and/or approved the document.		Geronimo and Alligator Creek Partnership facilitated by Texas A&M AgriLife Extension and Guadalupe-Blanco River Authority	Year Developed	2012			

Watershed Information				
Watershed or Aquifer Name(s)	Hydrologic Unit Code (12 Digit)	Segment ID	Category on 2014 IR	Size (Acres)
Geronimo Creek (including its tributary, Alligator Creek)	121002020110, 121002020111	1804A	5c	44,152

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: Draft <i>2016 Texas Integrated Report</i> , Clean Rivers Program Basin Summary/Highlights Reports, or other documented sources.			
2016 Texas Integrated Report			
Segment 1804A, Geronimo Creek: 1804A_01 From the confluence of the Guadalupe River south of Seguin in Guadalupe County to the upstream perennial portion north of Seguin in Guadalupe County	<u>Impairment</u> bacteria nitrate	<u>Category</u> 5c CS	<u>Year Listed</u> 2006
<p>Due to the absence of permitted discharges in the watershed, except for one at the very lowermost point on Geronimo Creek, nonpoint source pollution is believed to be the primary source of bacteria loading causing the impairment. Based on stakeholder input during WPP development, key potential sources of loading were identified and grouped into three major categories: urban nonpoint sources, on-site wastewater, and agricultural nonpoint sources. Within these three categories, the following sources were identified for management measure development: pet waste, urban stormwater, faulty wastewater collection systems, failing septic systems, livestock (cattle, horses, and goats), and native and non-domestic wildlife. The Spatially Explicit Load Enrichment Calculation Tool (SELECT) was utilized to estimate distributions and degree of contribution of these potential pollutant sources within the watershed.</p> <p>2017 GBRA CRP Basin Highlights Reports - The Clean Rivers Program Basin Highlights Report for the Guadalupe River Basin since 2004 comments on elevated nitrate-nitrogen concentrations suggesting the source appears to be groundwater seepage from the Leona Aquifer. Private wells that have been monitored in the area are shallow and have concentrations in excess of 20 mg/L. In 2015, GBRA partnered with USGS to investigate the source(s) of nitrate in the Plum Creek Watershed and the Geronimo Creek Watershed, in a TSSWCB project titled, <i>Investigation into</i></p>			

Contributions of Nitrate-Nitrogen to Plum Creek, Geronimo Creek and the Underlying Leona Aquifer. The final report published in 2017 indicate that sources of nitrate in Geronimo Creek is predominantly from fertilizer applications, as well as from septic systems.

Project Narrative

Problem/Need Statement

In 2007, the TSSWCB Regional Watershed Coordination Steering Committee, using established criteria, ranked Geronimo Creek in the top 3 watersheds for WPP development. TSSWCB project 08-06 entitled *Development of a Watershed Protection Plan for Geronimo Creek* was begun in June 2008. The project included water quality monitoring, water quality modeling, and WPP development. WPP development was a stakeholder driven process led by Extension with vital support from the GBRA. The Geronimo and Alligator Creeks Watershed Partnership Steering Committee includes local officials, land and business owners and citizens and is supported by state and federal agency partners. With technical assistance from project staff, the Steering Committee identified issues that are of particular importance to the surrounding communities, contributed information on land use and activities that helped determine potential sources of the nutrient and bacteria impairment, and guided development of the WPP. TSSWCB Project 11-06 titled *Water Quality Monitoring in the Geronimo Creek Watershed and Facilitation of the Geronimo and Alligator Creeks Watershed Partnership* provided funding to continue stakeholder meetings in order to complete development of the Geronimo and Alligator Creeks WPP which was approved and signed by the Steering Committee in August of 2012 and accepted by EPA in September of 2012.

Historical data identified the bacteria impairment and a concern for nitrate-nitrogen. Water quality monitoring by GBRA attempted to fill gaps in the historical data in spite of record drought conditions. Routine ambient water quality data are collected at one site (12576) by GBRA as part of the Clean Rivers Program (CRP). Through project 08-06, GBRA conducted an 18-month water quality monitoring task that included an additional seven monthly routine ambient and six targeted stream sites on Geronimo and Alligator Creeks and three tributaries, and quarterly monitoring of two springs, three wells, and the single point source in the watershed. Project 11-06 provided funding to continue water quality monitoring. Results from the water quality monitoring support the continued need for full implementation of the Geronimo and Alligator Creeks WPP. Project 13-57 titled *Implementation of the Geronimo and Alligator Creeks Watershed Protection Plan* provided funding to continue with implementation efforts, as well as Project 14-08 titled *Coordinating Implementation of the Geronimo and Alligator Creeks Watershed Protection Plan*, which was completed in 2018. Project 17-07 titled *Coordinating Implementation of the Geronimo and Alligator Creeks Watershed Protection Plan* has continued implementation efforts in the watershed and is expected to be completed September 30, 2020.

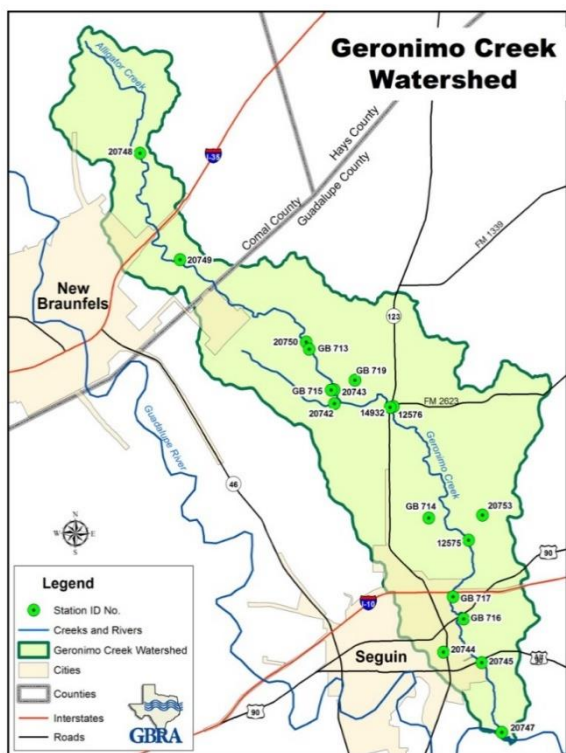
Through the WPP development process, stakeholders identified three categories of potential nonpoint sources of bacteria and nitrate-nitrogen in the watershed: urban, on-site wastewater, and agricultural. SELECT was utilized to estimate distributions and the degree of contribution of these potential pollutant sources within the watershed. Management measures were then identified to address each potential source. The timeline for full implementation of all management measures in the WPP is 10 years; this proposal supports that ongoing process.

An active and involved stakeholder group is essential for successful implementation of the Geronimo and Alligator Creeks WPP. Communication among project stakeholders and agency partners must be actively maintained to make progress and sustain momentum. Collaborative efforts among project partners will be essential to implement management measures for all three key source categories with specific emphasis on measures identified in Tables 8.1 and 8.2 of the WPP. Substantial emphasis also will be needed on education and training to enable all stakeholder groups and agency partners to work effectively toward full implementation of the Geronimo and Alligator Creeks WPP and ultimately to achieve the water quality goals that have been established.

Project Narrative

General Project Description (Include Project Location Map)

Extension will continue to facilitate the Geronimo and Alligator Creeks Watershed Partnership through coordination with all key stakeholder groups (cities, counties, agricultural groups, local businesses, HOAs, etc.) and partner agencies (GBRA, NRCS, SWCDs, TCEQ, etc.). This will include organizing and conducting public meetings with the Partnership, as well as other planning and implementation meetings, as necessary and appropriate. Extension will promote public participation in meetings, events, and implementation activities through extensive use of various communication mechanisms, including a semi-annual newsletter, news releases, radio and other mass media, the project website, direct telephone, mail and e-mail contact, and social media.



Extension will facilitate collaborative efforts among project partners to implement management measures for all three key categories of nonpoint source pollution: urban, wastewater, and agricultural, including specific emphasis on measures identified in Tables 8.1 and 8.2 of the WPP. In particular, this will include working closely with city and county personnel, as well as local and regional state staff (including the SWCD District Technician funded in a separate grant) and federal agency staff.

Extension will assist governmental and non-governmental organizations in the Geronimo and Alligator Creeks watershed with acquisition of resources to enable WPP implementation. This will include the identification of potential funding sources and assistance with the development of proposals and plans of work to secure supplemental funding from both internal (local) and external (state, federal, etc.) sources, as well as tracking and reporting for successful projects, as appropriate.

Extension will facilitate and coordinate outreach and education activities in the watershed to promote implementation of recommended management measures. This will include active use of local media outlets (newspapers, newsletters, radio, etc.) to

communicate project planning efforts and activities, and development and dissemination of factsheets and other educational resources at public events and through the project website. Extension also will facilitate and/or conduct a wide range of targeted educational programs consistent with the WPP including: a Texas Watershed Steward Training Workshop, urban sector nutrient and pesticide management training, Smart Growth workshops, Master Gardner/Master Naturalist Programs, an annual stream cleanup event, septic system workshops, soil and water testing campaigns and workshops, agriculture nutrient management education, crop management seminars, livestock grazing management education, and feral hog management through TSSWCB Project 15-06 titled *Continued Statewide Delivery of the Lone Star Healthy Streams Program*.

Extension will work with GBRA to track changes in water quality identified through monitoring, communicate results to stakeholders, and facilitate adaptive management activities to continue progress toward addressing nonpoint source water quality concerns in the watershed. GBRA is currently collecting water samples for submission to Texas A&M University Soil & Aquatic Microbiology Laboratory for the purpose of conducting bacterial source tracking (BST) on bacteria found in the samples. Preliminary raw data from this project indicates a large variety of sources are contributing to Geronimo Creek, and reducing inputs from these sources will be explored through this project.

Extension will, at the discretion of SWCD 306, provide cattle radio tracking collars for the purpose of assisting local agricultural producers with identifying cattle grazing patterns. This confidential information could be potentially useful

to the producer to better understand the need for alternative water supplies located upland, and would serve to reduce time cattle spent in or around the creek.

Extension will work to identify landowners with septic systems that are on property adjacent to Geronimo Creek, in light of the most recent BST results and USGS study. Extension will work to assist and encourage proper maintenance of those systems, and identify if repairs are necessary.

Tasks, Objectives and Schedules						
Task 1	Project Administration					
Costs	Federal	\$47,766	Non-Federal	\$31,844	Total	\$79,610
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	Extension 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 1 st of January, April, July and October. QPRs shall be distributed to all Project Partners.					
	Start Date	Month 1		Completion Date	Month 45	
Subtask 1.2	Extension 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 45	
Subtask 1.3	Extension 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. Extension will develop lists of action items needed following each project coordination meeting and distribute to project personnel.					
	Start Date	Month 1		Completion Date	Month 45	
Subtask 1.4	Extension 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 45	
Deliverables	<ul style="list-style-type: none"> • 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	Facilitate and Promote Watershed Protection Plan Implementation					
Costs	Federal	\$270,674	Non-Federal	\$180,450	Total	\$451,124
Objective	Facilitate the Geronimo and Alligator Creeks Watershed Partnership and promote stakeholder implementation of the WPP.					
Subtask 2.1	Extension will facilitate the Geronimo and Alligator Creeks Watershed Partnership and entities identified in the WPP and work in cooperation with partner agencies to promote plan implementation. Extension will coordinate meetings of the Partnership and meetings of other parties, as needed.					
	Start Date	Month 1		Completion Date	Month 45	
Subtask 2.2	Extension will assist governmental and non-governmental organizations in the Geronimo and Alligator Creeks watershed in identification and acquisition of resources to enable WPP implementation. Extension will actively seek and pursue funding opportunities and work with partners to develop grant proposals.					
	Start Date	Month 1		Completion Date	Month 45	
Subtask 2.3	Extension will evaluate progress toward achieving milestones established in the WPP, collaborate with GBRA to assess water quality data collected through the Clean Rivers Program in relation to achieving load reductions, and provide updates to stakeholders regarding the Geronimo and Alligator Creeks WPP.					
	Start Date	Month 1		Completion Date	Month 45	

Subtask 2.4	<p>Extension will facilitate and coordinate education and outreach activities as identified in the Geronimo and Alligator Creeks WPP tables 8.1 and 8.2. Specifically, Extension will continue to submit updates, reports, meeting materials, and other project related information to GBRA for posting to the Geronimo and Alligator Creeks Watershed Partnership website and publish a semi-annual newsletter. Extension will develop and distribute press releases and news articles when warranted to promote implementation activities by stakeholders and highlight project activities and successes. Extension will provide information to GBRA for inclusion in the Clean Rivers Program Basin Highlights Report. Extension will conduct a series of workshops targeting key issues, including: one Texas Watershed Stewards workshop, one Lone Star Healthy Streams program, and rainwater harvesting programs (1/year). Extension will collaborate with NRCS and SWCD 306 to conduct educational events focused on bacteria, nutrient, and pesticide management for forage crops (2/year); and, nutrient, pesticide and sediment management for row crops (2/year), and provide them with livestock radio tracking collars to be used at their discretion. Extension will coordinate annual soil testing campaigns targeting both urban and agricultural fertilizer users in Comal and Guadalupe Counties. Extension will collaborate with project partners to provide a Smart Growth workshop (1 every 2yrs), and Master Gardener/Master Naturalist programs (1/year). Extension will collaborate with GBRA to provide watershed residents with septic system workshops, giving focus to identifying and providing training to owners of systems adjacent to Geronimo Creek and its tributaries (2/year). Extension will collaborate with GBRA to conduct a stream cleanup event (1/year). In addition, Extension will provide/ distribute Geronimo and Alligator Creeks WPP informational materials at all appropriate area events.</p>			
	Start Date	Month 1	Completion Date	Month 45
Deliverables	<ul style="list-style-type: none"> • Agendas and attendance lists from steering committee meetings, work group meetings, educational workshops, and other events. • Documentation of resource opportunities identified, applied for, and resources obtained to support plan implementation. • Newsletters, press releases, and other publications developed. 			

Project Goals
<ul style="list-style-type: none"> • Coordinate implementation of the Geronimo and Alligator Creeks WPP. • Inform, educate and encourage active involvement of the public in implementation of the WPP. • Communicate water quality conditions to the public and Partnership to support adaptive management of the WPP. • Facilitate the Partnership and foster coordinated activities and actions between and among the cities, counties, GBRA, TSSWCB, local SWCDs, and NRCS. • Conduct Partnership meetings to provide regular updates on progress, and seek stakeholder input and recommendations on needed activities. • Develop and/or assist with the development of proposals to acquire funding for implementation of management measures, and with managing and tracking implementation projects. Assist those entities in completing the deliverables required by funded projects. • Conduct and/or facilitate education and training programs in order to encourage adoption of BMPs. • Work with state and federal agencies, as appropriate, to secure and optimize the delivery of technical and financial resources for the watershed. • Track and document implementation efforts to assess progress toward achieving milestones established in the WPP. • Facilitate public awareness and participation in planning and implementation efforts by actively updating website content and producing a semi-annual newsletter.

Measures of Success

- Technical assistance provided to the Partnership through identification and acquisition of resources and funding for implementation efforts.
- Communication of water quality data to the public and partnership, and use of those data to evaluate progress in achieving water quality restoration.
- Increased knowledge and adoption by citizens, landowners, and agricultural producers of management measures identified in the WPP as a result of outreach and education efforts.
- Development and dissemination of factsheets, news releases, newspaper and magazine articles, and a semi-annual newsletter to maintain contact with Geronimo and Alligator Creek stakeholders and promote implementation of the WPP.
- Active management of the project website to announce education and training events, provide project updates, and disseminate educational resources to stakeholders.
- Provide regular updates to the Geronimo and Alligator Creeks Partnership that describe modifications/updates to goals and milestones, and document success in achieving goals and milestones for water quality improvement and load reductions.

2017 Texas NPS Management Program Reference

Components, Goals, and Objectives

Long-Term Goal One– Protect and restore water quality affected by NPS pollution through assessment, implementation, and education.

- Objective 1 – Focus NPS abatement efforts, implementation strategies, and available resources in watersheds and aquifers identified as impacted by nonpoint source pollution.
- Objective 3 – Support the implementation of state, regional, and local programs to reduce NPS pollution, such as the implementation of strategies defined in TMDL I-Plans, WPPs, and other water planning efforts in the state.
- Objective 6 – Develop partnerships, relationships, memoranda of agreement, and other instruments to facilitate collective, cooperative approaches to manage NPS pollution.

Objective 7 – Increase overall public awareness of NPS issues and prevention activities.

Short-Term Goal Two – Implementation

- Objective D – Implement TMDL I-Plans, WPPs, and other state, regional, and local plans developed to restore and maintain water quality in water bodies identified as impacted by NPS pollution.

Short-Term Goal Three – Education

- 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 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.
- Objective G – Implement public outreach and education to maintain and restore water quality in water bodies by NPS pollution.

Estimated Load Reductions Expected

Estimated load reductions expected from implementing measures identified in the Geronimo and Alligator Creeks WPP, primarily tables 8.1, 8.2, and 8.3.

The overall goal of the Geronimo and Alligator Creeks WPP is to reduce nonpoint source loadings of bacteria (impairment) and nitrate-nitrogen (concern) from identified sources within the watershed. Management measures contained in the WPP focus on bacteria reduction, but by implementing these management measures reductions in nitrate-nitrogen loading also will be realized. This proposal will address nonpoint source loadings from urban, agriculture, and wastewater. Additional load reductions from agricultural nonpoint sources are addressed under a separate project being conducted by the Comal-Guadalupe Soil and Water Conservation District.

In order to calculate estimated load reductions, some assumptions were made. Consistent with Table 8.1, approximately 50% of the pet waste management measures are assumed to be implemented in the first 3 years of implementation. Other urban stormwater management measures are assumed to be equally split among years 1-3, 4-6, and 7-10 of the implementation planning period. The load reduction from the agricultural education component in this proposal is estimated to be 25% of the total load reduction (over the 10 year implementation schedule) from this source category identified in Table 8.3. The remaining 75% is estimated to result from the implementation of WQMPs developed by the Comal-Guadalupe SWCD district technician. Wastewater management measures that are components of sanitary sewer overflow initiatives are assumed to be 50% implemented within years 1-3, and the remaining reductions split equally over the remaining implementation period. Wastewater management measures that deal with septic systems are assumed to achieve a 50% reduction during years 1-3, with the remaining load reduction split equally over years 4-6 and 7-10 of implementation.

Management Measure		Estimated <i>E. coli</i> Load Reductions Expected (cfu/day)
Pet Waste	Full WPP Implementation	6.38 x 10 ¹¹
	This Project	3.19 x 10 ¹¹
Urban Stormwater	Full WPP Implementation	1.87 x 10 ¹²
	This Project	6.22 x 10 ¹¹
SSO Initiatives	Full WPP Implementation	1.31 x 10 ⁹
	This Project	6.55 x 10 ⁸
Septic Systems	Full Implementation	5.02 x 10 ¹¹
	This Project	2.51 x 10 ¹¹
Agricultural Education	Full Implementation	6.24 x 10 ¹²
	This Project	5.15 x 10 ¹¹

Participation by individual entities involved in implementation activities is voluntary and dependent upon many factors such as financial ability, available personnel, and political will. Estimated load reductions can be impacted by a variety of factors including BMP placement within the watershed, proximity to a waterway, and weather conditions, etc.

EPA State Categorical Program Grants – Workplan Essential Elements FY 2018-2022 EPA Strategic Plan Reference

Strategic Plan Goal – Goal 1 Core Mission: Deliver a cleaner, safer, and healthier environment for all Americans and future generations by carrying out the Agency’s core mission.

Strategic Plan Objective – Objective 1.2 Provide for Clean and Safe Water to ensure waters are clean through improved water infrastructure and, in partnership with states and tribes, sustainably manage programs to support drinking water, aquatic ecosystems, and recreational, economic, and subsistence activities.

Part III – Financial Information

Budget Summary				
Federal	\$	318,440	% of total project	60%
Non-Federal	\$	212,294	% of total project	40%
Total	\$	530,734	Total	100%
Category		Federal	Non-Federal	Total
Personnel	\$	199,804	\$ 81,873	\$ 281,677
Fringe Benefits	\$	53,688	\$ 31,202	\$ 84,890
Travel	\$	10,392	\$ 0	\$ 10,392
Equipment	\$	0	\$ 0	\$ 0
Supplies	\$	1,650	\$ 0	\$ 1,650
Contractual	\$	0	\$ 0	\$ 0
Construction	\$	0	\$ 0	\$ 0
Other	\$	11,370	\$ 0	\$ 11,370
Total Direct Costs	\$	276,904	\$ 113,075	\$ 389,979
Indirect Costs (≤ 15%)	\$	41,536	\$ 57,683	\$ 99,219
Unrecovered IDC			\$ 41,536	\$ 41,536
Total Project Costs	\$	318,440	\$ 212,294	\$ 530,734

Budget Justification (Federal)		
Category	Total Amount	Justification
Personnel	\$ 199,804	One Extension Program Specialist I and CoPI (\$53,000/yr at 0.5-1.0 FTE total/year for three years), and two Extension Program Specialists (\$51,465 to \$98,201/yr at up to 0.025 FTE each/year for three years) and a student worker (15hrs/wk for 3 yrs \$21,150). PI Extension Associate Professor (\$96,813/yr at 0.083 FTE total years 2 and 3). Professor and Extension Specialist for LID workshops (\$100,113/yr at 0.02 FTE)
Fringe Benefits	\$ 53,688	Fringe benefits are calculated at a rate of 18.2% of salary to cover FICA, UCI, WCI, and retirement. An additional amount of \$746/month (prorated by % FTE) is calculated for group medical insurance. These estimates are in accordance with the TAMUS Office of Budget and Accounting estimating procedures established for FY2020.
Travel	\$ 10,392	<p>Travel to the watershed to perform project tasks.</p> <ul style="list-style-type: none"> • Watershed coordinator (up to 10 trips per year; car rental/mileage/fuel, hotel, meals/incidentals, parking, at the State rate-/year), \$1,938/yr • Educators / speakers (up to 2 trips per year; car rental/mileage/fuel, hotel, meals/incidentals, parking, at the State rate- /year), \$475/yr <p>Watershed coordinator participation in state meetings (e.g., Clean Rivers Program Basin Steering Committees, the Texas Watershed Coordinator Roundtables, and the TSSWCB Regional Watershed Coordination Steering Committee) (up to 4 trips total during the project, car rental/mileage/fuel, hotel, meals/incidentals, parking, at the State rate included), \$433.33/yr</p> <p>Support of professional development for the Program Specialist at national and state conferences (up to 1 trip per year for lodging, transportation (either by state vehicle, rental, or airfare) and per diem airfare, hotel, meals/incidentals, taxi, parking, mileage/fuel at the State rate/year), \$618/yr</p>
Equipment	\$ 0	N/A
Supplies	\$ 1,650	stream cleanup supplies (\$100/yr), printing supplies (\$450/yr)
Contractual*	\$ 0	N/A
Construction	\$ 0	N/A
Other	\$ 11,370	Phone service (\$600/year), advertising (\$1,350/yr), conference registration fees (\$892/year), facility rental for workshops (\$800/year), computer services (\$108/yr), and software licenses/computer services (\$120).
Indirect	\$ 41,536	Reimbursable indirect costs are limited to no more than 15% of total direct costs. State the rate and the base costs associated with the rate. Generally, indirect costs are based on personnel, fringe benefits, travel, supplies, other, and up to \$25,000 of each subcontract.

Budget Justification (Non-Federal)		
Category	Total Amount	Justification
Personnel	\$ 81,873	Extension Program Director (\$75,000/yr at 0.06-0.08 FTE), Extension District Manager (\$103,796/yr at 0.1 FTE), and three County Extension Agents (Guadalupe and Comal Counties) (\$50,848 to \$73,256/yr at x 0.15 FTEs)
Fringe Benefits	\$ 31,202	Fringe benefits are calculated at a rate of 18.2% of salary to cover FICA, UCI, WCI, and retirement. An additional \$746/month (prorated by % FTE) is calculated for group medical insurance. Estimates are in accordance with TAMUS Office of Budget & Accounting procedures established for FY2015.
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	\$ 57,683	50 -51.5% of Total Non- Federal Direct Costs
Unrecovered IDC	\$ 41,536	Unrecovered Indirect Costs of 15% of Total Direct Costs (difference between project-allowed indirect costs (15%) and the standard Texas A&M AgriLife Extension Service indirect cost rate of (30%).