

Texas State Soil and Water Conservation Board Clean Water Act §319(h) Nonpoint Source Grant Program FY 2021 Workplan 21-07

	SUMMARY PAGE	
Title of Project	Implementing Agricultural Nonpoint Source Components of the Ced Bayou Watershed Protection Plans	lar Bayou and Double
Project Goals	 Provide technical assistance to agricultural producers for the d Quality Management Plans (WQMPs) and implementation of Practices (BMPs) and track progress Revise existing WQMPs in both watersheds Provide educational programs to increase stakeholders and citiz water quality issues in the watershed Conduct status reviews on WQMPs to track implementation successfor coordinated technical assistance activities between TSSW and NRCS Inform and coordinate project efforts with the Cedar Bayou Watershed Steering Committees, Watershed Coordinators, and Assistant 	tens knowledge about tess CB, the local SWCD, and Double Bayou
Project Tasks	(1) Project administration; (2) Promotion and implementation of the Program	TSSWCB WQMP
Measures of Success	 Provide needed technical assistance to agricultural producers Development and implementation of WQMPs; Implementation of management measures outlined in the Ceo Double Bayou WPPs; Reduction in potential pollutant loads of streams from NPS pagricultural operations 	dar Bayou and
Project Type	Implementation (X); Education (); Planning (); Assessment (); Gro	undwater ()
Status of Waterbody on 2020 Texas Integrated Report	Segment ID 0901 Cedar Bayou Tidal 0901A Cary Bayou 0902 Cedar Bayou above Tidal 2422B Double Bayou West Fork 2422D Double Bayou East Fork	Category 5c, 5b
Project Location (Statewide or Watershed and County)	Cedar Bayou, Double Bayou and their tributaries in Chambers, Harri Counties.	s and Liberty
Key Project Activities	Hire Staff (X); Surface Water Quality Monitoring (); Technical Assi Education (X); Implementation (X); BMP Effectiveness Monitoring Demonstration (); Planning (); Modeling (); Bacterial Source Track	();
2017 Texas NPS Management Program Reference	 Component 1 – Long Term Goal – Objectives 1, 2, 3 Component 1 – Short Term Goal 2 – Objectives A, B, D Components 2, 3 and 4 	0157.161
Project Costs Project Management	Federal \$157,164 Non-Federal \$0 To Trinity Bay Soil and Water Conservation District	tal \$157,164
Project Period	September 13, 2021 – December 31, 2024	

Part I – Applicant Information

Applicant									
Project Lea	.d	Otho Turner							
Title		Chairman							
Organizatio	on	Trinity Bay Soil	& Water 0	Conservati	on [District			
E-mail Add	lress	trinitybay@swc	d.texas.gov	J.					
Street Addr	ess	PO Box 1366							
City	Anahuac		County	Chamber	·s	State	Texas	Zip Code	77514-1366
Telephone	Number	409-267-3581		•	Fa	x Number	409-267-	-4139	

Project Partners	
Names	Roles & Responsibilities
Texas State Soil and Water Conservation Board (TSSWCB) Trinity Bay Soil and Water Conservation District (SWCD #434)	Provide state oversight and management of all project activities and ensure coordination of activities with related projects and TCEQ. Supervise one technician. Develop, implement and maintain WQMPs. Conduct status reviews. Responsible for all project deliverables.
Harris County Soil and Water Conservation District (#442) and Lower Trinity Soil and Water Conservation District (#435)	Collaborate with SWCD #434 to promote stakeholder participation in WQMPs and support the work of the technician in the Cedar Bayou and Double Bayou Watersheds.
United States Department of Agriculture- Natural Resources Conservation Service (NRCS)	Support SWCD Technician in the development, implementation, and maintenance of WQMPs. Provide training as necessary to the technician.
Houston Advanced Research Center Houston-Galveston Area Council	Support the SWCD Technician in educational program and resource development and delivery and in maintaining communication with the Steering Committee and Watershed Coordinator.
Cedar Bayou and Double Bayou Watershed Steering Committees	Collaborate as critical local stakeholders and play a lead role in communicating with other local stakeholders.

Part II – Project Information

Project Type											
Surface Water	X	Grou	ındwater								
TMDL; (c) an app	oroved I CWA §3	-Plan; 320; (e)	(d) a Compro the <i>Texas</i> (ehensive	in: (a) a completed WPP; (b) a Conservation and Management WPS Pollution Control Program	nt Plan		Yes	X	No	
If yes, identify the	docum	ent.			on Plan for Cedar Bayou; Wa tal NPS Pollution Control Pro		Prote	ction P	lan fo	or Doul	ble
If yes, identify the developed and/or					Bayou-Houston-Galveston 1 (HGAC); Double Bayou-Housed Research Center (HARC)		Year Deve	eloped	20	15	

Watershed Information				
Watershed or Aquifer Name(s)	Hydrologic Unit Code (12 Digit)	Segment ID	Category on 2020 IR	Size (Acres)
Cedar Bayou	12040203	0901; 0902	5c	110,754
Double Bayou	12040202	2422A; 2422B	5b, 5c	89,325

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.

The 2020 Texas Water Quality Inventory lists Segment 0901, Cedar Bayou Tidal, list as Category 5c for bacteria, PCBs in edible tissue, and Dioxins in edible tissue.

The 2020 Texas Water Quality Inventory lists Segment 2422B, Double Bayou West Fork as category 5c impaired for Bacteria, PCBs in edible tissue and dioxin in edible tissue and 5a for Depressed Dissolved Oxygen and a Concern for Chlorophyll-a. Additionally, Segment 2422D, Double Bayou East Fork is listed for Bacteria.

Project Narrative

Problem/Need Statement

The Cedar Bayou Watershed covers approximately 200 square miles and drains into the Galveston Bay system. The Galveston Bay system is a major economic asset for the City of Houston and the surrounding metropolitan area, as well as being a vital ecological component of the Gulf Coast area. Oyster production, recreational activities, and commercial fishing are significant economic assets of the area. Additionally, the estuaries of Cedar Bayou and surrounding areas are considered a critical wildlife habitat area for migratory birds and other wildlife by the Texas Parks and Wildlife Department, and a large portion of the watershed is considered an environmentally sensitive area in general.

Beginning in 2010, H-GAC, TSSWCB, and a group of local stakeholders engaged in developing a watershed protection plan for Cedar Bayou. This effort happened in conjunction with other local activities, including the PCB/Dioxin TMDLs for the Galveston Bay system, the Oyster Waters TMDL for Galveston Bay, and a variety of efforts by local partners to address various issues contributing to water quality. Over the course of the development process, sources of contamination were identified, and voluntary solutions were proposed to address them. The primary focus was placed on bacteria, given the concurrent TMDL activities for PCBs/dioxins. The draft decisions by the stakeholder group currently call for a variety of bacteria BMPs, targeting multiple sources. The WPP has been completed and submitted to EPA for review.

The Double Bayou watershed is located on the Upper Texas Gulf Coast and is part of the Galveston Bay watershed. Situated in the eastern portion of the Lower Galveston Bay, it is comprised of two main subwatersheds; East Fork and West Fork, which are also the primary waterways in the watershed. The Double Bayou watershed drains directly into the Trinity Bay system and ultimately into Galveston Bay. The majority (93%) of the watershed lies within Chambers County, Texas. The remaining 7% of the watershed is located in Liberty County, Texas. The Double Bayou watershed drains 98 square miles of predominantly rural and agricultural landscape. However, several residential centers are located in the watershed.

Since 2012, GTRI has worked with the USGS and Shead Conservation Solutions with funding from multiple sources to develop a Watershed Protection Plan (WPP) for Double Bayou. Through the WPP process, stakeholders in the Double Bayou watershed including community leaders, elected officials, landowners, nonprofit organizations, and representatives of relevant local, state, and federal agencies met through a serious of larger stakeholder meetings and smaller workgroup meetings to collaborate on the development of the WPP. Water quality was monitored on both the East and West Forks throughout the WPP process, and stakeholders were informed about results of the water quality monitoring and analysis. Working with the stakeholders, ideas for water quality management measures were discussed and analyzed by the three main workgroups (Ag/Wildlife/Feral Hog, Recreation/Hunting and WWTF/Septic) for inclusion in the Double Bayou WPP.

As identified during development of the WPPs, agricultural nonpoint sources of pollutant loading may be addressed by implementing best management practices. Agricultural producers, along with SWCDs, TSSWCB and NRCS, have been collaborating to protect the natural resources in Texas for decades. Through the TSSWCB's WQMP Program, farmers and ranchers routinely implement BMPs on their land utilizing financial and technical assistance programs of SWCDs who receive state and federal funds from TSSWCB, EPA, and NRCS. A WQMP is a site-specific plan developed through, and approved by, SWCDs which includes appropriate land treatment practices, production practices, management measures, and technologies that prevent and abate agricultural and silvicultural nonpoint source pollution. The BMPs prescribed in a WQMP are defined in the NRCS Field Office Technical Guide. SWCDs provide technical assistance to producers seeking to develop a WQMP. TSSWCB and NRCS have various financial assistance programs that help producers implement a WQMP. Because of this, and similar programs, the State of Texas has been able to demonstrate major successes in the improvement of water quality conditions through on-the-ground conservation results.

Expanding participation of agricultural producers in WPP implementation is essential to achieve water quality improvement. As an established and well-known local entity, the Trinity Bay SWCD is uniquely situated to engage and

support agricultural producers in watershed restoration and protection efforts, including implementation of appropriate BMPs to address nonpoint source pollution.

Technical support from the Trinity Bay, Harris County and Lower Trinity SWCDs and NRCS personnel is critical for proper selection and placement of appropriate management measures on individual agricultural properties. However, due to the number of management plans that will be needed, a new position dedicated specifically to WQMP development in the watershed will be necessary to provide direct assistance to agricultural producers, with emphasis on the sources and geographical areas within the watershed identified through the Cedar and Double Bayou WPPs.

Project Narrative

General Project Description (Include Project Location Map)

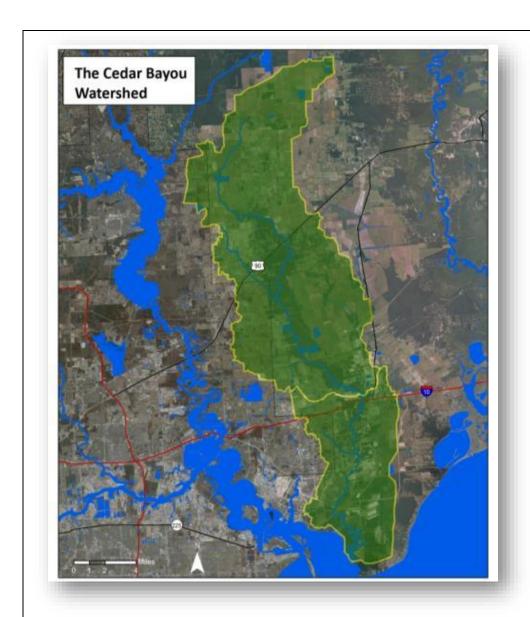
A comprehensive watershed approach focused on the most significant potential sources of NPS pollution contributing to the current impairments was used for WPP development. Recommended BMPs were identified for implementation by the Steering Committee, focus groups and partner agencies. This project provides funding to support implementation of recommended agricultural management measures identified for action in the WPP during the 10-year implementation schedule.

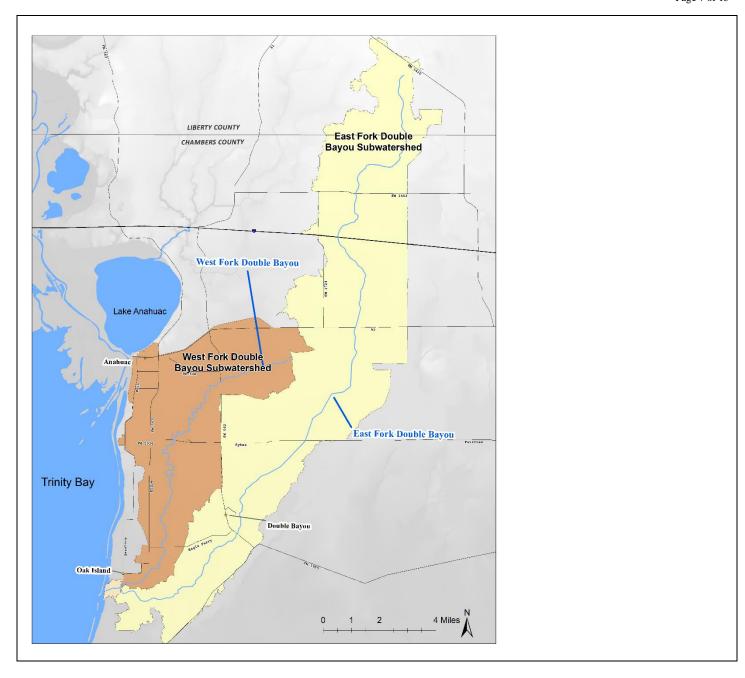
To achieve this goal, the TSSWCB will administer federal CWA §319(h) funds through the Trinity Bay SWCD #434 for support of one District Technician who will provide technical assistance to agricultural producers in developing and implementing WQMPs and Prescribed Grazing Plans in the Cedar Bayou and Double Bayou Watersheds. WQMPs are developed according to the NRCS Field Office Technical Guide. Once the WQMP is developed, it will be sent to the appropriate TSSWCB regional office for technical review and certification. Upon certification of the WQMP, the District Technician will work with the landowners to implement the BMPs prescribed in the WQMP.

The District Technician will be placed in the Trinity Bay SWCD office and will work under the direction of the SWCD, with assistance from the TSSWCB, Trinity Bay, Harris County, and Lower Trinity SWCDs, NRCS, and Watershed Coordinators, as needed. The District Technician also will assist landowners in applying for and obtaining financial incentives to aid in implementation of BMPs prescribed in WQMPs.

The District Technician will conduct annual status reviews on all WQMPs developed and certified through the course of this project to ensure that landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. The District Technician will track utilization of obligated financial incentives and assist landowners in utilizing these funds on schedule. The District Technician will complete an aggregate final report which describes the success of the project including WQMPs developed, BMPs implemented, and financial incentives funds obligated and utilized.

The District Technician also will work with TSSWCB, NRCS and the Watershed Coordinator to educate agricultural producers about water quality issues and how WQMPs and BMPs address NPS pollution from agriculture. The Technician will work with commodity organizations, such as Texas and Southwestern Cattle Raisers Association (TSCRA), Independent Cattlemen's Association of Texas (ICA), Texas Farm Bureau (TFB), and others to educate their members about how BMPs can protect and enhance the value of their operation and achieve water quality goals for the watershed at the same time. The Technician will cooperate and communicate with the Cedar Bayou and Double Bayou Watershed Steering Committees in order to effectively and efficiently achieve project goals and to summarize activities and achievements made throughout the course of this project.





Tasks, Objective	es and Schedules							
Task 1	Project Administration	on						
Costs	Federal	\$15,773	Non-Federal	\$0	Total	\$15,773		
Objective	To effectively admin technical and financi				l under this pi	roject including		
Subtask 1.1	The Trinity Bay SW the TSSWCB. QPRs by the 1st of January, Start Date:	shall docu	ment all activities pe	rformed within a	quarter and s ed to all Proje	hall be submitted		
Subtask 1.2	The Trinity Bay SW Reimbursement Form		form accounting fur // CB at least monthly	nctions and will su	ubmit approp	riate		
	Start Date:		Month 1	Completion I		Month 40		
Subtask 1.3	The Trinity Bay SW Project Manager, and project schedule, cor SWCD will develop distribute to project p	d TSSWCB nmunicatio lists of acti	Field Representativn needs, deliverables	e, at least quarters, and other requir	ly, to discuss rements. The	project activities, Lower Trinity		
	Start Date:		Month 1	Completion I	Date:	Month 40		
Subtask 1.4	Trinity Bay SWCD	will comple	te one financial audi	t during the proje	ct period.			
	Start Date:		Month 1	Completion I	Date:	Month 40		
Subtask 1.5	The Trinity Bay SWCD will develop a final report at the culmination of the project. At a minimum the Final Report shall describe the success of the project including WQMPs developed and BMPs implemented.							
	Start Date:		Month 1	Completion I	Date:	Month 40		
Deliverables	Reimbursement	forms and	in electronic format necessary document and hard copy format	ation in hard copy	y format			

Task 2 Promotion and Implementation of the TSSWCB WQMP Program S141,391 Non-Federal S0 Total S141,391 S00 Total S141,391 To promote WQMP development and implementation, encourage participation, and provide technical assistance to agricultural producers for the development and implementation of WQMPs. Promote the availability of financial incentives to support BMP implementation. Track implementation of WQMPs to achieve load reductions as identified in the Cedar Bayou and Double Bayou WPPs. Subtask 2.1 The Trinity Bay SWCD will hire one District Technician to promote, develop, and implement WQMPs. Start Date: Month 1 Completion Date: Month 40 M	Tasks, Objectiv	ves and Schedules					
Objective Federal S141.391 Non-Federal \$0 Total S141.391	Task 2	Promotion and	Implementation of the	he TSSWCB WC	MP Program		
Dijective To promote WQMP development and implementation, encourage participation, and provide technical assistance to agricultural producers for the development and implementation of WQMPs. Promote the availability of financial incentives to support BMP implementation. Track implementation of WQMPs to achieve load reductions as identified in the Cedar Bayou and Double Bayou WPPs. Subtask 2.1 The Trinity Bay SWCD will hire one District Technician to promote, develop, and implement WQMPs. Start Date: Month 1 Completion Date: Month 40 Month						Total	\$141,391
Subtask 2.2 The District Technician will identify landowners in priority areas to distribute notifications announcing the availability of technical assistance and financial incentives for developing and implementing WQMPs. The District Technician will develop and distribute flyers, brochures, letters, news releases and other appropriate promotional publications to encourage participation from agricultural producers. TSSWCB must approve all announcements, letters and publications prior to distribution. Start Date:		technical assista Promote the ava implementation Bayou WPPs.	nce to agricultural pilability of financial of WQMPs to achie	roducers for the incentives to supve load reduction	development and in opport BMP implements as identified in the	inplementation entation. Trac ne Cedar Bay	n of WQMPs. kk ou and Double
The District Technician will identify landowners in priority areas to distribute notifications announcing the availability of technical assistance and financial incentives for developing and implementing WQMPs. The District Technician will develop and distribute flyers, brochures, letters, news releases and other appropriate promotional publications to encourage participation from agricultural producers. TSSWCB must approve all announcements, letters and publications prior to distribution. Start Date:	Subtask 2.1	WQMPs.			•		•
announcing the availability of technical assistance and financial incentives for developing and implementing WQMPs. The District Technician will develop and distribute flyers, brochures, letters, news releases and other appropriate promotional publications to encourage participation from agricultural producers. TSSWCB must approve all announcements, letters and publications prior to distribution. Start Date: Month 1 Completion Date: Month 40 Subtask 2.3 The District Technician will work with TSSWCB, NRCS and the Cedar Bayou and Double Bayou Watershed Coordinators to educate producers about water quality issues and how WQMPs and BMPs address pollutant contamination from agriculture. Start Date: Month 1 Completion Date: Month 40 The District Technician will work with commodity organizations, such as Texas and Southwestern Cattle Raisers Association (TSCRA), Independent Cattlemen's Association of Texas (ICA), and Texas Farm Bureau (TFB), to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time. Start Date: Month 1 Completion Date: Month 40 Subtask 2.5 The District Technician, with assistance from NRCS and TSSWCB, will assist landowners in the development of WQMPs and associated Prescribed Grazing Plans. The District Technician will develop at least 2 WQMPs but shall strive to develop additional WQMPs beyond the 2. Start Date: Month 1 Completion Date: Month 40 Subtask 2.6 The District Technician, with assistance from NRCS and TSSWCB, will assist landowners in applying for and obtaining financial incentives to aid in implementation of BMPs prescribed in WQMPs. \$75,000 in CWA §319(h) funding (TSSWCB project 21-02) is available as financial incentive rate shall not exceed 60% of the cost of implementation of BMPs. The remaining 40% will be provided by the landowner. Financial incentives will be based on actual costs not to exceed the average cost of the practice. Start Date: Month 1 Completion Date: Month 40 Subtas	Subtagle 2.2						
Subtask 2.3	Subtask 2.2	announcing the implementing W news releases ar agricultural proc	availability of technic QMPs. The District and other appropriate	ical assistance and Technician will promotional pub	d financial incentive develop and distribilications to encoura	es for develo oute flyers, br ge participati	ping and ochures, letters, on from
Watershed Coordinators to educate producers about water quality issues and how WQMPs and BMPs address pollutant contamination from agriculture. Start Date:		Start Da	te:	Month 1	Completion Date	: I	Month 40
Subtask 2.4 The District Technician will work with commodity organizations, such as Texas and Southwestern Cattle Raisers Association (TSCRA), Independent Cattlemen's Association of Texas (ICA), and Texas Farm Bureau (TFB), to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time. Start Date:	Subtask 2.3	Watershed Coor BMPs address p	dinators to educate j ollutant contaminati	oroducers about on from agricult	water quality issues ure.	and how W(MPs and
Cattle Raisers Association (TSCRA), Independent Cattlemen's Association of Texas (ICA), and Texas Farm Bureau (TFB), to educate their members on this opportunity to enhance the value of their operation and achieve water quality goals for the watershed at the same time. Start Date:	Subtagle 2.4						
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applying for and obtaining financial incentives to aid in implementation of BMPs prescribed in WQMPs. \$75,000 in CWA \$319(h) funding (TSSWCB project 21-02) is available as financial incentive through the TSSWCB WQMP Program. Landowners shall be eligible to receive a maximum financial incentive amount of \$30,000 from the TSSWCB \$319(h) funds. The maximum financial incentive rate shall not exceed 60% of the cost of implementation of the BMPs. The remaining 40% will be provided by the landowner. Financial incentives will be based on actual costs not to exceed the average cost of the practice. Start Date: Month 1 Completion Date: Month 40 Subtask 2.7 The District Technician will prioritize WQMP development and financial incentive applications consistent with the priority areas identified in the WPP. Start Date: Month 1 Completion Date: Month 40 Subtask 2.8 The District Technician will conduct annual status reviews on all WQMPs developed and certified through the course of this project and any existing WQMPs (certified prior to this project) in the Cedar and Double Bayou watersheds to ensure that landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. The District Technician will document any follow-up technical assistance needed or necessary modifications to the WQMP implementation schedule.					*		
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consistent with the priority areas identified in the WPP. Start Date: Month 1 Completion Date: Month 40 Subtask 2.8 The District Technician will conduct annual status reviews on all WQMPs developed and certified through the course of this project and any existing WQMPs (certified prior to this project) in the Cedar and Double Bayou watersheds to ensure that landowners implement BMPs as specified and agreed to in the WQMP implementation schedule. The District Technician will document any follow-up technical assistance needed or necessary modifications to the WQMP implementation schedule.		Start Dat	e: N	Ionth 1	Completion Date	: I	Month 40
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Start Date. Month 1 Completion Date. Month 40	Subtask 2.8	The District Technology through the countered to in the follow-up technology.	hnician will conducted of this project and le Bayou watershed WQMP implementated assistance neede	t annual status re d any existing W s to ensure that la tion schedule. Th	views on all WQM QMPs (certified prandowners implement one District Technici	Ps developed for to this pro- ent BMPs as s an will docur WQMP imple	and certified ject) in the specified and ment any

Subtask 2.9	The District Technician will track utilization of obligated financial incentives. The District								
	Technician, with assistanc	e from TSSWCB and NR	CS, will assist landowne	ers in utilizing obligated					
	financial incentives on sch	financial incentives on schedule.							
	Start Date:	Month 1	Completion Date:	Month 40					
Subtask 2.10	The District Technician wa	ill create a spreadsheet and	d map describing and sh	owing the location of all					
	WQMPs developed and B	MPs implemented through	n the project. The map v	vill not reveal the identity					
	or exact location of any pr	oducer.							
	Start Date:	Month 1	Completion Date:	Month 40					
Subtask 2.11	The District Technician wa	ill meet monthly with the	Trinity Bay SWCD and	as needed with Harris					
	County and Lower Trinity	SWCDs and other parties	s to efficiently and effec	tively achieve project					
	goals; summarize activitie	s and achievements made	throughout the course of	f this project; and discuss					
	project activities, project s	chedule, communication r	needs, deliverables, and	other requirements.					
	Start Date:	Month 1	Completion Date:	Month 40					
Subtask 2.12	The District Technician wa	ill cooperate and commun	icate with the Cedar Ba	you and Double Bayou					
	Watershed Coordinators in	n order to efficiently and e	effectively achieve proje	ct goals and to					
	summarize activities and a	•							
	District Technician will, at			d under the auspices of					
	the Cedar Bayou and Doul								
	Start Date: Month 1 Completion Date: Month 40								
Deliverables	Promotional and educational publications, as developed and distributed								
	• Status reviews for WQMPs								
	Map of project area sh	lowing location of WQMF	es developed; map will i	not reveal the identity of					
	any landowner		* *	·					

Project Goals (Expand from Summary Page)

- Provide technical assistance to agricultural producers for the development of Water Quality Management Plans (WQMPs) and implementation of Best Management Practices (BMPs) and track progress
- Provide educational programs to increase stakeholders and citizens knowledge about water quality issues in the watershed
- To conduct status reviews on WQMPs to track implementation success
- To foster coordinated technical assistance between TSSWCB, SWCDs and NRCS
- Inform and coordinate project efforts with the Double Bayou and Cedar Bayou Watershed stakeholders and Watershed Coordinators

Measures of Success (Expand from Summary Page)

- Provide needed technical assistance to agricultural producers
- Development and implementation of WQMPs
- Implementation of agricultural management measures outlined in the Double Bayou and Cedar Bayou WPPs
- Reduction in potential pollutant loads of streams from NPS pollution from agricultural operations

2017 Texas NPS Management Program Reference (Expand from Summary Page)

Components, Goals, and Objectives

Component One – Explicit short- and long-term goals, objectives and strategies that protect surface and ground water. Long-Term Goal – 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 2 Support the implementation of state, regional, and local programs to prevent NPS pollution through assessment, implementation, and education.
- 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..

Short-Term Goal Two – Implementation – Coordinate the NPS Program to support the implementation of TMDL I-Plans …and other state, regional, and local plans/programs to reduce NPS pollution …[by] target[ing] implementation activities to the areas identified as impacted

- 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 B Develop and implement BMPs to address constituents of concern or waterbodies not meeting water quality standards in watersheds indentified as impacted by NPS pollution
- Objective D Implement TMDL I-Plans, WPPs, and other state, regional, and local plans developed to restore and maintain water quality in waterbodies identified as impacted by NPS pollution.

Short-Term Goal Three – Education – Conduct education and technology transfer activities to increase awareness of NPS pollution and activities which contribute to the degradation of water bodies, including aquifers, by NPS pollution

- Objective A Enhance existing outreach programs at the state, regional, and local levels to maximize the effectiveness of NPS education.
- 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.

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

Component Three – Balanced approach that emphasizes both statewide NPS programs and on-the-ground management of individual watersheds.

Component Four – Abatement of water quality impairments from NPS pollution and prevention of significant threats to water quality from present and future NPS activities.

Estimated Load Reductions Expected (Only applicable to Implementation Project Type)

Estimated load reductions expected from implementing this project are based on information in the Cedar Bayou and Double Bayou WPPs.

The goals of the Cedar Bayou and Double Bayou WPPs are to reduce nonpoint source loadings of bacteria (impairment) from identified sources within the watershed. Management measures contained in the WPPs focus on bacteria reduction, but through implementing the management measures, reductions in nutrient loading will also be realized. This proposal will address nonpoint source loadings from agricultural nonpoint sources through development of Water Quality Management Plans for agricultural operations in the watersheds. Currently there are 9 certified WQMPs in the Cedar Bayou watershed, and 29 in the Double Bayou Watershed.

In order to calculate estimated load reductions, we assumed that, consistent with Subtask 2.5, all 2 WQMPs to be implemented are assumed to be in subwatersheds with the greatest number of operations, operations with the greatest number of animal units, and particularly those located closest to streams and drainage areas. The load reduction from the District Technician agricultural education component in this project is consistent with the total load reduction (over the 10 year implementation schedule).

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

The mechanism for reporting pollutant load reductions achieved through implementation of BMPs funded with CWA §319(h) monies is through the EPA Grants Reporting and Tracking System (GRTS). Actual load reductions achieved can only be reported after the BMPs are installed and operational.

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	\$	157,	164	%	of total pr	oject		100%	
Non-Federal	\$		0	% of 1	total project	(≥40%)		0%	
Total	\$	157,	164		Total			100%	
Category			Federal		N	Ion-Federal		Total	
Personnel		\$	130,30	09	\$	0	\$	130,309	
Fringe Benefits		\$	\$ 11,141		\$	0	\$	11,141	
Travel		\$	\$ 9,174		\$	0	\$	9,174	
Equipment		\$	6		\$	0	\$	0	
Supplies		\$	\$ 2,540		\$	0	\$	2,540	
Contractual		\$	4,00	00	\$	0	\$	4,000	
Construction		\$		0	\$	0	\$	0	
Other		\$		0	\$	0	\$	0	
Total Direct Costs		\$	157,10	64	\$	0	\$	157,164	
Indirect Costs (≤ 15%)		\$		0	\$	0	\$	0	
		-		·					
Total Project Costs	3	\$	157,10	64	\$	0	\$	157,164	

Budget Justifica	tion (Fe	ederal)	
Category	Total	Amount	Justification
Personnel	\$	130,309	1 full-time technician for 3 years (\$130,309)
Fringe Benefits	\$	11,141	Fringe benefits calculated
Travel	\$	9,174	5,000 miles/yr @ state rate (\$8,400)
			Per diem @ \$46/day and hotel expenses @ \$83/night for 6 overnight trips
			(\$774)
Equipment	\$	0	N/A
Supplies	\$	2,540	Office supplies include pens, pencils, paper, printer cartridges, folders,
			envelopes, mailing labels, flash drives, etc. for SWCD @ \$15/month for 3
			years (\$540,); laptop and printer @ \$2,000
Contractual*	\$	4,000	Financial audit for Trinity Bay SWCD
Construction	\$	0	N/A
Other	\$	0	N/A
Indirect	\$	0	N/A

Budget Justifica	tion (Non-	Federal)	
Category	Total An	nount	Justification
Personnel	\$	0	N/A
Fringe Benefits	\$	0	N/A
Travel	\$	0	N/A
Equipment	\$	0	N/A
Supplies	\$	0	N/A
Contractual*	\$	0	N/A
Construction	\$	0	N/A
Other	\$	0	N/A
Indirect	\$	0	N/A