Texas State Soil and Water Conservation Board Clean Water Act §319(h) Nonpoint Source Grant Program FY 2020 Workplan 20-03

	SUMI	MARY PAGE					
Title of Project	Extended Delivery of the	Texas Well Owner Network					
Project Goals	 Continue statewide implementation of the Texas Well Owner Network (TWON) program through (1) "Well Educated" programs of 4-6 hours, and (2) "Well Informed" programs of 1-2 hours Improve and protect well water and surface water quality by increasing awareness of water quality issues and knowledge of best management practices (BMPs) through improve a program of a surface water quality. 						
Project Tasks	(1) Project Administration trainings; (3) Evaluate TW	; (2) Coordination and delivery of TWON /ON effectiveness	screenings and				
Measures of Success	 Increase well owner awareness of water quality issues and knowledge of BMPs through distribution of TWON publications and delivery of 60 TWON Well Educated and Well Informed events Deliver at least 30 TWON Well Educated (4- to 6-hour) events in selected watersheds Deliver at least 30 TWON Well Informed (1- to 2-hour) events in selected watersheds Measure impact of program delivery through participation in TWON events and increased knowledge and understanding of program participants 						
Project Type	Implementation (); Educa	tion (X); Planning (); Assessment (); Grou	undwater (X)				
Status of Waterbody on	Segment ID	Parameter of Impairment or Concern	Category				
2014 Texas Integrated	0207	Bacteria	5b				
Report	0612	Bacteria	5b				
1	0901	Bacteria, PCBs and Dioxin	5c, 5a, 5a				
	1105	Bacteria	5c				
	1103	Bacteria, Depressed DO	5a				
	1804A	Bacteria	5a 5c				
	2311	Depressed DO	50 50				
	1200	Bosterio	50				
	1209	Dartenia Depressed DO	50				
	1217D	Depressed DO Destario	50				
	1221	Dacteria Deserve 1 DO Destavia	50 51:				
	1221A	Depressed DO, Bacteria	50 and 50				
	1221D	Bacteria	50 5				
	1221F	Bacteria	5C				
	1901	Bacteria	4a -				
	1301	Bacteria	5c				
	1302	Bacteria	5b				
	1302A	Bacteria	5b				
	1302B	Bacteria	5b				
		Depressed DO	5c				
	1202K	Bacteria	5c				
	1908	Bacteria	5c				
		Chloride	5c				
	1245C	Bacteria	5b				
	1245D	Bacteria	5b				
	1245F	Bacteria	5b				
	1245I	Bacteria	5b				

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	1421	Bacteria and Depressed DO	5c and 5c
	1911	Impaired fish community	5c
	1911B	Bacteria	5a
	1911C	Bacteria	5a
	1911D	Bacteria	5a
	1911E	Bacteria	5c
	1911H	Depressed DO	5c
	1911	Bacteria	5c
	2102	TDS	50 50
	2201 and 2202	Bacteria	50 50
	2422B and D	Bacteria Depressed DO Dioxin PCBs	5c 5h 5a 5a
	1815	Depressed DO Impaired habitat	CS and CS
Project Location	Statewide with priorities f	for: Adams and Cows Bayous in Adams I	asper and Newton
(Statewide or Watershed	Counties: Attoyac Bayon	in Rusk Nacoodoches San Augustine and	Shelby Counties.
and County)	Arrovo Colorado in Cam	eron and Willacy Counties: Bastron Bayo	u Watershed in
and County)	Brazoria County: Brady	Track in Conche. McCullech Menard and	San Saba Counties:
	Buck Creak in Donlay C	allingsworth and Childress Counties: Dial	Sall Saba Counties,
	Drazania and Calvastan C	onnigsworth, and Childress Counties, Dick	anson Dayou III
	Whatten Counting Coder	Derivers in Chambana Liberta and Hamia C	agorda, Camoun, and
	Diversion Lines, Ceuar	bayou in Chambers, Liberty and Harris C	ben and Canaba
	River in Irion, Runners, S	in Herry Country Distringer Deservice Deservice	ner, and Concho
	Counties; Cypress Creek	in Hays County; Dickinson Bayou in Braz	oria and Galveston
	Counties; Double Bayou	In Chamber's County; Dry Comai and Con	nal River in Comai
	and Guadalupe counties; (Jeronimo Creek Watersned in Guadalupe	and Comal
	Counties; Hickory Creek	in Denton County; Pecos River Watershe	d in Texas in Crane,
	Crockett, Pecos, Reeves, T	errell, Upton, and Ward Counties; Plum C	Creek Watershed in
	Caldwell, Hays, and Travi	s Counties; Lake Lavon in Collin County;	Lampasas River
	Watershed in Bell, Burne	t, Coryell, Hamilton, Lampasas, Mills, and	Williamson
	Counties; Lavaca River V	Watershed in Lavaca, De Witt, Jackson, G	onzales, and Fayette
	Counties; Leon River Wa	tershed below Proctor Lake in Comanche	Hamilton, Erath, ,
	Mills and Bell Counties; N	Navasota River in Grimes, Leon, Robertson	n, Brazos, Madison
	and Limestone Counties; I	Nueces River below Lake Corpus Christi in	n Nueces, Jim Wells
	and San Patricio Counties;	; Lower San Antonio River Watershed in	DeWitt, Goliad,
	Guadalupe, Karnes, Refug	io, Victoria, and Wilson Counties; Peach	C reek in Bastrop,
	Caldwell, Fayette, Gonzal	es and Counties; San Bernard River Wate	e rshed in Austin,
	Colorado, Wharton, Fort E	Bend, and Brazoria Counties; Lake Granb	ury Watershed in
	Hood, Parker, Palo Pinto,	Ranger, Erath, and Jack Counties; Gillelan	d Creek in Travis
	County; Lake Houston A	rea Watersheds in Grimes, Harris, Liberty	v, Montgomery, San
	Jacinto, Walker, and Wall	er Counties; Mill Creek in Washington and	l Austin Counties;
	Tres Palacios Watershed	in Matagorda and Wharton Counties; Upp	er Cibolo Creek in
	Kendall County; Upper L	lano River watershed in Edwards, Kerr, K	imble, Menard, Real,
	and Sutton Counties; Upp	er Oyster Creek in Fort Bend County; Up	per San Antonio
	River in Bexar County; U	pper San Marcos in Hays and Comal Cou	nties; and any new
	watersheds identified for	TMDL or WPP development.	
Key Project Activities	Hire Staff (); Surface Wat	ter Quality Monitoring (); Technical Assist	tance ();
	Education (X); Implement	ation (); BMP Effectiveness Monitoring ();
	Demonstration (); Plannin	ng (); Modeling (); Bacterial Source Track	ing (); Other ()
2017 Texas NPS	• Component 1 – LTG	Objectives 1, 2, 4, 7	
Management Program	• Component 1 – STGs	2C, 3A, 3B, 3D, 3E	
Reference	• Components 2. 3	,- ,- ,- ,	
Project Costs	Federal \$ 556,068	Non-Federal \$370,712 Tot	al \$ 926,780
Project Management	Texas A&M AgriLife	e Extension Service, Texas Water Resource	s Institute
Project Period	January 6, 2021 – Decemb	per 31, 2024	

Part I – Applicant Information

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Project Lea	d	Dr. Troy Allen H	Dr. Troy Allen Berthold						
Title		Senior Research	Senior Research Scientist						
Organizatio	n	Texas A&M AgriLife Extension Service, Texas Water Resources Institute							
E-mail Add	ress	taberthold@ag.ta	amu.edu						
Street Addr	ess	578 John Kimbr	ough Blvd	.; 2260 TA	MU	ſ			
City	College Sta	ation	County Brazos State TX Zip Code 77843-226				77843-2260		
Telephone Number 979-314-2467		979-314-2467			Faz	x Number	979.845.	0662	

Project Co-	Lead	Dr. Vanessa Con	riher-Olso	n					
Title		Professor & For	Professor & Forage Extension Specialist						
Organizatio	on	Texas A&M Ag	Texas A&M AgriLife Extension Service, Department of Soil & Crop Sciences						
E-mail Add	lress	vacorriher@ag.t	<u>amu.edu</u>						
Street Addr	ess	370 Olsen Blvd,	2474 TAN	ЛU					
City	College Sta	ation	County	Brazos		State	ΤХ	Zip Code	77843-2474
Telephone	Number	979.834.6191			Faz	x Number	979.845.	0604	

Project Co-	Lead	David Joel Pigg							
Title		Texas Well Own	Texas Well Owner Network Coordinator and Extension Program Specialist						
Organizatio	on	Texas A&M AgriLife Extension Service, Department of Soil & Crop Sciences				ces			
E-mail Add	lress	j-pigg@tamu.e	<u>du</u>						
Street Addr	ess	370 Olsen Blvd,	2474 TAN	MU					
City	College Sta	tion County Brazos State TX Zip Code 77843-2474					77843-2474		
Telephone Number 979.845.1461					Faz	x Number	979.845	.0604	

Project Co-	Lead	Dr. Anish Jantra	Dr. Anish Jantrania						
Title		Associate Profes	Associate Professor and Extension Specialist						
Organizatio	n	Texas A&M Ag	Texas A&M AgriLife Extension Service, Dept of Biological & Agricultural Engineering						
E-mail Add	lress	ajantrania@tam	ajantrania@tamu.edu						
Street Add	ess	720 East Blackla	and Road						
City	Temple		County	Bell		State	ΤX	Zip Code	76502
Telephone	Number	254.774.6014			Faz	x Number	254.774.	6001	

Project Partners

Names	Roles & Responsibilities
Texas State Soil and Water Conservation	Provide state oversight and management of all project activities and
Board (TSSWCB)	ensure coordination of activities with related projects and TCEQ.
Texas A&M AgriLife Extension Service –	Project coordination and administration. Maintain the TWON
Texas Water Resources Institute (TWRI)	website/educational material clearinghouse. Assist in development and
	distribution of TWON press releases and publications.
Texas A&M AgriLife Extension Service –	Project coordination with watershed coordinators, County Extension
Department of Soil and Crop Sciences	Agents and groundwater conservation districts; update and tailor
(SCSC)	educational materials and programs to local conditions; deliver programs;
	provide content management for TWON website/educational material
	clearinghouse; and conduct program/educational material evaluations.
Texas A&M AgriLife Extension Service –	Assist with developing supplemental TWON materials and delivering
Department of Biological and Agricultural	educational programs.
Engineering (BAEN)	
Texas Water Development Board (TWDB)	Support coordination with the Texas Alliance of Groundwater Districts as
and the Texas Alliance of Groundwater	appropriate in order to communicate project goals, activities, training
Districts	opportunities and accomplishments to affected parties.

Part II – Project Information

I	Project Type
1	110jeee 1jpe

Surface Water	Х	Groundwater	Х						
Does the project in TMDL; (c) an app developed under C Texas Groundwate	npleme proved I CWA §3 er Prote	nt recommendati -Plan; (d) a Com 20; (e) the <i>Texas</i> ection Strategy?	ons made in: prehensive C s <i>Coastal NP</i>	(a) a completed WPP; (b) an adopted conservation and Management Plan <i>S Pollution Control Program</i> ; or (f) th	e	Yes	x	No	
If yes, identify the	docum	ent.	Attoyac Bayou Watershed Protection Plan; Buck Creek Watershed Protection Plan; Arroyo Colorado Watershed Protection Plan; Bastrop Bayou Watershe Protection Plan; Buck Creek Watershed Protection Plan; Brady Creek Watershed Protection Plan; Cedar Bayou Watershed Protection Plan; Conch River Watershed Protection Plan; Cypress Creek Watershed Protection Plan; Eight Total Maximum Daily Loads for Indicator Bacteria in Dickinson Bayo and Three Tidal Tributaries; Double Bayou Watershed Protection Plan; Dry Comal/Comal River Watershed Protection Plan; Geronimo Creek and Alligator Creeks Watershed Protection Plan; Fifteen TMDLs for Indicator Bacteria in Watersheds of the Lake Houston Area; Hickory Creek Watershed Protection Plan; Lake Granbury Watershed Protection Plan Implementation; Lake Lavon Watershed Protection Plan; Implementation Plan for One Total Maximum Daily Load for Bacteria in Gilleland Creek; Leon River Watershed Protection Plan; Lower Nueces River Watershed Protection Plan; One Total Maximum Daily Load for Bacteria in the Lower San Antonio Riv One Total Maximum Daily Load for Bacteria in Peach Creek; Mill Creek Watershed Protection Plan; San Bernard Watershed Protection Plan; Tres Palacios Watershed Protection Plan; Upper Cibolo Creek Watershed Protection Plan; Lance River Watershed Protection Plan; Tres Palacios Watershed Protection Plan; Upper San Marcos River Watershed Protection Plan; Upper Llano River Watershed Protection Plan; Upper San Antonio River Watershed Protection Plan; Upper San Marcos River Watershed Protection Plan; San Bernard River Watershed Protection Plan; One TMDL						on ed ho n; ou 7 ed ; tion he n; ver; m
If yes, identify the developed and/or a document.	agency approve	d the	Attoyac Ba facilitated b	you Watershed Partnership by TWRI and TSSWCB;	Year Deve	eloped	20	14	
			Arroyo Col facilitated b U.S. EPA	orado Watershed Partnership by Texas Sea Grant, TCEQ and the			20	07	
		Bastrop Bayou Stakeholder Group facilitated by Houston-Galveston Area Council, Galveston Bay Estuary Program and TCEQ; University of Houston and CDM:							
		Brady Cree Watershed	k facilitated by Brady Creek Protection Plan Steering Committee olders, funded by U.S.EPA and			20	16		
			TCEQ	statis, funded by Clothin und			20	14	

	TSSWC	B CWA §319(h)
		10-03-23
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facilitated by TWRI and TSSWCB;		2019
Carancahua Bay by Stakeholders of Carancahua Bay, TWRI, facilitated by TCEQ		2016
Cedar Bayou Watershed Partnership facilitated by the H-GAC, Galveston Bay Estuary Program, TSSWCB, and U.S. EPA		2011
Concho River Watershed Advisory Committee facilitated by the Upper Colorado River Authority, TSSWCB, U.S. EPA, and Texas Institute for Applied Environmental Research;		2015
Cypress Creek WPP facilitated by The Meadows Center, TCEQ, Texas A&M AgriLife Extension, City of Wimberley, Blue Hole, Hays Trinity Groundwater Conservation District, U.S. EPA, Hays County, Texas Clean Rivers Program, City of Woodcreek, Texas Water Development Board, TSSWCB, Guadalupe- Blanco River Authority (GBRA), and the Wimberley Valley Watershed Association;		2012
Eight Total Maximum Daily Loads for Indicator Bacteria in Dickinson Bayou and Three Tidal Tributaries; facilitated by TCEQ		2016
Double Bayou Watershed Partnership facilitated by Galveston Bay Estuary Program, TCEQ, TSSWCB, Houston Advanced Research Center, U.S. Geologic Survey, and Shead Conservation Solutions		2017
Dry Comal/Comal River by Greg Malatek and Mark Enders, City of New Braunfels		2012
administered by TCEQ from U.S EPA		2008
Geronimo Creek Watershed Partnership facilitated by Texas A&M AgriLife Extension Service and TSSWCB:		
Hickory Creek by the city of Denton in		2008
cooperation with CH2M Hill, Texas A&M University and University of North Texas, facilitated by TCEQ and U.S EPA		2008
One Total Maximum Daily Load for Bacteria in the Lower San Antonio River; facilitated by TCEQ		2017
		2018

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One Total Maximum Daily Load for Bacteria in Peach Creek; facilitated by TCEQ	2008
Lake Lavon by Lavon Lake Watershed Partnership, North Texas Municipal Water District, Texas A&M AgriLife Extension Service and TSSWCB	2008; 2014
Lavaca River Watershed by Stakeholders of Lavaca River Watershed, TWRI and facilitated by TCEQ	2012
Landowners and entities in the Pecos River	2012
watershed, facilitated by AgriLife Extension, TWRI and TSSWCB;	2017
Plum Creek Watershed Partnership and facilitated by Texas AgriLife Extension Service and TSSWCB;	2016
Lampasas River Watershed Partnership facilitated by Texas A&M AgriLife Research and TSSWCB;	2013
Landowners and entities in the Leon River watershed, facilitated by Brazos River Authority and TSSWCB;	2011
Navasota River by Navasota River Watershed Partnership, Texas A&M AgriLife Research, TWRI	2015
Nueces River Watershed Partnership facilitated	2017
by the Nueces River Authority and TSSWCB	2013
Landowners and entities in the San Bernard River watershed, facilitated by the Houston- Galveston Area Council and TCEQ;	
Lake Granbury Watershed Protection Plan Stakeholders Committee facilitated by the Brazos River Authority and TCEO:	2016
Mill G a LW (a d LD (a d Li G ili (a d)	2018
Texas A&M AgriLife Extension Service and the TSSWCB;	
Tres Palacios by TWRI and Stakeholders of Tres Palacios watershed, administered by TCEQ	2007
Upper Cibolo Creek Watershed Partnership facilitated by the City of Boerne, Texas	2007; ongoing

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landowners and entities in the Upper Cibolo Creek watershed and the TCEQ;	
Upper Llano by the Upper Llano Watershed Coordination Committee, Llano River Field Station, TWRI, and TSSWCB	
Upper San Marcos by the San Marcos Watershed Initiative Stakeholder Committee, The Meadows Center for Water and the Environment, facilitated by TCEQ and U.S. EPA	
One TMDL for Bacteria in Upper Oyster Creek prepared by the TCEQ;	
Upper San Antonio River Watershed Partnership facilitated by Texas A&M AgriLife Research, San Antonio River Authority, and the TCEQ	

Watershed Information				
Watershed or Aquifer Name(s)	Hydrologic Unit Code (12 Digit)	Segment ID	Category on 2014 IR	Size (Acres)
Adams and Cow Bayous	120100051100, 120100051001, 120100051002, 120100051003, 120100051004, 120100051005	0508, 0508A, 0508B, 0508C, 0511, 0511A, 0511B, 0511C, 0511E	4a	160,000
Arroyo Colorado (Lower, Middle and Upper)121102080700, 121102080600, 121102080100		2201 and 2202	5c	1,169,920
Attoyac Bayou	120200050301 - 120200050307, 120200050401 - 120200050406,	0612	5b	354,629
Bastrop Bayou Tidal	120402050400	1105	5c	138,880
Brady Creek	120901100101, 120901100102, 120901100103, 120901100104, 120901100105, 120901100106, 120901100107, 120901100108, 120901100201, 120901100202, 120901100203, 120901100204, 120901100205, 120901100206, 120901100207, 120901100208, 120901100209, 120901100210	1416	5c	513,000
Buck Creek	111201050204, 111201050208, 111201050303, 111201050305 – 111201050307, 111201050401 – 111201050407, 111201050501 – 111201050502	0207	5b	184,960

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Carancahua Bay	121004010201-121004010205, 121004010207-121004010211	2456,2453,1602	5a, 5c	218,462
Cedar Bayou Tidal	120402030101, 120402030102, 120402030103, 120402030104, 120402030105, 120402030106,	0901	5c	92,800
Concho River	120800041104, 120800070204, 120901010206, 120901020101, 120901020205, 120901020306, 120901020509, 120901030402- 120901030601- 120901030504, 120901030601- 120901030602, 120901030601- 120901030706, 120901030801- 120901030706, 120901030901- 120901030909, 120901031001- 120901031006, 120901031001- 120901031006, 120901040101, 120901040102, 120901040101, 120901040106, 120901040107, 120901040106, 120901040107, 120901040106, 120901040107, 120901040301- 120901040204, 120901040305, 120901040404, 120901040305, 120901040404, 120901040403, 120901040404, 120901040406- 120901040408, 120901040406- 120901040505, 120901040502- 120901040505, 120901040508- 120901040510, 120901050101- 120901050107, 120901050301, 120901050207, 120901050301, 120901050308, 120901050304- 120901050308, 120901050304- 120901050308, 120901040103, 120901050308, 120901040103, 120901050308, 120901040103, 120901050308, 120901040103, 120901040404, 120901040103, 120901050308, 120901040103, 120901040405, 120901040103, 120901050308, 120901040306, 120901040304, 120901040306, 120901040304, 120901040306, 120901040507, 120901020502, 120901020502- 120901020504, 120901020502- 120901020504, 12	1421	5c	4,200,000
Cypress Creek	121002030202	1815	SI	24,328
Dickinson Bayou	120402040200	1103	5a	63,287
Double Bayou	120402020100	2422B 2422D	5c 5c	89,325
Dry Comal, Comal River	121002020106, 121002020104, 121002020105	1811	5c	38,894
Geronimo Creek (including its tributary, Alligator Creek)	121002020110, 121002020111	1804A	5c	44,152

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Gilleland Creek	120903010106	1428C	4a	52,866
	120301030406, 120301030506,			
	12030103070305			
	120301030804 - 05			
Hickory Creek	120301030901 - 02	0823		31,947
	120301030901 =02, 120301030905 = 06			
	12030103090300,			
	120501051001			
	111403050401, 111403050402,			
Lake O' The Pines	111403050405, 111403050404,	0403		
	111403050405, 111403050406,			
	111403050407, 111403060101			
Lake Lavon	120301060205,0708;	0821 C. D	5c	492.095
	12030106030307			
	121001010305,121001010204,121			
	001010105,121001010304,121001			
	010201,121001010202,121001010			
	401,121001010102,121001010302			
Lawa an Dissan	,121001010403,121001010106,12	1602	5	1 125 642
Lavaca River	1001010104,121001010108,12100	1002	Ja	1,123,042
	1010107,121001010303,12100101			
	0206,121001010203,12100101040			
	4,121001010301,121001010205,1			
	21001010103.121001010101			
	120701030201-04 120701030307			
	120701030309 120701030401-07			
	120701030501-10			
Navasota River	120701030501-10; 120701030601-04	1209	5b	1,002,056
	120701030001-04,			
	120701030701-07, 120701030801-04			
	120/01030801-04			
Serving Croals	120401020201, 120401020203, 120401020200, 120401020212	1009	5c, 5c	
Spring Creek	120401020209, 120401020212,	1008		100 149
	120401020213			100,148
	120401030101, 120401030102,	10100	-	
Spring Branch	120401030104, 120401030105,	1010C	5c	
	120401030110			114,773
	121004010301, 121004010302,			
Tres Palacios	121004010303, 121004010304,	1501	4a 5h	171 151
	121004010305, 121004010306,	1501	-ra, 50	1/1,101
	121004010307, 121004010310			
Mill Creek	1207010402	1202K	5c	256,000
North and South I lana Divor	12000202 12000202	1415_05,	1	605,622
North and South Liano River	12090202, 12090203	1415 06	1	604,228
	120701030201-204; 0307, 0309;			
Navasota River	0401-0407; 0501-0510; 0601-	1209	5b	1,002,056
	0604; 0701-0707; 0801-0804			
	110901050702, 110901050703,			
	111002030102, 111301050208,			
	111302090204, 120100040204			
Plum Creek	120301010104, 120500030306	1810	4b	288,240
	120601020401, 120702010804			
	120702010805 120800020403			
	121002030401 - 121002030403			

				1 age 11 01 23
Lampasas River (Lampasas River above Stillhouse Hollow Lake, Rocky Creek, Sulphur Creek, Simms Creek)	120702030101 – 120702030509	1217 1217A 1217B 1217C 1217D	5c 5b 2 2 5c	839,800
Leon River below Proctor Lake	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	1221	5c	871,488
Lower Nueces River	121101110701, 121101110705	2102	5c	116,862
Lower San Antonio River	121003030202, 121003030205, 121003030206, 121003030403, 121003030404, 121003030501, 121003030503, 121003030505, 121003030604 - 121003030608, 121003040405	1901	4a	776,863
San Bernard River	120904010101, 120904010102, 120904010104, 120904010109, 120904010205, 120904010207, 120904010302, 120904010304 – 120904010306, 120904010308	1301 1302 1302A 1302B	5c 5a 5c 5c	672,000
Lake Granbury	$\begin{array}{r} 120602010601-0608,\\ 120602010701-0706,\\ 120602010801-120602010809,\\ 120602010901-120602010907,\\ 120602011001-120602011004,\\ 120602011101-120602011110,\\ 120602011201-120602011208\end{array}$	1205	2	1,335,138
Upper Cibolo Creek	1210030402	1908	5c	49,210
Upper Llano	12090202010709, 120902020101 - 05, 12090202020108; 120902020301 - 06; 120902040201 - 02; 12090203010107; 12090203020106; 12090203040105	1415_05,1415_0 6	n/a	1,184,870
Upper San Marcos	121002030302	1814	n/a	31,436
Upper Oyster Creek	120402050100, 120402050200, 120701040403	1245C 1245D 1245F 1245I	5b	65,649
Upper San Antonio River (and Apache Creek, Alazan Creek, San Pedro Creek, Sixmile Creek, Picosa Creek, Martinez Creek)	1210030306	1911 1911B 1911C 1911D 1911E 1911H 1911H	5c 5a 5a 5c 5c 5c	80,000

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 2016 Texas Integrated Report, Clean Rivers Program Basin Summary/Highlights Reports, or other documented sources.

This project will extend statewide implementation of the TWON program. Watersheds and aquifers will be selected in collaboration with the TSSWCB and with input from other interested groups including groundwater conservation districts (GCDs), County Extension Agents (CEAs), river authorities and Soil and Water Conservation Districts (SWCDs). Many of the watersheds and aquifers selected are described in the *Texas NPS Management Program* or identified as impaired in the 2016 *Texas Integrated Report*.

The U.S. Geological Survey (USGS, DeSimone et al. 2009) reported that nitrate was the most commonly detected contaminant in private wells derived from man-made sources at concentrations greater than the EPA Maximum Contaminant Level (MCL). A second finding was that total coliform bacteria were detected in 34% of sampled wells. The MCL goal for fecal coliform bacteria, including *Escherichia coli*, in drinking water is zero.

For 2003-2008, the TWDB reported that for the 3,861 private water wells sampled, the percentage of wells exceeding the nitrate MCL varied from 2% to 50% each year, depending on the region. Additionally, results of well screenings conducted by the Texas A&M AgriLife Extension Service from 2009 - 2019 indicated that about 34% of private wells in Texas contain coliform bacteria, and about 5% contain *E. coli*.

Segment ID	Body Name	Impairment	Code
0207	Buck Creek (Lower Prairie Dog Town Fork)	Bacteria	5b
0508 and 0511	Adams and Cow Bayou	Bacteria, Depressed DO, pH	4a
0612	Attoyac Bayou	Bacteria	5b
0901	Cedar Bayou Tidal	Bacteria, PCBs, Dioxin	5c, 5a, 5a
1105	Bastrop Bayou Tidal	Bacteria	5c
1103	Dickinson Bayou	Bacteria, Depressed DO	5a and 5b
		Dioxin, PCBs	5a and 5a
1202K	Mill Creek	Bacteria	5c
1804A	Geronimo Creek	Bacteria	5c
2311	Upper Pecos River	Depressed DO	5c
1810	Plum Creek	Bacteria	4b
1209	Navasota River	Bacteria	5c
1217B	Sulphur Creek	Depressed DO	5c
1217D	North Fork Rocky Creek	Depressed DO	5b
1221	Leon River below Proctor Lake	Bacteria	5c
1221A	Resley Creek	Bacteria and Depressed DO	5b and 5b
1221D	Indian Creek	Bacteria	5b
1221F	Walnut Creek	Bacteria	5c
1901	Lower San Antonio River	Bacteria	4a
1301	San Bernard River Tidal	Bacteria	5c
1302	San Bernard River Above Tidal	Bacteria	5b
1302A	Gum Tree Branch	Bacteria	5b
1302B	West Bernard Creek	Bacteria and Depressed DO	5b and 5c
1421	Concho River	Bacteria and Depressed DO	5c and 5c
2201 and 2202	Arroyo Colorado	Bacteria	5c
2422B	Double Bayou West Fork	Bacteria, Depressed DO	5c and 5b
		Dioxin, PCBs	5a and 5a
2422D	Double Bayou East Fork	Bacteria, Dioxin, PCBs	5c, 5a, 5a

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1416	Brady Creek	DO	5c
2456,2453,1602	Carancahua Bay	Bacteria	5a, 5c
1811	Dry Comal, Comal River	Bacteria	5c
0821 C, D	Lake Lavon	Bacteria	5c
1602	Lavaca River	Bacteria, DO	5a
1209	Navasota River	Bacteria	5b
1301.1302	San Bernard	Bacteria	5c.5b
1501	Tres Palacios	Bacteria, DO	4a, 5b
Water Ouality Co	ncerns		, , , , , , , , , , , , , , , , , , , ,
0612	Attovac Bayou	Bacteria	CN
0207	Buck Creek	Chlorophyll-a	CS
0207A	Buck Creek from OK state line to S of Hedley	Nitrate	CS
1804A	Geronimo Creek	Nitrate	CS
1217B	Sulphur Creek	Depressed DO	CS
1221	Leon River Below Proctor lake	Chlorophyll-a	CS
		Depressed DO	CS
1221A	Resley Creek	Chlorophyll-a	CS
		Nitrate	CS
		Bacteria	CN
		Orthophosphorus	CS
1221B	South Leon River	Depressed DO	CS
1221D	Indian Creek	Depressed DO	CN
		Nitrate	CS
		Orthophosphorus	CS
1205	Lake Granbury	Chlorophyll-a	CS
1901	Lower San Antonio River	Bacteria	CN
		Chlorophyll-a	CS
		Nitrate	CS
		Orthophosphorus	CS
		Total phosphorus	CS
2311	Upper Pecos River	Bacteria	CN
		Chlorophyll-a	CS
		Depressed DO	CS
		Golden alga	CN
1810	Plum Creek	Depressed DO	CS
		Nitrate	CS
		Orthophosphorus	CS
		Total phosphorus	CS
1301	San Bernard River Tidal	Chlorophyll-a	CS
1302	San Bernard River Above Tidal	Depressed DO	CS
1302A	Gum Tree Branch	Bacteria	CN
		Depressed DO	CS
1302B	West Bernard Creek	Depressed DO	CS
Special Interest			
0207A	Buck Creek	Bacteria	WAP
1205	Lake Granbury	Bacteria	WAP
1217	Lampasas River Above Stillhouse Hollow Lake	Bacteria	WAP
1415	Upper Llano	-	WAP

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1815	Cypress Creek	Depressed DO, Impaired fish community, Impaired habitat, Impaired macrobenthic community	WAP	

TSSWCB CWA §319(h)

Project Narrative

Problem/Need Statement

Over 1,000,000 private water wells in Texas provide water to citizens in rural areas and increasingly to those living on small acreages in the rural-urban interface. Public drinking water supplies are generally of good quality and are monitored through requirements of the federal Safe Drinking Water Act; however, private well owners are independently responsible for monitoring the quality of their wells and frequently at greater risk for exposure to compromised water quality. The two most common private well pollutants, *E. coli* bacteria and nutrients, also are the most frequent cause of waterbody impairment or concern in Texas. It is likely that in many cases, local release of *E. coli* and nutrients is not limited to contamination of the property owner's private well and that these contaminants are transported off-site and contribute to pollutant loadings in surface waterbodies.

Management and protection of private water wells are under the control of the landowner, and therefore, depend primarily on education rather than regulation. To address the issues described above, which affect both surface water and groundwater, SCSC, BAEN and TWRI have developed TWON to deliver a science-based, community-responsive education curriculum. TWON also complements the successful Texas Watershed Steward program by emphasizing the importance of implementing BMPs.

TWON provides training to Texans regarding water quality and BMPs for protecting their wells and surface waters, which averts off-site transport of contaminants (bacteria and nutrients) to surface waters, prevents contamination of underlying aquifers, and safeguards the health of landowners and their families. As a result, this program supports ongoing watershed protection planning efforts being conducted by TSSWCB and others by expanding the reach of these programs to additional audiences and resulting in greater BMP implementation for water quality improvement and protection. This project builds upon and continues the impact of TSSWCB projects #10-04 ("Preventing Water Quality Contamination Through the Texas Well Owner Network"), #13-08, ("Statewide Delivery of the Texas Well Owner Network") and #17-10 and #17-56 ("Continued Statewide Delivery of the Texas Well Owner Network"). Project information is at twon.tamu.edu, and the most recent final report for the TWON program (13-08) is available at http://twon.tamu.edu/media/679597/13-08-fr-twon2-2-3-17_final.pdf.

Project Narrative

General Project Description (Include Project Location Map)

This project will extend statewide implementation of the TWON program, which builds institutional and local capacity to improve and protect both well water and surface water quality by improving awareness of water quality issues and increasing knowledge of BMPs. The training includes methods for safeguarding well water quality for landowners and their families and others relying on the availability of high-quality groundwater stored by aquifers. Because improved understanding of water quality, human impacts and management practices to improve well and surface water quality will help to forestall off-site transport of fecal indicator bacteria and nutrients to surface waters, TWON is an effective tool to bring to bear in WPP and TMDL implementation where investigations indicate bacterial and nutrient contributions. The program is delivered through (1) "Well Educated" programs of 4-6 hours, (2) "Well Informed" programs of 1-2 hours, and (3) evaluation of the program so that needed modifications and improvements can be made. Both versions of the program include opportunities for participants to have a water well sample screened for bacteria, nitrate and total dissolved solids (TDS). Program activities, deliverables, accounting and reporting will be managed by TWRI in cooperation with SCSC and BAEN.

TWON Water Well Events. A total of 60 Well Informed and Well Educated programs will be delivered; a minimum of 30 TWON Well Informed (approximately 10 each year) and 30 TWON Well Educated (approximately 10 each year) programs will be delivered throughout the project to provide wellhead protection information and recommendations for remediating well contamination, if appropriate. Educational materials such as the TWON Handbook, factsheets and PowerPoint modules developed through TSSWCB projects #10-04, 13-08, 17-10, and 17-56 "Preventing Water Quality Contamination Through the Texas Well Owner Network," "Statewide Delivery of the Texas Well Owner Network," and "Continued Statewide Delivery of the Texas Well Owner Network" will be used. Trainings will be delivered by the TWON Coordinator, BAEN and/or SCSC Program Specialists and/or the SCSC Associate Professor and Extension Specialist, as appropriate. TWON educational programs are delivered in two forms: 1) Well Informed events will be scheduled for areas where the watershed coordinator or CEA recommends short and extremely focused events not lasting more than 2 hours, and 2) Well Educated programs will usually be delivered in other areas for more comprehensive, specific topics through a 4- to 6-hour event.

TWON Educational Program Topics. The TWON education curriculum emphasizes BMPs for safeguarding private well water quality and aquifer integrity. The TWON curriculum and publications include the following topics:

- Interpretation of well water screening results
- Watershed and groundwater hydrology and the importance to neighbors and the public of safeguarding aquifer integrity and groundwater quality
- Proper siting of drinking water wells and avoiding improper well construction techniques
- Proper maintenance and protection of the wellhead
- Proper household waste management
- Proper siting and functioning of on-site wastewater treatment systems
- Maintenance, aging and failure of on-site wastewater treatment systems
- Effects of land use changes on well water quality
- Locating and properly plugging abandoned wells

Selection of Screening/Training Locations. SCSC will collaborate with the TSSWCB and other state and local organizations to select locations for TWON events. SCSC will coordinate efforts with state agencies and organizations already involved in WPP/TMDL processes or who are planning future WPP/TMDL processes in specific watersheds.

Well Water Analyses. For both TWON Well Educated and Well Informed events, participants will be encouraged to arrive with private well water samples, collected using the Soil, Water and Forage Testing Laboratory water collection procedures (<u>http://soiltesting.tamu.edu/files/waterweb1.pdf</u>). Samples will be screened for nitrate, salinity concentrations and arsenic for areas where these contaminants are of concern according to the *Texas NPS Management Program* Appendix D Groundwater Constituents of Concern Report. For participants with positive results, remediation instructions and/or a recommendation and instructions will be given for sending follow-up samples to an accredited NELAC laboratory to perform additional water analyses.

Screening for *E. coli* bacteria will either be conducted on-site or at Texas A&M University by the SCSC Program Specialist or nearby NELAC-certified laboratory representatives will be available at the beginning of the program to accept samples for analyses at their laboratories. During most of the screenings, results of bacterial analyses will not be available before the training is completed. Bacterial screening results and remediation instructions or recommendations for additional testing will be emailed or mailed to the participants, which allows them to receive bacterial screening results privately. TWON will request participants' permission to receive copies of bacterial lab results so that appropriate remediation recommendations and materials may be forwarded to those with positive analyses.

Most participants will be responsible for the cost of their water sample screening analysis (approximately \$10-\$20/sample depending on the laboratory or supplies used). Previous experience with private well water screenings has indicated that requiring a nominal fee improves attendance because the community perceives the program as being developed for all rather than targeting those with financial need. However, for underserved and student audiences, and by individual request through the CEA or watershed coordinator, costs of analyses will be underwritten by the project through the purchase of necessary supplies. As a result of the training, participants will more clearly understand the relationships between practices in or near their well and the quality of water available for their families and other families pumping from the same formation. To increase delivery of the educational materials to a greater audience, any new or updated TWON educational materials will continue to be posted online (<u>http://twon.tamu.edu/fact-sheets/</u>) as they are developed to make them readily available to the public.

Assessment. An evaluation approach that was developed through TSSWCB projects #10-04, #13-08, #17-10, and #17-56, will be used to measure both knowledge and behavior changes of program participants. A pre-test/post-test evaluation strategy will be implemented at the beginning and end of each training event. The pre-test will ask knowledge-based questions and the post-test will measure knowledge change of participants. In addition, the post-test will include 'intentions to change' questions that will focus on behaviors that participants should adopt based on what they have learned.

A one-year follow-up evaluation instrument will also be administered to participants via online technology. Emails will be sent to program participants to determine which practices were adopted one year after the program.



Tasks, Objec	tives and Schedul	es					
Task 1	Project Administr	ration					
Costs	Federal	\$22,243	Non-Federal	\$14,828	Total	\$37,071	
Objective	To effectively add	minister, co	pordinate, and monitor a	ll work performed	under this proj	ect including	
	technical and fina	ancial super	rvision, and preparation	of status reports.		-	
Subtask 1.1	TWRI will prepar	re electroni	c quarterly progress repo	orts (QPRs) for su	bmission 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 O	ctober. QP	Rs shall be distributed to	all Project Partne	ers.		
	Start Date		Month 3	Completion I	Date	Month 48	
Subtask 1.2	TWRI will perfor	rm accounti	ing functions for project	funds and will sul	omit appropriat	e Reimbursement	
	Forms to TSSWC	CB at least o	quarterly.				
-	Start Date		Month 1	Completion I	Date	Month 48	
Subtask 1.3	TWRI will host c	oordinatior	n meetings or conference	e calls, at least qua	rterly, with Pro	ject Partners to	
	discuss project ac	ctivities, pro	oject schedule, communi	cation needs, deliv	verables, and or	ther requirements.	
	TWRI will develo	op lists of a	iction items needed follo	wing each project	coordination n	neeting and	
	distribute to proje	ect personne	el.				
0.1/ 1.1/	Start Date		Month I	Completion I	Date C	Month 48	
Subtask 1.4	I WRI and SCSC	will attend	and participate in the I	exas Groundwater	Protection Con	mmittee and	
	subcommittee me	etings, Tex	as Alliance of Groundw	ater Districts coni	erences, and of	her meetings as	
	appropriate to con	mmunicate	Month 1	Completion I	accomplished	Month 48	
Subtack 15	TWPL in collabo	ration with	NOILII I	a TWON website	Jale (twon tamu adu	Wonun 46	
Sublask 1.5	clearinghouse for	TWON int	formation and resources	Unique visitors y	<u>(iwon.tamu.eut</u>	hrough the website	
	and reported in O		ionnation and resources	. Onique visitors v		infough the website	
	Start Date		Month 1	Completion I	Date	Month 48	
Subtask 1.6	TWRI and SCSC	will develo	op a Final Report that su	mmarizes activitie	es completed ar	nd conclusions	
	reached during th	e project ar	nd discusses the extent to	o which project go	als and measur	es of success have	
	been achieved.	1 5		1 5 8			
	Start Date		Month 33	Completion I	Date	Month 48	
Deliverables	• QPRs in elec	ctronic forn	nat				
	Reimbursem	ent Forms	and necessary document	tation in hard copy	v format		
	• Final Report	 Final Report in electronic and hard copy formats 					

Tasks, Object	tives and Schedule	es				
Task 2	Coordination and	delivery of TWO	ON screenings and	trainings		
Costs	Federal	\$514,363	Non-Federal	\$342,909	Total	\$857,272
Objective	Deliver a total of	60 TWON Well	Informed 1- to 2-h	nour screenings an	d TWON We	ell Educated 4- to 6-
	hour trainings in p	priority watershe	ds and aquifers.			
Subtask 2.1	SCSC will continu	ue to employ an	Extension Program	n Specialist who v	vill serve as t	the full-time TWON
	Program Coordina	ator and will be r	esponsible for the	general oversight	and coordina	ation of all project
	activities and for p	promoting, coord	linating and/or del	ivering the TWON	V training eve	ents. SCSC will
	coordinate with th	e TSSWCB and	other state and loo	cal organizations a	lready involv	ved in WPP/TMDL
	processes or who	are planning futu	are WPP/TMDL p	rocesses in specifi	c watersheds	s to select locations
	for the TWON We	ell Educated and	Well Informed ev	vents. SCSC and T	SSWCB will	l periodically make
	collaborative deci	sions to re-priori	tize and add/remo	ve locations from	the list.	
	Start Date		Month 1	Completion I	Date	Month 48

				Page 19 01 25			
Subtask 2.2	SCSC with assistance from	m TWRI will develop and	disseminate informational	materials to actively			
	market TWON events including news releases, internet and social media postings, newsletter						
	announcements, public/cc	onference presentations, fly	ers, etc. As appropriate, TV	WRI will include			
	information on the project	t in the txH2O, Conservation	on Matters e-letter and Agr	<i>iLife Today</i> . All			
	announcements, letters and publications will be provided to the TSSWCB for review and comment prior						
	to dissemination.						
	Start Date	Month 1	Completion Date	Month 48			
Subtask 2.3	Deliver 1- to 2-hour Well	Informed events to provide	e well-head protection info	rmation and			
	recommendations for rem	ediating well contaminatio	n, if appropriate. Well Info	rmed educational events			
	will be delivered by the SCSC Associate Professor and Extension Specialist, TWON Coordinator and/or						
	the SCSC Program Specia	alist as appropriate. A mini	mum of 30 Well Informed	events (approximately 10			
	each year) will be delivered	ed throughout the project. I	Events will include an oppo	ortunity for participant			
	water samples to be scree	ned for fecal indicator bact	eria, nitrate and TDS and a	n overview of the well			
	management topics discus	ssed in more detail during o	comprehensive TWON We	ll Educated Events.			
	Start Date	Month 1	Completion Date	Month 48			
Subtask 2.4	Deliver 4- to 6-hour TWC	ON Well Educated events in	n selected watersheds, with	the minimum goal being			
	30 events delivered throug	ghout the course of the proj	ject (approximately 10 eacl	n year) to increase local			
	understanding of the facto	ors that can adversely impa	ct well water quality, and p	provide information and			
	tools to prevent and/or res	solve them. Well Educated	events will include a well	water quality screening			
	opportunity for participan	ts. Well Educated events w	vill be delivered by the TW	ON Coordinator and a			
	combination of the BAEN	and SCSC Program Speci	alists and the SCSC Assoc	iate Professor and			
	Extension Specialist.						
	Start Date	Month 1	Completion Date	Month 48			
Deliverables	• List of program deliv	very watersheds selected in	cooperation with TSSWC	B, updated as needed			
	• Delivery of at least 3	0 (10 each year) 4- to 6-ho	ur TWON Well Educated	events			
	• Delivery of at least 3	0 (10 each year) 1- to 2-ho	ur TWON Well Informed	events			
	Meeting notices, mat	erials, agendas and attenda	nce lists for TWON events	\$			
	Press releases, newsp	paper articles, newsletters a	and other public information	n, as developed and			
	disseminated						

Tasks, Objec	tives and Schedules					
Task 3	Evaluate TWON effec	iveness				
Costs	Evaluate 1 WON effect	162	Non Fodoral	\$12.075	Total	\$22.427
	Federal \$19.	+02		312,973	Total	\$52,457
Objective	To measure both know	ledge and t	ehavior changes c	of individuals parti	cipating in the pr	ogram
Subtask 3.1	SCSC will administer	pre-test and	post-test evaluation	ons to evaluate know	owledge increase	s by individuals
	participating in TWO	regarding	program principle	s, appropriate BM	Ps addressing pro	oper private well
	management, participa	nt satisfacti	on with the progra	im and attendees'	intentions to char	nge their
	behavior as a result of	their partici	pation.			
	Start Date		Month 1	Completion I	Date	Month 48
Subtask 3.2	SCSC will administer	one-year fo	llow-up evaluation	ns via online techn	iques to assess be	chavior changes
	adopted and other acti	vities by TV	VON Well Educate	ed participants.		
	Start Date		Month 1	Completion I	Date	Month 48
Subtask 3.3	SCSC will analyze res	ults obtaine	d from the pre-test	/post-test and one	-year follow-up e	valuations using
	descriptive summary s	tatistics. SC	SC will modify th	e educational prog	gram and material	ls as appropriate.
	Start Date		Month 3	Completion I	Date	Month 48
Deliverables	• Pre-test/post-test	evaluation r	esults for TWON	training		
	• Follow-up evalua	tions for TV	VON training			

Project Goals (Expand from Summary Page)

This project will extend statewide implementation of the TWON through (1) Well Educated training programs of 4 to 6 hours, and (2) Well Informed screening programs of 1 to 2 hours. The goals of the project are to improve and protect both groundwater and surface water quality by increasing awareness of water quality issues and knowledge of BMPs through improved private well and on-site septic system management. Project goals will be achieved through (1) 30 (approximately 10 per year) Well Educated programs, (2) 30 (approximately 10 per year) Well Informed programs, and (3) evaluation of the program to measure knowledge gained, BMPs adopted and to determine if modifications and improvements need to be made to the programs. Both versions of the program include opportunities for participants to have a water well sample screened for fecal indicator bacteria, nitrate and TDS. If water quality standards are exceeded, recommendations for determining contamination sources and resolving issues are provided.

Measures of Success (Expand from Summary Page)

Increase well owner awareness of water quality issues and knowledge of BMPs through:

- o Distribution of TWON publications and delivery of TWON well screenings and trainings
- o Delivery of 60 TWON Well Educated and Well Informed events
- Delivery of at least 30 (approximately 10 each year) 4 to 6-hour TWON Well Educated programs in selected watersheds
- Delivery of at least 30 (approximately 10 each year) 1- to 2-hour TWON Well Informed programs.
- Measure impact of program delivery through:
 - o Numbers of citizens participating in TWON programs and unique visitors to website
 - Increased knowledge and understanding of individuals participating in the program, as measured by pre-/post-tests and one-year follow-up evaluations
 - Intention to adopt or adoption of recommended BMPs as indicated by pre-/post-tests and one-year follow-up evaluations.

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 that protect surface and ground water. LTG: Protect and restore water quality affected by NPS pollution through assessment, implementation and education

- Focus NPS abatement efforts ...and available resources in watersheds and aquifers as identified as impacted by NPS pollution.
- 2. Support the implementation of state, regional, and local programs to prevent NPS pollution through assessment ...and education.
- 4. Support the implementation of state, regional, and local programs to reduce NPS pollution to groundwater through the *Texas Groundwater Protection Strategy*, based on the potential for degradation with respect to use.
- 7. Increase overall public awareness of NPS issues and prevention activities.

STG Two – Implementation: Implement TMDL I-Plans and/or WPPs and other state, regional and local plans/programs to reduce NPS pollution...potentially degraded with respect to use criteria by NPS pollution.

• Objective C – Develop and implement BMPs to address NPS constituents of concern in aquifers identified as impacted by or vulnerable to NPS pollution.

STG Three – Education: Conduct education and technology transfer activities to help increase awareness of NPS pollution and activities which contribute to the degradation of waterbodies, including aquifers, by NPS.

- 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 E Implement outreach and education activities identified in the *Texas Groundwater Protection Strategy* to prevent NPS impacts to groundwater.

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.

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	\$	556	,068 %	of total	project		60%	
Non-Federal	\$	370	,712 %	% of total project		40%		
Total	\$	926	,780	Total		100%		
			· · · · ·					
Category		F	Federal		Non-Federal		Total	
Personnel		\$	\$ 340,440		182,347	\$	522,787	
Fringe Benefits		\$	104,033	\$	47,160	\$	151,193	
Travel		\$	8,725	\$	0	\$	7,725	
Equipment		\$	0	\$	0	\$	0	
Supplies		\$	5,300	\$	0	\$	5,300	
Contractual		\$	0	\$	0	\$	0	
Construction		\$	0	\$	0	\$	0	
Other		\$	25,040	\$	0	\$	26,040	
Total Direct Costs		\$	483,538	\$	229,507	\$	713,045	
Indirect Costs ($\leq 15\%$)		\$	72,530	\$	141,205	\$	213,735	
Total Project Costs		\$	556,068	\$	370,712	\$	926,780	

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Budget Justification (Federal)			
Category	Total Amount	Justification	
Personnel	\$ 340,440	 TWRI Program Manager: \$59,064 @ 3 months (\$15,208) TWRI Project Manager: \$44,800 @ 3 months (\$11,881) SCSC TWON Coordinator: \$75,000 @ 36 months (\$238,773) SCSC Extension Program Specialist: \$58,884 @ 7.2 months (\$37,493) BAEN Extension Program Specialist: \$58,245 @ 7.2 months (\$37,085) *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	\$ 104,033	Fringe for faculty and staff is calculated at 18.2% salary plus \$746 per month. *Fringe benefits estimates are based on salary estimates listed. Actual fringe benefits will vary between months coinciding with percent effort variations; but in aggregate, will not exceed the overall estimated total.	
Travel	\$ 8,725	 TWRI travel includes mileage at the state rate for one trip to Temple annually for project meetings and mileage for travel to TGCP and other related meetings statewide. (\$225) SCSC Extension Water Resource Specialist, Extension Program Specialist and TWON Coordinator travel for TWON Well Educated trainings, TWON Well Informed screenings and related meetings statewide includes travel expenses such as rental cars and fuel charges or mileage at the state rate. Lodging and per diem are also included at the state rate for the locations when an overnight stay is necessary due to distance and associated Concur travel system usage fees. Funds may also be for specialist and program specialists to disseminate information regarding the successful delivery of the TWON program at national, international and state conferences such as the SWCD Directors annual conference. (\$5,500): a minimum of 10 TWON Well Educated locations/year x 1 night x 3 individuals (program specialists and other Extension personnel necessary for support of training events) x at the state rate per night + travel for trips ranging from 100-500 miles roundtrip a minimum of 10 TWON Well Informed locations/year x 2 nights x 1 individual (program specialist) at the state rate per night + travel for trips ranging from 100-500 miles roundtrip. BAEN Extension Program Specialist travel to TWON Well Educated trainings and meetings statewide. Travel includes rental car and fuel or mileage at the state rate; lodging and per diem are also included at the GSA state rate for the locations when an overnight stay is necessary due to distance; and associated Concur travel system usage fees. (\$3,000): a minimum of 10 TWON Well Educated locations/year x 1 night x 1 individual (BAEN program specialist travel to TWON Well Educated locations/year x 1 night x 1 individual (BAEN program specialist or Extension specialist) at the state ra	
Equipment	\$ 0	N/A	

Supplies	\$ 5,300	• Supplies for training materials (plastic bins, flash drives, water sample analysis supplies, paper, binders, folders, rental car fees, fuel for rental car, etc.)
Contractual*	\$ 0	N/A
Construction	\$ 0	N/A
Other	\$ 25,040	(Amounts listed below are estimates and may fluctuate)
		Communications Services: \$13,300
		• Website maintenance services (Data Analysis Team/DAT) - transferring
		TWON website to standalone website: \$7,500
		• SCSC printing costs (training & screening materials): \$1,000
		• Conference fees: \$870
		• Postage: \$270
		• Laptop and software licenses: \$1,500
		• Facility rental fees: \$600
Indirect	\$ 72,530	Texas A&M AgriLife Extension Service's federally-negotiated indirect cost
		rate (IDC) is 30% modified total direct costs (MTDC). Per the limitations of
		this RFP, indirect costs are limited at 15% total direct costs.
		\$483,538 TDC * 0.15

Budget Justification (Non-Federal)			
Category	Total Amount	Justification	
Personnel	\$ 182,347	• TWRI Director, \$219,180 @ 1.17 months (3.26% per year) – \$22,734	
		 SCSC Extension Professor & Forage Extension Specialist, \$102,737 @ 14.15 months (39.3% per year) - \$128,548 	
		 BAEN Extension Specialist & Associate Professor, \$118,704 annually @ 2.96 months (8.22% per year) – \$31,065 	
		*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	
		not exceed total effort estimates for the entire project.)	
Fringe Benefits	\$ 47,160	Fringe for faculty and staff is calculated at 18.2% salary plus \$746 per month.	
		Fringe for hourly students is calculated at 10.7% salary plus \$412 per month.	
		between months coinciding with percent effort variations; but in aggregate, will not exceed the	
		overall estimated total.	
Travel	\$ 0	N/A	
Equipment	\$ 0	N/A	
Supplies	\$ 0	N/A	
Contractual*	\$ 0	N/A	
Construction	\$ 0	N/A	
Other	\$ 0	N/A	

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Indirect	\$ 141,205	Texas A&M AgriLife Extension Service's federally-negotiated indirect cost rate (IDC) is 30% modified total direct costs (MTDC). MTDC includes salary, fringe, travel, supplies and other; facility rental is IDC exempt.
		Cost Share IDC - \$229,507 * 0.30 = \$68,853
		Unrecovered IDC = 30% MTDC - 15% TDC - IDC on MTDC: \$482,938 MTDC * 0.30 = \$144,882 - IDC on TDC: \$483,538 TDC federal * 0.15 = 72,530 - Total Unrecovered IDC: \$144,882 - \$72,530 = \$72,352