

# Mill Creek Watershed Partnership

*Collaborating for the betterment of land and people*

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Texas A&M AgriLife Extension Service



TEXAS A&M  
**AGRI**LIFE  
EXTENSION



*Bleiberville Fire Hall  
June 27, 2017*

# Meeting Agenda

- Welcome and introductions
- Summary of Mill Creek Activities
- WQMPs: Review and Update

## Action Items

- Water quality monitoring contract approval
- New Steering Committee Members/Ground Rules approval
- Prioritization of Implementation Activities

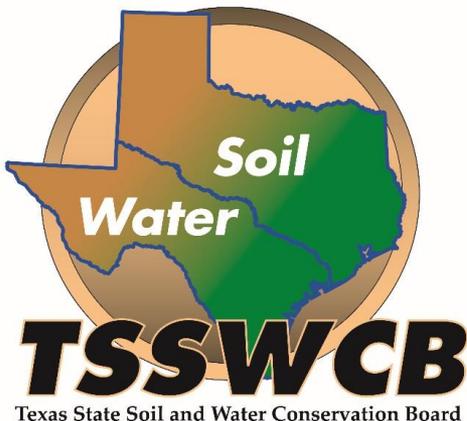
If time –

- Mill Creek Texas Stream Team
- Mill Creek Clean-up

# Water Quality Management Plans (WQMPs)

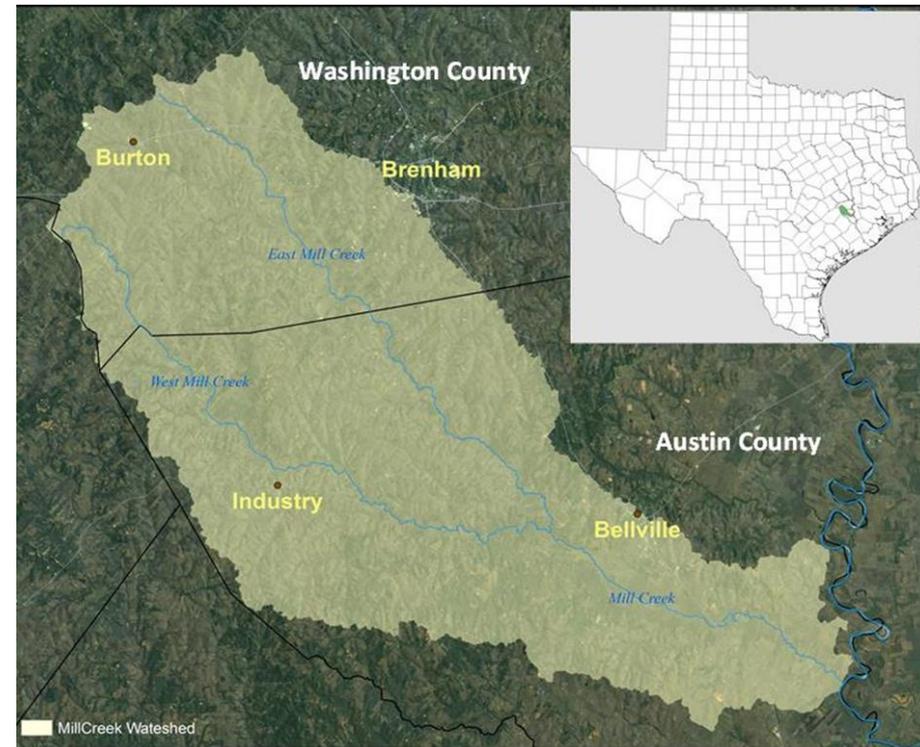


Taylor Marburger – District Technician  
Austin County NRCS Office

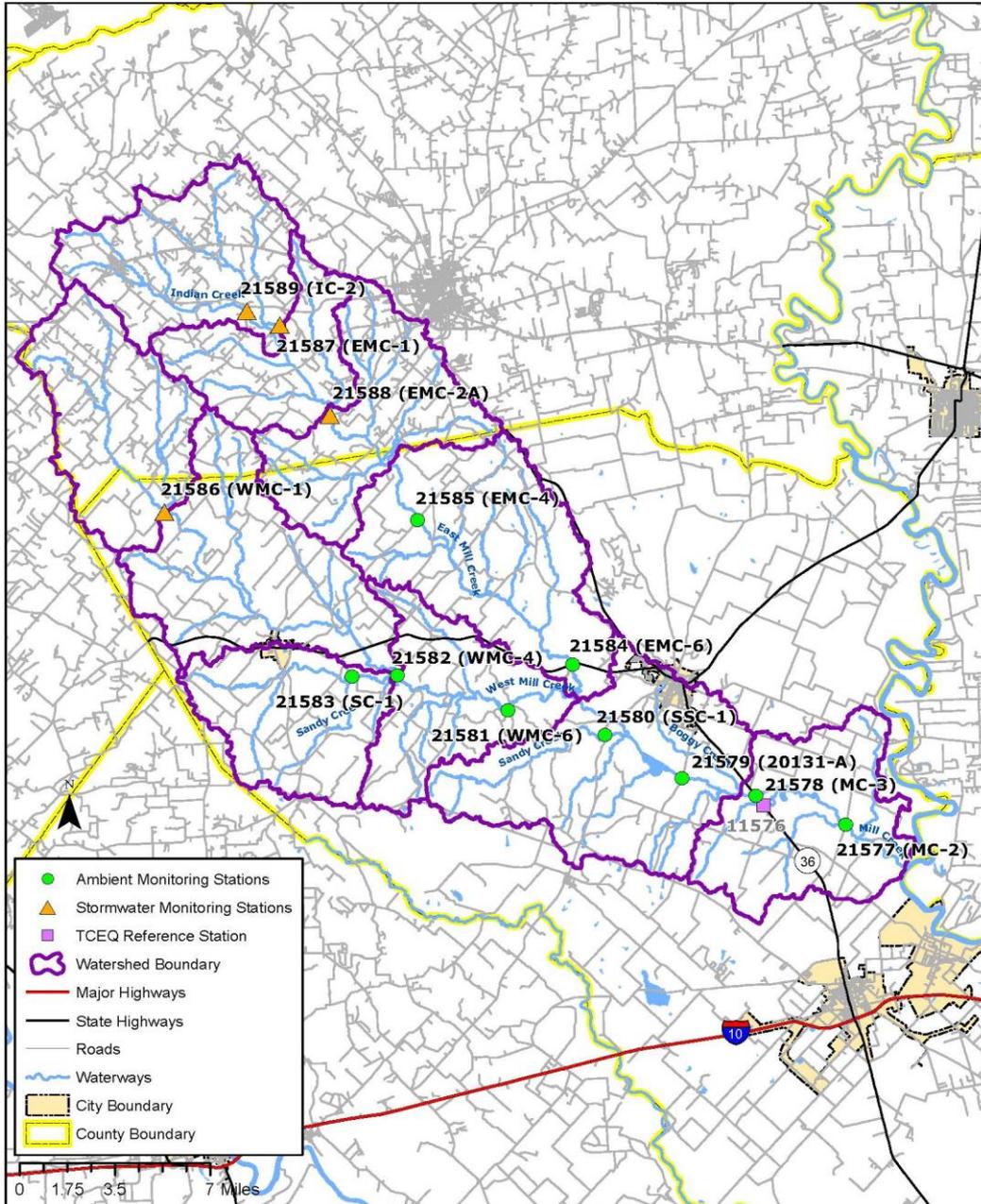


# Implementation of the WPP

- ⦿ Improving surface water quality
- ⦿ Educational Programming
- ⦿ Water quality monitoring
- ⦿ Measuring success and changes to the WPP



# Mill Creek Monitoring Stations



## Mill Creek WPP Monitoring for Development

### Water Quality Monitoring

9 ambient sites

-monthly from Sept 2014-June 2015

4 Storm water

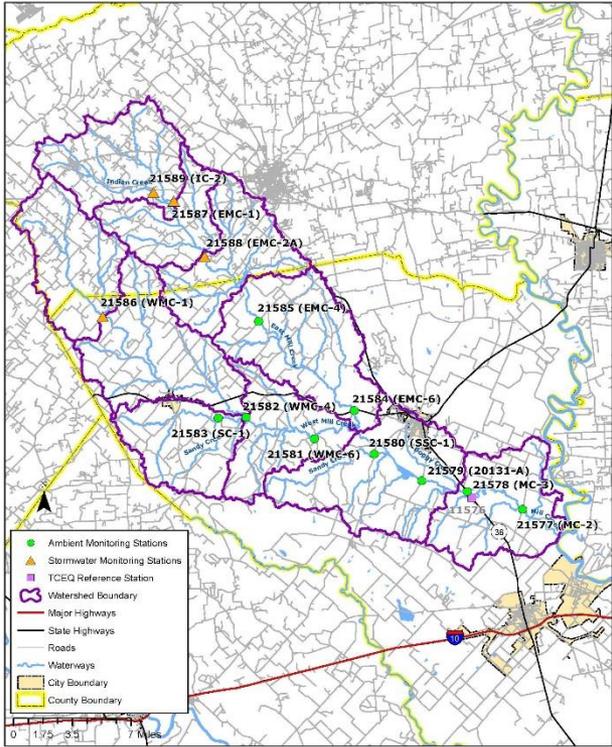
-3 monitoring events at each site at some point in 10 month period

### Proposed Monitoring Locations

Site	Site ID	TCEQ ID	Lat_dd	Lon_dd	Description
13*	IC-2	21589	30.154482	-96.514878	Indian Creek at CR 2/Beckermann Rd, 300 meters south of CR 25 and 9 kilometers west of Brenham.
12*	EMC-1	21587	30.14667	-96.494839	East fork of Mill Creek at Indian Creek Ln/CR 28A, 0.75 km SW of intersection of CR 28 and Indian Creek Ln.
11*	EMC-2a	21588	30.097393	-96.464984	East Mill Creek at FM332, 7.5 km SW of intersection of FM332 and CR 389.
10*	WMC-1	21586	30.04692	-96.567711	West fork of Mill Creek at Wolfe Rd approximately 3.0 km NW of intersection of FM 389 and Wolfe Rd.
9	EMC-4	21585	30.039449	-96.413137	East fork Mill Creek at Bleiblerville Rd. About 1.5 km northwest of TCEQ station ID 20133.
8	EMC-6	21584	29.959612	-96.320151	East fork Mill Creek at FM 159/Old Nelsonville Rd, 1.5 km west of intersection of Koy Rd and FM 159.
7	SC-1	21583	29.955764	-96.455117	Sandy Creek at New Breman Rd approximately 5 km southeast of the city of Industry.
6	WMC-4a	21582	29.955712	96.427633	West Mill Creek at Tiemann Rd, east of Industry.
5	WMC-6	21581	29.935733	-96.360328	West Fork of Mill Creek approximately 7.7 km west of the Mill Creek Rd and Kuykendall Rd
4	SSC-1	21580	29.921135	-96.301334	Sandy Creek at Mill Creek Rd 4.3KM west and 2.9 km south of Bellville
3	20131-A	21579	29.89679	-96.25499	Mill Creek at FM 2429 5.13 km upstream of SH 36 and 5.25 km downstream of Mill Creek Road at approximately 5.78 km south of the City of Bellville in Austin County
2	MC-3	21578	29.886502	-96.210053	Little Boggy Creek at Hwy 36 south of Bellville
1	MC-2	21577	29.869637	-96.155232	Mill Creek at FM331, 5.7 kilometers south of Burleigh

\*Targeted monitoring sites

Mill Creek Monitoring Stations

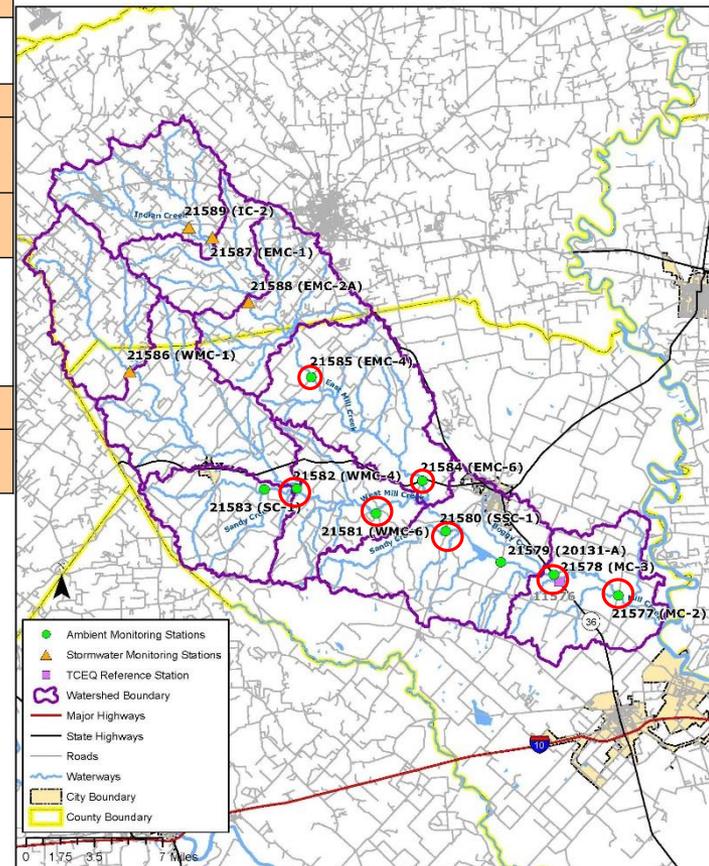


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### Mill Creek Monitoring Stations



## Monitoring Locations

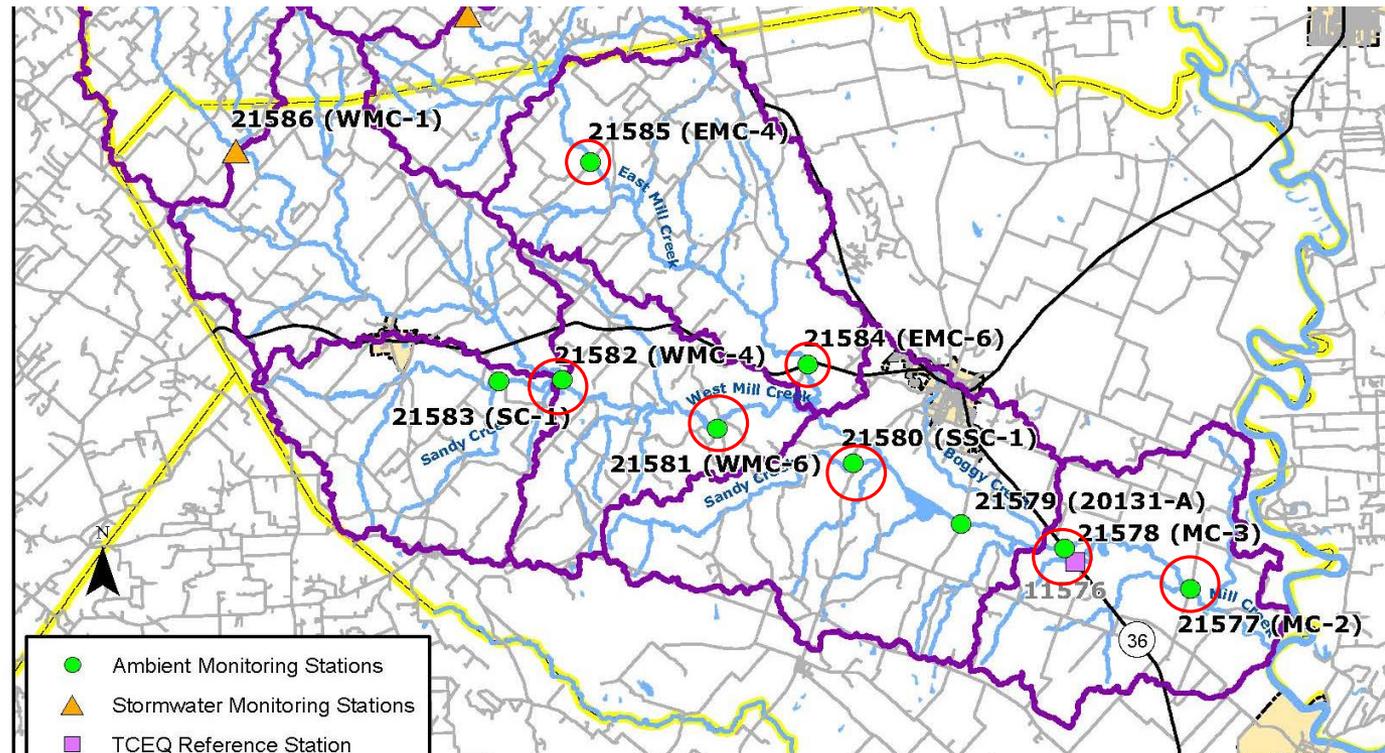
## Implementation – 2017/2018

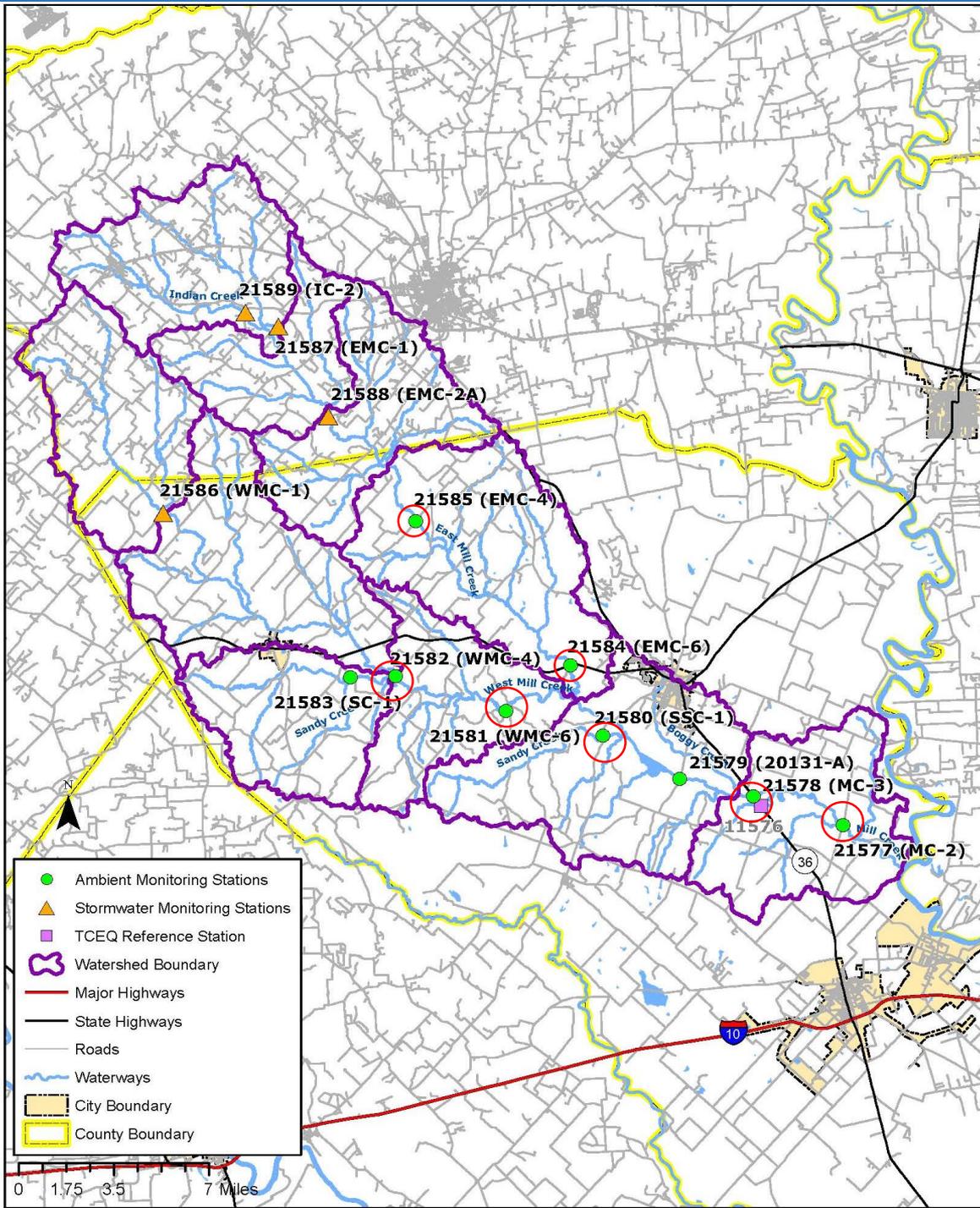
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## 6 Parameters

- Total Nitrogen
- Total Phosphorus
- Nitrate+Nitrite
- Ammonia
- Orthophosphate
- *E. coli*





## Agenda Items

- Ground Rules
- New Members

	<u>First</u>	<u>Last Name</u>	<u>Alternate</u>	<u>County</u>	<u>Affiliation</u>
1	Doug	Albrecht		AuCo	Landowner/Mill creek/wildlife
2	William	Amelang	Bill Eikenhorst	WaCo	WaCo Wildlife Society
3	Kenneth	Blezinger		AuCo	(AuCo) SCWD
4	George	Dillingham			Landowner/Ag Producer
5	Peggy	Felder		WaCo	City of Burton
6	Ric	Flores		AuCo	Bellville Chamber of Commerce
7	Luther	Hueske		WaCo	WaCo Commissioner
8	Shawn	Jackson		AuCo	City of Bellville
9	Robert	Luedeker			Landowner/Ag Producer
10	Doug	Marek			Landowner/Ag Producer
11	Mark	Marzahn		WaCo	(WaCo) Environmental Dept.
12	Ben	Mayberry		AuCo	Landowner Farmer/rancher
13	Frank	Monk		AuCo	Mill Creek Drainage District
14	Bobby	Rinn			AuCo Commissioner
15	Ronnie	Schulte	Ray Thaler	WaCo	(WaCo) SWCD
16	Charlie	Tallerine		AuCo	City of Industry
17	Don	Wellmann			Landowner
18	Larry	Winkelman		WaCo	WaCo Farm Bureau

### Stakeholders wishing to join

Randy	Hegermeyer		AuCo	Landowner, West Mill Creek
Diana	Kies		AuCo	Landowner
Linda	Nations			Master Naturalist/Landowner
Mary	Rinn			Bellville ISD teacher/landowner

# Agenda Item:

## Shaping the Implementation of the Mill Creek WPP

### Project Implementation

Table 8.1. Jurisdiction, implementation milestones, and estimated financial cost for recommended management measures.

Management Measure	Jurisdiction	Unit Cost	Number Implemented			Total Cost
			Year			
			1-3	4-6	7-10	
<i>Urban Stormwater Management Measures</i>						
Pet Waste Collection Stations	Bellville, Burton, Brenham, Industry	\$620/station \$85 annual/station	6	3	3	\$17,640
Initiate Spay/Neuter Program	Bellville, Burton, Brenham, Industry	\$35,000	3	---	---	\$105,000
Comprehensive Urban Stormwater Assessment	Cities of Bellville, Burton, and Industry	\$35,000/survey	3	---	---	\$105,000
Enhance Stormwater Management Practices	Cities of Bellville, Burton, Brenham, Industry					\$105,000
Modify Stormwater Conveyance Systems	Cities of Bellville and Brenham					\$1,200,000

### Project Implementation

Management Measure	Jurisdiction	Unit Cost	Number Implemented			Unit Cost
			Year			
			1-3	4-6	7-10	
<i>Wastewater Management Measures</i>						
Wastewater Collection System Line Testing / Replacement (SSO Initiative)	Cities of Bellville, Burton, and Industry					\$14,500,000 <sup>1</sup>
Modifications to Lift Stations (SSO Initiative)	Cities of Bellville, Burton, and Industry	\$86,000/lift station				\$14,500,000 <sup>1</sup>
Expand County OSSF Education Programs	Extension	\$2,500 event	2	2	2	\$15,000
Septic System Repair	Homeowner	\$5,000/system	121	235	313	\$3,345,000
Septic System Replacement	Homeowner	\$10,000/system	15	15	15	\$450,000
Septic System Decommissioning	Homeowner	\$2,000/system	10	15	15	\$80,000
Expand the Existing Household Hazardous Waste Programs	Austin and Washington Counties	\$12,500/event	2	3	4	\$112,500

Project Implementation

Management Measure	Jurisdiction	Unit Cost	Number Implemented			Unit Cost
			Year			
			1-3	4-6	7-10	
<i>Agricultural Management Measures</i>						
WQMP Technician (New Position)	SWCDs	\$75,000/year <sup>2</sup>	1			\$750,000
Water Quality Management Plans	SWCDs	\$15,000/plan	15	147	197	\$5,385,000
<i>Non-Domestic Animal and Wildlife Management Measures</i>						
Feral Hog Control (Existing Position)	Extension	\$75,000/year <sup>2</sup>	1			\$750,000
Feral Hog Control (Equipment)	Extension	\$500/trap	10	---	---	\$5,000
<i>Monitoring Component</i>						
Targeted Water Quality Monitoring	Extension & H-GAC	---	1	1	1	\$650,000
Comprehensive Stream Assessment	TAMU	\$1,500/assessment	3	3	3	\$13,500
Bacterial Source Tracking and Wildlife Surveys	TAMU	---	---	---	1	\$200,000

<sup>1</sup> Currently underway using City of Bellville funds. Total includes lift station modifications, WWTF expansion, sewer line testing/replacement/extension, construction of new water towers, and other infrastructure-related projects.

<sup>2</sup> Total includes salary and benefits (health insurance, annual/sick leave, etc.).

Table 8.2. Jurisdiction, implementation milestones, and estimated financial costs for outreach and education efforts.

Outreach Activity	Jurisdiction	Number Implemented			Total Cost
		Year			
		1-3	4-6	7-10	
<b>Broad-Based Programs</b>					
Texas Watershed Steward Training Sessions	Extension	1	1	---	n/a <sup>1</sup>
Public School Education Program	Extension & Washington County Wildlife Society	1	1	1	\$25,000
Mill Creek Watershed Protection Brochure and Newsletters	Extension	5	5	5	\$10,000
Displays at Local Events	Extension/TSSWCB	6	6	6	\$3,600
Nonpoint Source Pollution Educational Programs	Extension	3	3	4	\$100,000
<b>Urban Programs</b>					
Urban Sector Nutrient Education	Extension	3	3	4	\$45,000
Pet Waste Programs	Cities, TCEQ, Extension	3	3	4	\$35,000
Urban Smart Growth Workshops	TCEQ & Extension	2	---	---	\$20,000
Fats, Oil, Grease Workshops		2	---	---	
Master Gardner and Master Naturalist Programs		2	2	2	
Sports and Athletic Field Education (SAFE)	Extension	3	3	4	\$45,000

Jan '18



Outreach Activity	Jurisdiction	Number Implemented			Total Cost
		Year			
		1-3	4-6	7-10	
<b>Wastewater Programs</b>					
Advertise Septic System Online Training Modules	Extension	3	3	4	\$10,000
Septic System Workshops and Assistance	Extension, Austin & Washington Counties	3	3	4	\$25,000
<b>Agricultural Programs</b>					
Soil and Water Testing Campaigns	Extension	3	3	3	\$40,000
Agriculture Nutrient Management Education	Extension	3	3	3	\$1,100
Crop Management Seminars	Extension	3	3	3	\$1,100
Agricultural Waste Pesticide Collection Days	TCEQ	2	3	4	\$125,000
Livestock Grazing Management Education	Extension	3	3	3	\$1,100
<b>Non-Domestic Animal and Wildlife Programs</b>					
Feral Hog Management Workshop	Extension	2	1	2	\$40,000
<b>Additional Programs</b>					
Community Stream Cleanup Events	Extension	2	3	3	\$40,000
Rainwater Harvesting Education/ Demonstration	Extension	2	1	2	\$25,000
Post "Don't Mess With Texas Water" Signage (H.B. 451, 82 <sup>nd</sup> Legislative Session)	Extension	4			\$4,000
Watershed Coordinator	Extension				\$950,000 <sup>2</sup>



Oct '18



Sept '18



<sup>1</sup> Funded through the TSSWCB through an existing CWA section 319(h) grant.

<sup>2</sup> Total includes salary and benefits (health insurance, annual/sick leave, etc.) and travel.

## Oct '16:

- ✓ Volunteer meeting, Brenham ISD Outdoors
- ✓ Started Social Media
- ✓ Texas Master Naturalist Conference
- ✓ Texas Stream Team training
- ✓ Started TPWD Texas Waters Certificate

## Nov '16:

- ✓ WaCo Wildlife Mtg
- ✓ TWA/L.A.N.D.s – Quail day, Brenham ISD

## Dec '16:

- ✓ TWA/L.A.N.D.s – Deer day, Brenham ISD
- ✓ WaCo Ag conference, Information Table

## Jan '17:

- ✓ Master Naturalist Presentation
- ✓ Master Gardener Information Table
- ✓ Introduction of District Technician

## Feb '17:

- ✓ WaCo CEU Conference, Presentation
- ✓ Bellville Jr High – S.T.E.M night
- ✓ ISEA Conference, Watershed Curriculum
- ✓ Master Gardener Presentation

## Mar '17:

- ✓ Lions Club presentation
- ✓ Aerobic OSSF workshop
- ✓ Open Steering Committee meetings
- ✓ Mill Creek Stakeholder Meeting

## Apr '17:

- ✓ Homeowners OSSF Workshop
- ✓ Bellville ISD, Quail Necropsy
- ✓ Brenham Elementary S.T.E.M night
- ✓ Commissioners Court, Mill Creek Cleanup
- ✓ Steering Committee meeting
- ✓ TWON (well-owners) Program

## May '17:

- ✓ WaCo Youth Ag Day
- ✓ TWA/L.A.N.D.s – Water day, Brenham ISD
- ✓ Meeting with Texas Stream Team
- ✓ WaCo Feral Hog Seminar, Presentation

# Planned Educational Programs



- Austin County WQMP Q&A – July (??)
- Lone Star Healthy Streams – August (tentative)
- Youth Creek Clean up – September (tentative)
- Soil Fertility Workshop – November (tentative)
- Texas Watershed Stewards – January

## Other Available Programs

- Extension Feral Hog workshop
- Smart Growth Workshop
- Livestock Management workshop
- Urban Nutrient Management
- Agricultural Nutrient Management
- Riparian Management Workshop

## Possible Activities

- Mill Creek Texas Stream Team
- Pesticide Waste Collection (?)
- Soil Testing Campaign
- Pet Waste Campaign
- eLearning Module of WPP

# Next Meeting

- ⦿ Group discussion on selected implementation activities
  - Mill Creek Clean Up
- ⦿ Texas Stream Team volunteer mtg?
  
- ⦿ Future meetings:
  - ⦿ Steering Committee Meeting: \_\_\_\_\_
    - ⦿ Thursday, July 27<sup>th</sup>?
    - ⦿ Tuesday, August 15<sup>th</sup>?
  - ⦿ General Public, quarterly: \_\_\_\_\_
    - ⦿ Tuesday, August 19<sup>th</sup> ??

# Thanks for coming!

- ⦿ Questions?
- ⦿ Concerns?

We welcome your voice!

Watershed Coordinator: Jennifer Cary  
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College Station, TX 77843  
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Or follow us on Facebook, Twitter, and Instagram