

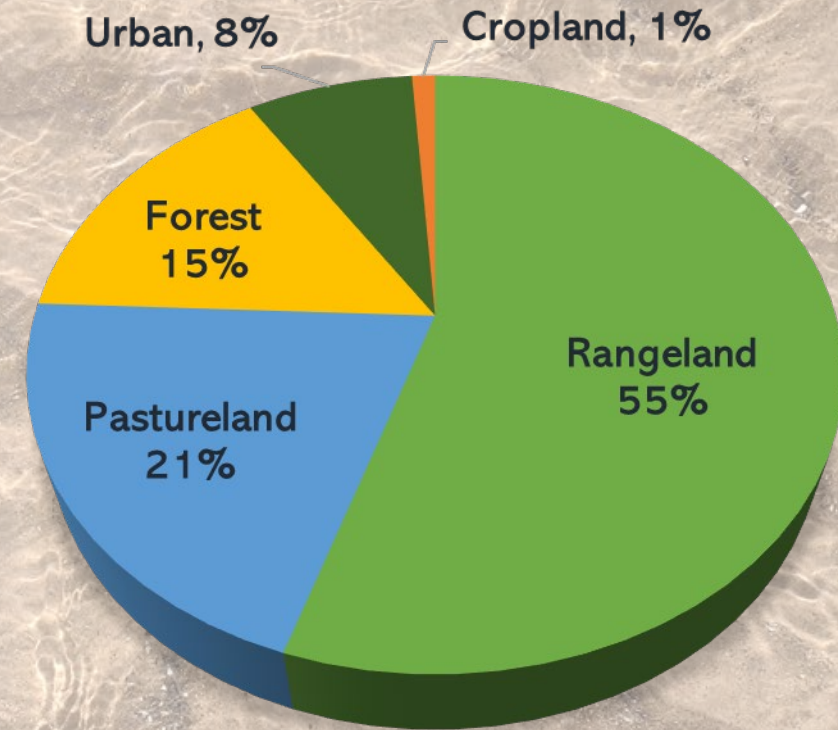
Mill Creek Watershed Protection Plan

Implementation Updates

Evgenia Spears, Ph.D.
Watershed Coordinator
Texas A&M AgriLife Extension Service

November 9, 2021

Mill Creek Watershed



- 263,450 acres
- Predominantly rural and privately-owned
- Permitted discharges: the City of Bellville, City of Industry, and City of Burton; and Kieke Egg Farm

Mill Creek Watershed Protection Plan (WPP)

- 2014 – Mill Creek listed impaired
 - Elevated levels of *E.coli* bacteria
- January 2015 – WPP initiated
- February 2016 – WPP accepted by EPA
- WPP functions to restore and protect water quality in Mill Creek
- All measures are voluntary
- Heavy focus on public outreach and education



Major Sources of Pollution

- The bacteria originates from nonpoint sources
- Potential sources identified in the WPP:
 - Urban (e.g., stormwater, pet waste)
 - Agriculture (e.g., livestock, cropland)
 - Wastewater (e.g., failing septic systems)
 - Wildlife and non-domestic animals (e.g., feral hog, deer)




What Is Being Done?

- Public outreach and education
- Watershed-wide Cleanup Day
- Routine water quality monitoring
- Water quality management plans (WQMPs)
- Online Homeowner Maintenance of Septic Systems class



Public Outreach and Education

- Many events and programs had to be canceled or postponed 
- 2021 Watershed Cleanup Day
- Face-to-face programs are back!
 - Texas Watershed Steward (December 9)
 - Homeowner Maintenance of Septic Systems (TBD)
 - Healthy Lawns Healthy Waters (summer 2022)



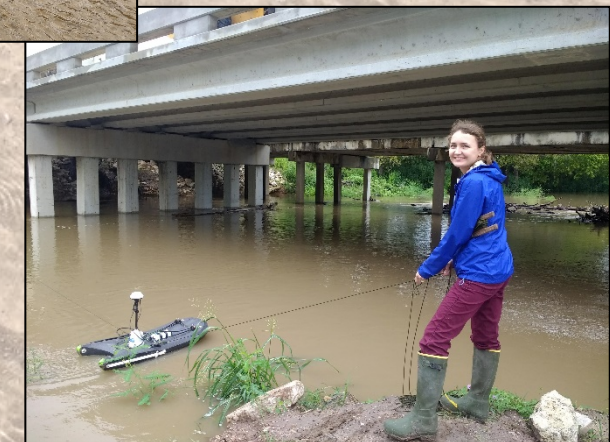
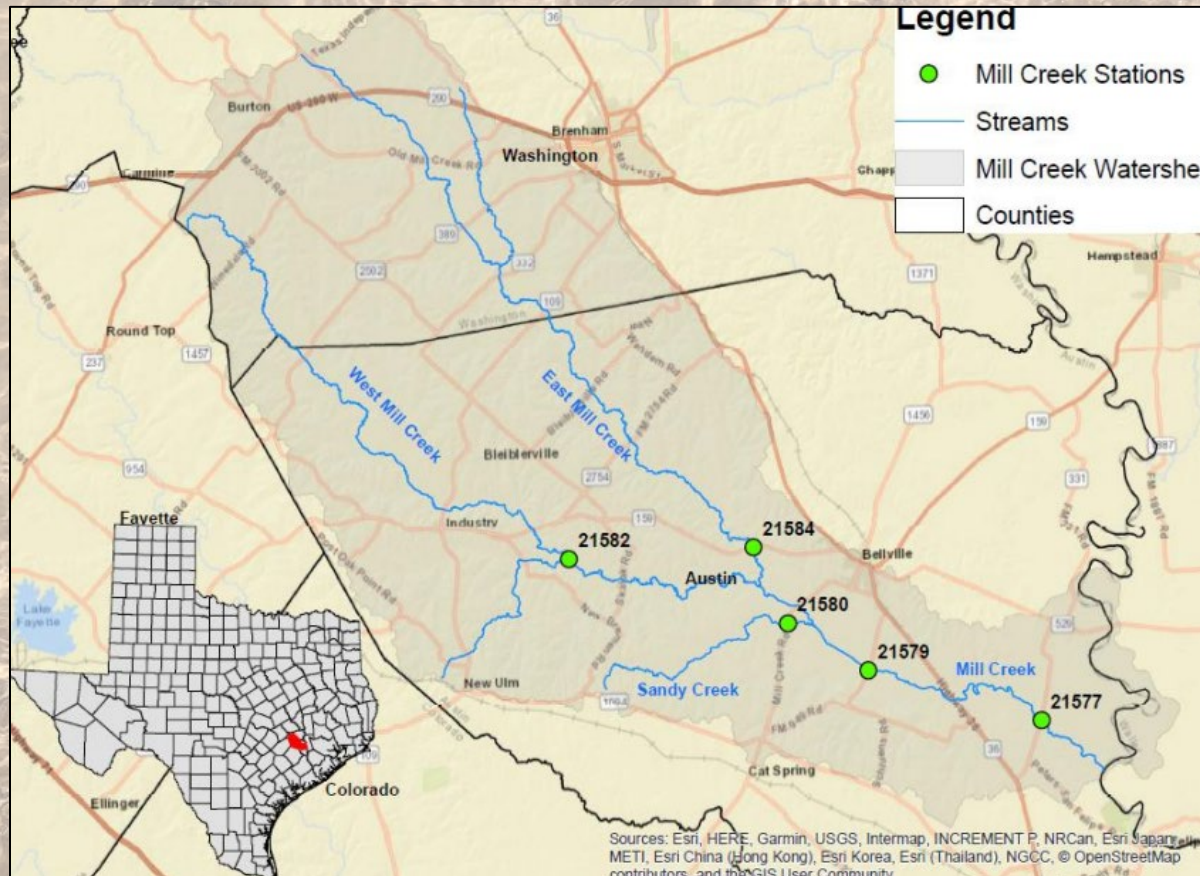
2021 Cleanup Day

- Saturday, April 10
- Targeted private landowners in the watershed
- Centralized trash drop-off spot at Bleiblerville VFD
- 600 pounds of trash and debris removed

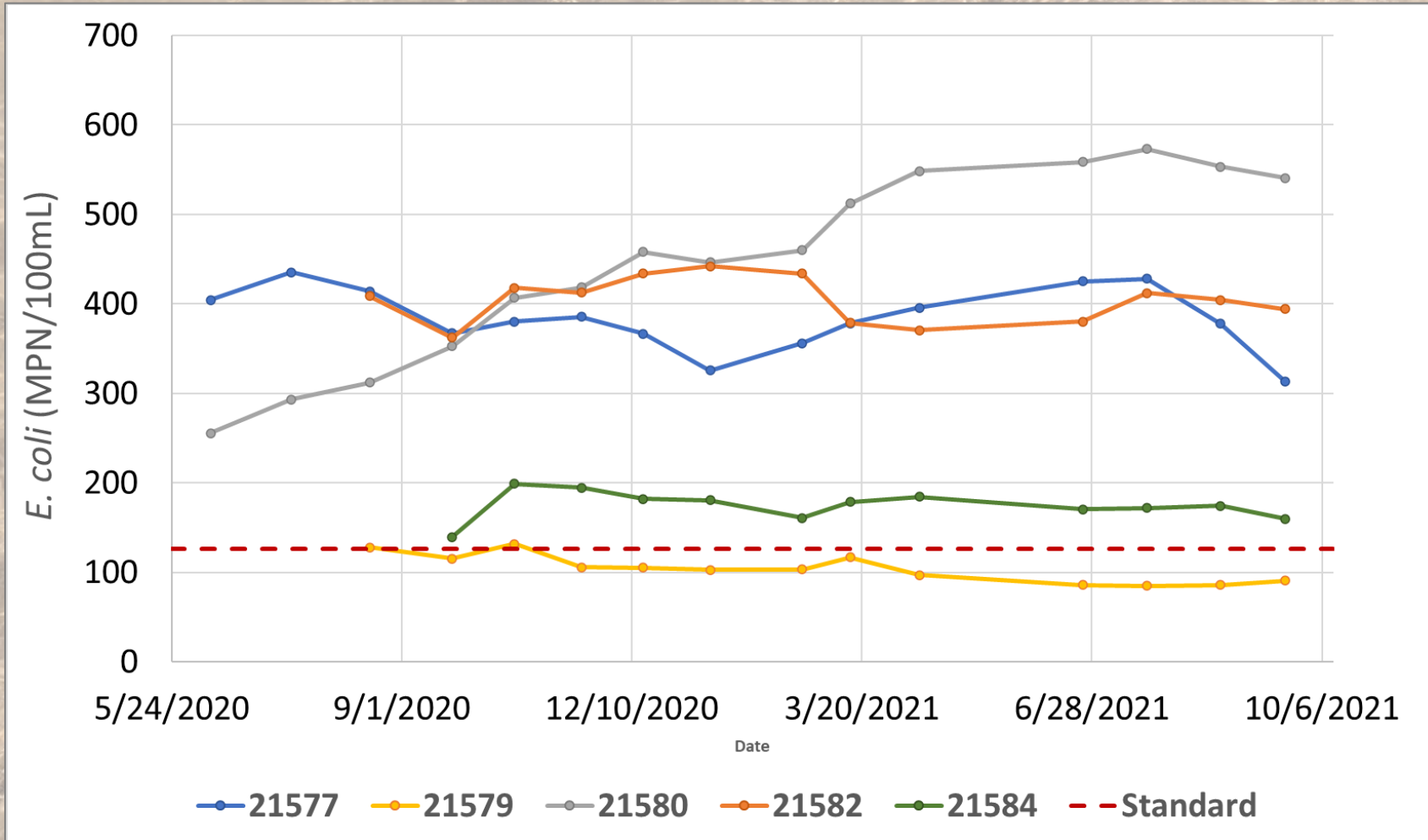


Routine Water Quality Monitoring

- Monthly monitoring at 5 locations along the creek
- In partnership with the Texas Water Resources Institute



Water Quality: *E. coli* Trends



MC sampling locations:

21577 – MC @ FM 331

21579 – MC @ FM 2429

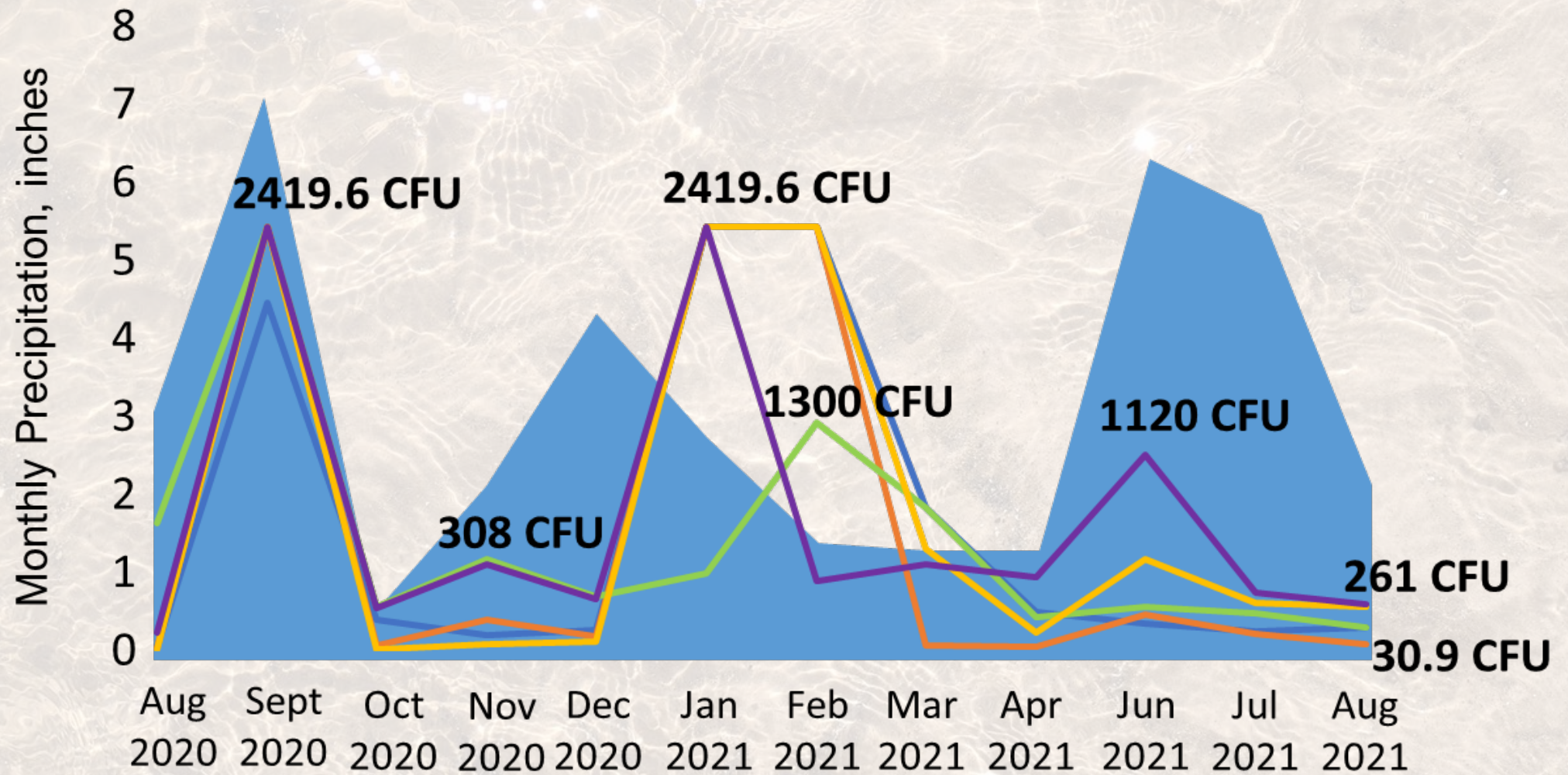
24580 – Sandy Creek @ MC Rd.

21582 – W MC @ Tiemann Rd.

21584 – East Fork MC @ FM 159

Standard: 126 MPN/100mL

Rainfall and *E.coli* Levels



Homeowner Maintenance of Septic Systems Online Course

- Available via AgriLife Learn
- 7-hour course with quizzes
- 30 days to complete
- Course fee: \$150
- Eligible for certification in Austin and Washington Counties
 (other counties – check!)



COURSE INFORMATION

An aerobic septic system, or aerobic treatment unit (ATU), uses oxygen to breakdown both dissolved and solid constituents into gases, cell mass, and non-degradable material contained in wastewater. This online course will teach you how to properly maintain and operate your ATU.

Topics

- Understand the basic operation and maintenance activities for an ATU
- Be a better consumer in the onsite wastewater treatment industry
- Have the knowledge needed to understand and communicate with maintenance providers

Course Details

Cost: \$150

Duration: 30 days from sign-up date

To register, go to tx.ag/EnrollAerobicTreatment and click 'Enroll Now'.

Available to Texans in approved counties starting **April 1**.

Visit tx.ag/HomeAerobicTreatmentSystems for more information.



Contact

Dr. Anish Jantrania
Anish.jantrania@ag.tamu.edu

Want to Get Involved?

- Mill Creek Watershed Partnership Meetings
- Stay in touch with your CEA
- Visit www.millcreek.tamu.edu and subscribe to our newsletter
- Find us on Twitter and Facebook: [@MillCreekWater](https://twitter.com/MillCreekWater)
- Reach out to the Watershed Coordinator at millcreek@ag.tamu.edu or **(979) 845-2862**.



Mill Creek WPP Partners



THANK YOU!

Evgenia Spears, Ph.D.
Watershed Coordinator
Texas A&M AgriLife Extension Service
millcreek@ag.tamu.edu
(979) 845-2862





Water Quality Management Plans in Mill Creek Watershed

By Faith Chase

Austin County SWCD District Technician




What is a Water Quality Management Plan(WQMP)?

- ▶ Site-specific plan for land improvement measures developed through Soil and Water Conservation Districts (SWCD) and the Texas State Soil and Water Conservation Board (TSSWCB) for agricultural lands
- ▶ Provides farmers and ranchers a voluntary opportunity to achieve a level of pollution prevention or abatement consistent with state water quality standards
- ▶ Includes appropriate and essential land treatment practices, production practices, management measures, or technologies applicable to the planned land use
- ▶ Best available management and technology as described in Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FTOG)



Benefits of a WQMP

- Abate/prevent erosion and promote conservation
 - A strategic “management” plan for your operation
 - Demonstrate that voluntary conservation programs promote agricultural production and environmental quality as compatible goals
 - Resolve water quality complaints through a voluntary process with SWCD and TSSWCB
- 



How to get a WQMP?

- An individual requests planning assistance through their local SWCD
- The WQMP is usually developed by the SWCD Technician with NRCS and TSSWCB
- The WQMP is approved by the landowner, the SWCD and NRCS and then certified by the TSSWCB
- Producer implements the WQMP on their land
- Annual status reviews are conducted to ensure that the landowner implements BMPs as agreed to in the implementation schedule



Financial Assistance

State and Federal (TSSWCB) or Federal (NRCS) assistance is obtainable for certain conservation practices

➤ TSSWCB

- WQMP Financial Assistance
- Clean Water Act Section 319(h) funding (must be in the Mill Creek Watershed)

➤ NRCS

- Farm Bill Programs
- Environmental Quality Incentives Program (EQIP)



What if I have a plan written and I want to make changes or cancel it?

- WQMPs are flexible and voluntary
- If you want to change something, it can be done at ANY time*
- If you decide you no longer want to participate in the WQMP program on your property, for ANY reason it can be canceled at ANY time*

*If the plan is cancelled, cost-share will need to be refunded.



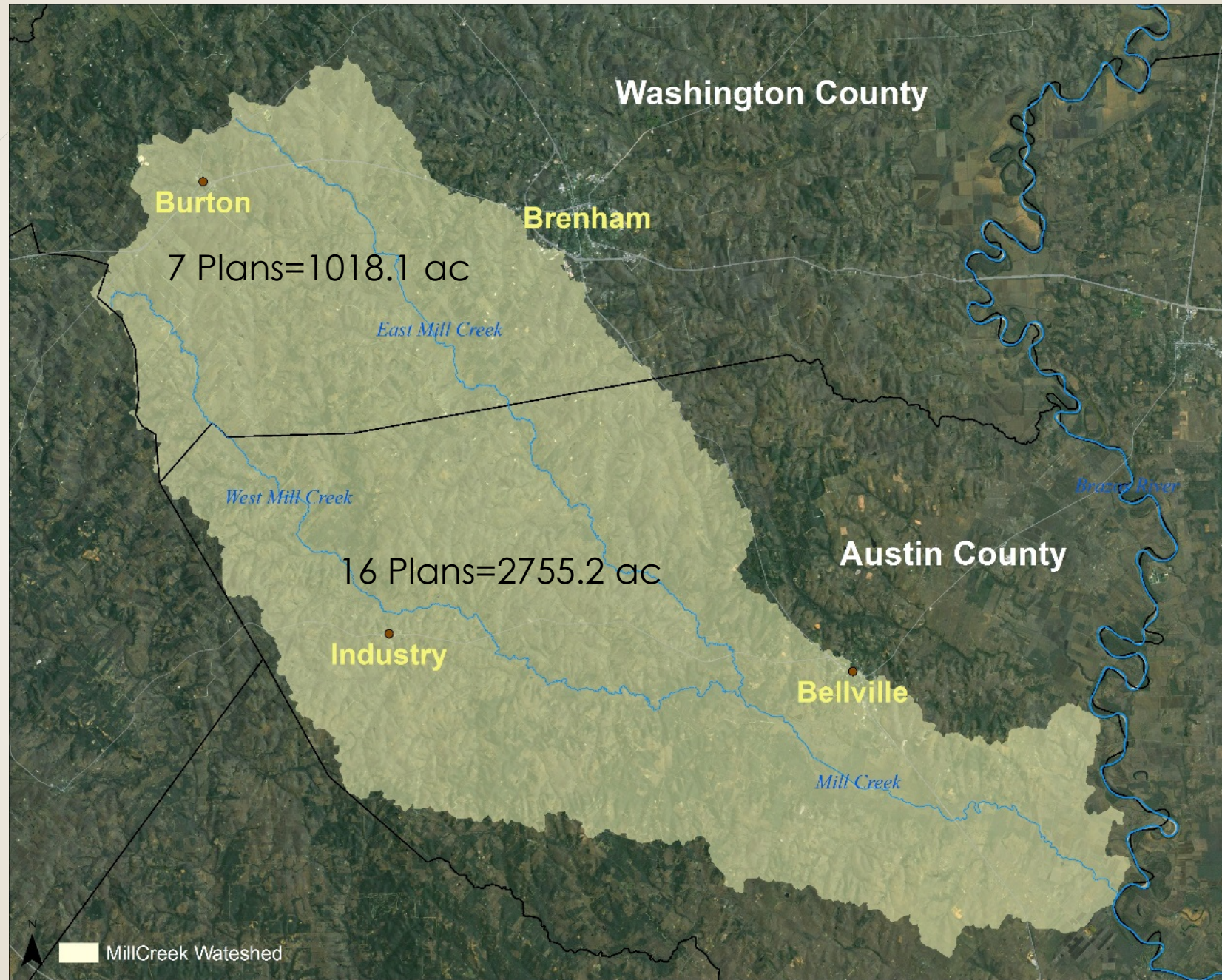
Mill Creek Watershed: **Progress Report**

Beginning in 2017, which includes two three-year grant periods
(2017-2019, 2020-2022)

How it's going?

County	Austin	Washington	Totals
Plans Developed	16	7	23
Acres Implemented	1443.8 ac	779.7 ac	2223.5 ac
Financial Incentives Paid Out	\$68,238.23	\$7522.16	\$75,760.39
Acres to be Implemented within 12 mos	553.2 ac	238.4 ac	791.6 ac
Financial Incentives to be Paid within 12 mos	\$65,670.00	\$30,000.00	\$95,670.00
Plans in development	3	0	3
Acres under development	758.2 ac	0 ac	758.2 ac
Total Acres	2755.2 ac	1018.1 ac	3773.3 ac

Mill Creek Watershed





Questions?

Contact Faith Chase at:

faith.chase@tx.nacdnet.net

Austin County Soil & Water Conservation District (MWF)

1351 W Main St, Ste. B, Bellville, TX 77418

(979) 865-3139 Ext. 3

Washington Soil & Water Conservation District (TTh)

2305 Becker Dr. Ste. C Brenham, TX 77833

(979) 830-7123 Ext. 3

Funding for this effort is provided through a Clean Water Act §319(h) nonpoint source grant from the Texas State Soil and Water Conservation Board and U.S. Environmental Protection Agency.