

Mill Creek Watershed Protection Plan

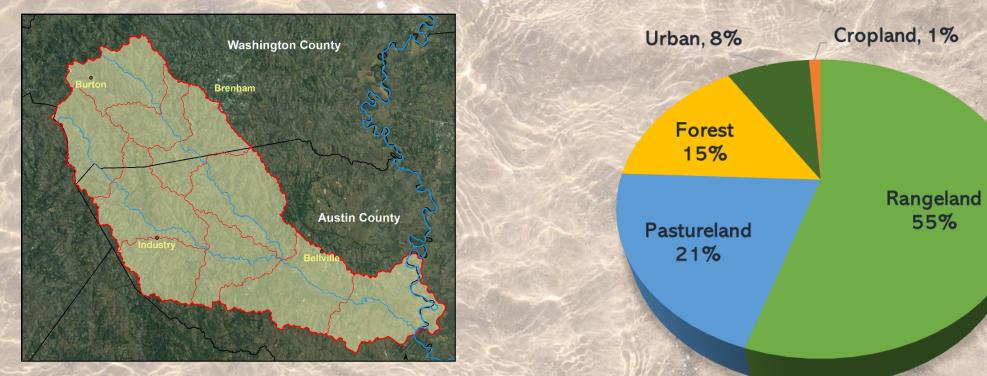
Implementation Updates

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

October 1, 2021



Mill Creek Watershed

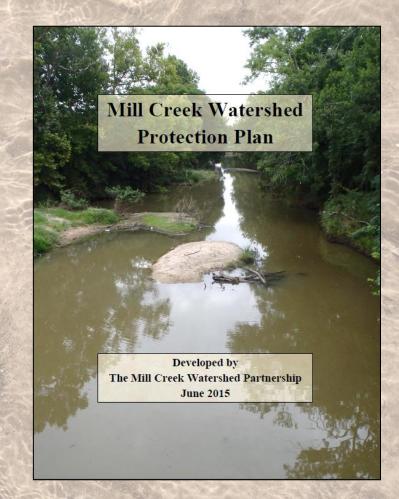


- 263,450 acres
- Predominantly rural and privately-owned
- Permitted discharges: the City of Bellville, City of Industry, and City of Burton; and Kieke Egg Farm



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



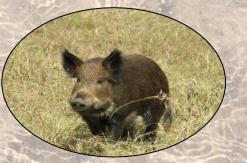


Major Sources of Pollution

- The bacteria originates from nonpoint sources
- Potential sources identified in the WPP:
 - O Urban (e.g., stormwater, pet waste)
 O 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)
- <u>Online</u> Homeowner Maintenance of Septic Systems class





Public Outreach and Education

- Many events and programs had to be canceled or postponed cavid-19
- 2021 Watershed Cleanup Day
- Face-to-face programs are back!

 Riparian and Stream Restoration (October 1)
 Lone Star Healthy Streams (November 9)
 Texas Watershed Steward (December 9)
 Homeowner Maintenance of Septic Systems (TBD)





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

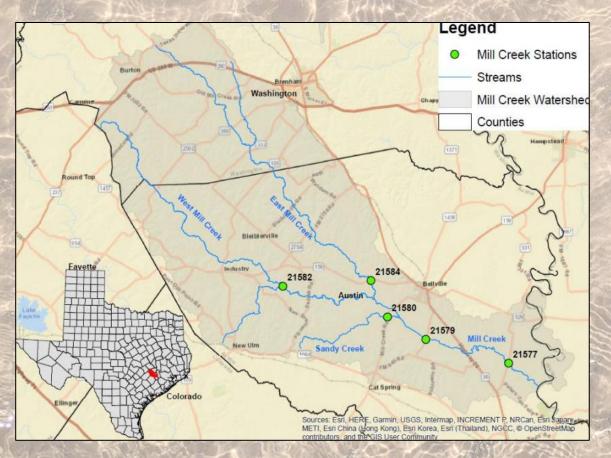






Routine Water Quality Monitoring

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

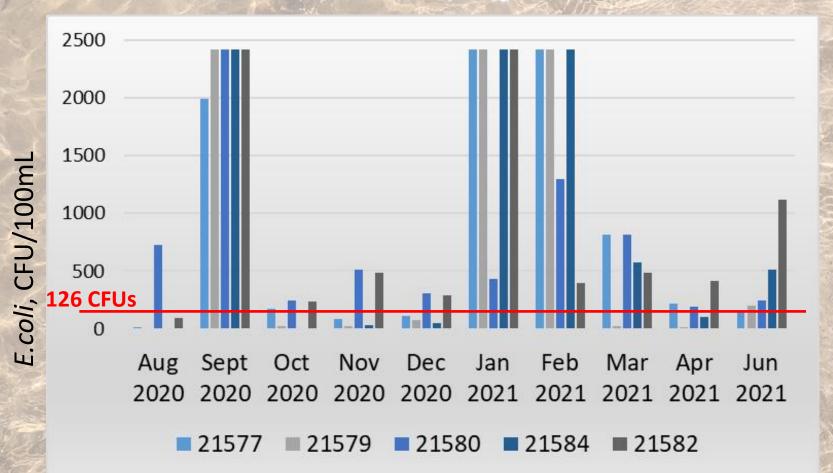








Water Quality Data: 2020-2021

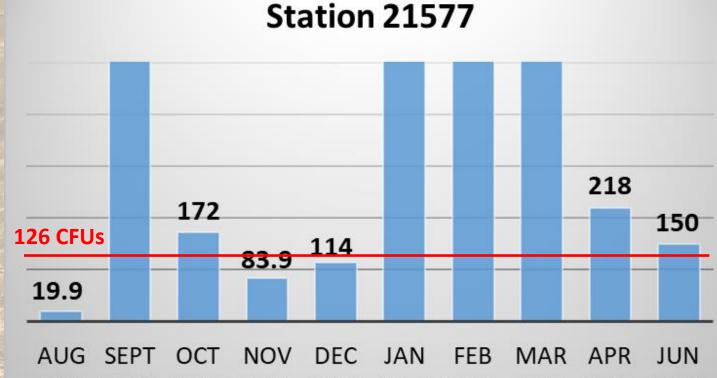


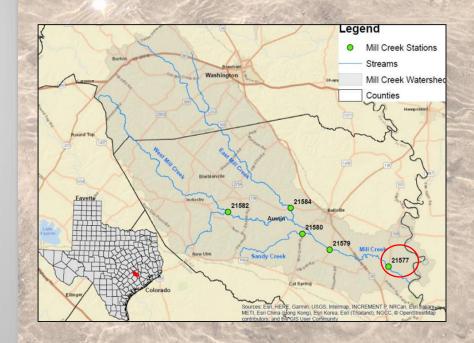
- *E.coli* levels should not exceed **126CFU/100mL**
- Max value of *E.coli* measured:
 >2419.6 CFU/100mL
- No May 2021 data





Station 21577: Mill Creek at FM 331

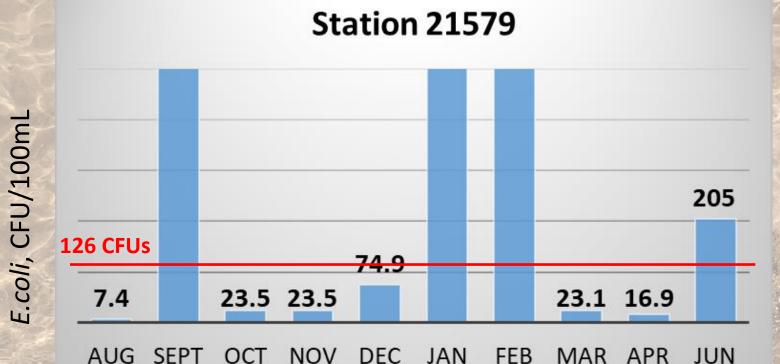


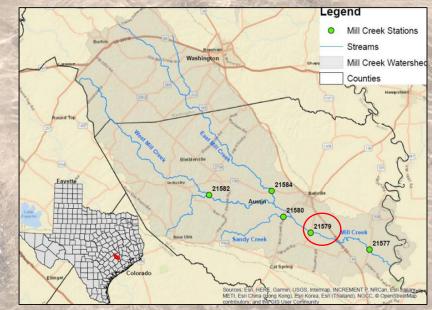


E.coli, CFU/100mL



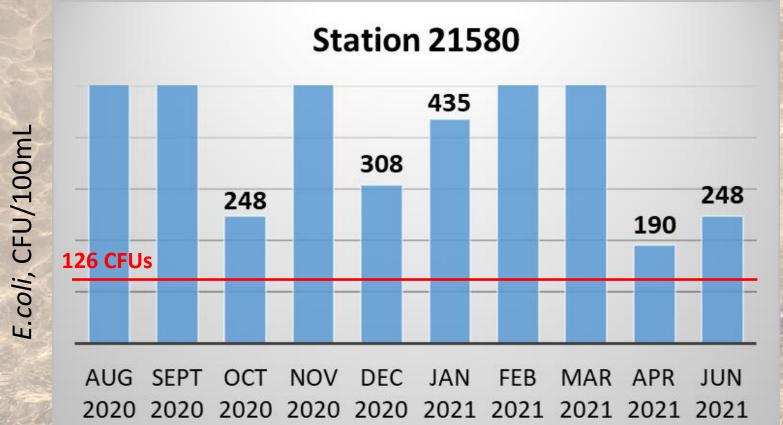
Station 21579: Mill Creek at FM 2429

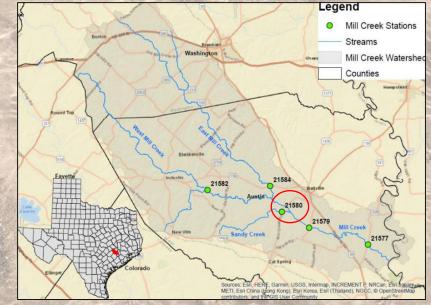






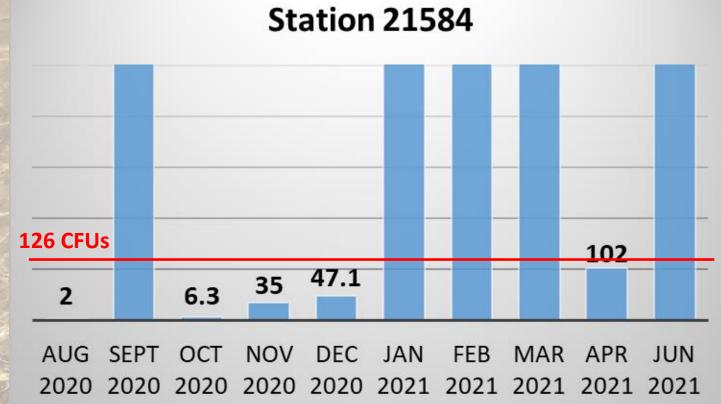
Station 21580: Sandy Creek at Mill Creek Road

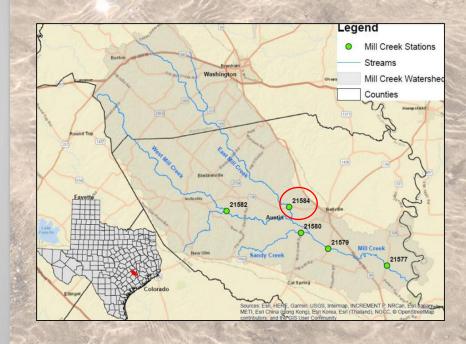






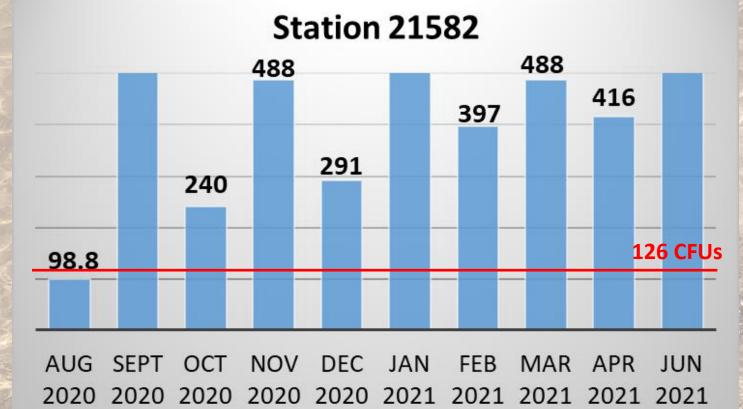
Station 21584: East Fork Mill Creek at FM 159



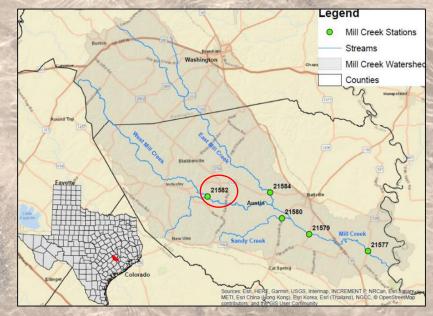




Station 21582: West Mill Creek at Tiemann Road

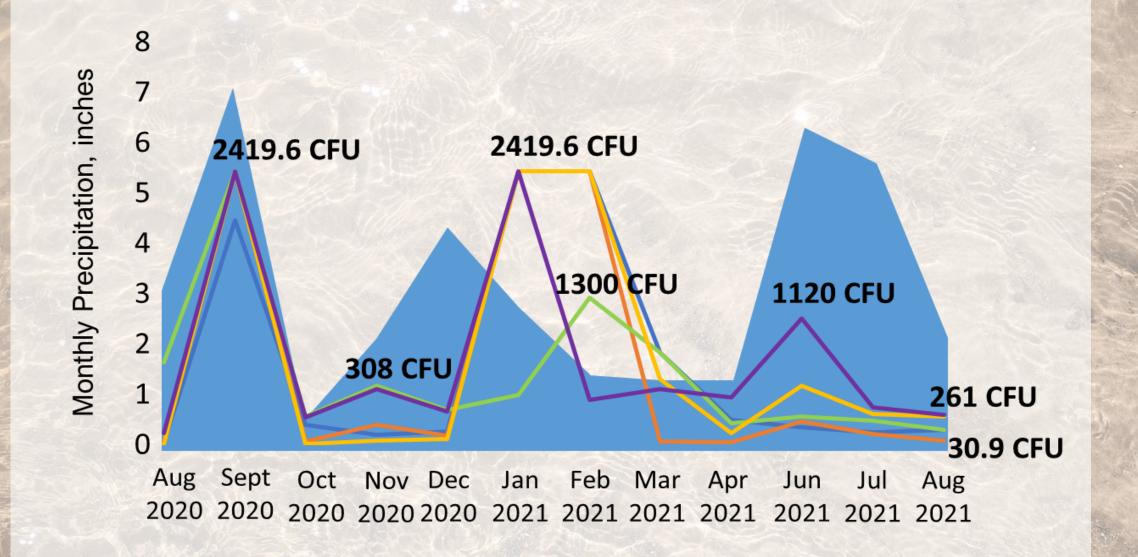


E.coli, CFU/100mL





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

ATEXAS A&M GRILIFE EXTENSIO

- 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 <u>tx.ag/HomeAerobicTreatmentSystems</u> for more information.

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

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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
- Reach out to the Watershed Coordinator at millcreek@ag.tamu.edu or (979) 845-2862.

Mill Creek WPP Partners











CONSERVATION BOARD





Houston-Galveston Area Council







THANK YOU!

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