



# MILL CREEK WATERSHED PROTECTION PLAN

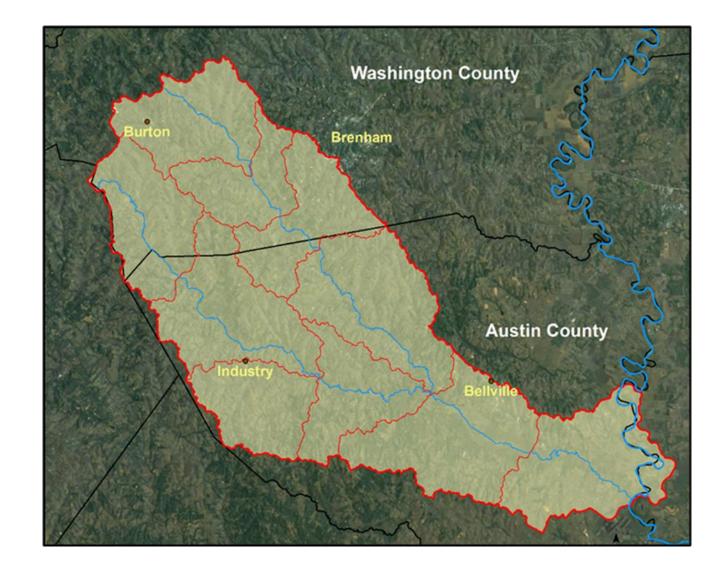
### IMPLEMENTATION UPDATES



AUGUST 9, 2022

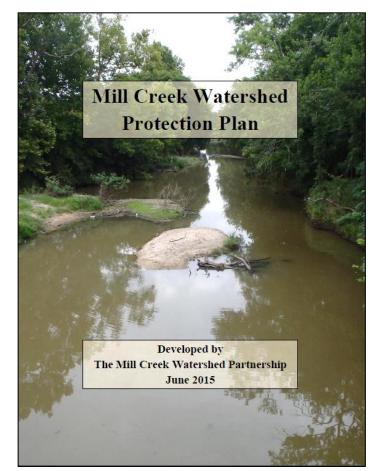
### MILL CREEK WATERSHED

- 263,450 acres
- Predominantly rural
- Permitted discharges:
  - City of Bellville
  - City of Industry
  - City of Burton
  - Kieke Egg Farm



## MILL CREEK WATERSHED PROTECTION PLAN

- 2010 Mill Creek listed impaired due to elevated E. coli
- January 2015 WPP initiated
- February 2016 WPP accepted by EPA
- WPP functions to restore and protect water quality in Mill Creek
- All measures are <u>voluntary</u>
- Heavy focus on public outreach and education

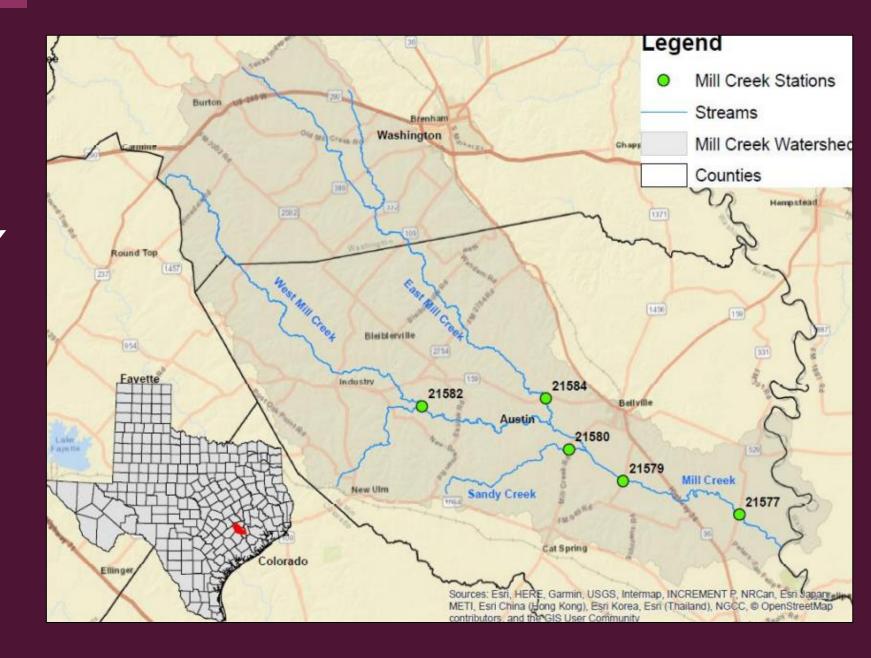


## MAJOR SOURCES OF POLLUTION IN MILL CREEK

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



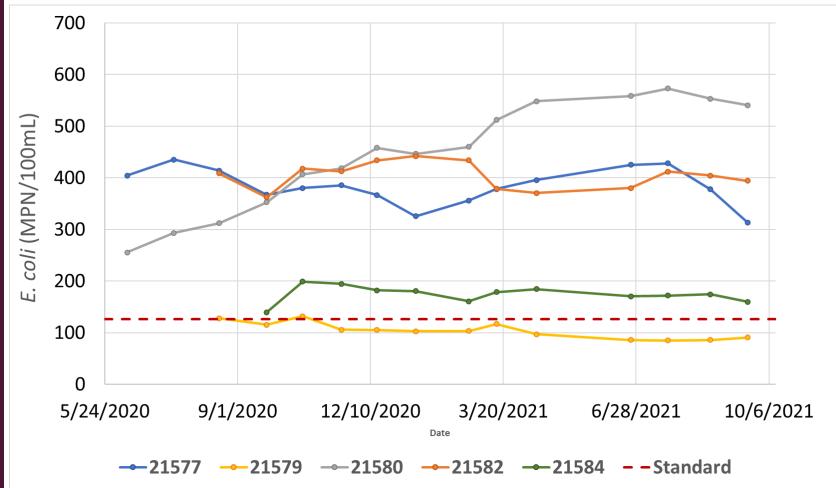
# WATER QUALITY MONITORING



### WATER QUALITY DATA

21577 – MC at FM 331
21579 – MC at FM 2429
24580 – Sandy Creek at MC Rd.
21582 – W. MC at Tiemann Rd.
21584 – E. Fork MC at FM 159

*E. coli* Standard: 126 MPN/100mL



## PUBLIC OUTREACH AND EDUCATION

- Educational programs
  - Healthy Lawns Healthy Waters
  - Texas Watershed Steward
  - Texas Well Owner Network, etc.
- Watershed-wide Cleanup Day
- Feral hog abatement efforts
- Water Quality Management Plans



### MILL CREEK CLEANUP DAY

### 202 I

- Private landowners in the watershed
- Provided a centralized trash drop-off location
- 600 pounds of trash and debris removed!

### 2022

- August 13 at 9am-4pm, Bleiblerville VFD
- Only for Mill Creek watershed residents



## HOMEOWNER MAINTENANCE OF SEPTIC SYSTEMS - ONLINE

- 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.

 Understand the basic operation and maintenance activities for an ATU

 Be a better consumer in the onsite wastewater treatment industry

Topics

provider

ATEXAS A&M GRILIFE EXTENSIO

 
 wastewater treatment industry
 To register, go to

 • Have the knowledge needed to understand and communicate with maintenance
 tx.ag/EnrollArrobicTreatment and click 'Enroll Now'.

Course Details Cost: \$150

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

Duration: 30 days from sign-up date

Visit tx.ag/HomeAerobicTreatmentSystems for more information.

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

AGRILIFELEARN.TAMU.EDU

## FUNDING OPPORTUNITY FOR SEPTIC SYSTEM OWNERS

- Financial assistance to septic system owners in the Mill Creek watershed
- Contact Watershed Coordinator
  - o (979) 739-1097
  - o millcreek@ag.tamu.edu



### SIGNS OF FAILING SEPTIC SYSTEMS

- Standing water around your septic tank
- Unpleasant smell
- Bright green lush grass around your septic tank
- Sewage backup
- Slowly draining bathtubs, showers, and sinks
- Noises in your plumbing system
- Excessive growth of algae in nearby ponds

## WATER QUALITY MANAGEMENT PLANS

- Site-specific land improvement plans to minimize and/or prevent water pollution through voluntary management practices
- Developed through collaboration with Soil and Water Conservation Districts (SWCD) and Texas State Soil and Water Conservation Board (TSSWCB)
- Examples of practices: fencing, brush control, livestock pipelines, etc.
- For more information:

Washington County SWCD – (979) 830-7123 ext. 3

Austin County SWCD – (979) 865-3139 ext. 3



## FERAL HOG ABATEMENT IN AUSTIN AND WASHINGTON COUNTIES

- Feral Hog Bounty Program in Austin Co. sponsored by Austin County Commissioners Court
- County Feral Hog Grant Texas A&M Wildlife Services
  - For Austin and Washington Counties
  - Activities considered: purchase of equipment, trap sharing, educational events, bounty
  - Stakeholder input gathered on May 3 (meeting notes on website, www.millcreek.tamu.edu)
  - Met with County Judges and Commissioners
  - Next: Proposal development and submission

QUESTIONS?



Austin County Bounty Program: Subject to fund availability, participants will be awarded \$5 per feral hog harvested in Austin County. Biological evidence MUST be provided of harvest in form of a pair of feral hog ears. Each pair must be placed in an individually sealed bag and dropped off to 1 of the 3 drop off locations.



• Lindemann Store (Industry)

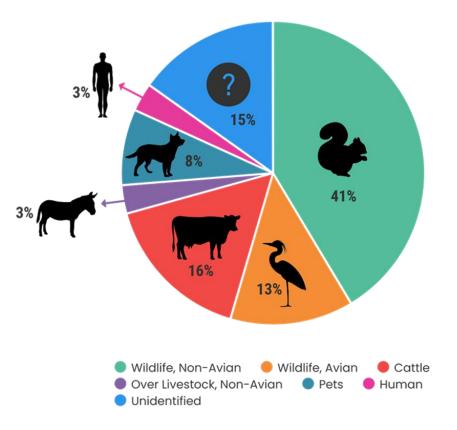
Feral hogs can be harvested until funds are depleted. All feral hog MUST be harvested in Austin County.

## BACTERIAL SOURCE TRACKING IN MILL CREEK

- Identifies sources of E. coli bacteria
- Improves public outreach and education
- Through TSSWCB Nonpoint Source Grant Program
- Partners:
  - Texas Water Resources Institute (sampling)
  - TAMU Soil & Crop Sciences (analysis)
- All partners met and discussed the course of action
- Next: Proposal development and submission

### **QUESTIONS?**

### Example: BST in Geronimo Creek, Seguin, TX



## WANT TO GET INVOLVED?

- Attend Mill Creek Watershed Partnership meetings
- Stay in touch with your County Extension Agent
  - Austin County Stacie Villarreal, Stacie.Villarreal@ag.tamu.edu or (979) 865-2072
  - Washington County Kara Matheney, Kara.Matheney@ag.tamu.edu or (979) 277-6212
- Visit www.millcreek.tamu.edu
- Follow us on Facebook: @MillCreekWater
- Reach out to the Watershed Coordinator at millcreek@ag.tamu.edu or (979) 845-2862



# THANKYOU!

### **Evgenia Spears**, Ph.D.

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