Ayish Bayou & West Mud Creek Water Quality Planning.

Goal:

Addresses impairments by involving local stakeholders in developing and implementing action plans that improve water quality.

Updates: 06/2023

- *†* Watersheds
- *†* Water quality status
- + Current planning efforts

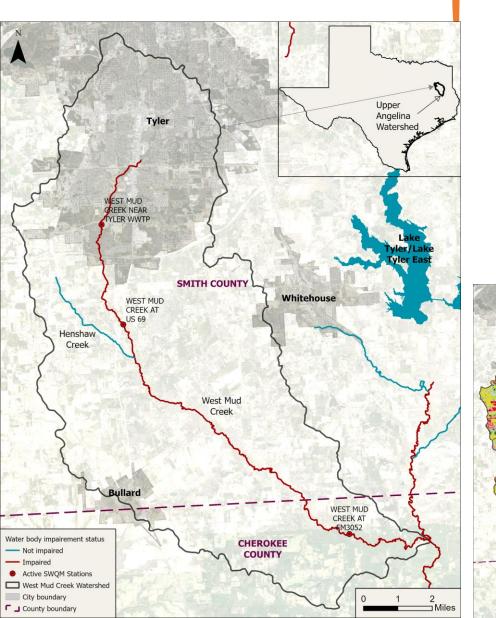




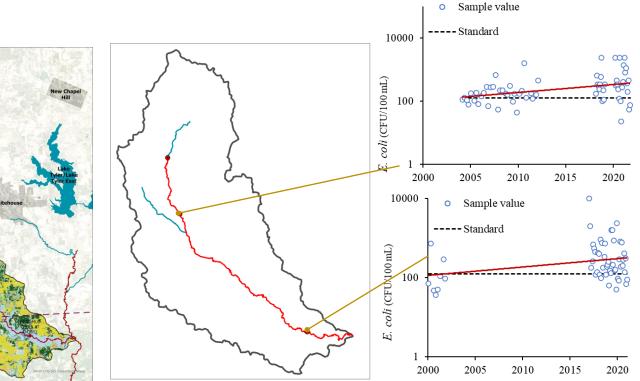


TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Duncan Kikoyo, PE TWRI 06/21/2023

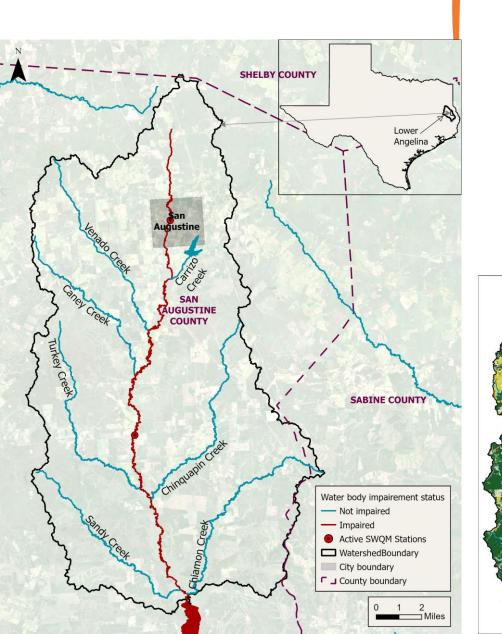
West Mud Creek



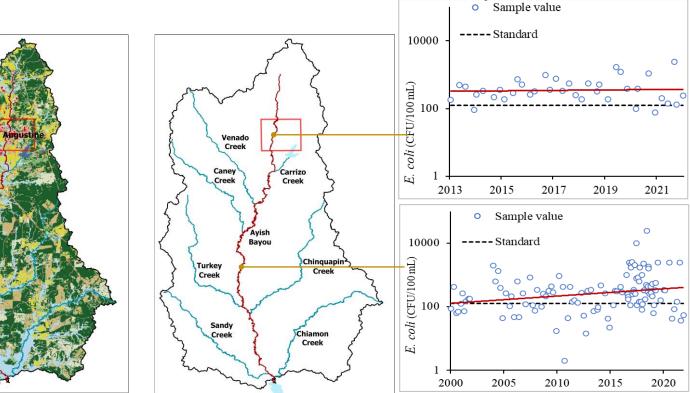
- \Box Area is about 93 mi², located in Smith and Cherokee counties.
- □ Upstream is urban, draining part of the City of Tyler. Includes part of Bullard & Whitehouse.
- □ Data shows elevated fecal indicator bacteria levels in the downstream AU.
- □ Typical sources of contamination in urban watersheds include;
 - Human waste from e.g., leaking sewer lines, sewer overflows,
 - 0 Domesticated animal waste transported via runoff.



Ayish Bayou



- □ 32 mi long stream, flowing into the Sam Rayburn Reservoir.
- □ Area is about 192 mi², 99% in the San Augustine County.
- □ Soils have low infiltration rates, high runoff potential.
- □ Largely rural forests cover about 56%.
- Data shows elevated fecal indicator bacteria levels.
- **D** Typical sources of contamination in rural watersheds include;
 - 0 Human waste from e.g., failing septic systems,
 - 0 Domesticated, farm and wild animal waste transported via runoff.



The Watershed Based Planning

TWRI & ANRA are working with the TCEQ to monitor water quality, engage residents, and develop strategies for improving water quality.

Sign up for emails & updates at https://ayish.twri.tamu.edu/

Objectives	Ayish Bayou	West Mud Creek
Gather & analyze existing data.	~ Data analysis in 21/22 ~ Planned characterization.	~ Characterization in 2021 (https://twri.tamu.edu/publication s/technical-reports/2022- technical-reports/tr-539/)
Identify data gaps and collect additional data if needed.	 Monitoring in 22/23. Planned monitoring & characterization. 	 Characterization for watersheds above the Sam Rayburn Reservoir. Engagement in 22/23.
□ Identify causes and sources of pollution that need to be controlled.	~ To do	~ Planned TSD , Engagement
Estimate pollutant loads and reductions needed.	~ To do	~ Planned TSD, Engagement
Develop effective management / control measures	~ To do	~ To do
□ Implement measures	~ To do	~ To do
 Track progress. Monitor & Evaluate 	~ To do	~ To do