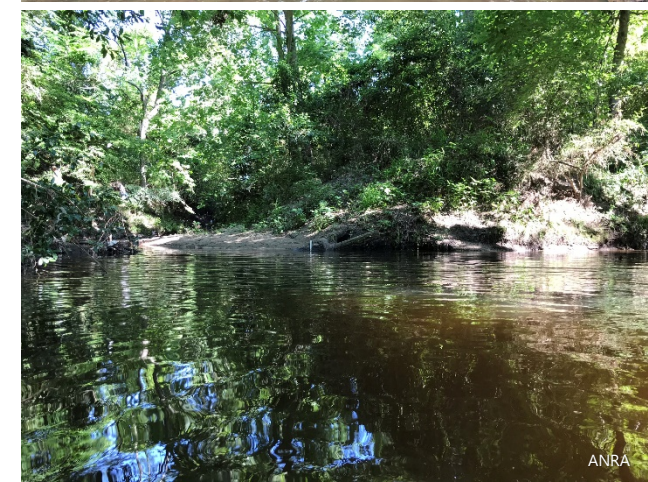
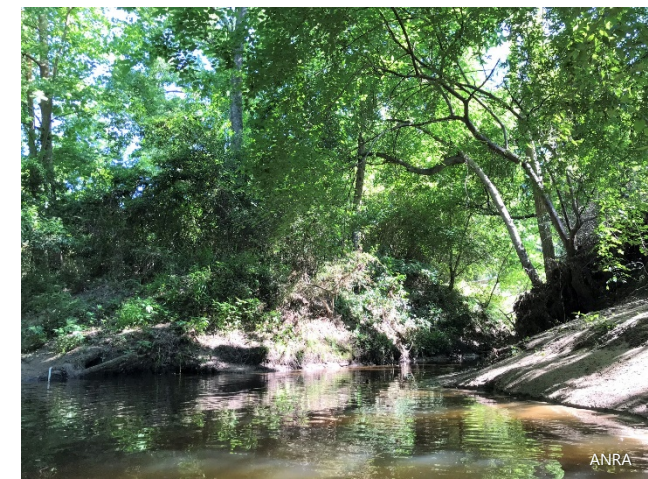


# Water Quality Updates in the Neches River Basin

Anna Gitter-Texas Water Resources Institute

July 23, 2020

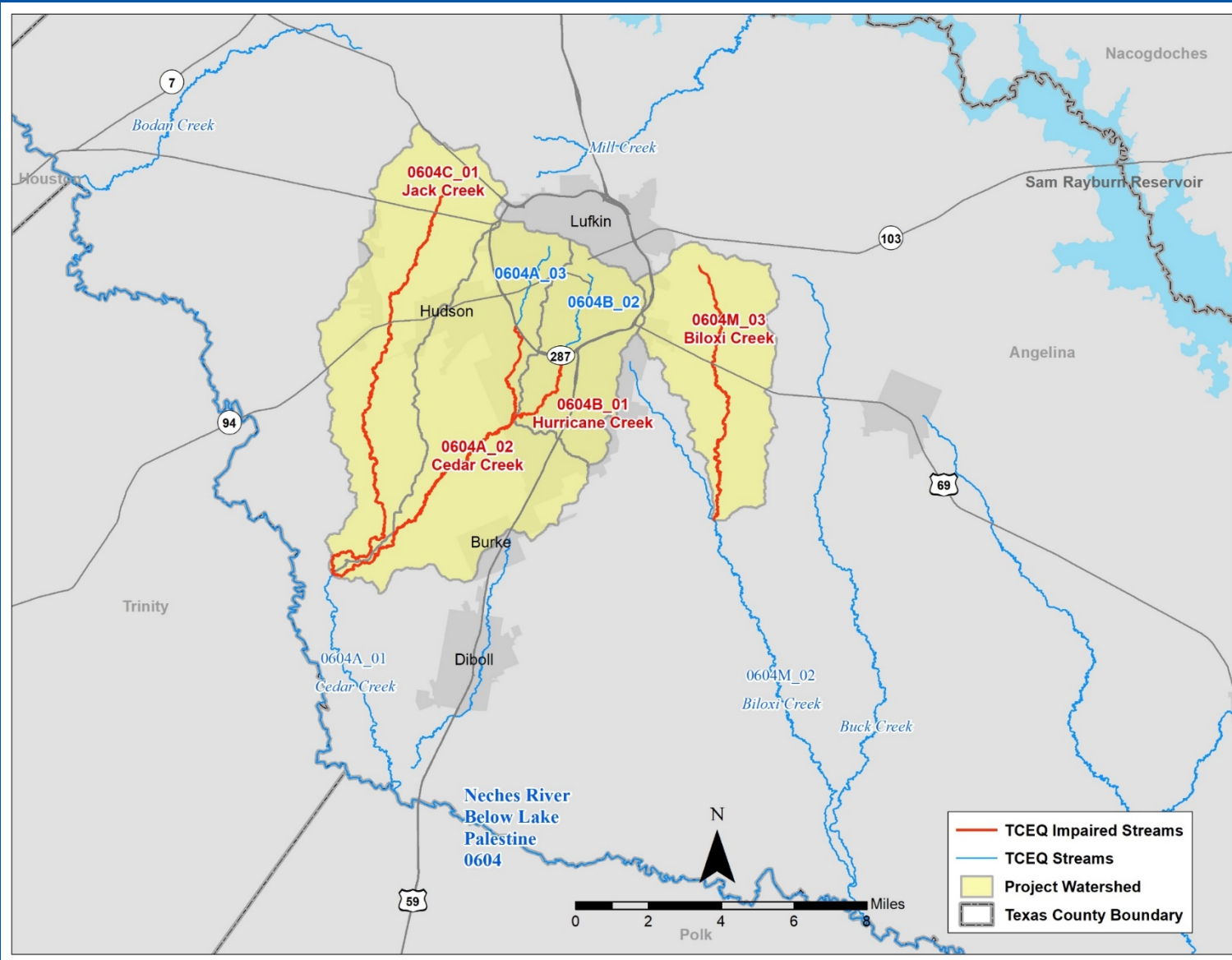
Upper Neches Basin Clean Rivers Program Steering Committee  
Meeting





# Tributaries of the Neches River below Lake Palestine (Middle Neches)





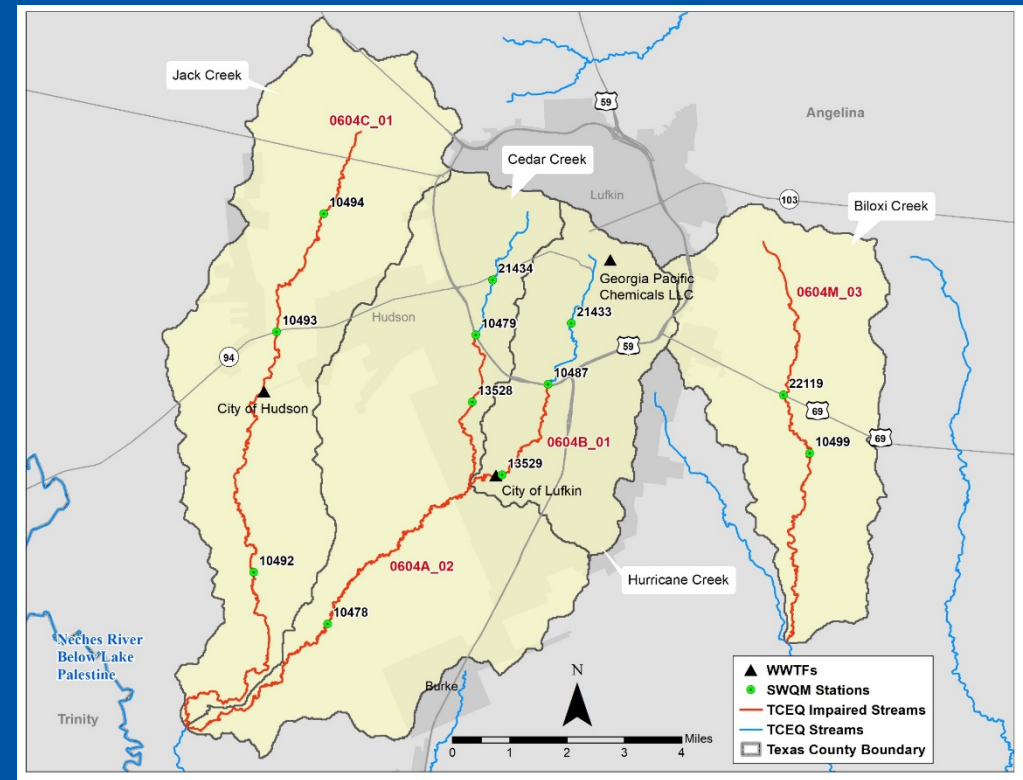
## • Watershed Bacteria Impairments:

- Jack Creek (0604C)
  - Impaired AU: 0604C\_01
- Cedar Creek (0604A)
  - Impaired AU: 0604A\_02
- Hurricane Creek (0604B)
  - Impaired AU: 0604B\_01
- Biloxi Creek (0604M)
  - Impaired AU: 0604M\_01

# Watershed Statistics

- Tributaries of the Neches River below Lake Palestine (collectively called the Middle Neches Project)
  - Jack, Cedar, Hurricane and Biloxi Creeks
- Entirely located in Angelina County
- 92 sq. miles (59,130 acres)
- 42,647 estimated population
- 3,457 estimated on-site sewage facilities
- 3 TPDES/NPDES discharge permits (2 with bacteria reporting requirements)





## 2020 Integrated Report

Water Body	AU	Parameter	Data Range	AU Geometric Mean (MPN/100mL)
Cedar Creek	0604A_02	<i>E. coli</i>	12/01/2011-11/30/2018	291.49
Hurricane Creek	0604B_01	<i>E. coli</i>	12/01/2011-11/30/2018	276.16
Jack Creek	0604C_01	<i>E. coli</i>	12/01/2011-11/30/2018	185.35
Biloxi Creek	0604M_03	<i>E. coli</i>	12/01/2011-11/30/2018	152.24



# Project Status

- Currently working on the Technical Support Document
- Will begin working on the Draft TMDL later this year
- Held two public meeting in the past year
  - November 2019
  - July 2020 (online)

# Project Support





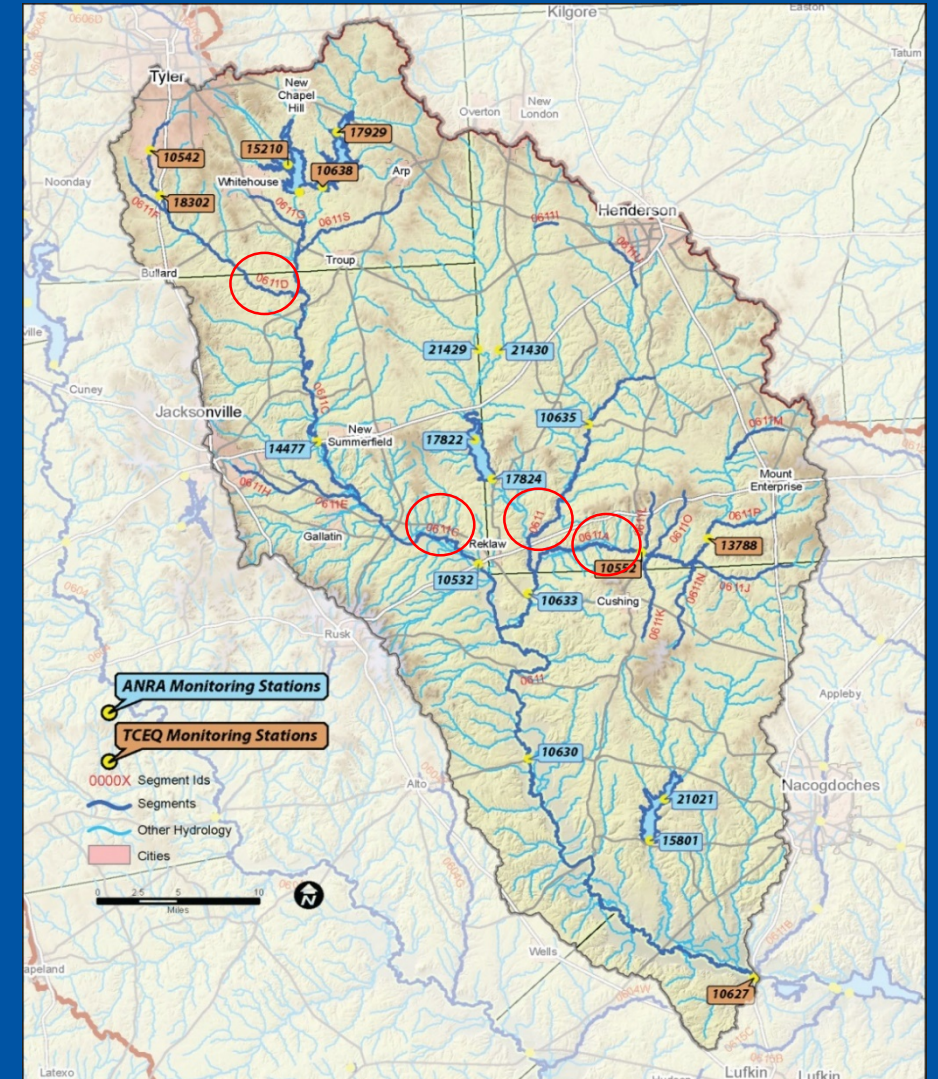
# Angelina River above Sam Rayburn Reservoir





- According to the 2020 Texas Integrated Report, 4 segments are impaired for not meeting primary contact recreation bacteria standard
- *E. coli* standard: geometric mean of 126 cfu/100mL and a single sample limit of 399 cfu/100mL
- Concerns for elevated total phosphorus, nitrate and ammonia

Water Body	Impaired AUs	Parameter	Data Range	AU Geometric Mean (MPN/100mL)
Angelina River above Sam Rayburn Reservoir	0611_01 0611_04	<i>E. coli</i>	12/01/2011-11/30/2018	151.35 185.5
East Fork of the Angelina River	0611A_01 0611A_02	<i>E. coli</i>	12/01/2011-11/30/2018	197.62 223.93
Mud Creek	0611C_01	<i>E. coli</i>	12/01/2011-11/30/2018	200.88
West Mud Creek	0611D_01	<i>E. coli</i>	12/01/2011-11/30/2018	378.43

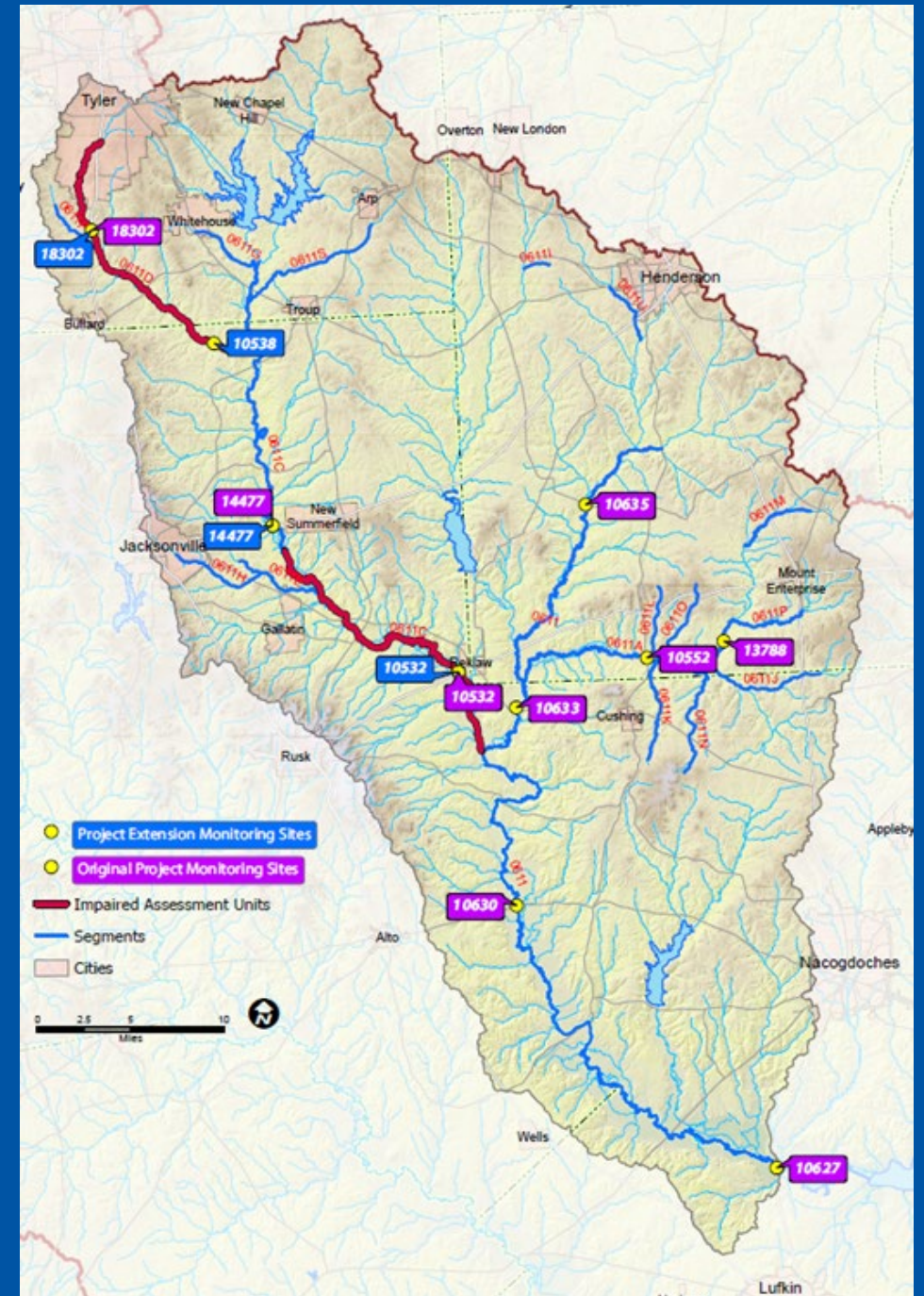


Upper Angelina River Watershed (Source: ANRA 2015 Basin Highlights Report)

Received a project extension to conduct supplemental monitoring on Mud and West Mud Creeks to increase our understanding of water quality in those impaired areas of the watershed

## Monitoring Stations

- 18302
- 14477
- 10532
- 10538







# Project Updates

- Received a project extension to conduct supplemental monitoring along Mud and West Mud Creeks until the end of 2021
- Initiate stakeholder meetings in the winter/early spring
- Develop watershed characterization report
  - Will add additional data analysis for Mud and West Mud Creeks

# Project Support





Questions?

Contact:

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