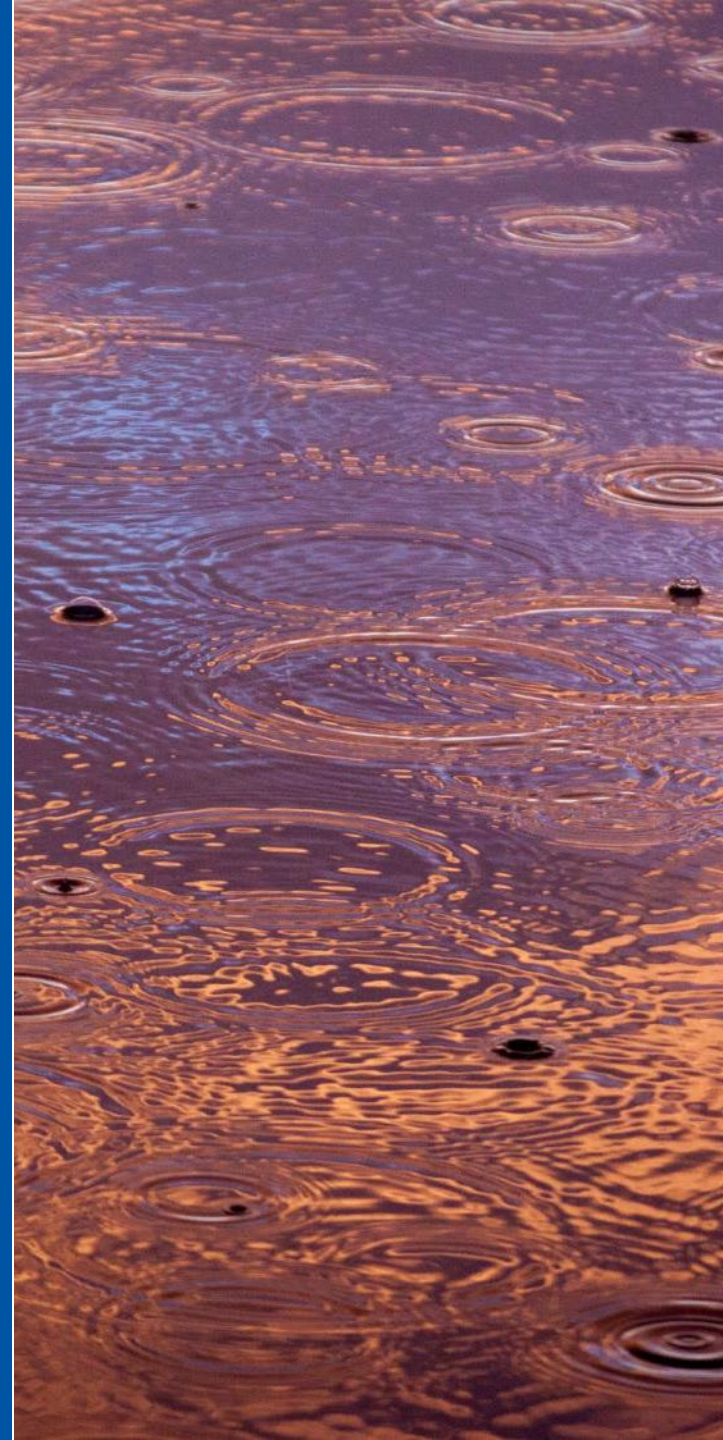
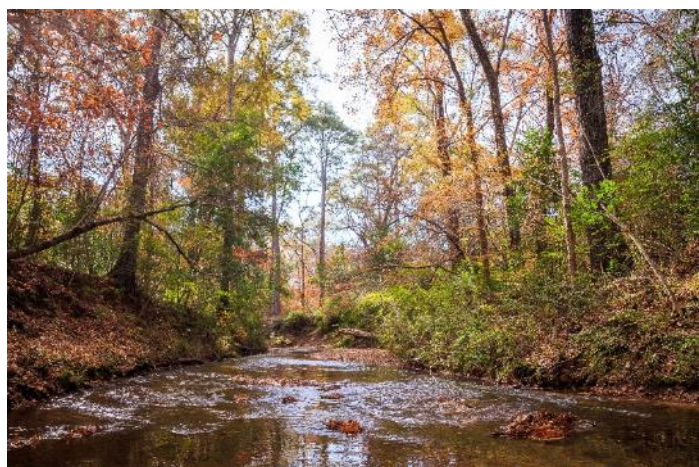


# Sandy and Wolf Creeks I-Plan Coordination Committee Meeting

The meeting will start at 1:00 PM.

If you have issues with sound, please join by phone. Use the chat box below if there are other issues.





# Sandy and Wolf Creeks I-Plan Coordination Committee Meeting

Michael Schramm | Research Specialist  
Texas Water Resources Institute

Online

February 8, 2020 | 1:00 pm

Before we start:

- 1) Please mute your microphones.
- 2) The slides and meeting notes will be posted online after the meeting at:  
<https://www.tceq.texas.gov/waterquality/tmdl/nav/118-sandy-wolf-creeks-bacteria>
- 3) Please sign in using our webform, the link will be posted in the chat box.

## Coordination Committee

Brock Fry & Jacob Spivey – Jasper and Tyler AgriLife Extension

Jeannie Mahan - LNVA

Carla Ethridge, Jeremiah Poling - ANRA

Adrian Van Dellen - Resident

Laura Clark, Sylvia Holmes, Lori Horne – Texas Master Naturalist

Brian Koch - TSSWCB

Sarah Baily – Texas A&M Forest Service

James Garrigus – US Army Corp of Engineers

Terry McFall – Jasper-Newton SWCD/NRCS

Bob Gary – City of Jasper

Angela Caraway - Jasper-Newton County Public Health

## Project Team

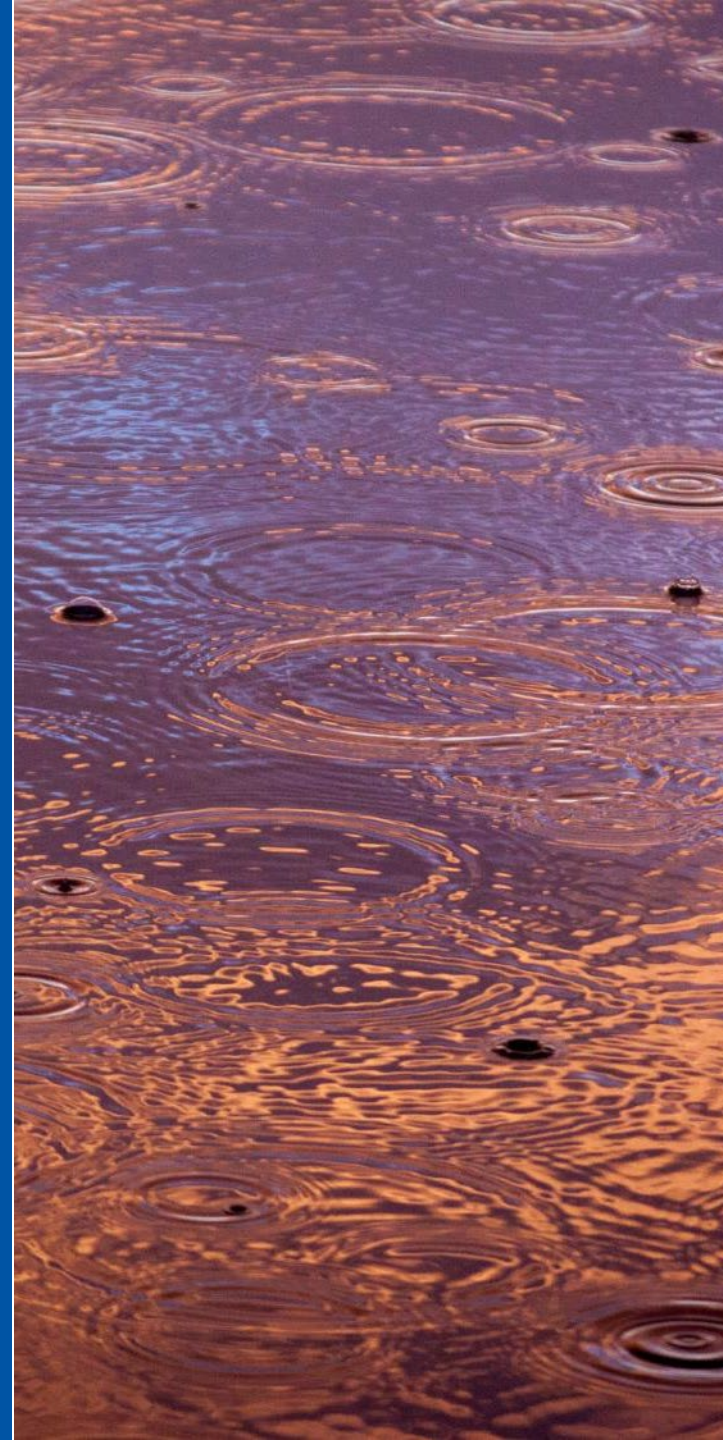
Michael Schramm – Texas Water Resources Institute

Nicole Reed - Texas Commission on Environmental Quality, TMDL Program

Jazmyn Milford - Texas Commission on Environmental Quality, TMDL Program

# Agenda

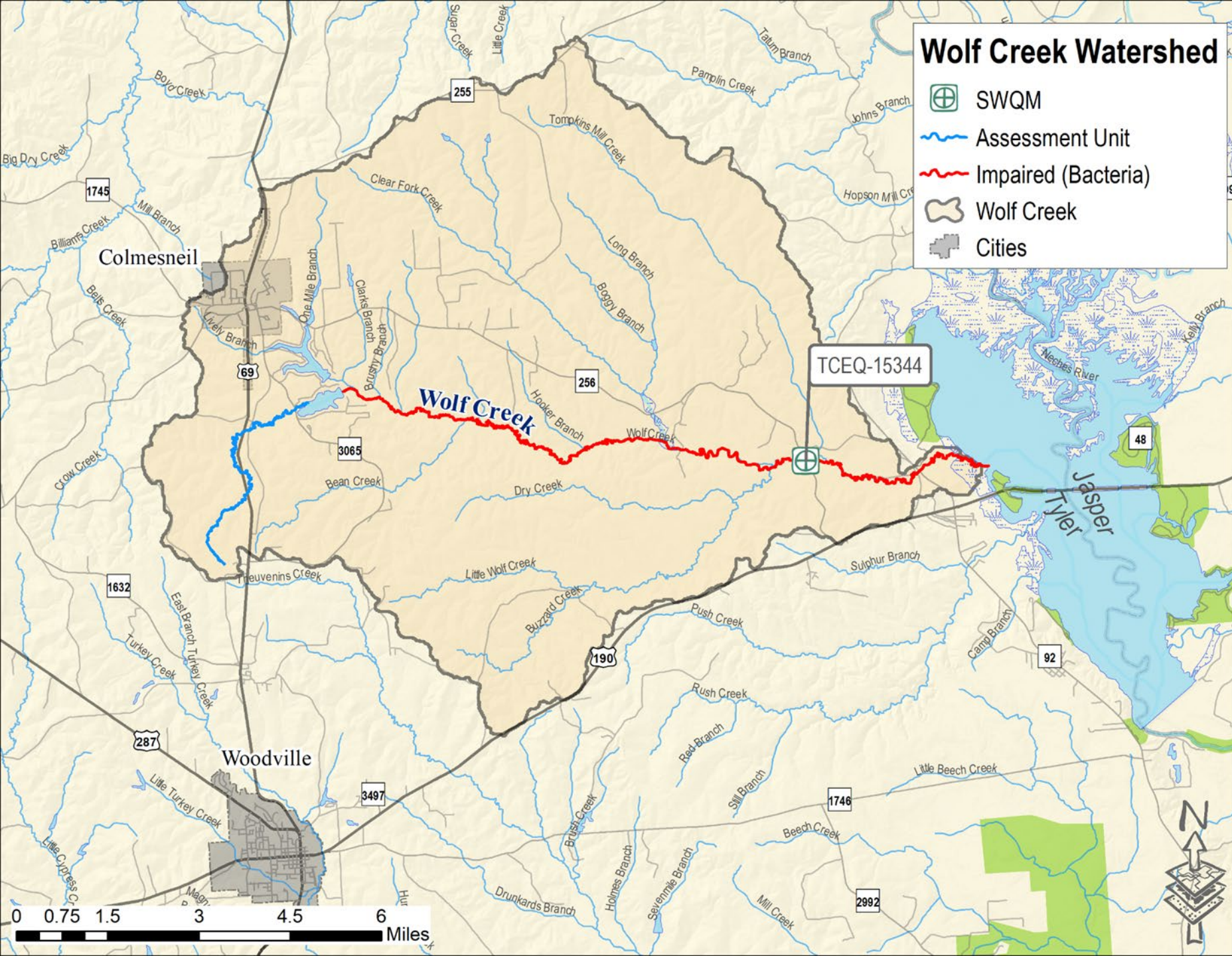
- 1: Project Updates
- 2: WPP Discussion and Decision
- 3: Sources and Potential Management Measures
- 4: Next Steps





# Project Updates

- Technical Support Document is online:  
<https://www.tceq.texas.gov/assets/public/waterquality/tmdl/118sandywolfcreeks/118-sandy-wolf-tsd-2020june.pdf>
- Draft TMDL in review process at TCEQ

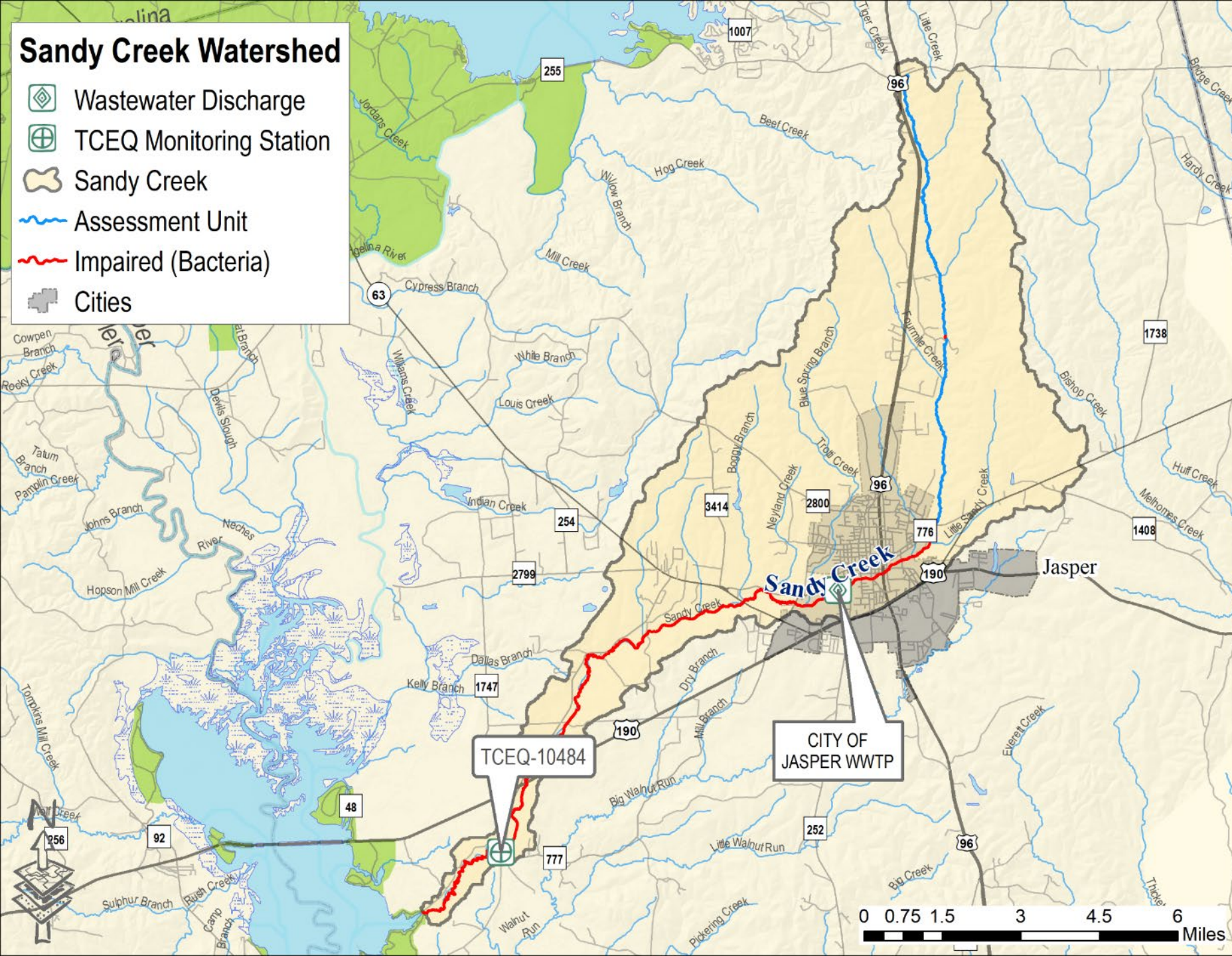


### Wolf Creek Summary:

- Entirely in Tyler County
- 83 sq. miles
- ~1,683 people
- Predominately forest and wetland

# Sandy Creek Watershed

- Wastewater Discharge
- TCEQ Monitoring Station
- Sandy Creek
- Assessment Unit
- Impaired (Bacteria)
- Cities

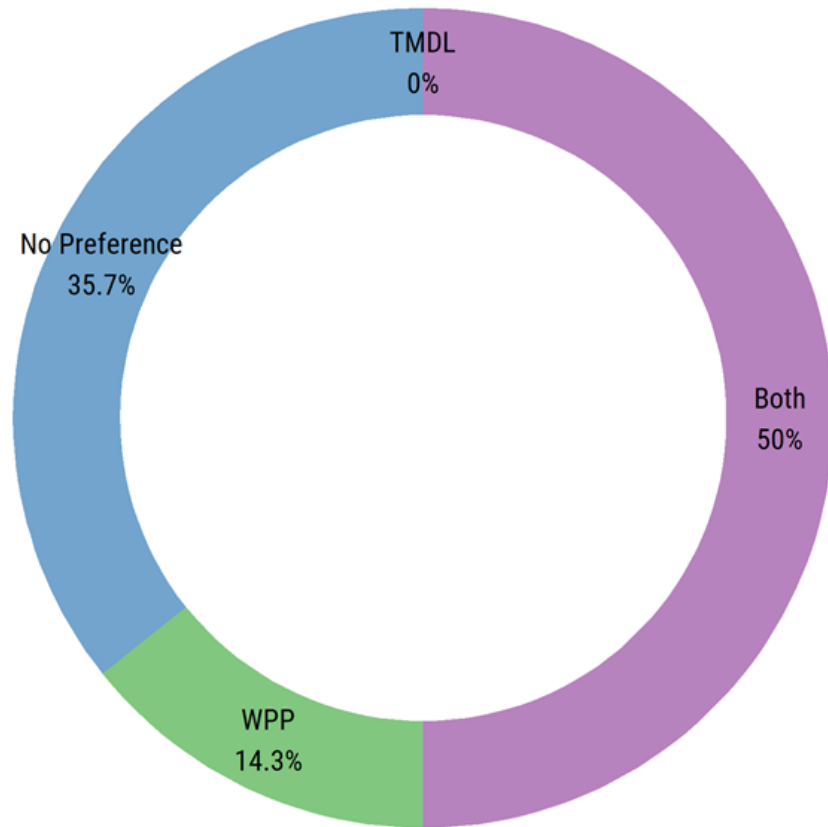


## Sandy Creek Summary:

- Entirely in Jasper County
- 57 sq. miles
- ~7,462 people
- Predominately forest and wetland
- Approximately 14.5 percent developed
- 1 permitted wastewater facility



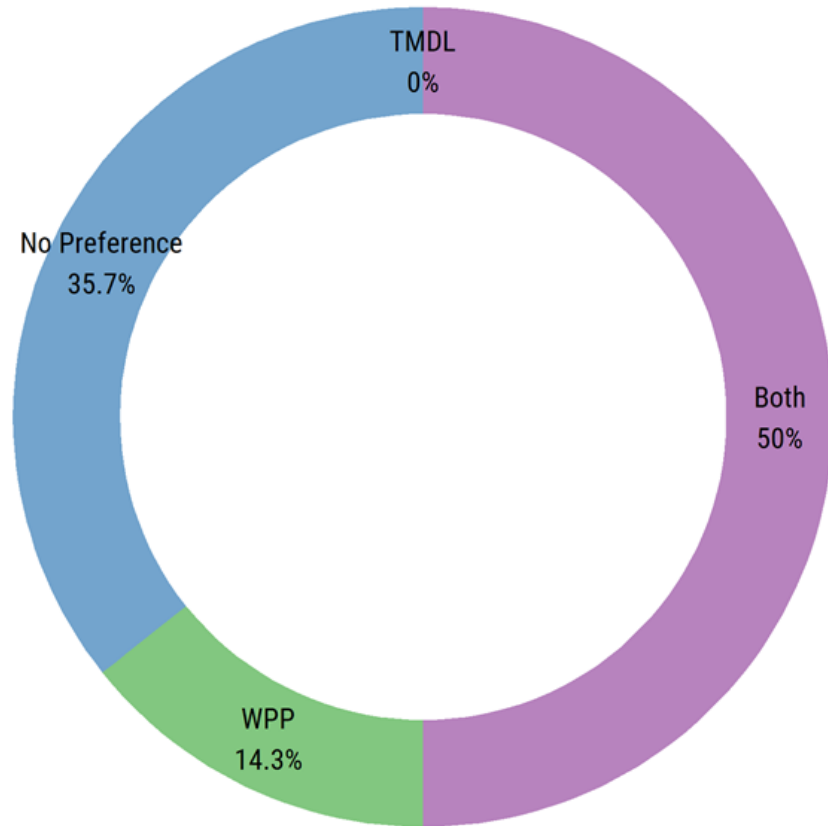
Q5: Do you have a preferred planning option?



From Stakeholder Meeting Questionnaire (November 2019)

1. TMDL I-Plan *and* WPP are the preferred stakeholder planning option.
2. Both documents are similar. However, WPP receives additional review by EPA.
3. Some concerns about a potential WPP meeting EPA's review criteria:
  1. One monitoring site in each watershed
  2. Two separate watersheds in one plan

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3. Some concerns about a potential WPP meeting EPA's review criteria:
  1. One monitoring site in each watershed
  2. Two separate watersheds in one plan

Options include

1. Continue to develop WPP for both watersheds
  1. Funding available for both watersheds
  2. Might have a harder time getting approved
2. Develop WPP for Sandy Creek only
  1. Makes 319 funding options available
  2. Will need to identify more robust future water quality monitoring
3. Only develop the I-Plan
  1. No EPA review
  2. Limits funding options



# Indicator Bacteria Sources and Management Measures

# Management Measures

- Voluntary actions implemented by stakeholders that will result in direct or indirect pollutant load reductions
- Need to identify:
  - The actions
  - Implementation schedule
  - Needed technical and financial resources
  - Measurable milestones
  - Monitoring
  - Responsible entities
  - Anticipated pollutant load reduction

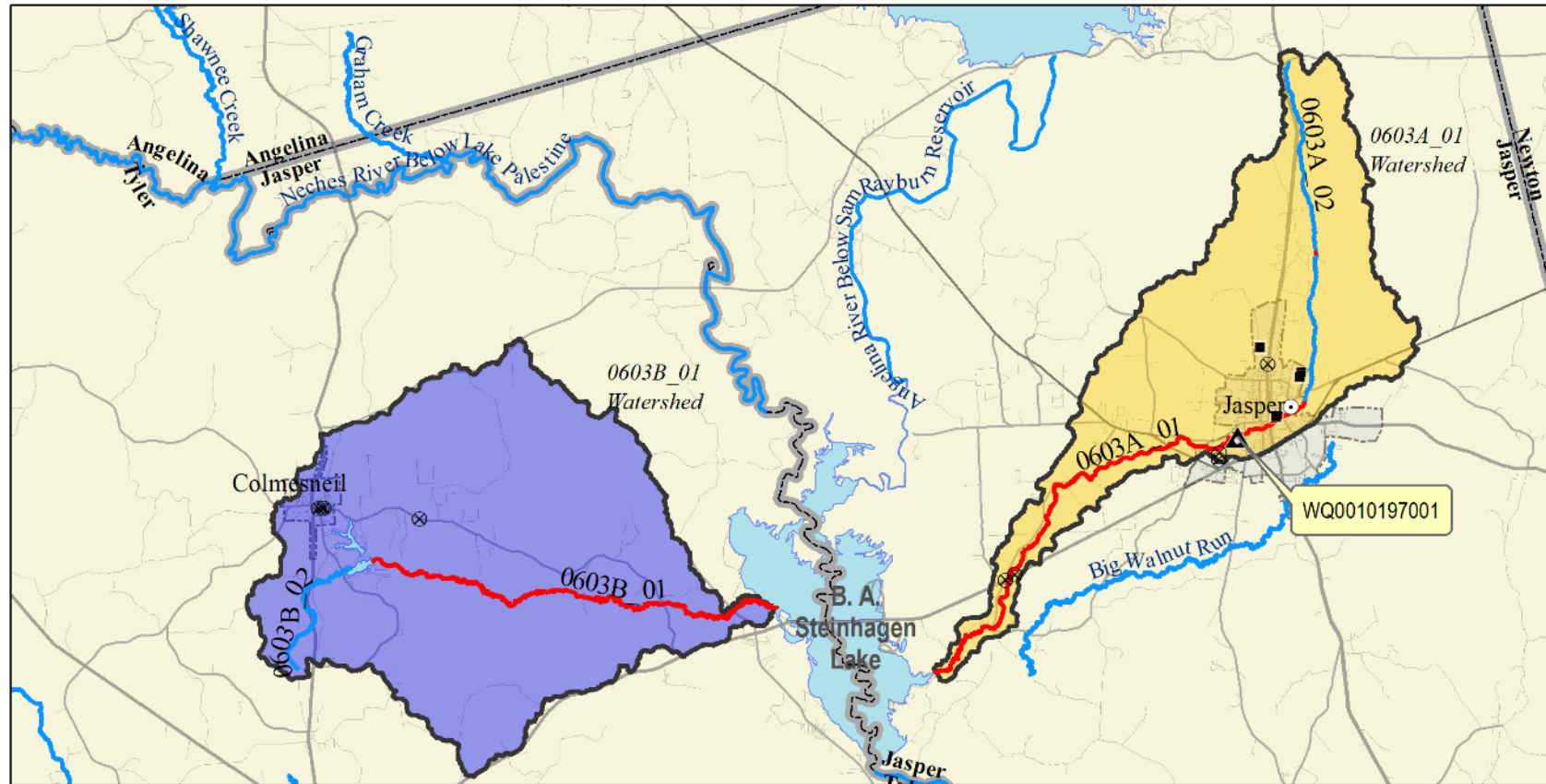
# Potential Regulated Sources

- TPDES permitted point source discharges (wastewater facilities or industrial discharges with bacteria component)
- Permitted stormwater (large urbanized areas, industrial stormwater, construction sites)



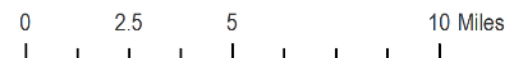
# Permitted Point Sources

AU	Facility	Held By	Annual Average Permitted Discharge (MGD <sup>+</sup> )	Recent Discharge (MGD)*
0603A_01	City of Jasper WWTF	City of Jasper	3.25	1.23



No exceedances of the daily average limit from 2015-2018; Three exceedances of the daily max (out of 48 reports)

- ▲ WWTF Permit
- Concrete Production Permit
- MSGP Permit
- ⊗ Construction (2003-2018)
- Stream
- Impaired
- Sandy Creek Watershed
- Wolf Creek Watershed
- County Boundaries
- Cities



# Sanitary Sewer Overflows

	No. of incidents	Total Volume	Average Volume	Minimum Volume	Maximum Volume
<b>Sandy Creek</b>	196	947,860	4,989	10	240,000
<b>Wolf Creek</b>	4	8,500	2,125	1,500	3,000



Data from TCEQ regional and statewide database 2005-2018

# Regulated Stormwater

- Less than 1% of each watershed is under regulated stormwater.
- Sandy Creek:
  - Six industrial facilities
  - One concrete production facility
  - ~36 acres per year under construction permits
- Wolf Creek:
  - ~7 acres per year under construction permits



# Potential Management Measures

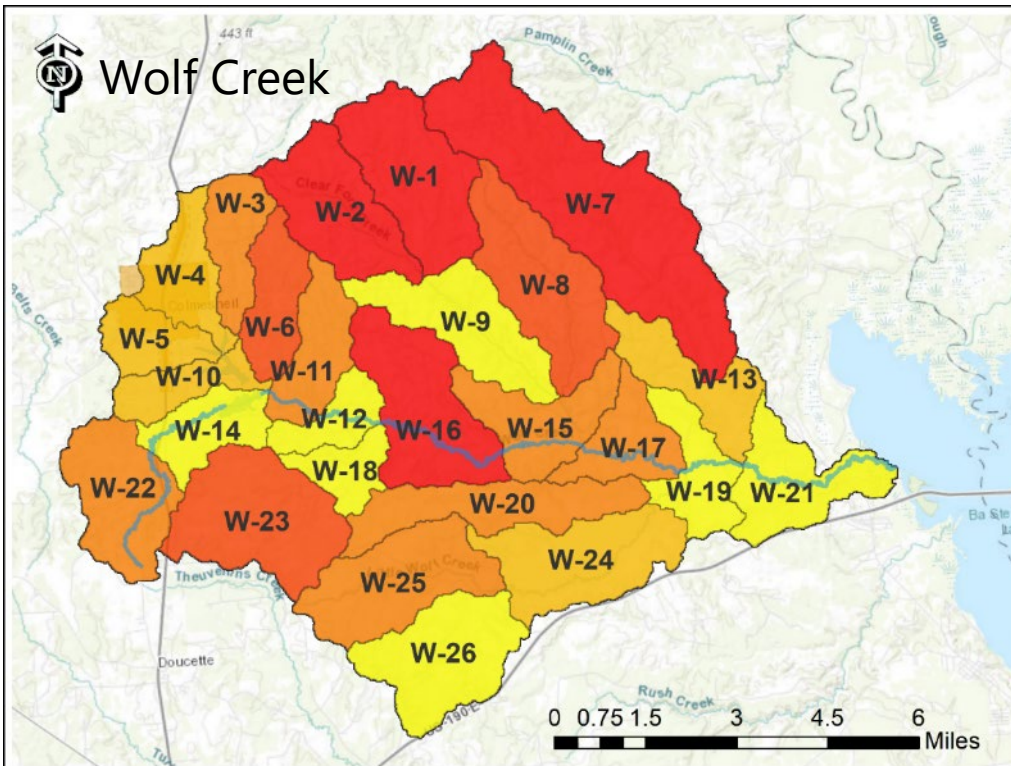
## Regulated Sources

- Continued compliance with permit requirements
- Smoke testing sanitary sewer network
- Infrastructure maintenance and upgrades (often part of existing master plans or operations plans if available)
- Participation in TCEQ SSO Initiative Program
- Fats Oils and Grease Education Programs
- Others?

# Unregulated Sources

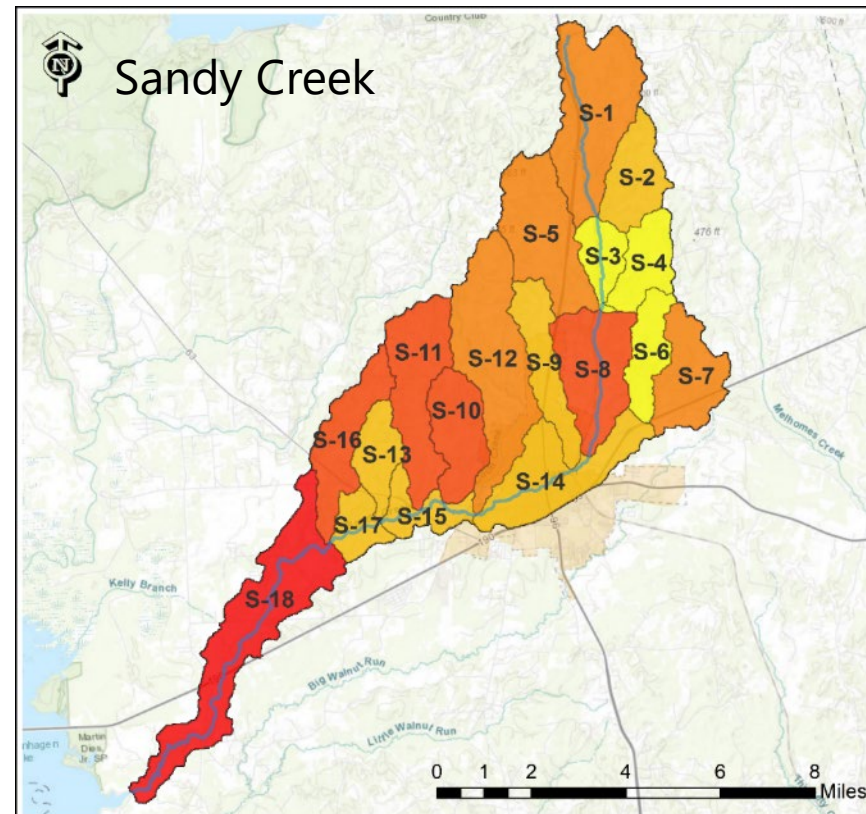
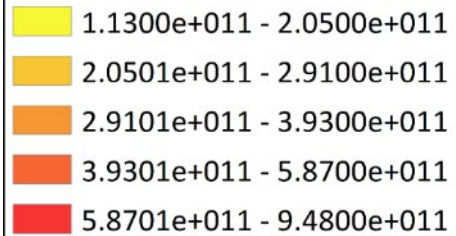
- Agriculture activities (non-CAFO)
- OSSF (Septic systems)
- Pets
- Wildlife

# Livestock



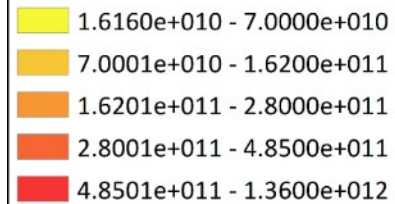
## Potential Loadings

### Cattle (CFU/day)



## Potential Loadings

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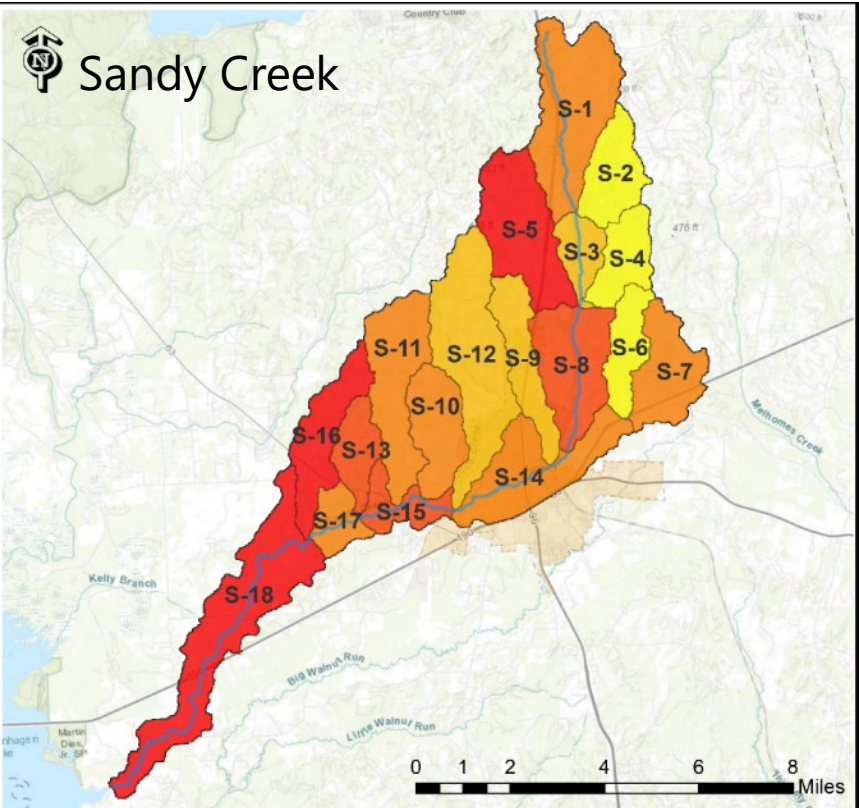
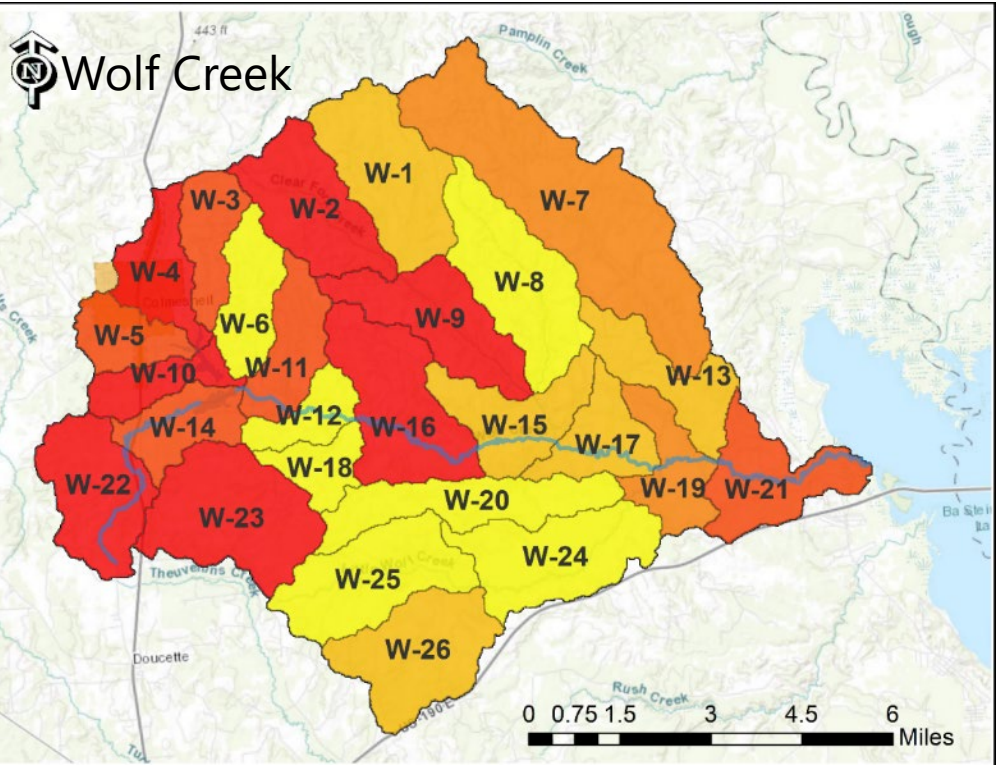


# Potential Management Measures

## Livestock

- Implement NRCS Conservation Plans and TSSWCB Water Quality Management Plans to install conservation practices that improve water quality.
- Workshops and Extension Programs (Local and Statewide programs)
- Other measures?

# Septic Systems (OSSFs)



## Potential Loadings

OSSF (CFU/day)

0.0000e+000 - 5.0384e+010
5.0385e+010 - 1.0000e+011
1.0001e+011 - 1.5500e+011
1.5501e+011 - 2.8200e+011
2.8201e+011 - 4.0800e+011

## Potential Loadings

OSSF (CFU/day)

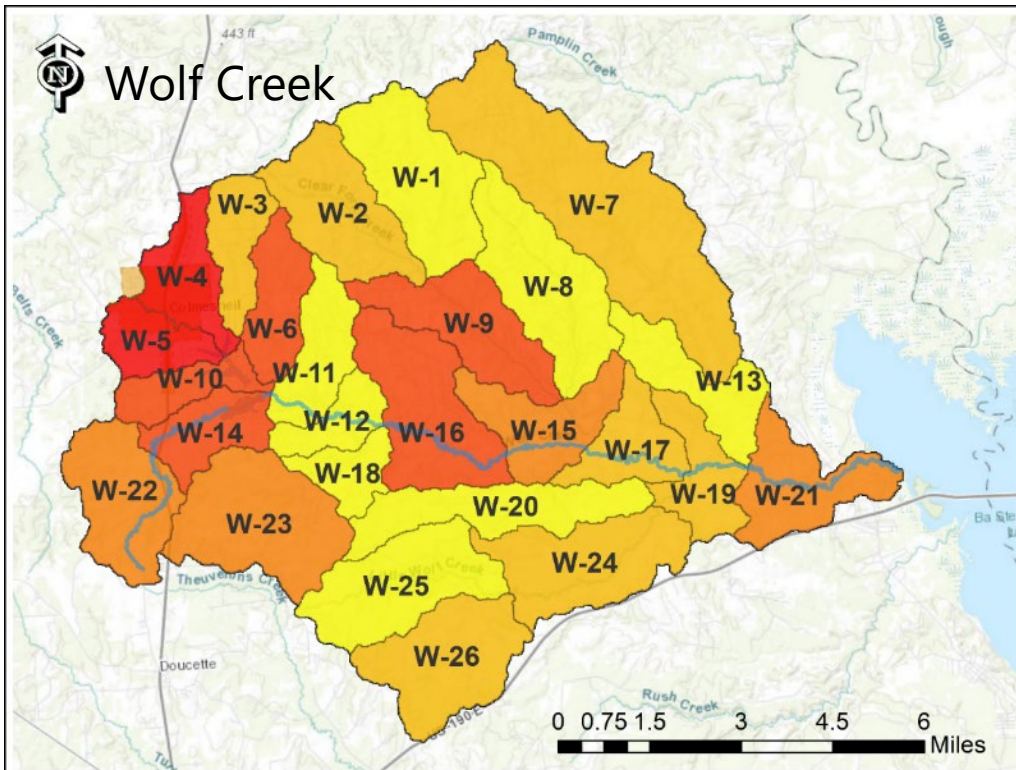
0.0000e+000 - 5.5982e+010
5.5983e+010 - 2.7100e+011
2.7101e+011 - 5.1900e+011
5.1901e+011 - 7.6000e+011
7.6001e+011 - 1.4600e+012

# Potential Management Measures

## OSSFs

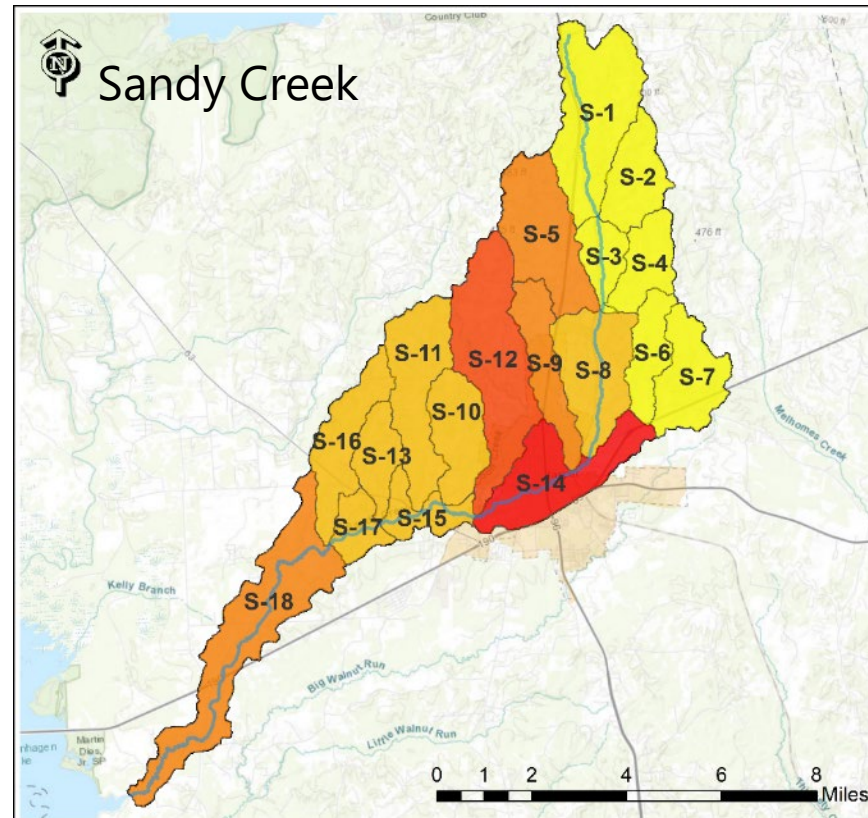
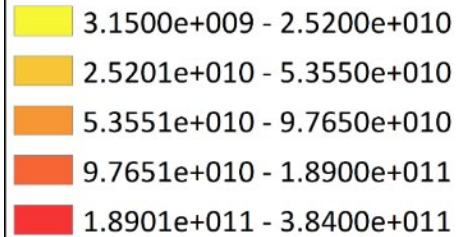
- Workshops and Extension Programs (Local and Statewide programs)
- OSSF inspection/repair/replacement programs
- Connection to sanitary sewer system
- Other Measures?

# Household Pets



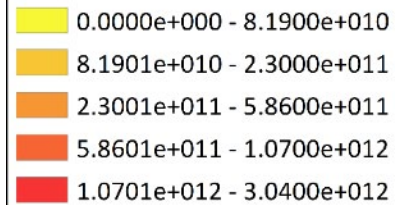
## Potential Loadings

### Dogs (CFU/day)



## Potential Loadings

### Dogs (CFU/day)



# Potential Management Measures Household Pets

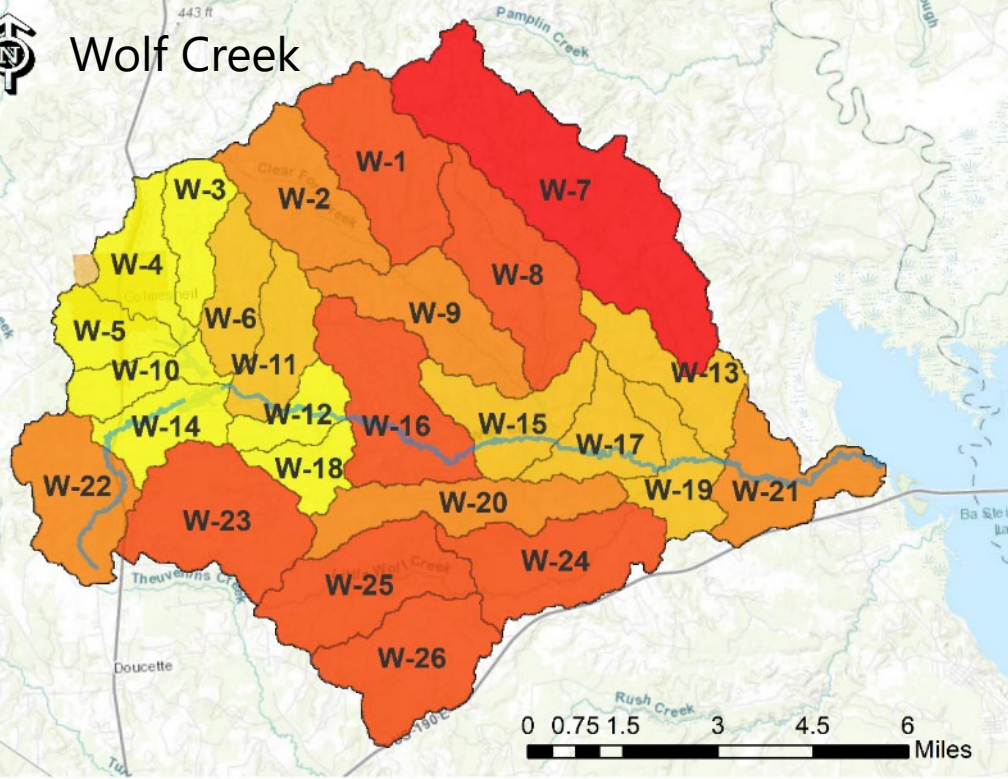
- Signs and waste stations in public spaces
- Mailers, videos and other public education resources
- Other Measures?



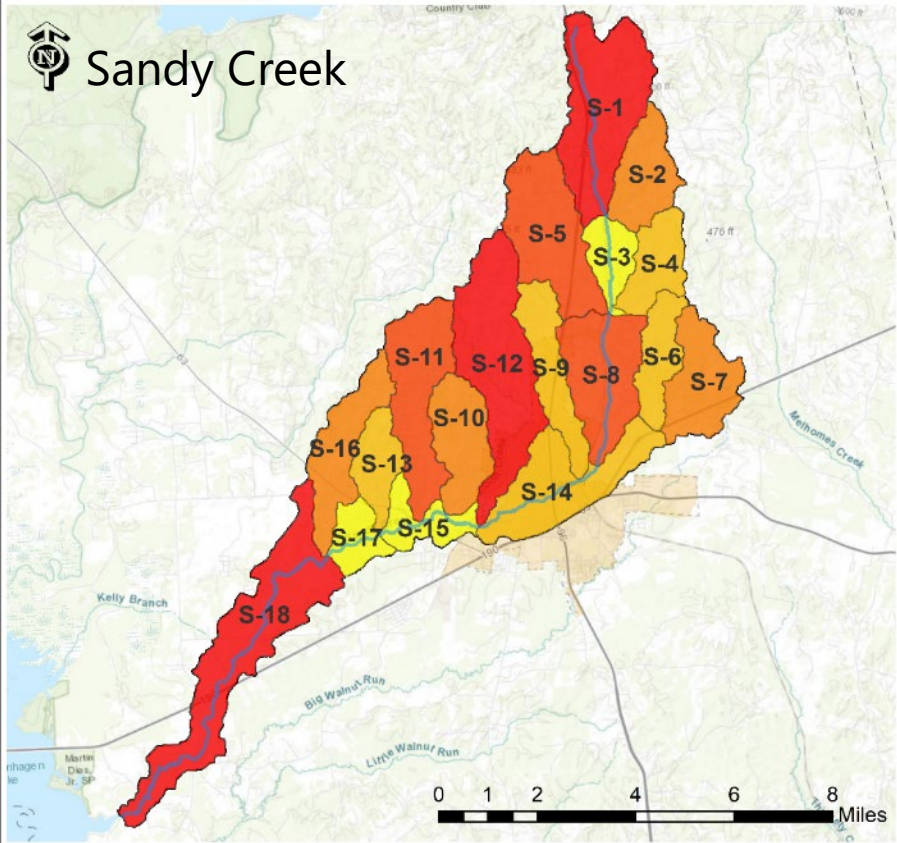
# Wildlife (feral hogs)



Wolf Creek

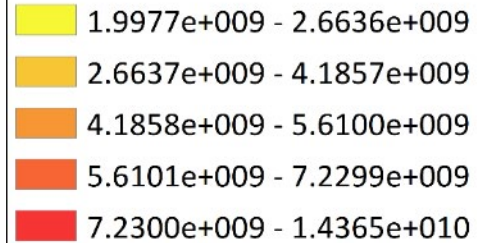


Sandy Creek



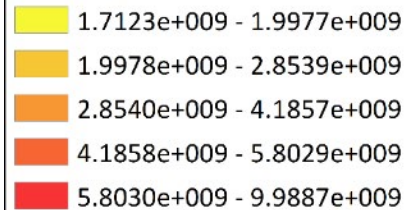
## Potential Loadings

### Feral Hogs (CFU/day)



## Potential Loadings

### Feral Hogs (CFU/day)



# Potential Management Measures

## Feral Hogs

- Feral hog management extension programs
- Trapping assistance program (panels, gates, installation)

# Other Measures

- Forest landowners. Well managed private forests have water quality benefits
- Urban Riparian restoration/protection
- Water quality monitoring
- General water quality education



# What is next?

# What is next?

- Before next meeting
  - Document management measures and calculate approximate load reductions
  - Provide draft of first sections to committee members
- At next meeting
  - Finalize management measures to include in I-Plan (and/or WPP)
  - Identify implementation schedules
- What else would you like covered in the next meeting?