

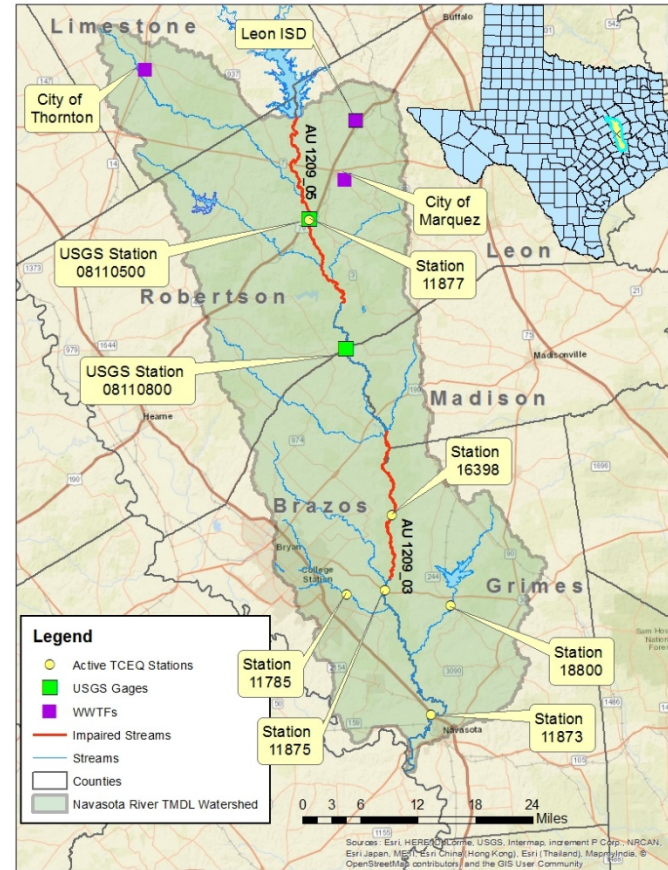
# TMDL and I-Plan Review and Approval Update

Ms. Lauren Oertel

TCEQ TMDL Project Manager

# Navasota River Bacteria TMDLs Progress

- Initial agency review is complete
- TCEQ Management prefer that TMDLs and I-Plans move through the official review together
- TMDL is waiting for I-Plan to catch up at this point

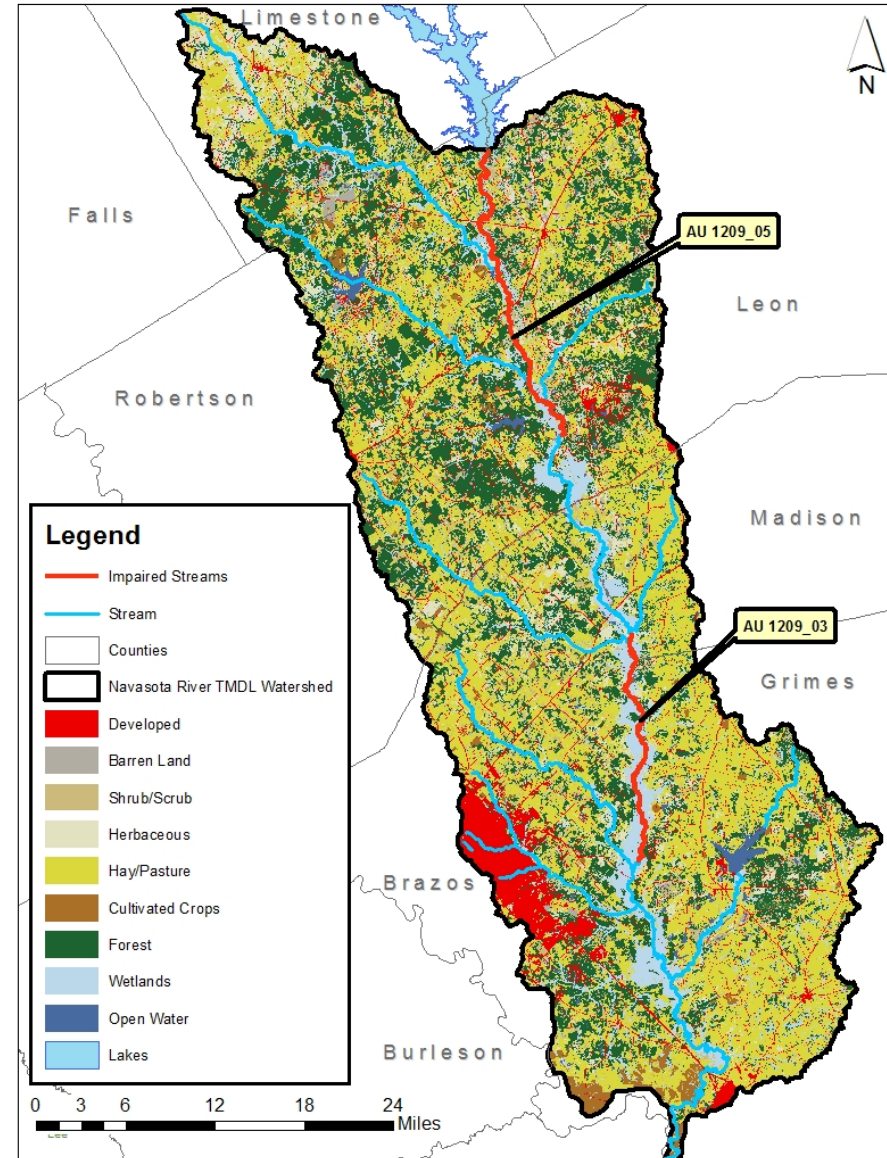


# Next Steps for TMDL and I-Plan

- I-Plan will be reviewed by multiple TCEQ programs, TCEQ regional office, and TSSWCB
- TMDL and I-Plan will go through TCEQ management review together
- Agenda date scheduled (February 2019?)
- Agenda date starts the 30-day public comment period for TMDL and I-Plan
  - Will host public comment meeting
- TCEQ will further review the documents
- Request final agenda date for adoption and approval (August 2019?)

# TMDL and I-Plan Complete; Then What?

- TCEQ coordinates annual check in meetings for the I-Plan starting in 2020 for 5 years
- If needed, adaptive management to revise the I-Plan



# Navasota River Watershed Update

*Lucas Gregory*

*Texas Water Resources Institute*

*July 11, 2018*



# Next Steps for TMDL and I-Plan

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# I-Plan Overview

- Based on Navasota River Watershed Protection Plan
- Executive Summary
  - Briefly describes I-Plan
  - Highlights management measures included
  - Denotes content provided for each management measure
- Introduction describes the TMDL, I-Plan and how they relate
- Watershed Overview
  - Defines the TMDL area and watershed as a whole
  - Land Use
  - Population distribution and projected growth

# I-Plan Overview

- Source Analysis
  - Describes sources of *E. coli* in the watershed
- Regulated Sources
  - Domestic & Industrial Wastewater
  - Water Quality General Permits
  - Sanitary Sewer Overflows
  - Regulated Stormwater
  - Illicit Discharges
- Unregulated Sources
  - Grazing livestock
  - Wildlife and unmanaged animals
  - Pets
  - Onsite Sewage Facilities
- Summary of the TMDLs
  - Components of the calculations
  - Extracted from the TMDL document



# I-Plan Overview

- Implementation Strategy
  - Management strategies selected based on feasibility, cost, timing and stakeholder support
- Adaptive Implementation
  - Iterative checks to see how progress is going
- Activities and Milestones
- Unregulated Sources
  - Grazing livestock
  - Wildlife and unmanaged animals
  - Pets
  - Onsite Sewage Facilities

# Management Strategies

- Management Approach
  - Address the sources that can be reasonably managed
    - Feral Hogs
    - Livestock
    - Human
    - Pets
- Feral hogs
  - Remove 15% of population annually
  - Trap, shoot, snare, dogs
  - Fence around deer feeders to limit food access
  - Deliver education programs regarding trapping techniques and hog biology



# Management Strategies

- Livestock
  - Goal is to modify resource usage with voluntary practice implementation through conservation plans and water quality management plans
  - Improves forage cover and reduces runoff
  - Implement 130 plans over 10 years



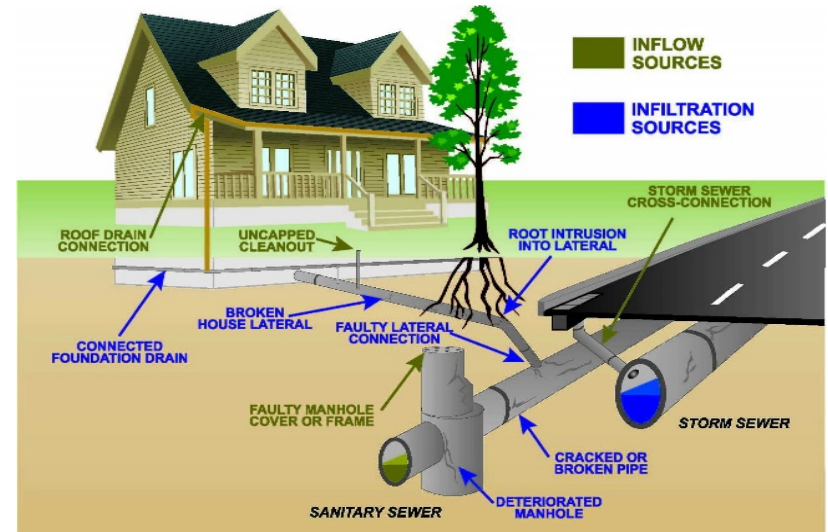
**Figure 1**

Waterer between two paddocks installed on heavy use area



# Management Strategies

- Wastewater
  - OSSFs
    - Repair and replace failing systems: ~ 150 systems over 10 years
    - Education and outreach programs
  
- Centralized systems
  - Address inflow and infiltration issues
  - As funding allows



# Management Strategies

- Pets & Urban Stormwater
  - Reduce dog waste not properly disposed of in the watershed
    - Information
      - Utility bill inserts
      - Signage in dog parks
    - Pet waste stations
      - Keep them stocked and maintained



# I-Plan Includes

- Summary Table for Each Management Measure
  - Potential load reduction
  - Technical and financial assistance needed
  - Education component
  - Schedule of implementation
  - Interim, measurable milestones
  - Indicators of progress
  - Monitoring component
  - Responsible party
- Sustainability
  - Pace of implementation
  - Practice effectiveness
  - Progress toward meeting water quality standards
- Water quality indicator
  - *E. coli*
- Implementation milestones

# Questions About the I-Plan?

# Implementation Opportunities

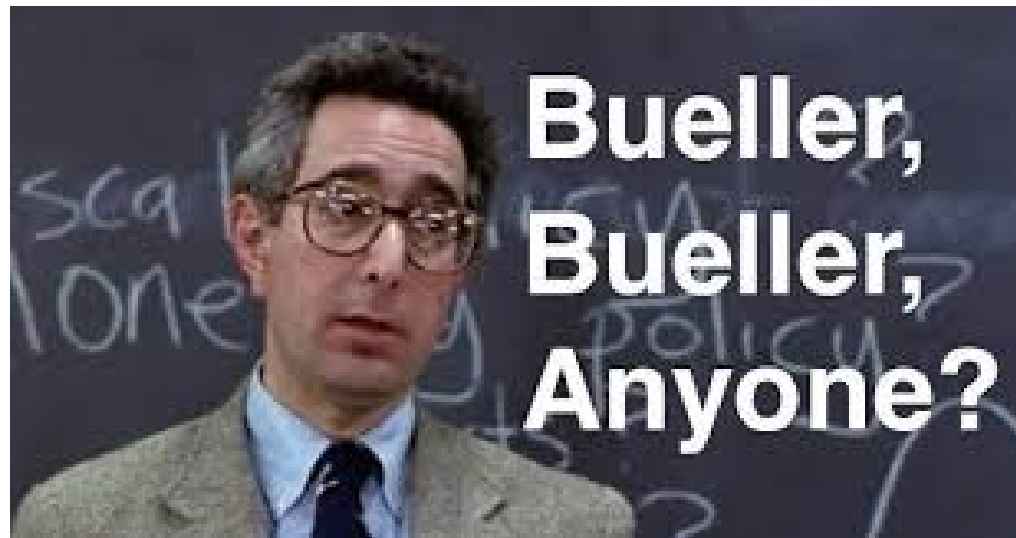
- Current Opportunities
  - TCEQ – Clean Water Act, Nonpoint Source Pollution Grants - Applications due 7/31
    - Traditionally focus on more urban non-point source issues and human associated loads
    - Cannot include items covered under MS4 permits
    - Can address failing OSSFs
      - County Designated Representatives are interested in program to repair/replace failing OSSFs
    - Can include water quality monitoring
  - TSSWCB - Clean Water Act, Nonpoint Source Pollution Grants - Applications due sometime early fall (late September?)
    - Traditionally focus on rural nonpoint source issues
    - Can address loadings from feral hogs, livestock and wildlife
    - Can include water quality monitoring



# Project Plan #1

- OSSF Repair & Replacement Project
  - TWRI working with County DRs and AgriLife Extension
    - DRs will help ID people in need of systems
    - AgriLife Extension will inspect and design new systems
    - TWRI will request bids on system designs
    - Contractor will install systems
    - Education component regarding proper system function, maintenance, etc.

# Any Other Ideas?



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