

bacteria fate and transport

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More than 300 water bodies in Texas are impaired because they did not meet bacteria criteria established by the state to protect contact recreation use in freshwater and/or oyster water.

The *Fate and Transport of E. coli in Rural Texas Landscapes and Streams* project addresses several issues related to bacteria Total Maximum Daily Load (TMDL) development and implementation addressed in a recent state task force report. These issues include identifying, characterizing and monitoring the fate and transport of *E. coli* in impaired watersheds and streams. The results from this project will help in developing scientifically sound TMDLs.

Objectives

- Identify, characterize and quantify *E. coli* loads from various sources in an impaired watershed
- Monitor survival, growth, re-growth and die-off of *E. coli* under varying environmental conditions
- Monitor re-suspension of *E. coli* in streams
- Develop and disseminate education materials that will be used to educate the public on bacterial issues in the state

Accomplishments

- Presented education programs on the “Occurrence and Fate of *E. coli* from Cattle and Wildlife Under Different Environmental Conditions”

Collaborators

- Texas Water Resources Institute
- Texas AgriLife Research
- Texas AgriLife Extension Service
- USDA Agricultural Research Service
- Texas Parks and Wildlife Department
- Brazos River Authority
- Brazos County Soil & Water Conservation District

Funding Agencies

- Texas State Soil & Water Conservation Board
- U.S. Environmental Protection Agency

