

# **Status of the Lampasas River Watershed Partnership**

**Brazos River Basin Clean Rivers Program  
Steering Committee  
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# Lampasas River Watershed



# Why are we here?

- ▶ Routine water quality sample collection in 1998 & 1999 exceeded the Texas Surface Water Quality Standards for fecal coliform
- ▶ Lampasas River was listed as 'impaired' for bacteria on the 2002 Texas 303(d) list
- ▶ The State of Texas requires water quality in the Lampasas River be suitable for contact recreation, a healthy aquatic ecosystem, fish consumption and general use
- ▶ Existing active stakeholder groups concerned about water quality in the watershed
  - Friends of Sulfur Creek
  - Lake Stillhouse Cleanwater Steering Committee

# How did we begin?

- ▶ Texas AgriLife Research obtained a Clean Water Act §319(h) grant from TSSWCB and U.S. EPA to develop a Watershed Protection Plan (WPP) for the Lampasas River watershed
- ▶ Stakeholders holistically address all sources and causes of impairments and threats to water resources within a watershed
- ▶ A WPP prioritizes implementation projects based upon technical merit and benefits to the community, promotes a unified approach to seeking funding for implementation, and creates a coordinated public communication and education program
- ▶ A WPP serves as a tool to better leverage resources of local governments, state and federal agencies, and non-governmental organizations.

# How did we begin?

- ▶ Hosted 2 Kick-Off Meetings in May 2009 to garner stakeholders' interest
- ▶ Officially formed the Lampasas River Watershed Partnership in November 2009
- ▶ Formed a Technical Advisory Group
  - Comprised of state and federal agency experts to provide technical advice
  - Provide workgroups and steering committee with information/knowledge to develop strategies to improve water quality in the Lampasas River Watershed
  - Hosted TAG meeting in February 2010

# The Lampasas River Watershed Partnership

- ▶ Steering Committee – decision-making body of the Partnership and makes decisions based up the input of topical work groups
  - Currently an 18 member board
- ▶ Topical Work Groups – Work Groups dedicated to specific topic areas; with knowledge and expertise to that field
  - Agriculture and Wildlife Work Group
  - Urban Nonpoint Source Work Group
- ▶ Partnership – General members who are concerned, but may not have the time to participate more

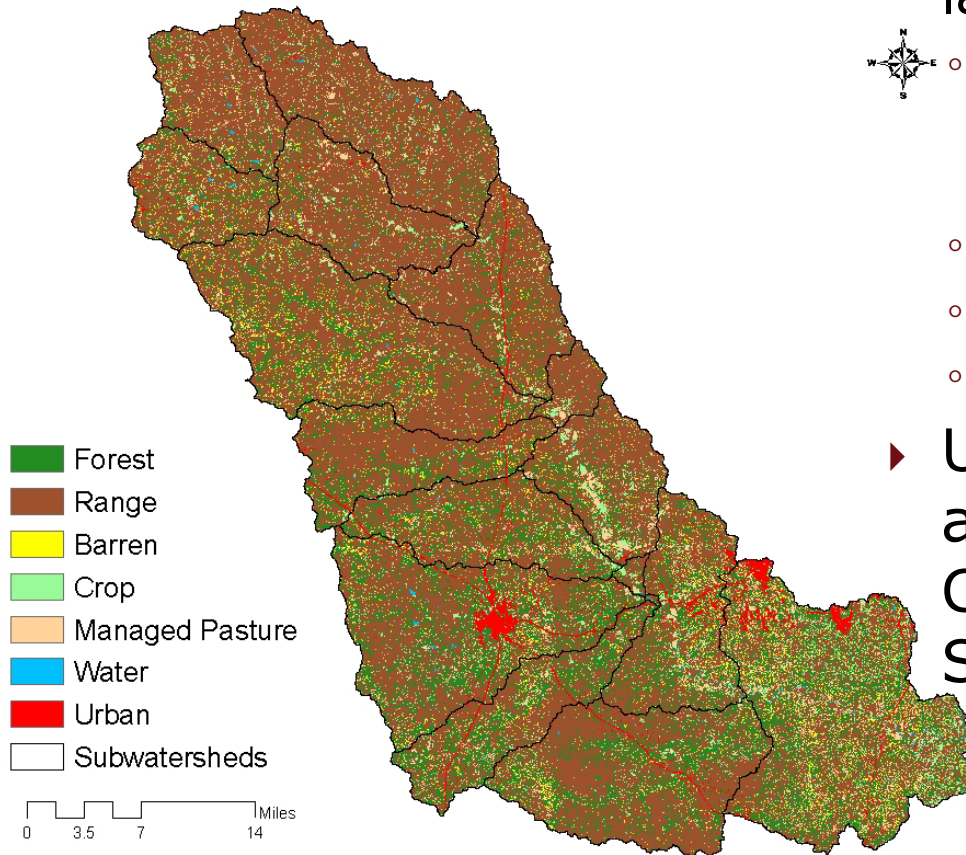
# What have we accomplished?

- ▶ The Partnership adopted State Surface Water Quality Standards as Water Quality Goals for the Partnership
  - E. coli : geomean < 126 cfu per 100 ml
  - Chloride: mean < 500 mg/l
  - Sulfate: mean < 100 mg/l
  - Total Dissolved Solids: mean < 1200 mg/l
  - Dissolved Oxygen:  $\geq 3.0$  mg/l
  - Nitrate Nitrogen<sup>\*\*</sup>: mean < 2.76 mg/l
  - Orthophosphate<sup>\*\*</sup>: mean < 0.5 mg/l
- ▶ <sup>\*\*</sup>State screening criteria – 85% of state's waterbodies are below this level<sup>\*\*</sup>

# What have we accomplished?

- ▶ As a result of the TAG meeting, TCEQ revisited the data that initially placed the Lampasas River on the 303(d) List
  - Data that originally placed the Lampasas River on the 303(d) list no longer meets the new criteria
- ▶ This information was presented to the Partnership and the consensus was to support delisting of the river.
- ▶ The Lampasas River has been removed on the Draft 2010 Integrated Report of Impaired Waterbodies that was approved by the TCEQ Commissioners on August 25<sup>th</sup>
- ▶ Draft is pending EPA's approval

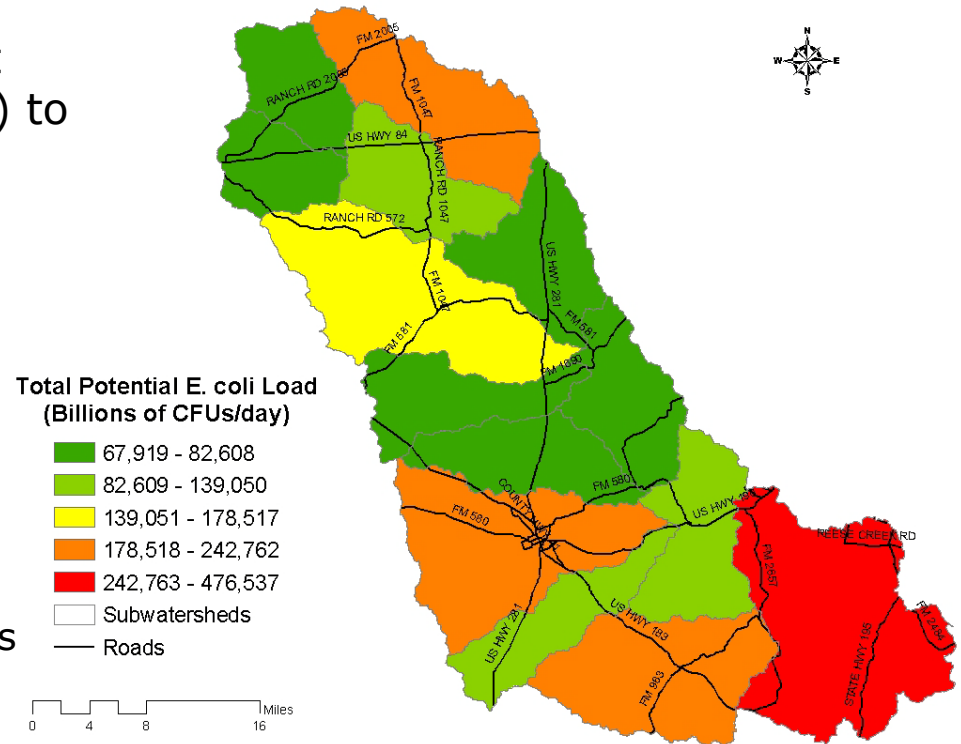
# What have we accomplished?



- ▶ Updated watershed land use and land cover from satellite imagery
  - National Agriculture Imagery Program (NAIP) Digital Ortho Imagery- 2008
  - National Land Cover Dataset- 2001
  - Crop Data Layer- 2008
  - Ground Truth Data
- ▶ Updated land use has been approved by the Steering Committee and used in the SELECT analysis

# What have we accomplished?

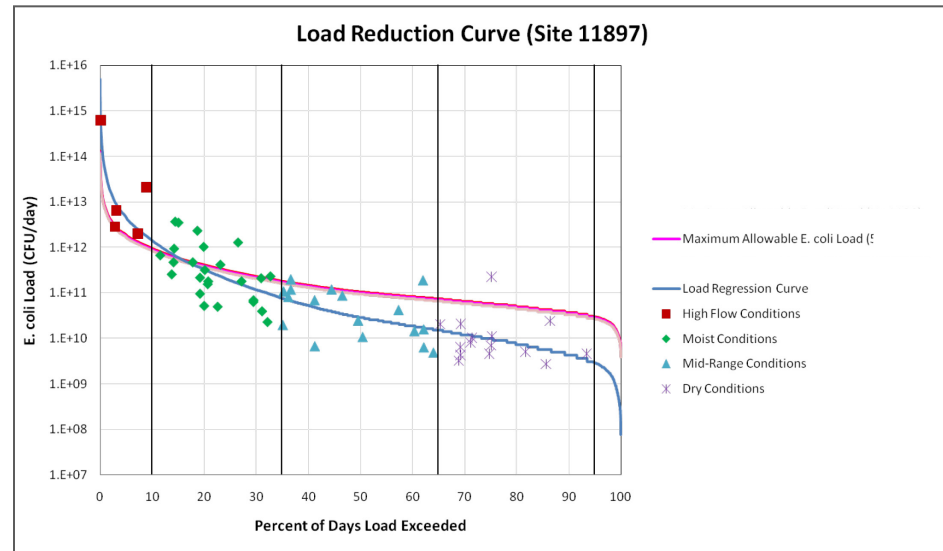
- Utilized SELECT (Spatially Explicit Load Enrichment Calculation Tool) to determine potential bacteria contribution from:
  - Septic Systems
  - Wastewater Treatment Facilities
  - Dog Waste
  - Horses
  - Sheep
  - Goats
  - Cattle
  - Confined Animal Feeding Operations
  - Deer
  - Feral Hogs



### SELECT Output for Total Potential *E. Coli* Load

# What have we accomplished?

- ▶ Developed Load Duration Curves for six water quality sites in watershed
  - Percentage of time a pollutant load meets or exceeds a target level
- ▶ Water quality analysis indicates no need for bacteria load reduction, with the exception of during the High Flow Regime



# What have we accomplished?

## *NRCS Riparian Proper Functioning Condition Workshop*

- ▶ Participants learn the basic interaction of Hydrology – Erosion/Deposition and Vegetation for Central Texas creeks and rivers
- ▶ One-day course; ½ Classroom, ½ Field
- ▶ Sign-in begins at 8:00 am
  - Tuesday, April 26<sup>th</sup>
    - Lampasas County Farm Bureau Building
  - Wednesday, April 27<sup>th</sup>
    - Parrie Haynes Equestrian Center



Please register by April 21<sup>st</sup>  
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# What have we accomplished?

- ▶ Work Groups also prioritized subwatersheds for implementation and developed a timeline for the next 10 years
- ▶ Work Groups have outlined management strategies to sustain water quality at or below current conditions
  - Management strategies include:
    - Encouraging land owner enrollment into Water Quality Management Plans through TSSWCB to implement conservation practices
    - Feral hog trap loan program
    - Online tracking of feral hog damage
    - Map permitted and unpermitted OSSFs within the watershed
    - Repair or replace failing OSSFs
    - Pet waste stations in parks and along hiking trails
    - Outreach and education support for all management measures
- ▶ Determined long-term monitoring needs to support implementation and assess load reductions

# What is next?

- ▶ April 2011
  - Urban NPS Work Group meeting to finalize recommendations (Tentative)
- ▶ Summer 2011
  - Steering Committee Meeting to finalize all Work Group recommendations
  - Distribute WPP for 45 day public comment period
  - Public Comment meeting
- ▶ Fall 2011
  - TSSWCB and EPA Consistency Review Period
- ▶ Winter 2011
  - Print WPP & begin implementation



# **Thank you**

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**[www.lampasasriver.org](http://www.lampasasriver.org)**