Addressing Recommendations from the Joint Task Force on Bacteria TMDLs

Total Maximum Daily Load Program
Texas Commission on Environmental Quality

Recreational TMDL Issues

- Large number of recreational use impairments
  - 2004 303(d) List – 183 Impairments
  - Draft 2006 303(d) – 294 Impairments
- Many different tools being implemented to develop bacteria TMDLs
- Stakeholder concern that approaches should use the best methods and data available

Bacteria TMDL Task Force

- Joint effort of TSSWCB and TCEQ
- Initial meeting September 26, 2006
- Final document June 4, 2007
- Task force members

Dr. Allan Jones (Chair)

Dr. George DiGiovanni	Dr. Raghavan Srinivasan
Dr. Larry Hauck	Dr. Hannadi Rafai
Dr. Joanna Mott	Dr. George Ward

50 additional expert advisors and agency personnel

Bacteria TMDL Task Force

- Examining approaches that other states use to develop and implement bacteria TMDLs
- Recommending cost-effective and time-efficient methods for developing TMDLs
- Recommending effective approaches for developing implementation plans
- Evaluating the variety of models and bacteria-source-tracking methods available for developing TMDLs and implementation plans, and recommending under what conditions certain methods are more appropriate
- Developing a roadmap for further scientific research needed to reduce uncertainty about how bacteria behave under different water conditions in Texas

Bacteria TMDL Task Force - Report

- Bacteria Fate and Transport Models
  - Load duration curves (LDC)
  - Mass balance approaches
  - Spatially explicit methods
  - Mechanistic approaches
- Bacteria Source Tracking (BST)
  - Method descriptions
  - Regulatory expectations and capabilities
  - Method comparisons
  - Future direction
- Research and Development Needs
  - Characterization of sources
  - Characterization of kinetic rates and transport mechanisms
  - Enhancements to fate and transport models
  - Bacteria source tracking
  - Control measure effectiveness
  - Quantification of uncertainty and communication of risk

Recommended Approach – Three Tiers

- Tier 1 – One year
  Required for all TMDLs

  Form TMDL stakeholder advisory group

  Develop GIS inventory for watershed

  Calculate load duration curves (LDC)

  Analyze data