



Surface Water Quality

Program Updates

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Texas Commission on Environmental Quality
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Reorganization

- ◆ Shift from media based to a functional structure to a “functional media”
- ◆ New office, new management
- ◆ Better communication and coordination



Office of Water

Water Quality Planning Division

Monitoring & Assessment Section

CRP, SWQM, WQS, DM

Planning & Implementation Section

TMDL, NPS, GBEP

Division Support Section

Houston Laboratory



Monitoring and Assessment Programs

- ◆ Clean Rivers Program
- ◆ Surface Water Quality Monitoring
- ◆ Water Quality Standards



Clean Rivers Program

- ◆ The Clean Rivers Program (CRP) is a unique State-fee funded water quality monitoring, assessment, and public outreach program.
- ◆ Clean Rivers Act added to Texas Water Code in 1991
- ◆ CRP provides the opportunity to approach water quality issues within a watershed at the local level through coordinated efforts among diverse agencies and various programs.
- ◆ Partnership between the TCEQ and 15 regional water quality authorities



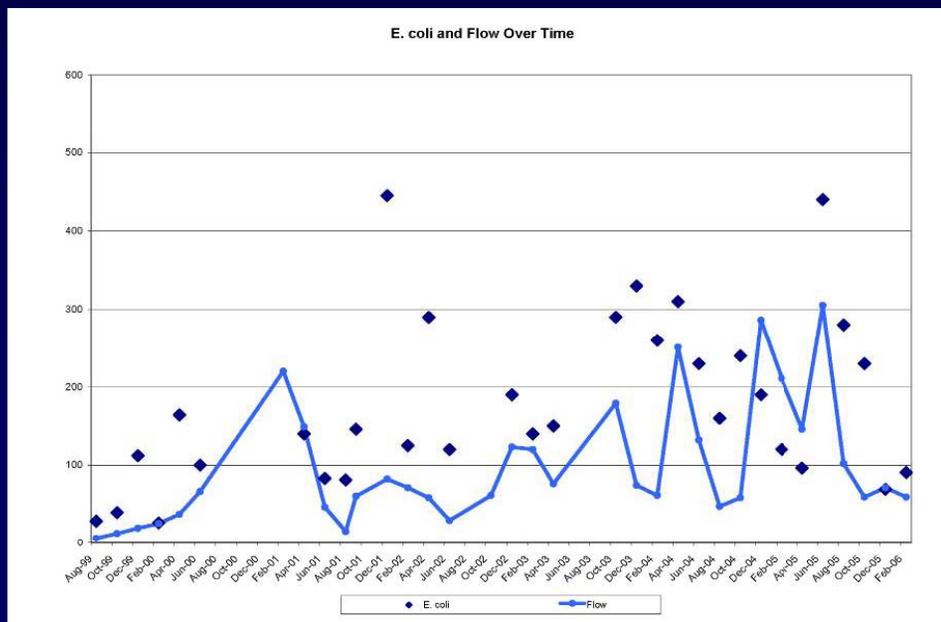
Clean Rivers Program Objectives

- ◆ Monitor Water Quality
- ◆ Evaluate Water Quality
- ◆ Facilitate Involvement in TCEQ Water Programs
- ◆ Engage Stakeholders



Water Quality Data

- ◆ CRP collects over 60% of data used by TCEQ for assessment
- ◆ Rigorous quality assurance process
- ◆ Additional data provided using partner funds



- ◆ Coordinating resources to get more data
- ◆ Evaluate data, trend analysis, interpretive reports



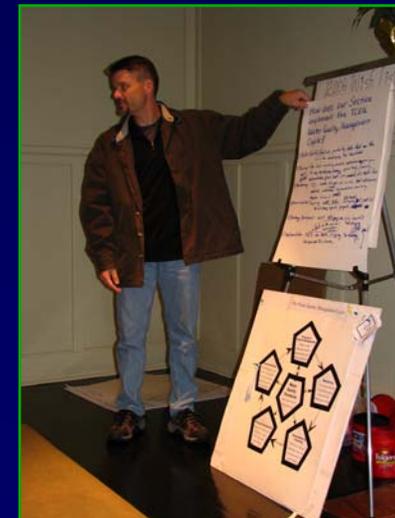
Facilitate Involvement

- ◆ Coordinate monitoring activities by basin
- ◆ Conduct and participate in studies to modify analytical methods & field practices
- ◆ Water quality assessment review and prioritization
- ◆ Data for permits and Standards development



Engage Stakeholders

- ◆ Periodic steering committee meetings
- ◆ Setting water quality priorities
- ◆ Bringing issues to the table
- ◆ Work to resolve water quality issues





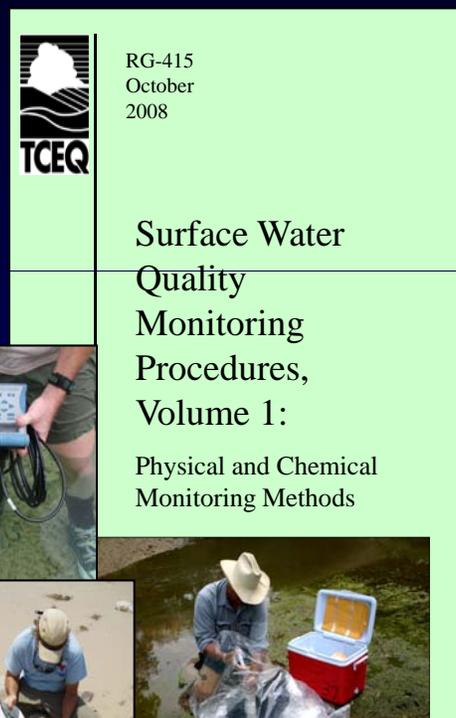
Surface Water Quality Monitoring Program

- ◆ *Develop Monitoring Methods & Coordinate Program*
- ◆ *Assess Surface Water Quality*
- ◆ *Support Management Strategies*
- ◆ *Continuous Water Quality Monitoring Network*
- ◆ *Special Projects*



Develop SWQM Methods

- ◆ Develop rigorous monitoring methods to ensure data of known quality.
- ◆ Ensure consistency of water quality data.
- ◆ Developed and maintain a nationally recognized biological monitoring program.
- ◆ Maintain expertise in water quality monitoring methods and equipment.



Assess Surface Water Quality

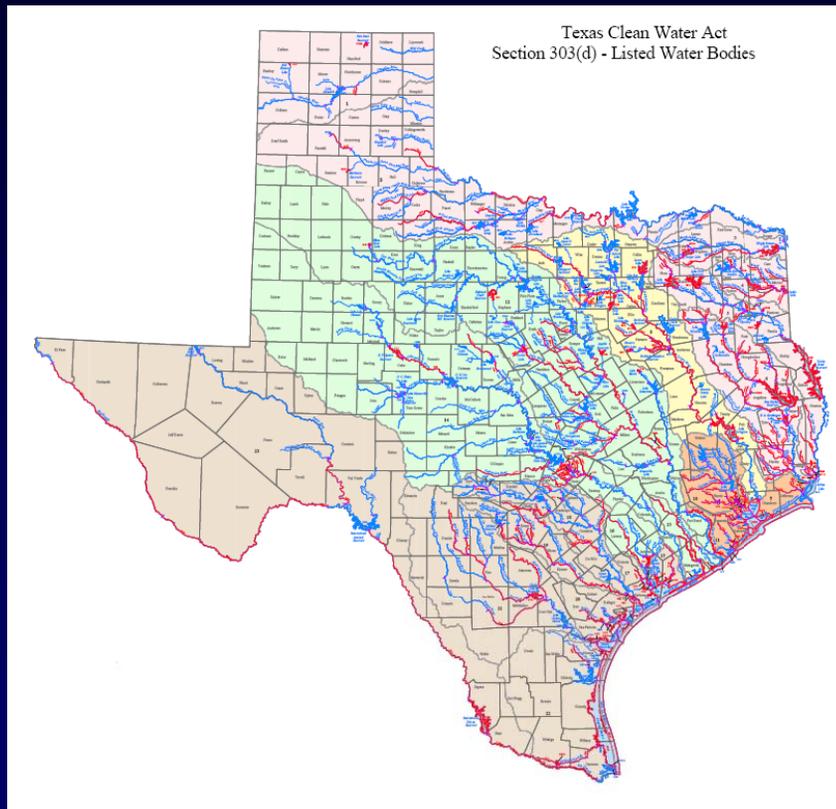
Produce the **Texas Integrated Report**, formerly called the Water Quality Inventory and List, required by sections 305(b) and 303(d) of the Clean Water Act every 2 years

TCEQ's primary surface water assessment and planning tool

Develop the *Guidance for Assessing and Reporting Surface Water Quality in Texas*.

Identify readily available and reliable water monitoring data

Engage stakeholders in the assessment process.





2010 Integrated Report

- ◆ **Guidance Advisory Workgroup – June 2009**
- ◆ **Assessment Schedule:**
 - ◆ **Draft complete February 2010**
 - ◆ **Public comment period February 5-March 8, 2010**
 - ◆ **SWQM response to public comments and make changes by April 2010, posted later**
 - ◆ **Submit to TCEQ Commissioners for approval**
 - ◆ **Submit to EPA mid June 2010 for final approval**



Assessment Challenges

- ◆ **First full scale assessment since 2006**
 - ◆ **Increased number of water bodies – data**
- ◆ **Water Quality Standards Revisions**



Successes

- ◆ Data Provider's Meeting
 - ◆ Opportunity to provide early input
 - ◆ Eliminates many errors and judgment calls
- ◆ SAS Tool performance
- ◆ Increased Coordination with other WQ groups



Water Quality Standards Group

- ◆ Develops water quality goals for the state
- ◆ Reviews and revises the Texas Surface Water Quality Standards
- ◆ Coordinates and conducts use-attainability analyses and standards development projects
- ◆ Assists with the implementation of standards



Achievements

- ◆ TCEQ WQS Program is recognized for its tremendous success in developing tailored standards for individual water bodies
- ◆ Texas is one of the few states that has extensive procedures to develop site-specific standards for aquatic life, dissolved oxygen, toxic criteria, and aquatic recreation.
- ◆ TCEQ WQS Group has a well-recognized statewide advisory group process



WQS Revisions

- ◆ Coordinated with Advisory Workgroup
- ◆ Also revising Implementation Procedures
- ◆ Proposed (January 13, 2010)
- ◆ 45-day public comment period
- ◆ Public hearing (March 11, 2010)
- ◆ Comment period ended (March 17, 2010)

Key Standards Revisions

- ▶ Revised toxic criteria
- ▶ Nutrient criteria
- ▶ Recreational standards
- ▶ Site-specific standards

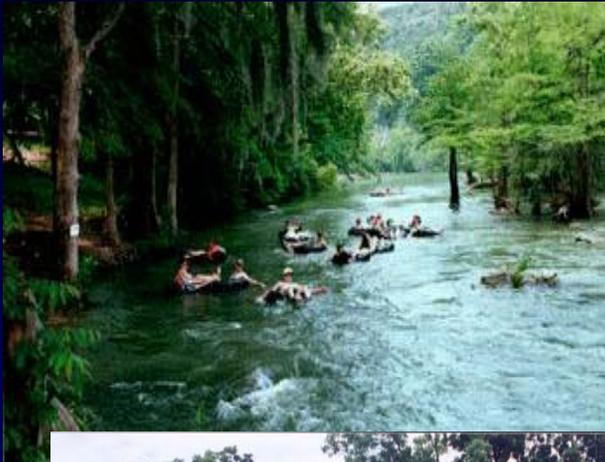




Nutrient Criteria

- ▶ Development plan – November 2006
- ▶ Proposed for 93 reservoirs:
 - ▶ - Chl *a* in main pool
 - ▶ - Based on historical data for each reservoir
 - ▶ - Assessed as long-term median
 - ▶ - Secondary screening with TP, Transparency?
- ▶ Evaluation of Nutrients – IPs
- ▶ Under development: streams, estuaries

Recreational Use



Expand categories:

- Primary contact
- Secondary contact 1
- Secondary contact 2
- Noncontact



Set new UAA procedures

- Local knowledge



Next Steps

- ◆ Adoption (June 30, 2010)
 - ◆ Effective (July 2010 - tentative)
- ◆ EPA Review & Approval



Planning and Implementation Programs

- ◆ Total Maximum Daily Load
- ◆ Nonpoint Source



Total Maximum Daily Load Program

- ◆ Texas is required under the federal Clean Water Act to list impaired waters and to take action to restore them.
- ◆ A surface water body is considered impaired if it does not meet the criteria for support of one or more of its beneficial uses, as defined in the Texas Surface Water Quality Standards (307.1-307.10 TAC).



Texas TMDL Program

- ◆ Two Elements

- ◆ TMDL – Total Maximum Daily Load

- ◆ Determines the maximum amount (load) of a pollutant that a water body can receive and still maintain uses
 - ◆ and allocates this load to regulated and unregulated sources in the watershed.

The logo features a stylized landscape with a white cloud, green hills, and blue water, set against a blue background with horizontal lines.

Texas TMDL Program

- ◆ Two Elements

- ◆ Implementation Plan

- ◆ A detailed description of the regulatory and voluntary management measures necessary to achieve the pollutant reductions identified in a TMDL
 - ◆ that includes a plan for sustaining the implementation effort over time.



Nonpoint Source Program

- ◆ 1987 Clean Water Act §319(h) NPS Grant Program
- ◆ Purpose – Implement the State’s program for managing NPS pollution
 - ◆ TCEQ 50% funds – urban & non agricultural rural
 - ◆ TSSWCB 50% funds – agriculture & silviculture

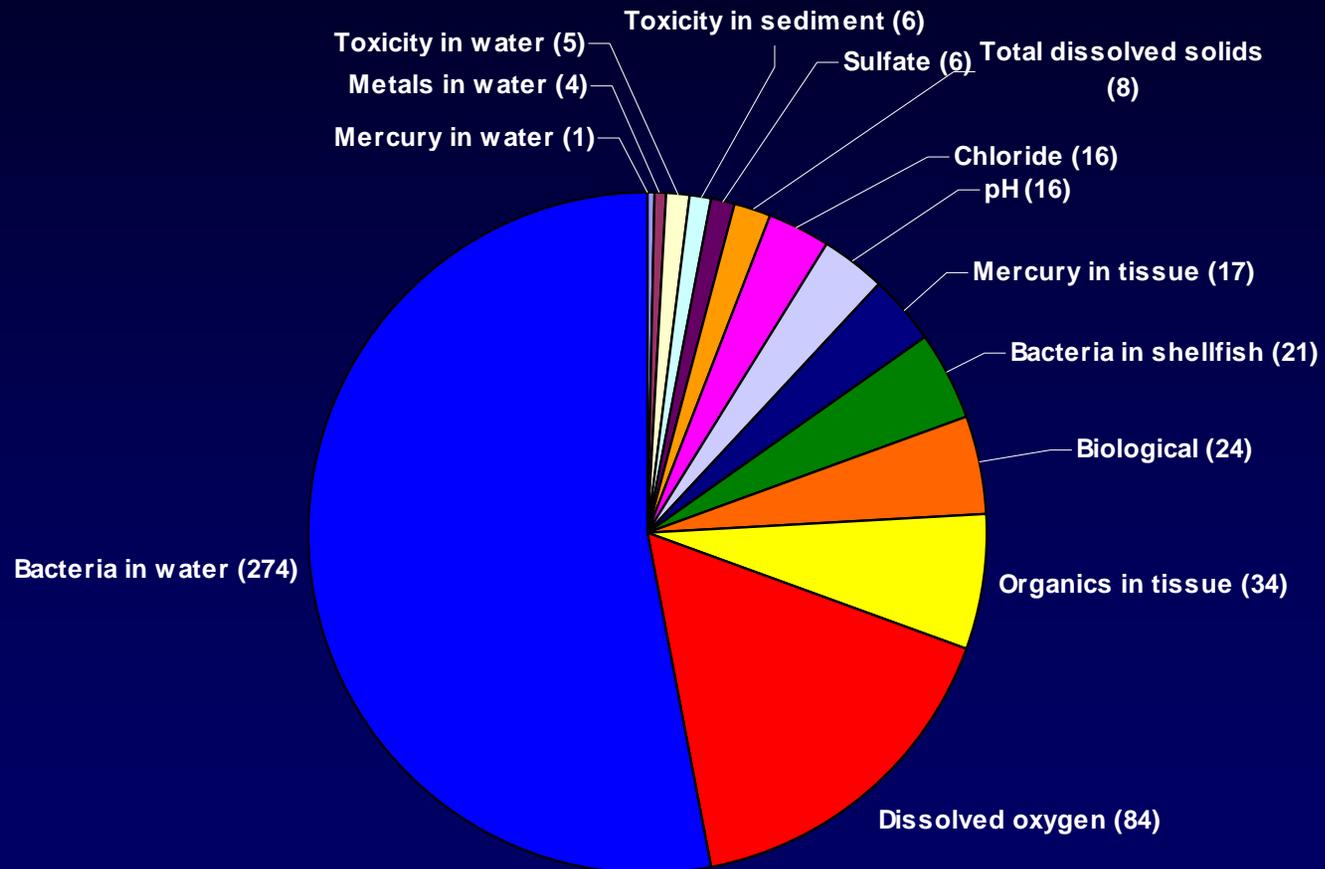


NPS Measures of Success

- ◆ Water quality improvements from NPS controls
- ◆ NPS pollutant load reductions
- ◆ Implementation of NPS controls
- ◆ Public education, awareness, and action



2008 303(d) List of Impairment Parameters



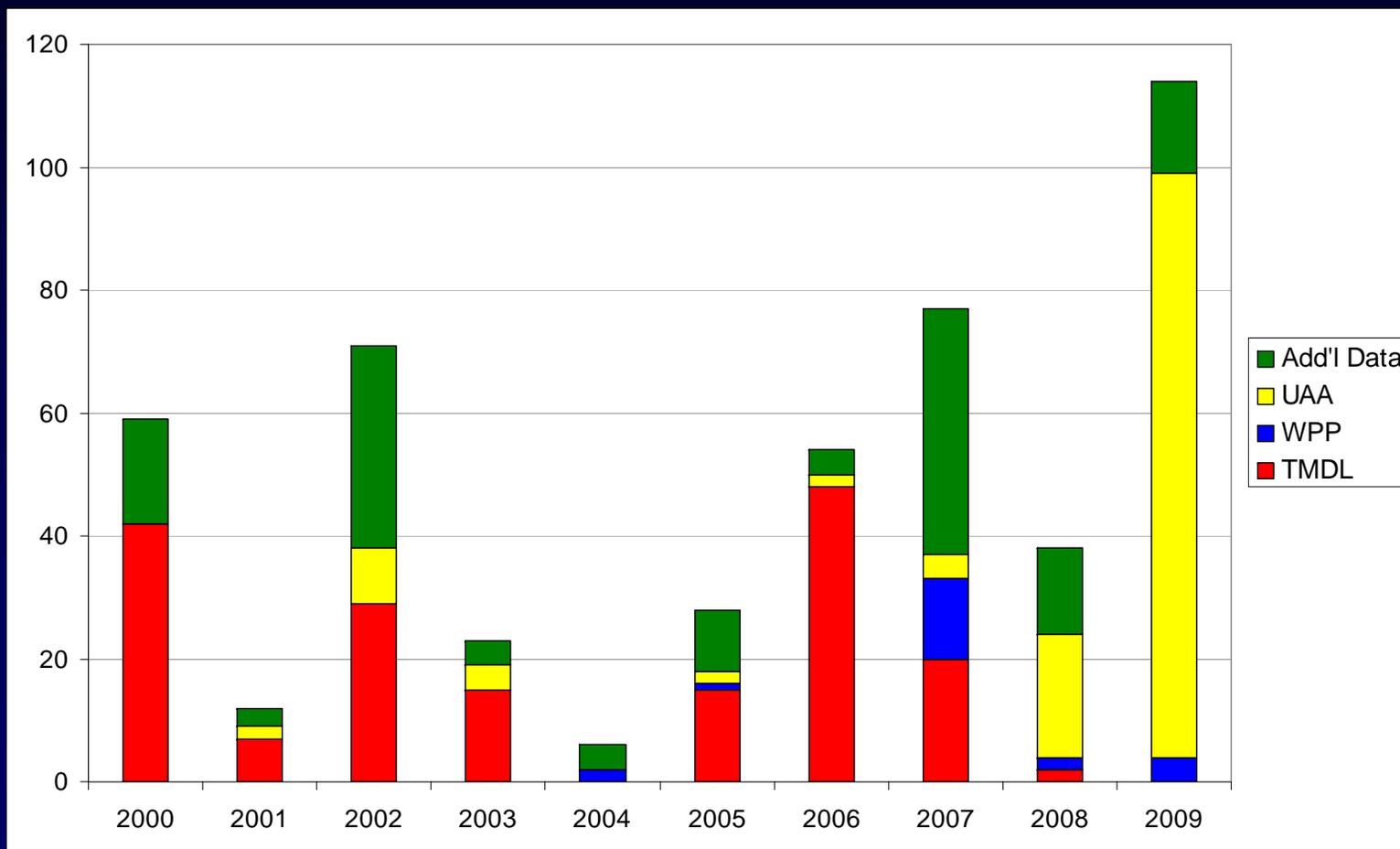
Total Number = 516



Addressing Impaired Water Bodies Projects through FY 2009

- ◆ Data – Additional sampling and analysis is required to determine whether a TMDL is necessary or a UAA should be initiated.
- ◆ UAAs – Use attainability analyses (UAAs) review the appropriateness of the standard — whether a water body is used as designated and the criteria are attainable.
- ◆ TMDLs – Total maximum daily loads estimate the amount of a particular pollutant that a water body can naturally assimilate, and the amount by which the pollutant load must be reduced in order to attain water quality standards.

Addressing Impaired Water Bodies





Discussion...



...Questions??