

Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d)

Water Quality Planning Division

Monitoring & Assessment Section

Surface Water Quality Monitoring Program (SWQM)

Background

- Statewide assessment of the status of state waters
 - Compares water quality data to approved water quality standards
 - Evaluates all readily available data
 - Identifies impaired waters (303(d) List)
- Requirements
 - Federal Clean Water Act, Sections 305(b) and 303(d)
 - Title 30 of the Texas Administrative Code (30 TAC)
- Conducted every two years
 - Draft due to EPA on April 1 of even numbered years

Integrated Report References

**30 Texas Administrative Code (TAC) Chapter 307, Texas Surface
Water Quality Standards,**

**Surface Water Quality Monitoring Procedures, Volume 1:
Physical and Chemical Monitoring Methods**

**Surface Water Quality Monitoring Procedures, Volume 2:
Methods for Collecting and Analyzing Biological Assemblage and
Habitat Data**

**Surface Water Quality Monitoring Program,
Water Quality Standards Program, and
Water Quality Assessment Program
QUALITY ASSURANCE PROJECT PLAN**

Data Management Reference Guide



**Guidance for Assessing and Reporting Surface Water Quality in Texas In
Compliance with Sections 305(b) and 303(d) of the Federal Clean Water Act**



**Texas Integrated Report of Surface Water Quality for Clean Water Act
Sections 305(b) and 303(d)**

SWQM Procedures

- Volume 1 – General Monitoring
 - General Guidelines – Types of Monitoring
 - Field Measurements - Physical Chemical Parameters
 - Sample Collection
 - Bacteriological
 - Water Samples
 - Sediment
 - Tissue
 - Calibrating and Maintaining Multiprobe Instruments
 - Quality Assurance and Quality Control – TSAs and QC samples
 - Field Safety

SWQM Procedures

- Volume 2 – Biological Monitoring
 - Requirements – Temporal, Spatial, Physical
 - Types of Biological Monitoring
 - Nekton - Freshwater\Saltwater
 - Benthic Macroinvertebrates
 - Algae and Aquatic Macrophytes
 - Plankton
 - Reporting Requirements and Data Management
 - QA\QC – Training, TSAs, Vouchers, Sample Tracking
 - Appendices
 - Equipment, Forms, Fact Sheets

Quality Assurance Project Plan

- Organization\Distribution
- Problems Definition\Task Description – Types of Monitoring
- Objectives and Criteria – Data Quality Objectives
- Sample Design, Methods and Handling – SWQM Procedures Manuals
- Analytical Methods – TSWQS\Standard Methods
- Instrument Testing, Calibration and Supplies
- Data Management - SWQMIS
- Audits, Reports and Response Actions – TSAs and Laboratory
- Data Validation and Verification – Data Management Reference Guide

Assessment Guidance

- General Assessment Methodology
 - Representative data – spatial and temporal
 - Methods for Attainment Determinations
 - Minimum sample requirements, censored data, rounding, levels of support
- Assessment of Beneficial Uses
 - Aquatic Life
 - DO and Toxic Substances
 - Narrative Criteria
 - Recreation
 - General
 - Public Water Supply
- Methods for Assigning Pollutant Causes and Concerns
- Categorizing Water Quality Conditions for Management Actions

Assessment Process

Request Data

Develop Proposals and Revisions to Methods

Present Proposals to Guidance Advisory Workgroup

Update Assessment Tools and Data

Conduct Assessment and Prepare Draft Reports

Coordinate Initial Review with Data Providers

Provide Draft for Public Comment

TCEQ Commission Approval

Submit for EPA Review and Approval

Integrated Report Documents

- Executive Summary
- Guidance for Assessing and Reporting Surface Water Quality in Texas
- 303(d) List (Category 5)
- Delistings
- New Listings
- Schedule to Develop TMDLs for Category 5a Water Bodies
- Water Quality Concerns
- Sources of Pollution for Impairments and Concerns
- Public Comment and Response
- Water Body Assessments by River Basin
- Cost/Benefit Assessment
- Trophic Assessment of Texas Reservoirs

Integrated Report Documents (cont)

- Electronic data files summarizing the assessment results for EPA's Assessment Database
- Index of Water Quality Impairments
- Water Bodies Evaluated
- Five-part categorization of waters
- Water Body Assessments by River Basin
- Changes to the Draft Following Public Comments
- Water Pollution Control Program
- Monitoring Program
- Statistically-Based Monitoring in Texas
- Water Quality Inventory Summary of Uses
- Texas Groundwater Assessment

Current Status

- 2012 Integrated Report Approved by EPA on May 9, 2013
- 2014 Integrated Report Under Development
 - Advisory Workgroup – June 6, 2013
 - Data Provider Coordination – October 2014
 - Public Comment –Dec 19 – February 2
 - Commission Agenda – June 3, 2015
- 2016 Integrated Report – Planning

2014 Revised Procedures

- Drought Considerations
- Implementing new and revised water quality standards
- Consideration of data collected as part of watershed protection plans
- Oyster Waters Assessments
- Probabilistic Survey Results

Draft 2014 Integrated Report

- Available for Public Comment
- Summary
 - 1409 Waterbodies Evaluated\1065 Assessed
 - 72 New Impairments
 - 66 Impairments Removed
 - Net Increase = +6 Impairments
 - Largest change = Recreational Use (-17 Impairments)

Additional Information

- 2014 Integrated Report
 - https://www.tceq.texas.gov/waterquality/assessment/public_comment
- 2012 Integrated Report
 - <http://www.tceq.texas.gov/waterquality/assessment/12twqi/twqi12>
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