

Total Maximum Daily Load for Indicator Bacteria in Oyster Waters in the Galveston Bay System

*Texas Commission on Environmental Quality
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THE TMDL AND IMPLEMENTATION PLAN

The Clean Water Act requires that a Total Maximum Daily Load be established for pollutants for “impaired” water bodies

Based on the Total Maximum Daily Load, an Implementation Plan must be developed to reduce the pollutants.

The goal is to meet the Water Quality Standards

TMDL PROCESS MILESTONES

1st Milestone – Process and important terms to be discussed in this presentation.

Place Water Body on 303(d) List

2nd Milestone – Determine limits to pollutant loads

TMDL Document

3rd Milestone – Develop plan to improve water quality

Implementation Plan Document

Final Goal – Meet Water Quality Standards

TMDL PROCESS

- 1. Prepare TMDL Report**
- 2. TMDL Adoption - TCEQ**
- 3. TMDL Approval – EPA**
- 4. Prepare Implementation Plan**
- 5. IP Approval - TCEQ**

TMDL REPORT

Primary element of TMDL

$$LC = WLA + LA + MOS$$

LC = Load Capacity

WLA = Waste Load Allocation Permitted)

LA = Load Allocation

MOS = Margin of Safety

TMDL REPORT

LC = Load Capacity

How much can the stream assimilate and still achieve the standard

WLA = Waste Load Allocation

“Point Sources” All permitted sources (discharge, storm water, agricultural, etc.)



TMDL REPORT

LA = Load Allocation

“Non-Point” Sources, “Background”

MOS = Margin of Safety

**Factor to allow for uncertainty in
allocations**



TMDL REPORT

- ➔ **Prepare TMDL Report**
 - ➔ **Summarize Problem**
 - ➔ **Summarize Project Findings**
 - ➔ **TMDL allocations**

- ➔ **Adopted by TCEQ
Commissioners**

TMDL ADOPTION PROCESS

- ☞ Commissioners approve for public comment**
- ☞ Posted for Comment for 30 days**
- ☞ Public Hearing Conducted**
- ☞ TMDL Revised as necessary**
- ☞ Commissioners Adopt TMDL**
- ☞ About 6 month process**

February 2008



TMDL ADOPTION PROCESS

- ☞ Adopted TMDL is sent to EPA for Approval**
- ☞ Comments are negotiated**
- ☞ If irresolvable, EPA can develop the TMDL**
- ☞ If the TMDL allocations are changed appreciably, adoption process is repeated.**

IMPLEMENTATION PLAN

The Implementation Plan preparation begins as soon as possible

Develop in consultation with:

- ☞ Stakeholders and all watershed representatives
- ☞ TCEQ Sections
- ☞ All State Agencies affected by TMDL
- ☞ All Federal Agencies affected by TMDL

IMPLEMENTATION PLAN ELEMENTS

- 👉 **Activities**
- 👉 **Schedule of Activities**
- 👉 **Monitoring Program**
- 👉 **Funding Sources**
- 👉 **Program Evaluation**

IMPLEMENTATION PLAN APPROVAL

- ➔ **Commissioners Approve for Public Comment**
- ➔ **Posted for Comment for 30 days**
- ➔ **Public Hearing Conducted**
- ➔ **Plan Revised as necessary**
- ➔ **Commissioners Approve Plan**
- ➔ **About 6 month process**

February 2008



PROJECTED SCHEDULE

- 🕒 TMDL Report – Complete 2/08
- 🕒 TCEQ TMDL Adoption – 8/08
- 🕒 EPA TMDL Approval – Fall 2008
- 🕒 Implementation Plan – 2009
- 🕒 IP Approval – 2009 - 2010

Thank You

Questions ?

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