



June 2008



# Total Maximum Daily Load Bacteria in the Lake Houston Watershed



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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

1<sup>st</sup> Milestone – Process and important terms to be discussed in this presentation.

Place Water Body on 303(d) List

2<sup>nd</sup> Milestone – Determine limits to pollutant loads

TMDL Document

3<sup>rd</sup> 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 & EPA
3. Prepare Implementation Plan
4. IP Approval – Only TCEQ

# TMDL REPORT

Primary element of TMDL

$$LC = WLA + LA + MOS$$

**LC = Load Capacity**

**WLA = Waste Load Allocation (Regulated)**

**LA = Load Allocation**

**MOS = Margin of Safety**

# TMDL Report

**LC = Load Capacity**

**Amount of indicator bacteria a stream can receive and achieve the standard**

***Standard* – designated use and associated criteria**

# Contact Recreation



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# TMDL Report

**WLA = Waste Load Allocation**

**Sources regulated by permits  
(discharge, urban storm water,  
CAFO, etc.)**

**LA = Load Allocation**

**“Non-Point” Sources, background  
and non-regulated sources**

# TMDL Report

**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**

# 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**

# PROJECTED SCHEDULE

-  **TCEQ TMDL Adoption – 2009**
-  **EPA TMDL Approval – Spring 2010**
-  **Implementation Plan – 2009**
-  **Implementation Approval – 2009-2010**

# TMDL Revisions

If conditions change or new information is developed that change the premises of the TMDL, the TMDL can be revised or reissued to reflect the changes.

# Questions ?





# Thank You

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