

Total Maximum Daily Loads: Restoring Water Quality in Texas Surface Waters



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Section 303(d) of the Clean Water Act

- Identify water bodies that do not meet water quality standards, or are not expected to meet standards within two years (threatened)
- Establish priorities and schedules for developing total maximum daily loads (TMDLs)
- Develop TMDLs and Implementation Plans that identify activities responsible for reducing pollution loads



How Are Waters Assessed?

-  Waters are assessed against uses defined in the *Texas Surface Water Quality Standards*, 30 TAC 307
- Numeric and narrative criteria are evaluated
- Four general categories of use are defined:
 - Aquatic life use
 - Contact recreation
 - Public Water Supply
 - Fish Consumption/Oyster Waters



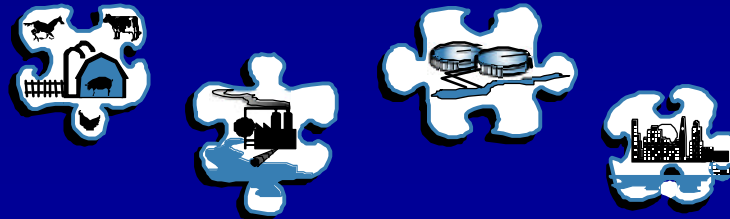
How Are Results Reported?

- Results of the assessment are reported in the *Water Quality Inventory and 303(d) List*
- The report includes:
 - Assessment of surface waters to determine if they meet standards [CWA §305(b) report]
 - Identification of those waters that do not meet standards [CWA §303(d) List]
 - Schedule for implementing TMDLs and other management measures



What Is a TMDL?

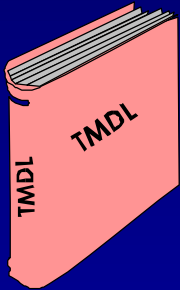
- A total maximum daily load (TMDL) is a scientific model that:
 - determines the maximum amount (or load) of a particular pollutant that a water body can receive and attain and maintain its standards
 - allocates this allowable load to point and non-point sources of pollution in the watershed



A TMDL Is Also A . . .

➤ **Technical term:** the amount of pollution a water body can receive and still meet standards for its use (a load allocation).

➤ **Technical document:** submitted to EPA for approval. Includes identification of pollutant, sources, and allocation of load to point and nonpoint sources



➤ **Process:** for restoring water quality

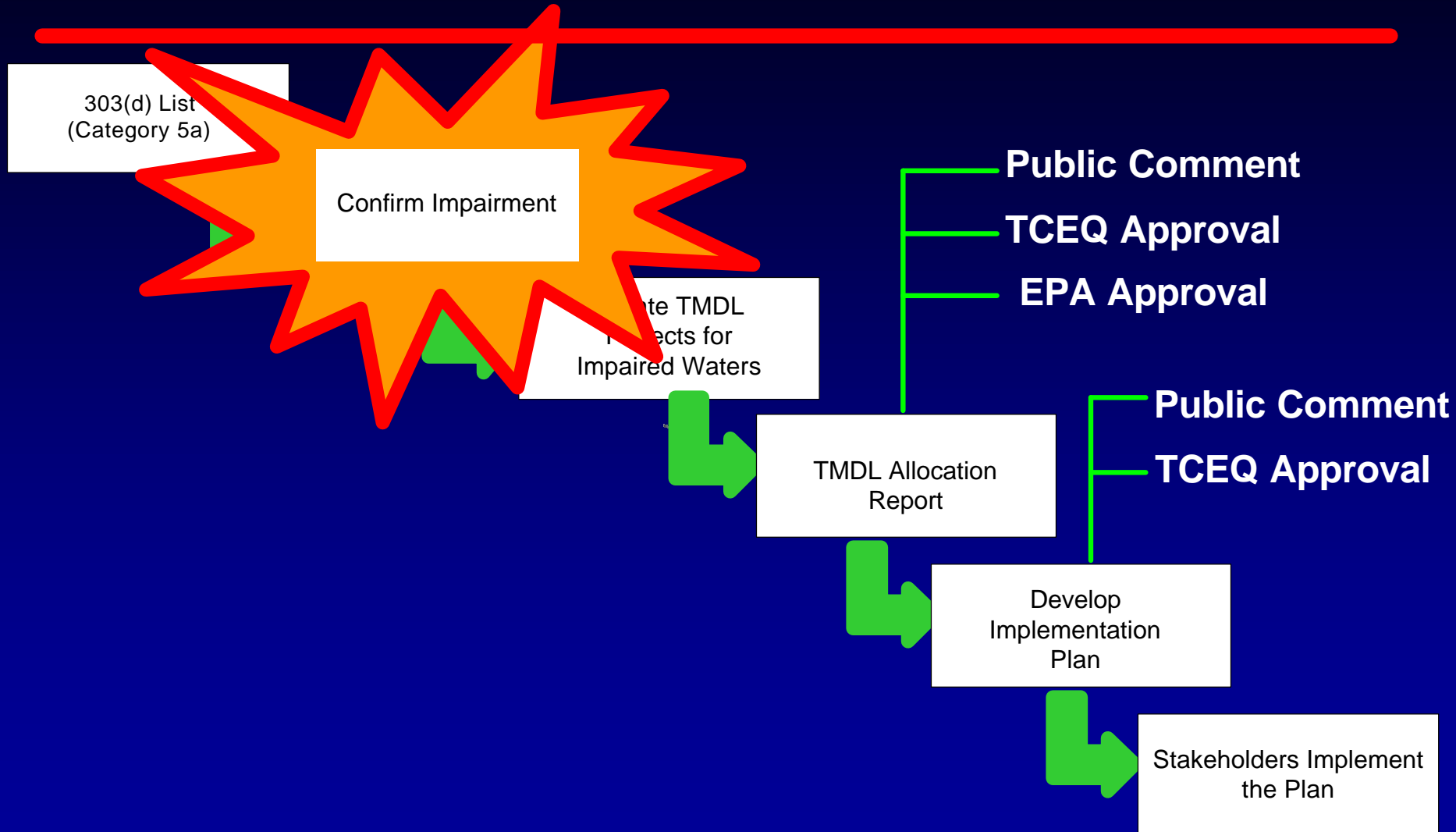


Why Do TMDLs?

- Restore water quality in rivers, lakes, and bays affected by pollutants
- An effective tool for determining sources and necessary actions
- Required under Section 303(d) of the federal Clean Water Act (CWA) for some water bodies that do not meet water quality standards

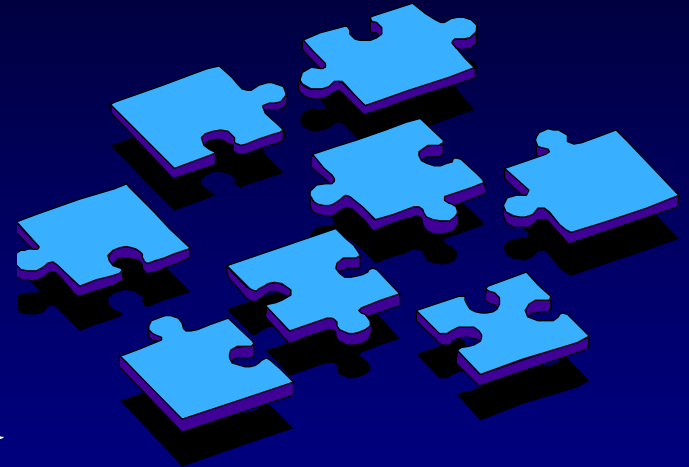


TMDL Development Process



Main Elements of a TMDL

- Problem Definition
 - Impairment Confirmation
- Endpoint Identification
- Source Analysis
- Linkage Between Sources and Receiving Waters
- Margin of Safety
- Pollutant Load Allocation



Main Elements of an Implementation Plan

- A description of management measures and actions
- A schedule for implementing activities
- A follow-up monitoring plan to determine the success of management measures
- Reasonable assurance for implementation of voluntary non-point sources
- Identification of measurable outcomes to determine success



[www.tnrcc.state.tx.us/water/
quality/tmdl/](http://www.tnrcc.state.tx.us/water/quality/tmdl/)



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