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# Total Maximum Daily Loads

## TMDLs

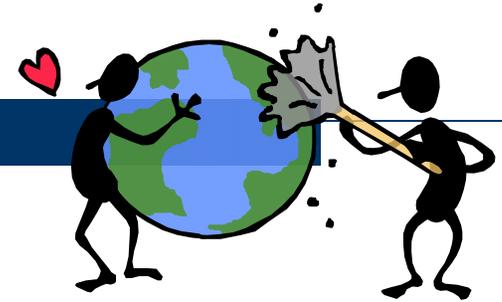
### Water Clean Up Plans

**What?**

**Why?**

**How?**

# What is a TMDL?



- It's a **CLEAN-UP PLAN**

- It's a **PROCESS**



- It's a **DOCUMENT**



- It's an **AMOUNT OF A POLLUTANT**



# What is a TMDL?

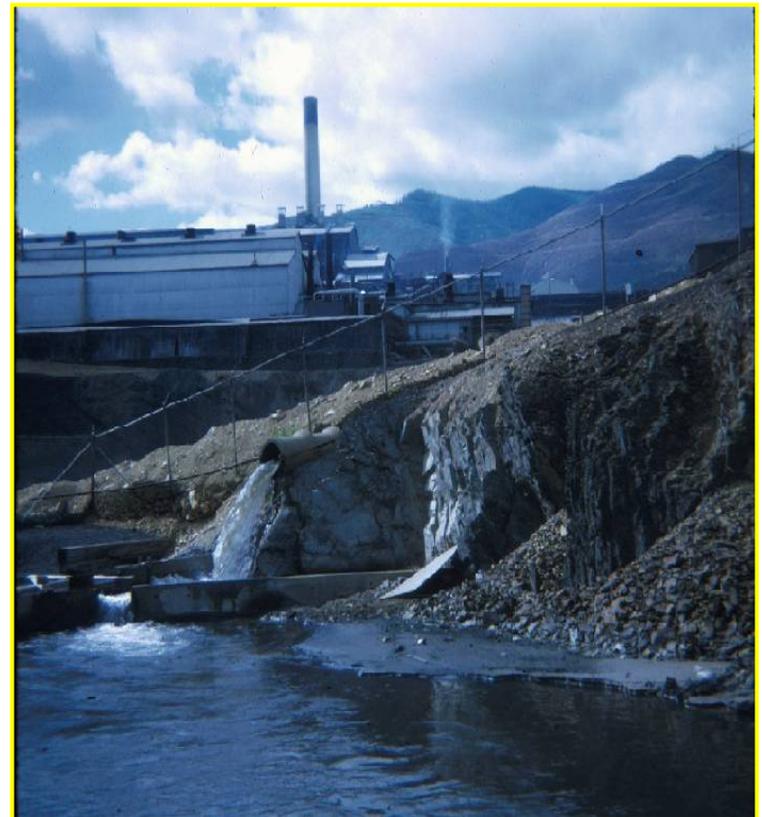
**TMDL = Total Maximum Daily Load**

**“the amount of a pollutant that a waterbody can receive and still meet water quality standards”**

# Allocations

Waste Load Allocations (WLA) - are allocations for **point sources of pollution**

- End of pipe discharge
- Usually from a facility such as a wastewater treatment plant or a factory



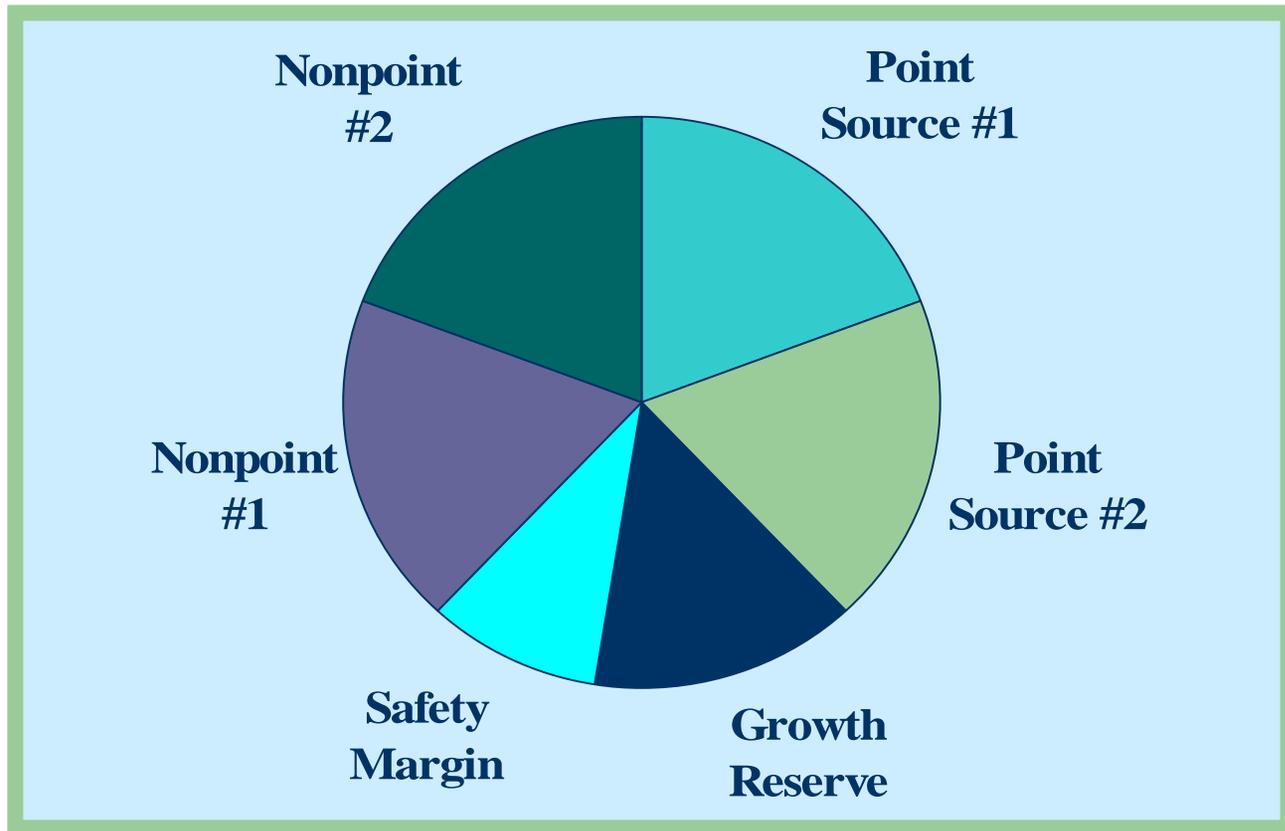
# Allocations - continued-

- **Load Allocations (LA)** - allocations from **nonpoint sources** of pollution
  - From diverse sources
  - Exact source not easily determined
  - Examples include:
    - Runoff from streets
    - Fertilizer from lawns and crops
    - Runoff from pastures
    - Faulty septic tanks

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# The TMDL pie contains the maximum amount of pollutant divided into allocations for each source



# Parts of the Process

- **Problem Assessment**
- **Technical Analysis and Allocation**
- **Implementation Strategy**
- **Monitoring**

# Why do TMDLs?

- 1) To protect water**
- 2) It's the law**
- 3) Lawsuit compliance**

# The Law

 The Clean Water Act (CWA) requires states to set water quality standards for surface waters to protect public and environmental health.

 These standards protect water for beneficial uses such as:

- Drinking Water
- Recreation
- Fishing
- Aquatic Habitat
- Irrigation
- Livestock

# The Clean Water Act

 Streams and lakes not providing these beneficial uses are placed on a list of impaired waterbodies

➤ The 303(d) list

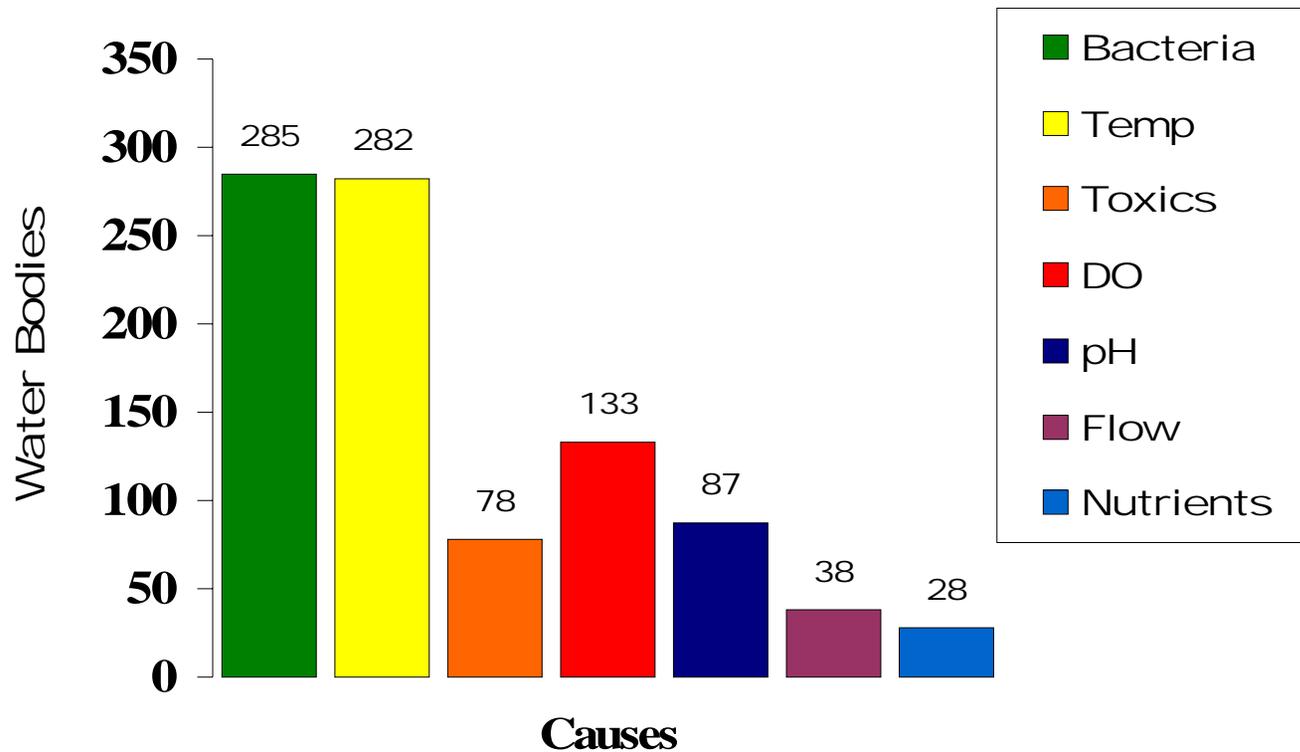
 Waterbodies on the 303(d) list must have a TMDL developed for them to correct the impairment

# Lawsuit Compliance

- **1990's:** several citizen lawsuits around the US claimed that EPA was not implementing section 303(d) of the Clean Water Act in a timely manner.
- **1998:** In January 1998, Ecology, EPA, and two environmental advocate groups agreed to a clean up schedule directing how Washington state will improve the health of nearly 700 water segments by the year 2013.
- This agreement was outlined in a Memorandum of Agreement (MOA).

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# Major Causes Water Bodies Fail to Meet Water Quality Standards



\*1998 303(d) List of waters not meeting water quality standards

# How the process works?

- 💧 A water body fails to meet the state water quality standards
- 💧 It is placed on a list of impaired water bodies (the 303(d) list)
- 💧 The water body is prioritized and then scheduled for a TMDL (water clean up plan)

# Ecology works with

- Tribes
- Watershed Planning Units
- Local governments
- Conservation districts
- Local interest groups
- Individual citizens
- Businesses
- Landowners

to prioritize which waterbodies to start TMDLs on and to develop plans to reduce the pollution.



# Advisory Groups

- An Advisory Group may be formed to help complete the TMDL
- Sometimes an existing group (such as a Watershed Planning Unit) fills this role
- This group may help develop strategies to achieve the necessary pollution reduction
- These strategies are included in the TMDL Submittal Report to EPA for approval

# How you can be involved:

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- Volunteer to be on an Ecology TMDL Advisory Group
- Keep in touch through local groups
- Work with others already improving water quality
- Sign up for Ecology's mailing list

# Quick Review of TMDL Process

**Water body violates water quality standards**

**Water body is listed on 303(d) list  
[Section 303(d) of the Clean Water Act]**

**Problem(s) verified**

**TMDL Study to determine water's capacity to assimilate pollutant**

**TMDL Study used as a tool to develop strategies to reduce pollution**

**TMDL Study and strategies (SIS) sent to EPA for approval**

**After EPA approval develop a detail implementation plan  
(1 year to complete)**

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# Questions



[http://www.ecy.wa.gov/programs/wq/links/impaired\\_wtrs.html](http://www.ecy.wa.gov/programs/wq/links/impaired_wtrs.html)