

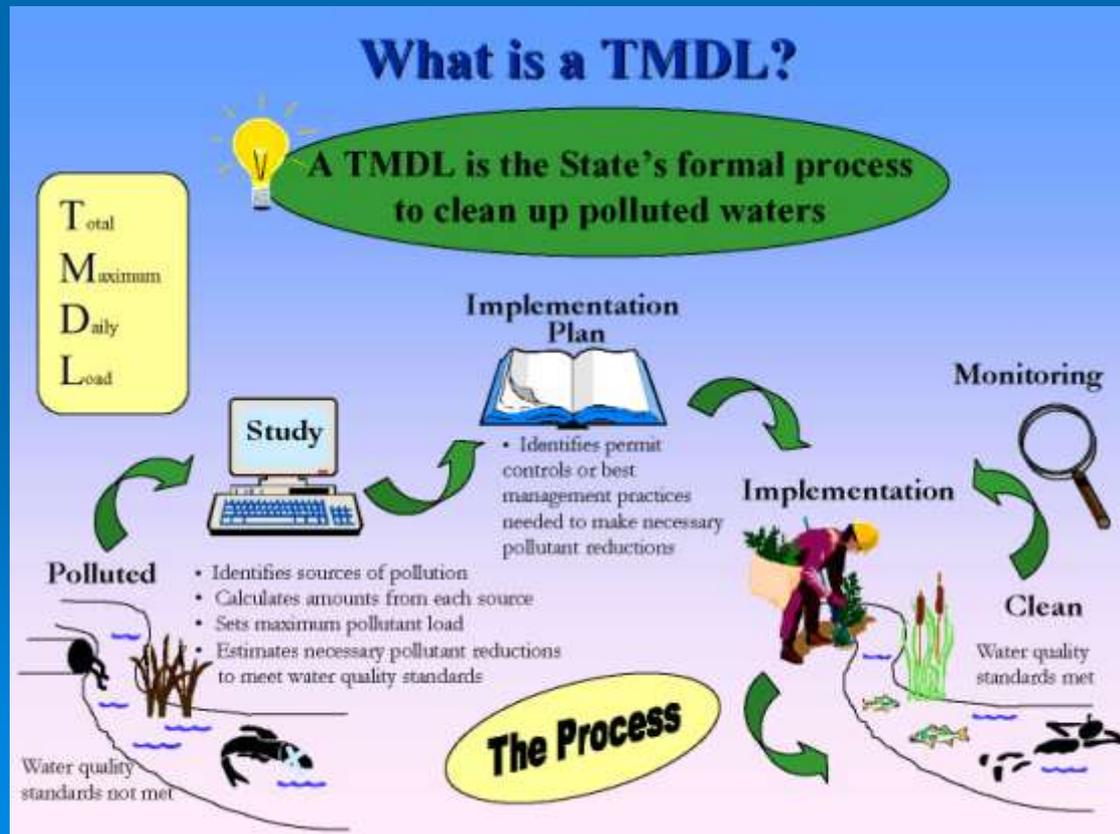


Stormwater Hot Topics



303(d) Lists, TMDLs, and Stormwater

TMDLs to Stormwater Permits



TMDL Basics

- States identify impaired waters (not meeting WQS) on **303(d) lists**
- **TMDLs** - Strategies for achieving water quality standards
 - Specifies a pollutant budget to address an impairment
 - Allocates pollutant loads among sources of that pollutant
- States and tribes are required to develop TMDLs for all waters on their 303(d) lists

TMDLs to Stormwater Permits Handbook

- A technical resource that addresses:
 - Options/Approaches for developing Wasteload Allocations where Stormwater is contributing to water quality impairments
 - Options for “translating” between TMDLs (written in terms of loadings) and permits (typically written in terms of BMPs)
- A tool to assist:
 - TMDL writers (EPA, state, third-party)
 - Stormwater permit writers (EPA, state)
 - Stormwater dischargers

Handbook Content Overview

Current Chapters

- 1) Understanding the connections between TMDLs and stormwater permits
 - 2) Identifying opportunities to coordinate TMDLs and stormwater permits
 - 3) **Characterizing impairments and stormwater sources**
 - 4) **Developing TMDL allocations with stormwater sources**
 - 5) **Promoting effective BMP implementation and adaptive management**
 - 6) **Coordinating TMDL and stormwater permit requirements**
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Schedule

- Initial draft distributed to EPA Regions: 3/2008
- Comments received from EPA Regions: 8/2008
- Rewrite to address comments
- Released draft Handbook to States and other stakeholders for review: 11/2008
- 90 days for comments (**Feb. 27, 2009**)
- <http://www.epa.gov/owow/tmdl/stormwater/>

Construction & Development Effluent Guidelines

- Technology-based standards for control of wastewater and stormwater discharges from various categories of dischargers
- Can be numeric standards (i.e., discharge limitations) and/or Best Management Practices (BMPs)



Proposed Effluent Guidelines

- **Erosion Controls**
 - Soil stabilization
 - Restoring infiltrative capacity
- **Sediment Controls**
 - Discharge to buffers and vegetated areas
 - Sediment basins w/ skimmers
- **Pollution Prevention Measures**
 - Trash/debris management
 - Chemical and fuel management
- **Numeric Turbidity Standard**



Erosion Control Requirements

- Stabilize disturbed soils when earth-disturbing work has ceased
- Control stormwater volume and velocity within the site to minimize soil erosion
- Minimize the amount of soil exposed
- Control stormwater discharges leaving the site to prevent channel and streambank erosion and erosion at outlets
- Preserve topsoil and natural vegetation
- Minimize soil compaction by construction equipment in areas that will not contain permanent structures or where compaction is not necessary for structural integrity

Erosion/Sediment Control

- Provide and maintain natural buffers around surface waters
- Minimize disturbance of steep slopes
- Divert stormwater that runs onto the site away from disturbed areas of the site
- Control sediment using perimeter control measures
 - BMPs such as diversion dikes, storm drain inlet protection, filter berms, and silt fencing
- Remove any sediment and other pollutants, including construction materials, from paved surfaces daily to minimize discharges from the site
 - Washing sediment and other pollutants off paved surfaces into storm drains is prohibited unless those storm drains discharge to a sediment basin or other sediment control on the site

Sediment Basin Requirements

- Sediment basins designed to provide storage of 3,600 cf/acre or runoff from 2-year, 24-hour storm
- Additional 1,000 cf/acre of sediment storage volume required
- Required for all sites with 10 or more acres of disturbed land draining to one location



Pollution Prevention Requirements

- Prohibit the discharge of construction wastes, trash, and sanitary waste in stormwater
- Prohibit the discharge of wastewater from washout of concrete, stucco, paint, and cleanout of other construction materials
- Prohibit the discharge of fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- Prohibit the discharge of pollutants resulting from the washing of equipment and vehicles where soaps or solvents are used
- Prevent stormwater runoff from contacting areas with uncured concrete (to minimize changes in stormwater pH)

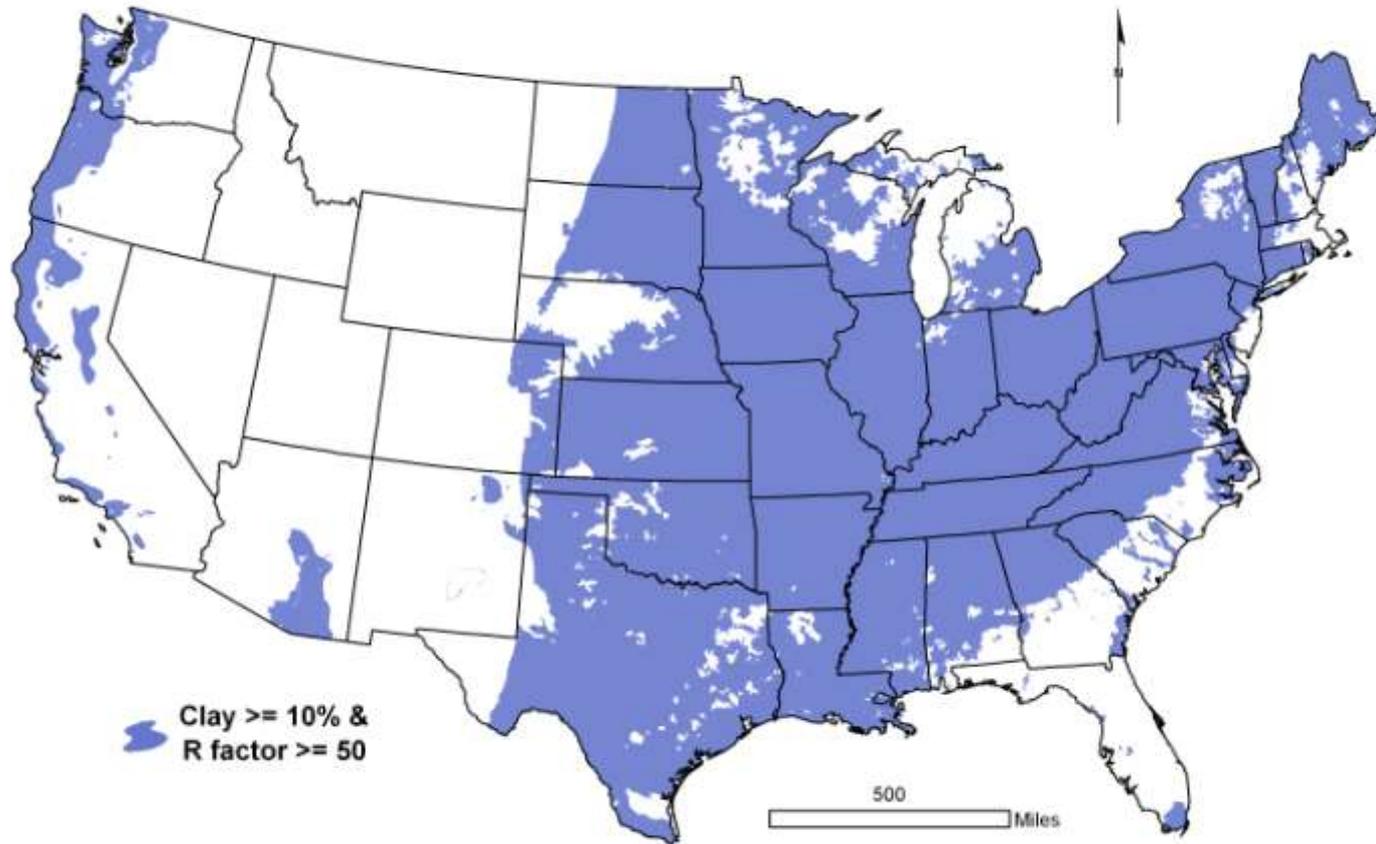
Turbidity Limit

Turbidity limit of 13 NTUs applies to sites of 30+ acres with R-factor ≥ 50 and $\geq 10\%$ clay content for all discharges up to the 2-year, 24-hour storm

➤ **Monitoring**



Where would the Turbidity Limit Apply?



Construction sites of 30 or more acres in shaded areas would need to meet a 13 NTU (daily max) turbidity limit

Effluent Guidelines for Stormwater Discharges from Construction Sites

- Proposed rule published in the Federal Register November 28, 2008
- **90 day public comment period ends February 26, 2009**
- Response to comments, re-analysis of options, update cost and economic impacts: Spring/Summer/Fall 2009
- Publish final rule by December 1, 2009
- Effective 90 days after publication in Federal Register
- EPA and States must incorporate requirements into permits within 5 years of effective date – full implementation expected by early 2015

For More Information

- EPA's C&D Web Page
- <http://www.epa.gov/waterscience/guide/construction/>

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