

St. Louis County Bacteria Total Maximum Daily Loads

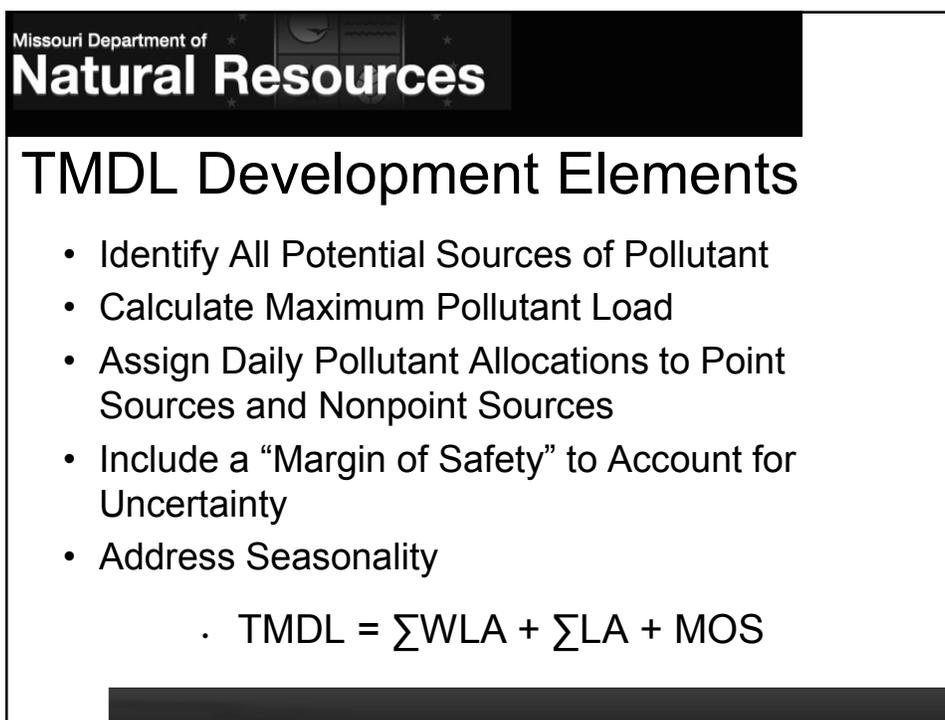
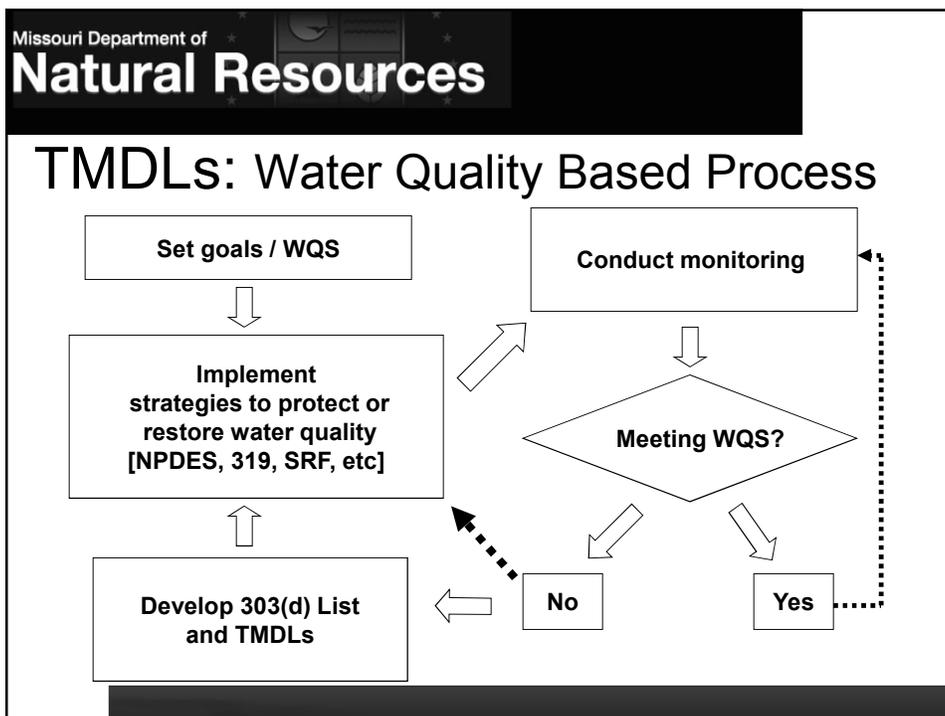
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MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

What is a TMDL?

The Maximum Amount of a Pollutant
(the “Load”) That a Water Body Can
Assimilate and Still Meet Water Quality
Standards



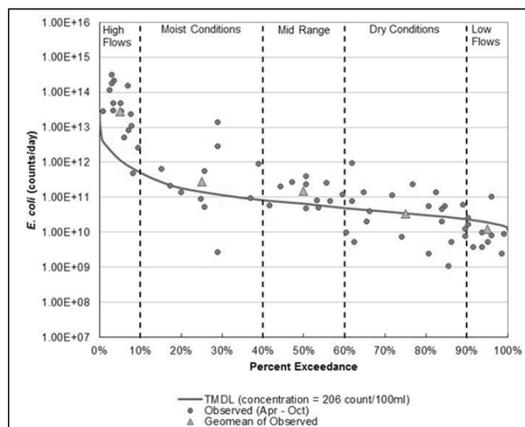
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Bacteria TMDLs

<u>Pollutant / Condition</u> Bacteria Recreation Use Impairment	<u>Source(s)</u> Point + Nonpoint Sources
<u>Water Quality Criterion</u> 206 col/100 mL (<i>E. coli</i>)	<u>Margin of Safety</u> Explicit 10 % of LC
<u>Target Concentration</u> NPS+PS+MOS = 206/100 mL	<u>TMDL (Loading Capacity)</u> $206 * \text{Flow} * \text{Conversion} =$ counts per day

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Bacteria TMDLs



Potential Sources Identified in St. Louis County Bacteria TMDLs

- Point Sources
 - Sanitary Sewer System (overflows)
 - Constructed SSOs
 - Municipal Separate Storm Sewer System
 - Illicit Straight Pipe Discharges

Potential Sources Identified in St. Louis County Bacteria TMDLs

- Nonpoint Sources
 - Agricultural Runoff
 - Urban Runoff (Non-MS4 areas)
 - Onsite Wastewater Treatment Systems

TMDL Implementation

Once Approved by EPA, Department Staff Follow the Progress of TMDL Implementation.

- Missouri State Operating Permit Modifications
- Best Management Practices (BMP)
- Watershed Group Organization and Support
- Follow-up Water Quality Monitoring
- TMDL Implementation Plan

TMDLs are a Phased and Iterative Process

TMDL Implementation Plan

- Level of Detail For Each Plan Will Vary Dependent Upon the Amount of Information Available.
- Plan Will Include EPA's 9-Elements for a Successful Watershed Plan Where Appropriate.
- Plan Will Identify Targeted Participants and Specify Their Potential Roles for Implementation.
- To the Extent Possible, the Plan Will Outline a Schedule for Meeting Benchmarks Towards Progress in Achieving Water Quality Standards.

MS4 Permits & TMDLs

Progress Toward Meeting Water Quality Standards Will Be Long-Term.

- Continue Implementing Current, Ongoing Activities.
- Continue Identifying Sources
- Begin Prioritizing Actions
- Eliminate Known Sources.

Ultimate Goal is to Meet Water Quality Standards

- Once Developed, a TMDL Never Goes Away
- Permits May be Modified After the Water Body is No Longer Impaired.
- TMDLs May be “Re-Opened” and Modified Should Water Quality Standards Change

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Approved TMDLs

Online At

dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-EPA-Appr.htm

Scheduled TMDLs

Online At

dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

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Questions?



Creve Coeur Creek



Coldwater Creek