

NEW JERSEY (REGION 2)

A Snapshot of New Jersey's TMDL Program (August 2008)

The Basics

Key Agency/Department & website

New Jersey Department of Environmental Protection Division
of Watershed Management
www.state.nj.us/dep/watershedmgt/tmdl.htm

TMDL Program Structure/Placement

Housed in Bureau of Environmental Analysis & Restoration

By the Numbers

Number of Impaired Waters	965
Number of Causes of Impairment	1,359
Top Five Causes of Impairment	<ol style="list-style-type: none">1. Cause Unknown–Impaired Biota2. Pathogens3. Metals (other than mercury)4. Nutrients5. Mercury
Approximate Number of TMDLs Developed Annually	50-100
Total Number of TMDLs Approved (1995 to present, incl. any est'd by EPA)	442
Total Number of TMDLs Approved in 2005/2006/2007	51/46/76
2008 303d/Integrated Report Submission Status (Date)	9/15/2008
Approximate Number of FTEs Working on TMDL Issues	10 (not incl. monitoring & standards staff)

TMDLs

EPA Under Consent Decree to Develop TMDLs?	N
Broad-Scale? (e.g., watershed, multi-jurisdictional, etc.)	Y

Non-TMDL Options

Use of Non-TMDL Options to Address Impaired Waters?	N
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Funding

Approximate Annual Budget for TMDL Program	\$1 million
Primary Source(s) of TMDL Program Funding	Corporate Business Tax and federal 319(h) funds

TMDL Implementation

TMDL Implementation Required?	Y
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Innovations

Example(s) of Any Innovative Approach(es) Employed

--NJ uses an expert panel as suggested by the National Academy Sciences to review and comment on Technical Approaches developed by the state to address impaired waterbodies/watersheds, consultant TMDL proposals, and products such as model calibration and validation

--NJ has begun to utilize the “Additional Measure” component of a municipality’s MS4 Stormwater Permit to require the adoption of a phosphorus fertilizer management ordinance

TMDLs that Represent a Particular Achievement

TMDL Report for the Non-Tidal Passaic River Basin Addressing Phosphorus Impairments (comprehensive TMDL based on a 14-year, multi-partnership effort)
www.state.nj.us/dep/watershedmgt/tmdl.htm

Barriers

Top Three Barriers to TMDL Development

1. a TMDL is not always the appropriate tool to address 303d listings wherein some parameters exceed the SWQS due to natural conditions (pH and arsenic) or due to legacy pollutants (PCBs and mercury); but EPA only credits states for TMDLs—not other responses; but the same or more staff time goes into delisting, as compared to TMDL development
2. data used for 303d listing is insufficient for development of WLA & LAs for TMDLs
3. TMDL staff require an intensive amount of knowledge to be able to verify data used for the 303d list and its applicability toward model development, selection of an appropriate model (whether it be a simple spreadsheet model or a dynamic, multidimensional model—need to understand the model’s strengths and weaknesses) to use with existing data, and running the model and preparing a defensible TMDL calculation/report; for 303d listings that require a WLA that is applied to a NPDES permit, staff must have knowledge on selecting an appropriate and defensible model, how to develop a monitoring plan to collect data needed to run model, and selection of drivers and endpoints for TMDL development; same level of knowledge is needed if work is contracted out to a consultant, in addition to requesting information to be presented on time and in a format that is useable and may be recreated

Top Three Barriers to TMDL Implementation

1. amount of money required to fully understand sources of the particular impairment (hot spots) to the waterbody/watershed, that in turn can be addressed by BMPs or other management measures

2. staff and/or consultants' lack of knowledge to determine if BMP(s) selected are appropriate to mitigate the pollutant, sited correctly, and designed/sized correctly; lack of knowledge is not always due to lack of an overall understanding, but due to level of detail required up front when making funding decisions, because site plan design requires money and permitting
3. BMP effectiveness is still an emerging science