

KENTUCKY (REGION 4)

A Snapshot of Kentucky's TMDL Program (August 2008)

The Basics

Key Agency/Department & website

Kentucky Department for Environmental Protection
Division of Water
www.water.ky.gov/sw/tmdl/

TMDL Program Structure/Placement

Housed in Water Quality Branch; Integrated

By the Numbers

Number of Impaired Waters	736
Number of Causes of Impairment	1,465
Top Five Causes of Impairment	<ol style="list-style-type: none"> 1. Sediment 2. Pathogens 3. Habitat Alterations 4. Nutrients 5. Organic Enrichment/Oxygen Depletion
Approximate Number of TMDLs Developed Annually	15 (but near 50 this yr)
Total Number of TMDLs Approved (1995 to present, incl. any est'd by EPA)	80
Total Number of TMDLs Approved in 2005/2006/2007	0/12/9
2008 303d/Integrated Report Submission Status (Date)	6/1/2008
Approximate Number of FTEs Working on TMDL Issues	9 (incl. 4 monitor., 2 data analysts, 1 branch coord., 1 water chem./samp. analyst, & 1 super.)

TMDLs

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

Non-TMDL Options

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

Approximate Annual Budget for TMDL Program	\$600,000
Primary Source(s) of TMDL Program Funding	federal 106 funds

TMDL Implementation

TMDL Implementation Required?	N
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Innovations

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

--KY has a new sediment protocol for TMDL development and has recently begun monitoring efforts; protocol includes fluvial geomorphology and sediment sampling procedural trainings to aid in the identification of sediment-specific issues, potential sources, and restoration

--TMDL Team is comprised of TMDL development staff and watershed management (implementation) staff that meet 2x/month; team has 1) reduced TMDL and 319(h) monitoring redundancy through improved communication and coordination to meet multiple program needs; 2) targeted TMDL development in priority watersheds; 3) synchronized TMDL and watershed plan development; and 4) developed WLA/LA calculation protocols

--KY has embraced watershed approach for addressing impaired waters since early '90s; watershed restoration actions to improve water quality have been documented in 228 impaired water-body segments (303(d) listed) that total 1,312 stream miles, 2 groundwater springs, and 3,142 lake acres; these restoration actions include capacity development, watershed plan development, active implementation, and success monitoring; KY is evaluating several 4b categorical listing opportunities

--relative to measuring success of TMDL implementation, several tiers are employed: (1) meeting WQSs (full support); (2) project success monitoring showing trends or improvements in water quality; and (3) implementation actions/activities underway (documented as follows: State 305(b) report, 104(b)(3) reports, 319(h) Annual Report, NPS Success Stories national website, Measure "W" reports (watershed implementation reports to EPA on meeting strategic plans), and the KDOW file folder Word document (updated every two years))

--program incorporates a multidisciplinary approach that allows other Divisions and agencies to include their work and comments during development phase; the TMDL report and Watershed Plans are handled as separate documents: TMDL report focuses on data, the LA, and WLA—and Watershed Plans address all system stressors

Barriers

Top Three Barriers to TMDL Development

1. lack of resources (*i.e.*, people, equipment, money, etc.)
2. lack of experience (*i.e.*, a familiarity with the TMDL program and its relativity to other programs—training time)

3. lack of existing physiochemical monitoring data

Top Three Barriers to TMDL Implementation

1. early and sustained public engagement (bring people to the table before monitoring begins, keep them at the table and engaged)
2. institutionalization of watershed management with agency programs and among agency partners
3. robust TMDLs (large datasets and modeling) that provide effective sub-watershed targets for implementing solutions, which is directly related to personnel and budgeting issues