

EPA Region 3

Measure Proposal: Documenting Incremental Progress toward Clean Water using a more holistic set of measurements.

ASWIPCA: TMDL Work Group for Environmental Results and Innovation

February 5, 2009

Goal of the Proposed Measure

Using a more holistic set of measures, be able to document incremental progress toward cleaner water without relying solely upon binary assessments such as those relating to 303(*d*) assessments of impaired or not.

Description of the Measure

- Capture multitude of activities that states often initiate that lead toward cleaner water – sometimes reported separately but often not in a larger context
- Many activities often don't immediately lead to cleaner water – missing pieces of the story
- Since these measures rely less on WQ data, the results are not subject to lag times nor to concomitant increases in population.

Main Categories of Measures

1. Water Quality Standards Partially Met
2. Pollution Budgeting
3. Implementation Plans
4. Restoration
5. Protection
6. Social Commitment

Specific Measures per Category

1. Water Quality Standards Partially Met
 - A. Designated Use Support
 - B. Pollutants Removed
2. Pollution Budgeting
 - A. TMDLs Approved
 - B. Cost per TMDL
 - C. Employee Time per TMDL
3. Implementation Plans
 - A. WQIP Developed
 - B. WQIPs developed that meet A-I criteria

Specific Measures per Category

4. Restoration
 - A. Permits Adjusted
 - B. BMPs installed
 - C. Pollutant Loads Reduced
5. Protection
 - A. Tier II or Tier III Waters
 - B. Waters protected through land preservation
6. Social Commitment

Real-Life Example

- Picked MD's Corsica watershed to see what these numbers would look like for a small geographic area (40 sq. miles) with a predominantly agricultural landuse.
- Figured this would be a fairly simple exercise since the Corsica is so well studied and has been the target of a major statewide implementation effort

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Real-Life Example

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- No dearth of information on the Corsica
- However, some of the questions were new, so numbers were not always easily generated
- Not discouraging though b/c those heavily involved in the Corsica cleanup were happy to provide information and felt that such an exercise would be useful to them as well as EPA
- General interpretation of the results revealed that although no water quality benefits could be realized yet in the Corsica, a lot of efforts to reduce pollution (specifically nutrients) should likely payoff in the future

Corsica Numbers

Pollution Budgeting			Implementation Plan	
TMDLs Approved	Average Cost per TMDL (waterbody-pollutant combination)	Average Employee Time per TMDL (waterbody-pollutant combination)	Water Quality Implementation Plans Developed	WQ Implementation Plan developed that meets A-I criteria
3 Pollutants	\$69,000	1 FTE	28.1 mi Streams	0
.69 sq. miles Estuary – FC			2.1 sq. miles Estuary	
2.1 sq. miles Estuary – TP				
2.1 sq. miles Estuary - TN				

Lessons Learned

- Currently, for many of these measures, there is not a consistent method of calculation
- Will require improved record keeping throughout a variety of phases of CWA implementation
- Exercise should help to show budget expenditures and inadequacies
- Efforts to provide this information are going to have to be **Cross-programmatic**

Future of this Measure....

- EPA has expressed interest in pursuing this in the future
- It's uncertain whether OMB would accept an accounting system that is not primarily results-driven (with the result being: immediate water quality improvement)
- Any work that we do will likely build on Minnesota's Effectiveness Tracking & Reporting Project



Matthew Stover
Maryland Department of the Environment
Environmental Assessment & Standards Program
410-537-3611
mstover@mde.state.md.us