

Meeting Highlights
Michigan Water Quality Monitoring Advisory Board
Wednesday, April 23, 2003

Focus Topic: Non-Point Source Effectiveness Monitoring

Members Present: Dean Premo, Elwin Coll, Mick DeGraeve, and Richard Rediske

Michigan Department of Environmental Quality (DEQ), Water Division (WD) Staff Present: Diana Klemans, Gary Kohlhepp, John Suppnick, Bob Day, Steve Holden, Ralph Reznick

DEQ, Geological and Land Management Division (GLMD) Staff Present: Rick Sorrell

Public Present: Jim Nicholas, Steve Blumer (U.S. Geological Survey).

The fifth meeting of the Michigan Water Quality Monitoring Advisory Board (Board) was held on April 23, 2003, from 9:30 a.m. to 2:30 p.m. at Constitution Hall in Lansing. Dr. Premo of White Water Associates, Inc., chaired the meeting (agenda attached).

UPDATES ON RECENT DEVELOPMENTS

DEQ staff provided the following updates to the Board:

Mr. Coll's initial term expired on December 15, 2002. The DEQ-WD has recommended that he be reappointed to another term. This recommendation is being reviewed by the Governor, who is responsible for appointing Board members. A decision is expected soon.

Fiscal Year 2003 Clean Michigan Initiative (CMI) funds, totaling \$3 million, will be available for water quality monitoring activities. All new grants and contracts, as well as contract amendments, greater than \$25,000 must be reviewed and approved by the state Administrative Board.

The state legislature appropriated \$2.5 million in FY 2003 general funds to the DEQ for water quality monitoring in the Lake St. Clair watershed. A draft work plan, developed jointly by Macomb, Oakland, St. Clair, and Wayne counties, was completed in November 2002 and was reviewed by DEQ. Representatives from the Macomb County Health Department met with the DEQ Director and other staff on April 23, 2003, at which time a revised work plan was provided for DEQ review.

DEQ staff will be among representatives from several federal, state, and provincial agencies participating in a Great Lakes monitoring workshop in May in Windsor, ON. The purpose of the workshop is to increase awareness of Great Lakes monitoring activities, investigate opportunities for collaboration, and identify gaps and potential solutions. Sessions will include monitoring related to on open and nearshore waters, sediments, tributary loadings, fish and wildlife contaminants, plankton, benthos, and beach monitoring.

Since the last Board meeting in September 2002, a number of reports have been completed. These include the 2000 Water Chemistry Trend Monitoring report, the 2000 Bald Eagle

Contaminant report, and the 2001 Inland Lake Sediment report. A draft 2002 FCMP report has been prepared, and will be finalized soon.

The Board was informed that the Office of the Auditor General was conducting an audit of CMI-funded activities, including the water quality monitoring program. Documentation for many of the ongoing monitoring projects already has been reviewed, and the auditor presumably is writing the report now. Although we have not been given a target completion date, we expect the audit report to be released in a matter of months. CMI audits are supposed to be performed every other year.

FISCAL YEAR 2003 MONITORING IMPLEMENTATION PLAN

DEQ staff presented the FY 2003 water quality monitoring implementation plan to the Board. CMI funds will be used to implement a number of monitoring activities identified in the DEQ's Monitoring Strategy. These include the following components: Water Chemistry (\$1,723,000); Sediment Chemistry (\$162,000); Fish Contaminants (\$205,000); Wildlife Contaminants (\$171,000); Beach Monitoring (\$100,000); Volunteer Monitoring (\$100,000); Inland Lake Quality (\$393,000); and Stream Flow (\$145,000).

NONPOINT SOURCE EFFECTIVENESS MONITORING

The remainder of the meeting focused on non-point source effectiveness monitoring. John Suppnick (Water Division) gave a presentation entitled, "DEQ Monitoring Activities Supporting the Non-point Source Program in Michigan" (see attached handout). This presentation included an explanation of what is considered monitoring; a summary of existing non-point source monitoring activities; a detailed description of three example projects (Sycamore Creek, Cedar River, and Carrow Creek); and the challenges and issues associated with non-point monitoring. The following is a summary of the subsequent discussion:

1. There was concern about the discrepancy in load estimates between the model and the actual monitoring data. It is not uncommon to see differences of 300% between actual data and model results. It was pointed out that models usually are generated based on data from another part of the country, and therefore may not be accurate for Michigan.
2. Non-point source effectiveness monitoring can be reach-specific or can be done on the watershed scale. Actions can be effective at the reach level, but may not show up on a watershed scale if the reach contribution is small relative to other sites. A GIS component is very useful for evaluating results on a watershed scale. GIS also can help to measure attitude/behavior changes (e.g. riparian zones) and thus allow us to measure success more proactively.
3. Future proposals should place more emphasis on monitoring as an important project component, especially pre-implementation monitoring, which will increase the cost of the proposals. The volunteer monitoring component of 319 projects could be enhanced. Currently, there is a disconnect in BMP implementation (location and timing) by the grantee and the monitoring conducted by DEQ.
4. The road/stream crossing surveys can be used to document existing statewide problems, land use changes, and potential threats. Results also could be used to rank watersheds and identify priorities. The increased number of watershed groups is a good sign of

increasing public interest, and can be tapped to provide new information. Local land use inventories/updates are not being incorporated in state land use maps.

5. One suggestion was to choose specific "pilot" locations for detailed monitoring, preferably sites with plenty of existing data. Successful projects could serve as a model for other locations and could be applied to other sites around the state.
6. There was discussion about the appropriate indicators that should be monitored. These can include programmatic indicators and environmental outcomes. Examples of the former could include zoning/stormwater ordinances, population dynamics, land use, and miles of stream buffer enrolled in CREP. Examples of the latter include channel morphology, temperature, and riparian zone width.
7. The EPA has distributed draft guidance for evaluating non-point source program effectiveness. The DEQ is expected to provide a plan to EPA to measure program effectiveness. A DEQ work group will be formed in the near future to develop an assessment plan. The plan should be reviewed by the Advisory Board.

ACTION ITEMS

1. Board members will provide comments and observations on the draft EPA guidance, the DEQ presentations, and/or the subsequent discussion to the chairperson, who will consolidate the responses and forward them to DEQ (see attached).
2. If available, the DEQ will provide a draft non-point source monitoring plan to the Advisory Board members by July 9, 2003, one week prior to next tentatively scheduled meeting.
3. The DEQ will add the Advisory Board's 2002 Annual Report to Governor to our web site so that it is more readily available to the public.

NEXT SCHEDULED MEETING DATE

The next meeting was tentatively scheduled for Wednesday, July 16, 2003.