

Meeting Highlights  
Michigan Water Quality Monitoring Advisory Board  
September 27, 2001

**Members Present:** Dean Premo, Debbie Hayes, Elwin Coll, Mick DeGraeve, and Richard Rediske.

**Michigan Department of Environmental Quality (MDEQ), Surface Water Quality Division (SWQD) Staff Present:** Dave Hamilton, Jim Grant, Jerry Saalfeld, Christine Aiello, and Gary Kohlhepp.

**MDEQ, Land and Water Management Division (LWMD) Staff Present:** Diana Klemans, Ralph Bednarz, and Richard Sorrell.

**Public Present:** Jim Nicholas and Steve Blumer, United States Geological Survey.

The Michigan Water Quality Monitoring Advisory Board (Board) was held on September 27, 2001, from 9 a.m. to 2:30 p.m. at the Hannah Building in Lansing. Dean Premo of White Water Associates, Inc., chaired the meeting (agenda attached).

#### OPENING COMMENTS BY DAVE HAMILTON

- The state legislature gave priority use of the Clean Water Fund (CWF) to support ambient water quality monitoring programs outlined in the report, entitled "A Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters," January 1997 (Strategy).
- The goals of the Strategy are as follows: 1) Assess the current status and condition of individual waters of the state and determine whether standards are being met; 2) Measure temporal and spatial trends in the quality of Michigan surface waters; 3) Provide data to support MDEQ water quality protection programs and evaluate their effectiveness; and 4) Detect new and emerging water quality problems.
- The role of the Board is advisory rather than decision-making in nature. The Board is charged with the following responsibilities as they relate to implementing the Strategy: 1) Advise the MDEQ on issues affecting the implementation of the Strategy; 2) Advise the MDEQ on the development of statistically sound sampling designs to collect various types of water quality data; 3) Advise the MDEQ on appropriate methodologies for evaluating temporal and spatial water quality data; 4) Advise the MDEQ on state-of-the-art data management and data communication techniques to ensure that water quality information is easily accessible and communicated in meaningful, understandable, and timely ways to intended audiences; and 5) Review and comment on the annual monitoring plans prepared by the MDEQ to implement the Strategy.
- The following recommendations were made, to which the Board agreed: 1) Board meetings should take place quarterly, at least for the first few meetings; 2) The Board should submit its first annual report to the Governor before the end of the current administration, either at the end of the fiscal year or at the end of the calendar year; and 3) Because Board

meetings are open to the public, the Board should set aside a specific time period at each meeting, during which questions from the public may be addressed.

## PRESENTATIONS

- Jerry Saalfeld gave an overview of the Strategy, and the administrative rules developed governing contract establishment for expenditure of money in the CWF to implement the Strategy.
- Gary Kohlhepp gave an overview of the following program elements outlined in the Strategy, including their implementation plans and Fiscal Year 2001 (FY01) CWF funding: Fish contaminants, water chemistry, sediment chemistry, biological integrity and physical habitat, wildlife contaminants, bathing beach monitoring, stream flow, and citizen volunteer monitoring.
- Ralph Bednarz gave an overview of the inland lake quality and eutrophication program element of the Strategy, including its implementation plan and FY01 CWF funding.
- Dave Hamilton summarized FY00 and FY01 funding by Strategy program element, and identified those elements that are currently unfunded. He asked for Board input/advice as to whether there is anything in the Strategy that we should or should not be doing. He also stressed that the MDEQ will make financial decisions as they relate to implementation of the Strategy. The SWQD staff noted that inflation/deflation may necessitate adjustments to future implementation plans/program element objectives, and would therefore have to be considered.

## BOARD COMMENTS AND QUESTIONS

### Monitoring Planning

- It is important that we define the questions that we want to answer when designing a monitoring program and this Board can help to frame such questions.
- What are some examples of local water quality monitoring projects? (See Action Item 2, below).
- What are the factors that determined site selection? (See Action Item 2, below).
- What is the basis of the intensive/non-intensive site sampling design? (See Action Item 2, below).
- Is there ever any follow-up monitoring at 319 sites? This addresses trends and program effectiveness and is therefore highly relevant to the goals of the Strategy. The SWQD staff responded that some 319 monies do go to monitoring, and that nonpoint source effectiveness monitoring is a high priority for the MDEQ.

### Conditions/Parameters to Measure

- What parameters are measured as part of the fish, water chemistry and sediment program elements? (See Action Item 2, below).
- Near-shore lake and stream riparian habitat is important, and its measurement/evaluation should be considered for incorporation into the Strategy.
- What contaminants (e.g., endocrine disruptors, pharmaceuticals) might be of concern in fish/wildlife tissues and sediments that are not currently being investigated as part of the Strategy? There are a large number of industrial chemicals that may/may not be bioaccumulating. The MDEQ staff requested guidance from the Board in addressing new and emerging concerns.
- Consider forming partnerships with industries having analytical capabilities needed to address new and emerging issues.
- Consider developing Grant Application Packages targeted to universities, to solicit proposals to screen environmental matrices for new and emerging water quality problems on an annual basis. Of current interest are alkylphenolic ethoxylates, resin acids, and endocrine disruptors.
- What are the effects of development on aquatic ecosystems and habitat? The biological integrity and physical habitat program element could be used to respond to this concern if it was targeted to specific geographic areas selected within the framework of concerns over development.
- What are the factors that affect the prevalence of *E. coli* at beaches? Consider the need for a comprehensive assessment of beach water quality using a single, consistently deployed sample collection and analysis approach to ensure reliable results.
- Consider adding sediment toxicity testing to the sediment chemistry program element. Bioavailability is the underlying issue in understanding sediment quality, and sediment chemistry alone doesn't show the whole picture.
- What are the long-term effects of 2-4-D on aquatic ecosystems? The LWMD staff responded that it's one of the most extensively researched herbicide in the country, and it's considered safe if used properly.

### Information Reporting

- How are reports currently distributed? The MDEQ staff responded that paper copy reports are made available to the public upon request.
- All reports should be made available on the web in Portable Document Format (PDF).
- Web page should be developed showing an interactive map of monitoring locations with links to available reports.

- Reports should be developed which present monitoring data in a manner suitable for the non-technical public. The MDEQ staff requested guidance from the Board on how best to accomplish this, in particular how to release data to the public in a manner that will not result in inaccurate conclusions being drawn from the data. One recommendation made was to include appropriate qualifier statements with raw data published on the web.
- The MDEQ should “advertise” – educate the public (especially children), to raise awareness of water quality problems as well as success stories (such as when a stream is returned to attainment status), and to promote the value of monitoring data. It is important to create a market (both within the public at large and among technical users) for monitoring information.
- Does the beach monitoring database communicate the number of days a given beach is open or meeting Michigan Water Quality Standards? [MDEQ refers the Board to the beach monitoring database located at <http://www.deq.state.mi.us/swq/asp/beach/>].
- Consider publishing a five-year water quality “report card,” written for the general public and summarizing the results of monitoring.

#### ACTION ITEMS

1. The MDEQ staff will provide Board members with written instructions on how to seek reimbursement from MDEQ for expenses related to meeting attendance.
2. The MDEQ staff will forward electronic copies of all PowerPoint presentations made during the meeting to the Board.
3. The MDEQ staff will forward copies of fish, water chemistry and sediment reports, and the Ambient Surface Water Chemistry Monitoring plan, to the Board. These documents will answer questions pertaining to parameters and site selection, among others posed by the Board.
4. The MDEQ staff will provide the Board with examples of local water quality monitoring projects.
5. The MDEQ staff will take the lead in developing a draft of the meeting highlights, to be forwarded to the chair through email for further development, as necessary.

#### INSTRUCTIONS TO THE BOARD FROM THE CHAIR

Prior to next meeting:

1. Consider and digest the information acquired today, and prepare suggestions on where you think the Board can contribute.
2. Decide what you’d like to see or hear at the next meeting. [Chair agreed to prepare agenda for next meeting].

3. Consider how monitoring data might best be managed, reported, and marketed/advertised.
4. Consider the program priorities that were presented for the Year 2001. Do these need to be revised or reinforced?

#### NEXT SCHEDULED MEETING DATE

The next meeting will be held on Wednesday, February 13.