Meeting Highlights
Michigan Water Quality Monitoring Advisory Board
Tuesday, August 26, 2003

Focus Topics: Updates on Recent Developments/Issues; FY2004 Monitoring

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

Michigan Department of Environmental Quality (DEQ), Water Division (WD) Staff Present: Diana Klemans, Jerry Saalfeld, Gary Kohlhepp, Christine Aiello, Ralph Bednarz, Bob Day and Rick Sorrell.

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

The sixth meeting of the Michigan Water Quality Monitoring Advisory Board (Board) was held on August 26, 2003, from 9:00 a.m. to 2:30 p.m. at Constitution Hall in Lansing. Dr. Premo of White Water Associates, Inc., chaired the meeting (agenda attached).

UPDATE ON RECENT DEVELOPMENTS/ISSUES

Clean Michigan Initiative (CMI) Grants: The DEQ recently received approval from the Executive Office to award 21 grants totaling approximately $465,000, for volunteer monitoring, local water quality monitoring, and emerging issue monitoring. The latter emphasize pharmaceuticals, personal care products, antibiotics, algal blooms and viral concerns. The diversity of proposals received in response to the Emerging Issue grant application package was not as high as was hoped. $200,000 was set aside; no per-grant-limit was imposed up front. The Board suggested that a presentation at a future meeting by one of the emerging issue researchers, or by another CMI partner or funding recipient, should be arranged.

$270,000 in (FY02) federal funds were available to Michigan for Great Lakes beach monitoring in FY03. *Note: No (FY02) CMI funds were available for beach monitoring in FY03. $283,000 in FY03 federal funds are available to Michigan for Great Lakes beach monitoring, and $114,000 in FY03 CMI funds are available for inland beach monitoring in FY04.*

Nonpoint Source (NPS) Monitoring Strategy Development: The WD is developing an NPS support and effectiveness monitoring strategy, in part to satisfy its Section 319 grant obligations. A multidisciplinary team consisting of key staff from the Surface Water Quality Assessment Section (SWQAS) and Field Operations Section (FOS) was formed to accomplish this task. A first draft of this strategy will be available by November 1, 2003, and a final draft by January 30, 2004. The deadline for submittal of this strategy to the EPA was extended to March 1, 2004, because the necessary EPA guidelines aren't available yet.

The strategy will address the 4 categories of monitoring currently undertaken by the WD, and will propose ways in which better use and communication of the data may be made in order to best support and evaluate the effectiveness of the NPS program:

1. Monitoring to identify NPS problems.
2. Monitoring to evaluate the effectiveness of NPS projects.

3. Monitoring to develop and evaluate the effectiveness of Total Maximum Daily Loads (TMDLs).
4. Statewide/watershed long-term water quality trend monitoring.

All present were unanimous in the belief that professionals should carry out the monitoring, and that contaminant pathways must be given professional consideration insofar as not all contaminants enter the water through runoff.

WD staff acknowledged that better integration of the Division's NPS and water quality monitoring programs needs to occur. The recent combination of the water quality monitoring and NPS programs into a single Section (SWQAS) should eliminate some organizational barriers that contributed in the past to ineffective program integration. WD staff also expressed some concern that additional FTE support may be needed to effectively implement the strategy, once it is complete.

Michigan Clean Water Corps (MCWC): We expect the Governor to issue an Executive Order creating the MCWC in September or October. The MCWC will include, at a minimum, the existing stream volunteer monitoring, the Cooperative Lakes Monitoring Program, and volunteer road crossing surveys. A Volunteer Monitoring Advisory Board will be appointed to advise DEQ on MCWC development and implementation. It is the goal of the DEQ that the MCWC will produce valuable supplemental water quality monitoring data that can be used as screening data by DEQ biologists, that it will comprise well-trained people adhering to good Quality Assurance/Quality Control practices, and that it offer web-based opportunities to share experiences and information. A grant application package will be released to find an organization will to administer the MCWC, including grant management, training, data entry and maintenance, web site development, newsletter production, and convening an annual volunteer "Congress." Stream Cleanup grants will also be administered through this contract.

The Board reacted very favorably to the MCWC, and suggested that the DEQ advertise it via targeted free spots on public television and radio.

Reports: The following reports are now available:

- Saginaw Bay/Grand Traverse Bay Report
- Connecting Channel Report
- 2001 Water Chemistry Monitoring Report
- 2000 Bald Eagle Report
- Biological Trend Monitoring Report

The 2003 DEQ/DNR State of the Environment Indicator Report is expected to be completed in October.

FY04 MONITORING

Gary Kohlhepp made a presentation on the topic of the FY04 Monitoring Implementation Plan. *Copies of this presentation are available upon request.* Issues raised during this discussion are outlined below:

1. When CMI runs out, general funds are insufficient to support an adequate monitoring program.

2. A biological trend monitoring component is not included in the current implementation of the Strategy.
3. It seems that the most impaired waters should be moved to an earlier position in the TMDL development schedule. Can this be done? DEQ Response: There may be some flexibility there.

Ideas for Additional Monitoring:

1. Cryptosporidium should be monitored in waterbodies flowing through/near CAFOs.
2. Beach monitoring using the currently accepted standardized procedure may not be yielding the best information obtainable, insofar as this procedure does not reflect the latest science on where and how best to monitor beach water. Moreover, there are correlative statistical approaches that may be used to predict when a beach should be closed. Currently, information on beach closings is provided too late (e.g., the day *after* the problem manifests itself).
3. Monitor to determine the impacts of beach grooming by private land owners on water and habitat quality.
4. Develop a sediment toxicity inventory; ascertain the speciation of sediment toxicity.
5. Monitor inland lakes for trends in benthic invertebrates.
6. Monitoring is needed to determine if AOCs are meeting their designated uses and therefore may be delisted.
7. Monitor stream flow stability.
    - The drain code is up for redrafting, and that is where we could make a major impact on flow stability.
    - Recognize that groundwater and surface water are interrelated: all groundwater eventually discharges to surface water.

Probabilistic Monitoring:

Gary Kohlhepp made a presentation on the topic of Probabilistic Monitoring. *Copies of this presentation are available upon request.* Issues raised during this discussion are outlined below:

1. Find out which states have been using this type of monitoring the longest. Likely their progress has evolved over time, and they have made adjustments and course corrections from which we could benefit.
2. Why consider this type of monitoring? That is, what questions are we trying to answer? If you find out, for example, (thanks to probabilistic monitoring), that 15% of your waters exceed Hg standards, your very next question from the public will be, "Which waters?" On the other hand, changes in your larger population may indicate something useful to know.
3. Perhaps the next meeting could focus on proposing questions that could be answered by a probabilistic monitoring approach, and that would make such an addition to the existing monitoring effort a valuable one. The questions should be framed within a "whole system" context: whole lake, for example, rather than separately considering fish, sediment, water chemistry, etc., for a coordinated, cooperative approach.
4. One of the gaps in our monitoring program is the ability to extrapolate from sampled to unsampled waters, and a probabilistic monitoring component would enable us to do this.
5. Focus on a small number of parameters to keep costs down. Total phosphorus and Hg are important indicators and would make good choices.

ACTION ITEMS

1. Gary Kohlhepp will make it standard practice to e-mail notification of online report availability to Board members.
2. Dean Premo will review topics and highlights from meetings held during the past year, to initiate development of an annual report to the Governor.

NEXT SCHEDULED MEETING DATE

The next meeting will be held after the draft NPS Monitoring Strategy becomes available. The meeting date will be discussed and arranged via e-mail.