

Lake Michigan Monitoring Coordination Council

Meeting Summary

Fall Meeting
November 13-14, 2000
General Services Administration Conference Center, Room 326
Metcalf Federal Building
77 W. Jackson Blvd.
Chicago, IL

A total of 26 people attended the Fall Meeting of the Lake Michigan Monitoring Coordination Council (the Council). A list of participants is provided below.

Participants List

(see Council Members and Interested Parties List for contact information).

<i>Name</i>	<i>Affiliation</i>
Gary Kohlhepp (Co-Chair)	Michigan Department of Environmental Quality
Judy Beck	U.S. EPA, Region 5
Sarah Lehmann	U.S. EPA, Region 5
Chris Wright	Grand Traverse Bay Watershed Initiative
Laurie Rounds	Indiana Department of Natural Resources
Kathy Luther	Indiana Department of Environmental Management
Tom Trudeau	Illinois Department of Natural Resources
Janet Vail	Grand Valley State University - Robert B. Annis Water Resources Institute
Leslie Dorworth	Illinois-Indiana Sea Grant
Victoria Harris	Wisconsin Sea Grant
Greg Mund	Michigan Agricultural Stewardship Association
Kathy Evans	Muskegon Conservation District
Paul Geiselhart	Waukegan Harbor Citizen's Advisory Group
Bob Schacht	Illinois Environmental Protection Agency
Dale Robertson	U.S. Geological Survey
Joe Deal	Chicago Department of Environment
Niki Juarez-Cummings	Indiana Dunes National Lakeshore
Glenn Warren	U.S. EPA – Great Lakes National Program Office
Paul Horvatin	U.S. EPA – Great Lakes National Program Office
Tim Brown	Delta Institute
Roger Nanney	USDA, Natural Resources Conservation Service
Laura Evans	U.S. EPA, Region 5
Danielle Tillman	U.S. EPA, Region 5
Tom Brody	U.S. EPA, Region 5
Matt Doss	Great Lakes Commission
Ric Lawson	Great Lakes Commission

Monday, November 13, 2000

I Welcome and Introductions

Lawson opened the meeting and introduced Kohlhepp. Kohlhepp noted that Charlie Peters, the other co-chair of the Council, was not able to attend the meeting. He then asked the participants to introduce themselves.

II Council Business

Charge to Participants

Kohlhepp noted that the Council has conducted several meetings and made some progress, but he would like to see more steps toward monitoring coordination. The Council should end the meeting with concrete action items. The first part of the meeting will illustrate several programs that could be used as models for aspects of the Council's work.

Review of Agenda

Kohlhepp briefly reviewed the meeting agenda, and there were no suggested changes.

Acceptance of Council Charter

There was a question about Council membership. Lawson indicated that the Council has an open approach, with open participation in all Council activities. While official membership groups are listed in the Charter, the meetings and workgroups are open to anyone. There was also discussion about staggered terms for members. **Lawson said he would work with the co-chairs regarding announcing a schedule for staggered terms.**

The Council Charter was approved unanimously by voice vote.

U.S. EPA Milestones

Lehmann, Beck, and Horvatin reported on some new developments in milestone tracking. As part of the Government Performance and Results Act, federal agencies are formalizing performance milestones. Progress tracking, goals and objectives, implementation timelines, baseline conditions, and environmental outcomes are all elements that will need to be incorporated into federally sponsored projects and programs. States should be aware of these changes.

III Progress in Workgroups

Lawson briefly reviewed the progress and status in each of the workgroups. He emphasized that detailed discussions would occur on the following day.

Data Inventory and Analysis

- The inventory report has been completed and is online on the Commission's web site at: <http://www.glc.org/monitoring/lakemich/>.
- Phase II of the project is underway. The database is in the process of being reconfigured for access over the Internet. When complete, the inventory will be searchable by location, using a map interface, or by any of the other data fields.

Monitoring Objectives

- Response to Peters' survey was very low. The workgroup needs to discuss a better method to assess monitoring program objectives.

- Peters also developed a discussion paper on monitoring network considerations that was distributed prior to the meeting. The workgroup should discuss the content of this paper as well as ideas for establishing content-focused networks within the Council.

Outreach

- Peters continues to keep the Council's website updated. The workgroup should discuss ways to use this site for enhancing communication and information exchange.
- The Council brochure has been distributed widely, however, it has generated little response. The workgroup should consider how this is being used and targeted and if there is a better marketing approach.
- Planning for a full-day IAGLR session is underway. The title and framework have been submitted. The workgroup now needs to solicit abstracts from speakers.
- Considerations for a regional monitoring conference have been tabled until planning for the IAGLR conference progresses.

Watershed Pilots

- The workgroup is going through the process of considering several pilot options. Kohlhepp suggested several projects that would extend elements of the Lake Michigan Mass Balance project. He also drafted a discussion paper that proposes a surface water quality monitoring network. The workgroup should discuss these and other options.
- The speakers in the next agenda item were invited to speak about several initiatives in the Lake Michigan basin that may be used as case studies for developing monitoring networks.

IV Presentations and Discussions

Beach Monitoring

Beck discussed efforts related to the upcoming beaches conference. The conference will be held February 6-8 at the Midland Hotel in Chicago. She distributed draft agendas for the conference and discussed the elements. She also mentioned several developments related to beaches. Congress passed a BEACH bill that requires states to develop standards for beaches. \$30 million was authorized for this, but only \$2 million appropriated. MDEQ is working on a database of beach closures. IDEM still has quite a bit of work to do in this area. The City of Chicago has also developed a database that may be online soon. Beck emphasized that she would like to see a web site with linkages to real-time beach monitoring data.

Lake Michigan Indicators

Paul Bertram, a State of the Lakes Ecosystem Conference (SOLEC) co-chair with GLNPO, discussed SOLEC 2000 and how the indicators relate to Lake Michigan. He emphasized that the next step in the process was to have groups take ownership of the indicators and get them to the implementation phase. Horvatin suggested that the Council take ownership of the Lake Michigan indicators. Another gap is indicators for lake tributaries. Further, there is a gap in reporting on management practices and their success.

Lake Michigan Mass Balance (LMMB)

Warren discussed key elements of the LMMB project and its current status. Horvatin noted that the data from the project, which is mostly from 1994, is good for establishing baseline conditions. What is needed is a strategy for monitoring changes over time. Robertson pointed out that it is difficult to carry this forward into long-term monitoring because about 80% of the LMMB monitoring is from storm events. Other gaps that were pointed out included a lack of timely and easily accessible distribution of the data, large gaps in tributary data, a lack of information on air deposition from urban areas and little information on phosphorus.

Fish Population Monitoring Network

Trudeau presented on the history, structure, and driving factors behind the fish monitoring network. The network has created standardized monitoring approaches by all four states through a non-binding agreement. The network is described through a strategic plan with four foundation elements: consensus, ecological management, information sharing, and accountability. Funding is provided from the U.S. State Department through the Great Lakes Fishery Commission. Lake Committees have jurisdictional control. The main driver was a decline in commercial and sport fisheries. The impetus for the fish monitoring network was a document signed by DNR directors agreeing to a flexible, voluntary approach to managing Great Lakes fisheries.

Rounds suggested that this network illustrates the need to have a common focus and some legal authority to create a solution. Mandates, authorities, and objectives need to be consolidated.

Air Deposition Network

Brown discussed a workshop recently held to discuss developments in air deposition monitoring. He indicated five key needs:

- A monitoring network beyond IADN – an area where the Council could be helpful;
- Information to fill in inventory holes;
- Regional modeling mechanisms;
- Initiatives for urban reductions; and
- Environmental management systems.

Lawson pointed out that the Commission already supports a state air monitoring network that reports emissions through the Regional Air Pollutant Inventory Development System (RAPIDS). Data from this database is mapped online at <http://www.glc.org/air/airmapper.html>.

Volunteer Monitoring

Lehmann discussed several efforts to coordinate volunteer monitoring efforts. A Central States Volunteer Monitoring Network has recently been established to find ways to consolidate information and facilitate its use by the states. From the agency level, there is a need to identify what is needed that could be provided by properly QA/QC trained volunteer monitoring groups.

Illinois has an Ecowatch Network. Michigan uses some volunteer data for biological screening. Minnesota uses volunteer data for inland lake programs. Kohlhepp indicated that there are great opportunities in rivers and streams that states have not taken advantage of.

Tuesday, November 14, 2000

V Workgroup Sessions

Kohlhepp introduced the schedule for the morning. There would be two workgroup sessions, so that participants would be able to participate in discussions for two workgroups each. The following is a summary of the workgroup discussions.

Data Inventory and Analysis

Lawson gave a short presentation on the Lake Michigan Tributary Monitoring Project and the inventory assessment report. He indicated that full-color copies can be downloaded in PDF form from <http://www.glc.org/monitoring/lakemich/>. He also displayed a few of samples of the watershed inventory maps to the workgroup participants. The following are suggestions for improving the inventory and its ultimate online publication.

- Brody announced that Region 5 now has the new Multi-resolution land use/land cover coverages for the entire region. He is working to create CDs with the data for each lake basin, but can also cut the data

by any other boundary in the region. These coverages are better than previous ones as they are higher resolution and raster-based (pixels rather than polygons).

- Nanney indicated that information from the NRCS Performance and Results Measurement System (PRMS) should be included in the monitoring inventory. The website for this is <http://www.nrcs.usda.gov/prms>.
- The inventory and report should move beyond a focus on the Areas of Concern and cover all watersheds in the basin.
- Beck would like the basin boundary map to show the way Chicago was historically, prior to the Chicago River canal.
- The inventory should move to include information from academic research. Make linkages with IAGLR. Allow for electronic updates.
- There is a group working on land use change called “Chicago Wilderness.” This group includes representation from Wisconsin, Illinois, and Indiana. Links should be made to their efforts.
- Work done using research vessels should be included somehow.
- Information in the inventory should be kept updated. Lawson indicated that this was part of the online design plan.

Monitoring Objectives

The following is a list of key comments during the workgroup discussion.

- Schacht indicated that he was working on completing Peters’ survey for Illinois EPA.
- Others expressed concern that much of the information that was critical to the workgroup (i.e. objectives) could be obtained from the Commission’s inventory.
- Neither survey captures information related to phase II stormwater monitoring.
- Robertson spoke about how there is no plan to keep the LMMB project going. He suggested that there is a need for a position paper discussing what is needed in terms of ongoing monitoring, looking at Lake Michigan as a whole. What is the minimum effort needed to keep critical parts of the mass balance going and what is necessary to keep the models up to date? Indicator sites should be selected for monitoring that can represent the system as a whole.
- LMMCC should serve as an advocate for continuing monitoring to support the LMMB project.
- Major needs for additional information to support the LMMB include data on toxics, fish contaminants, and air deposition.

A list of key tasks was generated with responsibility (if known) listed in [brackets].

1. A discussion paper on the minimum requirements for a baseline effort following up on the LMMB project. [Kohlhepp, Peters or Robertson, and others with Warren]
2. Link LaMP indicators with SOLEC indicators. **Evans indicated that she would add the SOLEC numbers to LaMP indicators.** [Laura Evans, LaMP TCC]
3. An examination of state-level tributary monitoring. Are they doing comparable monitoring? Is there a need for coordination? Western Lake Michigan can be used as a model. [GLC, in part]
4. Summarize the objectives from projects in the Lake Michigan Monitoring Inventory. Distinguish between regulatory and ambient programs. [GLC]
5. Ultimately, a strategic plan should be developed, modeled on the GLFC plan for fisheries, for monitoring in the Lake Michigan basin. This needs to be a consensus plan.

Watershed Pilots

This workgroup discussed a number of ongoing projects, then discussed what should be done about selecting a pilot project.

1. Harris informed the group that the Fox-Wolf basin is developing a strategic data acquisition task force. They are working through the TMDL process. This limits the focus, but does get at process.

2. Kathy Evans is starting a project to assess the usefulness of volunteer monitoring data on three tributaries to the Muskegon River, which are slated for TMDL development. The project will assess sampling methodologies and determine which types of volunteer monitoring groups can be most effective. She is also working with water treatment plants to see if they will help with the chemical analysis. Robertson suggested that selected streams have continuous gages located on them.
3. Wright indicated that the Grand Traverse Bay Watershed Initiative is developing a regional water quality database for access over the Internet. Data will be stored in three tiers, based on the type of group collecting the data: 1) scientific professionals; 2) other trained professionals; and 3) students. Data will be limited to water chemistry. It should be running in February.
4. Kathy Evans mentioned the GLOBE program (see <http://www.globe.gov/>). The program provides protocols for students and training for teachers.
5. U.S. EPA is working with states to develop nutrient criteria. All states in the Great Lakes basin are tasked to develop more defensible nutrient criteria. This will encourage better monitoring coordination, as it will allow information to be shared across state boundaries.
6. Mund and Luther discussed the ALTHEA model. It projects how land use affects water quality and hydrology. Luther said that it will be implemented in a Lake Michigan tributary in Indiana.
7. Robertson stated that there is an effort to extend the Western Lake Michigan NAWQA to cover the entire lake.
8. There is also a new effort to consolidate monitoring work being conducted in the bi-state St. Joseph River watershed.

Workgroup participants agreed that the Watershed Pilot group and the Monitoring Objectives group will consolidate into one group.

The workgroup should continue to track pilot efforts. The group suggested that presentations be scheduled on these pilot efforts at future meetings.

Benefit Analysis and Outreach

This workgroup primarily discussed planning for the IAGLR Conference session. Specific comments appear below:

- Lawson discussed the overall purpose and framework for the IAGLR session. He noted that the intent was to have presentations from both academic investigators and agency-led monitoring programs. This would be followed by a panel discussion. The intent is to discuss coordination between monitoring programs and academic research. He indicated that it was now critical to recruit good speakers.
- Several suggestions for speakers were made, including:
 - Chicago Wilderness
 - Ron Baba – a statistician with UWGB and co-chair of the Forum
 - an economist to talk about monitoring benefits. There is a group in San Francisco doing hedonic pricing work related to water quality.
 - Bill Sensom, the principle investigator on the Lake Michigan Mass Balance project.
- It was suggested that the panel discussion focus on academic investigators who would like to build their work into long-term monitoring, but have difficulty finding funding.
- Funding organizations should be invited to present. Suggestions included: Joyce Foundation, GLNPO, Sea Grant, the Great Lakes Protection Fund, the National Science Foundation, Army Corps of Engineers (to discuss funding under the Water Resource Development Act), and U.S. EPA Star and EMPACT grants.
- Donna Myers, the new Great Lakes Coordinator with USGS, could talk about the funding and work under NAWQA.
- **Lawson agreed to send out an e-mail to all Council members to encourage them to submit papers and forward the invitation to their colleagues.**

Outside of the IAGLR session, there were several other suggestions for outreach.

- Develop fact sheets on innovative monitoring and research projects.
- Use the Council website to develop a forum to connect monitoring networks. Those with data collection projects could be matched up with data collectors on other projects, so that collection efforts could be coordinated. This could be done through chat rooms and bulletin boards. Lawson agreed to consider how best to frame this and send out a draft schematic.

VI Summary and Next Steps

The Council reconvened in plenary session to summarize workgroup discussions and discuss the next steps for Council work.

Workgroup Action Items

- Once the online monitoring inventory is completed, Council members will review and correct information. A form for information updates will be developed.
- A discussion paper on the minimum requirements for a baseline effort to follow up on the LMMB project will be developed.
- Laura Evans indicated that she would add the SOLEC numbers to LaMP indicators.
- Summarize the objectives from projects in the Lake Michigan Monitoring Inventory. Distinguish between regulatory and ambient programs.
- A strategic plan should be developed, modeled on the GLFC plan for fisheries, for monitoring in the Lake Michigan basin. This needs to be a consensus plan that supports the needs of management policies.
- Pilot monitoring coordination efforts will be tracked. Presentations will be scheduled on these pilot efforts at future meetings.
- Lawson will coordinate speaker recruitment for the IAGLR session.
- Lawson will draft a framework for enhancing information sharing between Council members and other monitoring interests.

Next Council Meeting

Several suggestions were made for planning the next Council meeting. Options for coordinating with other meetings include:

- IAGLR in Green Bay, Wisconsin in June
- The beaches conference in February
- Other LaMP Forum or Technical Coordinating Committee meetings

Council members will let the support staff at the Commission know about any other meeting coordination possibilities.

The meeting was adjourned at 12:00 p.m.

A list of action items follows.

Lake Michigan Monitoring Coordination Council

Action Items

Fall Meeting

November 13-14, 2001

Chicago, Illinois

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2. Once the online monitoring inventory is completed, Council members will review and correct information. A form for information updates will be developed.
3. A discussion paper on the minimum requirements for a baseline effort to follow up on the LMMB project will be developed.
4. Laura Evans indicated that she would add the SOLEC numbers to LaMP indicators.
5. Summarize the objectives from projects in the Lake Michigan Monitoring Inventory. Distinguish between regulatory and ambient programs.
6. A strategic plan should be developed, modeled on the GLFC plan for fisheries, for monitoring in the Lake Michigan basin. This needs to be a consensus plan that supports the needs of management policies.
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9. Lawson will draft a framework for enhancing information sharing between Council members and other monitoring interests.