

OHIO LAKE ERIE COMMISSION MEETING
Ohio Department of Natural Resources – East and West Conference Room
Assembly Center -Building E Columbus, OH
December 17, 2014 10:00 a.m.

Call to Order and Roll Call – Craig Butler, OLEC Commission Chair; Director, Ohio EPA

The Ohio Lake Erie Commission (OLEC) meeting was called to order at 10:10 a.m.

Commission Members Present:

Craig Butler, Director, Ohio Environmental Protection Agency (OEPA)
James Zehringer, Director, Ohio Department of Natural Resources (ODNR)
John Schlichter, Director's Designee, Department of Agriculture (ODA)
Tim Hill, Director's Designee, Department of Transportation (ODOT)
Sadicka White, Director's Designee, Ohio Development Services Agency (ODSA), arrived at 10:30 a.m.
Harry Allen, Great Lakes Power Group
J. Kevin Cogan, Jones Day

Gail Hesse shared the regrets of William Murdock, Mid-Ohio Regional Planning Commission, Gene Phillips, Ohio Department of Health, Darrell McNair, MVP Plastics, President, CEO, and Paul Toth, Jr., Toledo-Lucas County Port Authority who were not able to attend. There is a quorum to proceed with the meeting.

Staff Present:

Gail Hesse, Executive Director, OLEC
Sandra Kosek-Sills, OLEC
Rian Sallee, OLEC
Heidi Rife, OLEC

Welcome and Agenda Overview: Craig Butler, Director, Ohio EPA, and OLEC Chairman

Chairman Butler welcomed everyone to the meeting, provided a brief overview of the agenda, and then asked for a motion on the minutes from the September meeting.

Harry Allen moved the following resolution:

Resolved, that the Commission approves the meeting minutes for September 25, 2014.
ODA seconded the motion. No discussion was offered. The Commission members voted all in favor and the motion carried.

Director Butler then asked for a motion for the designation of Chairman and Secretary for 2015.

ODNR moved the following resolution:

Resolved, that the Commission approves the Ohio EPA as Chairman and ODOT as Secretary for 2015. Kevin Cogan seconded the motion. No discussion was offered. The Commission members voted all in favor and the motion carried.

Lake Erie Protection Fund – Grants Committee Report

Amy Jo Klei introduced the Lake Erie Protection Fund grants program.

The Ohio Lake Erie Commission administers the Lake Erie Protection Fund (LEPF) grant program with revenue generated by the sales of the Lake Erie license plate and other donations. Following the funding framework adopted by the Commission, the 2nd quarter grant cycle was open to proposals of up to \$15,000 with no targeted topics.

Projects must assist with implementation of the Lake Erie Protection and Restoration Plan (LEPR) and provide a direct benefit to Lake Erie and its tributary watersheds in Ohio. The Commission received four applications for the 2nd quarter of the LEPF small grants cycle. The Grants Committee reviewed all applications and recommends the following grants for funding for a total of \$29,956 from the SFY15 small grants allocation:

- ***“Development of a Phytoplankton Water Quality Metric.” John Carroll University. \$15,000***

This project will develop and test a water quality metric for Lake Erie’s nearshore using diatoms, blue-green algae and green algae that will provide relevant data to help program managers track changes. This metric will be constructed similarly to a benthic diatom metric previously developed by the applicant and tested by Ohio EPA. The metric will score the health of algal phytoplankton assemblage as impacted by phosphorus using a numeric scale based on sensitivity values of the taxa at each sampling site. Algae and water chemistry samples will be collected by Ohio EPA. The metric will serve as a tool for assessment of water quality along the nearshore and for evaluation of Lake Erie Assessment Units in the 2014 Ohio EPA Integrated Report.

- ***“Do Fish Use Structures Connecting Lake Erie and Its’ Wetlands?” The Ohio State University. \$14,956***

Coastal wetlands are important drivers for fish species diversity, abundance and biomass in Lake Erie. Due to historical changes in land use and wetland loss/remediation, many hydrologic connections between wetlands and the open lake are engineered, potentially restricting access of fish to the lake. This project will compare fish species composition, size and seasonal variation on both sides of water conveyance structures in three Lake Erie coastal wetlands. The project will assess which structures provide the most efficient and cost-effective fish passages for wetland restoration purposes. This project will help inform management decisions related to maintenance of coastal wetlands for both water level and fish access.

The SFY14 budget for LEPF Small Grants is \$150,000. With approval of the above projects, the remaining balance for the LEPF for SFY15 is \$90,093.

Klei then turned to Director Butler for action on the motion.

ODOT moved the following resolution:

Resolved, that the following Lake Erie Protection Fund grant proposals be funded:

- ***“Development of a Phytoplankton Water Quality Metric.” John Carroll University. \$15,000***

- “Do Fish Use Structures Connecting Lake Erie and Its’ Wetlands?” The Ohio State University. \$14,956

Kevin Cogan seconded the motion. The Commission members voted all in favor and the motion carried.

Discussion and Questions:

Director Butler asked what the water quality staff at Ohio EPA thought of the metric. Amy Jo responded that program staff from the Ohio EPA Northeast District Office is the project advisor and is very interested in the metric. Additional program staff believe the project is sound and has potential for program application.

Kevin Cogan asked what the nearshore is. Amy Jo responded that they are trying to standardize it based on depth, coastal metrics, fish communities and deeper waters. Hesse stated that there are varying definitions of nearshore and that some scientists maintain that the Western basin of Lake Erie can be considered nearshore due to the shallow depths.

Harry Allen asked how many total applications were received for this cycle of grants. Amy Jo stated that four applications were received with only two being approved. Those that were not approved were Fish Habitats in the Cuyahoga River and Cleveland Museum of Natural History’s using phragmites (an invasive species) as biomass for energy generation.

Kevin Cogan asked when the fish use structures grant will have results. Rian Saltee stated that the turnaround for final data is in one year.

HB490 Update – Karl Gebhardt

HB490 just wrapped up in the General Assembly and it will start back up in January of 2015. There will be a MBR 490 review this year and there is a discussion with all this summer. HB490 lapsed due to multiple extraneous provisions added to the bill resulting in the bill being withdrawn. The focus will now be on how to move forward on the issues that had agreement such as dredged sediment and its beneficial use, watershed analysis of nutrients and optimization of monitoring of waste treatment.

Sadicka White joined the meeting.

Karl then turned the update over to Mike Bailey, Chief of Soil and Water Resources at ODNR. Mike Bailey stated that there are two issues that will receive further attention including fertilizer and manure application and the transfer of the manure program administration from ODNR to ODA and they are working with the soil and water conservation districts to get it going. Director Zehringer stressed to the commission the importance of the transfer of the agriculture pollution management from ODNR to ODA.

Special Report

Development of a Water Trust Proposal for Lake Erie

Josh Knights, State of Ohio Director, The Nature Conservancy

Bill Stanley, Assistant State of Ohio Director, The Nature Conservancy

The agenda of the Water Trust is outcome driven and science based. Lake Erie is the warmest, shallowest, most nutrient rich lake of the 5 great lakes. It contains 2% of the water of the five great lakes and 50% of the fish biomass. Draining of the wetlands allows for agriculture use, economic growth, and human settlement. 2/3 of the Western Basin is soy and corn agriculture. Lake Erie is a drinking source for 11 million people.

The current response to the water quality concerns was a politically expedient amount and use of resources to hopefully address the problems. Was the Toledo water crisis a watershed moment? It caused 400,000 people to go without water. Restaurants were shut down and there was a "do not drink water" warning. Or was it an energized status quo? \$50 million dollars in loans to improve water treatment facilities was given out. \$5 million dollars for cover crops was dispersed for 86,000 acres. \$4 million went to OSU to study the problem. \$1 million from the Ohio Farm Bureau was given for the 4R program and lastly the Great Lakes Commission formed a new working group.

The current situation is that there is no single entity that owns the challenges of excessive nutrients and watershed protection. Also there is no specific water quality goal being adopted by organizations and funding is lacking to drive action. Funds are not necessarily well targeted and not enough to make measureable differences in water quality. Some goals are out there but implementation is a piecemeal defense. There is no strategy to win the game.

A different approach to the situation is suggested. Various stakeholders could adopt specific goals and milestones related to water quality then identify the needed amount of public and private funds to solve the problem. Next would be to aggregate funds to build economies of scale and use target funds based on anticipated or actual returns for water quality and use science to evaluate progress and adapt approaches.

The Water Trust principles are suggested as this:

- 1) A public-private partnership or utility to supplement and focus existing funding on specific water goals
- 2) A commitment to both long term goals and shorter term milestones.
- 3) Use science to invest like a business with water quality being its return.
- 4) Rewards would be based on outcomes, not activities.
- 5) Adaptation of the approach based on water quality monitoring and evolving science related to effectiveness.

The Water Trust also suggests that revolving loans for farm projects would be offered to help install controlled drainage structures to reduce phosphorus runoff as well as precision agricultural equipment to enable adoption of the 4R principles and for increased production.

Grants could also be made available for farms for targeted use of agricultural conservation practices and flood plains and wetlands restoration and put 1% of the Great Black Swamp land back to wetlands. An example of this restoration can be seen with the Blausey Tract in Ottawa County.

The Water Trust would happen in phases:

- 1) Convene leadership and design the water trust
- 2) Capitalize and launch water trust

3) Implementation

4) Monitoring and adaptive management

Discussion:

Harry Allen asked about the long time frame to get this underway. Should there be a sense of urgency?

In response, Bill Stanley questioned whether that much funding be absorbed that quickly with that many participants – can it get implemented that quick? No. Scientific and technical questions cannot be answered that quickly either. Josh Knights pointed out the milestones to use as encouragement. Bill added that The Nature Conservancy role is not looking to be the leader but rather to serve as a facilitator in bringing this together.

Director Zehringer, ODNR, stated that this is right on track but funding is going to be difficult. 40% reduction of phosphorus is well under way. The revolving loan is great for farmers and useful.

Sadicka White, ODSA, said she felt it is important to get all stakeholders at the table and someone taking the lead. How do they make it an economic proposition for loan repayments? One answer is to offer incentives.

Director Zehringer said that cover crops are being found to be economical and more farmers that use them are realizing they are useful all year.

Director Butler, Ohio EPA, asked about coming up with target strategies. The Toledo incident was instructive for all but the real struggle will be funding.

Tim Hill, ODOT, commented that throughout the state there is a constant repair and replace of culverts. What would be the best use of the mitigated funds or are there better ways to use it? There are more opportunities to use funds on other projects to help waterways.

Josh Knights stated there is interest to conduct polling to assess the willingness of the public to support elements of the water trust.

Harry Allen added that the greatest contribution can be from farmers giving back. Water users will reciprocate.

Tim Hill left the meeting at 11:10 a.m.

Josh Knights said that the Farm Bureau gets credit for helping start the discussion for saying they are part of the problem and want to help.

Gail Hesse said that the part of the trust that appeals to her is the networked governance approach to management of the trust and the partnerships are there with public and private entities.

The Nature Conservancy said their thanks and left the meeting at 11:15 a.m.

Project Update: Great Lakes Water Quality Agreement and Assessment of Nutrient/Eutrophication Dynamics on Lake Erie – Gail Hesse

There are 10 Annexes in the GLWQA 2012 which are:

1. Areas of Concern
2. Lakewide Management
3. Chemicals of Mutual Concern
4. Nutrients
5. Discharges from Vessels
6. Aquatic Invasive Species
7. Habitat and Species
8. Groundwater
9. Climate Change Impacts
10. Science

The 2012 GLWQA includes commitments to develop new phosphorus targets and action plans.

Starting with Lake Erie by 2016

- Determine phosphorus concentration objectives and loading targets for open waters and nearshore areas
- Determine loading allocation by country and identify priority watersheds for load reduction

Starting with Lake Erie by 2018

- Assess effectiveness of programs to achieve the Substance and Lake Ecosystem Objectives
- Develop domestic action plans and strategies to control nutrients

Hesse then went on to describe the Annex 4 Subcommittee and Task Team structure as well as the schedule for the draft phosphorus reduction strategy and targets – Tasks. She also highlighted the Eutrophication models and response indicators and their locations which included overall phytoplankton biomass, Western Basin cyanobacteria blooms, Central Basin hypoxia, and Eastern Basin Cladophora (nearshore).

Cooperative Science and Monitoring Initiative - Hesse

- Cooperative Monitoring Initiative started in 2002 to coordinate monitoring
 - Simple premise: focus resources on a few key issues on one lake each year
- CSMI follows a 5 year rotational cycle
- CSMI is now in Annex 10

Great Lakes Restoration Initiative and the CSMI

- GLRI funding specific to the Lake Erie CSMI in 2014
- Focused on nutrients and the western basin:
 - Internal loading
 - River hydrology and seasonality of blooms and climate changes

- Nutrient mass budget

Lake Erie CSMI – GLRI 2014

What Will be Done:

- Monitor in-lake sediments over a range of oxygen concentrations
- Integrate 2 river basin models -SPARROW and SWAT and incorporate climate variability data
- Application of WLEEM to quantify nutrient loadings and ecosystem response

Lake Erie CSMI – GLRI 2014

What We Will Learn

- The magnitude of internal loading
- The ability to model specific nutrient reduction scenarios and ecosystem response
- A nutrient mass balance for phosphorus, nitrogen and carbon for internal loads, external loads, transport thru the western basin and export to the central basin

A key theme in the project is that adaptive management approach is key to refining our actions.

Discussion:

Director Zehringer, ODNR, asked if the Annex 4 work is going to change the targets already set up by the Ohio Lake Erie Phosphorus Task Force. Gail stated that the Annex 4 work must address nutrient issues for the entire lake, not just Ohio waters. Zehringer stated that the agricultural community is on board now and we can't change our game plan. If we do, what happens?

Dr. Jeff Reutter said that in a month there will be an answer if there will be a different recommendation than what the Phosphorus Task Force has given.

Director Butler then stated that science is what it is. We have to mindfully manage the communication to the farmers and community.

Dr. Reutter said that the key point is comfort level and use of adaptive management.

Annex 4 Nutrient Targets and University Research Collaboration: Dr. Jeff Reutter

There are three issues that Ohio Sea Grant is focusing on and they are 1) the Ohio Board of Regents and the management of \$2 million dollar investment for coordination of the response of Ohio's colleges and universities to the HABS. 2) Science update – National Science Foundation proposal (CRUSE) and the water/food nexus 3) Field to Faucet program. Board of Regents has 2 million dollars available – allocated into five focus areas, led by Tom Bridgeman and George Bullerjahn. \$500,000 allocated to UT, \$400,000 to land sources and water quality, \$400,000 to Human Health, \$200,000 to Economics and Policy. There were 18 proposals in all. The Ohio EPA provided a lot of advice.

Lake Erie Protection Fund Development – Gail Hesse

Topics:

- Land Management systems & development

- Education & Outreach information
- Agency Priorities
- Administration Priorities

There is \$75,000 to garner additional funding for a larger project

Discussion:

Director Butler said that the idea for new money going to the habitat is good and wondered if there is a strategic way to promote 'the positive' about Lake Erie and use this to promote the lake.

Sadicka White said that Ohio doesn't have comprehensive land use polices. Local government innovation fund of \$50,000 is there to use to improve land. Hesse stated that the Balanced Growth program was created to do this.

Director Butler suggested to Gail Hesse to get with other commission members on projects and what they can do and report back.

Kevin Cogan and Harry Allen left the meeting at 11:55 a.m.

OLEC Office Report

Gail Hesse presented the OLEC office report to the commission.

- Lake Erie Quality Index update
- Proposed Water Monitoring summary
- Ohio Coastweeks 2014

Agency Reports:

Gene Phillips, ODH: No report

James Zehringer, ODNR: HB 490 and the role of ODNR – need to help move forward, 2015 Capital Improvements being done to state parks, and water quality is a major topic.

Commission Chair and Director, Craig Butler, OEPA: \$150 million directed to Toledo for monitoring. All projects are moving forward. \$1 million is going to the Ohio Department of Health for water quality monitoring.

John Schlichter, ODA: Annex 4 and water quality are coming up. There are more dollars coming in to NRCS. ODA is hoping to bring back the 490 issues. Senate bill 150 agriculture rules are done and training has begun. 3 sessions are complete and ODA is starting to issue certificates.

Sadicka White, ODSA: Tourism, messaging and marketing is a focus of ODSA this year.

Tim Hill, ODOT: No report

Agency Partner Reports:

Ohio Sea Grant College Program, Jeff Reutter: Went through a successful site review from NOAA. The Clean Marina program is expanding state wide. Two new extension agent positions will be added this year. A call for research projects is coming. The winter program will be in February 2015. Lake Erie Day will be at the boat show in Cleveland on January 21, 2015. Dr. Kristen DeVanna Fussell was also introduced as the new Executive Assistant to Ohio Sea Grant.

Northeast Ohio Area wide Coordinating Agency: Continued work with partners around area. There was a meeting with waste water treatment partners yesterday. 208 Plan – working with Ohio EPA northeast office to work with placing TMDL's in strategic plans.

Natural Resources Conservation Service, Cheryl Rice: not in attendance
Toledo Metropolitan Area Council of Governments, Kurt Erichsen: not in attendance

PUBLIC COMMENT PERIOD

No Public Comment

Director Butler adjourned the meeting at 12:05 p.m.

Powerpoint presentation slides used at this meeting are on file at the Ohio Lake Erie Commission Office.

NOTE: Next Lake Erie Commission Meeting: Wednesday, March 25, 2015 at the Ohio EPA Center for Excellence.