Memorandum of Understanding on
A Multi-Jurisdictional Approach to Water Quality Trading in the Western Lake Erie Basin

This Memorandum of Understanding (MOU) arises from collaboration by the states of Indiana, Michigan, and Ohio, facilitated by the Great Lakes Commission (GLC), to develop a common Framework for Water Quality Trading in the Western Lake Erie Basin (WLEB). Funding to develop the Framework was awarded to the GLC by the United States Department of Agriculture’s Natural Resources Conservation Service.

The WLEB suffers from harmful algae blooms fueled, in part, by excess phosphorus contributions from agriculture. Signatories share a common goal of improving water quality in Lake Erie and recognize the need for multiple approaches to reduce phosphorus loading from agricultural sources. Water quality trading is one approach that can help reduce phosphorus loadings and improve water quality. WLEB states will benefit from a consistent approach to water quality trading in the WLEB. Signatories hereby agree to the following:

1. Subject to the laws and regulations of the individual states, water quality trading is one tool which may be helpful in reducing phosphorus contributions from agriculture to the WLEB and mitigating compliance costs for traditional point sources.

2. Watersheds contributing phosphorus to the WLEB are located, in whole or in part, within the states of Indiana, Michigan, and Ohio.

3. Water quality trades occurring within those watersheds should proceed under a common framework for improving our shared water resource, the WLEB.

4. The attached document titled, “A Framework for Water Quality Trading in the Western Lake Erie Basin,” reflects a collaborative effort by the states to identify consistent principles and methods for conducting water quality trading within the WLEB.

5. The signatories or their designees will refer to this document when evaluating the potential for a water quality trading program in the WLEB or approving a water quality trade within a WLEB watershed.

6. The signatories to this MOU are authorized to enter such agreements on behalf of their respective states.
This MOU may be executed in two or more counterparts, each of which is deemed original, but all constitute one and the same instrument. The signatories agree that a facsimile copy of a signature, including a PDF of such signature, will be deemed original and binding.

For the State of Indiana:

[Signature]
Bruno Pigott, Commissioner
Indiana Department of Environmental Management

[Signature]
Melissa Rekweg, Interim Director
Indiana State Department of Agriculture

Date 12/6/2017

For the State of Michigan:

[Signature]
Heidi Grather, Director
Michigan Department of Environmental Quality

[Signature]
Jamie Clover Adams, Director
Michigan Department of Agriculture & Rural Development

Date

For the State of Ohio:

[Signature]
Craig Alender, Director
Ohio Environmental Protection Agency

[Signature]
David T. Daniels, Director
Ohio Department of Agriculture

Date 14/7/17

Date 17/8/2017
This MOU may be executed in two or more counterparts, each of which is deemed original, but all constitute one and the same instrument. The signatories agree that a facsimile copy of a signature, including a PDF of such signature, will be deemed original and binding.

**For the State of Indiana:**

Bruno Pigott, Commissioner  
*Indiana Department of Environmental Management*

Melissa Rekeweg, Interim Director  
*Indiana State Department of Agriculture*

**For the State of Michigan:**

Heidi Grether, Director  
*Michigan Department of Environmental Quality*

Jamie Clover Adams, Director  
*Michigan Department of Agriculture & Rural Development*  
[Signature]

**For the State of Ohio:**

Craig Butler, Director  
*Ohio Environmental Protection Agency*

David T. Daniels, Director  
*Ohio Department of Agriculture*
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For the State of Indiana:

Bruno Pigott, Commissioner  
*Indiana Department of Environmental Management*

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Melissa Rekeweg, Interim Director  
*Indiana State Department of Agriculture*

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For the State of Michigan:

[C. Heidi Grether], Director  
*Michigan Department of Environmental Quality*  
*See attached*  
13.6.17

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Jamie Clover Adams, Director  
*Mission Department of Agriculture & Rural Development*

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For the State of Ohio:

Craig Butler, Director  
*Ohio Environmental Protection Agency*

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David T. Daniels, Director  
*Ohio Department of Agriculture*
The DEQ does not have trading rules, nor does it intend to pursue or support any proposed trading rules. NPDES permits have been issued with tighter phosphorus effluent limits to protect Lake Erie. The effluent limits are strict liability to the permit holder.