The Middle Huron Cooperative Agreement for Reduction of Phosphorus Loading to the Middle Huron River Watershed September 16, 2004

This Cooperative Agreement (Agreement) is between the Michigan Department of Environmental Quality (MDEQ), Water Division (WD) and the attached signatories, representing both point source and nonpoint source (NPS) stakeholders in the Middle Huron River Watershed. The primary purpose of the Agreement is to create the process to cooperatively reduce phosphorus loading in the Middle Huron River Watershed to meet the goals of the Total Maximum Daily Load.

We the undersigned acknowledge the importance of Belleville Lake, Ford Lake, and the Huron River and its tributaries as valuable water resources for the residents, aquatic life, and wildlife in the watershed and agree to the following:

- 1. According to the document titled "Total Maximum Daily Load for Phosphorus in Ford and Belleville Lakes" (TMDL) published December 1996 by the MDEQ, NPS phosphorus loading accounts for a substantial amount of the present phosphorus loading to Ford and Belleville lakes. During the 1995 growing season, the TMDL states that NPS loads accounted for 63% of the total phosphorus load.
- 2. To achieve attainment of the goals of the TMDL, phosphorus levels must be reduced.
- 3. Discharges of phosphorus attributable to the TMDL's NPS load allocation occur from a variety of rural and urban land uses in the Middle Huron River Watershed. Many stakeholders are pursuing a significant reduction in these discharges of phosphorus in the watershed. The signatories agree to facilitate this reduction by providing assistance, resources, and the coordination of local efforts. The signatories also agree to develop a NPS Reduction Implementation Plan and submit it for approval to the MDEQ, WD, Jackson District Supervisor, within one year of the effective date of this Agreement.

The NPS load allocation in the TMDL includes some urban land uses, which have subsequently been covered by NPDES permits. All of the municipal entities within the Ann Arbor Urbanized Area have been issued Municipal Separate Storm Sewer System (MS4) permit coverages under U.S. EPA's federal Phase II storm water regulations. As a result, each of these communities is required to develop and implement a Storm Water Management Plan (SWMP) to address the quality of storm water discharges from their separate storm sewer systems. As part of SWMP implementation, the municipalities will be required to implement "Best Management Practice" measures for the control of storm water pollutants, including total phosphorus, in the storm discharges to receiving streams in the Middle Huron River Watershed.

The permit coverages issued to these various municipal entities require implementation of SWMPs in an urbanized area of approximately 87.3 square miles within the Middle Huron River Watershed. This urbanized area comprises approximately 27% of the total land area within the Middle Huron River Watershed. The implementation of SWMPs in these urbanized areas should result in a significant reduction in the phosphorus loading to the associated receiving waters.

Signatories who are required to develop SWMPs in accordance with the requirements of an MS4 permit shall do so in coordination with the overall NPS Reduction Implementation Plan, which is required for development and implementation in accordance with the requirements of this Agreement.

The municipalities and nested jurisdictions located in the Middle Huron River Watershed with MS4 permit coverage are the following:

Municipality	<u>Permit Number</u>
City of Ann Arbor	MI0053856
Ann Arbor Charter Township	MIS040028
Village of Barton Hills	MIS040025
City of Belleville	MIS040046
Village of Dexter	MIS040022
Lodi Township	MIS040030
Pittsfield Charter Township	MIS040021

Scio Township	MIS040031
Superior Charter Township	MIG610003
Van Buren Charter Township	MIG610021
Webster Township	MIS040062
City of Ypsilanti	MIS040015
Ypsilanti Charter Township	MIG610037

Nested Jurisdictions	Permit Number
Ann Arbor Public Schools	MIS040016
University of Michigan	MI0053902
Van Buren Twp. Public Schools	MIS040011
Washtenaw County Drain Commission	MIG610039
Washtenaw County Road Commission	MIG610314
Wayne County	MIG610040

Since the 1999 cooperative agreement was conceived, a county-wide program was developed and implemented that helps meet the phosphorus reduction goals of the TMDL by identifying and correcting failing on-site septic systems, a known nonpoint source of phosphorus. In June 1999, the Washtenaw County Board of Commissioners adopted the Washtenaw County Regulation for Onsite Water and Sewage Disposal System Inspection at Time of Property Transfer. The "Time of Sale" Program protects public health and safety by ensuring safe and adequate water supplies and proper disposal of human sewage. The Program requires:

- The inspection and evaluation of septic systems and/or wells before residential
 property changes ownership. Inspection reports are filed with the Washtenaw
 County Department of Environmental Health. These reports include the following
 components: a description of the water supply and septic system construction; a
 summary of functional status; and recommendations.
- The County to generate a written notice either authorizing the transfer of property or requiring corrections. Authorization must be issued before the deed can be transferred.
- Corrective action plans to be submitted within 30 days in cases of nonconformance.
- All necessary corrections to be completed within 180 days.

Nearly half of the septic systems in the county have reached their service life expectancy, and studies show that drinking water quality and availability are decreasing. Inspections over the first 18 months of the Program have shown that 18% of the septic systems inspected were failing or inadequate and that 5.5% of the septic systems had an illicit discharge. A similar ordinance was enacted by Wayne County in 2000 under the On-Site Sewage Disposal System Evaluation and Maintenance Ordinance.

The Washtenaw County Drain Commissioner's "Partners for Clean Stream Program" is a cooperative effort with local commercial and institutional landowners. The program promotes business practices that protect the Huron River and its tributaries. Particular emphasis is on designing, installing and maintaining landscapes, equipment and vehicle maintenance and preventing polluting facility runoff. Participants are assisted in preparing a site specific Water Quality Action Plan. When the plan is complete and in place, they receive the Partners for Clean Stream Designation. There are over 70 current Partners.

4. The four National Pollutant Discharge Elimination System (NPDES) permits identified in the following table will contain requirements for compliance with TMDL goals through implementation of the terms and conditions of this cooperative Agreement.

Facility	Permit Number
Ann Arbor Wastewater Treatment Plant	MI0022217
Chelsea Wastewater Treatment Plant	MI0020737
Dexter Wastewater Treatment Plant	MI0022829
Loch Alpine Sanitary Authority Wastewater Treatment Plant	MI0024066

In 2009, the point source permit limits for phosphorus loadings and concentrations for the above referenced facilities will be evaluated and may need to be revised pursuant to applicable laws and regulations depending upon the efficacy of this Agreement in meeting the TMDL goals.

5. The following point source permittees agree to develop a Point Source Reduction Implementation Plan to meet their monthly combined waste load allocation (WLA) each month from April through September, annually:

Facility	Permit Number
Ann Arbor Wastewater Treatment Plant	MI0022217
Chelsea Wastewater Treatment Plant	MI0020737
Dexter Wastewater Treatment Plant	MI0022829
Loch Alpine Sanitary Authority Wastewater Treatment Plant	MI0024066

These monthly combined WLAs are specified as follows: 164.5 lbs/day for April; 64 lbs/day for May; 64 lbs/day for June; 53.4 lbs/day for July; 53.4 lbs/day for August; 64 lbs/day for September.

The Point Source Reduction Implementation Plan shall be developed and submitted for approval to the MDEQ, WD, Jackson District Supervisor, within one year of the effective date of this Agreement. The Point Source Reduction Implementation Plan will contain a schedule with milestones for achieving the monthly combined WLAs identified in the TMDL and specified above within five years of the effective date of this Agreement.

The permittees listed in Item #5 above agree to put forth reasonable best efforts toward controlling phosphorus loads/concentrations in their discharges to achieve the individual monthly phosphorus facility-specific loads identified in the TMDL. Nothing in this Agreement shall be construed to require the use of Best Available Control Technology or any other particular level of treatment technology.

6. The MDEQ agrees to implement the following approach when considering applications for NPDES authorizations that propose a new or increased discharge of phosphorus to the Middle Huron River Watershed.

Following a determination of "completeness" for an NPDES application proposing a new or increased discharge of sanitary wastewater or any other phosphorus-containing wastewater to the Middle Huron River Watershed, MDEQ will provide

detailed information on the application to the partnership of this Agreement in order to solicit input from the partnership with respect to the processing of the application. Any input from the partnership will then be utilized in the decision-making process for the subject application.

In addition, if an NPDES application is submitted to MDEQ for a new discharge of sanitary wastewater or any other phosphorus-containing wastewater to the Middle Huron River Watershed, MDEQ will not process the NPDES permit unless the application specifies that the applicant will utilize and install a treatment technology-based process designed to and approved by MDEQ to achieve a total phosphorus effluent concentration consistent with the phosphorus concentration goals of the TMDL.

Specifically, if the proposed discharge is to the Middle Huron River Watershed at a location "upstream" of Ford Lake or in an area discharging directly to Ford Lake, MDEQ will not process the application unless the application indicates that a treatment technology-based process designed to and approved by MDEQ to achieve a monthly average effluent total phosphorus concentration of 0.05 mg/L will be installed and utilized. Similarly, if the proposed discharge is to the Middle Huron River Watershed at a location "upstream" of Belleville Lake and "downstream" of Ford Lake" or in an area discharging directly to Belleville Lake, MDEQ will not process the permit unless the application indicates that a treatment technology-based process designed to and approved by MDEQ to achieve a monthly average effluent total phosphorus concentration of 0.03 mg/L will be installed and utilized.

If an application is submitted to MDEQ for a new discharge of sanitary wastewater or any other phosphorus-containing wastewater from an existing discharger to the Middle Huron River Watershed, MDEQ will not process the "increased use" in the NPDES permit unless the permittee demonstrates that the application's existing or proposed treatment technology-based process will achieve the net increased phosphorus loading derived from the requested increased flow authorization and the

applicable TMDL-based concentration for the outfall location (i.e., $0.05\ mg/L$ or $0.03\ mg/L$).

In addition to the decision-making process described above, if an application is submitted to MDEQ for a new discharge of sanitary wastewater or any other phosphorus-containing wastewater to the Middle Huron River Watershed, MDEQ will inform the applicant of the existence of this Agreement and the Middle Huron Initiative, and MDEQ will encourage any perspective permittees to participate in the Agreement process and become a signatory.

- 7. The signatories agree to meet semiannually in the spring and fall to: a) discuss overall and individual performance activity directed towards meeting the goals identified in the TMDL; b) review the Point Source and Nonpoint Source Reduction and Implementation Plans and recommend modifications for improving implementation; and c) review data and information developed through the continued studies to be conducted pursuant to Item #9 and Item #10 (see pages 7 and 8).
- 8. An annual report shall be submitted by the signatories on or before May 1, annually, to the MDEQ, WD, Jackson District Supervisor, summarizing progress made towards meeting the goals identified in the TMDL. The annual report shall include the following:
 - Summaries from the semiannual meetings;
 - Progress made on each item identified in the implementation plans;
 - Changes in the implementation plans in response to new challenges;
 - Local successes in nonpoint source and point source phosphorus control;
 - Summary of the point source phosphorus effluent data; and a
 - Summary of any locally derived watershed monitoring data, including trend data, as implementation proceeds.
- The MDEQ agrees to continue monitoring the water quality in Ford and Belleville lakes, as resources allow. Monitoring will be conducted at Bandemer Park, immediately downstream of Barton Pond, to determine total phosphorus

concentrations in the Huron River upstream of many urban inputs. Monitoring will also be conducted at the Michigan Avenue bridge to determine the in-stream total phosphorus concentrations upstream of Ford Lake. In addition, monitoring will be conducted at four stations in Ford Lake and four stations in Belleville Lake to determine in-lake total phosphorus concentrations. The exact locations for these sampling points can be found in the MDEQ staff report MI/DEQSWQ-02/037.

On or before March 1, annually, MDEQ will prepare annual reports of the sampling and distribute them to all signatories of this Agreement.

- 10. The signatories agree that further study may demonstrate designated use attainment in the watershed even if phosphorus levels are not reduced as contemplated in the TMDL. The signatories agree to discuss the continuing study of the water quality parameters and endpoints for the phosphorus reduction program. The study may include, but not be limited to, the following:
 - continued monitoring of ambient phosphorus levels;
 - verification of the established baselines and endpoints for relevant warm water fish species and other indigenous aquatic life and wildlife;
 - the study and quantification of phosphorus contributions from accumulated sediments;
 - an evaluation of other causes of water quality impairment; and
 - information on the established relationship between phosphorus reduction and water quality improvements.

The signatories agree that new information acquired through these efforts, or others, will be incorporated into the TMDL and this Agreement, as appropriate.

11. Any signatory may terminate its involvement in this Agreement at any time for any reason. Notice of such termination shall be given in writing to all other signatories prior to the effective date of termination. If any of the point source dischargers listed on page 4 seek termination of their involvement in this Agreement, the MDEQ, WD, may propose modification of the associated NPDES permit to include

- effluent limitations for total phosphorus consistent with the individual monthly loadings identified by the TMDL.
- 12. This Agreement shall expire on October 1, 2009. The signatories may agree to renew the Agreement.
- 13. No signatory makes any admission of fact or law, or waives any claim, right, or argument against anyone or any entity by becoming a signatory to this Agreement or by acting under it. Nothing in this Agreement shall create any claim, right, or argument in any third party.
- 14. The signatories on the following pages shall be officials acting in one of the following capacities:
 - For a municipal, state, or other public facility, or a not-for-profit entity, a principal executive officer or ranking elected official (such as the mayor, village president, city or village manager or clerk);
 - For an organization, company, corporation or authority, a principal executive officer;
 - For a partnership, a general partner;
 - For a sole proprietor, the proprietor;
 - For a corporation, a principle executive officer of at least the level of vice president or their designated representative;
 - For a local unit of government, a county, city, village, or township official, or an agency of county, city, village, or township.