

APPENDIX K:
KALAMAZOO RIVER / LAKE ALLEGAN
WATERSHED COOPERATIVE AGREEMENT

Kalamazoo River/Lake Allegan Watershed Cooperative
Agreement for the Reduction of Phosphorus Loading
July 22, 2016

This agreement is between the Michigan Department of Environmental Quality (MDEQ), Water Resources Division (WRD) and the attached signatories, representing both point source (PS) and nonpoint source (NPS) stakeholders in the Kalamazoo River/Lake Allegan watershed. The primary purpose of the agreement is to continue to implement the process to cooperatively reduce phosphorus loading in the Kalamazoo River/Lake Allegan watershed to meet the goals of the Total Maximum Daily Load.

We the undersigned acknowledge the importance of the Kalamazoo River/Lake Allegan as valuable water resources for the residents, aquatic life, and wildlife in the watershed and agree to the following:

1. As identified in the document titled "Total Maximum Daily Load for Phosphorus in Lake Allegan" (TMDL) published March 2001 by the MDEQ, NPS phosphorus loading accounts for a substantial amount of the present phosphorus load to Lake Allegan. In the 1998 growing season, NPS loads accounted for 65 percent of the total phosphorus load. In 2010, the NPS load accounted for 83 percent of the total phosphorus load. The reduction of phosphorus in the watershed to date has largely come from PS entities.
2. To improve water quality in Lake Allegan and achieve attainment of the goals of the TMDL, NPS reductions must occur on a wide-scale basis.
3. NPS discharges of phosphorus occur from a variety of rural and urban land uses in the Kalamazoo River/Lake Allegan watershed. Many stakeholders are pursuing a significant reduction in NPS discharges of phosphorus in the watershed. Efforts to reduce NPS of phosphorus should focus on controlling runoff from the sources listed below: Rural sources of phosphorus include uncontrolled animal access to waterbodies, inadequate nutrient/manure management, erosion from farm fields due to the lack of buffer strips along waterways, and conventional tillage in environmentally sensitive areas; urban sources of phosphorus include the runoff of storm water to waterbodies due to historic developments and current non-existing/inadequate storm water ordinances, lack of proper planning and zoning to protect sensitive areas, and over-application of phosphorus-containing fertilizers; sources of phosphorus that may occur in both rural and urban settings including improper soil erosion and sedimentation controls at construction sites, and runoff from transportation infrastructure, including improperly designed road/stream crossings, gravel roads that are not properly maintained, and paved roads without adequate space allotted for storm water infiltration; and in-stream sources of phosphorus include unstable stream banks resulting from the removal of native vegetation, and stream bank scouring due to flashy flows from highly impervious areas.
4. The signatories to this cooperative agreement agree to facilitate NPS reductions in total phosphorus by providing assistance, resources, and the coordination of local efforts to reduce NPS of phosphorus indicated above by 2020 to meet the Load Allocation of the TMDL. If it is determined that commitments under the cooperative agreement are not met, and taking into account the findings in further study described in #10 below, NPDES permits for entities in the Lake Allegan watershed will be modified to include facility-specific WLAs and seasonal

aggregate WLAs for total phosphorus. Specific requirements for addressing NPS pollution are as follows:

- A. Industrial Point Sources. The industrial (non-municipal) point sources shall collectively develop and implement a public education plan and/or coordinate with their local stormwater municipal separate storm sewer system (MS4) to reach their employees, customers and general public. The plan shall be designed to accomplish the education of the public about 1) their responsibility and stewardship in their watershed and, 2) the connection of MS4 catch basins, storm drains, and ditches to area waterways, and the potential impacts these could have on the surface waters of the state. Progress shall be reported in the annual report.
 - B. Municipal Wastewater Treatment Plants located in municipalities without a National Pollutant Discharge Elimination System (NPDES) MS4 permit: except when the municipality is located in a county or township that implements the following activities or their equivalents (for example, in a drain commission or building permit program), the municipality in which the wastewater treatment plant is located shall develop and implement a plan that includes activities that reduce phosphorus to the Lake Allegan watershed. This shall include but is not limited to making storm water public education materials available to the public, routinely inspecting storm water outfalls to surface water to determine if illicit connections exist, and developing procedures for correcting problems, developing pollution prevention and good housekeeping protocols that minimize phosphorus from entering surface waters, and developing mechanisms to control storm water quality and quantity from new development and redevelopment. Progress shall be reported in the annual report.
 - C. Municipal Wastewater Treatment Plants located in municipalities covered by an NPDES MS4 permit: these municipalities shall provide technical assistance to municipalities within the Kalamazoo River/Lake Allegan TMDL Area that are not covered by an MS4 permit. Technical assistance may involve the following: sharing of public education materials, illicit discharge elimination plan methodology and technical assistance, post-construction storm water ordinances, and training on pollution prevention and good housekeeping activities for municipal operations.
 - D. All municipalities shall publicize the statewide restriction on applying phosphate-containing fertilizer to turf (in Part 85 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451) or any applicable local ordinance on applying phosphate-containing fertilizer beginning January 1, 2012.
5. The signatories also agree to update the 3-Year TMDL Strategy (2012) which updates the "Water Quality Improvement (Implementation) Plan for the Kalamazoo River Watershed and Lake Allegan through a Phosphorus Total Maximum Daily Load (TMDL) Process", dated July, 2002.

The permittees have met the aggregate waste load allocation (WLA) of 8,700 pounds of phosphorus per month from April through June, and 6,700 pounds per month from July through September as identified in the TMDL. The Implementation Plan shall contain a strategy to insure that the PS continue to meet the aggregate WLA identified in the TMDL, and seek continued

improvement through collaboration and sharing of resources. If these commitments are not met under this cooperative agreement, facility specific WLAs and seasonal aggregate WLAs will be included in NPDES permits. The permittees listed in #6 below agree to put forth reasonable best efforts to reduce phosphorus discharges and continue to meet the individual phosphorus loading goals set forth in the Implementation Plan (i.e., twenty three percent phosphorus reduction from 1998 PS loads during the period July through September). Nothing in this agreement shall be construed to require the use of Best Available Control Technology or any other particular level of treatment technology.

The update to the 3-Year TMDL Strategy (2012) shall be submitted to the MDEQ, WRD, Kalamazoo District Supervisor, within **one year** of the effective date of this agreement.

The MDEQ agrees, subject to United States Environmental Protection Agency approval and public comment, to include the existing NPDES permit limitations and/or monitoring requirements for phosphorus in the following permits for five years from the effective date of this agreement:

FACILITY NAME	PERMIT NUMBER
Albion WWTP	MI0022161
Allegan WWTP	MI0020532
Allegan Water Treatment Plant	MI0058703
Battle Creek WWTP	MI0022276
Battle Creek-DPW WTP	MIG640215
Bellevue WWTP	MIG570051
Brookfield Twp-Narrow Lk WWSL	MIG580401
Charlotte WWTP	MI0020788
Clarence Twp-Duck Lake WWSL	MIG580402
Concord WWSL	MIG580003
Gun Lake Sewer Authority	MI0042501
Homer WWSL	MI0021407
JBS – Plainwell, Inc.	MI0050628
Kalamazoo WWTP	MI0023299
Marshall WWTP	MI0023540
Olivet WWSL	MIG580267
Otsego Paper, Incorporated	MI0003824
Otsego WWTP	MIG570224
Parma WWSL	MIG580005
Perrigo Company-Plant No. 1	MI0039306
Perrigo Company-Plant Nos. 4 and 5	MI0039314
Plainwell WWTP	MI0020494
Springport WWSL	MIG580281
Westrock Cal-Battle Creek	MI0029386

In 2021, the PS NPDES permit limits for phosphorus will be evaluated taking into account the findings of further study described in #9 below, and may need to be revised to include facility specific WLAs and a seasonal aggregate WLA pursuant to applicable laws and regulations depending on the efficacy of the agreement in meeting the TMDL goals. Revisions to NPDES permits may include both the facility-specific WLA, and aggregate WLA for phosphorus. The facility specific WLA would be equal to the 1998 actual PS loads for the period April through June, and a twenty three percent phosphorus reduction from 1998 PS loads for the period July through September.

6. The signatories agree to meet semiannually in the spring and fall to: a) discuss overall and individual performance and activity directed towards meeting the goals identified in the TMDL; b) review the PS and NPS Reduction Implementation Plans for the Kalamazoo River Watershed and Lake Allegan, and the current Kalamazoo River Watershed Plan, and recommend modifications for improving implementation; and c) review data and information developed through the continued studies to be conducted pursuant to paragraphs #8 and #9 below.
7. An annual report shall be submitted by the signatories on or before March 1 of each year to the MDEQ, WRD, Kalamazoo District Supervisor, summarizing progress made towards meeting the goals identified in the TMDL to include the following:
 - i. Summaries from the semiannual meetings.
 - ii. Progress made on each item identified in the implementation plans.
 - iii. Changes in the implementation plans in response to new challenges.
 - iv. Local successes in phosphorus control.
 - v. Summary of the PS phosphorus effluent data and control methods.
 - vi. Summary of any locally derived watershed monitoring data, including trend data, as implementation proceeds.
8. The MDEQ agrees to continue monitoring the water quality in Lake Allegan and the Kalamazoo River, as resources allow. Monitoring will be conducted at M-89 (inlet) to evaluate the water quality as it enters Lake Allegan, and at the Lake Allegan dam (outlet). The exact monitoring locations for the inlet, outlet, and Lake Allegan samples are identified in the MDEQ staff report number MI/DEQ/SWQ-99/125. The minimum monitoring frequency will be monthly from April through September each year at each site in Lake Allegan and the Kalamazoo River as resources allow. The MDEQ will submit the annual sampling results by **March 1** of each year. The results will be posted on the internet at www.kalamazooriver.net for access by the signatories of this agreement.
9. The signatories agree that further study may demonstrate designated use attainment in the watershed even if phosphorus levels are not reduced as identified 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 need not be limited to, the following:
 - i. Continued monitoring of ambient phosphorus levels.
 - ii. Verify the established baselines and endpoints for relevant warm water fish species and other indigenous aquatic life and wildlife.
 - iii. Study and quantify phosphorus contributions sediments.

- iv. Evaluate other causes of water quality impairment.
 - v. Establish relationship between phosphorus reduction and water quality improvements.
10. 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.
11. This agreement shall expire on **March 1, 2021**. The signatories may agree to renew the agreement.
12. 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.
13. The signatories below shall represent either of the following:
- i. 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).
 - ii. For an organization, company, corporation or authority, a principal executive officer, vice president or their designated representative.
 - iii. For a partnership, a general partner.
 - iv. For a sole proprietor, the proprietor.
 - v. For a local unit of government, a county, city, village, or township official, or an agency of a county, city, village, or township.

By Michigan Department of Environmental Quality:

Name and Title

Date

By Michigan Department of Natural Resources:

Name and Title

Date

By Michigan Department of Transportation:

Name and Title

Date

By Michigan Department of Veteran Affairs, Fort Custer:

Name and Title

By City of Albion:

Name and Title

Date

Name and Title

Date

By City of Allegan:

Name and Title

Date

By Allegan County Conservation District:

Name and Title

Date

By Allegan County Drain Commission:

Name and Title

Date

By Allegan County Road Commission:

Name and Title

Date

By Barry County Drain Commission:

Name and Title

Date

By Barry County Road Commission:

Name and Title

Date

By City of Battle Creek:

Name and Title

Date

By Village of Bellevue:

Name and Title

Date

By Brookfield Twp- Narrow Lake WWSL

Name and Title

Date

By Calhoun County Conservation District:

Name and Title

Date

By Calhoun County Drain Commission:

Name and Title

Date

By Calhoun County Road Commission:

Name and Title

Date

By City of Charlotte:

Name and Title

Date

By Clarence Township- Duck Lake WWSL:

Name and Title

Date

By Village of Concord:

Name and Title

Date

By Eaton County Drain Commission:

Name and Title

Date

By Eaton County Road Commission:

Name and Title

Date

Date

By Gun Lake Sewer Authority:

Name and Title

Date

By The Gun Lake Tribe:

Name and Title

Date

By Hillsdale County Drain Commission:

Name and Title

Date

By Hillsdale County Road Commission:

Name and Title

Date

By Village of Homer:

Name and Title

Date

By Jackson County Drain Commission:

Name and Title

Date

By Jackson County Road Commission:

Name and Title

Date

By JBS Plainwell, Inc:

Name and Title

Date

By City of Kalamazoo:

Name and Title

Date

By The Kalamazoo County Conservation District:

Name and Title

Date

By The Kalamazoo County Drain Commission:

Name and Title

Date

By The Road Commission of Kalamazoo County:

Name and Title

By Jackson County Drain Commission:

Name and Title

Date

By Jackson County Road Commission:

Name and Title

Date

By City of Marshall:

Name and Title

Date

By Otsego Paper Incorporated:

Name and Title
By Village of Olivet:

Name and Title

Date

By City of Otsego:

Name and Title

Date

By City of Parma:

Name and Title

Date

By Perrigo Company-Plant No. 1:

Name and Title

Date

By Perrigo Company-Plants No. 4 and 5:

Name and Title

Date

By City of Plainwell:

Name and Title

Date

By City of Springport:

Name and Title

Date

By Westrock Cal-Battle Creek:

Name and Title

Date