MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY SURFACE WATER QUALITY DIVISION APRIL 2002

STAFF REPORT

CLEAN WATER ACT SECTION 303(d) LIST MICHIGAN SUBMITTAL FOR YEAR 2002

I. INTRODUCTION

A. Purpose

The purpose of this report is to fulfill the requirements set forth in Section 303(d) of the federal Clean Water Act (CWA) and the Water Quality Planning and Management regulation at Title 40 of the Code of Federal Regulations (CFR), Part 130.

This report is submitted to the United States Environmental Protection Agency (USEPA) by the Michigan Department of Environmental Quality (MDEQ) for review and approval of Michigan's list of water quality-limited or threatened waters needing pollutant Total Maximum Daily Loads (TMDLs) established. It provides the state's supporting documentation required by 40 CFR, Section 130.7(b)(6) and rationale in fulfilling Section 303(d) requirements. Michigan is providing its submittal of Section 303(d) requirements as a separate document rather than including it in the state's biennial Section 305(b) report.

B. CWA Requirements

Under the Section 303(d) requirements of the CWA, states are required to:

- Identify waters that will not attain applicable Water Quality Standards (WQS) with technology-based controls. This includes treatment technology, best available technology (BAT), and best management practices (BMPs) enforced by federal, state, or local laws or regulations.
- 2. Identify waters that are "threatened," which means those waters that presently attain WQS but are expected to not meet WQS by April 2004.
- 3. Establish a schedule for TMDLs so that TMDLs are completed in the next 10 years.

C. MDEQ's Watershed Approach

The MDEQ uses a rotating watershed cycle for surface water quality monitoring and National Pollutant Discharge Elimination System (NPDES) permit reissuance. Each of the 58 major watersheds in the state is scheduled for monitoring and discharge permit reissuance at least once every five years (Figure 1). This approach allows nonpoint source water quality-related issues and all the NPDES permits within a watershed to be addressed at the same time.

Monitoring used to enhance permit issuance reviews is conducted in the targeted watersheds two years prior to NPDES permit reissuance. This process facilitates the identification of waterbodies that need TMDLs and the compilation of appropriate information for their development.

II. METHODOLOGY

A. Section 303(d) References

Several references and guidance documents are involved in the Section 303(d) list development. These references include:

- Michigan Water Quality Report 2002 (Section 305(b) Report);
- CWA of 1987:
- Federal Register Part II, USEPA, 40 CFR, Parts 122, 123, and 130;
- USEPA Guidance for Water Quality-Based Decisions: The TMDL Process, April 1991;
- National Clarifying Guidance for 1998 State and Territory Section 303(d) Listing Decisions (August 27, 1997 Robert Wayland memo);
- New Policies for Establishing and Implementing TMDLs (August 8, 1997 Robert Perciasepe memo); and
- 2002 Integrated Water Quality Monitoring and Assessment Report Guidance (November 19, 2001 Robert Wayland memo).

B. Identification of Water Quality-Limited Waters

USEPA regulations (40 CFR, Section 130.7(b)) require that:

"(b)(1) Each state shall identify those water quality-limited segments still requiring TMDLs within its boundaries for which:

- (i) Technology-based effluent limitations required by Sections 301(b), 306, 307, or other sections of the CWA;
- (ii) More stringent effluent limitations (including prohibitions) required by either state or local authority preserved by Section 510 of the CWA, or federal authority (law, regulation, or treaty); and
- (iii) Other pollution control requirements (e.g., best management practices) required by local, state, or federal authority are not stringent enough to implement any WQS applicable to such waters."

These waterbodies are where the state needs to develop and implement either TMDLs or other suitable corrective actions to achieve WQS.

Michigan has reviewed its waterbody-specific information to identify those waterbodies that still require TMDLs under Section 303(d). Michigan's Section 303(d) list is compiled by evaluating the most current, available site-specific data using the following decision process:

- 1. The waterbody is not attaining WQS, and the waterbody will not attain WQS with the application of technology-based controls, BAT, or BMPs.
- 2. The waterbody is presently attaining WQS but is expected to not meet WQS by April 2004 (Threatened Waterbodies).

The decision process for nonattainment and threatened waterbodies is outlined in Attachment 1. This decision process is consistent with that previously used during the development of the 1998 and 2000 Section 303(d) lists.

C. Data Used to Develop Section 303(d) List

The source of identified waterbodies contained in the Section 303(d) list is the WQS Nonattainment List developed for the state's Section 305(b) biennial report. Water quality attainment assessments in the Section 305(b) report are based on a combination of chemical (water, sediment, and fish tissue) and biological data (macroinvertebrate and fish). All monitoring data, collected as part of MDEQ monitoring programs, are entered into either the Storage and Retrieval (STORET) database and/or into specific state-developed database management systems.

Data collected from credible sources other than MDEQ monitoring programs are also evaluated as part of the Section 305(b) development process. However, the use of data from other sources is often limited. Data are used if they meet appropriate quality assurance/control requirements. Other information sources include:

- USEPA;
- United States Geological Survey;
- United States Fish and Wildlife Service:
- United States Department of Agriculture;
- United States Army Corps of Engineers;
- State Universities:
- Michigan Department of Agriculture;
- Michigan's 2001 Fish Consumption Advisory;
- County Community Health Departments; and
- National Oceanic and Atmospheric Administration.

III. MICHIGAN'S SECTION 303(d) LIST

After applying the methodology provided in Section II of this report, the Michigan Section 303(d) list for 2002 was developed (Attachment 2). The Section 303(d) list contains the following information from Michigan's Waterbody System database as required by USEPA guidance:

- Waterbody I.D. Number;
- Reach File 3 Indexing Number:
- Stream/Lake Name;
- Location Description;
- Size (stream miles, lake acres);
- Problem Summary; and
- Scheduled TMDL completion year.

The information and data used to compile the list was primarily from Michigan's Environmental Assessment Program. To restore and expand these monitoring activities, the MDEQ developed a strategy entitled, "A Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters" in January 1997. Preliminary implementation through partial funding began immediately, with implementation accelerating rapidly with

the passage of the Clean Michigan Initiative (CMI) in 1998. The CMI included the Clean Water Fund, which prescribed monitoring of surface waters through the 1997 strategy as a priority. In addition, laboratory methods are becoming readily available to measure some pollutants at levels needed to determine if WQS are achieved. This is particularly true for mercury and polychlorinated biphenyls (PCBs). As a result of this enhanced monitoring and improved analytical capability, Michigan now has a much greater knowledge of surface water quality, including data from an aggressive five-year rotating watershed monitoring program that was completed for the first time in 2001.

The Great Lakes and Michigan's inland waters have substantially improved since the early 1970s when the NPDES permit process for point source discharges was implemented. Michigan has been very diligent and effective in issuing NPDES permits to point source dischargers that result in WQS compliance and designated use protection and support. Over 300 water quality-based effluent limits are developed for discharge permits issued each year. Each water quality-based effluent limit incorporates many of the same elements as a TMDL. The permit process serves to keep many additional waterbodies off the Section 303(d) list.

Michigan has also been aggressively pursuing the control of nonpoint sources (NPS) of pollutants. These programs have dramatically increased since the passage of the CMI in 1998. As part of this initiative, specific funds have been allocated to implement corrective actions to address NPS pollutant loadings.

The number of non-Bioaccumulative Chemicals of Concern TMDLs on the list has decreased from 194 in 2000 to 179 in 2002 list (Figure 2) as a result of corrective activities in both the NPS Program and the NPDES Permit Program. The NPS activities resulted in delisting ten waterbodies, primarily due to actions that addressed sedimentation and animal access. Seven waterbodies were delisted directly due to actions taken to correct point source discharges. These activities have allowed the waterbodies to meet water quality standards, as shown by follow-up monitoring, and be delisted (Attachment 4). In addition, seven waterbodies on the 2000 list due to contaminated sediments have been delisted because the contaminated sediments have been remediated, or are under order or contract to be remediated (South Branch Black River, Manistique River, Pine River, Rouge River (Newburgh Lake), Saginaw River, Unnamed Tributary to Wolf Creek, and Willow Run Creek).

IV. TMDL DEVELOPMENT AND PRIORITIZATION

Waterbodies are prioritized for TMDL development considering the following factors:

- 1. Michigan's five-year rotating watershed cycle approach.
- 2. USEPA's direction to have all TMDLs developed in 10 years.
- 3. Available resources to complete TMDLs.
- 4. Data availability.
- 5. Complexity of problem, including severity of pollution.
- 6. Ability of water program to address the TMDL issue.
- 7. Presence of active projects, such as site remediation under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).
- 8. Consideration of the "threatened" status for a waterbody.
- 9. Designated uses of the waters.

A schedule for TMDL development for the next ten years was derived based on the above factors and is included as Attachment 3.

The number of TMDLs to be developed, by year, is shown below and in Figure 3:

2002:	11	2008: 24
2003:	15	2009: 39
2004:	22	2010: 57
2005:	21	2011: 158
2006:	30	2012: 9
2007:	24	Total = 410

Most TMDLs are scheduled following Michigan's five-year rotating watershed assessment approach. There were some exceptions for the following reasons:

- The USEPA has offered to take the lead on developing the mercury TMDLs and requested that these TMDLs be scheduled at the end of the process due to the complexity of the problem. A total of 154 mercury TMDLs are scheduled in 2011.
- The 23 waterbodies that are affected by Combined Sewer Overflows (CSOs) are scheduled for TMDL development based on the scheduled implementation of the approved long-term CSO Control Programs for these facilities.
- TMDLs for problematic organic chemicals with primarily atmospheric sources (PCB, chlordane, DDT, and dioxin), are generally scheduled in later years (starting in 2008) to allow the collection of additional information based on low level analysis and source determination.

V. Status of 2000-2002 TMDL Development

The following TMDL development actions were taken during 2000-2002.

Five TMDLs were submitted to the USEPA for approval, as follows:

2000 TMDLs: Strawberry Lake – Phosphorus Lake Allegan – Phosphorus

2001 TMDLs: Huron River (Geddes Pond) - Escherichia coli (E. coli)

Coldwater River - Biota

2002 TMDL: Crapaud Creek - E. coli

The USEPA has approved the following TMDLs during 2000-2002:

Strawberry Lake, Lake Allegan, Ford/Belleville Lakes, Huron River (Geddes Pond), Coldwater River, and Crapaud Creek.

- Two pathogen-related TMDLs (Galien River and Lenawee County Drain 70) and one biota TMDL (Carrier Creek) are proceeding through public comment.
- Seven contaminated sediment TMDLs have been delisted because the contaminated sediments have been remediated, or are under order or contract to be remediated (South Branch Black River, Manistique River, Pine River, Rouge River (Newburgh Lake), Saginaw River, Unnamed Tributary to Wolf Creek, and Willow Run Creek).

Attachment 4 provides a list of waterbodies from the 2000 Section 303(d) listing where: the problem was remediated by specific actions restoring WQS; a TMDL was developed and submitted to the USEPA for approval; the TMDL was rescheduled because of a permitting action; the waterbody was reassessed and found to meet WQS; or a change in classification from nonattaining to highly modified waterbodies was made. Highly modified waterbodies are typically those that are impaired due to channelization or recent maintenance dredging.

Attachment 5 provides a list of waterbodies for which TMDLs have been developed and submitted to the USEPA since 1996.

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Water Quality Appraisal Unit South

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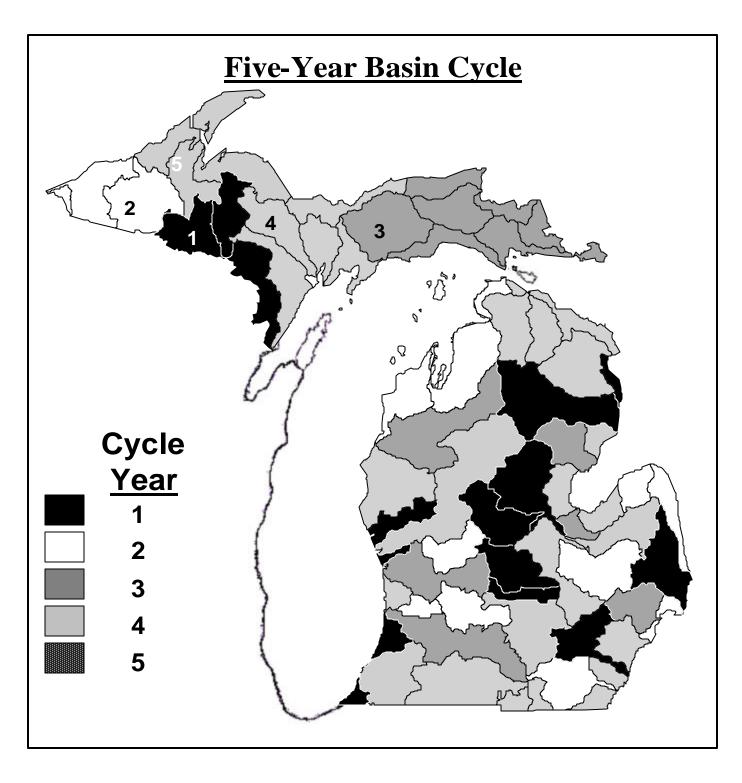
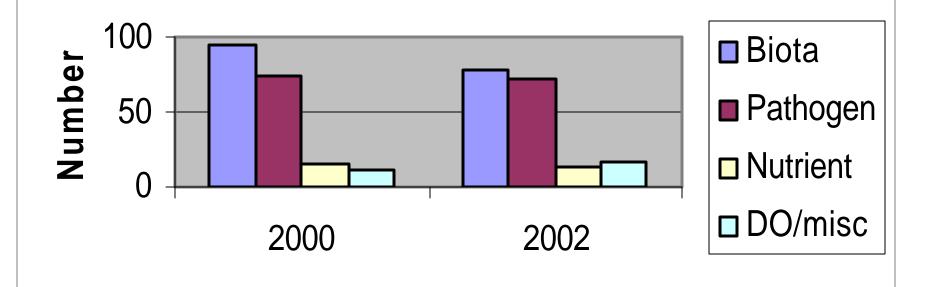
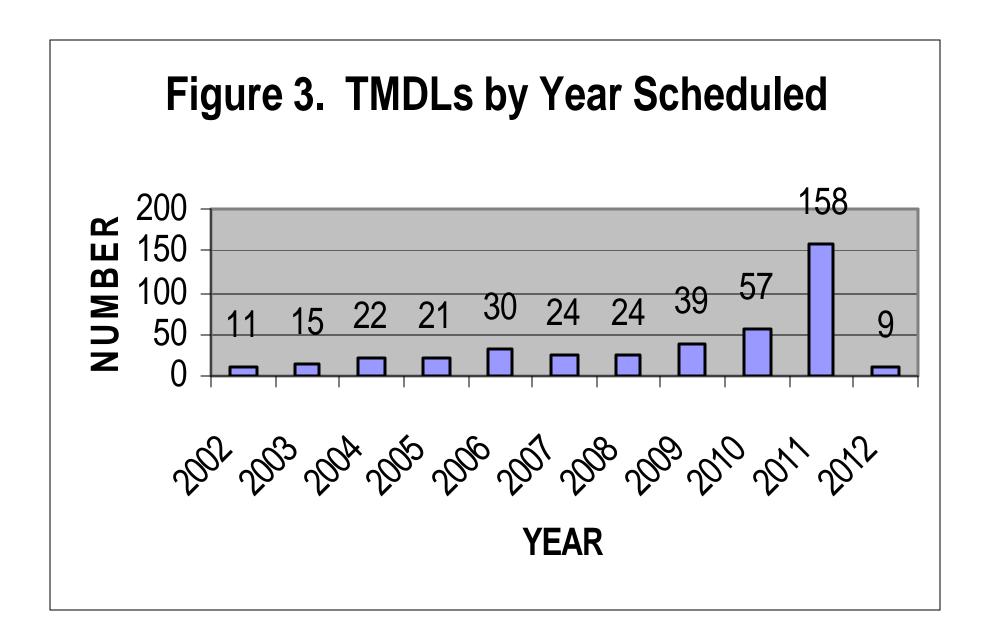


Figure 1 Five-Year Watershed Assessment Cycle







ATTACHMENT 1

Nonattainment and Threatened List Criteria

This attachment describes the criteria used by Michigan to determine the attainment status of the waterbodies monitored over the last five years.

Nonattainment Status Criteria

The following decision criteria were used in evaluating designated use nonattainment for each waterbody:

- 1. Water quality standards (WQS) are the minimally acceptable water quality conditions.
- 2. Ambient chemistry and microorganisms exceedances of the WQS are assessed and determined on a case-by-case basis. Nonattainment is determined by assessing the severity and frequencies of the exceedances.
- 3. When using biological community (fish and/or macroinvertebrate) assessment results, only the "poor" rating is used to place a waterbody on the Nonattainment List.
- 4. Waterbodies with combined sewer overflows or untreated sewage discharges are placed on the Nonattainment List.
- 5. Waterbodies with Fish Consumption Advisories are placed on the Nonattainment List.
- 6. Inland lakes and impoundments with fish tissue levels averaging greater than 0.3 mg/kg (based on at least five fish of a given species) for mercury are placed on the Nonattainment List as "Mercury Lakes."

Threatened Status Criteria

Threatened waterbodies are those that presently meet WQS but are expected to not meet WQS by April 2004. A waterbody is considered fully supporting but threatened for a particular designated use/compound when the use/compound may not meet WQS in April 2004 unless pollution prevention or control action is taken because of anticipated sources or adverse pollution trends.

ATTACHMENT 2

MICHIGAN WATERBODY SYSTEM Section 303(d) Year 2002 TMDL List

ADVENTURE CREEK WBID# 221209G

County: ONTONAGON HUC: 4020102 Size: 4 M

Location: Red Shed Road crossing d/s.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2008 RF3RchID: 4020102 28

ALBROW CREEK WBID# 082816J

County: JACKSON HUC: 4050004 Size: 1 M

Location: From Rives-Eaton Road u/s to Rives Junction Rd.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2007 RF3RchID: 40500041008

ALDER CREEK WBID# 082821K

County: CLINTON HUC: 4050005 Size: 3 M

Location: Station located 250 ft. u/s of Woodworth Road crossing. Ovid Twp. Problem: **Fish community rated poor; Nutrient enrichment, nuisance algal**

growths.

TMDL Year(s): 2009 RF3RchID: 4050005 13

ALMA IMPOUNDMENT (PINE RIVER) WBID# 210421G

County: GRATIOT HUC: 4080202 Size: 150 A

Location: Impoundment of the Pine River in the vicinity of Alma.

Problem: FCA-PCBs; Mercury Lake.

TMDL Year(s): 2010 2011 RF3RchID:

AMOS/PALMER DRAIN, N. BR. AND STONY CREEK# WBID# 061201C

County: MONROE HUC: 4100001 Size: 23 M

Location: Amos-Palmer Drain (2 miles d/s Palmer Rd.) d/s to Stony Creek, then, d/s

to Lake Erie.

Problem: WQS exceedance for TDS and hydrogen sulfide; Fish and

macroinvertebrate communities rated poor.

TMDL Year(s): 2004 RF3RchID:

ARBUTUS LAKE WBID# 081601L

County: GRAND TRAVERSE HUC: 4060105 Size: 395 A

Location: SE of Traverse City. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

AU SABLE RIVER WBID# 210801A

County: IOSCO HUC: 4070007 Size: 9 M

Location: Lake Huron u/s to Foote Dam. Problem: **FCA-PCBs, mercury.**

TMDL Year(s): 2010 2011 RF3RchID: 4070007 12

AU TRAIN LAKE WBID# 220402Y

County: ALGER HUC: 4020201 Size: 830 A

Location: W. of Munising.

Problem: Mercury Lake.

AUSTIN LAKE WBID# 083208C

County: KALAMAZOO HUC: 4050003 Size: 1090 A

Location: Vicinity of Portage. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

BARTON LAKE WBID# 083210G

County: KALAMAZOO HUC: 4050001 Size: 347 A

Location: SW of Vicksburg.

Problem: FCA-PCBs; Mercury Lake.

TMDL Year(s): 2010 2011 RF3RchID:

BARTON POND (HURON RIVER IMP.) WBID# 061203M

County: WASHTENAW HUC: 4090005 Size: 210 A

Location: Impoundment of Huron River in vicinity of Barton Hills (suburb of Ann

Arbor). From dam u/s to Conrail RR bridge crossing.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

BASS LAKE WBID# 081601M

County: GRAND TRAVERSE HUC: 4060105 Size: 343 A

Location: SW of Traverse City. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

BASS RIVER WBID# 082801H

County: OTTAWA HUC: 4050006 Size: 33 M

Location: Grand River confluence u/s to 92nd Street crossing of Bass and Little

Bass rivers.

Problem: Pathogens (Rule 100); Fish and macroinvertebrate communities

rated poor.

TMDL Year(s): 2006 RF3RchID: 4050006 4

BATTLE CREEK RIVER WBID# 083006F

County: CALHOUN HUC: 4050003 Size: 10 M

Location: Kalamazoo River confluence u/s.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4050003 32 0.16

BEAN CREEK WBID# 060102A

County: LENAWEE HUC: 4100006 Size: 2 M

Location: Vicinity of Hudson.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2002 RF3RchID: 4100006 7

BEAR CREEK WBID# 061402B

County: MACOMB HUC: 4090003 Size: 3 M

Location: Red Run Drain confluence u/s to Mound Rd. in the vicinity of Warren.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2006 RF3RchID: 4090003 525 0.00

BEAR LAKE WBID# 082701A

County: MUSKEGON HUC: 4060102 Size: 415 A

Location: Tributary to Muskegon Lake located north of Muskegon Lake, Laketon Problem: FCA-PCBs, mercury; Nutrient enrichment, nuisance algal growths.

TMDL Year(s): 2009 2011 2008 RF3RchID:

BEATONS LAKE WBID# 221205F

County: GOGEBIC HUC: 4020102 Size: 330 A

Location: Ottawa National Forest NE of Stickley.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

BEAUFORT LAKE WBID# 080308E

County: BARAGA HUC: 4030107 Size: 462 A

Location: Vicinity of Three Lakes. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

BEAVER LAKE WBID# 211001B

County: ALPENA HUC: 4070006 Size: 665 A

Location: SE of Fletcher Pond and SW of Alpena.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

BELLE RIVER AND N. BR. BELLE RIVER WBID# 061501G

County: LAPEER/ST. CLAIR HUC: 4090001 Size: 11 M

Location: Riley Center Rd. u/s to Berville Rd. and Bowman Rd. u/s to Imlay City

Problem: WQS exceedances for TDS and D.O.; Macroinvertebrate community

rated poor.

TMDL Year(s): 2004 RF3RchID: 4090001 16

BERRY DRAIN WBID# 061506A

County: SANILAC HUC: 4090001 Size: 4 M

Location: Stontenberg Road, one-half mile south of M-46 d/s to the Berkshire Road

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2004 RF3RchID: 4090001 000

BIG BLUE LAKE WBID# 082301P

County: MUSKEGON HUC: 4060101 Size: 330 A

Location: N. of Lakewood. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

BILLS LAKE WBID# 082804N

County: NEWAYGO HUC: 4050006 Size: 204 A

Location: S. of Croton.
Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

BISHOP CREEK WBID# 0613040

County: WAYNE HUC: 4090004 Size: 4 M

Location: Middle Br. River Rouge confluence u/s (including Ingersoll Creek).

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2007 RF3RchID: 4090004 242 0.00

BISHOP LAKE WBID# 061206N

County: LIVINGSTON HUC: 4090005 Size: 119 A

Location: Brighton State Recreation Area.

Problem: Mercury Lake.

BLACK CREEK WBID# 083102C

County: ALLEGAN HUC: 4050003 Size: 0.75 M

Location: Rabbit River confluence u/s to about 0.25 miles d/s of 140th Avenue.

Problem: Macroinvertebrate community rated poor; Nutrient enrichment,

nuisance plant growths; WQS exceedance for TDS.

TMDL Year(s): 2004 RF3RchID: 40500031015

BLACK CREEK WBID# 082701J

County: MUSKEGON HUC: 4060101 Size: 13 M

Location: Trib. to Mona Lake.

Problem: FCA-PCBs; Fish community rated poor.

TMDL Year(s): 2010 2003 RF3RchID: 4060101 14

BLACK CREEK WBID# 061101S

County: LENAWEE HUC: 4100002 Size: 27 M

Location: River Raisin confluence u/s to Lake Hudson outlet.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4100002

BLACK CREEK WBID# 061103G

County: LENAWEE HUC: 4100002 Size: 3 M

Location: In the vicinity north of Weston, Fairfield Twp. T8S, R3E, Sec. 17-19.

Problem: Fish community rated poor.

TMDL Year(s): 2005 RF3RchID: 4100002

BLACK RIVER WBID# 061504A

County: ST. CLAIR HUC: 4090001 Size: 1.5 M

Location: St. Clair River confluence u/s to I-94; vicinity of Port Huron.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2009 RF3RchID: 4090001 000

BLACK RIVER DRAIN, N. BR. WBID# 083102J

County: ALLEGAN HUC: 4050002 Size: 12 M

Location: 111th Street u/s into Allegan State Game Area to 49th Street; 2.5 miles

east of Bakersville.

Problem: Nutrient enrichment, nuisance plant growths.

TMDL Year(s): 2006 RF3RchID: 4050002 10

BLAKELY DRAIN / MARSH CREEK WBID# 061301B

County: WAYNE HUC: 4090004 Size: 14 M

Location: Brownstown Creek confluence u/s (including Hale Creek and excluding

Blakely Drain u/s of Hale Creek confluence). Problem: **Macroinvertebrate community rated poor.**

TMDL Year(s): 2007 RF3RchID: 4090004 134 0.00

BLUFF CREEK/ROSELAWN CREEK WBID# 221202A

County: ONTONAGON HUC: 4020102 Size: 13 M

Location: From the Bluff Creek confluence with the Sucker River u/s to Roselawn

Creek confluence u/s to Bond Falls Flowage Basin dam flume.

Problem: Fish community rated poor.

BOND FALLS FLOWAGE (MIDDLE BR. ONTONAGON RIVER)

HUC: 4020102 Size: 2118 A

WBID# 221208C

County: ONTONAGON Location: Bond Falls Flowage is an impoundment in the headwaters of the Middle Br.

Ontonagon River. NE of Sylvania on Rt. 2. and Watersmeet on Rt. 45.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

BOYNE RIVER WBID# 081403A

County: CHARLEVOIX HUC: 4060105 Size: 32 M

Location: Lake Charlevoix confluence u/s to include N. Br. and S. Br.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4060105 40 0.00

BRICKYARD CREEK WBID# **083005O**

County: CALHOUN HUC: 4050003 Size: 2 M

Location: Vicinity of Battle Creek from Minges Brook confluence u/s.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2011 RF3RchID: 40500031160

BROWNSTOWN CREEK WBID# 061301A

County: WAYNE HUC: 4090004 Size: 7 M

Location: Detroit River confluence u/s to Telegraph Rd. Problem: Macroinvertebrate community rated poor.

RF3RchID: 4090004 TMDL Year(s): 2007

BUCK CREEK WBID# 082805L

County: KENT HUC: 4050006 10 M Size:

Location: Grand River confluence u/s to 68th St.

Problem: Pathogens (Rule 100).

RF3RchID: 4050006 8 TMDL Year(s): 2006

BURDICK DRAIN WBID# 210414D

County: LAPEER HUC: 4080204 Size: 0.5 M

Location: Enters NE part of Potters Lake after crossing Davison Rd. and Olgelthorp

Rd., Elba Twp., SE 1/4 of the SW 1/4 of Sec. 6. (T7N, R9E). Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2004 RF3RchID: 4080204 0

BURT LAKE WBID# **211305X**

County: CHEBOYGAN HUC: 4070004 Size: 17120 A

Location: Vicinity of Indian River. Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

BUTTERNUT CREEK WBID# 082808F

HUC: 4050005 County: MONTCALM 8.5 M Size:

Location: Fish Creek confluence u/s to headwaters.

Problem: Fish community rated poor; bacterial slimes, pathogens (Rule 100).

RF3RchID: 4050005 19 TMDL Year(s): 2006

CABLE LAKE WBID# 080313B

County: IRON HUC: 4030106 Size: 333 A

Location: Copper Country State Forest.

Problem: Mercury Lake.

CARIBOU LAKE WBID# 211602E

County: CHIPPEWA HUC: 4070002 Size: 825 A

Location: West of DeTour Village. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

CARO IMPOUNDMENT (CASS RIVER) WBID# 210403E

County: TUSCOLA HUC: 4080205 Size: 120 A

Location: Vicinity u/s of Caro.

Problem: FCA-PCBs; Mercury Lake.

TMDL Year(s): 2010 2011 RF3RchID:

CARP CREEK TO DEER LAKE TO CARP RIVER MOUTH# WBID# 220601A

County: MARQUETTE HUC: 4020105 Size: 28 M

Location: Carp Creek is a tributary to the Deer Lake Reservoir, which discharges to

the Carp River, thence to Lake Superior.

Problem: FCA-mercury.

TMDL Year(s): 2003 RF3RchID:

CARP LAKE (AKA TROUT LAKE)

WBID# 211401B

County: CHIPPEWA HUC: 4070002 Size: 560 A

Location: Vicinity of the community of Trout Lake (sw corner of Chippewa Co.).

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

CARRIER CREEK WBID# 082812D

County: EATON HUC: 4050004 Size: 4 M

Location: Grand River confluence u/s to I-496.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2002 RF3RchID: 40500041290

CASS LAKE WBID# 061405A

County: OAKLAND HUC: 4090003 Size: 1280 A

Location: Vicinity of Keego Harbor and West Bloomfield.

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2010 2011 RF3RchID:

CASS RIVER WBID# 210402F

County: SAGINAW HUC: 4080205 Size: 1 M

Location: Vicinity of Caro at East Dayton Rd. u/s

Problem: WQS exceedances for D.O.

TMDL Year(s): 2008 RF3RchID: 4080205 7

CASS RIVER# WBID# 210402H

County: SAGINAW HUC: 4080205 Size: 7 M

Location: Shiawassee River confluence to u/s of Bridgeport.

Problem: FCA-mercury.

TMDL Year(s): 2011 RF3RchID:

CEDAR RIVER WBID# 210429A

County: GLADWIN HUC: 4080201 Size: 9 M

Location: Vicinity of Gladwin; M-61 d/s to Howard Oil Field Road.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2004 RF3RchID: 4080201 37

CHALK HILLS IMPOUNDMENT (MENOMINEE RIVER) WBID# 080303B

County: MENOMINEE HUC: 4030108 Size: 590 A

Location: Chalk Hill Dam u/s to Miscauno Island.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

CHANEY LAKE WBID# 221402B

County: GOGEBIC HUC: 4020101 Size: 520 A

Location: T45N, R45W, SEC 2, 3 AND 10 Bessemer Twp.

Problem: **FCA-mercury.**

TMDL Year(s): 2011 RF3RchID:

CHARLOTTE RIVER WBID# 211701I

County: CHIPPEWA HUC: 4070001 Size: 3 M

Location: E. of Pine Grove. Reach extends from Rt.- H63 (I.5 miles d/s of 6 Mile

Road) u/s to Rt.- H63 (1.5 miles u/s of 6 Mile Road).

Problem: Macroinvertebrate community rated poor; Nutrient enrichment.

TMDL Year(s): 2011 RF3RchID: 4070001 434 0.00

CHICAGON LAKE WBID# 080315A

County: IRON HUC: 4030106 Size: 1100 A

Location: Vicinity of Chicagon. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

CLARK LAKE WBID# 061101Q

County: JACKSON HUC: 4100002 Size: 580 A

Location: NW of Brooklyn. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

CLEAR SPRING LAKE (DEVELOPED GRAVEL PIT) WBID# 061405I

County: MACOMB HUC: 4090003 Size: 65 A

Location: Vicinity of Rochester east side. Old gravel pit that has been developed

into subdivision.

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2011 RF3RchID:

CLINTON RIVER WBID# 061404C

County: MACOMB HUC: 4090003 Size: 25 M

Location: Lake St. Clair confluence u/s to Yates Park Dam (just d/s of Utica).

Problem: FCA-PCBs; CSOs, pathogens (Rule 100).

TMDL Year(s): 2010 2006 RF3RchID: 4090003 000

CLINTON RIVER WBID# 061404A

County: OAKLAND HUC: 4090003 Size: 11 M

Location: Yates Dam u/s to Pontiac WWTP outfall.

Problem: Fish community rated poor.

TMDL Year(s): 2006 RF3RchID: 4090003 000

CLINTON RIVER WBID# 061404D

County: MACOMB HUC: 4090003 Size: 1 M

Location: N. Bound Gratiot Avenue (S. Broadway St.), Mt. Clemens. STORET

#500233. 1 mile reach (u/s and d/s of Gratiot Avenue).

Problem: WQS exceedances for mercury.

COLDWATER LAKE WBID# 083216C

County: BRANCH HUC: 4050001 Size: 1610 A

Location: S. of Coldwater. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

COLDWATER LAKE WBID# 210424Y

County: ISABELLA HUC: 4080202 Size: 294 A

Location: NW Mt. Pleasant and S. of Weidman.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

COLDWATER RIVER WBID# 082811F

County: KENT HUC: 4050007 Size: 6 M

Location: From Morse Lake Avenue (Kent County) crossing u/s to Brown Road

(Barry County) in the vicinity of Freeport.

Problem: Pathogens (Rule 100).

TMDL Year(s): 2006 RF3RchID: 4050007 23

COON CREEK, E. BR. WBID# 061408C

County: MACOMB HUC: 4090003 Size: 12 M

Location: Highbank Creek confluence to u/s of Armada.

Problem: CSOs, pathogens (Rule 100); WQS exceedances for D.O.

TMDL Year(s): 2006 RF3RchID: 4090003 000

COX DRAIN WBID# 082821G

County: CLINTON HUC: 4050005 Size: 5.7 M

Location: From Hyde Road (Section 11), d/s to the confluence of Hayworth Creek

(Section 18) in Essex Township, Clinton County.

Problem: Fish and macroinvertebrate communities rated poor; Nutrient

enrichment, nuisance algal growths.

TMDL Year(s): 2009 RF3RchID: 4050005 238

CRAIG LAKE WBID# 080308F

County: BARAGA HUC: 4030107 Size: 307 A

Location: NE of Nestoria. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

CRANBERRY CREEK WBID# 210415C

County: LIVINGSTON HUC: 4080203 Size: 7 M

Location: Yellow River Drain confluence u/s. Problem: **Fish community rated poor.**

TMDL Year(s): 2007 RF3RchID: 4080203

CROOKED CREEK WBID# 083007J

County: CALHOUN HUC: 4050003 Size: 2 M

Location: At 11 Mile Rd., Emmett Twp. (T2S, R7W, Sec 35). Problem: **Macroinvertebrate community rated poor.**

TMDL Year(s): 2011 RF3RchID: 4050003 744 0.00

CROOKED LAKE WBID# 211308X

County: EMMET HUC: 4070004 Size: 2400 A

Location: Vicinity of Oden and Ponshewaing.

Problem: Mercury Lake.

CROSWELL IMPOUNDMENT (BLACK RIVER) WBID# 061504F

County: SANILAC HUC: 4090001 Size: 14 A

Location: Black River in the vicinity of Croswell (Croswell Impoundment u/s to the

confluence of Elk Cr.)

Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID:

CROTON POND (MUSKEGON RIVER) WBID# 082702A

County: NEWAYGO HUC: 4060102 Size: 1235 A

Location: Croton Twp. R11W, T12N, Sec. 4,5,6,and 7 near Croton

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

CRYSTAL LAKE WBID# 081801D

County: BENZIE HUC: 4060104 Size: 9711 A

Location: Vicinity of Benzonia and Beulah.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

CULVER CREEK WBID# 210501A

County: BAY HUC: 4080102 Size: 0.5 M

Location: Kawkawlin River confluence u/s.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2007 RF3RchID: 4080102 12

DAVIS CREEK WBID# 083005V

County: KALAMAZOO HUC: 4050003 Size: 4.6 M

Location: Kalamazoo River confluence u/s to Cork Street.

Problem: Oil.

TMDL Year(s): 2006 RF3RchID: 40500030056

DEER CREEK WBID# 061408D

County: MACOMB HUC: 4090003 Size: 7 M

Location: N. Br. Clinton River confluence u/s.

Problem: Pathogens (Rule 100).

TMDL Year(s): 2006 RF3RchID: 4090003 000

DEER CREEK WBID# 083301D

County: BERRIEN HUC: 4040001 Size: 7 M

Location: S. Br. Galien River confluence u/s to the headwaters in vicinity of Three

Problem: Untreated sewage discharge, pathogens (Rule 100);

Macroinvertebrate community rated poor; Nuisance algae and

TMDL Year(s): 2002 RF3RchID: 4040001 440 0.00

DEER CREEK WBID# 082801K

County: OTTAWA HUC: 4050006 Size: 47 M

Location: Grand River confluence u/s to headwaters headwaters - entire watershed

including Beaver Creek.

Problem: D.O. violations; Fish and macroinvertebrate communities rated

poor; Fish kills; Nutrient enrichment; Untreated sewage

discharge, pathogens (Rule 100).

TMDL Year(s): 2011 RF3RchID: 4050006 36 0.00

DETROIT RIVER WBID# 061401A

County: WAYNE HUC: 4090004 Size: 28 M

Location: Entire river from Lake St. Clair d/s Lake Erie.

Problem: FCA-PCBs, TCDD (dioxin), mercury; WQS exceedances for

mercury; CSO, pathogens (Rule 100);.

TMDL Year(s): 2008 2011 2007 RF3RchID: 4090004 000

DOWAGIAC RIVER WBID# 083205J

County: CASS HUC: 4050001 Size: 8 M

Location: St. Joseph River confluence u/s to Pucker Street Dam, thence, u/s to the

community of Sumnerville

Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID: 4050001 62 0.00

DUCK LAKE WBID# 221207X

County: GOGEBIC HUC: 4020102 Size: 610 A

Location: SW of Watersmeet. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

DUFF CREEK WBID# 210406A

County: SANILAC HUC: 4080205 Size: 6 M

Location: S.Br. Cass River u/s to vicinity of Marlette.

Problem: Untreated sewage discharges, pathogens (Rule 100);

Macroinveretbrate community rated poor.

TMDL Year(s): 2004 2009 RF3RchID: 4080205 20 0.00

DUKE CREEK WBID# 082804K

County: KENT HUC: 4050006 Size: 11 M

Location: NW of Sparta and tributary to the Rogue River. Tyrone Twp., Sec. 36, u/s

Nelson Twp., Sec. 6.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2006 RF3RchID: 4050006 32

EAGLE RIVER, E. AND W. BRANCHES#

County: KEWEENAW HUC: 4020103 Size: 8.5 M

WBID# 220901D

Location: U/s from the confluence of these two streams (vicinity of Phoenix).

Problem: WQS exceedances for copper; Macroinvertebrate community rated

TMDL Year(s): 2008 RF3RchID:

EAST POND CREEK WBID# 061408G

County: MACOMB HUC: 4090003 Size: 8 M

Location: N. Br. Clinton River confluence u/s to East Mill Lake outlet, NW of Romeo.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2006 RF3RchID: 4090003 364 0.00

ECHO LAKE WBID# 220401B

County: ALGER HUC: 4020201 Size: 210 A

Location: Grand Isle (island off shore at Munising).

Problem: Mercury Lake.

ECORSE RIVER WBID# 061301I

County: WAYNE HUC: 4090004 Size: 25 M

Location: Detroit River confluence u/s (so as to include Ecorse Creek and La Blanc Problem: Macroinveretbrate community rated poor; Untreated sewage

discharges, pathogens (Rule 100).

TMDL Year(s): 2003 RF3RchID: 4090004 175 0.00

ELK LAKE WBID# 081501C

County: ANTRIM/GRAND TRAVERSE HUC: 4060105 Size: 7730 A

Location: Vicinity of Elk Rapids.
Problem: **FCA-PCBs, mercury.**

TMDL Year(s): 2010 2011 RF3RchID:

ELLSWORTH LAKE WBID# 081503I

County: ANTRIM HUC: 4060105 Size: 120 A

Location: Vicinity of Ellsworth. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

ESCANABA RIVER WBID# 080601D

County: DELTA HUC: 4030110 Size: 1 M

Location: Lake Michigan confluence u/s.

Problem: WQS exceedance for PCBs and mercury.

TMDL Year(s): 2010 2011 RF3RchID: 4030110 30 0.00

FARMERS CREEK WBID# 083204E

County: BERRIEN HUC: 4050001 Size: 1 M

Location: Pipestone Road (Park Road) u/s - Vicinity of Eau Claire WWSL.

Problem: Untreated sewage discharge, pathogens (Rule 100); Nuisance algal

growths.

TMDL Year(s): 2008 RF3RchID: 40500011762

FAWN RIVER WBID# 083214D

County: ST. JOSEPH, BRANCH HUC: 4050001 Size: 30 M

Location: St. Joseph River confluence u/s (excluding Indiana waters).

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4050001 24 0.00

FENNER LAKE WBID# 083004F

County: ALLEGAN HUC: 4050003 Size: 27 A

Location: NW of Martin (T2N, R11W, S15).

Problem: FCA-PCBs; Mercury Lake; Nutrients, nuisance plants growths. TMDL Year(s): 2010 2011 2006 RF3RchID:

FENTON LAKE WBID# 210416X

County: GENESEE HUC: 4080203 Size: 845 A

Location: Vicinity of Fenton. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

FISH LAKE WBID# 083004P

County: BARRY HUC: 4050003 Size: 165 A

Location: East of Orangeville. Problem: **Mercury Lake.**

FIVE LAKES WBID# 210427Y

County: CLARE HUC: 4080201 Size: 120 A

Location: NW of Clare. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

FLAT RIVER WBID# 082807A

County: KENT HUC: 4050006 Size: 46 M

Location: Grand River confluence (Vicinity of Lowell) u/s of the Greenville

Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID: 40500060021

FLINT RIVER WBID# 210409C

County: SAGINAW/GENESEE HUC: 4080204 Size: 52 M

Location: From the Shiawassee River confluence u/s to the first dam just d/s of the

IMA Auditorium in the vicinity of Flint.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4080204 941 0.00

FLINT RIVER, S. BR. WBID# 210413P

County: LAPEER HUC: 4080204 Size: 15 M

Location: Winns Pond u/s to the Lapeer Co. and Oakland Co. line to Horseshoe Lake

outlet.

Problem: Fish community rated poor.

TMDL Year(s): 2010 RF3RchID: 4080204 2112.18

FORD LAKE/BELLEVILLE LAKE (IMP. OF HURON) WBID# 061203N

County: WASHTENAW/WAYNE HUC: 4090005 Size: 2245 A

Location: Impoundments of the Huron River located between the cities of Ypsilanti

and Romulus. Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID:

FORESTVILLE BASIN (DEAD RIVER) WBID# 220602A

County: MARQUETTE HUC: 4020105 Size: 85 A

Location: From the Tourist Park Dam u/s to the powerhouse at the west end of the

Forestville Reservoir. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

FORTUNE LAKE (SECOND LAKE) WBID# 080315E

County: IRON HUC: 4030106 Size: 103 A

Location: Vicinity of Fortune Lake.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

FOUR MILE LAKE WBID# 061204F

County: WASHTENAW HUC: 4090005 Size: 256 A

Location: West of Dexter and NE of Chelsea in the Chelsea State Game Area.

Problem: Mercury Lake.

FRANK AND POET DRAIN WBID# 061301K

County: WAYNE HUC: 4090004 Size: 14 M

Location: Detroit River confluence u/s, including all tribs. Vicinity of Gibraltar.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2007 RF3RchID: 4090004 154 0.00

FUMEE LAKE WBID# 080304C

County: DICKINSON HUC: 4030108 Size: 480 A

Location: North of Quinnesec. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

FURLONG CREEK WBID# 081202B

County: MACKINAC HUC: 4060107 Size: 2 M

Location: Indian Road u/s to Raski Road; vicinity of Engadine. Problem: **Macroinvertebrate community rated poor.**

TMDL Year(s): 2006 RF3RchID: 4060107 646

GALIEN RIVER WBID# 083301A

County: BERRIEN HUC: 4040001 Size: 2 M

Location: Galien River in the vicinity of New Troy (Flynn Rd. u/s to Elm Valley Rd).

Problem: WQS exceedances for E. coli.; pathogens (Rule 100).

TMDL Year(s): 2002 RF3RchID: 4040001 2213.84

GALIEN RIVER WBID# 083301G

County: BERRIEN HUC: 4040001 Size: 6 M

Location: Lake Michigan confluence u/s to I-94.

Problem: FCA-PCBs, chlordane.

TMDL Year(s): 2009 RF3RchID: 4040001 22 0.00

GALIEN RIVER, E. BR. WBID# 083301F

County: BERRIEN HUC: 4040001 Size: 12 M

Location: Galien River confluence u/s to the Yellow Lake and Wagner Lake outlets.

Problem: Nutrient enrichment, nuisance algal growths.

TMDL Year(s): 2009 RF3RchID: 4040001 27 0.00

GLEN LAKE WBID# 081702A

County: LEELANAU HUC: 4060104 Size: 4865 A

Location: South of Glen Arbor.

Problem: FCA-PCBs, chlordane; mercury.

TMDL Year(s): 2009 2011 RF3RchID:

GOOSE LAKE WBID# 080605D

County: MARQUETTE HUC: 4030110 Size: 441 A

Location: SE of Neguanee and Ishpeming. Problem: FCA-PCBs; Mercury Lake.

TMDL Year(s): 2010 2011 RF3RchID:

GRAND RIVER WBID# 082801J

County: OTTAWA HUC: 4050006 Size: 1 M

Location: In the vicinity of Grand Haven near the gaging station located towards the

east end of the navigational channel upstream from Lake Michigan.

Problem: WQS exceedances for mercury.

TMDL Year(s): 2011 RF3RchID: 4050006 336

GRAND RIVER WBID# 082812B

HUC: 4050004 0.5 M County: EATON Size:

Location: Grand Ledge (Sec.2, T4N,R4W) Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2008 RF3RchID: 4050004 23

GRAND RIVER WBID# 082806A

County: KENT HUC: 4050006 Size: 1 M

Location: Johnson Park, vicinity of Walker. T6N, R12W, Sec. 7.

Problem: CSO, pathogens (Rule 100).

RF3RchID: 4050006 9 TMDL Year(s): 2006

GRAND RIVER AND PORTAGE RIVER

WBID# 082816H

County: JACKSON HUC: 4050004 Size: 25 M

Location: Grand River from Tompkins Rd. u/s to the City of Jackson and Portage

River from the Grand River confluence u/s to Wooster Rd.

Problem: Untreated sewage discharge, pathogens (Rule 100); WQS exceedances for D.O.; Macroinvertebrate and fish communities

TMDL Year(s): 2003 RF3RchID: 4050004

GRAND RIVER AND RED CEDAR RIVER

WBID# 082801F

County: OTTAWA/JACKSON HUC: 4050006 Size: 235 M

Location: Lake Michigan confluence u/s to the vicinity of Jackson and Red Cedar River from Grand River confluence upstream to Michigan State University

Problem: FCA-PCBs; WQS exceedances for PCBs.

TMDL Year(s): 2009 RF3RchID: 4050006 1

GRAND RIVER AND RED CEDAR RIVER#

WBID# 082815D

County: INGHAM HUC: 4050004 Size: 12 M

Location: The Grand River from Webster Road (vicinity of Delta Mills) u/s to Moores

River Dam and the Red Cedar River from the Grand River confluence

u/s to Kalamazoo Street.

Problem: CSO, pathogens (Rule 100); WQS exceedances for D.O.; Fish kills. RF3RchID:

TMDL Year(s): 2011

GRAND SABLE LAKE WBID# 220401X

County: ALGER HUC: 4020201 Size: 630 A

Location: Grand Sable State forest.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

GREEN BAY (LAKE MICHIGAN)

WBID# 080000C

County: DELTA/MENOMINEE HUC: 4060200 Size: 1560 Mi2

Location: Green Bay - Applies to Michigan waters.

Problem: FCA-PCBs, dioxin, mercury.

TMDL Year(s): 2012 2011 RF3RchID:

GREEN LAKE WBID# **081801G**

County: GRAND TRAVERSE HUC: 4060104 Size: 1987 A

Location: Vicinity of Interlochen. Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID: GREENWOOD RESERVOIR (ESCANABA RIVER) WBID# 080605B

County: MARQUETTE HUC: 4030110 Size: 1088 A

Location: Impoundment of the Middle Branch Escanaba River.

Problem: **FCA-mercury.**

TMDL Year(s): 2011 RF3RchID:

GULL LAKE WBID# 083005I

County: KALAMAZOO/BARRY HUC: 4050003 Size: 2030 A

Location: Vicinity of Midland Park, Yorkville and MSU's Kellogg Biological Station.

Problem: FCA-PCBs; Mercury Lake.

TMDL Year(s): 2010 2011 RF3RchID:

GULLIVER LAKE WBID# 081201J

County: SCHOOLCRAFT HUC: 4060107 Size: 837 A

Location: Vicinity of Gulliver, S of R#2.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

GUN LAKE WBID# 083004I

County: BARRY HUC: 4050003 Size: 2680 A

Location: At Yankee Springs State Park (Yankee Springs Twp.)

Problem: Pathogens (Rule 100).

TMDL Year(s): 2011 RF3RchID:

GUN RIVER WBID# 083004M

County: ALLEGAN HUC: 4050003 Size: 1 M

Location: 122nd Avenue u/s to Gun Lake.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2011 RF3RchID: 40500031310

HAMILTON LAKE WBID# 080303A

County: DICKINSON HUC: 4030108 Size: 75 A

Location: SE of Loretto.
Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

HAMLIN LAKE WBID# 082002B

County: MASON HUC: 4060101 Size: 4990 A

Location: Vicinity of Hamlin Lakes. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

HAMMELL CREEK WBID# 2210010

County: HOUGHTON HUC: 4020103 Size: 5 M

Location: Trapp Rock River confluence u/s. Problem: **WQS exceedances for mercury.**

TMDL Year(s): 2002 RF3RchID: 4020103 306 0.00

HAVEN-MAX LAKE DR./GREAT BEAR LAKE AND DRAIN# WBID# 083102L

County: VAN BUREN HUC: 4050002 Size: 4 M

Location: U/s of Great Bear Lake d/s to Great Bear Lake d/s via Great Bear Lake

Drain confluence with S. Br. Black River.

Problem: Nutrient enrichment, nuisance algal growths.

TMDL Year(s): 2004 RF3RchID:

HERON LAKE WBID# 210414F

County: OAKLAND HUC: 4080204 Size: 132 A

Location: NW of Austin Corners and NW of Valley and Wildwood lakes.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

HESS LAKE WBID# 082702L

County: NEWAYGO HUC: 4060102 Size: 1125 A

Location: SE of Newaygo. Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID:

HIGGINS LAKE WBID# 082713A

County: ROSCOMMON HUC: 4060102 Size: 9600 A

Location: Vicinity of Roscommon.

Problem: FCA-PCBs, chlordane and mercury.

TMDL Year(s): 2010 2011 RF3RchID:

HOLLOWAY RESERVOIR (FLINT RIVER IMP.)

WBID# 210411X

County: GENESEE HUC: 4080204 Size: 954 A

Location: NE of Richfield Center (Flint area).

Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID:

HOLLY DRAIN/THREE MILE CREEK WBID# 210416E

County: SHIAWASSEE HUC: 4080203 Size: 15 M

Location: Shiawassee River confluence u/s so as to include Three Mile Creek.

Problem: Untreated sewage discharge, Pathogen (Rule 100).

TMDL Year(s): 2010 RF3RchID: 4080203 677 0.00

HONEY CREEK WBID# 061205Q

County: LIVINGSTON HUC: 4090005 Size: 16 M

Location: Vicinity of Pinckney. Mill Pond at Toma Road u/s to include headwaters.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2007 RF3RchID: 4090005 615 5.34

HONEY CREEK WBID# 061205AI

County: WASHTENAW HUC: 4090005 Size: 0.5 M

Location: Confluence of Huron River u/s to Wagner Rd.

Problem: Pathogens (Rule 100)

TMDL Year(s): 2009 RF3RchID: 4090005 19

HORSESHOE LAKE DRAIN WBID# 061205R

County: LIVINGSTON/WASHTENAW HUC: 4090005 Size: 1.4 M

Location: Barker Road u/s to the Horseshoe Lake outlet.
Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2009 RF3RchID: 4090005 645

HOUGHTON LAKE WBID# 082713B

County: ROSCOMMON HUC: 4060102 Size: 20044 A

Location: Vicinity of Houghton Lake, Houghton Heights and Prudenville.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

HUBBARD LAKE WBID# 211001C

County: ALCONA HUC: 4070006 Size: 8850 A

Location: Vicinity of Backus Beach.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

INTERMEDIATE LAKE WBID# 081503H

County: ANTRIM HUC: 4060105 Size: 1520 A

Location: Vicinity of Central Lake community.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

JOHNSON CREEK WBID# 061304I

County: WAYNE, WASHTENAW HUC: 4090004 Size: 7 M

Location: Walled Lake Br. confluence u/s to 5-mile Rd.

Problem: WQS exceedances for D.O.

TMDL Year(s): 2007 RF3RchID: 4090004 248 0.00

JORDAN LAKE WBID# 082811A

County: BARRY/IONIA HUC: 4050007 Size: 430 A

Location: In the vicinity of Lake Odessa.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

KALAMAZOO RIVER WBID# 083001D

County: ALLEGAN HUC: 4050003 Size: 1 M

Location: 57th Street in the vicinity of New Richmond.

Problem: WQS exceedances for mercury.

TMDL Year(s): 2011 RF3RchID: 4050003 5

KALAMAZOO RIVER (Includes Morrow Pond, Lake Allegan, and WBID# 083005A

Kalamazoo Lake)

County: CALHOUN/KALAMAZOO/ALLEG HUC: 4050003 Size: 85 M

AN

Location: Kalamazoo River (Lake Michigan confluence u/s to the Battle Creek

Problem: FCA-PCBs; WQS exceedances for PCBs.

TMDL Year(s): 2006 RF3RchID: 40500031411

KAWKAWLIN RIVER WBID# 210501F

County: BAY HUC: 4080102 Size: 5 M

Location: Saginaw Bay confluence u/s to the N. Br. Kawkawlin River confluence.

Problem: FCA-PCBs.

TMDL Year(s): 2002 RF3RchID: 4080102 5

KAWKAWLIN RIVER, N. BR. WBID# 210501G

County: BAY HUC: 4080102 Size: 13 M

Location: Kawkawlin River confluence u/s to Eightmile Road.

Problem: WQS exceedance for D.O.

TMDL Year(s): 2007 RF3RchID: 4080102 6

WBID# 061206R

County: OAKLAND HUC: 4090005 Size: 1000 A

Location: An impoundment on the mainstem of the Huron River. The u/s boundry is

Dawson Rd. d/s to the Kent Lake spillway at I-96.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

KIDS CREEK WBID# 081601D

County: GRAND TRAVERSE HUC: 4060105 Size: 3 M

Location: Boardman River confluence u/s to M-37/US-31.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2010 RF3RchID: 4060105 938 0.00

KLINGER LAKE WBID# 083215B

County: ST. JOSEPH HUC: 4050001 Size: 830 A

Location: East of White Pigeon and West of Stugis.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

LAKE ANN WBID# 081701A

County: BENZIE HUC: 4060104 Size: 527 A

Location: Vicinity of Lake Ann. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE BELLAIRE WBID# 081503G

County: ANTRIM HUC: 4060105 Size: 1775 A

Location: Vicinity of Bellaire. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE BESSER (NINTH STREET POND) WBID# 211002C

County: ALPENA HUC: 4070006 Size: 392 A

Location: Vicinity of Alpena. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE EMILY WBID# 080315Y

County: IRON HUC: 4030106 Size: 320 A

Location: N. of Chicagon.
Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE ERIE WBID# 060000A

County: MONROE/WAYNE HUC: 4120200 Size: 115 MI2

Location: Lake Erie waters under Michigan jurisdiction.

Problem: FCA-PCBs, dioxin.

TMDL Year(s): 2012 RF3RchID:

LAKE ERIE - LUNA PIER BEACH WBID# 060101D

County: MONROE HUC: 4100001 Size: 1 M

Location: City of Luna Pier beach, Lake Erie.

Problem: Beach closings; pathogens (Rule 100).

TMDL Year(s): 2007 RF3RchID:

LAKE GOGEBIC WBID# 221204F

County: GOGEBIC HUC: 4020102 Size: 12800 A

Location: Vicinity of Bergland and Lake Gogebic.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

LAKE HURON WBID# 210000A

County: MACKINAC/ST.CLAIR HUC: 4080300 Size: 9100 MI2

Location: Lake Huron waters under Michigan jurisdiction.

Problem: FCA-PCBs, chlordane, dioxin.

TMDL Year(s): 2012 RF3RchID:

LAKE HURON - BURTCHVILLE TWP. PARK BEACH WBID# 210101F

County: ST. CLAIR HUC: 4080104 Size: 1 M

Location: East end of Harris Rd.

Problem: Beach closings, pathogens (Rule 100).

TMDL Year(s): 2005 RF3RchID:

LAKE HURON - KEEWADHIN ROAD BEACH WBID# 210101G

County: ST. CLAIR HUC: 4080104 Size: 1 M

Location: East end Keewahdin Rd.

Problem: Beach closings, pathogens (Rule 100).

TMDL Year(s): 2005 RF3RchID:

LAKE HURON - LAKEPORT STATE CAMPGROUND WBID# 210101D

County: ST. CLAIR HUC: 4080104 Size: 1 M

Location: Lakeport State Park, N. of Lakeport.

Problem: Beach closings, pathogens (Rule 100).

TMDL Year(s): 2005 RF3RchID:

LAKE HURON - METCALF ROAD BEACH WBID# 210101E

County: ST. CLAIR HUC: 4080104 Size: 1 M

Location: East end Metcalf Rd.

Problem: Beach closings, pathogens (Rule 100).

TMDL Year(s): 2005 RF3RchID:

LAKE INDEPENDENCE WBID# 220702X

County: MARQUETTE HUC: 4020105 Size: 1860 A

Location: Vicinity of Big Bay. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE MACATAWA (MACATAWA RIVER MOUTH) WBID# 082901D

County: OTTAWA HUC: 4050002 Size: 1780 A

Location: Vicinity of Holland (Park and Holland Twps.).

Problem: FCA-PCBs, chlordane.

TMDL Year(s): 2009 RF3RchID:

LAKE MARGRETHE WBID# 081907X

County: CRAWFORD HUC: 4060103 Size: 1920 A

Location: SW of Grayling. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE MICHIGAN - NORTH OF FRANKFORT WBID# 080000A

County: BENZIE/DELTA HUC: 4060200 Size: 6915 MI2

Location: Lake Michigan waters under Michigan jurisdiction located north of

Problem: FCA-PCBs, chlordane, dioxin, mercury.

TMDL Year(s): 2012 RF3RchID:

LAKE MICHIGAN - SOUTH OF FRANKFORT WBID# 080000B

County: BENZIE/BERRIEN HUC: 4060200 Size: 13825 MI2

Location: Lake Michigan waters under Michigan jurisdiction located south of

Problem: FCA-PCBs, chlordane, DDT, dioxin, mercury.

TMDL Year(s): 2012 RF3RchID:

LAKE MITCHELL WBID# 082712Z

County: WEXFORD HUC: 4060102 Size: 2580 A

Location: W. of Cadillac. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE NEPESSING WBID# 210413J

County: LAPEER HUC: 4080204 Size: 414 A

Location: SW of Lapeer, Elba Twp.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

LAKE ORION WBID# 061406A

County: OAKLAND HUC: 4090003 Size: 470 A

Location: Orion Twp. at Lake Orion. Problem: **FCA-PCBs, mercury.**

TMDL Year(s): 2010 2011 RF3RchID:

LAKE PONEMAH WBID# 210416Z

County: GENESEE HUC: 4080203 Size: 380 A

Location: NW of Fenton. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LAKE ST. CLAIR WBID# 061000A

County: MACOMB/WAYNE HUC: 4090002 Size: 430 Mi2

Location: Lake St. Clair waters under Michigan jurisdiction.

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2010 2011 RF3RchID:

LAKE ST. CLAIR METROPOLITAN BEACH WBID# 061403A

County: MACOMB HUC: 4090002 Size: 2 M

Location: Metropolitan Beach area.

Problem: Beach closings; CSO, pathogens (Rule 100).

TMDL Year(s): 2006 RF3RchID:

LAKE ST. CLAIR SHORES MEMORIAL BEACH WBID# 061403B

County: MACOMB HUC: 4090002 Size: 1 M

Location: Lake St. Clair at Memorial Beach

Problem: Beach closings; CSO, pathogens (Rule 100).

TMDL Year(s): 2006 RF3RchID:

LAKE SUPERIOR WBID# 220000A

County: CHIPPEWA/GOGEBIC HUC: 4020300 Size: 16400 MI2

Location: Lake Superior waters under Michigan jurisdiction. Problem: **FCA-PCBs, chlordane, dioxin, mercury.**

TMDL Year(s): 2012 RF3RchID:

LAKEVILLE LAKE WBID# 061407A

County: OAKLAND HUC: 4090003 Size: 460 A

Location: Vicinity of Lakeville NW of Romeo.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

LANGFORD LAKE WBID# 221205A

County: GOGEBIC HUC: 4020102 Size: 481 A

Location: SE of Marenisco. Problem: **FCA-mercury.**

TMDL Year(s): 2011 RF3RchID:

LAPOINTE DRAIN WBID# 060101E

County: MONROE HUC: 4100001 Size: 0.6 M

Location: About 2000 feet u/s of the Lake Erie confluence in the vicinity of the

Luna Pier WWTP outfall.

Problem: D.O. WQS exceedance, Nutrient enrichment, Nuisance algal

TMDL Year(s): 2007 RF3RchlD: 4100001039714.

LENAWEE COUNTY DRAIN No.70 WBID# 061103H

County: LENAWEE HUC: 4100002 Size: 1 M

Location: Tributary to Big Meadow Creek, Palmyra Twp from Manor Farms and

Humphrey Hwy d/s to west of Palmyra

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2002 RF3RchID: 4100002 575

LETTS CREEK WBID# 061204D

County: WASHTENAW HUC: 4090005 Size: 1.4 M

Location: One half mile u/s of M-52 to its confluence with the North Fork Mill Creek.

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2004 RF3RchID: 4090005 20

LILY LAKE WBID# 082708C

County: CLARE HUC: 4060102 Size: 161 A

Location: NE of Lake George. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LIMEKILN LAKE WBID# 061205T

County: LIVINGSTON HUC: 4090005 Size: 28 A

Location: W. of S. Lyon just d/s of Rushton Rd. on Yerkes Drain.

Problem: Nutrient enrichment.

TMDL Year(s): 2004 RF3RchID:

LINCOLN LAKE WBID# 082807Z

County: KENT HUC: 4050006 Size: 411 A

Location: NW of Greenville. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LITTLE BAY DE NOC (LAKE MICHIGAN) WBID# 080801B

County: DELTA HUC: 4030111 Size: 45 MI2

Location: Lake Michigan in the vicinity of Escanaba. Outer boundary between

Portage Point and Dutchman Point.

Problem: FCA-PCB, mercury.

TMDL Year(s): 2010 2011 RF3RchID:

LITTLE BLACK CREEK WBID# 082701T

County: MUSKEGON HUC: 4060101 Size: 7 M

Location: Mona Lake inlet u/s.

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2003 RF3RchID: 4060101 13

LITTLE RABBIT RIVER WBID# 083002E

County: ALLEGAN HUC: 4050003 Size: 7 M

Location: Rabbit River confluence u/s (does not include Red Run Drain - because of

separate listing).

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2010 RF3RchID: 4050003 45 0.29

LITTLEFIELD LAKE WBID# 210424E

County: ISABELLA HUC: 4080202 Size: 183 A

Location: N. of Weidman. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

LONG LAKE WBID# 082807Y

County: IONIA HUC: 4050006 Size: 356 A

Location: NE of Belding and W. of Shiloh.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

LOST CREEK WBID# 082820B

County: CLINTON HUC: 4050005 Size: 2.5 M

Location: From the confluence with Stoney Creek u/s (between Townsend and

Walker Road).

Problem: Fish and macroinvertebrate communities rated poor; Nutrient

enrichment and nuisance algal growths; Bacterial slimes.

TMDL Year(s): 2009 RF3RchID: 4050005 199

LOWER TROUT LAKE WBID# 061406E

County: OAKLAND HUC: 4090003 Size: 62 A

Location: W. of Goodison. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

MACEDAY LAKE WBID# 061406F

County: OAKLAND HUC: 4090003 Size: 200 A

Location: Vicinity of Waterford. Problem: **FCA-PCBs**, **mercury**.

TMDL Year(s): 2010 2011 RF3RchID:

MACON CREEK WBID# 061101C

County: LENAWEE HUC: 4100002 Size: 9 M

Location: Raisin River confluence u/s headwaters at Neblo Rd.

Problem: Fish kills, fish and macroinvertebrate community rated poor.

TMDL Year(s): 2005 RF3RchID: 4100002 7

MALLETS CREEK WBID# 061203I

County: WASHTENAW HUC: 4090005 Size: 2 M

Location: Huron River confluence u/s to Packard Rd.

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2004 RF3RchID: 4090005 499

MANISTEE LAKE WBID# 081901A

County: MANISTEE HUC: 4060103 Size: 930 A

Location: East of Manistee, Filer Twp.

Problem: FCA-PCBs, mercury; CSO, pathogens (Rule 100).

TMDL Year(s): 2010 2011 2006 RF3RchID:

MANISTIQUE RIVER WBID# 081103I

County: SCHOOLCRAFT HUC: 4060106 Size: 2 M

Location: Lake Michigan confluence u/s to old US-2 (M-94).

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2011 RF3RchlD: 4060106 2

MANISTIQUE RIVER AND NORTH MANISTIQUE LAKE# WBID# 081103B

County: SCHOOLCRAFT HUC: 4060106 Size: 45 M

Location: Manistique River (mouth u/s to M-77) and N. Manistique Lake.

Problem: FCA-mercury; WQS exceedances for mercury.

TMDL Year(s): 2011 RF3RchID:

MAPLE RIVER WBID# 082821D

County: GRATIOT/CLINTON/SHIAWASSE HUC: 4050005 Size: 28 M

Location: East of Maple River State Game Area. Ransom Road (NW of Bannister)

u/s Warren Road; SE of Ovid.

Problem: Nutrient enrichment, nuisance plant growths.

TMDL Year(s): 2009 RF3RchID: 4050005 10

MARION LAKE WBID# 221208B

County: GOGEBIC HUC: 4020102 Size: 318 A

Location: W. of Watersmeet. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

MARTEN LAKE WBID# 220803C

County: IRON HUC: 4020104 Size: 176 A

Location: Ottawa National Forest. 2 miles south of Houghton/Baraga county line.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

MCKINZIE CREEK WBID# 083205H

County: CASS HUC: 4050001 Size: 1.6 M

Location: Nieb Concrete settling ponds at Barron Lake Road. NE of Niles

(T7S.R16W.S9 and S16).

Problem: Fish community rated poor.

TMDL Year(s): 2003 RF3RchID: 4050001 91 0.00

MENOMINEE RIVER WBID# 080303C

County: MENOMINEE HUC: 4030108 Size: 85 M

Location: Menominee River from the first dam u/s to the confluence of the Brule Problem: FCA-PCBs, mercury; WQS exceedances for PCBs and mercury.

TMDL Year(s): 2009 2011 RF3RchID: 4030108 1

MENOMINEE RIVER WBID# 080303E

County: MENOMINEE HUC: 4030108 Size: 1 M

Location: Green Bay confluence u/s 1.0 mile. Problem: **CSO**, **pathogens** (**Rule 100**).

TMDL Year(s): 2009 RF3RchID: 4030108 15

MICHIGAMME RIVER AND IMPOUNDMENTS#

WBID# **080307B**

County: IRON HUC: 4030107 Size: 43 M

Location: Menominee River confluence u/s to include the Michigamme River and Impoundments (Includes Lake Michigamme, Michigamme Reservoir,

Peavy Pond and Michigamme Lake).

Problem: FCA-mercury.

TMDL Year(s): 2011 RF3RchID:

MILAKOKIA LAKE WBID# 081201A

County: MACKINAC HUC: 4060107 Size: 1956 A

Location: W. of Gould City. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

MILK RIVER WBID# 061410A

County: WAYNE/MACOMB HUC: 4090002 Size: 1.3 M

Location: Tributary to Lake St. Clair at the Wayne County/Macomb County line. Problem: CSO, pathogen (Rule 100); D.O.; nutrient enrichment; Fish kills.

TMDL Year(s): 2005 RF3RchID: 4090002 0

MILL CREEK WBID# 061503A

County: ST. CLAIR HUC: 4090001 Size: 1 M

Location: Village of Yale, T7N,R14E, Sec.1.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2004 RF3RchID: 4090001 1415.00

MILL POND CREEK WBID# 082701V

County: MUSKEGON HUC: 4060101 Size: 1.5 M

Location: Tributary to White Lake just west of Whitehall.

Problem: WQS exceedances for triethylene glycol dichloride, bis-2-

chloroethyl ether and tetrachloroethylene.

TMDL Year(s): 2004 RF3RchID: 4060101 18

MILLECOQUINS LAKE WBID# 0812020

County: MACKINAC HUC: 4060107 Size: 1062 A

Location: NW of Naubinway. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

MONA LAKE WBID# 082701U

County: MUSKEGON HUC: 4060101 Size: 695 A

Location: Tributary to Lake Michigan. Problem: **FCA-PCBs**, **mercury**.

TMDL Year(s): 2009 2011 RF3RchID:

MOORES PARK IMPOUNDMENT (GRAND RIVER)

WBID# **082815B**

County: INGHAM HUC: 4050004 Size: 110 A

Location: Lansing u/s of Moores Park Dam on the Grand River. Moores Park Dam

u/s to Waverly Road.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

MORRISON LAKE WBID# 082810E

County: IONIA HUC: 4050006 Size: 330 A

Location: S. of Rt. 96 due S. of Saranac.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

MULLETT LAKE WBID# 211305Y

County: CHEBOYGAN HUC: 4070004 Size: 17360 A

Location: S. of Cheboygan.and E. of Burt Lake.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

MUSKEGON LAKE AND MUSKEGON RIVER# WBID# 082701B

County: MUSKEGON/NEWAYGO HUC: 4060102 Size: 40 M

Location: Lake Michigan confluence u/s to Croton Dam (Vicinity of Croton).

Problem: FCA-PCBs, mercury; WQS exceedances for PCBs and mercury.

TMDL Year(s): 2008 2011 RF3RchID:

NAWAKWA LAKE WBID# 220303B

County: ALGER HUC: 4020201 Size: 399 A

Location: N. of Lavender Corners and Rt. 77.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

NET RIVER WBID# 080313A

County: IRON HUC: 4030106 Size: 11 M

Location: Net River including the wide waters. T44N, R34W, Sec. 7 to T46, R34W,

Sec. 24.

Problem: FCA-mercury.

TMDL Year(s): 2011 RF3RchID: 4030106 6

NETTIE LAKE WBID# 211201B

County: PRESQUE ISLE HUC: 4070003 Size: 278 A

Location: SE of Millersburg. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

NORTON CREEK WBID# 061206M

County: OAKLAND HUC: 4090005 Size: 0.9 M

Location: Pontiac Trail d/s of West Maple Road to confluence with the next tributary entering Norton Creek from the west. T2N,R8E,S31; Lat: 42.5314, Long:

83.5478.

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2009 RF3RchID: 4090005 21

ORCHARD LAKE WBID# 061406G

County: OAKLAND HUC: 4090003 Size: 788 A

Location: Vicinity of Orchard Lake.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

OSMUN LAKE WBID# 061405L

County: OAKLAND HUC: 4090003 Size: 15 A

Location: U/s of Terry Lake in the vicinity of Pontiac and part of the Upper Silver

Lake drainage into the headwaters of the Clinton River.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

OTTAWA LAKE WBID# 080318B

County: IRON HUC: 4030106 Size: 551 A

Location: West of Iron River. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

OTTAWA RIVER WBID# 060101C

County: MONROE HUC: 4100001 Size: 1 M

Location: N. Maumee Bay confluence u/s to the Michigan/Ohio border.

Problem: FCA-PCBs; WQS exceedances for the pesticides lindane (a-BHC)

and aldrin.

TMDL Year(s): 2007 RF3RchID: 4100001 10

OTTER LAKE WBID# 220805A

County: HOUGHTON HUC: 4020104 Size: 890 A

Location: Vicinity of Askel. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

OX CREEK WBID# 083202H

County: BERRIEN HUC: 4050001 Size: 3.5 M

Location: Paw Paw River confluence u/s to Napier Avenue, vicinity of Benton Harbor.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2008 RF3RchID: 4050001 94 0.00

PAINT CREEK WBID# 061201D

County: WASHTENAW HUC: 4100001 Size: 4.6 M

Location: R6E, T3S, Sec. 12 at Ypsilanti, stations are located just above and just

below the retention basin 1600 feet S. of I-94.

Problem: D.O.; Fish kills; Pathogens (Rule 100).

TMDL Year(s): 2005 RF3RchID: 4100001 18

PAINT RIVER WBID# 080315D

County: IRON HUC: 4030106 Size: 0.5 M

Location: Vicinity of Crystal Falls.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2009 RF3RchID: 4030106 2

PAINT RIVER POND WBID# 080315C

County: IRON HUC: 4030106 Size: 455 A

Location: Paint River and Brule River Confluence into Paint River Pond

Impoundment (AKA the Brule Island Impoundment)

Problem: FCA-mercury.

TMDL Year(s): 2011 RF3RchID:

PEET CREEK WBID# 082821F

County: CLINTON HUC: 4050005 Size: 6 M

Location: U/s Anderson RdT8N, R4W (Lebanon, Dallas and Essex Twps.)

Problem: Nutrient enrichment, nuisance plant growths.

TMDL Year(s): 2009 RF3RchID: 4050005 20

PERCH LAKE WBID# 220804Z

County: IRON HUC: 4020104 Size: 994 A

Location: N. of Iron River. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

PERCH LAKE WBID# 080308B

County: MARQUETTE HUC: 4030107 Size: 47 A

Location: SE of Republic. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

PERE MARQUETTE RIVER AND PERE MARQUETTE WBID# 082101E

County: MASON/LAKE HUC: 4060101 Size: 24.5 M

Location: Lake Michigan confluence u/s to 1 mile u/s of Scottville Road.

Problem: FCA-PCBs, mercury; WQS exceedances for PCBs and mercury. TMDL Year(s): 2008 2011 RF3RchID:

PICKEREL LAKE WBID# 211308A

County: EMMET HUC: 4070004 Size: 1080 A

Location: SE of Alanson. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

PIGEON RIVER WBID# 082901R

County: OTTAWA HUC: 4050002 Size: 10 M

Location: Olive Twp. d/s to the inlet to Pigeon Lake in Port Sheldon Twp. Problem: **Fish and macroinvertebrate communities rated poor; Nutrient**

enrichment, nuisance algae growths.

TMDL Year(s): 2007 RF3RchID: 4050002 20

PIKE LAKE WBID# 220301B

County: LUCE HUC: 4020201 Size: 292 A

Location: NE of Pine Stump Junction.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

PINE CREEK WBID# 082821L

County: GRATIOT HUC: 4080202 Size: 9 M

Location: SW of Ithaca. Grant Road u/s to 0.8 miles u/s of St. Charles Road.

Problem: Nutrient enrichment, nuisance plant growths.

TMDL Year(s): 2007 RF3RchID: 4080202 25

PINE LAKE WBID# 083004H

County: BARRY HUC: 4050003 Size: 660 A

Location: Vicinity of Praireville. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

PINE LAKE WBID# 081904K

County: MANISTEE HUC: 4060103 Size: 156 A

Location: SW of Wellston. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

PINE RIVER WBID# 061502F

County: ST. CLAIR HUC: 4090001 Size: 27 M

Location: St. Clair River confluence u/s to I-69.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4090001 15 0.00

PINE RIVER AND ST. LOUIS IMPOUNDMENT# WBID# 210421A

County: MIDLAND/GRATIOT HUC: 4080202 Size: 36 M

Location: Chippewa River confluence u/s to include St. Louis Impoundment at St.

Problem: Nutrient enrichment, nuisance algal growths.

TMDL Year(s): 2004 RF3RchID:

PLANTER CREEK WBID# 221404B

County: GOGEBIC HUC: 4020101 Size: 0.5 M

Location: Due N. of Wakefield.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2010 RF3RchID: 4020101 919 0.00

PLASTER CREEK WBID# 082806H

County: KENT HUC: 4050006 Size: 12 M

Location: Grand River confluence u/s to Dutton Park (Hanna Lake Avenue and 76th

Street).

Problem: Fish and macroinvertebrate communities rated poor; Pathogens

(Rule 100).

TMDL Year(s): 2002 RF3RchID: 4050006 10

POMEROY LAKE WBID# 221402Z

County: GOGEBIC HUC: 4020101 Size: 314 A

Location: SE of Marenisco E. of Rt 525.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

PONTIAC LAKE WBID# 061206G

County: OAKLAND HUC: 4090005 Size: 585 A

Location: NW. of Pontiac in the headwaters of the Huron River.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

PORTAGE CREEK WBID# 061205V

County: INGHAM HUC: 4090005 Size: 3 M

Location: Shepper Rd. u/s to City of Stockbridge.

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2008 RF3RchID: 4090005 0

PORTAGE LAKE WBID# 082816Q

County: JACKSON HUC: 4050004 Size: 360 A

Location: NE of Jackson. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

PORTAGE LAKE WBID# 221001B

County: HOUGHTON HUC: 4020103 Size: 10970 A

Location: Vicinity of Houghton and Hancock. Problem: **FCA-PCBs; Mercury Lake.**

TMDL Year(s): 2010 2011 RF3RchID:

PORTAGE LAKE WBID# 081802B

County: MANISTEE HUC: 4060104 Size: 2164 A

Location: Vicinity of Onekama.

Problem: **FCA-PCBs.**

TMDL Year(s): 2010 RF3RchID:

PORTAL CREEK WBID# 221303C

County: ONTONAGON HUC: 4020101 Size: 1 M

Location: Mineral River confluence u/s.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2010 RF3RchID: 4020101 724 0.00

POTTERS LAKE WBID# 210413F

County: LAPEER HUC: 4080204 Size: 160 A

Location: Vicinity of Elba Twp.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2004 RF3RchID:

PRATVILLE DRAIN & LIME LAKE WBID# 060102B

County: HILLSDALE HUC: 4100006 Size: 0.5 M

Location: Wright Township

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2003 RF3RchID: 4100006 236

RABBIT RIVER WBID# 083002C

County: ALLEGAN HUC: 4050003 Size: 3 M

Location: Green Lake Creek confluence u/s to 7th Street in the vicinity of Wayland. Problem: Macroinvertebrate community rated poor; WQS exceedance of

pesticide endosulphan.

TMDL Year(s): 2005 RF3RchID: 4050003 956 0.00

RAINBOW LAKE WBID# 082807K

County: MONTCALM HUC: 4050006 Size: 155 A

Location: E. of Trufant.
Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

RANDALL LAKE (NORTH LAKE AND CEMETERY LAKE CHAIN) WBID# 083216H

County: BRANCH HUC: 4050001 Size: 513 A

Location: Vicinity N.W. of Coldwater. Problem: **FCA-PCBs**, **mercury**.

TMDL Year(s): 2010 2011 RF3RchID:

RED CEDAR RIVER WBID# 082818H

County: INGHAM HUC: 4050004 Size: 1 M

Location: Harris Road u/s I.0 mile.

Problem: Pathogens (Rule 100); Fish and macroinveretbrate communities

rated poor.

TMDL Year(s): 2011 RF3RchID: 4050004

RED RUN WBID# 083002D

County: ALLEGAN HUC: 4050003 Size: 8 M

Location: Little Rabbit River confluence u/s (entire stretch of Red Run).

Problem: Fish and macroinvertebrate community rated poor; WQS

exceedances for D.O.

TMDL Year(s): 2007 RF3RchID: 4050003 45 5.80

RED RUN DRAIN WBID# 061402A

County: MACOMB HUC: 4090003 Size: 6 M

Location: Clinton River confluence u/s including all tributaries to Warren, Center

Line, Madison Heights, Troy and Clawson.

Problem: CSO, pathogens (Rule 100); Macroinvertebrate community rated

TMDL Year(s): 2006 RF3RchID: 4090003 10 0.00

REEDS LAKE WBID# 082806E

County: KENT HUC: 4050006 Size: 265 A

Location: Vicinity of E. Grand Rapids. Problem: **FCA-PCBs**; **Mercury Lake.**

TMDL Year(s): 2010 2011 RF3RchID:

RICE CREEK WBID# 083008A

County: CALHOUN HUC: 4050003 Size: 0.3 M

Location: 22 1/2 Mile Road u/s for 0.25 miles.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2011 RF3RchID: 4050003 31 6.68

RICE LAKE WBID# 221001AC

County: HOUGHTON HUC: 4020103 Size: 675 A

Location: SW of Traverse Bay on Keweenaw Penninsula.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

RIFLE RIVER WBID# 210602A

County: ARENAC HUC: 4080101 Size: 8 M

Location: Saginaw Bay confluence u/s to 1 mile u/s of U.S. Rt. 23 (Vicinity of

Problem: FCA-PCBs; WQS exceedances for mercury.

TMDL Year(s): 2010 2011 RF3RchID: 4080101 24 0.03

RIO GRANDE CREEK WBID# 082803F

County: OTTAWA HUC: 4050006 Size: 0.5 M

Location: Crockery Creek confluence u/s to Chester Twp.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2003 RF3RchID: 4050006 60

RIVER RAISIN WBID# 061101P

County: LENAWEE HUC: 4100002 Size: 8 M

Location: City of Tecumseh u/s to the vicinity of the City of Clinton. Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2002 RF3RchID: 4100002 11

RIVER RAISIN WBID# 061101F

County: MONROE HUC: 4100002 25 M Size:

Location: Lake Erie confluence u/s to U.S. Rt.-23 (Vicinity of Dundee).

Problem: FCA-PCBs.

TMDL Year(s): 2005 RF3RchID: 4100002 1

RIVER RAISIN WBID# **061101G**

County: MONROE HUC: 4100002 Size: 1 M

Location: Dundee d/s 1 mile.

Problem: WQS exceedances for pesticides; Pathogens (Rule 100).

TMDL Year(s): 2005 2005 RF3RchID: 4100002 9

RIVER RAISIN WBID# 061101H

County: MONROE HUC: 4100002 1 M Size:

Location: ERA dock near mouth, Monroe u/s for 1 mile. STORET #580046

Problem: WQS exceedances for mercury.

TMDL Year(s): 2011 RF3RchID: 4100002 1

RIVER RAISIN WBID# 061101E

County: LENAWEE HUC: 4100002 Size: 16 M

Location: Lenawee County line (vicinity of Deerfield) u/s to Blissfield.

Problem: CSO, pathogens (Rule 100).

RF3RchID: 4100002 11 TMDL Year(s): 2005

RIVER RAISIN, S. BR. WBID# **061102B**

County: LENAWEE HUC: 4100002 Size: 10 M

Location: River Raisin confluence u/s to Carlton Road, vicinity of Adrian.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4100002 16 0.00

RIVER RAISIN. S. BR. WBID# 061102A

County: LENAWEE HUC: 4100002 Size: 4 M

Location: River Raisin confluence u/s to the vicinity of the Adrian WWTP.

Problem: CSO, pathogens (Rule 100); chlorides, TDS; turbidity, siltation.

TMDL Year(s): 2008 RF3RchID: 4100002 16 0.00

RIVER ROUGE WBID# **061305H**

County: WAYNE HUC: 4090004 Size: 1 M

Location: Vicinity of W. Jefferson Avenue. STORET # 820070

Problem: WQS exceedances for mercury.

TMDL Year(s): 2011 RF3RchID: 4090004 14 0.00

RIVER ROUGE (MAIN BR.); UPPER BR.; AND LOWER WBID# **061302A**

County: OAKLAND/WAYNE HUC: 4090004 Size: 70 M

Location: Detroit River confluence u/s (Main Br. River Rouge u/s to Rt. 75 in the

vicinity of Troy; the Upper Br. River Rouge (confl. To Rt. 696) and Lower

River Rouge (confl. u/s).

Problem: FCA-PCBs.

TMDL Year(s): 2008 RF3RchID: 4090004 14 0.00 RIVER ROUGE (MAIN BR.); UPPER BR.; MIDDLE BR.; LOWER BR.; WBID# 061305G

BELL BR.; FRANKLIN BR.; EVANS DITCH

County: OAKLAND/WAYNE HUC: 4090004 Size: 91 M

Location: Detroit River confluence u/s (Main River Rouge (u/s to Big Beaver Road); Upper River Rouge (u/s to Rt. 696); Middle Br. River Rouge (u/s to 8 Mile Rd.); Lower Br. (u/s to Beck Road); Bell Br. (u/s to 7 Mile Rd.; Evans Ditch (u/s to Lahser Rd.); and the Franklin Br. (u/s to Big Beaver Rd.)

Problem: Fish and macroinvertebrate communities rated poor; Pathogens;

WQS exceedances for D.O.

TMDL Year(s): 2007 RF3RchID: 4090004 15

ROUND LAKE WBID# 080902B

County: DELTA HUC: 4030112 Size: 455 A

Location: West of Uno in the Hiawatha National Forest.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

ROUND LAKE WBID# 080308D

County: MARQUETTE HUC: 4030110 Size: 38 A

Location: Located 2.5 miles north of Champion and within the Michigamme State

Forest R29W, T48N, Sec. 16

Problem: FCA-mercury.

TMDL Year(s): 2011 RF3RchID:

RUDDIMAN CREEK WBID# 082701D

County: MUSKEGON HUC: 4060102 Size: 1.5 M

Location: Muskegon Lake confluence u/s.

Problem: Fish and macroinvertebrate communities rated poor; Pathogens

(Rule 100).

TMDL Year(s): 2008 RF3RchID: 4060102 3

RUNKLE LAKE WBID# 080315B

County: IRON HUC: 4030106 Size: 76 A

Location: East of Crystal Falls. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

RYERSON CREEK WBID# 082701Q

County: MUSKEGON HUC: 4060102 Size: 2.5 M

Location: Tributary to Muskegon Lake

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2008 RF3RchID: 4060102 4

SAGINAW BAY (LAKE HURON) WBID# 210400A

County: BAY HUC: 4080300 Size: 1143 MI2

Location: Saginaw River mouth extending out some 53 miles to Lake Huron between

Port Austin and Tawas Point. Problem: **FCA-PCBs**, **dioxins**, **mercury**.

TMDL Year(s): 2010 2011 RF3RchID:

SAGINAW RIVER WBID# 210401B

County: BAY HUC: 4080206 Size: 1 M

Location: Main St., (Essexville) STORET #090177. Off boat launch site north

Woodside Avenue.

Problem: WQS exceedances for mercury.

TMDL Year(s): 2011 RF3RchID: 4080206 1

SAGINAW/CASS/TITTABAWASSEE RIVERS#

WBID# **210402I**

County: SAGINAW/MIDLAND/BAY HUC: 4080206 Size: 54 M

Location: Saginaw R. d/s to Saginaw Bay.; Cass R.(d/s Bridgeport to Shiawassee

R.); Tittabawassee R. (Midland d/s to Saginaw R.)

Problem: FCA-TCDD (dioxin).

TMDL Year(s): 2009 RF3RchID:

SALINE RIVER WBID# 061104A

County: WASHTENAW HUC: 4100002 Size: 1 M

Location: Near Mooreville, Sec. 28, York Twp.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2002 RF3RchID: 4100002 2

SALT RIVER WBID# 061409D

County: MACOMB HUC: 4090002 Size: 10 M

Location: S. of New Baltimore extending from Anchor Bay confluence u/s to 29 Mile

Problem: Pathogens (Rule 100).

TMDL Year(s): 2005 RF3RchID: 4090002 281 0.00

SAND CREEK WBID# 082801G

County: OTTAWA HUC: 4050006 Size: 16 M

Location: Chester Twp. (T9N, R13W, Sec. 34) Wilson Road d/s to confluence with Grand River, Tallmadge Twp. (T7N, R13W, Sec. 33). Just west of Kent

Problem: Fish community rated poor.

TMDL Year(s): 2006 RF3RchID: 4050006 35

SANDY CREEK WBID# 061201E

County: MONROE HUC: 4100001 Size: 4 M

Location: Sandy Creek d/s of Reinhardt Road to mouth.

Problem: Fish and macroinvertebrate communities rated poor.

TMDL Year(s): 2005 RF3RchID: 4100001 467 0.17

SANFORD LAKE (TITTABAWASSEE RIVER) WBID# 210426X

County: MIDLAND HUC: 4080201 Size: 1250 A

Location: NW of Midland at Sanford.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

SAWYER CREEK WBID# 083301E

County: BERRIEN HUC: 4040001 Size: 1.6 M

Location: Vicinity of Sawyer W. of I-94 (Trib. to Lake Michigan west of Galien River

system).

Problem: Oil.

TMDL Year(s): 2009 RF3RchID: 4040001 406 0.00

SCALES CR./KEARSARGE CR.# WBID# 221001P

County: HOUGHTON HUC: 4020103 Size: 1.75 M

Location: Valley Road u/s.

Problem: WQS exceedances for copper; Macroinvertebrate community rated

TMDL Year(s): 2008 RF3RchID:

SCHWEITZER RESERVOIR (ESCANABA RIVER) WBID# 080605C

County: MARQUETTE HUC: 4030110 Size: 260 A

Location: Impoundment of Schweizter Creek.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

SEBAWAING RIVER WBID# 210301E

County: HURON HUC: 4080103 Size: 2 M

Location: Vicinity of Sebawaing.

Problem: **FCA-PCBs.**

TMDL Year(s): 2009 RF3RchID: 40801031026

SECOND SISTER LAKE WBID# 061205C

County: WASHTENAW HUC: 4090005 Size: 8 A

Location: West side of Ann Arbor. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

SELKIRK LAKE WBID# 083002A

County: ALLEGAN HUC: 4050003 Size: 94 A

Location: Vicinity of Shelbyville Problem: **FCA-mercury.**

TMDL Year(s): 2011 RF3RchID:

SHIAWASSEE RIVER WBID# 210415A

County: SAGINAW HUC: 4080203 Size: 1 M

Location: Fergus Rd., St. Charles Twp. STORET #730023. Reach extends 0.5 mile

u/s and d/s (1 mile).

Problem: WQS exceedance for mercury.

TMDL Year(s): 2011 RF3RchID: 4080203 932.00

SHIAWASSEE RIVER WBID# 210415B

County: SAGINAW HUC: 4080203 Size: 0.5 M

Location: Vicinity of Oakley d/s.

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2003 RF3RchID: 4080203 9

SHIAWASSEE RIVER AND S. BR. SHIAWASSEE RIVER WBID# 210417A

County: SHIAWASSEE HUC: 4080203 Size: 107 M

Location: Saginaw River confluence u/s to Byron Millpond, thence, the S. Br.

Shiawassee River from Byron u/s to M-59 (vicinity of Howell).

Problem: FCA-PCBs.

TMDL Year(s): 2002 RF3RchID: 4080203 1

SHIAWASSEE RIVER, S. BR. WBID# 210417C

County: LIVINGSTON HUC: 4080203 Size: 6 M

Location: Route M-59 u/s to Pinckney Road. Problem: **Fish community rated poor.**

TMDL Year(s): 2007 RF3RchID: 4080203 20

SHIAWASSEE RIVER, S. BR. AND MARION GENOA WBID# 210417E

County: LIVINGSTON HUC: 4080203 Size: 3 M

Location: S. Br. Shiawassee River at Mason Rd. u/s to Marion and Genoa Drain

confluence at Norton Rd, thence u/s to to stormwater discharge pipe in the

vicinity of the Howell WWTP's Outfall 001.

Problem: Macroinvertebrate community rated poor; WQS exceedances for

hexavalent chromium.

TMDL Year(s): 2007 RF3RchID: 4080203

SILVER LAKE INLET WBID# 083102G

County: VAN BUREN HUC: 4050002 Size: 0.5 M

Location: Silver Lake near Grand Junction, Michigan.

Problem: WQS exceedance for pesticide simazine; Macroinvertebrate

community rated poor.

TMDL Year(s): 2008 RF3RchID: 4050002 326

SISKIWIT LAKE (ISLE ROYALE)

WBID# **220101H**

County: KEWEENAW HUC: 4020300 Size: 3965 A

Location: Isle Royale.

Problem: FCA-PCBs; Mercury Lake.

TMDL Year(s): 2010 2011 RF3RchID:

SIX MILE LAKE WBID# 221101I

County: ONTONAGON/HOUGHTON HUC: 4020103 Size: 73 A

Location: W. of Nisula. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

SMALL CREEK & HUNTERS LAKE WBID# 210806B

County: ALCONA HUC: 4070007 Size: 0.5 M

Location: Vicinity of Curtis Twp.(Glennie).

Problem: Untreated sewage discharge, pathogens (Rule 100).

TMDL Year(s): 2004 RF3RchID: 4070007 10

SMITH'S CREEK WBID# 061502B

County: ST. CLAIR HUC: 4090001 Size: 3 M

Location: Vicinity of Smith's Creek (drains to Pine River).

Problem: CSO, pathogens (Rule 100), Macroinvertebrate community poor.

TMDL Year(s): 2009 RF3RchID: 4090001 32 0.00

SOUTH LAKE WBID# 061205M

County: WASHTENAW HUC: 4090005 Size: 197 A

Location: N. of Lyndon Center. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

SPAULDING CREEK WBID# 082820C

County: CLINTON HUC: 4050005 Size: 7 M

Location: Tributary to Stony Creek; Grove Road u/s to its headwaters.

Problem: Nutrient enrichment, nuisance algal growths.

TMDL Year(s): 2004 RF3RchID: 4050005 6

ST. CLAIR RIVER WBID# 061502A

County: ST, CLAIR HUC: 4090001 Size: 30 M

Location: Algonac u/s to the Black River confluence at Port Huron Problem: **FCA-PCBs, mercury; CSO, pathogens (Rule 100).**

TMDL Year(s): 2010 2011 2009 RF3RchID: 4090001 1

ST. JOSEPH RIVER WBID# 083204G

County: BERRIEN HUC: 4050001 Size: 32 M

Location: Lake Michigan confluence in Morrison Channel u/s to Michigan/Indiana

state line.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2003 RF3RchID: 4050001 2

ST. JOSEPH RIVER WBID# 083204H

County: BERRIEN AND ST. JOSEPH HUC: 4050001 Size: 83 M

Location: Lake Michigan confluence u/s to Indiana/Michigan state line and

Indiana/Michigan state line u/s to Sturgis dam vicinity of Three Rivers.

(Includes Lake Chapin and Constantine Impoundment).

Problem: FCA-PCBs; WQS exceedances for PCB.

TMDL Year(s): 2009 RF3RchID: 4050001 1

ST. JOSEPH RIVER WBID# 083204I

County: BERRIEN HUC: 4050001 Size: 1 M

Location: At gaging station downstream of BL-94 located in the navigational channel

east of Lake Michigan at Benton Harbor. Problem: **WQS exceedances for mercury.**

TMDL Year(s): 2011 RF3RchID: 4050001 406

ST. LOUIS CREEK WBID# 221001N

County: HOUGHTON HUC: 4020103 Size: 0.5 M

Location: From the First Street CSO d/s approximately 1/2 mile. (88 25' 59, 47 14'

Problem: CSO, pathogens (Rule 100), bacterial slimes.

TMDL Year(s): 2008 RF3RchID: 4020103 296

ST. MARYS RIVER WBID# 211701E

County: CHIPPEWA HUC: 4070001 Size: 50 M

Location: St. Mary's River system, from Sault Ste. Marie to east side of Drummond

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2009 2011 RF3RchID: 4070001 4

ST. MARYS RIVER WBID# 211701A

County: CHIPPEWA HUC: 4070001 Size: 0.02 M

Location: At Sault Ste. Marie.

Problem: CSO, pathogens (Rule 100).

TMDL Year(s): 2012 RF3RchID: 4070001 4

STEGEMAN CREEK WBID# 082804I

County: KENT HUC: 4050006 Size: 4.5 M

Location: N. of Rockford and tributary to the Rouge River. Rector Road in Algoma

Twp., Sec. 23 u/s to Courtland Twp., Sec. 16. Problem: **Macroinvertebrate community rated poor.**

TMDL Year(s): 2006 RF3RchID: 4050006 67

STONY CREEK IMPOUNDMENT (STONY CREEK) WBID# 061407B

County: MACOMB HUC: 4090003 Size: 700 A

Location: Stony Creek Metropolitan Park, S.W. of Romeo.

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2009 2011 RF3RchID:

STOVER CREEK WBID# 081401B

County: CHARLEVOIX HUC: 4060105 Size: 4 M

Location: Lake Charlevoix confluence u/s.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2008 RF3RchID: 4060105 851 0.00

STRAWBERRY CREEK WBID# 082805G

County: KENT HUC: 4050006 Size: 3 M

Location: Mill Creek confluence to 2 miles u/s (Alpine Twp. T8N, R12W, Sec. 25.

NW of Grand Rapids.

Problem: Fish community rated poor.

TMDL Year(s): 2006 RF3RchID: 4050006 839

SUNSET LAKE WBID# 080317X

County: IRON HUC: 4030106 Size: 545 A

Location: NE of Iron River. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

SWIFT RUN CREEK WBID# 061203L

County: WASHTENAW HUC: 4090005 Size: 3.7 M

Location: SE Ann Arbor: Huron River confluence u/s to Ellsworth Road.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2004 RF3RchID: 4090005 25

TAHQUAMENON RIVER WBID# 220201E

County: CHIPPEWA HUC: 4020202 Size: 1 M

Location: 1 mile reach from Lake Superior confluence u/s. Sampling site: STORET

170141 off trail through Tahquamenon Falls State Park.

Problem: WQS exceedances for PCBs.

TMDL Year(s): 2010 RF3RchID: 4020202 1

TAWAS RIVER WBID# 210703C

County: IOSCO HUC: 4080101 Size: 2 M

Location: Lake Huron confluence u/s to Tawas Lake.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID: 4080101 7

TERRY LAKE WBID# 061405K

County: OAKLAND HUC: 4090003 Size: 8 A

Location: NW side of Pontiac. Located between Osmun and Harris Lakes.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

THOMPSON LAKE WBID# 210417B

County: LIVINGSTON HUC: 4080203 Size: 262 A

Location: Thompson Lake near Howell (Sections 25 and 36, T3N,R4E and Sections

30 and 31, T3N,R5E) entire lake.

Problem: FCA-PCBs.

TMDL Year(s): 2009 RF3RchID:

THOUSAND ISLAND LAKE WBID# 221205G

County: GOGEBIC HUC: 4020102 Size: 1020 A

Location: S.W. of Watersmeet. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

THREAD CREEK AND THREAD LAKE WBID# 210414U

County: GENESEE HUC: 4080204 Size: 26 M

Location: Genesee/Oakland county line d/s to Thread Lake

Problem: FCA-PCBs.

TMDL Year(s): 2005 RF3RchID: 4080204 816.03

THREE MILE CREEK WBID# 210416D

County: SHIAWASSEE HUC: 4080203 Size: 5 M

Location: Holly Drain confluence u/s to Miller Road. Vicinity of Durand,

Problem: Fish and macroinvertebrate communities rated poor; Nutrient

enrichment, nuisance plant growths.

TMDL Year(s): 2007 RF3RchID: 4080203 677 0.00

THUNDER BAY AND THUNDER BAY RIVER (LAKE

WBID# **211002P**

County: ALPENA HUC: 4070006 Size: 85 MI2

Location: Thunder Bay area and I mile of Thunder Bay River from the bay

confluence u/s to the 9th Street Dam (Besser Lake Dam).

Problem: FCA-PCBs

TMDL Year(s): 2010 RF3RchID:

TITTABAWASSEE RIVER WBID# 210420D

County: SAGINAW/MIDLAND HUC: 4080201 Size: 1 M

Location: Saginaw River confluence u/s to the City of Midland's dam. Problem: **Untreated sewage discharge, pathogens (Rule 100).**

TMDL Year(s): 2009 RF3RchID: 4080201 120.11

TOBICO MARSH (WETLAND) WBID# 210501H

County: BAY HUC: 4080102 Size: 680 A

Location: NE of Kawkawlin. Problem: **FCA-PCBs.**

TMDL Year(s): 2009 RF3RchID:

TODD LAKE WBID# 082706B

County: OSCEOLA HUC: 4060102 Size: 76 A

Location: W. of Slaybaugh Corner. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

TONQUISH CREEK, (TRIBUTARY TO MIDDLE RIVER ROUGE) WBID# 061304H

County: WAYNE HUC: 4090004 Size: 12 M

Location: Middle River Rouge confluence u/s. Vicinity of Nankin Mills. Problem: **Fish and macroinvertebrate communities rated poor.**

TMDL Year(s): 2007 RF3RchID: 4090004 266 0.00

TORCH LAKE WBID# 081501E

County: ANTRIM HUC: 4060105 Size: 18770 A

Location: Vicinity of Eastport.

Problem: FCA-PCBs, chlordane, mercury.

TMDL Year(s): 2009 2011 RF3RchID:

TORCH LAKE WBID# 221001A

County: HOUGHTON HUC: 4020103 Size: 2659 A

Location: In the vicinity of the communities of Hubbell and Lake Linden, Michigan.

Problem: FCA-PCBs, mercury; WQS exceedances for copper;

Macroinvertebrate community rated poor.

TMDL Year(s): 2010 2011 2003 RF3RchID:

TYLER CREEK (BEAR CREEK)

WBID# 082811E

County: IONIA/KENT HUC: 4050007 Size: 11 M

Location: Originates in Ionia Co. (as Bear Cr.) then enters SE corner of Kent Co. (as

Tyler Cr.) as a tributary to the Coldwater River-(Ionia Co., Campbell Twp., T5N, R8W, Sec. 4 d/s to Kent Co., Bowne Twp. T5N, R9W, Sec. 35).

Problem: Macroinvertebrate and fish communities rated poor; Pathogens

(Rule 100).

TMDL Year(s): 2006 RF3RchID: 4050007 27

UNION LAKE WBID# 083210C

County: BRANCH HUC: 4050001 Size: 525 A

Location: Vicinity of Union City u/s of Dunk Rd. dam.

Problem: **FCA-PCBs.**

TMDL Year(s): 2005 RF3RchID:

UNNAMED DRAINS (METAMORA) WBID# 210413I

County: LAPEER HUC: 4080204 Size: 1 M

Location: All of Metamora drains eventually flow to S. Br. Flint River. Problem: **Untreated sewage discharge**, **pathogens (Rule 100)**.

TMDL Year(s): 2004 RF3RchID: 4080204 742 0.00

UNNAMED LAKE WBID# 080309A

County: BARAGA HUC: 4030107 Size: 52 A

Location: Located at T49N, R31W, Sec. 35. just S.E. of Crooked Lake.

Problem: **FCA-mercury.**

TMDL Year(s): 2011 RF3RchID:

UNNAMED LAKE WBID# 061203E

County: WASHTENAW HUC: 4090005 Size: 2 A

Location: S. of Ford Lake in the NE corner of Sec. 26, T3S, R7E (Textile Road and

Burton Road).

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2010 2011 RF3RchID:

UNNAMED TRIBUTARY TO GRAND RIVER WBID# 082805K

County: KENT HUC: 4050006 Size: 1 M

Location: Off Grand River Drive and S. of Hordyk Road, E. side of Grand Rapids.

Plainfield Twp. Sec. 36.

Problem: Fish community rated poor.

TMDL Year(s): 2006 RF3RchID: 40500061133

UNNAMED TRIBUTARY TO POTERFIELD CREEK WBID# 080302D

County: MENOMINEE HUC: 4030108 Size: 1 M

Location: A drainage running from north to south off the Berger Cattle Ranch

(northwest of Bagley, MI) T37N, R27W, Sec. 25, 36. Problem: **Nutrient enrichment, nuisance algal growth.**

TMDL Year(s): 2009 RF3RchID: 4030108 0

VAN ETTEN CREEK WBID# 210806I

County: ALCONA HUC: 4070007 Size: 14.7 M

Location: Confluence of Pine River u/s to M-72.

Problem: Macroinvertebrate community rated poor; Nutrient enrichment.

TMDL Year(s): 2009 RF3RchID: 4070007 66

VAN ETTEN LAKE WBID# 210806Z

County: IOSCO HUC: 4070007 Size: 1320 A

Location: NE of Wurtsmth Air Force Base.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

VANDERCOOK LAKE WBID# 082816R

County: JACKSON HUC: 4050004 Size: 144 A

Location: Summit twp. (T3S, R1W, Sec. 22/23 and 26/27).

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

VERMILAC LAKE (WORM LAKE) WBID# 220803B

County: BARAGA HUC: 4020104 Size: 622 A

Location: E. of Covington. Problem: **Mercury Lake**

TMDL Year(s): 2011 RF3RchID:

VERMILION CREEK WBID# 082819B

County: SHIAWASSEE/INGHAM HUC: 4050004 Size: 6.5 M

Location: From Woodbury Road u/s to headwaters at County Line Lake. Problem: **Untreated sewage discharge, pathogens (Rule 100).**

TMDL Year(s): 2009 RF3RchID: 4050004 23

VICTORIA RESERVOIR (W. BR. ONTONAGON RIVER) WBID# 221203D

County: ONTONAGON HUC: 4020102 Size: 293 A

Location: SW of Rockland. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

WABASIS LAKE WBID# 082807M

County: KENT HUC: 4050006 Size: 418 A

Location: N. of Grattan. Problem: **Mercury Lake.**

TMDL Year(s): 2011 RF3RchID:

WAGNER-PINK DRAIN WBID# 061203J

County: MONROE HUC: 4090005 Size: 0.5 M

Location: Huron River confluence u/s to 0.2 mile u/s of S.Huron River Drive. Problem: Macroinvertebrate community rated poor; Pathogens (Rule 100).

TMDL Year(s): 2005 2003 RF3RchID: 4090005 0

WAISKA RIVER, S. BR. OF THE E. BR. WBID#: 211801B

County: CHIPPEWA HUC: 4020203 Size: 1 M

Location: 7 mile Road u/s to 8 Mile Road; W. of Piche Rd.

Problem: Macroinvertebrate community rated poor; Pathogens (Rule 100).

TMDL Year: 2011

WALLED LAKE WBID# 061304D

County: OAKLAND HUC: 4090004 Size: 670 A

Location: Vicinity of Novi.

Problem: FCA-PCBs, mercury.

TMDL Year(s): 2010 2011 RF3RchID:

WAMPLERS LAKE WBID# 061101R

County: JACKSON/LENAWEE HUC: 4100002 Size: 780 A

Location: Vicinity of Oak Shade Park.

Problem: Mercury Lake.

TMDL Year(s): 2011 RF3RchID:

WANNADOGA CREEK WBID# 083006M

County: BARRY HUC: 4050003 Size: 14 M

Location: Baseline Rd. u/s.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2011 RF3RchID: 4050003 37 5.45

WEST BRANCH LAKES WBID# 081104A

County: ALGER HUC: 4060106 Size: 52 A

Location: T48N, R14W, Sec. 31. Problem: **FCA-mercury.**

TMDL Year(s): 2011 RF3RchID:

WHITE CREEK WBID# 210405A

County: TUSCOLA HUC: 4080205 Size: 9 M

Location: Cass River confluence u/s to the confluence of the N. Br. and S. Br.

White Creek.

Problem: Macroinvertebrate community rated poor.

TMDL Year(s): 2009 RF3RchID: 4080205 8

WHITE LAKE WBID# 082301A

County: MUSKEGON HUC: 4060101 Size: 2572 A

Location: Vicinity of Montague and Whitehall. Problem: **FCA-PCBs**, **chlordane**, **mercury**.

TMDL Year(s): 2009 2011 RF3RchID:

WHITMORE LAKE WBID# 061205H

County: LIVINGSTON/WASHTENAW HUC: 4090005 Size: 677 A

Location: Vicinity of Whitmore Lake.

Problem: FCA-PCBs.

TMDL Year(s): 2010 RF3RchID:

YORK CREEK WBID# 082805I

County: KENT HUC: 4050006 Size: 3.5 M

Location: Grand River confluence u/s to Chordes Road.

Problem: Fish community rated poor.

TMDL Year(s): 2006 RF3RchID: 4050006 832

ATTACHMENT 3

Schedule for TMDL Development

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2002	Carrier Creek Deer Creek Galien River Hammell Creek Kawkawlin River Lenawee County Drain No. 70 Plaster Creek Plaster Creek River Raisin Saline River Shiawassee River and S. Br. Shiawassee River	082812D 083301D 083301A 221001O 210501F 061103H 082806H 082806H 061101P 061104A 210417A	Biota Pathogen Pathogen Mercury, Copper PCB Pathogen Biota Pathogen Pathogen Pathogen Pathogen Pathogen PCB
2003	Bean Creek Black Creek Carp Creek Ecorse River Grand River Grand River Grand River Little Black Creek McKinzie Creek Pratville Drain and Lime Lake Rio Grande Creek Shiawassee River St. Joseph River Torch Lake Wagner-Pink Drain	060102A 082701J 220601A 061201I 082816H 082816H 082701T 083205H 060102B 082803F 210415B 083204G 221001A 061203J	Pathogen Biota Mercury Biota Pathogen DO Biota Biota Biota Biota Pathogen Pathogen Pathogen Pathogen Pathogen Copper Pathogen
2004	Amos/Palmer Drain Belle River Belle River Berry Drain Black Creek Burdick Drain Cedar River Duff Creek Haven-Max Lake Drain/Great Bear Lake Letts Creek Limekiln Lake Mallets Creek Mill Creek Mill Pond Creek Pine River Potters Lake	061201C 061501G 061501G 061506A 083102C 210414D 210429A 210406A 083102L 061204D 061205T 061203I 061503A 082701V 210421A 210413F	TDS, Biota Biota DO, TDS Biota Biota Biota Pathogen Pathogen Pathogen Phosphorus Biota Phosphorus Biota Pathogen Org Chem Phosphorus Pathogen

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2004 cont.	Small Creek Spaulding Creek Swift Run Creek Unnamed Drains, Metamora	210806B 082820C 061203L 210413I	Pathogen Phosphorus Biota Pathogen
2005	Black Creek Bluff Creek Lake Huron - Burtchville Twp. Park Beach Lake Huron - Keewadhin Road Beach Lake Huron - Lakeport State CG Beach Lake Huron - Metcalf Road Beach Macon Creek Milk River Paint Creek Paint Creek Paint Creek Rabbit River River Raisin River Raisin River Raisin River Raisin Salt River Sandy Creek Thread Creek Union Lake Wagner-Pink Drain	061103G 221202A 210101F 210101D 210101D 210101E 061101C 061410A 061201D 061201D 061201D 083002C 061101G 061101G 061101F 061101F 061409D 061201E 210414U 083210C 061203J	Biota Biota Pathogen Pathogen Pathogen Pathogen Biota Pathogen Pathogen Pathogen DO Biota Biota Biota Pesticides Pathogen Pathogen Pathogen PCB Pathogen Biota PCB PCB Biota
2006	Bass River Bass River Bear Creek Black River Drain Buck Creek Butternut Creek Clinton River Clinton River Coldwater River Coon Creek Coon Creek Davis Creek Deer Creek Duke Creek East Pond Creek Fenner Lake Furlong Creek Grand River Kalamazoo River Lake St. Clair Metropolitan Beach Lake St. Clair Shores Memorial Beach Manistee Lake	082801H 082801H 061402B 083102J 082805L 082808F 061404C 082811F 061408C 061408C 061408D 082804K 061408D 082804K 061408G 083004F 081202B 082806A 083005A 061403A 061403B 081901A	Pathogen Biota Pathogen Phosphorus Pathogen Biota Biota Pathogen Pathogen Pathogen DO Oil Pathogen Biota Pathogen Biota Pathogen Biota Pathogen Phosphorus Biota Pathogen Phosphorus Biota Pathogen Phosphorus Biota Pathogen Pathogen PCB Pathogen Pathogen Pathogen

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2006 cont.	Red Run Drain Sand Creek Stegeman Creek Strawberry Creek Tyler Creek Tyler Creek Unnamed Tributary to Grand River York Creek	061402A 082801G 082804I 082805G 082811E 082811E 082850K 082805I	Pathogen Biota Biota Biota Biota Biota Pathogen Biota Biota Biota
2007	Albrow Creek Bishop Creek Blakely Drain Brownstown Creek Cranberry Creek Culver Creek Detroit River Frank and Poet Drain Honey Creek Johnson Creek Kawkawlin River Lake Erie-Luna Pier Beach LaPointe Drain Ottawa River Pigeon River Pine Creek Red Run Red Run River Rouge River Rouge River Rouge Shiawassee River Three Mile Creek Tonquish Creek	082816J 061304O 061301B 061301A 210415C 210501A 061401A 061301K 061205Q 061304I 210501G 060101D 060101E 060101C 082901R 082821L 083002D 083002D 081305G 061305G 061305G 210417C 210417E 210416D 061304H	Pathogen Biota Biota Biota Biota Biota Biota Biota Pathogen Biota DO DO Pathogen DO PCB Biota Phosphorus Biota DO DO Biota Pathogen Biota DO DO Biota Pathogen Biota Biota Pathogen Biota Pathogen Biota Biota Biota Biota Biota Biota
2008	Adventure Creek Bear Lake Cass River Detroit River Detroit River Eagle River Farmers Creek Farmers Creek Grand River Muskegon Lake and Muskegon River Ox Creek	221209G 082701A 210402F 061401A 061401A 220901D 083204E 083204E 082701B 083202H	Biota Phosphorus DO PCB TCDD Biota, Copper Pathogen Phosphorus Pathogen PCB Biota

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2008 cont.	Pere Marquette River Portage Creek River Raisin River Raisin River Rouge Ruddiman Creek Ruddiman Creek Ryerson Creek Scales Creek/Kearsarge Creek Silver Lake Inlet St. Louis Creek Stover Creek White Creek	082101E 061205V 061102A 061102A 061302A 082701D 082701D 082701Q 221001P 083102G 221001N 081401B 210405A	PCB Biota Pathogen TDS PCB Biota Pathogen Biota Pathogen Biota Biota, Copper Biota Pathogen Biota Pathogen Biota Pathogen Biota Biota Biota
2009	Alder Creek Alder Creek Bear Lake Black River Cox Drain Cox Drain Duff Creek Galien River Galien River, E. Br. Glen Lake Grand River and Red Cedar River Honey Creek Horseshoe Lake Drain Lake Macatawa Lost Creek Lost Creek Maple River Menominee River Menominee River Menominee River Menominee River Peet Creek Saginaw/Cass/Tittabawassee Rivers Sawyer Creek Sebewaing River Smith's Creek St. Clair River St. Joseph River Stony Creek Impoundment (Stony Creek) Thompson Lake Tittabawassee River	082821K 082701A 061504A 082821G 082821G 210406A 083301G 083301F 081702A 082801F 061205A 061205R 082901D 082820B 082821D 080303C 080303E 082701U 061206M 080315D 082821F 210402I 083301E 210301E 061502B 061502B 061502B 061502B 061502A 083204H 211701E 061407B 210420D	Phosphorus Biota PCB Pathogen Phosphorus Biota Biota PCB, Chlordane Phosphorus PCB, Chlordane PCB Pathogen Biota PCB, Chlordane Biota PCB, Chlordane Biota Phosphorus PCB Pathogen Biota Phosphorus PCB Pathogen PCB Biota Pathogen PCB Biota Pathogen PCB Biota Pathogen PCBB Pathogen PCB Pathogen Biota Pathogen PCB Pathogen PCB Pathogen PCB Pathogen PCB PCB PCB PCB PCB PCB PCB PCB

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2009 cont.	Tobico Marsh (wetland) Torch lake Unnamed Tributary to Poterfield Creek Van Etten Creek Vermilion Creek White Creek White Lake	210501H 081501E 080302D 210806I 082819B 210405A 082301A	PCB PCB, Chlordane Phosphorus Biota Pathogen Biota PCB, Chlordane
2010	Alma Impoundment (Pine River) Au Sable River Barton Lake Barton Pond (Huron River Impoundment) Battle Creek River Black Creek Black Creek Boyne River Caro Impoundment (Cass River) Cass Lake Clinton River Croswell Impoundment (Black River) Crystal Lake Dowagiac River Elk Lake Escanaba River Famn River Fenner Lake Flat River Flint River, Main Flint River, S. Br. Ford Lake/Belle Lake (Imp. of Huron R) Goose Lake Gull Lake Hess Lake Higgins Lake Holloway Reservoir (Flint River Imp.) Holly Drain/Three Mile Creek Houghton Lake Kent Lake Kids Creek Lake Orion Lake St. Clair Little Rabbit River Maceday Lake Manistee Lake Morrison Lake Osmun Lake Osmun Lake Pine River	210421G 210801A 083210G 061203M 083006F 082701J 061101S 081403A 210403E 061405A 061404C 061504F 081801D 083205J 081501C 080601D 083214D 083204F 082807A 210409C 210413P 061203N 080605D 083005I 082702L 082713A 210411X 210416E 082713B 061206R 081601D 061406A 061000A 083002E 061406F 081901A 082810E 061405L 061502F	PCB

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2010 cont.	Planter Creek Pontiac Lake Portage Lake Portage Lake Portal Creek Randall Lake Reeds Lake Rifle River River Raisin, S. Br. Siskiwit Lake (Isle Royale) St. Clair River Tahquamenon River Tahquamenon River Tawas River Thunder Bay/Thunder Bay R (Lk Huron) Torch Lake Unnamed Lake Van Etten Lake Walled Lake Whitmore Lake	221404B 061206G 221001B 081802B 221303C 083216H 082806E 210602A 061102B 220101H 061502A 220201E 210703C 211002P 221001A 061203E 210806Z 061304D 061205H	Pathogen PCB PCB Biota PCB
2011	Alma Impoundment (Pine River) Arbutus Lake Au Sable River Au Train lake Austin Lake Barton Lake Bars Lake Bear Lake Beatons Lake Beaufort Lake Beaver Lake Big Blue Lake Bills Lake Bills Lake Bishop Lake Bond Falls Flowage Bond Falls Flowage Bond Falls Flowage Brickyard Creek Burt Lake Caribou Lake Caribou Lake Caro Impoundment (Cass River) Carp Lake (aka Trout Lake) Cass Lake Cass River Chalk Hills Impoundment (Menominee R) Chaney Lake Charlotte River	210421G 081601L 210801A 220402Y 083208C 083210G 081601M 082701A 221205F 080308E 211001B 082301P 082804N 061206N 221208C 221208C 221208C 083005O 211305X 080313B 211602E 210403E 211401B 061405A 210402H 080303B 221402B 211701I	Mercury

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
	Chicagon Lake Clark Lake Clear Spring Lake (developed gravel pit) Clinton River Coldwater Lake Coldwater Lake Craig Lake Crooked Creek Crooked Lake Croton Pond (Muskegon River) Deer Creek Deer Creek Deer Creek Detroit River Duck Lake Echo Lake Elk Lake Ellsworth Lake Escanaba River Fenner Lake Fenton lake Fish Lake Five Lakes Forestville Basin (Dead River) Fortune Lake (Second Lake) Four Mile Lake	080315A 061101Q 061405I 061404D 210424Y 083216B 080308F 083007J 211308X 082702A 082801K 082801K 082801K 061401A 221207X 220401B 081501C 081503I 080601D 083004F 210416X 083004P 210427Y 220602A 080315E 061204F	Mercury Mercury Mercury Mercury Mercury Mercury Mercury Biota Mercury Mercury DO Biota Pathogen Mercury
	Fumee Lake Glen Lake Goose Lake Grand River Grand River and Red Cedar River Grand River and Red Cedar River Grand Sable Lake Green Lake Green Lake Greenwood Reservoir (Escanaba River) Gull Lake Gulliver Lake Gun Lake Gun River Hamilton Lake Hamlin Lake Heron Lake Higgins Lake Hubbard Lake Intermediate Lake Jordan Lake Kalamazoo River	080304C 081702A 080605D 082801J 082815D 082815D 220401X 081801G 080605B 083005I 081201J 083004I 083004M 080303A 082002B 210414F 082713A 211001C 081503H 082811A 083001D	Mercury Mercury Mercury Pathogen DO Mercury Mercury Mercury Mercury Mercury Pathogen Biota Mercury

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
	Klinger Lake Lake Ann Lake Bellaire Lake Besser (Ninth Street Pond) Lake Emily Lake Gogebic Lake Independence Lake Margrethe Lake Mitchell Lake Nepessing Lake Orion Lake Ponemah Lake St. Clair Lakeville Lake Langford Lake Lily Lake Lincoln Lake Littlefield Lake Long Lake	083215B 081701A 081503G 211002C 080315Y 221204F 220702X 081907X 082712Z 210413J 061406A 210417H 061000A 061407A 221205A 082708C 082807Z 210424E 082807Y	Mercury
	Long Lake Lower Trout Lake Maceday Lake Manistee Lake Manistique River Manistique River and N Manistique Lake Marion Lake Marten Lake Menominee River Michigamme River and Impoundments Milakokia Lake	082807Y 061406E 061406F 081901A 081103I 081103B 221208B 220803C 080303C 080307B 081201A	Mercury Mercury Mercury Pathogen Mercury Mercury Mercury Mercury Mercury Mercury Mercury Mercury Mercury
	Millecoquin Lake Mona Lake Moores Park Impoundment (Grand River) Mullett Lake Muskegon Lake and Muskegon River Nawakwa Lake Net River Nettie Lake Orchard Lake Ottawa Lake Otter Lake Paint River Pond Perch Lake Perch Lake Pere Marquette R and Pere Marquette Lk Pickerel Lake Pike Lake Pine Lake	0812020 082701U 082815B 211305Y 082701B 220303B 080313A 211201B 061406G 080318B 220805A 080315C 220804Z 080308B 082101E 211308A 220301B 081904K	Mercury

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
	Pine Lake Pomeroy Lake Portage Lake Portage Lake Rainbow Lake Randall Lake Red Cedar River Red Cedar River Reeds Lake Rice Creek Rice Lake Rifle River River Raisin River Rouge Round Lake Round Lake Round Lake Round Lake Saginaw River Sanford Lake (Tittabawassee River) Schweitzer Reservoir (Escanaba River) Second Sister Lake Selkirk Lake Shiawassee River Siskiwit Lake (Isle Royale) Six Mile Lake South Lake St. Clair River St. Joseph River St. Marys River Stony Creek Impoundment Sunset Lake Terry Lake Thousand Island Lake Torch Lake Torch Lake Unnamed Lake Unnamed Lake Vandercook Lake Vermilac Lake (Worm Lake) Victoria Reservoir (W. Br. Ontonagon R) Wabasis Lake Waiska River, S. Br. of the E. Br. Walled Lake	083004H 221402Z 221001B 082816Q 082807K 083216H 082818H 082818H 082806E 083008A 221001A 210602A 061101H 061305H 080308D 080902B 080315B 210401B 210426X 080605C 061205C 083002A 210415A 220101H 221101I 061205M 061502A 083204I 211701E 061407B 080317X 061405K 221205G 082706B 221001A 081501E 080309A 061203E 082816R 220803B 221203D 082807M 211801B 061304D	Mercury Mercury Mercury Mercury Mercury Mercury Mercury Pathogen Biota Mercury
	Wamplers Lake Wannadoga Creek West Branch Lakes White Lake	061101R 083006M 081104A 082301A	Mercury Biota Mercury Mercury

TMDL Year	Waterbody Name	WBID#	TMDL Parameter(s)
2012	Green Bay	080000C	PCB, Dioxin, Mercury
	Lake Erie	060000A	PCB, Dioxin
	Lake Huron	210000A	PCB, Chlordane, Dioxin
	Lake Michigan	A000080	PCB, Mercury,
			Chlordane, Dioxin
	Lake Michigan	080000B	PCB, Mercury,
	•		Chlordane, Dioxin, DDT
	Lake Superior	220000A	PCB, Mercury,
	·		Chlordane, Dioxin
	Little Bay de Noc	080801B	PCB, Mercury
	Saginaw Bay	210400A	PCB, Mercury, Dioxin
	St. Marys River	211701A	Pathogen
			-

ATTACHMENT 4

Total Maximum Daily Load (TMDL) Watebodies Delisted Since 2000 List

Mercury (6 waterbodies)

Sediment Cleanup: Unnamed Tributary to Wolf Creek (210422A).

Fish Consumption Advisory Change: Cisco Lake (221205D), Ford/Belleville Lake (061203N), Kent Lake (061206R), Portage Lake (081802B), and Portage Lake (061205J).

PCB (5 waterbodies): All sediment cleanups - Black River (082102B), Manistique River (081103F), Pine River (DDT) (210421A), Saginaw River (210402Z), Willow Run Creek (061203A); (plus Newburgh Lake on the Middle Branch Rouge River).

<u>Pathogens</u> (3 waterbodies): Geddes Pond (Huron River) and Crapaud Creek TMDLs submitted and approved by the United States Environmental Protection Agency (USEPA). One waterbody (Little Black Creek, 08270T) was delisted because the source of pathogens (pump station) was corrected.

Nutrient (1 waterbody): Lake Allegan TMDL submitted and approved by the USEPA.

Biota (22 waterbodies):

- A. Coldwater River TMDL submitted and approved by the USEPA.
- B. Nine waterbodies delisted due to nonpoint source actions:

Augusta Creek (083003A): Animal access eliminated. Stream quality improved and now meets water quality standards (WQS).

Chippewa Creek (082201H): Cattle access eliminated. Stream quality now meets WQS.

Christiana Creek (083206I): Animal access eliminated. Stream quality now meets WQS.

Duck Creek (082811D): Stream recovered from past manure losses, now meets WQS.

Prairie River (083214F): Stream recovering from illegal dredging and erosion, now meets WQS.

Rocky River (083209F): Cattle access eliminated. Stream now meets WQS.

St. Joseph River/Beebe Creek (083218F): Siltation/sedimentation problem appears to be corrected. Stream now meets WQS.

Whetstone Creek (220601D): Excessive storm water runoff addressed with detention ponds. Stream now meets WQS.

Wolf Creek (082818E): Nuisance nutrient expression problem appears to have been addressed.

C. Six waterbodies delisted due to point source (PS) actions:

Ball Creek (082804F): PS discharge from National Fruit Products has ceased. Stream now meets WQS.

Chart Creek, E. Br. (083003D): Illegal discharge from Murco stopped. Stream now meets WQS.

Eau Claire Extension Drain (083204D): Three of four PS discharges now in compliance. Biota now acceptable.

Hart Drain (210415D): Illegal discharges of Alachlor stopped. Stream now meets WQS.

Mann Creek (083001L): PS discharge from Michigan Fruit Cannery and causing WQS violations.

Red Cedar River (082818F): Stream recovered from previous PS discharges (Cu problem), and now meets WQS.

D. Five waterbodies delisted due to miscellaneous reasons:

Clam River (082711E): Nutrient expression (Cladophora) not present.

Paw Paw, S. Br. (083207J): Stream dredged; no longer appropriate to list for biota. Now a highly modified stream.

Pine Creek (083202I): Stream dredged; no longer appropriate to list for biota. Now a highly modified stream.

Silver Creek (083205E): Stream dredged; no longer appropriate to list for biota. Now a highly modified stream.

Ten Hagen Creek (082901S): Acceptable biological communities found in recent survey. Stream meets WQS.

ATTACHMENT 5

TMDLs Submitted to the USEPA Since 1996.

Waterbody: ALLEGAN LAKE (KALAMAZOO RIVER IMP.) WBID#: 083005G

County: ALLEGAN HUC: 4050003 Size: 1587 A

Location: Located west of Allegan in Alley and Allegan Twps.

Problem: Nutrient enrichment, nuisance algal growths.

TMDL Type: Phosphorus TMDL Submittal Date: 03/2001 Approval Date: 04/2001

Waterbody: BEAR CREEK

WBID#:082805E

County: KENT HUC: 4050006 Size: 3 M

Location: From W. Cannonsburg Road u/s to cattle access site 100 yards u/s of

Warren Townsend Park.

Problem: Threatened Biota.

TMDL Type: Sediment TMDL Submittal Date: 08/1997 Approval Date: Inform. TMDL

Waterbody: BRIGHTON LAKE

WBID#: **0612050**

County: LIVINGSTON HUC: 4090005 Size: 158 A

Location: An impoundment on south Ore Creek just d/s from the City of Brighton.

Problem: Nutrient enrichment.

TMDL Type: Phosphorus TMDL Submittal Date: 12/1999 Approval Date: 02/2000

Waterbody: COLDWATER RIVER

WBID#:**210424B**

County: ISABELLA HUC: 4080202 Size: 3 M

Location: Vernon Rd. Crossing u/s to Outlet Lake (Littlefield Lake area).

Problem: Biological community threatened.

TMDL Type: Biota TMDL Submittal Date: 06/2001 Approval Date: 09/2001

Waterbody: CRAPAUD CREEK WBID#: 061409E

County: MACOMB HUC: 4090002 Size: 2 M

Location: Downtown New Baltimore at Hamer Street u/s.

Problem: Pathogens (Rule 100).

TMDL Type: E. coli TMDL Submittal Date: 02/2002 Approval Date: 03/2002

Waterbody: FORD LAKE/BELLEVILLE LAKE (HURON RIVER IMP.) WBID#:

061203N

County: WAYNE HUC: 4090005 Size: 2245 A

Location: Vicinity of Belleville.

Problem: Nutrient enrichment, nuisance algal growths.

TMDL Type: Phosphorus TMDL Submittal Date: 09/1996 Approval Date: 03/2000

Waterbody: GEDDES POND (HURON RIVER) WBID# 061203B

County: WASHTENAW HUC: 4090005 Size: 2 M

Location: Geddes Pond Dam u/s to Geddes Avenue (vicinity of Ann Arbor).

Problem: Pathogens (Rule 100).

TMDL Type: <u>E</u>. <u>coli</u> TMDL Submittal Date: 08/2001 Approval Date: 09/2001

Waterbody: **KENT LAKE** WBID#: **061206D**

County: OAKLAND HUC: 4090005 Size: 1000 A

Location: An impoundment on the main stem of the Huron River, Its u/s boundary is

Dawson Rd. and d/s is the Kent Lake spillway at I-96.

Problem: Nutrient enrichment.

TMDL Type: Phosphorus TMDL Submittal Date: 12/1999 Approval Date: 03/2000

Waterbody: LAKE MACATAWA (WATERSHED) WBID#: 082901D

County: OTTAWA HUC: 4050002 Size: 1780 A

Location: Vicinity of Holland (Park and Holland Twps.)

Problem: Nutrient enrichment, nuisance algal blooms.

TMDL Type: Phosphorus TMDL Submittal Date: 01/1999 Approval Date: 04/2000

Waterbody: ORE LAKE

WBID#: **061205S**

County: LIVINGSTON HUC: 4090005 Size: 192 A

Location: D/s of Brighton Lake
Problem: Nutrient enrichment.

TMDL Type: Phosphorus TMDL Submittal Date: 12/1999 Approval Date: 02/2000

Waterbody: STRAWBERRY LAKE

WBID#:**061205U**

County: LIVINGSTON HUC: 4090005 Size: 247 A

Location: A lake on the Huron River just d/s of M-36 in Livingston County.

Problem: Nutrient enrichment.

TMDL Type: Phosphorus TMDL Submittal Date: 12/1999 Approval Date: 08/2000

Waterbody: SYCAMORE CREEK

(WATERSHED)# WBID#: 082817D

County: INGHAM HUC: 4050004 Size: 87 M

Location: Grand River confluence u/s to headwaters and to include Mud Creek,

Talmadge Creek, Willow Creek and Havens Drain.

Problem: WQS exceedances for D.O.

TMDL Type: D.O. TMDL Submittal Date: 05/1997 Approval Date:

Inform. TMDL