



**Macatawa Watershed Voluntary Agreement  
2010 and 2011 Annual Report**

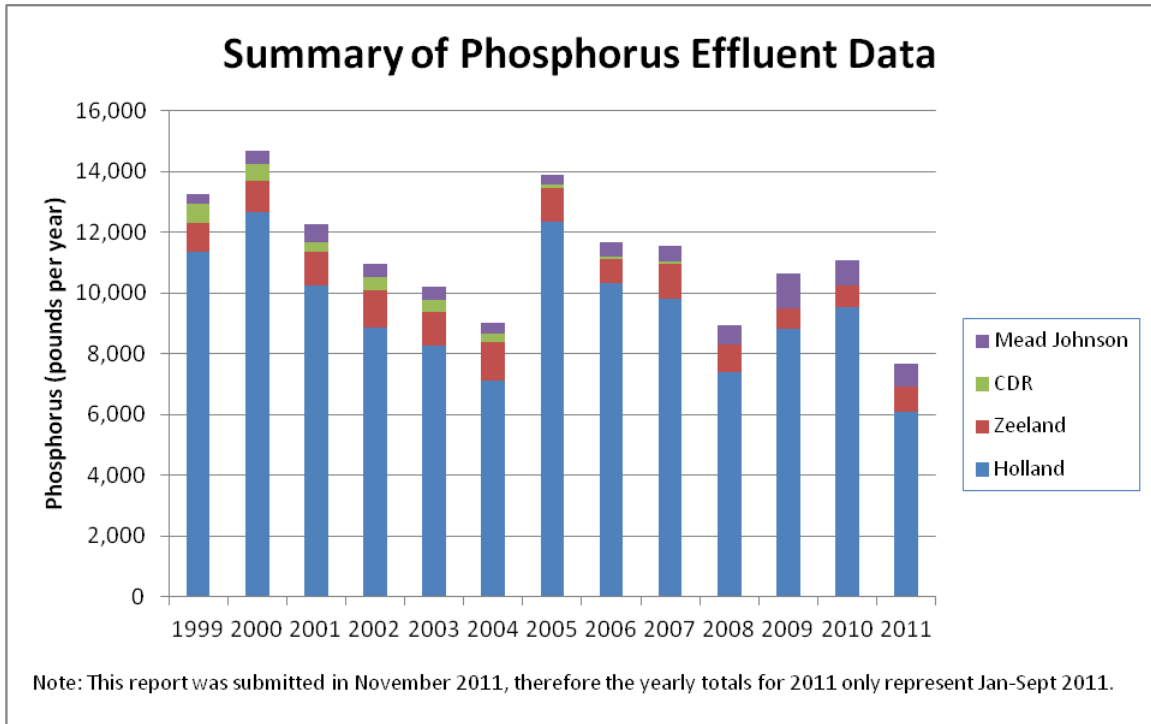
**October 1, 2009 – September 30, 2011**

This annual report was developed under the Macatawa Watershed Voluntary Agreement developed to show the commitment between the point and non-point sources to improve water quality in the Macatawa Watershed. The intent of the agreement is to outline the ways in which all parties will support reduction of phosphorus loading into Lake Macatawa as detailed in the Macatawa Watershed Plan.

FISCAL YEAR TOTALS

Point Source	Total pounds of Phosphorus	
	FY10 (Oct 1 2009-Sept 30-2010)	FY11 (Oct 1 2010-Sept 30-2011)
Holland BPW	10,006	8,383
Zeeland Clean Water Plant	756	944
Mead Johnson	968	951

Please note that this report covers two years worth of data and that the data shown in the graph and table below represent annual totals (calendar year) and are not reported based on the fiscal year as noted above.



Annual Phosphorus Load (lbs) from Point Sources in the Watershed

	<b>Holland</b>	<b>Zeeland</b>	<b>CDR</b>	<b>Mead Johnson</b>	<b>Totals</b>
1999	11352	941	640	335	<b>13268</b>
2000	12664	1042	522	467	<b>14695</b>
2001	10229	1108	339	592	<b>12268</b>
2002	8871	1195	464	423	<b>10953</b>
2003	8252	1135	370	433	<b>10190</b>
2004	7132	1265	267	369	<b>9033</b>
2005	12352	1098	107.56	317	<b>13875</b>
2006	10303	795	83.45	472	<b>11653</b>
2007	9817	1142	56.43	549	<b>11564</b>
2008	7373	940	0	628	<b>8941</b>
2009	8802	690	0	1138	<b>10630</b>
2010	9540	689	0	859	<b>11088</b>
2011*	6096	828	0	724	<b>7648</b>

\* 2011 totals only include January-September

## Point Source Updates:

All activity at the CDR facility has ceased. It is currently unoccupied.

The Zeeland Clean Water Plant, Holland Board of Public Works and Mead Johnson continue to reduce phosphorus loading when possible.

In September of 2011, Holland BPW received the Neighborhood Environmental Partners Program Award from the Michigan Department of Environmental Quality (see attached article).

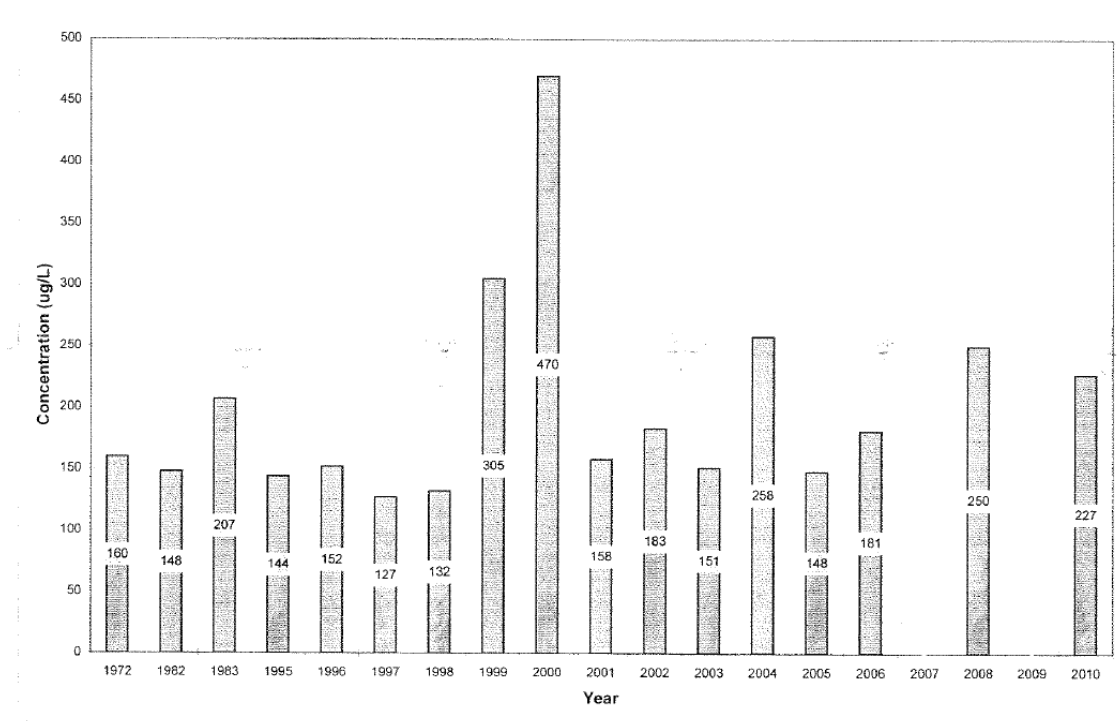


Figure 5. Average historic spring phosphorus concentrations at stations 1, 2, and 4 in Lake Macatawa, Ottawa County, Michigan.

\*The most recent monitoring results (conducted by State of Michigan, Department of Natural Resources and Environment during 2010) indicate that the average spring concentration of phosphorus in Lake Macatawa was approximately 227 ppb.

A TMDL meeting was held on January 14, 2010 at the MDEQ Grand Rapids District Office (a copy of the agenda is attached). The Voluntary Agreement expired in April of 2009 and was updated and then renewed by the MACC in July of 2010. The agreement was signed by MDEQ in September of 2010 (a copy of the signed agreement is attached).

The MACC continues to hold watershed planning meetings every other month. Representatives from all point sources are invited to attend. Copies of meeting agendas are attached (Oct 2009-Sept 2011).



## THIRTEEN ORGANIZATIONS HONORED

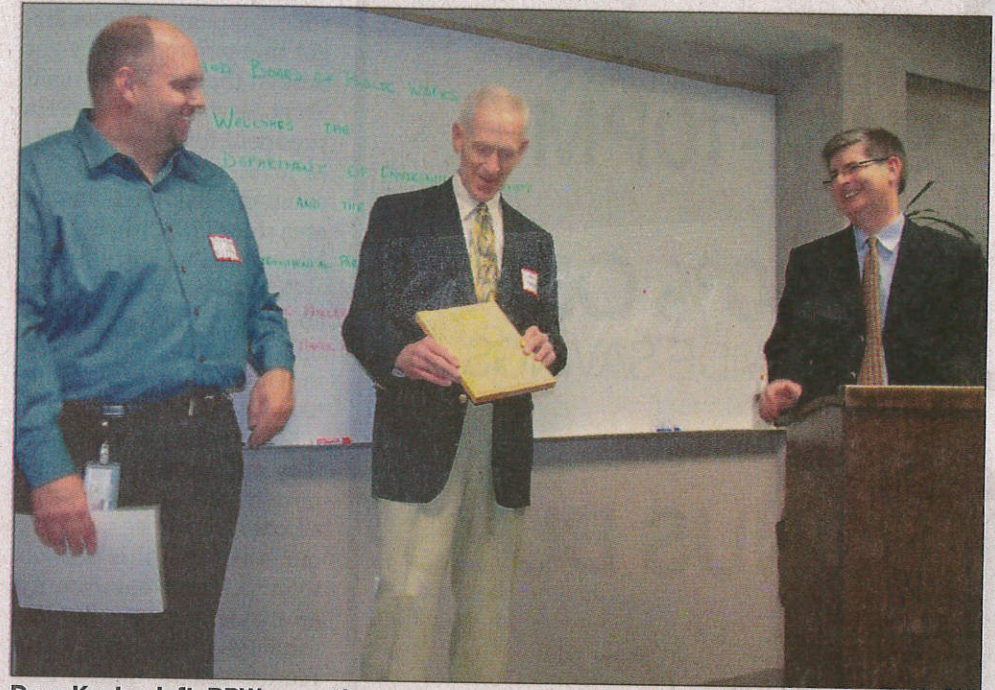
# DEQ honors businesses

The Holland Board of Public Works, Herman Miller Inc. and Pilgrim Manor Retirement Community were honored Thursday by the Michigan Department of Environmental Quality.

Thirteen organizations in the state were honored with what DEQ Director Dan Wyant called the group's highest honor, the Neighborhood Environmental Partners Program award.

"Working to comply with environmental law is tough enough," Wyant said. "These organizations went above and beyond."

Zeeland-based Herman Miller Inc. was honored for its partnership with Tri-Cities Area Habitat for Humanity for building a Leadership in Energy and Environmental Design-certified home. About 130 Herman Miller employees volunteered to



**Dave Koster, left, BPW operations manager, looks on as Loren Howard, BPW general manager, accepts a plaque from Michigan DEQ Director Dan Wyant. The Holland Board of Public Works was presented by the Michigan Department of Environmental Quality with the Neighborhood Environmental Partners Program award.** ANNETTE

MANWELL/SENTINEL STAFF

help with the build. Full-time employees may be paid for 16 hours of community service annually.

The BPW was honored for its partnership with the Ottawa County Health Department and the pharmaceutical col-

lection program hosted by the organizations. The BPW got involved with the program in an effort to keep medications out of the wastewater treatment facility.

Grand Rapids-based Pilgrim Manor was hon-

ored for a composting program, pharmaceutical take back, partnering with Comprenew for an electronic waste recycling program and a quarterly blood drive.

—ANNETTE MANWELL

H.S. 9/30/11



**Macatawa Area  
Coordinating Council**  
*A Cooperative Effort Among Units of Government*



## Macatawa Watershed Project

### **Macatawa Watershed Project Status Meeting**

**Thursday, January 14, 2010**

**3:00 PM**

**MDEQ, Grand Rapids District Office**

#### **Policy Board**

H Rosemary Ervine, Chair  
H Blaine Koops  
H Hannes Meyers, Jr.  
H Pankaj Rajadhyaksha  
H William Vanderbilt  
Howard Baumann, Jr.  
Terry M. Burns  
Kurt Dykstra  
Terry Hofmeyer  
Lester Hoogland  
John Kleinheksel  
Dal McBurrows  
Al Myaard  
Terry Nienhuis  
Keith Potter  
Amanda Price  
Gord Schrottenboer  
Russ Te Slaa  
Dave Vander Kooi  
Todd Wolters

H Executive Committee

### **Agenda**

- I. INTRODUCTION OF NEW EXECUTIVE DIRECTOR, STEVE BULTHUIS
  
- II. REVIEW, HISTORY AND CURRENT STATUS OF THREE GUIDING DOCUMENTS
  - Total Maximum Daily Load for Phosphorus in Lake Macatawa, dated 1/20/1999
  - Nonpoint Source Phosphorus Reduction Plan for the Macatawa Watershed, dated 10/21/1999
  - TMDL Voluntary Agreement, dated 5/1/2000
  
- III. RENEWAL OF THREE GUIDING DOCUMENTS
  
- IV. DISCUSS TECHNICAL ASSISTANCE CONCERNS
  
- V. NEXT STEPS AND FUTURE OUTLOOK OF MACATAWA WATERSHED PROJECT





**Policy Board**

\* Rosemary Ervine, Chair  
\* Blaine Kooops  
\* Hannes Meyers, Jr.  
\* Pankaj Rajadhyaksha  
\* William Vanderbilt  
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Kurt Dykstra  
Terry Hofmeyer  
Lester Hoogland  
John Kleinhessel  
Dal McBurrows  
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Keith Potter  
Amanda Price  
Gord Schrottenboer  
Russ Te Slaa  
Dave Vander Kooi  
Todd Wolters

\* Executive Committee

**Lake Macatawa Watershed Agreement  
Reduction of Phosphorus Loading**

ORIGINAL DATE: May 1, 2000  
REVISED AND RENEWED DATE: July 2010

This agreement is between the State of Michigan Department of Natural Resources and Environment (MDNRE), Water Bureau, and the attached signatories.

We, the undersigned, acknowledge the importance of Lake Macatawa and its tributaries as valuable water resources for the residents, wildlife and aquatic life in the watershed.

1. As identified in the document titled "Total Maximum Daily Load for Phosphorus in Lake Macatawa" (TMDL document) published January 20, 1999, by the MDNRE (then referred to as the Michigan Department of Environmental Quality), nonpoint source phosphorus loadings account for the vast majority of the annual phosphorus load to Lake Macatawa. In 1997, nonpoint source phosphorus loads accounted for 91 percent of the total phosphorus load.
2. To improve the resource and achieve attainment of Water Quality Standards, phosphorus levels must be reduced.
3. Members of the Macatawa Area Coordinating Council (MACC) have agreed to pursue activities to bring about a significant reduction in nonpoint source discharges of phosphorus in the watershed under a voluntary program managed through the Macatawa Watershed Project. Nonpoint source discharges of phosphorus occur from a variety of rural, urban and suburban land uses in the watershed.
4. Members of the MACC have agreed to implement a voluntary, watershed-wide strategy titled "The Nonpoint Source Phosphorus Reduction Plan for the Macatawa Watershed 1999-2009", dated October 21, 1999, for the reduction of nonpoint source phosphorus loading to Lake Macatawa. The plan is currently being updated to meet EPA Nine Key Elements Criteria.

5. The majority of the current point source phosphorus loadings are from three (3) facilities. As identified in the January 20, 1999 TMDL document, the MDNRE agrees to:

Propose and support the current National Pollutant Discharge Elimination System (NPDES) permit limitations for phosphorus listed in the following table for the following three point source dischargers for each re-issuance or modification of their respective NPDES permits, until the expiration of this agreement. Upon expiration of this agreement, it is the MDNRE's position that the point source limits for phosphorus loadings may need to be revised if this voluntary agreement is ineffective in achieving the goals of the TMDL.

Permittee	Permitted Monthly Average Load	Monthly Average Concentration
Holland WWTP	58 lbs/day	1 mg/L
Zeeland WWTP	14 lbs/day	1 mg/l
Mead Johnson & Co	5 lbs/day	--

6. The permittees listed in #5 above agree to put forth reasonable efforts to keep within the combined wasteload allocation of 20,000 pounds of phosphorus per year from point source discharges as identified in the TMDL document.
7. All parties agree to meet annually to:
  - a. Discuss overall and individual performance and activity directed towards meeting the phosphorus goals identified in the TMDL document,
  - b. Review the watershed wide strategy and recommend modification for improving implementation, and
  - c. Review data and information developed through the continued studies to be conducted pursuant to paragraphs 9 and 10 below.
8. An annual report shall be submitted by the MACC to the MDNRE and all other parties to this agreement on or before November 1<sup>st</sup> of each year, summarizing the progress made towards meeting the phosphorus goals identified in the TMDL document.

The report shall include the following:

- Summary from the annual meeting
- Progress made on each item identified in the strategy
- Changes in the strategy in response to new challenges
- Local successes in phosphorus control
- Summary of the point source phosphorus effluent data and control methods
- Summary of any locally derived watershed monitoring data, including trend data as implementation proceeds

9. The MDNRE agrees to continue monitoring water quality in Lake Macatawa and tributaries as resources allow. Monitoring locations to be considered are identified in the MDNRE staff report number MI/DEQ/SWQ-98/015. The MDNRE will prepare a report of the sampling results by May 1<sup>st</sup> of the year following any monitoring effort. The report will be distributed to all parties to this agreement.
  
10. The MDNRE agrees to collaborate with the signatories to evaluate additional sampling to identify sources of phosphorus, as resources allow, e.g. wet weather sampling as part of the MDNRE rotating schedule of watershed monitoring.
  
11. The parties agree that further study may demonstrate designated use attainment in the watershed even if phosphorus levels are not reduced as contemplated by the TMDL Document. The undersigned agree to discuss supporting continued study of water quality parameters and develop endpoints for the phosphorus reduction program.  
  
 The study should include, but not be limited to, the following:
  - Continued monitoring of ambient phosphorus levels
  - Establish baselines and endpoints for relevant warm water fish species and other indigenous aquatic life and wildlife
  - Study and quantify phosphorus contributions from accumulated sediments
  - Evaluate other causes of water quality impairment
  - Establish relationship between phosphorus reduction and water quality improvements
  
12. Any party may terminate its involvement in this agreement. Notice of such termination shall be given in writing to all other parties prior to the effective date of termination.
  
13. This agreement shall be treated as an integral part of, and not severable from, the TMDL Document.

This agreement was passed via resolution at the July 2010 meeting of the MACC Policy Board. This agreement shall expire on August 31, 2020. The parties to the agreement may renew it on the basis of agreement.

Steve Bulthuis 8-13-10  
 Steve Bulthuis, Executive Director, Macatawa Area Coordinating Council Date

William Creal 9-17-10  
 William Creal, Bureau Chief, Water Resources Division Date  
 Michigan Department of Natural Resources and Environment



Watershed Planning Committee Meeting Agendas

Available Upon Request

[info@the-macc.org](mailto:info@the-macc.org)