

# CASS COUNTY MICHIGAN

## Water Resources Commissioner



*New Cass County Drain – Birch Williamsville Drain*

## 2011 Annual Report

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*“ Both residents and visitors of Cass County enjoy the beauty of over 250 lakes and ponds, along with numerous streams, creeks, and wetlands that offer some of the best boating, fishing, swimming, wildlife habitat, and other recreational opportunities in Southwest Michigan. Maintaining county drains for agricultural, commercial, industrial, and residential use is critical to our economy and our quality of life. Managing established lake levels and protecting the waters of our county through a strong Soil Erosion Control Program will ensure the protection of these waters as one of our county’s most valuable resources for our current and future generations.”*

*– Bruce Campbell, Cass County Water Resources Commissioner*

### ***Forward***

The fiscal year 2011 found the Drain Office both busy and productive. In the fall of 2010 the MDEQ Administrative Judge ruled in favor of the Drain Offices of Cass and VanBuren County in the Crooked Lake Augmentation Project. The agricultural pump was upgraded and the outlet infrastructure was installed. The water table dropped after a dry summer and fall and for the first time since its installation the Barron Lake Pump was left running throughout the winter and into the spring. Longtime Twin Lakes Custodian Jerry Vomish passed away in December and was honored by the county Board of Commissioners. The process of the transfer of the Breezy Beach Drain in Howard Township to the Drain Office continued. Construction began in the summer of 2011 on the new Birch Williamsville Drain and was completed in July by contractor Andy Merrill of Dowagiac. The Happy Homes Drain Project continued with the transfer of property to the Drainage District from Cassopolis Schools and MDOT. Easements were also procured from the Village of Cassopolis. Construction will commence on this new county drain by contractor Brad Thomas in the Fall/Winter of 2011/2012. Survey was completed on the petitioned project on the Hilltop Road Drain. Easement acquisition is underway and construction will be scheduled after it is obtained. Maintenance will be scheduled on the Priest Lake Level structure and the Nottingham Jones Drain in the fall of 2011. Repairs to the lake bank and drain were done on the Pitcher Lake Drain. In August the Road Commission replaced a culvert on Loveridge Street which crosses the Red Run Extension Drain. The county is still in a wet water cycle, which began around 2006-07. The spring of 2011 produced ample rainfall and for the second year in a row the county experienced a dry period in July and August. July set a record for the number of days over 90 degrees.

**ANNUAL REPORT  
OF THE  
CASS COUNTY WATER RESOURCES COMMISSIONER**

**October 1, 2011  
By Bruce Campbell**

**I. COUNTY DRAINS**

Inspection of County Drains

Since October 1<sup>st</sup>, 2010 42 inspections have occurred on 26 different drains.

New Drainage Districts

Petitions received and district formed: Two

Subdivision plats, with new drainage districts are: None

And being contemplated for: None

Cleaning, Maintenance and Repair

Petitions were received for cleaning, maintenance or repair of drains for: Beaver Dam Stateline Drain.

Drains cleaned or maintained from drain fund accounts or revolving drain funds:

Lilly Lake Drain – Newberg Township  
Twin Lakes Channel – Wayne Township  
Patrick Hamilton Drain – Silver Creek Township

Drains needing cleaning or maintenance include: Most.

Status Report

Beaver Dam State Line Drain Ontwa Township

A petition has been filed and is being checked for validation. Survey and inspection was performed in 2010.

MEANDERS Pokagon Township

A new description and easement needs to be written and recorded.

Breezy Beach Drain Howard Township

A drainage district was established and the transfer of the drain from Howard Township to the Drain Office is still in process.

Birch Williamsville Drain

Porter Township

The new county drain was constructed by Contractor Andy Merrill from Dowagiac after a permit was obtained from the MDEQ.

Happy Homes Drain

Lagrange Township

The Happy Homes Drain Project continued with the transfer of property to the Drainage District from Cassopolis Schools and MDOT. Easements were also procured from the Village of Cassopolis. Construction will commence on this new county drain by contractor Brad Thomas in the Fall/Winter of 2011/2012. Storm water runoff issues are being looked at by the Drain Office, Road Commission, and the Village of Cassopolis.

Hilltop Road Drain

Porter Township

Survey was completed on the petitioned project on the Hilltop Road Drain. Easement acquisition is underway and construction will be scheduled after it is obtained.

Patrick Hamilton Drain

Silver Creek Township

Maintenance was performed on the drain to fix erosion problems from storm water runoff from agricultural fields.

Pitcher Lake Drain

Wayne Township

Repairs to the lake bank and drain were performed on the Pitcher Lake Drain.

## **II. INTERCOUNTY DRAINS**

The Department of Agriculture Intercounty Drain program was funded for the Fiscal Year of 2011 with two agents and one administrative staff.

### New Drainage Districts

None

### Cleaning, Maintenance and Repair

None

### Drains need cleaning

Four County – Marcellus Township

## Status Report

Smith Lake

Pokagon Township

Water still drained from Big and Little Smith Lakes into the summer of 2011.

### **III. LAKE LEVEL CONTROLS**

Water levels were high throughout the spring and summer of 2011. A number of lakes did not require a control board.

Barron Lake

Howard Township

A pump valve was worked on during the summer of 2011. Iron build up on the well point is an issue and will be discussed with the Barron Lake Association after the yearly inspection report is provided by Peerless Midwest in October.

Priest Lake

Silver Creek Township

Sink holes were discovered after inspection in September of 2011. Repairs will be scheduled in October.

Magician Lake

Silver Creek

The lake stayed above the court ordered decree level of 753' throughout the summer and no control board was needed for the second year in a row. A fallen tree was removed from the control structure in the summer of 2011.

All lake level structures were inspected on the mandatory 3 year cycle by Merritt Engineering in 2011 and reported to the MDEQ.

### **IV. SOIL EROSION AND SEDIMENTATION CONTROL PROGRAM**

The Board of Commissioners transferred the authority of the Soil Erosion and Sedimentation Control Program to the Water Resources Commissioner as the enforcing agency on July 3, 2008 by Resolution R-93-08.

## Statistics

Permits Issued	-	112
Total Site Inspections	-	187
Final Site Inspections	-	108
Complaints	-	2

Major Sites Permitted

Lakes Area Sewer Authority	-	Marcellus Township
Moose Lake Aggregates	-	Howard Township
Aggregate Industries	-	Milton Township
Diamond Lake Water System	-	Penn, LaGrange, Calvin, Jefferson Townships
Donnell Lake Water System	-	Penn Township
AT&T	-	Howard Township
Enbridge Pipeline	-	Calvin, Jefferson, Penn, Howard Townships
Pokagon Band Potowatomi	-	LaGrange Township
BP Pipeline	-	Porter
Wolverine Pipeline	-	Milton Township
Merit Fiber Network	-	Across County M-62 to M-60

Future Major Permits

Pipeline inspections and repairs.

**V. FINANCIAL**

Assessments

The following special assessments have been approved for 2011:

<b>Drain/Lake Level</b>	<b>Township</b>	<b>Amount</b>
Hilltop Road Drain	Porter	\$ 12,000.00 (year 1 of 2)
Barron Lake Level	Howard	\$ 67,628.00
Glenwood Drain	Wayne	\$ 10,863.80 (year 3 of 3)
Happy Homes Drain	LaGrange	\$ 30,398.25 (year 1 of 3)
Bame & Huntly Drain	Howard/Milton	\$ 1,000.00
Lilly Lake Drain	Newberg	\$ 1,750.00
Birch Williamsville Drain	Porter	\$ 40,000.00 (year 2 of 2)
MacMillan Dam, Fish, Finch, Saddlebag Lakes Level	Marcellus/Volinia	\$ 4,586.63
Twin Lakes Level	Wayne	\$ 7,920.00
Crooked Lake Level Intercounty	Silver Creek	\$ 11,464.33 (year 2 of 5)

Drain Funds

On September 28, 2011, the cash balances in the various accounts were:

	<u>Amounts</u>
801 Drain	\$ 13,397.41
841 Lake Level	18,241.53
802 Revolving Drain	29,154.92

Notes Payable

None

Delinquent Tax Fund Loans

\$17,000 plus interest to be paid on May 31, 2012 from the Glenwood Drain Fund.

**VI. OTHER ISSUES**

Lake Augmentation Projects

Barron Lake's well point will be evaluated after the September inspection report is provided by Peerless Midwest.

Twin Lakes is functioning at a satisfactory level.

In the fall of 2010 the MDEQ Administrative Judge ruled in favor of the Drain Offices of Cass and VanBuren County in the Crooked Lake Augmentation Project. The agricultural pump was upgraded and the outlet infrastructure was installed.

MS4 of NPDES

Fishbeck, Thompson, Carr and Huber applied for Cass County's new permit which has been obtained. Updates for drain outfalls completed for urbanized areas in September of 2011. A Water Resources Commissioner Facebook Page was created for the Public Education Program.

Cass County Road Commission

The Water Resource Commissioner and the Cass County Road Commission continue to work together in several areas. The Road Commission replaced a culvert on Loveridge Street which crosses the Red Run Extension Drain.

**VII. WATER RESOURCES COMMISSIONER'S OFFICE**

1. Developing drain and lake level districts into county GIS System continues.

2. Drawing route and courses of drains into GIS System continues.
3. Developing electronic spreadsheet for assessment rolls continues.
4. A Facebook page was developed for the Drain Office and continues to be developed.
5. Web page development for the Drain Office is completed and updated on a regular basis.

## VIII. PROFESSIONAL

The drain commissioner attended the following professional meetings:

MACDC – Fall District Meeting	10.29.11 – Berrien County
MACDC – Winter Conference	02.16.11 - Traverse City
Sanitary Storm Water Seminar - ADS	03.25.11 - Kalamazoo
Intergovernmental Forum	03.11.11 – SMC
Planning Commission Seminar	06.07.11 – Cassopolis at CCRC
WMSECN Soil Erosion Training	06.09.11 - Muskegon
MACDC – Spring District Meeting	04.26.11 - Cassopolis
MACDC – Summer Conference	07.13.11 - Out of State
SW District Soil Erosion Meeting	09.16.11 - Portage

## IX. OTHER

Besides regular office hours and field inspections, the Water Resources Commissioner attended:

- Board of Public Works – Member
- Parks Board – Member and Chairman
- Road Commission monthly meetings
- Board of Commissioners bi-monthly meetings
- Numerous County, Township, Village and City meetings

## X. ACKNOWLEDGEMENTS

The Water Resources Commissioner is appreciative of the assistance of many individuals over the past year, but wants to give special recognition to:

Jackie Taylor and Tara Myer for their administrative assistance.

CPA Becky Moore and Treasurer Linda Irwin for their assistance on the accounting of the drain and lake level funds and ledgers.

Clerk Barb Runyon and her staff for assistance with deeds, plats, and easement information.

Information Systems Director Kerry Collins and his staff for mapping and GIS support.

County Administrator's Chuck Clarke and Charles Cleaver for administrative support.

Cass County Board of Commissioners.

## **APPENDIX A**

### **DRAINS INSPECTED BY WATER RESOURCES COMMISSIONER**

Brandywine  
Dowagiac IC  
Garver Lake Drain  
Hilltop Road

Smith Lake Intercounty  
Pleasant Lake  
Pitcher Lake  
Huckleberry

Twin Lakes  
Patrick Hamilton  
Goose & Mud Lake  
Bame & Huntley  
Jones Bair Lake  
Birch Williamsville  
Round Lake  
Miller Robinson  
Mud Pine Lake

Whitaker NE Extension  
Nottingham Jones  
Red Run  
Stock Farm  
Happy Homes  
Glenwood  
Red Run Extension  
Park Shore No 1 & 2  
Union State Line

LAKE LEVEL CONTROL STRUCTURES INSPECTED BY WATER REOSURCES  
COMMISSIONER

*(note – all lake level structures were inspected on the mandatory 3 year cycle by Merritt Engineering in 2011)*

Barron Lake\*  
Garver Lake  
Magician Lake \*  
Twin Lakes\*  
Lilly Lake  
Diamond Lake  
Shavehead Lake \*  
Pleasant Lake  
Priest Lake\*  
Corey Lake  
Eagle Lake  
McMillan Dam\*  
\* - work was performed

OTHER INSPECTIONS (complaints)

Numerous throughout the year.

DRAIN CROSSING PERMITS

None



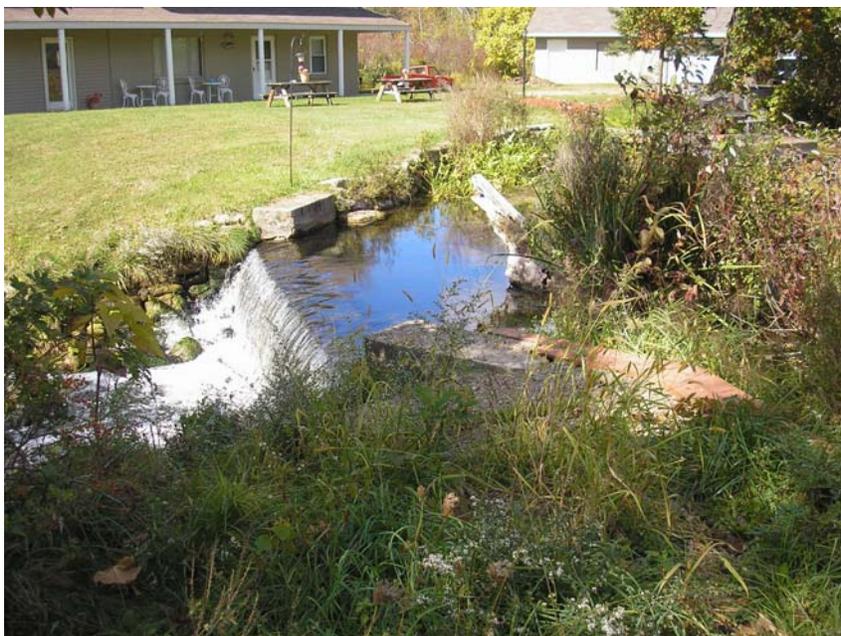
*Garver Lake Level*



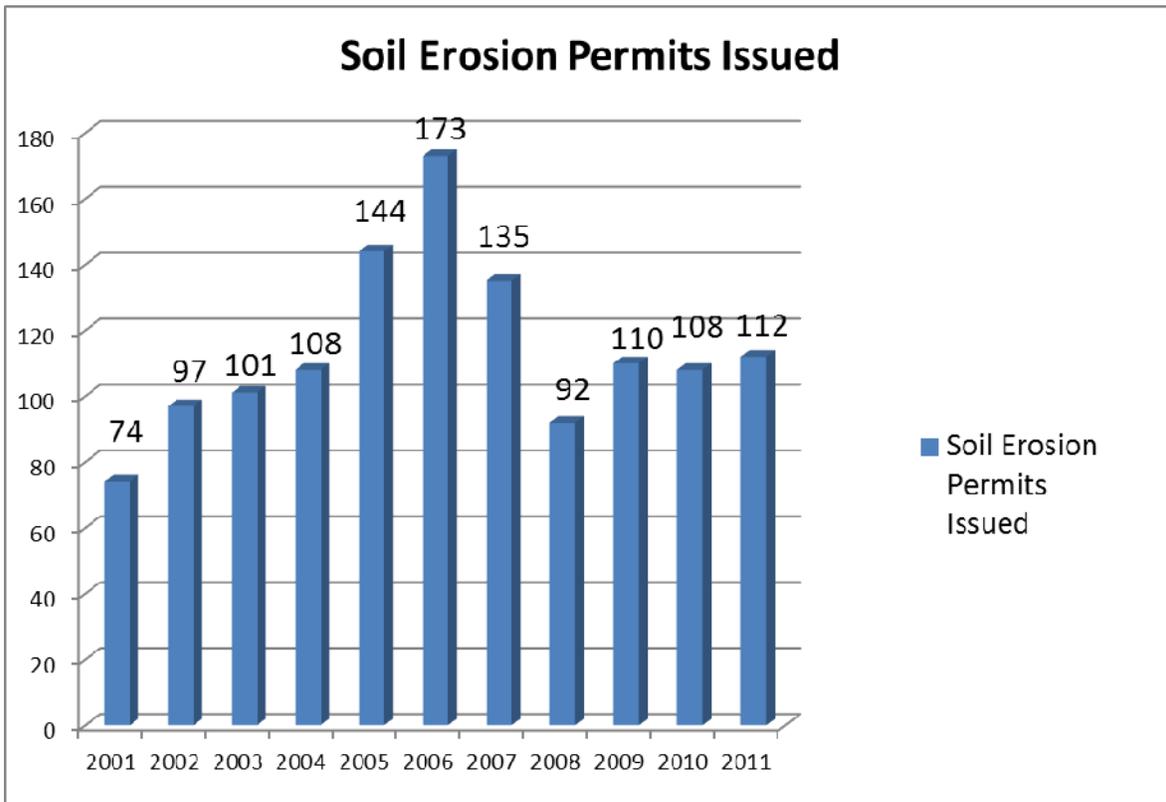
*Magician Lake Level*



*Twin Lake Level*



*MacMillan Dam, Fish, Finch, Saddlebag Lakes Level*



*Soil Erosion Statistics – FY 2011*



*Water Resources Commissioner Facebook Page*