

# CASS COUNTY MICHIGAN

## Drain Commissioner



*Enbridge Pipeline Replacement*

## 2013 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 Drain Commissioner*

## ***Forward***

The year 2013 presented many challenges that resulted in a number of projects for the Drain Office. The winter of 2012-13 had more snow than the previous winter but was still below normal with average temperatures slightly above normal. The spring was wetter and cooler than normal. The summer was normal but by mid-July we experienced drought like conditions that continued into October which repeated a pattern that started in 2010. In the spring construction work commenced on the Stock Farm petition project. Wet soils slowed progress with the completion coming in mid-summer. Improvements on Happy Drive and Spencer Road were scheduled for the Happy Homes Drainage District in October. Also in October maintenance was scheduled to begin on the Beaver Dam State Line Drain. No significant maintenance had been done on this drain in over 100 years. The Board of Commissioners changed the name of the Drain Office back to the historic title of Drain Commissioner in February. The augmentation pump was not operated on Barron Lake as studies continued on the water table which included monitoring private wells both on and off the lake. Beaver control problems were prevalent throughout the county and impacted a number of lake level controls and drains such as the Garver Lake Drain, Finch Lake, Lilly Lake, Red Run Extension Drain, Harwood Lake, and the Brandywine Drain to name a few. The Soil Erosion Program issued a permit and inspected the biggest construction project the county has seen in many years as Enbridge Pipeline replaced the entire length of its’ 36” oil pipeline as it traversed the county from Milton through Newberg Townships.

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

**October 1, 2013  
By Bruce Campbell**

**I. COUNTY DRAINS**

Inspection of County Drains

County drains are inspected on a weekly basis.

New Drainage Districts

Petitions received and district formed: None.

Subdivision plats, with new drainage districts are: None.

And being contemplated for: Carlton Drive.

Cleaning, Maintenance and Repair

Petitions were received for cleaning, maintenance or repair of drains for: none

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

Eggleston Drain – Marcellus Township  
Hilltop Road Drain – Porter Township  
Happy Homes Drain – LaGrange Township  
Eggleston Drain – Marcellus Township  
Red Run Extension Drain – Marcellus Township  
Red Run Intercounty Drain – Volinia Township  
Jones & Bair Lake Drain – Newberg Township

Drains needing cleaning or maintenance include: most.

Status Report

Beaver Dam State Line Drain

Ontwa Township

Contract work was awarded in September, 2013 and work will commence in the fall. A portion of the channel will be dredged that will remove a large amount of sediment.

MEANDERS

Pokagon Township

The MEANDER was surveyed and a new legal description was written by PAV Engineering.

Eggleston Drain

Marcellus Township

The Road Commission replaced the culvert under Loveridge Road and beaver dams were removed which relieved flooding to the south in the wetland area. The Drain Office contracted with Thomas Excavating to clean the drain to the north.

Happy Homes Drain

Lagrange Township

Thomas Excavating is scheduled to do intersection work on the Happy Drive and Spencer Road Intersection in October. New pipe and a basin will be installed at the intersection with new tile installed down to the new retention pond to the west.

Hilltop Road Drain

Porter Township

Merrill Excavating is scheduled to reconstruct the northern easement which includes maintenance of the inlet and bank.

Patrick Hamilton Drain

Silver Creek Township

The farm crossing is going to be extended by 10 feet at the end of Sarabyn Street. Work is scheduled to be done in October by Merrill Excavating.

Red Run Intercounty Drain

Volinia Township

Sediment removal was performed to enhance drainage along a half a mile stretch north of Dewey Lake Street. Work was performed by Thomas Excavating.

Red Run Extension Drain

Marcellus Township

An 80 foot in length beaver dam was removed by trapper Mike Fisher to relieve flooding.

California Stock Farm Drain

Pokagon Township

The Board of Determination issued an "Order of Necessity" in November of 2012. Merrill Excavation began reconstruction work in the spring in wet conditions that caused runoff

issues. Over a quarter of mile of older tile was replaced with corrugated plastic and the open ditch portion of the drain was reestablished to its proper grade.

Jones & Bair Lake Drain

Newberg Township

A concrete cover on a connection structure failed and was placed with a wooden cover. The Drain Commissioner met with Newberg Township officials in October to discuss issues on the drain and in the drainage district.

## II. INTERCOUNTY DRAINS

The Department of Agriculture Intercounty Drain program was funded for the Fiscal Year of 2012 with two agents and one administrative staff.

### New Drainage Districts

None

### Cleaning, Maintenance and Repair

Red Run Intercounty Drain

### Drains need cleaning

Four County – Marcellus Township

### Status Report

Red Run Intercounty Drain

Volinia Township

A portion of the drain was dredged north of Dewey Lake Street which improved drainage flow.

## III. LAKE LEVEL CONTROLS

A wetter than normal spring augmented county lakes and wetlands. The augmentation was reversed in late summer and early fall by drought like conditions.

Barron Lake

Howard Township

The augmentation pump was not operated on Barron Lake in 2013 as studies continued on the water table which including monitoring private wells on the lake and off from late June

thru November. Talks were initiated by the Drain Commissioner with the City of Niles reference utilizing a newer well that the City of Niles is contemplating installing near the airport.

Priest Lake Silver Creek Township

Further sinkhole issues at the outlet structure will be addressed in the fall of 2013.

Magician Lake Silver Creek Township

The lake stayed near the court ordered decree level of 753' throughout the summer and The control board was put in place in the summer.

Shavehead Lake Porter Township

No activity occurred in 2013.

Baldwin Lake Porter Township

A new staff gauge to measure lake level was installed just south of the boat launch on Sunset Boulevard. The previous one had broken off during the winter of 2011-12 due to ice movement. The new gauge was also compromised by the ice during the winter of 2012-13 and was not replaced. A more stable location will be determined in the future.

All lake level structures were inspected on the mandatory 3 year cycle by Merritt Engineering in 2011 and reported to the MDEQ. Next inspection is due in 2014.

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

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

##### Statistics

Permits Issued	-	76
Total Site Inspections	-	153
Final Site Inspections	-	93
Complaints	-	6

## Major Sites Permitted

Cedar Lake Sewer	-	Marcellus Township
Moose Lake Aggregates	-	Howard Township
Aggregate Industries	-	Milton Township
City of Dowagiac Russom Park	-	Silver Creek Township
Lakeland Immediate Care Center	-	LaGrange Township
Enbridge Pipeline	-	Calvin, Jefferson, Penn, Howard Townships
North American Forest Products	-	Ontwa Township
Trans Canadian Pipeline	-	Mason Township

## Future Major Permits

None known.

## **V. FINANCIAL**

### Assessments

The following special assessments have been approved for 2013:

<b>Drain/Lake Level</b>	<b>Township</b>	<b>Amount</b>
Hilltop Road Drain	Porter	\$ 23,523.09 (year 2 of 3)
Jones & Bair Lake Drain	Newberg	\$ 5,165.00
Dibble Drain	Howard & Milton	\$ 5,905.00
Happy Homes Drain	LaGrange	\$ 30,398.25 (year 3 of 3)
Twin Lakes Level	Wayne	\$ 7,920.00
Crooked Lake Level Intercounty	Silver Creek	\$ 11,464.33 (year 4 of 5)
Eggleston Drain	Marcellus	\$ 3,040.00
Beaver Dam and State Line Drain	Ontwa	\$ 38,605.00
Lilly Lake Drain	Newberg	\$ 6,000.00
Red Run Extension Drain	Marcellus	\$ 1,615.00
Red Run Intercounty Drain	Volinia	\$ 8,825.33
Stock Farm Drain	Pokagon	\$ 36,610.72 (year 1 of 3)

### Drain Funds

On June 30, 2013, the cash balances in the following accounts were:

	<u>Amounts</u>
801 Drain	\$ 58,903.61
841 Lake Level	\$ 129,626.52
802 Revolving Drain	\$ 29,158.95

Notes Payable

None.

Delinquent Tax Fund Notes

\$70,000 plus interest to be paid by May 31, 2015 from the Hilltop Road Drain Fund.  
\$30,000 plus interest to be paid by May 31, 2015 from the Happy Homes Drain Fund.

**VI. OTHER ISSUES**

Lake Augmentation Projects

None

MS4 of NPDES

The Drain Office is exploring the administering of this statutory program in another manner.

Cass County Road Commission

The Drain Commissioner and the Cass County Road Commission continue to work together in several areas throughout the county including Redfield Street, Spencer Road, Carlton Drive, and Lake Street to name a few.

**VII. DRAIN COMMISSIONER'S OFFICE**

1. Implementing drain and lake level districts into county GIS System continues. Application will be submitted for a 90/10% match for a SAW Grant.
2. Drawing route and courses of drains into GIS System continues.
3. Developing electronic spreadsheets for assessment rolls continues.
4. A Facebook page was developed for the Drain Office and is updated as needed.
5. Web page development for the Drain Office is completed and updated as needed.

## VIII. PROFESSIONAL

The Drain Commissioner attended the following professional meetings:

MACDC – Fall District Meeting	10.19.12 - Branch County
Township Supervisors Meeting	10.23.12 - EOC
St. Joseph River Watershed Annual Mtg	03.18.13 - Sturgis
MDEQ / Drain Commissioner Forum	03.28.13 - Kalamazoo
Earth Day	04.19.13 - T.K. Lawless Park
Township Supervisors Meeting	04.23.13 - EOC
Intergovernmental Forum	04.30.13 - Dowagiac Middle School
MDOT / Drain Commissioner Forum	05.17.12 - Coloma TSC
MACDC – Summer Conference	07.16.13 - Crystal Mountain
Emergency Management Exercise	09.19.13 - EOC

## IX. OTHER

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

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

## X. ACKNOWLEDGEMENTS

The Drain 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 for the accounting of the drain and lake level funds and ledgers.

Clerk Monica Kennedy 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 Louis Csokasy for administrative support.

Cass County Board of Commissioners.

## APPENDIX A

### LAKE LEVEL CONTROL STRUCTURES INSPECTED BY DRAIN COMMISSIONER

*(note – all lake level structures were inspected on the mandatory 3 year cycle by Merritt Engineering in 201. Statutory dam inspections are scheduled for 2014.*

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

### OTHER INSPECTIONS (complaints)

Numerous throughout the year.

### DRAIN CROSSING PERMITS

- 1 - Brandywine Drain - Enbridge Pipeline Replacement Project
- 2 - Dibble Drain - Enbridge Pipeline Replacement Project



*Beaver Dam and State Line Drain*



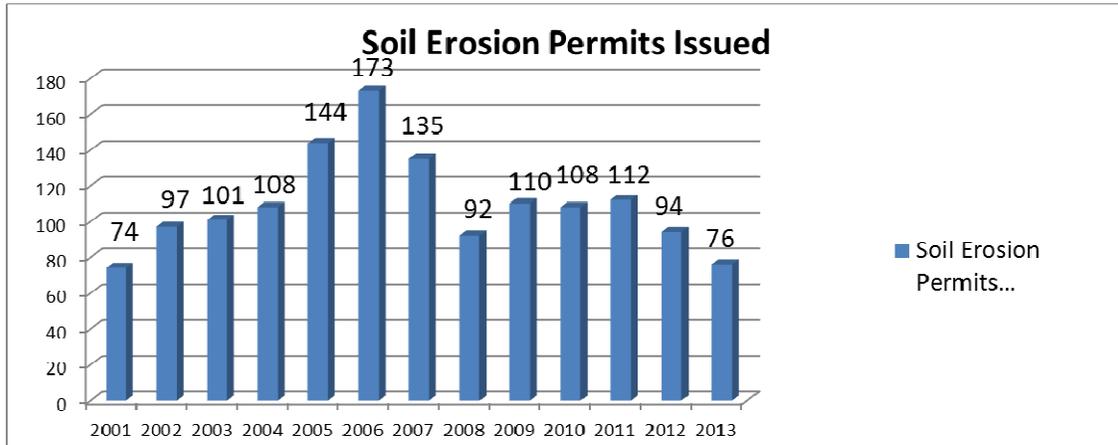
*Garver Lake Level*



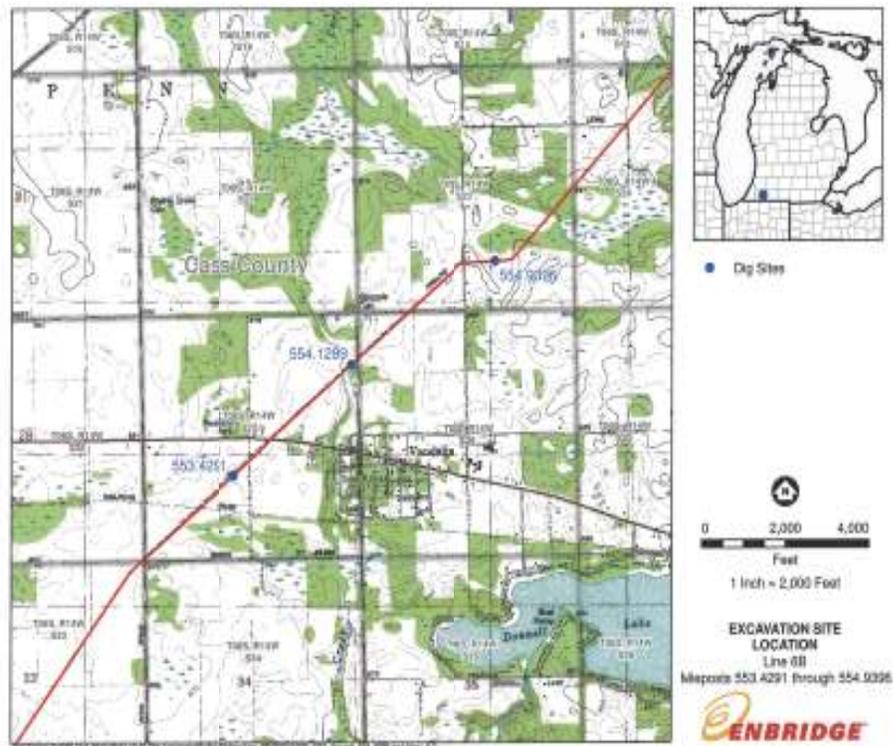
*Jones & Bair Lake Drain*



*Enbridge Pipeline Replacement*



*Soil Erosion Statistics – FY 2013*



*Enbridge Pipeline Replacement Project – Line 6B*