

CASS COUNTY  
MICHIGAN

Drain Commissioner



*Christiana Creek*

2015 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 weather for the fall of 2014 was rather uneventful. The main topic of news was the election of a new Ontwa Township Board that stopped the newly proposed waste water treatment plant project at its’ first meeting. The winter of 2015 was not as severe as the harsh 2014 winter but a bitterly cold February brought back memories of the previous year. Many days and nights in February were near or below zero when the heaviest snowfall amounts of the winter were recorded. Many heavy rain events in the spring and early summer raised the water table and filled lakes along with swelling creeks and streams. The rain was the heaviest in the northern part of the county with some of the rain gauges registering up to 17” in a 6 week period in Marcellus Township. These rains also swelled the Dowagiac River and it topped its’ banks in a number of places in Wayne Township. Farm fields were flooded on the Dowagiac River just north of the county line in Decatur. Culverts were compromised and had to (or will) be repaired or replaced throughout the county including road crossings on Dewey Lake Street, Born Street, Worrell Street, and Leet Road to name a few. Culverts were cleaned on Hathaway Road which alleviated flooding on Bunker Lake. Lake levels throughout the county were high during the summer. The heavy spring rains resulted in many drain maintenance projects. Cass County experienced a relatively dry period from mid-July through September. September temperatures’ were some of the warmest on record.

**ANNUAL REPORT  
OF THE  
CASS COUNTY DRAIN COMMISSIONER**

**October 1, 2015  
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: Petition received from the Cass County Road Commission for flooding on Trout Creek in Porter Township.

Subdivision plats, with new drainage districts are: None.

And being contemplated for: Oak Spring Crossing in Ontwa Township.

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:

Patrick Hamilton Drain – Silver Creek Township  
Four County Drain – Marcellus Township  
Breezy Beach Drain – Howard Township  
Huckleberry Big Marsh Drain – Penn Township  
Brandywine Drain/East Branch – Howard Township  
Lilly Lake Drain – Penn Township

Drains needing cleaning or maintenance include: Most.

Status Report

Hayes Drain Marcellus Township

Heavy spring and early summer rains resulted in flooding on the drain. Easement, maintenance, and establishing a positive outlet will be explored during the winter of 2016.

G.D. Mann Drain

Silver Creek Township

The Indian Lake Improvement Association asked the Drain Commissioner for continuing assistance to its' ongoing water quality projects for Indian Lake.

Huckleberry Big Marsh Drain

Penn Township

Spring flooding on White Temple Road resulted in discussion between the Road Commission and the Drain Office.

Jones & Bair Lake Drain

Newberg Township

Maintenance and proposed work has been scheduled on the outlet on Bair Lake Street which leads to Bair Lake. The culvert is plugged and has resulted in flooding to the farm fields to the north.

Patrick Hamilton Drain

Silver Creek Township

The drain was cleaned between the pond belonging to the City of Dowagiac and the Meadowbrook Subdivision approximately 1,200 feet to the north.

Lilly Lake Drain

Penn Township

Maintenance is being explored from the Born Street Crossing to the DNR Crane Pond wetlands to the north.

Breezy Beach Drain

Howard Township

Maintenance was performed during the summer at the shoreline of Barron Lake. HDPE pipe was replaced and lengthened into the lake and anchored.

Park Shore Drain

LaGrange Township

Two basins on Channel Drive need to be replaced.

California Drain

Silver Creek Township

Easements were acquired along Yaw Street and from the City of Dowagiac. Maintenance is going to be schedule for the winter of 2016.

## II. INTERCOUNTY DRAINS

The Department of Agriculture Intercounty Drain program was funded for the Fiscal Year of 2015 with two agents and one administrative staff.

### New Drainage Districts

None

### Cleaning, Maintenance and Repair

Four County Drain is to be scheduled for cleaning along Van Buren Street.

### Drains need cleaning

Four County – Marcellus Township

### Status Report

None

## III. LAKE LEVEL CONTROLS

A wetter than normal spring and summer augmented county lakes and wetlands. The augmentation was reversed in late summer and early fall by drier conditions for the second year in a row.

Barron Lake

Howard Township

The augmentation pump was not operated in 2015.

Priest Lake

Silver Creek Township

Patching of the interior pipe is scheduled for the fall of 2015.

Magician Lake

Silver Creek Township

A branch was removed from the creek above the dam by a local tree service. The lake was over its court decreed level all summer.

Shavehead Lake

Porter Township

Maintenance was scheduled for the support walls and under the footing for the first week of October 2015.

MacMillan Dam, Finch, Fish, Saddlebag Lake

Volinia/Marcellus Townships

Minor maintenance is planned for MacMillan Dam in 2016.

All lake level structures were inspected on the mandatory 3 year cycle by Peter VanDop of PAV in 2014 and reported to the MDEQ. Next inspection is due in 2017.

#### **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	-	85
Complaints	-	9

##### Major Sites Permitted

Moose Lake Aggregates	-	Howard Township
Aggregate Industries	-	Milton Township
American Electric Power	-	City of Dowagiac
Enbridge Pipeline	-	City of Dowagiac
Vineyard Place	-	City of Dowagiac
Marcellus Schools	-	Marcellus Township
Pokagon Band Potawatomi	-	LaGrange Township
Pokagon Band Potawatomi	-	Pokagon Township
Dollar General	-	Porter Township
Wolverine Pipeline	-	Milton Township
Wolverine Pipeline	-	Pokagon Township

##### Future Major Permits

Unknown.

## V. FINANCIAL

### Assessments

The following special assessments have been approved for 2014:

<b>Drain/Lake Level</b>	<b>Township</b>	<b>Amount</b>
California Drain	Silver Creek	\$ 4,972.00
Brandywine Drain	Milton/Howard	\$ 8,509.86
Twin Lakes Level	Wayne	\$ 8,017.77
Stock Farm Drain	Pokagon	\$ 36,548.50 (year 3 of 3)

### Drain Funds

On September 30, 2015 the cash balances in the following accounts were:

	<u>Amounts</u>
801 Drain	\$ 213,972.72
841 Lake Level	\$ 80,439.20
802 Revolving Drain	\$ 14,166.40

### Notes Payable

None.

### Delinquent Tax Fund Notes

Outstanding Borrowing:		Loan Amount	Loan Date	Due Date	Balance	Paid Date
1.50%	#80 Hilltop Road from Treasurer	70,000.00	2/14/2012	5/31/2015	-	7/20/2015
1.50%	#111 Happy Homes from Treasurer	30,000.00	2/14/2012	5/31/2015	-	7/20/2015
0.00%	#111 Happy Homes from 802-not treasurer	15,000.00	9/30/2013		13,531.44	
2.00%	#7 Stock Farm	115,000.00	1/13/2013	5/31/2016	78,436.64	

## VI. OTHER ISSUES

### Lake Augmentation Projects

None



## MS4 of NPDES

The Drain Office decided to administer the program internally and not utilizing an outside paid consultant as in previous years.

## Cass County Road Commission

The Drain Commissioner and the Cass County Road Commission continue to work together in several areas throughout the county. Monthly meetings have been set up.

## **VII. DRAIN COMMISSIONER'S OFFICE**

- 1) Implementing drain and lake level districts into county GIS System continues. SAW Grant funding was preliminarily approved for 2017.
- 2) Drawing route and courses of drains into GIS System continues.
- 3) Developing electronic spreadsheets for assessment rolls continues.
- 4) Web page development for the Drain Office is completed and updated as needed.
- 5) The Drain Office has implemented a MISS DIG PROGRAM as mandated by Public Act 197 of 2013.
- 6) The Soil Erosion and Sedimentation Program will transfer from the Drain Office to the Cass County Conservation District by their request and approval by Resolution by the Cass County Board of Commissioners.

## **VIII. PROFESSIONAL**

The Drain Commissioner attended the following professional meetings:

- 10.10 SWMACDC Fall District Meeting – Kalamazoo County
- 10.13 MDEQ NPDES Permit Hearing Ontwa WWTP
- 10.14 MEANDERS – Wayne Township
- 12.03 SWMACDC – Drain Commissioner Meeting
- 03.19 Social Media Training – Edwardsburg PAC
- 03.20 BOC Workshop – Lowe Foundation
- 05.08 Attended Soil Conservation District Monthly Meeting
- 07.04 Attended Kelsey Lake Association Meeting
- 07.08 Attended FEMA Phase II Discovery / Floodplains - Dowagiac
- 07.14 MACDC Summer Drain Conference – Mackinac Island
- 09.18 BOC Workshop – Lowe Foundation

## **IX. OTHER**

Besides regular office hours and field inspections, the Drain Commissioner attends:  
Board of Public Works – Member  
Parks Board – Member and 2015 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.

Financial Officer Angie Steinman and Treasurer Linda Irwin and her staff for their assistance for the accounting of the drain and lake level funds and ledgers.

Tony Meyaard and Tami Stewart from the Equalization Department for assessment assistance.

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 Roger Fraser for administrative support.

Cass County Board of Commissioners.

## APPENDIX A

LAKE LEVEL CONTROL STRUCTURES VISUALLY INSPECTED BY DRAIN COMMISSIONER  
*(note – all lake level structures were inspected on the mandatory 3 year cycle by a licensed engineer.  
Statutory dam inspections were performed in the spring of 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  
Long Lake (Porter Twp)  
Coverdale Lake  
Indiana Lake  
Birch Lake  
Finch Lake  
\* - work was performed

### OTHER INSPECTIONS / DRAINS

Drain Inspections - numerous throughout the year.  
Drain Complaints - 12

### DRAIN CROSSING / OTHER PERMITS

1 - G.D. Mann Drain – Indian Lake Improvement Association – Nutrient Capturing  
Project - Renewal



*Trout Creek*



*Christiana Creek*



*Shavehead Lake Dam*



*County Drain Culverts*



*Brandywine Drain – Howard Township*



*Priest Lake Level Control*