

CASS COUNTY MICHIGAN

Drain Commissioner



M-60 Flooding East of Cassopolis

2016 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 2015 was rather uneventful. The winter of 2015-2016 was not as severe as the harsh 2014 winter. Temperatures were above normal and precipitation in snowfall was below normal as the Midwest experience an El Nino. Spring of 2016 had a number of above normal temperature days and less precipitation than 2015. The summer of 2016 showed temperatures above normal and the county was in drought like conditions from late May into August. Many days had temperatures in the upper 80’ to the low 90’s. This drought was broken by a record rainfall in a 72 hour period from August 13-15th. Some rain gauges in the eastern half of the county had 3” of rain on the 13th and another 8-9” on the 15th for a total of a foot or more rain during that period. During the next few days many lakes, ponds, and wetlands rose by a foot or more. These rains resulted in many drain maintenance projects. Culverts on many road crossing were compromised. M-60 east of Cassopolis was closed for 3 days due to flooding resulting from runoff from the Midwest Energy construction project on Decatur Road. Cass County experienced a relatively dry period from the end of August through September. September temperatures were some of the warmest on record.

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

**October 1, 2016
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. The Board of Determination (BOD) did not issue an Order of Necessity for this petition. A petition was submitted by residents in the Hayes Drainage District in Marcellus Township.

Subdivision plats or Site Condominiums, 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: Hayes Drain.

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

Chess Drain – Calvin Township
Dibble Drain – Howard Township
Huckleberry Big Marsh Drain – Penn Township
Jones & Bair Lake Drain – Newberg Township
Park Shore #2 – LaGrange Township
Red Run Intercounty Drain – Volinia Township
Pine & Mud Lake Drain – Marcellus Township
Happy Homes Drain – LaGrange Township
Lilly Lake Drain – Newberg Township

Drains needing cleaning or maintenance include: Most.

Status Report

Hayes Drain

Marcellus Township

A petition was filed by residents of the drainage district and a Board of Determination (BOD) will be held in the fiscal year of 2017.

Big Huckleberry Big Marsh Drain

Penn Township

The Road Commission dealt with a beaver dam on the drain in the spring of 2016 and the Drain Office dealt with the same issue in the Fall of 2016. The Road Commission replaced the culvert under White Temple Road north of Hoffman Street during the summer of 2016.

Jones & Bair Lake Drain

Newberg Township

An emergency culvert replacement occurred in August of 2016 on Bair Lake Street. The drainage district was modified under the Drain Code and a Day of Review was held at the Newberg Township Fire Department in September.

Lilly Lake Drain

Penn Township

Maintenance was performed on the Born Street crossing in the fall of 2016. The culvert was replaced under the Road Commission and survey, design, and drain review was performed by the Drain Office.

Park Shore #2 Drain

LaGrange Township

Two basins on Channel Drive were replaced and the work was coordinated with SEMCO Gas Company

California Drain

Silver Creek Township

Drain maintenance was performed in 2016. The Drain was cleaned and trees were removed from Yaw Street to the Dowagiac Airport runway to the south. The drain was restored south of the runway to the Dowagiac Creek. The City of Dowagiac passed a Resolution to exceed maintenance costs.

Dibble Drain

Howard Township

The culvert under Leet Road experienced sinkholes and washouts after the August heavy rains. The Drain Office coordinated the Road Commission on culvert replacement and realignment.

Happy Homes Drain

LaGrange Township

The historic rain event in August caused the retention ponds to fill and required them to be pumped to an upland location like they were in 2008. In a local intergovernmental agreement both the Penn and the Cassopolis Fire Departments assisted.

Kestrel Hills Drain (433 Drain Agreement)

Milton Township

The historic rain event in August caused the retention ponds to fill. They did not require pumping but the Edwardsburg Fire Department was monitoring the situation.

II. INTERCOUNTY DRAINS

The Department of Agriculture Intercounty Drain program was funded for the Fiscal Year of 2016 with two agents and one administrative staff.

New Drainage Districts

None

Cleaning, Maintenance and Repair

Four County Drain was cleaned along the road right of way (ROW).

The Red Run Intercounty Drain was cleaned from Dewey Lake Street for approximately 2,600 feet to the north.

Drains need cleaning

None scheduled.

Status Report

None

III. LAKE LEVEL CONTROLS

The historic rain event from August augmented county lakes and wetlands after a drought like period earlier in summer.

Barron Lake Howard Township

The augmentation pump was not operated in 2016. A committee was formed during 2016 by the Drain Office and the Barron Lake Association to look at the existing pump and a possible additional augmentation well. Consultation included Tritium Inc. from Elkhart, IN.

Priest Lake Silver Creek Township

Restoration maintenance around the inlet is scheduled for the fall of 2016.

Magician Lake Silver Creek Township

A beaver dam was partially removed downstream on the Magician Lake IC Drain in the summer. Trapping is scheduled for the fall of 2016.

Shavehead Lake Porter Township

Maintenance was performed for the support walls and under the footings below the dam during October of 2016. A sinkhole developed near the west support wall which will be addressed in October of 2016.

MacMillan Dam, Finch, Fish, Saddlebag Lake Volinia/Marcellus Townships

Maintenance was performed for MacMillan Dam during the summer and fall of 2016 to address minor leakage and sinkholes on the northern end of the metal support walls.

Garver Lake Ontwa Township

Beaver control continued to be an issue on the tubes located on Elkhart Road next to the dam.

Harwood Lake Newberg Township

Beaver control issues developed near the outlet on County Line Road.

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	-	115
Service Request	-	5

The Drain Office handles numerous service calls monthly that are not recorded.

Major Sites Permitted

Niles Community Schools	-	Howard Township
Aggregate Industries	-	Milton Township
American Electric Power	-	Multiple Townships
Bair Lake Bible Camp	-	Porter Township
City of Dowagiac	-	City of Dowagiac
Cassopolis Fire Department	-	LaGrange Township
Midwest Energy (new facility)	-	Penn Township

Future Major Permits

Unknown.

V. FINANCIAL

Assessments

The following special assessments have been approved for 2016:

Drain/Lake Level	Amount	Drain/Lake Level	Amount
California Drain	\$ 7,182.00	Crooked Lake	\$ 2,500.00
Happy Homes Drain	\$ 6,700.00	Jones Bair Lake	\$21,139.65
Lilly Lake Drain	\$ 6,000.00	Red Run IC Drain	\$ 3,000.00
Shavehead Lake	\$17,675.33	Stock Farm Drain	\$ 7,000.00
Twin Lakes	\$ 7,500.00		

Drain Funds

On September 30, 2016 the cash balances in the following accounts were:

	<u>Amounts</u>
801.00	\$ 69,141.45
802.00	\$ 14,178.91
<u>841.00</u>	<u>\$ 59,613.27</u>
	\$ 142,933.63

Notes Payable

None.

Delinquent Tax Fund Notes

Outstanding Borrowing:		Loan Amount	Loan Date	Due Date	Balance	Paid Date
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	15,000.00	W-16 Tax

VI. OTHER ISSUES

Lake Augmentation Projects

Barron Lake - the augmentation pump was not operated in 2016. A committee was formed during 2016 by the Drain Office and the Barron Lake Association to look at the existing pump and a possible additional augmentation well. Consultation included Tritium Inc. from Elkhart, IN.

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 are scheduled.

VII. DRAIN COMMISSIONER'S OFFICE

- 1) Implementing drain and lake level districts into county GIS System continues. SAW Grant funding is 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. This transfer will occur when the Director of the Conservation District is certified by the MDEQ to administer the program.

VIII. PROFESSIONAL

The Drain Commissioner attended the following professional meetings:

- 12.11 BOC Workshop – COA Dowagiac
- 02.12 Conservation Conversation - COA
- 03.08 FOTSJR – Annual Meeting Sturgis
- 09.23 BOC Workshop – South west Michigan Community College

IX. OTHER

Besides regular office hours and field inspections, the Drain Commissioner attends:
Board of Public Works – Member
Parks Board – Member and 2016 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 for drain and lake level fund support.

Treasurer Linda Pruett and her staff for their assistance for the accounting, mapping and GIS support.

Roger McEvers 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 technology support.

County Administrator's Karen Folks 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 Service Requests - 13

DRAIN CROSSING / OTHER PERMITS

None



California Drain



Happy Homes Drain



Hayes Drain



Jones & Bair Lake Drain



Mud Lake Drain – Howard Township



Kestrel Hills – August Flooding