

CASS COUNTY MICHIGAN

Drain Commissioner



Dowagiac River Intercounty Drain – Drone Picture

2020 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 from a strong environmental position 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 winter was quite different than typical winters in Cass County. Snow amounts were below normal, and the county did not experience the lake-effect snow events that were typical in previous years. The County’s temperatures were near normal or slightly above with very few subzero days. The water levels in the county were still high for the third straight year. This included lakes, ponds, wetlands, streams, creeks, and the groundwater. The high groundwater in some areas recharged the water bodies faster than they could drain. The Spring of 2020 was wetter than in normal years and once again several farmers had to plant their fields later than planned. In early June the rains stopped, and the county experienced a dry summer with precipitation levels below average for all three months. Water levels in some lakes, ponds, and wetlands dropped between 1-2 feet over the summer. The dry weather continued through September which was also a very warm month. The Drain Office continued implementation of the SAW Grant award which now includes the entire county. The grant period will run through 2020 and will include the Dowagiac River, Rocky River, and Christiana Creek Watersheds. Once completed the Drain Office will be technologically updated with GIS mapping, survey, inventory, and planning assistance.

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

**October 1, 2020
By Bruce Campbell – Drain Commissioner**

I. COUNTY DRAINS

Inspection of County Drains

County drains are inspected on a weekly basis.

New Drainage Districts

No petitions were received but petition forms were discussed with some residents in the county.

The Dockside Landing on Eagle Lake in Ontwa Township was submitted for plan review. Also, the development in Milton Township called Glenayre at Knowlwood.

And being contemplated for: None.

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:

Mud and Pine Lake Drain – Marcellus Township
Pleasant Lake Drain – Ontwa Township
Goose and Mud Lake Drain – Jefferson Township
Regal Place Drain – Ontwa Township
Pine Lake Drain – Wayne and Silver Creek Township
Kingsbury Drain – LaGrange Township
Lilly Lake Drain – Newberg Township
Mud Lake and Extension Drain – Howard Township
Red Run Intercounty Drain – Voilinia Township
Breezy Beach Drain – Howard Township

Drains needing cleaning or maintenance include: Many

Status Report

Lilly Lake Drain

Newberg Township

Culvert maintenance was needed primarily for beaver control.

Pleasant Lake Drain

Ontwa Township

Beaver control, weed and culvert maintenance continued. The M-62 culvert was lowered 2 feet in August of 2020 by Pavlak Excavating. The lowering of the culvert was funded by MDOT. Beaver control and culvert maintenance continued throughout the year.

Mud and Pine Lake Drain

Marcellus Township

Culvert maintenance at the outlet of Mud Lake was needed primarily for beaver control. The culvert was replaced at Brody Street by the Road Commission. The drain was cleaned from north of Brody Street by Thomas Excavating to its' terminus south of Brody Street

Nottingham and Jones Drain

Marcellus Township

The drain was cleaned from the south end of Dean McKenzie's fields to the wetland pond to the south.

Goose and Mud Lake Drain

Jefferson Township

The inlet at the M-62 crossing was cleaned out by REV Excavating. The outlet 200' east of the crossing was also dipped out. An unauthorized plastic tube, installed by the Edwardsburg Snowmobile Club year ago, was removed in the MDOT right-of-way on the west side of M-62.

Regal Place Drain # 3

Ontwa Township

An inlet was repaired by the Road Commission

Breezy Beach Drain

Howard Township

The inlet of the drain was cleaned of yard debris and other obstructions.

Mud Lake & Extension Drain

Howard Township

A series of 5 culverts were removed from the drain. Beaver control was also needed in this location.

II. INTERCOUNTY DRAINS

The Department of Agriculture Intercounty Drain program (MDARD) was funded for the Fiscal Year of 2020 with three agents and one administrative staff.

New Drainage Districts

None

Cleaning, Maintenance and Repair

Dowagiac River Intercounty Drain

Pokagon Township

The Intercounty Drain Board met with the Pokagon Band of the Potawatomi Indians and a new easement was approved and recorded for their Meander Project. The historic easement was not abandoned.

Corey Lake Intercounty Drain

Newberg Township

A petition resulted in an Order of Practibility and an Order of Necessity to be issued by the Intercounty Drain Board (Cass, St. Joseph, and MDARD). A project was not decided on because the Board was waiting on an opinion from Environmental Great Lakes Energy (EGLE) on permittable options.

VanCass Instercounty Drain

Marcellus Township

The Intercounty Drain Board (Cass, VanBuren, and MDARD) held and passed Practability and Necessity Hearing's to extend the drain, by petition, from the Point-of-Beginning of the drain north to Bankson Lake. Further action was suspended because of litigation filed in the VanBuren Courts

Drains need cleaning

Corey Lake Intercounty Drain

III. LAKE LEVEL CONTROLS

In early June the rains stopped, and the county experienced a dry summer with precipitation levels below average for all three months. Water levels in some lakes, ponds, and wetlands dropped between 1-2 feet over the summer.

Barron Lake Howard Township

Tritium Inc. out of Elkhart, IN monitored wells around the lake. Tritium, Inc also tested the lake bed for leakage rates. The Drain Office worked on obtaining an easement, for a possible pump in the Bartak Acres Plat / Park.

Long Lake Newberg Township

Pumping was limited due to high water on Clear, Mud, Kaiser, and Corey Lakes.

Magician Lake Silver Creek Township

Legal counsel determined that the Magician Lake Drain below the dam was not legally established.

Long Lake Porter Township

The lake remained at a high lake level for the entire year of 2020 but dropped over the summer.

Garver Lake Ontwa Township

Beaver control continued to be an issue on the tubes located on Elkhart Road next to the dam. Grates were installed on both ends of the culverts.

Twin Lakes Wayne Township

Drain landscaping maintenance was performed during the Spring and Summer.

MacMillan Dam, Fish, Saddlebag, Finch Lakes Volinia & Marcellus Townships

Beaver control was needed between Finch Lake and Lawrence Road throughout the year.

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 December 1, 2016 by Resolution.

V. FINANCIAL

Assessments

The following special assessments were submitted for approved for 2020:

DRAIN	ASSESSMENT PERIOD
Kingsbury Drain – LaGrange Township	Year 1 of 2
Mud Lake Drain – Howard & Jefferson Twp’s	Year 1 of 1
Pine Lake Drain – Wayne & Silver Creek Twp’s	Year 1 of 1
Union Stateline Drain / Calvin, Mason, Porter Twp	Year 1 of 1
Goose & Mud Lake Drain – Jefferson Township	Year 1 of 1
Dibble Drain – Howard & Milton Townships	Year 2 of 3
Smith Lake Intercounty Drain – Pokagon Twp	Year 1 of 1
Pleasant Lake Drain – Jefferson & Ontwa Twp’s	Year 1 of 1
Hayes Drain – Marcellus Township	Year 3 of 3
Mud & Pine Lake Drain – Marcellus Township	Year 1 of 1
Crooked Lake Level – Silver Creek Township	Year 1 of 1
Garver Lake Level – Ontwa Township	Year 1 of 1
Twin Lakes Level – Wayne Township	Year 1 of 1
Barron Lake Level – Howard Township	Year 1 of 1

Drain Funds

On September 1, 2020 the cash balances in the following accounts were:

	<u>Amounts</u>
801.00	\$ 125,479.62
802.00	\$ 29,258.73
841.00	\$ 111,488.06

Notes Payable

None.

Delinquent Tax Fund Notes

None.

VI. OTHER ISSUES

Lake Augmentation Projects

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 or the relocation of the existing pump. Tritium Inc. was retained to oversee a well monitoring project. Four shallow wells were installed around the lake with monitors installed to record ground water levels. Monitors were also installed on three existing deep wells on the lake. Monitoring continued in 2020.

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. Meetings are scheduled as needed.

VII. DRAIN COMMISSIONER'S OFFICE

- 1) Implementing drain and lake level districts into county GIS System continues. SAW Grant funding is approved for 2017 thru 2020.
- 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 Board of Commissioners transferred the authority of the Soil Erosion and Sedimentation Control Program to the Drain Commissioner as the enforcing agency on December 1, 2016 by Resolution.

VIII. PROFESSIONAL

The Drain Commissioner attends meetings as warranted.

IX. OTHER

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

Board of Public Works – Member

Parks Board – Member and 2020 President

Board of Commissioners - Bi-monthly meetings as needed

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 Beth Daly for their administrative assistance.

Financial Officer Becky Moore for drain and lake level fund support.

Treasurer Hope Anderson and her staff for their assistance for the accounting, mapping and GIS support.

Tami Stewart and her staff 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, Jodi Nestich and their staff for technology support.

County Administrator's Jeff Carmen for administrative support.

Cass County Board of Commissioners.

APENDIX A

LAKE LEVEL CONTROL STRUCTURES VISUALLY INSPECTED BY DRAIN COMMISSIONER

(note – all lake level structures are inspected on the mandatory 3-year cycle by a licensed engineer. Statutory dam inspections are scheduled for the Fall of 2020.

Barron Lake *
Garver Lake *
Magician Lake *
Twin Lakes*
Lilly Lake*
Diamond Lake
Shavehead 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 - numerous throughout the year

DRAIN CROSSING / OTHER PERMITS

None



Dowagiac River Intercounty Drain – Drone Picture



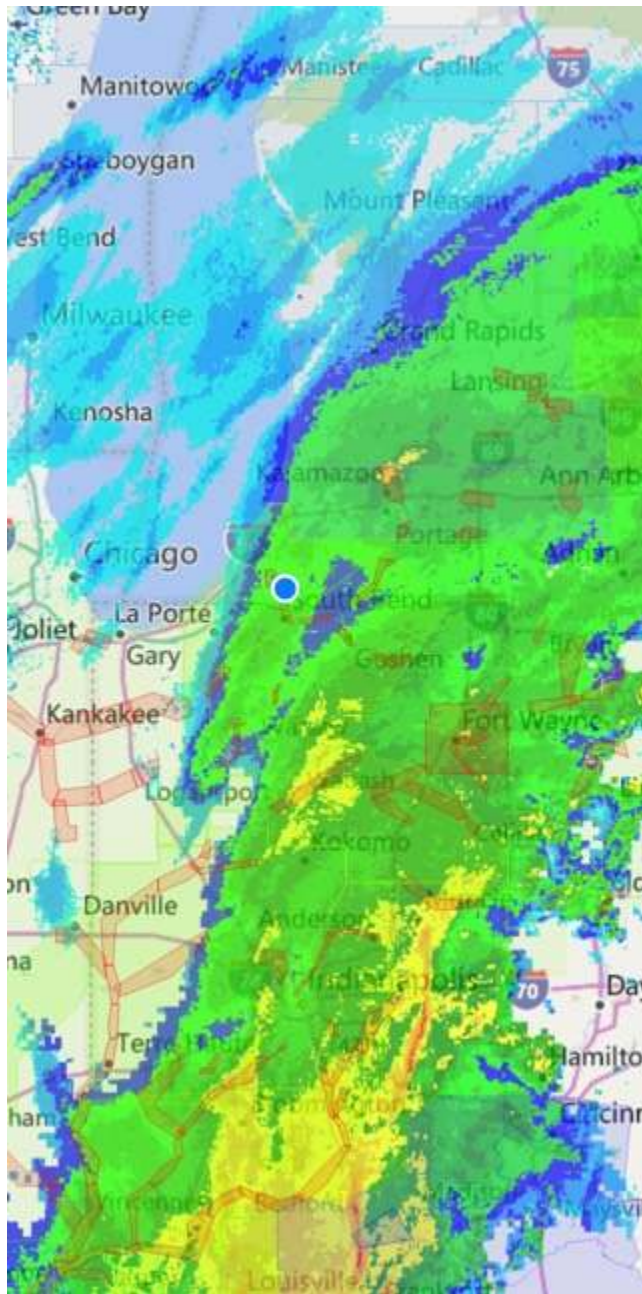
Flooding – Brandywine Drain



Mud & Pine Lake Drain- Marcellus Township



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Flood Event January 11, 2020