

CASS COUNTY MICHIGAN

Water Resources Commissioner



Spring Flooding – Huckleberry Lane – Dewey Lake - 2009

2009 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 year 2009 provided a lot of activity for the Drain Office. The historic rain from the remnants of Tropical Depression Lowell and Hurricane Ike in September 2008 coupled with rains in the Fall and snow that covered the ground for the majority of the Winter brought the water table up to levels we had not seen in the past 30 to 50 years. The Spring and Summer of 2009 produced a number of rain events that further contributed to the high water table. The resulting rains left water over portions of the following roads: Harvey Street, M-60 just west of Cassopolis, Huckleberry Lane, Black Street, White Temple Road, Yankee Street, Corwin Street, and many others. High water threatened homes in the Regal Place and Wilkinson Trail Subdivisions along with Big and Little Smith Lakes. Two lifelong residents in rural Volinia Township witnessed water in the woods between their homes for the first time in 80 years. Long time residents experienced water in their basements for the first time. Shavehead Lake had rain gauges that registered over 7” in a rain event in August. Lake levels were high in the county and strong currents in drains and creeks threatened and washed out culverts and bridges throughout the county. Most notable were Magician Lake Road, Donnell Lake Street, White Street, M-51 southwest of Dowagiac, and Redfield Street. Crops were planted late due to standing water in many fields. The Drain Office started the year with approximately 6 projects and finished with well over 20.

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

**October 1, 2009
By Bruce Campbell**

I. COUNTY DRAINS

Inspection of County Drains

Since October 1st, 2008 35 inspections have occurred on 20 different drains.

New Drainage Districts

Petitions received and district formed: Three

Subdivision plats, with new drainage districts are: None

And being contemplated for: SW Corner Shavehead Lake

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:

Nottingham Jones Drain - Marcellus Township
Whitaker Drain NE Extension – Volinia Township
Patrick Hamilton Drain – Silver Creek Township
Dodd & Doanne Drain – Howard Township
Bame Huntley Drain – Howard Township

Drains needing cleaning or maintenance include: Most.

Status Report

Patrick Hamilton Drain Silver Creek Township

Maintenance and repair was completed in July and August 2009.

MEANDERS Pokagon Township

A new description and easement needs to be written and recorded. An application has been submitted for a permit from the Michigan Department of Environmental Quality (MDEQ) for a proposed project south of the original Meanders.

Breezy Beach Drain Howard Township

A drainage district was established and the transfer of the drain from Howard Township to the Drain Office is scheduled for Fiscal Year 2010.

Williamsville Drain

Porter Township

The Cass County Road Commission petitioned the Drain Office for a watershed issue in the Williamsville area from Birch to Shavehead Lakes. Preliminary surveying and engineering has started which will lead to a Board of Determination Hearing.

Happy Homes Drain

Lagrange Township

Lagrange Township petitioned the Drain Office and preliminary surveying and engineering has been completed for a Board of Determination Hearing scheduled for the Fall of 2009.

Glenwood Drain

Wayne Township

Wayne Township petitioned the Drain Office and preliminary surveying and engineering has been completed. The Board of Determination Hearing issued a Order of Necessity and the drain will be constructed in the Fall of 2009.

Nottingham Jones Drain

Marcellus Township

The drain inspection showed a sinkhole as the result of a failure along a joint on the buried tile. Over 500' of new plastic pipe was installed in the Summer of 2009.

Pleasant Lake Drain

Ontwa Township

Inspection made in the Summer of 2009 indicated future maintenance.

II. INTERCOUNTY DRAINS

The Department of Agriculture Intercounty Drain program was funded for the Fiscal Year of 2009 with two agents and one administrative staff.

New Drainage Districts

None

Cleaning, Maintenance and Repair

Smith Lake

Drains need cleaning

Four County – Marcellus Township

Status Report

Smith Lake

Pokagon Township

The drain was reestablished through construction in the Summer of 2009. The Road Commission replaced the culvert under Indian Lake Road with a steel pipe.

III. LAKE LEVEL CONTROLS

The required three year Inspections were completed on all eighteen structures in October of 2008. Report indicated maintenance was required for the Shavehead Lake control structure (dam).

Lilly Lake

Penn Township

A 12 inch steel pipe was replaced between Hutchins and Lilly Lake in the Spring of 2009.

Barron Lake

Howard Township

Two 6" lake level control boards in a weir were discovered in the middle manhole on Lake Shore Drive in the Spring of 2009.

Garver Lake

Ontwa Township

The petitioned dredging project is scheduled for maintenance in the Fall of 2009.

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	-	105
Total Site Inspections	-	207
Final Site Inspections	-	198
Complaints	-	5

Major Sites Permitted

Lakes Area Sewer Authority	-	Marcellus Township
T&R Investments	-	Ontwa Township
SMC Apartments	-	Lagrange Township
North Shore Cottages	-	Penn Township

Edwardsburg Sports Complex	-	Ontwa Township
Aggregate Industries	-	Ontwa Township
Garver Lake Dredging	-	Ontwa Township
Smith Lake Intercounty Drain	-	Pokagon Township
Shavehead Lake Dam	-	Porter Township

Future Major Permits

None pending

V. FINANCIAL

Assessments

The following special assessments have been approved for 2009:

		<u>Amounts</u>
Bame Huntly	Howard/Milton	4,784.00
Barron Lake Level	Howard	34,079.00
Beaver Dam & State Line	Ontwa	4,400.00
Brandywine	Howard/Milton	14,704.80
Dodd & Doanne	Howard	4,378.00
Dowagiac River IC	Wayne/Volinia	13,992.16
G.D. Mann	Silver Creek	6,252.40
Garver Lake Level	Ontwa	53,603.00
Glenwood	Wayne	10,863.80 (3 year)
Lilly Lake Level	Newberg	15,065.00
Long Lake	Newberg	5,636.12
Magician Lake Level	Silver Creek	7,370.00
Nottingham Jones	Marcellus	20,350.00
Patrick Hamilton	Silver Creek	67,699.50
Pleasant Lake	Ontwa	5,592.40
Shavehead Lake Level	Porter	34,305.70
Smith Lake Intercounty	Pokagon	15,989.62
Stock Farm	Pokagon	2,365.00
Twin Lakes Level	Wayne	7,920.00
Whitaker NE Extension	Volinia	10,560.00

Drain Funds

On September 21, 2009, the cash balances in the various accounts were:

	<u>Amounts</u>
801 Drain	\$ 34,744.19
841 Lake Level	101,614.38
802 Revolving Drain	29,091.68

Notes Payable

Barron Lake Note: \$395,000 - installment four of five was paid on July 1, 2009.

Dowagiac River Note: \$94,000.00 – installment three of three was paid on July 1, 2009.

Delinquent Tax Fund Loans

\$ 214,000 was borrowed from the Delinquent Tax Fund.

VI. OTHER ISSUES

Lake Augmentation Projects

Barron Lake is functioning at an optimal level.

Twin Lakes is functioning at a satisfactory level.

The Michigan Department of Environmental Quality (MDEQ) permit was obtained for Crooked Lake. Construction of the system was nearly completed at the time of this report.

Phase II of NPDES

Fishbeck, Thompson, Carr and Huber along with Southwest Michigan Commission have administered and submitted a public awareness campaign. Our annual report was accepted and the County is in compliance. Fishbeck, Thompson, Carr and Huber applied for Cass County's new permit. The final draft for the storm water regulations for the county is being reviewed.

Cass County Road Commission

The Water Resource Commissioner and the Cass County Road Commission continue to work together in several areas. The petition by the Road Commission for the Williamsville Project is the first such petition in many years, if ever.

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. Storm water regulations are in the final draft review.
5. Web page development for the Drain Office is complete.
6. An imaging program for historic drain documents was implemented in 2009.

VIII. PROFESSIONAL

The drain commissioner attended the following professional meetings:

MACDC – Fall District Meeting	10.03.08 - Barry County
MACDC – Winter Conference	02.18.09 - Grand Traverse Resort
MACDC – Spring District Meeting	06.05.09 - JFNew Walkerton, IN
MACDC – Summer Conference	07.08.09 - Crystal Mountain Resort
St. Joseph River Basin Symposium	06.12.09 – Fernwood Gardens

IX. OTHER

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

Board of Public Works – Member
Parks Board – Member
Road Commission 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 especially wants to thank:

Jackie Taylor and Tara Myer for their secretarial and 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 other GIS support.

County Administrator Terry Proctor for administrative support.

APPENDIX A

DRAINS INSPECTED BY WATER RESOURCES COMMISSIONER

Brandwywine *	Smith Lake Intercounty *
Dowagiac	Pleasant Lake
Garver Lake Drain *	Pitcher Lake *
Hilltop Road	Whitaker
Twin Lakes	Whitaker NE Extension *
Patrick Hamilton *	Nottingham Jones *
Mud & Pine Lake	Big Huckleberry Marsh *
Bame & Huntley *	Stock Farm *
Dodd & Doanne *	Jones Drain
G.D. Mann *	Peavine Creek *

Note – Water Resources Commissioner performed familiarity visits to 37 drains in 2009.

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 October of 2008)

Barron Lake*
Garver Lake
Magician Lake
Twin Lakes
Lilly Lake *
Diamond Lake
Shavehead Lake *

Pleasant Lake
Priest Lake
Corey Lake
Eagle Lake *
* - work was performed

OTHER INSPECTIONS (complaints)

Numerous throughout the year with the majority coming during the Spring of 2009.

DRAIN CROSSING PERMITS

None



Patrick Hamilton Drain – 2009



Nottingham Jones Drain – 2009



Smith Lake Intercounty Drain – 2009



Whitaker NE Extension Drain – 2009



Spring Flooding – Black Street- 2009



Spring Flooding – Wilkinson Trail Subdivision – 2009



Spring Flooding – Huckleberry Lane – 2009



*Spring Flooding - M-60 - Just west of Cassopolis going towards Niles – 2009
Long time residents could not remember water ever being over the road in
this location. High water resulted in the planned raising of the road by MDOT.*