

***OTTAWA COUNTY  
WATER RESOURCES COMMISSIONER***

**Annual Report**

**January 1, 2015  
Thru  
December 31, 2015**

**Office Staff**

**Joe Bush, Water Resources Commissioner  
Linda Brown, Chief Deputy  
Chris Machiela, Drain Inspector  
Dennis Cole, Civil Engineer  
Jon Braxmaier, Soil Erosion Agent  
Angela Walachovic, Soil Erosion Inspector  
Teresa Overly, Drain Clerk  
Jen Vandenberg, Senior Secretary**

# TABLE OF CONTENTS

Departmental Activity Narrative.....	2
Drain Activity Narrative.....	3-5
NPDES Phase II Storm Water Permit Program.....	6
Development Review.....	6-7
Soil Erosion Control Act - Permit Program.....	7-8
Water Resources Commissioner's Certificate.....	9

## **DEPARTMENTAL ACTIVITY NARRATIVE**

The Water Resources Commissioner and his staff are responsible for the construction, operation and maintenance of approximately 886 County Drains. These systems are designed to provide storm water management, drainage, flood prevention and stream protection for urban and agricultural lands. A County Drain may be an open ditch, natural watercourse or underground pipe. The Water Resources Commissioner is also responsible for maintaining safe operation of water control structures that include 6 dams, 7 lake level control structures, 4 drain control structures, 3 pumping stations and 295 Detention/Retention Ponds.



Construction and maintenance of these systems can be accomplished through petition by property owners or public entities and general maintenance by the Water Resources Commissioner under Michigan Drain Code, Public Act 40 of 1956, as amended. Typical duties include inspection, enforcement, response and analysis of citizen complaints of drainage problems and the administration of construction and maintenance activities. 426 complaints were responded to in 2015.

Additional responsibilities include compiling all accounting records of financial activities for the individual drains and for preparation and distribution of special assessment rolls for reimbursement of costs associated with individual projects. A full financial statement of each drainage district is available in the Office of the Water Resources Commissioner as required by Drain Code.

## **DRAIN CONSTRUCTION AND MAINTENANCE**

Every year, numerous County Drains require maintenance and improvements in order to provide positive drainage. In addition, petitions are received requesting improvements to existing County Drains as well as establishment of new County Drains. 2015 was a busy year for both drain petitioned projects and drain maintenance which resulted in expenditures totaling **\$5,504,278.60**. A list of all drain orders issued in 2015 (#4456 thru #5212) is kept on file in the Office of the Water Resources Commissioner as required by Drain Code.

Projects that were approved and assessed in 2015 consisted of the following:

<b>Assessment Type</b>	<b>Number of Drains</b>	<b>Total Cost</b>
Maintenance	99	\$ 540,701
Petition – New Drain (Orphan drainage system petitioned by municipality to establish and place under jurisdiction of Water Resources Commissioner)	5	\$ 11,650
Installment - Past projects being assessed over a period of years	17	\$ 451,045
Lake Levels – Legal process to establish assessment districts	3	\$ 41,000
<b>Total 2015 Assessment Levy</b>	<b>124</b>	<b>\$1,044,396</b>
Petition (No. 18 Drain was financed over 10 years – Amount of first installment is included in the 2015 levy)	1	\$ 146,000
Prepayments (Projects where municipalities or property owners chose to pay costs up front. These projects were not placed on the official assessment roll.	30	\$ 482,930
<b>Grand Total</b>	<b>155</b>	<b>\$1,673,326</b>

Costs associated with drain construction and maintenance are paid for by levy of special assessment to individual drainage districts. Drainage districts consist of municipalities, the County, Road Commission, Michigan Dept. of Transportation, CSX Railroad and property owners. The Individual Drain Assessment Rolls included on the 2015 Assessment Levy are kept on file in the Office of the Water Resources Commissioner as required by Drain Code.

There are several mechanisms available to pay for projects until assessment revenue is collected. Drainage districts can borrow money to cover project costs. Some projects require that the assessment be levied in installments to make the cost more affordable to the property owners. The terms of the borrowing are typically between 1 and 10 years but can be as long as 20 years.

Drain Code requires that the County appropriate a Revolving Fund for the purpose of paying preliminary and maintenance costs until such time that assessment revenue is collected. The Ottawa County Board of Commissioners has appropriated \$175,000 to the Drain Revolving Fund for this purpose.

Statute also allows for creation of a Revolving Maintenance Fund. This fund is generated from interest earnings of individual drainage district accounts that have a balance of less than \$1,000. Over the years, the fund has grown to \$55,325. This fund can only be used to pay for drain maintenance and is reimbursed in the same manner as the Drain Revolving Fund.

The total outstanding debt at 12/31/15 is as follows:

<b>Debt Type</b>	<b>Total Debt</b>
Drain Notes	\$1,693,400
Bonds (Munn, Nunica & Park West Drains)	\$1,789,954
Revolving Fund	\$ 174,987
Revolving Maintenance Fund	\$ 55,316
<b>Grand Total</b>	<b>\$3,713,657</b>

Drain funds are invested thru the Ottawa County Treasurer and had interest earnings as follows:

<b>Fund Type</b>	<b>Interest Earnings</b>
Drain Funds	\$10,364
Revolving Maintenance Fund	\$ 5
Debt Service Funds	\$ 963
Lake Boards	\$ 720
<b>Grand Total</b>	<b>\$12,052</b>

At times, State and federal funding is also available. In 2015, funding was received from FEMA in the amount of \$46,240 to repair damage caused by a severe storm event to a number of established County Drains.

### **PARK WEST DRAIN**

This project was initiated because of problems associated with highly fluctuating groundwater levels and cyclical flooding that had plagued a large area of Park Township for over 35 years.



The project consisted of construction of 7 miles of bioswales and underdrain. This type of system reduces flashiness and turbidity and provides a natural treatment of storm water. The Park West Drain Project was substantially completed in 2015.





Funding of the project came from an award of 1.739 million thru the Stormwater, Asset Management & Wastewater (SAW) Grant Program under the Innovative Technology category. It was the only project funded under this category in the State of Michigan. Additional funding came from a SAW Loan from the Strategic Water Quality Initiatives Fund in the amount of 1.755 million. The Park West Drain was the first project in the State financed thru this funding mechanism. The remainder of the project cost (2.631 million) was paid by the Park West Drain Drainage District

## **NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM** **MS4 PHASE II STORMWATER PROGRAM**

The Water Resources Commissioner is responsible for coordinating all requirements of the Federal Clean Water Act, Phase II Stormwater Permit Program, as they pertain to Ottawa County Drains and Ottawa County owned facilities. These requirements include; a Public Education Plan, a Public Participation Plan, an Illicit Discharge and Elimination Plan, a Construction Site Runoff Control Plan, a Post Construction Storm Water Management Plan and a Storm Water Pollution Prevention Initiative.

Most of 2015 was spent identifying and documenting in the County GIS the location of all catch basins that are part of an established County Drain and all storm water control facilities under the jurisdiction of the Ottawa County Water Resources Commissioner or are located at facilities owned by Ottawa County. This task was undertaken to address a new requirement of the Phase II Program. Once all basins have been identified, a schedule for inspection and cleaning if necessary, must be established. To date 4,765 catch basins have been identified within the urbanized area of the County. The process and coordination effort that will be necessary to ensure permit compliance will be significant.

### **DEVELOPMENT REVIEW**

The Michigan Land Division Act (Public Act 591 of 1996) requires that the Water Resources Commissioner be responsible for reviewing the drainage or storm water management system of all platted developments. The Ottawa County Water Resources Commissioner has adopted and published a set of Standards and Specifications for this purpose. In 2014, a collaborative effort was initiated between this office, the Allegan & Muskegon County Drain Commissioner's Offices and the Macatawa Area Coordinating Council (MACC) to update the current standards. The cost of this initiative was paid by a SAW Grant that was awarded to the MACC. The result of this effort was completion of a draft document at the end of 2015. The new standards will be published in 2016 after roll out meetings are held with area engineers and municipal leaders.

Primary drainage systems within platted lands are required to be established as County Drains under the jurisdiction of the Water Resources Commissioner.

The Mobile Home Commission Act (Public Act 419 of 1976) requires that the storm water management system in a Mobile Home Park comply with the standards and specifications established by the Water Resources Commissioner.

The Condominium Act (Public Act 59 of 1978, as amended) requires that the Water Resources Commissioner be notified of the intent to establish a condominium project. Approval by the Water Resources Commissioner is not required. However, municipalities in Ottawa County require review and approval by this office.

These standards and specifications are also applied to other miscellaneous developments when required by the local unit of government.

There were 74 developments reviewed by the Ottawa County Water Resources Commissioner's Office in 2014. Fees associated with these reviews totaled \$89,074. The location and type of development are reflected in the tables below.

TOWNSHIP/CITY	PERMITS
Allendale	9
Blendon	3
Georgetown	19
Grand Haven	3
Grand Haven City	1
Holland	20
Jamestown	5
Park	1
Port Sheldon	1
Robinson	1
Spring Lake	3
Tallmadge	2
Zeeland	1
Zeeland City	5
<b>TOTAL</b>	<b>74</b>

DEVELOPMENT TYPE	PERMITS
Apartment	2
Church	3
Commercial	21
Condominium	5
Industrial	17
Misc.	3
Parcel Split	1
PUD	3
Site Condo	2
Subdivision	17
<b>TOTAL</b>	<b>74</b>

**SOIL EROSION AND SEDIMENT CONTROL ACT, PART 91 OF 451, NATURAL RESOURCES AND E.P.A., 1994**

A state statute was created in 1972 to provide protection of the waters of the State and adjacent properties from sedimentation during earth changing activities. Sediment from soil erosion is the greatest pollutant by volume impacting our lakes, streams and wetlands. Erosion and sedimentation result in: loss of fertile topsoil, filling of lakes, streams and County Drains, increased flooding and damage to plant and animal life. Construction is one of the major causes of erosion in Michigan. Without proper planning and management, tons of sediment per acre per year can be generated on some construction sites.





The Water Resources Commissioner is designated by County Ordinance No. 05-1, as the County Enforcing Agent who is responsible for implementation and enforcement including establishing a system of fees, penalties and civil infraction penalties for violation of the ordinance. The ordinance was reviewed and updated in 2015 and will be presented to the County Board for approval early 2016.

A permit is required for any earth change that disturbs one or more acres, or is within 500 feet of a lake or stream. Exempted activities include plowing and tilling for crop production and some logging and mining activities.

Due to the rapid development in Ottawa County, it is important to protect the county's valuable water resources. By preventing erosion and sediment in runoff from construction sites, sedimentation of storm drains, wetlands and streams is controlled.

Between January 1, 2015 and December 31, 2015 there were 591 permits issued by Ottawa County Water Resources Commissioner's Office staff. Once again, this is the largest number of permits issued since this office became responsible for administration of the program.

2015 permit fee revenue totaled \$95,830. Permits were issued for the development type and in the jurisdiction shown below.

TOWNSHIP/CITY	PERMITS
Allendale	54
Blendon	25
Chester	5
Coopersville	7
Crockery	20
Ferrysburg	4
Georgetown	105
Grand Haven	56
Holland	98
Hudsonville	3
Jamestown	17
Olive	8
Park	51
Polkton	8
Port Sheldon	26
Robinson	12
Spring Lake	39
Tallmadge	20
Wright	7
Zeeland	26
<b>TOTAL</b>	<b>591</b>

DEVELOPMENT TYPE	PERMITS
Apartment	5
Church	2
Commercial	54
Condominiums	10
Cut/Fill	12
Duplex	20
Industrial	4
Misc.	17
Park	7
Pond	5
Private Drive	3
Residential/Minor	65
Sand Mining	1
School	7
Single Family Home	342
Sidewalk	3
Subdivision	12
Utility	21
Wetland	1
<b>TOTAL</b>	<b>591</b>

## CERTIFICATE

This annual report for the period of January 1, 2015 to December 31, 2015 is submitted in compliance with Act 365 of the Public Acts of 1925 and Act 331 of the Public Acts of 1927.

I do Hereby Certify that the preceding is a true report of the amount of revenue and expenditures collected and issued by the Ottawa County Water Resources Commissioner's Office, also the Assessments on drains this year, and that the Financial Statement is true and correct.

**Joe Bush**

Joe Bush  
Ottawa County Water Resources Commissioner

Dated this 31<sup>st</sup> Day of March, 2015.



The activities and programs of this department are brought to you by the Ottawa County Board of Commissioners: Joe Baumann, Chair, Greg DeJong, Vice-Chair, Don Disselkoen, Stu Visser, Allen Dannenberg, Mike Haverdink, Dennis VanDam, James Holtvluwer, Philip Kuyers, Roger Bergman and Matthew Fenske