

***OTTAWA COUNTY  
WATER RESOURCES COMMISSIONER***

**Annual Report**

**January 1, 2016  
Thru  
September 30, 2016**

**Office Staff**

**Joe Bush, Water Resources Commissioner  
Linda Brown, Chief Deputy  
Chris Machiela, Drain Inspector  
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The activities and programs of this department are brought to you by the Ottawa County Board of Commissioners: Greg DeJong, Chair, Roger Bergman Vice-Chair, Francisco Garcia, Joe Baumann, Don Disselkoen, Allen Dannenberg, Mike Haverdink, Kelly Kuiper, James Holtvluwer, Philip Kuyers, and Matthew Fenske

## 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. 429 complaints were responded to in 2016.

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. In 2016 drain expenditures totaled **\$2,005,427.74**. A list of all drain orders issued in 2016 (#5213 thru #5952) is kept on file in the Office of the Water Resources Commissioner as required by Drain Code.

Projects that were approved and assessed in 2016 consisted of the following:

<b>Assessment Type</b>	<b>Number of Drains</b>	<b>Total Cost</b>
Maintenance	82	\$ 582,278
Petition – New Drain (Orphan drainage system petitioned by municipality to establish and place under jurisdiction of Water Resources Commissioner)	1	\$ 3,500
Installment - Past projects being assessed over a period of years	15	\$ 442,903
Lake Levels – Legal process to establish assessment districts	0	\$ 0.00
Petition – Idlewood Drain	1	\$ 131,508
<b>Total 2016 Assessment Levy</b>	<b>124</b>	<b>\$1,160,189</b>
Petition (Seydell Drain was financed over 15 years – Amount of first installment is included in the 2016 levy)	1	\$ 311,000
Prepayments (Projects where municipalities or property owners chose to pay costs up front. These projects were not placed on the official assessment roll.	13	\$185,964
<b>Grand Total</b>	<b>155</b>	<b>\$1,657,153</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 2016 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 \$55,583. 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 9/30/16 is as follows:

<b>Debt Type</b>	<b>Total Debt</b>
Drain Notes	\$1,327,810
Bonds (Munn, Nunica & Park West Drains)	\$2,044,600
Revolving Fund	\$ 174,999
Revolving Maintenance Fund	\$ 55,575
<b>Grand Total</b>	<b>\$3,602,984</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	\$ 9,917
Revolving Maintenance Fund	\$ 250
Debt Service Funds	\$ 1,174
Lake Boards	\$ 962
<b>Grand Total</b>	<b>\$12,303</b>

At times, State and federal funding is also available. In 2016, funding was received from the State for a SAW Grant in the amount of \$19,352 to draft a Stormwater Management Plan for the Maplewood Intercounty Drain. The total amount of the grant is \$135,000. The project will be completed in 2017.

## **SEYDELL DRAIN**

The Seydell Drain is located in Blendon Township and has a Drainage District that encompasses 1,083 acres. The main drain was established in 1896. Over the years, natural drainage ways, private ditches and culverts have deteriorated to a condition where chronic seasonal flooding and high ground water levels were adversely affecting homes and property near Baldwin Street and 64<sup>th</sup> Avenue.



The project consisted of 1.5 miles of new Drain construction that provided drainage relief to more than 40 properties and utilized existing wetland complexes to provide water quality treatment and reduce downstream peak flows. Other areas of work included replacement of three road culverts and five driveway culverts, installation of in-stream rock riffles and stabilization of side inlets for surface water to enter the Drain and relieve flood-prone areas.



The project required extensive coordination with the Ottawa County Road Commission. Our office and the project engineer also worked closely with Blendon Township and the impacted residents throughout the course of the project. Numerous meetings were held to review the project scope, listen to landowner concerns and negotiate acceptable easement agreements.

## **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 2016 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. We are anticipating that the new permit will be issued in 2017 or 2018 with the process of inspection beginning after that.

### **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 that was presented to various stakeholders in 2016 with the intent of adopting the new standards in 2017.

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 68 new developments reviewed by the Ottawa County Water Resources Commissioner's Office in 2016 fiscal year. The location and type of development are reflected in the tables below.

TOWNSHIP/CITY	PERMITS
Allendale	6
Crockery	1
Georgetown	9
Grand Haven	4
Holland	29
Holland City	1
Jamestown	8
Park	1
Robinson	1
Spring Lake	2
Tallmadge	1
Wright	1
Zeeland	4
<b>TOTAL</b>	<b>68</b>

DEVELOPMENT TYPE	PERMITS
Apartment	3
Church	1
Commercial	24
Condominium	2
Industrial	14
Mobile Home Park	1
Misc.	6
Parcel Split	0
PUD	0
School	8
Site Condo	3
Subdivision	6
<b>TOTAL</b>	<b>68</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. 16-01, 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 & updated by Water Resources Staff and presented to the County Board for approval in 2016 with an effective date of June 1, 2016.

A permit is required for any earth change that disturbs one or more acres, or is within 500 feet of the water's edge of any lake, stream or waters of the state. 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.

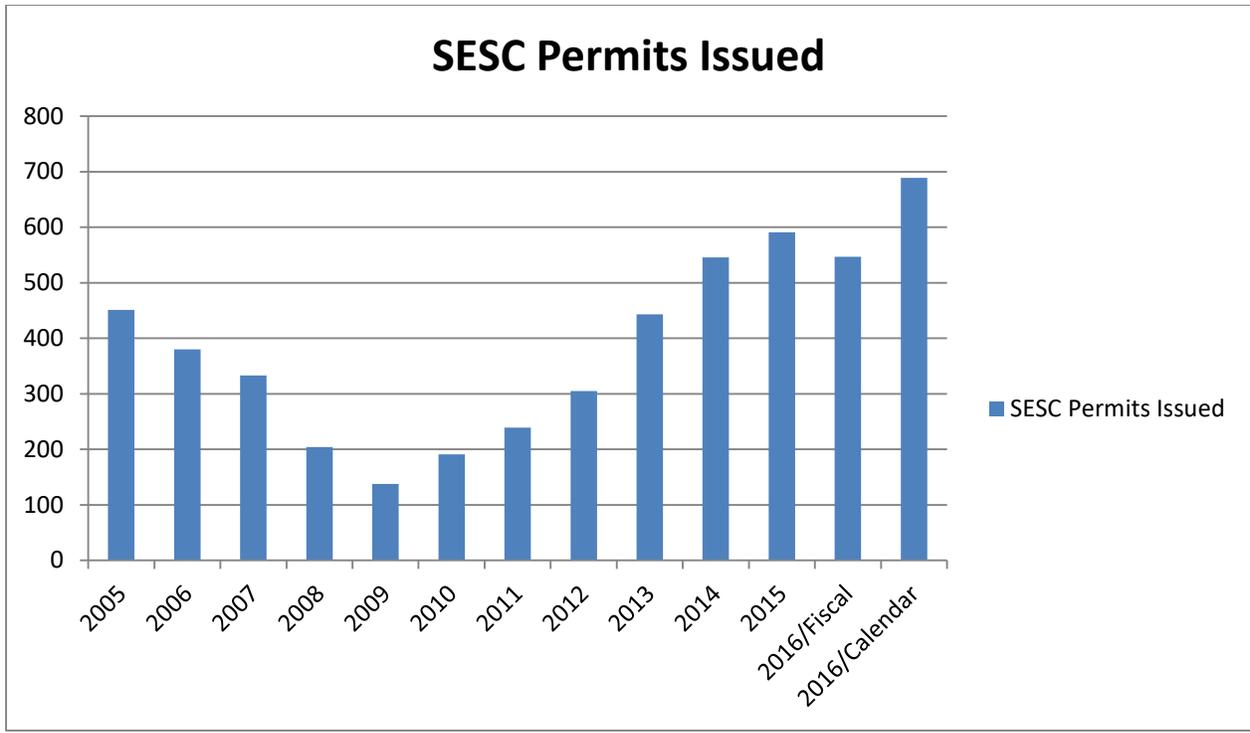
Between January 1, 2016 and September 30, 2016 there were 547 permits issued by Ottawa County Water Resources Commissioner's Office staff.

Permit fee revenue totaled \$99,670. Permits were issued for the development type and in the jurisdiction shown below.

<b>TOWNSHIP/CITY</b>	<b>PERMITS</b>
Allendale	61
Blendon	27
Chester	0
Coopersville	3
Crockery	19
Ferrysburg	6
Georgetown	94
Grand Haven	58
Holland	80
Hudsonville	2
Jamestown	21
Olive	7
Park	43
Polkton	4
Port Sheldon	33
Robinson	13
Spring Lake	37
Tallmadge	7
Wright	3
Zeeland	29
<b>TOTAL</b>	<b>547</b>

<b>DEVELOPMENT TYPE</b>	<b>PERMITS</b>
Apartment	5
Church	3
Commercial	58
Condominiums	15
Cut/Fill	6
Duplex	16
Industrial	1
Mobile Home Park	1
Misc.	3
Park	5
Pond	1
Private Drive	1
Residential/Minor	71
Sand Mining	2
School	11
Single Family Home	311
Sidewalk	6
Subdivision	20
Utility	11
Wetland	0
<b>TOTAL</b>	<b>547</b>

The chart below represents the total number of Soil Erosion & Sedimentation Control Permits issued beginning with 2005, which was the year with the largest number of permits issued since the County took over the program. The total for both the fiscal year (thru 9/30/16) and the calendar year is shown due to the unprecedented number of permits issued in 2016. It is anticipated that 2017 will see another record number of permits issued.



### CERTIFICATE

This annual report for the period of January 1, 2016 to September 30, 2016 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, 2017.