



Don Schonhardt, Mayor

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STORM WATER UTILITY ANNUAL REPORT

From January 1, 2014 to December 31, 2014

Background

ORDINANCE No. 09-63, Passed 12/21/2009, Effective 1/21/2010

CREATING A STORMWATER MANAGEMENT UTILITY; ESTABLISHING A STORMWATER MANAGEMENT SERVICE CHARGE TO BE PAID BY USERS BASED ON AN EQUIVALENT RESIDENTIAL UNIT (ERU); INCLUDING THE MONTHLY ERU SERVICE CHARGE IN CHAPTER 190 OF THE CITY'S CODIFIED ORDINANCES; ADOPTING SECTION 951 OF THE CITY'S CODIFIED ORDINANCES TITLED "STORMWATER MANAGEMENT CODE", AND CREATING A SPECIAL FUND FOR THE DEPOSIT AND USE OF ALL SERVICE CHARGES.

Amended by:

ORDINANCE 10-14, Passed 3/22/2010, Effective 3/22/2010

AMENDING CHAPTER 951 "STORMWATER MANAGEMENT CODE" OF THE CITY'S CODIFIED ORDINANCES, AND DECLARING AN EMERGENCY.

Amended by:

ORDINANCE 13-11, Passed 4/22/2013, Effective 5/22/2013

Purpose was to increase storm water utility ERU charge over the next five years from \$1.95 per ERU to \$3.00 per ERU in 2017:

<u>Year</u>	<u>Rate</u>	<u>effective date</u>
2014	\$2.35/ERU	January 1, 2014
2015	\$2.55/ERU	January 1, 2015
2016	\$2.75/ERU	January 1, 2016
2017	\$3.00/ERU	January 1, 2017

§ 951.17 ANNUAL REVIEW OF CHARGES.

Every year after the effective date identified in Section 951.16(C), the Director shall prepare a report with recommended Stormwater Management Service Charges. This report shall contain data used in the determination of the recommended Stormwater Management Service Charges and shall be presented to City Council for referral to the appropriate Council committee. The committee shall make a recommendation to City Council on or before the fourth Monday in October concerning the Stormwater Management Service Charge to be in effect during the next calendar year.

§ 945.18 CREDITS.

(A) The Director shall promulgate rules and regulations which allow for a credit in the Stormwater Management Service Charge, and to design a credit application, for properties other than single-family residential properties. These rules and regulations may allow, where appropriate, application of the credits retroactive to the effective date of this Chapter. The Director shall have the authority to charge a Stormwater Management Service Charge credit application fee, which shall be based upon the estimated costs of reviewing, processing and administering the credit application, which fee shall be included in the rules and regulations promulgated. A Credit Program was established in August of 2010. No credits have been applied for to date.

Stormwater Management

Stormwater management systems represent valuable public assets that provide a number of benefits to many users by controlling floodwaters and preventing pollutants from reaching our rivers and lakes. Stormwater management systems can protect the health and safety of the public and the environment. In doing so, clean and healthy water resources support public drinking water supplies and can attract local investment through increased land values.

Funding

A stormwater rate is a funding mechanism that has been successfully implemented throughout the United States. The goal of the rate study is and was to develop and implement an equitable, self-supporting, and dedicated funding source for stormwater management in Hilliard.

Monthly user fees were introduced when the Storm Water Utility was established in 2009 by Ordinance 09-63 and subsequently modified by Resolution 10-14 and Ordinance 13-11. These fees cover the operations, maintenance and replacement costs of the existing storm water management system and construction of new storm drainage and flood management facilities. In creating the utility, the City declared its intention to impose just and equitable charges on storm water drainage utility users. Impervious surface area plays the single largest role in determining the amount of storm water runoff from a property. Impervious area leads directly to storm water runoff. All single-family residential properties are proposed to be defined as being equal to each other, and form the basis for all other comparisons.

The typical single-family residential property for the City of Hilliard contains 2,000 square feet of impervious surface area. Therefore, all single-family residential properties will have an equivalent residential unit (ERU) rating of 1.0. An example of a non-residential property with 30,000 square feet of impervious surface area would have an ERU rating of 15.0.

2014 SWU Rates projected revenues					2014 Actual
Estimated ERU's	26,181	\$ 2.35	2,000	\$ 738,305	
Residential units	8,217	\$ 2.35	1	\$ 231,720	
Commercial units	17,964	\$ 2.35	2,000	\$ 506,585	
2014 SWU Rates projected revenues – non central sewer accounts					
Estimated ERU's	562	\$ 2.35	2,000	\$ 15,849	
Residential units	59	\$ 2.35	1	\$ 1.664	
Commercial units	503	\$ 2.35	2,000	\$ 14,185	
Total Revenues	26,743			\$ 754,154	*\$714,893.31

- Does not include December revenues received in January 2015

Typical Causes of Stormwater Problems

Urbanization: Growth and development alters the amount of runoff and pollution discharged into the system.

Aging Infrastructure: Pipes, culverts and inlets have a limited life expectancy and must be repaired or replaced.

Design standards: Regulatory requirements are always changing such that systems designed to previous criteria may be inadequate with respect to current standards.

Inadequate planning: Problems will result if programs do not proactively plan the appropriate resources, measures, and improvement projects to address needs and problems,

Inadequate maintenance: problems will also result if programs do not actively operate facilities, maintain watercourses, sweep streets, collecting debris, etc.

Poor design or faulty construction: Developer plans must be properly reviewed and sites must be adequately inspected during construction to minimize the potential for problems.



Types of Stormwater Problems

Flooding

Flooding is the most visible of stormwater problems. Serious flooding presents a threat to public safety and can damage public and private property, disrupt business, and hamper our everyday activities.

Erosion

Water traveling quickly over an unprotected surface will cause that surface to erode. Controlling the movement of stormwater is important to prevent the erosion of stream banks, hill slopes and even structures.

Water Quality

Road salt, chemical spills, eroded sediments and organic debris can pollute watercourses. Stormwater management systems can protect water quality if facilities are properly planned, designed, operated and maintained.

Pollution

Water carries with it anything it can and deposits material when things get in the way. This can cause a buildup of debris that blocks water getting through and may cause flooding problems as a result.

Hilliard's Stormwater Management Program

To address stormwater management, the City's program includes:

- Operation and maintenance of facilities;
- Rehabilitation, renewal, retrofit, and/or upgrade of facilities;
- Design, permitting, construction, and inspection of new City capital improvement projects;
- Emergency response, recovery, and clean-up for flooding events and water quality violations;
- Engineering and support services for review and regulation of proposed development site plans, inspection, monitoring, and environmental compliance programs;
- Support for public education and community involvement programs; and
- Administration, staffing, computer resources, equipment, etc.

Operation and Maintenance

Maintaining existing facilities is a significant part of the Stormwater Utility budget. This vital task includes street cleaning; inspection and maintenance of ponds; inspection cleaning, and repair of catch basins, manholes, pipes, outfalls, ditches, channels, bridges, etc.

Storm Sewers

City crews removed debris, performed root cutting, and cleaned full-length run storm sewer lines at 90 manhole locations year to date in 2014. Sewer camera inspections were performed at 6 routine camera locations and as prompted by emergency calls. Troughs were cleaned and debris was removed from citywide detention basins at least twice in 2014. Both Cemetery Rd. underpass storm

water lift stations were cleaned twice in 2014. City crews mucked out the Beacon ditch in 2014. City crews performed 2 storm sewer point repairs in 2014.

Street Sweeping

City crews swept every street by quadrant four times and swept main arterial streets four times during 2014. Street sweeping efforts were increased during special events and prior to holiday weekends. Efforts also included sweeping all City-owned parking lots and associated paved areas four times during 2014. Staff continues to refine street sweeping routes and service areas.

Leaf Collection Program

City crews provided this service in all four quadrants at least four times and in high generating areas at least eight times during the 2014 leaf collection season. Currently operating program with 5 leaf units. Resident notification process continued for the 2014 leaf collection season. Calls concerning missed collections and other related issues were minimal.

Totals program cost: \$497,700.00

Cost per household: \$54.00 (currently 9,209 single family households)

Chipper Service and Brush Collection Program

The City's chipper and brush collection services were continued in 2014. The annual citywide collection program occurred from April to December. Two units with larger capacity chipper boxes continued to operate with increased efficiency and production. The City purchased a new brush chipper in 2014, which noticeably increased crew efficiency and production. City crews also provided citywide clean-up efforts after several damaging wind storms.

Capital Improvement Projects

Completed 2014 Capital Improvements:

ST-27 – Detention & Retention Basin Rehabilitation Program

- The Darby Glen retention basin rehabilitation project was completed - \$92,204. The Village at Homestead retention basin bank stabilization project was completed - \$43,865. The contractor for both projects was the Lusk Group.

ST-32 – Storm Water Management (NPDES Phase 2) Program

- 2014 annual permit update and education program \$63,700.
- Public education and outreach continued in 2014.
- Storm water pollution in-class training held at Hilliard City schools.
- Backyard conservation and rain barrel program continued in 2014.
- Review and update of City storm water and surface water mapping is major focus for 2014. This effort will incorporate the City's storm water data into the county-wide database maintained by FSWCD.

ST-38 – Stream Restorations and Water Quality Improvements –

- 2014 - Hamilton Ditch Stream Restoration Project - \$1,484,578.
- An OPWC Clean Water Grant of \$684,578 with a developer contribution of \$720,000 with only \$80,000 in local match from the Storm Water Utility Funds.
- The construction contract was awarded to Savko Construction Company for \$516,328. Construction was completed in the Fall of 2014.
- The City is continuing to working with contractor and the Franklin County Engineer's office to clean the portion of the ditch downstream of the restoration project so that the ditch flows as designed.

Proposed 2015 Capital Improvements:

ST-27 - Detention & Retention Basin Rehabilitation Program

- 2015 – Britton Farms retention basins rehabilitation project - \$230,900.

ST-32 – Storm Water Management (NPDES Phase 2) Program

- 2015 – NPDES Professional Services - \$63,700.

- **ST-38 - STREAM RESTORATIONS AND WATER QUALITY IMPROVEMENTS**

Two projects in Municipal Park both have received grants. Design should be completed in in early 2015 with construction to follow.

- **2015 - Clover Groff Ditch in Municipal Park - Grant approved:** Total Cost = \$1,436,600.00. **Awarded an OEPA 319h Grant** – Clover Groff Ditch in Municipal Park Phase I (CIP ST-38) - \$232,916 of a \$388,194 project
- **Awarded a Clean Ohio Grant thru OPWC** – Clover Groff Ditch in Municipal Park Phase II (CIP ST-38) - \$458,577
- **Local funds needed: \$745,107**

Engineering and Support Service

The Engineering Division of the City continues to help the utility save time and money. Having qualified staff available to answer questions is critical to the success of the utility. The City will continue to work with Franklin County Soil and Water Conservation District (FSWCD) and the Franklin County Drainage Engineer (FCDE) to comply with the federal and state mandates for the City's NPDES Storm Water Permit. This Division also maintains our storm sewer GIS mapping.

Emergency Response

The City has been fortunate in the past few years, having only one known hazardous spill. The Ohio EPA was contacted and responded very quickly. When the City receives an inquiry by a resident, it is investigated and all actions are documented for the annual report to the Ohio EPA as required by the City's NPDES Permit and the City's Findings and Orders with the Ohio EPA. The Franklin County Sheriff's Department has an Environmental Sheriff who can be called to write citations, if necessary. During periods of moderate to heavy rainfall, the City's maintenance crews respond to calls of standing or slowly receding water.

City crews responded to the following number of storm water related service requests in 2014:

- 19 – Storm Sewer Issues
- 9 – Poor Drainage or Flooding Concern
- 2 – Ditch or Creek Maintenance
- 0 – Erosion or Bank Stability

Public Involvement Programs

The annual Household Hazardous Waste (HHW) collection sponsored by the Solid Waste Authority of Central Ohio (SWACO) is vital to keeping our streams and creeks free of pollutants. Thousands of pounds of various wastes are collected. Without this program, a lot of these pollutants would end up in our storm sewers and/or our waterways. The City sponsored/supported the *Community Clean-Up*

Week in June. This program collects all types of wastes including volunteers picking up trash along our roadways and parks. The FSWCD is usually present to distribute information. They also help with the education of our school children, as required by the City's NPDES Permit.

NPDES Phase II Storm Water Master Plan

Staff continued to bring the City toward its goal of improving storm water quality and quantity. Public outreach and education continued as the program focus in 2014. Staff maintained several pages on the City's website to increase awareness and effectiveness of the current storm water management program. The City provided a tree education session and field exercise to students at Avery Elementary School on Arbor Day. Staff maintained a Hilliard Storm Water Management Plan (SWMP) and Hilliard Service Center Facility Storm Water Pollution Prevention Plan (SWPPP). The City's Operations Division staff is continuing to focus on good housekeeping practices at the Hilliard Service Center in 2014. Continued efforts were made in improving the general appearance of the Hilliard Service Center in 2014. Scout Pack 148 did a storm drain marking program in 2014. "No Dumping" labels were placed on curb inlets in the Avery, Beacon, and Conklin subdivisions. Scouts also distributed educational door hangers to all homes within these subdivisions. This volunteer effort is expected to increase public education and awareness regarding the City's effort to reduce stormwater pollution. Pack 148 won a National Hornaday Award for successful completion of this community service project.

Administration and Enforcement

The City's engineering and construction inspection staff inspect all active construction sites to ensure that all temporary soil erosion and sediment control measures designed for the project are in place and functioning properly. Though construction is down because of the economy, there are many sites that must be inspected on a regular basis to insure the owners are in compliance with their Ohio EPA issued General Stormwater permit. In the first half of 2014, the City conducted bi-weekly temporary soil erosion and sediment control inspections on twelve (12) construction sites throughout the City. Ten (10) of these twelve (12) sites had earth disturbing activities over one (1) acre, and thus had to obtain a General Storm Water Permit from the Ohio EPA. Five (5) of these twelve (12) sites are located in the Big Darby Creek watershed, and thus had to obtain the Ohio EPA's General Storm Water Permit for the Big Darby Creek watershed. One (1) notice of violation was issued as a result of the bi-weekly inspections, and it was promptly resolved.

Current and Future Status of Stormwater Fund

Fund balance at the end 2014 was \$386,956.57. Total funds expended through December 31' 2014 were \$832,320.24 with encumbrances of \$155,044.55, and an unencumbered balance is \$231,912.02. Projected revenues for 2015 as budgeted are \$800,000.

OTHER FUNDS:

AWARDED AN OEPA 319H GRANT – CLOVER GROFF DITCH IN MUNICIPAL PARK PHASE I (CIP ST-38) - \$232,916 OF A \$388,194 PROJECT

AWARDED A CLEAN OHIO GRANT THRU OPWC – CLOVER GROFF DITCH IN MUNICIPAL PARK PHASE II (CIP ST-38) - \$458,577

DEVELOPER FUNDS - CLOVER GROFF DITCH (CIP ST-38) - \$240,000

PROFORMA TABLES: OPERATION VS CAPITAL

Table includes a 1.015 ERU increase per year beginning in 2015 and a \$0.20 increase every year 2013-2016 and \$0.25 in 2017.

	2014			2015		
	ERU	RATE	TOTAL	ERU	RATE	TOTAL
	26,743	\$ 2.35	\$ 754,154	27,152	\$ 2.55	\$ 830,850
OPERATION		69%	\$ 520,366		65%	\$ 540,050
CAPITAL		31%	\$ 233,788		35%	\$ 290,800
	2016			2017		
	ERU	RATE	TOTAL	ERU	RATE	TOTAL
	27,562	\$ 2.75	\$ 909,550	27,972	\$ 3.00	\$ 1,007,000
OPERATION		61%	\$ 554,825		58%	\$ 584,060
CAPITAL		39%	\$ 354,725		42%	\$ 422,940

GOAL OF THESE PROJECTIONS IS TO GET CAPITAL FUNDS BACK TO AT LEAST 40% OF THE TOTAL REVENUES.

Implementation and Recommendation

Hilliard's Storm Water Utility continues to diligently and properly operate and maintain the City's storm water facilities. The Department of Public Service has been expending a tremendous amount of effort to comply with the Ohio EPA's NPDES Phase II permit requirements. Despite this effort, there are several locations around the City of Hilliard that require maintenance that are "outside" the capabilities of our Department.

The City provides funds for the NPDES Permit Program as follows:

- 2005 - \$75,000;
- 2006 - \$100,000;
- 2007 - \$60,000;
- 2008 - \$60,000;
- 2009 - \$54,000,
- 2010 - \$60,000.
- 2011 - \$67,250;
- 2012 - \$60,000;
- 2013 - \$61,800;
- 2014 - \$63,700; and
- 2015 - \$63,700

These projects require major construction and personnel who specialize in construction activities so that we are able to stay in compliance with our NPDES permit. Identification of such projects is our first step. Developing these storm water projects into a practical and adequately funded Capital Improvement Program (CIP) is crucial for the City.

To properly develop this CIP, we will be continually evaluating the condition, capacity, and demand on our storm water system in order to maintain our system, and establish a priority of projects that allows the City to minimize its expenditures while using outside funding sources.

Our evaluation includes open water ways, underground pipes, ditches, and other storm water conveying infrastructure. With this evaluation we will be able to determine what projects will provide maximum benefit for the dollar. We will also be able to determine when such projects should be undertaken to minimize damage as a result of the condition of the existing storm water facilities. We must also decide how the projects identified and/or desired through our evaluation can be funded, by either the collection of fees, grants, or possibly through assessments.

A RATE INCREASE BEYOND THOSE APPROVED IS NOT NEEDED.