

## Staff Report

**COMMUNICATION REGARDING PROPOSED CHANGE  
TO STORMWATER FEE STRUCTURE**

August 14, 2012

**BACKGROUND**

In 2009 the City Council directed the Public Works Department to develop a more fair and equitable system for charging property owners for the City's management of stormwater originating on their properties. Several options were brought before the Council, and direction was provided to explore an "Estimated Residential Unit" (ERU) approach in place of the current flat monthly fee. The ERU is based on the amount of hard surface or impervious area on the average residential lot. Impervious area is directly related to the amount of stormwater runoff a property produces.

**By moving to an ERU system, properties with a large amount of hard surface, such as parking lots or large roofs, will experience a significant increase in their monthly charge.** In light of this change, the Public Works Department has worked in conjunction with the Public Relations Office to alert property owners of this new fee structure. The public outreach plan targeted two audiences. The first was to inform the community as a whole of these pending changes. The second was to directly connect with those property owners who will be most significantly affected by this change in rate structure.

To alert the community, notices of the change appeared in the May and August 2012 issues of City Side, and will appear again in the November and January 2013 newsletters. Corey Mellies has appeared as a guest on Channel 12 to discuss the stormwater fee changes, and the information has gone out on Facebook and Twitter several times a month beginning in April (See Appendix A). To be user friendly, a link on the City of Ames website allows anyone to access an estimate of the new stormwater fee on any piece of property in Ames, by going to [www.cityofames.org/stormwaterfees](http://www.cityofames.org/stormwaterfees).

For the average single family residential customer, the fee will change from the flat fee of \$3.45 per month to the estimated fee of \$4.64.

To alert specific property owners who will be most affected, emails, phone calls, and direct letters have been used. Those properties identified as the most affected include:

Ames Community School District  
National Centers for Animal Health  
Non-profit organizations and churches

In most cases, the Public Works Department sent an email to these organizations. (See Appendix B). This was followed by a letter in the U.S. Mail delivered in August that

targeted all exempt properties (properties exempt from paying property taxes) that will experience an increase, all commercial and industrial properties that will see an increase of 500% or more an account, and all properties that currently do not have a utility account but will be subject to the new fee (E.g., parking lots and homeowner association common areas). These letters also included a question and answer section and referred the recipients to the website to calculate estimated fees (See Appendix C).

As part of the last City Council direction, staff was to gain feedback on the proposed ordinance change. The general feedback to this ordinance received to date is summarized below:

- There seems to be confusion on the charge per account versus the total amount per parcel. The website was made to show per account, but if all accounts are held by the same owner the charge must be multiplied by accounts
- There has been feedback that the website is too complicated to find the proposed fee
- There was feedback on the fact that in some areas there are no stormwater facilities so they feel the charge is unfair
- Barilla representatives commented that they felt the increase is unreasonable and would like to be notified when the ordinance will be open for public comment. They were not against any increase, but felt the amounts proposed were unreasonable.
- A townhome association felt that being charged for the common area that included the private streets was not fair compared to areas where townhomes have public streets.
- There have been several inquiries regarding whether or not there would be credits or ways to reduce the charge such as rain gardens.
- Residential property owners have complained that the literature states that the new system is revenue neutral, but their monthly fees will increase. They have also stated that they do not understand why it must go up in the first year and then decrease over time.

## **STAFF COMMENTS**

City staff has worked, and will continue to work, to notify the public of the proposed changes in storm sewer billing. Feedback received thus far shows that the proposed change is causing some confusion with customers as it relates to the new billing. Staff also anticipates receiving a high volume of calls once the actual bills are received by customers. If implemented in January, the new fee structure would be reflected in February bills.

Staff has the following comments regarding the storm sewer utility fee structure:

- The staff's major focus is on having a fee structure that generates adequate funding to cover the costs of the storm sewer utility. How that structure is designed, or from whom that amount is collected, is a policy decision for the City Council.
- The fee structure most recently supported by the City Council is a radical departure from the current fee structure. (See the most recent Council Action Form on this subject from December 2011.)
- The City Council should remember that the fee structure proposed for the five-year rate transition assumed no overall revenue increase to the Storm Sewer Fund. With the City just entering into the Comprehensive Flood Study, there is the possibility that additional stormwater management improvements will be identified that will necessitate a revenue increase. This could cause the impact to exempt, commercial, and industrial users to be even greater than what is shown in the current five-year transition plan.
- **Some on the Council might remember the magnitude of negative citizen reaction to the proactive sidewalk improvement program that was suggested for implementation several years ago. The backlash to the proposed "sidewalk matrix" was so intense that the Council ultimately decided not to implement the program. The Council should expect this same level of objections, especially from those property owners who have large impervious areas.**
- **While the shift to a new fee structure that reflects higher fees for larger impervious areas is justifiable, the impact on many of our customers might not be palatable.** Therefore, there is still time to develop a more simple three- or four-tier structure that recognizes differences in impervious areas.
- City properties would be billed and subject to the same increases proposed for private properties. This will need to be included in individual departments' budget proposals for the coming year.

## **NEXT STEPS**

The City Council should now decide which of the following options to take.

1. The City Council can direct the City Attorney to draft an ordinance changing from a flat stormwater fee to a fee based on an "Estimated Residential Unit" (ERU). This is the fee structure previously approved by Council.

2. The City Council can to decide to continue the flat fee stormwater fee structure.
3. The City Council can direct staff to develop a simpler, three- or four-tier fee structure that does not use ERU units, but that still assigns fees according to the general degree of impervious area.

**Unless Council has strong feelings that this type of radical change suggested under Option # 1 should be made, staff believes that the simpler fee structure under Option # 3 would be the wisest “next step” for our community.**

## **APPENDIX A – SAMPLE FACEBOOK/TWITTER POSTS**

*New stormwater fee on all property in Ames begins 2013. Most homes go from \$3.45 to \$4.64. Find your monthly payment at [ow.ly/akRWC](http://ow.ly/akRWC)*

## APPENDIX B – SAMPLE E-MAIL

Dear Property Owner,

I am writing to you on behalf of the City of Ames to alert you to changes in the way the City will charge its stormwater fee on utility bills. The change will result in a modest increase on the typical residential owner, but could have a big impact on utility bills for other properties. Although the new fee structure will not go effect until **Jan. 1, 2013**, I am contacting you early so you can prepare for the change. Also, I am available to speak to groups, answer questions, and provide information.

I'd like to provide some background on the change. Currently, the stormwater fee on your utility bill is a flat fee of \$3.45 charged to every account, regardless of contribution to the storm sewer system. In response to requests from the public, the Ames City Council directed City staff to develop alternatives for billing based on the amount of hard surface or impervious area contained on a property.

Impervious area is directly related to the amount of stormwater runoff a property produces. After many discussions, the City Council is moving forward with a system based on impervious area called an Estimated Residential Unit (ERU) system. This system uses an average for the amount of impervious area on a residential property as the calculation of an ERU. This change will reflect your contribution to the stormwater system and conforms with how other utilities are charged. The new fee structure is designed to be revenue neutral.

**To access an estimate of the new stormwater fee on any piece of property in Ames, go to [www.cityofames.org/stormwaterfees](http://www.cityofames.org/stormwaterfees) to access the database.** For the average single family residential customer, the fee will change from the flat fee of \$3.45 to the estimated fee of \$4.64. If you want more information, I've included a Q & A section below.

Because this change will be significant for property owners, I hope you will help me get the word out to those who need to know.

Corey Mellies, P.E.  
Public Works Operations Manager  
City of Ames Public Works Dept.  
515 Clark Ave.  
Ames, IA 50010  
Phone: 515-239-5276  
cmellies@city.ames.ia.us

### **Questions & Answers**

#### **Q: What activities does my storm water fee fund?**

Stormwater utility fees cover costs of constructing, operating, repairing, and maintaining all kinds of conduits, drains, stormwater detention devices, ponds, ditches, streams, erosion control devices, and other stormwater control facilities. Capital Improvement Plan projects financed through the fee include storm sewer intakes rehabilitation, low point drainage, and improvements to specific parts of the community. The fee includes education, outreach, and other activities.

#### **Q: What is the difference from my current billing?**

The City charges a flat fee per utility account for stormwater. This charge is currently \$3.45. The new billing for will be based on impervious area. This will be accomplished using an Estimated Residential Unit (ERU) process. This process is accomplished using Geographic Information System (GIS) to estimate the average impervious area on residential lots. This number is then used to divide the impervious area of all properties to give each property an ERU value. It is estimated the new charge for the average residential customer will be \$4.64.

**Q: How was the ERU calculated?**

Staff used the City's GIS to calculate an average impervious area for residential property. The GIS showed an average residential parcel has 3,050 square feet of impervious area. After reviewing the data, Council determined that one ERU equals 4,000 square feet. This formula was then used for all analysis. For example, a parcel with 8,000 square feet of impervious area will have an ERU equal to two (8,000 sf/4,000 sf = 2 ERUs). Also, the minimum ERU was set at one. This means properties with less than 4,000 square feet of impervious area will be charged one ERU. For the purpose of billing, the calculated ERU will be rounded to the nearest half ERU.

**Q: What is impervious area?**

Impervious area means the total square feet of any hard surface area, including buildings, any attached or detached structures, paved or hard-scaped areas, and gravel, that either prevents or restricts the absorption of water into the soil and thereby causes water to run off the surface.

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## APPENDIX C – SAMPLE DIRECT MAIL

Dear Customer,

I am writing to you with important information regarding the stormwater utility fee that appears on your City of Ames utility bill. The City of Ames is preparing to make changes to the way it charges its stormwater utility fee. The change will result in a modest increase on the typical residential owner, but could have a very big affect on utility bills for non-residential properties, such as yours. I am contacting you to share this information early, so you may prepare for the change. Also, I am available to you by email, phone, or in person to provide information.

I'd like to provide some background on the change. Currently, the stormwater fee on your utility bill is a flat fee of \$3.45 charged to every account, regardless of contribution to the storm sewer system. In response to requests from the public, the Ames City Council directed City staff to develop alternatives for billing based on the amount of hard surface (or impervious area) contained on a property. Impervious area is directly related to the amount of stormwater runoff a property produces. After many discussions, the City Council is moving forward with a system based on impervious area called an Estimated Residential Unit (ERU) system. This system uses an average for the amount of impervious area within a residential property as the calculation for one ERU. This change will better reflect your contribution to the stormwater system. The new fee structure is designed to be revenue neutral.

**After reviewing several alternatives, the Ames City Council directed staff to proceed with the proposed billing structure. The new ordinance is planned to be finalized by City Council this fall. The new billing would go into effect January 1, 2013. To access an estimate of the new stormwater fee on any piece of property in Ames, go to [www.cityofames.org/stormwaterfees](http://www.cityofames.org/stormwaterfees) to access the database.**

For more information, I've included a Q & A section on the back of this letter. Also, please feel free to contact me with questions or concerns. I can be reached at (515) 239-5160 or via email at [cmellies@city.ames.ia.us](mailto:cmellies@city.ames.ia.us).

### **City of Ames**

### **New Stormwater Fees for Non-Residential Property**

#### **Questions & Answers**

##### **Q: What activities does my storm water fee fund?**

Stormwater utility fees cover costs of constructing, operating, repairing, and maintaining all kinds of conduits, drains, stormwater detention devices, ponds, ditches, streams, erosion control devices, and other stormwater control facilities. Capital Improvement Plan projects financed through the fee include storm sewer intakes rehabilitation, low point drainage, and improvements to specific parts of the community. The fee includes education, outreach, and other activities.



**Q: What is the difference from my current billing?**

The City charges a flat fee per utility account for stormwater. This charge is currently \$3.45. The new billing for will be based on impervious area. This will be accomplished using an Estimated Residential Unit (ERU) process. This process is accomplished using Geographic Information System (GIS) to estimate the average impervious area on residential lots. This number is then used to divide the impervious area of all properties to give each property an ERU value. Non-residential properties will have a different charge per ERU than residential properties.

**Q: How was the ERU calculated?**

Staff used the City's GIS to calculate an average impervious area for residential property. The GIS showed an average residential parcel has 3,050 square feet of impervious area. After reviewing the data, Council determined that one ERU equals 4,000 square feet. This formula was then used for all analysis. For example, a parcel with 8,000 square feet of impervious area will have an ERU equal to two ( $8,000 \text{ sf} / 4,000 \text{ sf} = 2 \text{ ERUs}$ ). Also, the minimum ERU was set at one. This means properties with less than 4,000 square feet of impervious area will be charged one ERU. For the purpose of billing, the calculated ERU will be rounded to the nearest half ERU.

**Q: What is impervious area?**

Impervious area means the total square feet of any hard surface area, including buildings, any attached or detached structures, paved or hard-scaped areas, and gravel that either prevents or restricts the absorption of water into the soil and thereby causes water to run off the surface.

**Q: What is the ERU rate for non-residential property?**

The ERU rate for non-residential property is \$1.37 during the first year. To see how this will be applied to your non-residential property, go to [www.cityofames.org/stormwaterfees](http://www.cityofames.org/stormwaterfees). The website will give you the estimated charge for the next five years.

Dear Non-Residential Property Owner,

I am writing to you with important information regarding the City of Ames stormwater utility fee. The City of Ames is preparing to make changes to the way it charges its stormwater utility fee. The change will result in a modest increase on the typical residential owner, but could have a very big affect on utility bills for non-residential properties such as yours listed on the enclosure to this letter. I am contacting you to share this information early, so you may prepare for the change. Also, I am available to you by email, phone, or in person to provide information.

I'd like to provide some background on the change. Currently, the stormwater fee is a flat fee of \$3.45 charged to every account, regardless of contribution to the storm sewer system. In response to requests from the public, the Ames City Council directed City staff to develop alternatives for billing based on the amount of hard surface (or impervious area) contained on a property. Impervious area is directly related to the amount of stormwater runoff a property produces. After many discussions, the City Council is moving forward with a system based on impervious area called an Estimated Residential Unit (ERU). This system uses an average for the amount of impervious area within a residential property as the calculation for one ERU. This change will better reflect your contribution to the stormwater system. The new fee structure is designed to be revenue neutral.

**After reviewing several alternatives the Ames City Council directed staff to proceed with the proposed billing structure. The new ordinance is planned to be finalized by City Council this fall. The new billing would go into effect January 1, 2013. To access an estimate of the new stormwater fee on any piece of property in Ames, go to [www.cityofames.org/stormwaterfees](http://www.cityofames.org/stormwaterfees) to access the database.**

**As part of the proposed billing structure, all properties with impervious area will be charged a fee. This will apply to parcels that currently have no utility accounts. If adopted, these properties will be required to register for a utility account so they can be billed for this stormwater fee.**

For more information, I've enclosed a Q & A section with this letter. Also, please feel free to contact me with questions or concerns. I can be reached at (515) 239-5160 or via email at [cmellies@city.ames.ia.us](mailto:cmellies@city.ames.ia.us).

**SUBJECT: STORMWATER UTILITY SYSTEM RATES**

**BACKGROUND:**

Since its inception, the City's Storm Sewer Utility has generated revenue based on a uniform flat monthly fee per utility account. In response to requests from the public, the City Council directed City staff to develop alternatives for billing based on impervious area. At a November 17, 2009 workshop, the Council considered four alternatives that reflected this new billing philosophy. At that meeting the Council then directed staff to explore two additional alternatives for consideration. The City Council was subsequently presented with those six alternatives at a September 21, 2010 workshop. Staff was then directed to bring back those alternatives for a final decision. In a meeting held November 23, 2010, Council reviewed seven alternatives. **On March 15, 2011, City Council directed staff to implement an ERU based billing system, with a five year phase-in of the revenue share adjustment, beginning in July 2011.**

**Storm Sewer Funding:**

The money collected for and paid into the Storm Sewer Fund is expended for the purpose of constructing, operating, repairing, and maintaining all kinds of conduits, drains, stormwater detention devices, flow impediments, ponds, ditches, sloughs, streams, filter strips, rip-raps, erosion control devices, and other stormwater control facilities. Capital Improvement Plan projects financed from the Storm Sewer Fund include the Storm Sewer Intake Rehabilitation Program, the Storm Sewer Facility Rehabilitation Program, Low Point Drainage Improvements, Southwest Ames Stormwater Management Improvements (improvements to Greenbriar Park), and Storm Sewer Outlet Erosion Control (College Creek Restoration project as part of this program from 2008-2010). Funded activities in the City's operating budget include illicit discharge detection and elimination, storm sewer maintenance and cleaning, permit administration, public outreach/education, construction site erosion control inspection, pesticide and fertilizer management, Geographic Information System (GIS) mapping of the storm sewer network, the rain barrel grant program, the rain garden grant program, the stream bank stabilization grant program, and the annual Eco Fair.

**Existing Billing:**

At present, the City charges a flat fee per utility account for stormwater. This charge is currently \$3.45. There are approximately 25,432 utility accounts in the City. This generates approximately

\$87,740 a month in revenue for stormwater improvements, or \$1,053,000 annually. There are currently 18,276<sup>1</sup> residential utility accounts in the City, which account for 72 percent of the total utility accounts.

### **Impervious/Pervious Analysis:**

The first step in looking at impervious fee scenarios is to analyze the data in our GIS. In 2008, Ames had planimetrics created in conjunction with aerial photography. This data included streets, sidewalks, driveways, and any structures over 150 square feet in size. Using the GIS, we were able to look at the City and generate the percentage of imperviousness per classification. The percentages are shown below and were derived from City Assessor classifications<sup>2</sup>:

- Residential           46.9%
- Commercial         32.9%
- Industrial            7.1%
- Tax Exempt          13.0%
- Agriculture           0.1%

Iowa State University is not included in these calculations, since the University has its own Municipal Separate Storm Sewer System (MS4). In discussions with the Iowa Department of Natural Resources (DNR), they clarified that Iowa State's permit covers all land owned and/or used by the University within the City's corporate limits. It is the opinion of both the City's legal staff and the DNR that this would prevent the University from being billed by the City based on impervious area<sup>3</sup>.

### **Billing for Impervious/Pervious:**

In researching how other cities are billing for impervious area, it was found that many are using the Estimated Residential Unit (ERU) process (see Attachment 1). This process is accomplished using GIS to estimate the *average impervious area on residential lots*. This number is then used to divide the impervious area of all properties to give each property an ERU value.

Staff used the City's GIS to calculate an average impervious area for residential parcels within the City. The GIS showed that an average residential parcel in Ames has 3,050 square feet of impervious area. After reviewing staff's analysis of the data, Council determined that one ERU would equal 4,000 square feet. This seemed appropriate since our planimetrics do not capture

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<sup>1</sup> This is the number of utility accounts on parcels with a residential Assessor designation and the estimate of residential accounts on mixed use property. It is not based on current residentially billed accounts.

<sup>2</sup> Does not include Iowa State University land or City of Ames properties; only billable parcels. Does not include any impervious area after the 2008 planimetrics

<sup>3</sup> Iowa City does not charge the University of Iowa properties

all impervious area on a parcel. Things not captured would include patios and non-public sidewalks on residential parcels. This calculation did not include mixed use parcels which include residential units. The 4,000 square feet would also potentially reduce the number of appeals of ERU calculations.

This formula was then used for all analysis in the several reports on this subject. For example, a parcel with 8,000 square feet of impervious area will have an ERU equal to two ( $8,000 \text{ sf} / 4,000 \text{ sf} = 2 \text{ ERUs}$ ). Properties having 4,000 square feet equal to one ERU comprise 87.2% of residential properties and 80.2% of all properties in the City being less than or equal to one ERU.

### **Assumptions:**

Staff next needed to make some assumptions to analyze an ERU system for billing. First, the minimum ERU was set at one. This means properties with less than 4,000 square feet of impervious area will be charged one ERU. Second, for the purpose of billing, the calculated ERU will be rounded to the nearest half ERU. For example a property with a calculated ERU of 10.24 will be rounded to ten ERUs for the purpose of billing. The rounding calculation of ERUs results in 93.6 percent of residential properties and 86.6 percent of all properties being less than or equal to one ERU. All calculations in this report are done with these two assumptions for the purpose of billing.

Next, Assessor codes are being used when looking at residential versus other classifications. Currently, the City's utility billing system has different residential versus commercial classifications based on the type of utility. For example a commercially classed parcel which contains apartments may be billed in two different ways. For the Electric utility, the apartments are billed as residential while the common areas with Electric accounts are billed as commercial. For the purpose of this report, staff has assigned all accounts by their Assessor codes. In the example above, all accounts of the parcel would be assigned as commercial.

Finally, for the purposes of this study, staff assumed that mixed use development is residential. This is due to the fact that residential utility accounts are 99 percent of the accounts in the mixed use parcels.

### **Council Approved Alternative (ERU based billing per parcel w/ \$1 minimum charge per utility account)**

The Council's approved fee structure uses a rounded ERU value, but adds a minimum charge of \$1.00 to each utility account with ERU valuation under the minimum. (E.g., for an ERU

Valuation which equals \$.92, the Stormwater bill amount would be \$1.00.) It is important to note that all of the City's other utilities currently have a service charge that is billed each month in addition to usage charges. To illustrate, a typical residential customer is billed the following service charges: Electric \$5.25, Water \$8.05, and Sewer \$6.55. This fee structure does not include a service charge.

This approved fee structure also has two billing classes. The first is for all parcels assessed as residential and the second billing class is for all other classes (Agriculture, Exempt, Commercial, and Industrial). This was done to achieve the approved revenue share adjustment over five years.

Table 1<sup>4</sup>: Approved Alternative - Illustrating Residential Phase-In.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Minimum Charge</b>	-	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
<b>Residential Charge per ERU</b>	-	\$4.64	\$4.20	\$3.74	\$3.29	\$2.80
<b>All Others Charge per ERU</b>	-	\$1.37	\$1.84	\$2.32	\$2.77	\$3.24
<b>Flat Fee</b>	\$3.45	-	-	-	-	-
<b>Total Revenue per Month</b>	\$87,740	\$85,489.84	\$85,505.20	\$85,531.97	\$85,537.59	\$85,476.68
<b>% Residential</b>	72.0%	73.92%	67.04%	59.91%	53.10%	45.87%
<b>% All Others</b>	28.0%	26.08%	32.96%	40.09%	46.90%	54.13%

**To remind Council of the impact of this method on different properties, aerial photographs for the following five examples are attached. At the bottom of each figure is a summary of the storm sewer fees to be charged under the adopted method.**

- Figure 1 – 2500 Northwestern Avenue (Single Family Residential)
- Figure 2 – 2900 Hoover Avenue (St. Cecilia Church)
- Figure 3 – 1921 Ames High Drive (Ames High School)
- Figure 4 – 3311 E. Lincoln Way (Barilla)

<sup>4</sup> Estimated revenue based on 2009 planimetric estimates. Actual revenue will likely increase with additional properties developed since 2009.

- Figure 5 – 2801 Grand Avenue (North Grand Mall)

### **Implementation Costs of ERU-Based Billing System:**

Previous reports identified several steps to be completed and associated costs required to implement an ERU based system. These are as follows:

- Create utility accounts for parcels which currently do not receive utility bills (i.e. parking lots with no lights or water). As of the last report staff had identified approximately 350 such parcels. All of these parcels have now been added to the system.
- Using the GIS, staff identified approximately 100 parcels which were not captured in the 2008 planimetric development. Planimetric layers are now current to 2009, which is the most recent aerial photography.
- Staff time to verify calculated ERU values and contested valuations for a time period after implementation.

### **Ongoing Costs for ERU Based Billing System:**

While minimal overall, some staff time and resources will be required to maintain the ERU based stormwater billing system. These considerations are outlined as follows:

- Ongoing staff time to value newly constructed properties.
  - New construction will be calculated by the Stormwater Specialist as permits are given.
  - ERU valuations for new accounts will be passed to Utility Billing staff for billing.
  - ERU updates for individual properties will be done as needed. (i.e., pavement additions or removal)
- Recurring updates and audits to ERU valuations.

- GIS Staff will carryout manual planimetric updates on an annual basis or as new aerial photography is acquired.
- Whole system ERU updates will be done on an annual basis or as warranted.

**Additional Comments:**

In order to keep the administration of this new approach as simple as possible to avoid further costs, the proposed ERU system will not offer credits for ERU reduction. The only way to change the ERU will be to reduce or increase impervious area (e.g., by reducing paved parking area or installing additional impervious surfaces).

Under the approved fee structure, every property with impervious surface over 150 ft.<sup>2</sup> will be charged a stormwater fee. Currently, only properties with a utility account are charged the monthly fee.

Iowa State University will not be charged stormwater fees, since the University is legally under its own Municipal Stormwater (MS4) permit.