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MEMORANDUM

TO: Finance Committee

FROM: Ian Houseal, Assistant to the City Manager, Sustainability Coordinator

DATE: September 26, 2013

SUBJECT: Finance Committee Stormwater Service Charge Material

Please see the attached additional material in reviewing the stormwater management program and fee:

1. Revised stormwater charge review schedule;
2. Revised stormwater fee chronology;
3. Finance Committee September 12, 2013 information request:
 - a. Roads: Why was the decision made not to bill for the impervious area contained in roadways (public and private)?
 - b. Credits: Why are stormwater credits capped at a maximum of 60%?
 - c. Rate Structure: How was the recommended stormwater rate structure developed?
 - d. Rate comparison: How does the Portland's proposed stormwater rate compare with others?
4. Requested legal review Pierce Atwood;
5. Requested allocation rationale;
6. Stormwater service charge impact;
7. Ordinance detail;
8. Billing;
9. Implementation/Public notification:
 - a. What time of year should the first bill be sent out? and;
 - b. Should and how should the new charge be phased-in?

Proposed Stormwater Charge Review Schedule

(Updated September 17, 2013)

Meeting 1: September 12, 2013 - Stormwater Charge Introduction: Where we are and how we got here

- Introduction
- Chronology of Council Actions
- Introduction to Sewer and New Stormwater Fees Rationale (powerpoint presentation)
- Review of Compliance with Task Force Recommendations
- Sewer and Stormwater Funds Budget Projections (Rationale for allocating Sewer and Stormwater Expenditures)

Meeting 2: September 26, 2013

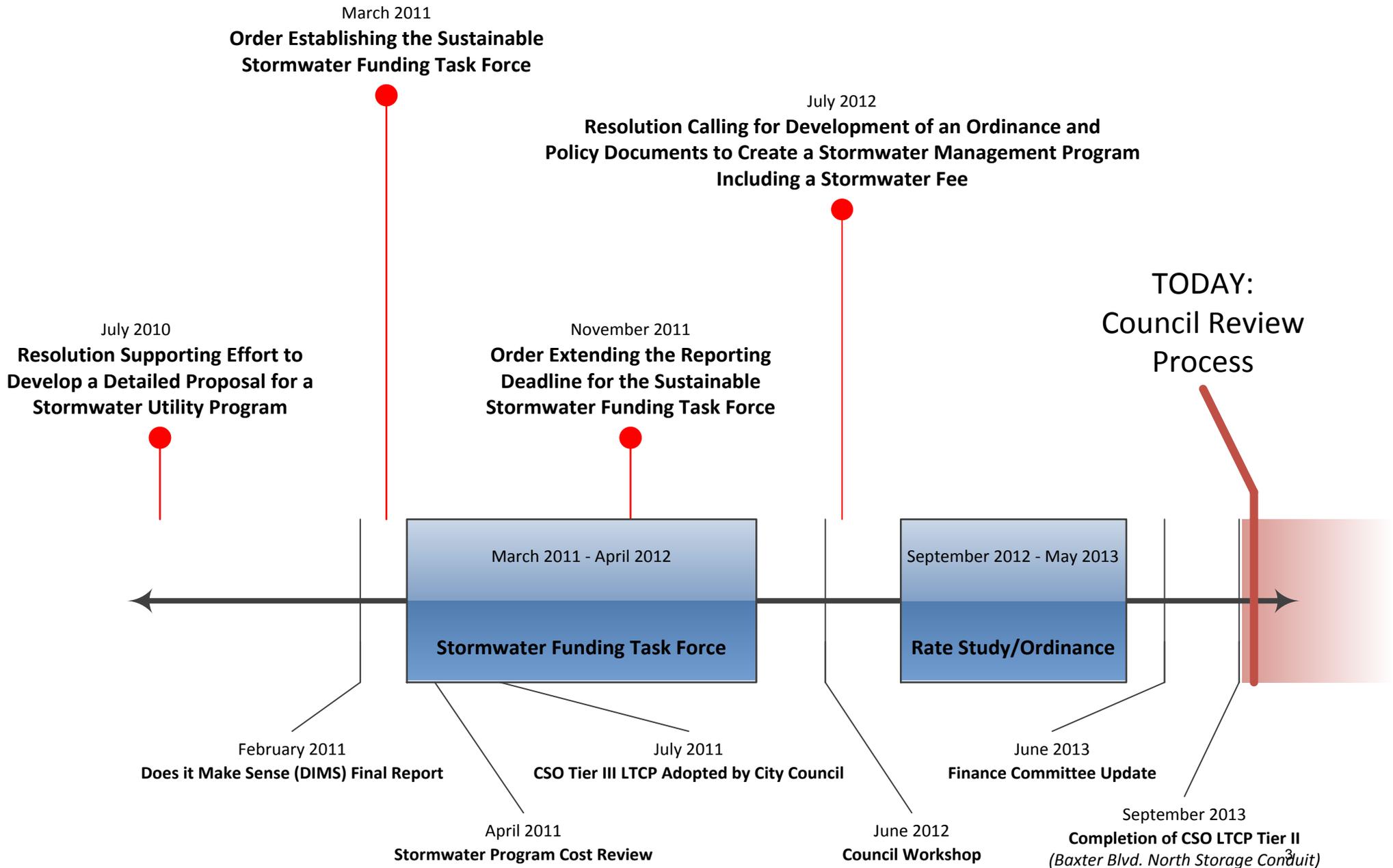
1. Rate Setting Methodology and Impacts
 - Rate Setting Methodology
 - Impact Analysis to Single Family Residential, Commercial, City Property
2. Ordinance Review and Implementation Plan
 - Detailed Ordinance Review
 - Billing Method Options and Recommendation
 - Implementation Options and Recommendation
 - Phasing in Stormwater Fee Options and Recommendation
 - First Bill Date, Bill Review Period, Public Education/Notification

Meeting 3: October 24, 2013 – Finance Committee Recommendation

- Continue Review
- Public Hearing
- Recommendation on Stormwater Management Program and Fee

CITY OF PORTLAND

STORMWATER FEE: CHRONOLOGY





Finance Committee Information Requests

The purpose of this handout is to provide requested background information to assist the Finance Committee in decision making concerning the stormwater user fee.

Introduction and Background Data

The Finance Committee requested information on four areas of stormwater user fee policy and rate structure:

1. Roads: Why was the decision made not to bill for the impervious area contained in roadways (public and private)?
2. Credits: Why are stormwater credits capped at a maximum of 60%?
3. Rate Structure: How was the recommended stormwater rate structure developed?
4. Rate comparison: How does the Portland's proposed stormwater rate compare with others?

The analysis uses 2014 as our example year, though it should be understood that all program costs, both storm and sewer, will be increasing due to the combined sewer overflow (CSO) costs and their portion allocated to storm water (wet weather causes) over time. Below are some key related facts:

- The current stormwater only program costs are \$1.14m.
- The 2014 stormwater only costs are \$3.90m.
- The Task Force directed a CSO allocation to stormwater. CSO allocated portion to the 2014 stormwater program is \$2.71m bringing the total stormwater fee funded program to \$3.90m + \$2.71m = \$6.61m.
- The actual revenue requirement for the stormwater (wet weather) fee must also include allowances for bad debt, credits, fund balance reserves and other necessary items. The final estimated total revenue requirement for the entire stormwater program in 2014 is \$7.01m.
- The estimated stormwater rate per billing unit (1,200 square feet of impervious area) in 2014 is estimated to be \$6.61/month. This rate may be adjusted as the billing and data files are updated.

1. Handling Public and Private Roads

Question: Why was the decision made not to bill for the impervious area contained in roadways (public and private)?

Facts:

- One third (33%) of the total impervious area in the City is made up of roadways. Thus if the City charged itself for its roads and all others paid for roadways, the fee per billing unit would be 33% lower or \$4.41 per billing unit per month.
- 87% of the roadways are City owned or private – the rest are MDOT roadways. The non-MDOT roadway bill would be \$2.22m annually. This revenue must come from either increasing the sewer bill or increasing property tax.



- In a recent survey of national practice in this area, 22.4% of all respondents exempt roads and the rest either charge or charge a reduced rate. All other stormwater utilities in Maine exempt roads.

Reasoning of the Task Force/Consultant/Staff:

- While the fee per unit would be reduced 33%, the payment of these funds would have come from either taxes or the sewer fee. In both of these cases the lack of logical relationship between property value on the one hand (tax-based funding) or water usage on the other (sewer fee based funding) seemed a poor decision trending away from rational nexus arguments.
- Increasing property taxes to pay for stormwater seemed very unattractive for many reasons. And increasing the sewer fee was seen as illogical since the apportionment of the sewer fee was already taken into consideration. The sewer fund is about to be burdened with larger support demands for the long term combined sewer overflow (CSO) control plan and adding over two million dollars to that budget seemed problematic.
- There were concerns that MDOT would challenge the fee and a protracted legal battle might ensue, resulting in less net revenue from this user.
- Charging private roads might be considered a small new revenue source though it was considered doubtful that owners of private roads would be able to pay the charges for those roads, and those roads generally serve a public function.
- While there is no perfect way to allocate the use of roads among rate payers, it is generally considered that the larger the impervious area of a parcel the more use of roadways it demands. Large warehouses or stores are large because they anticipate numerous trucks or customers to use the public roads to get to and from their property. Large parking lots are large because they anticipate they will be needed by vehicles using public roads to travel to those lots.
- The idea that charging a City for its roads will create an incentive for the City to reduce its roadway impervious area burden is more illusory than real because other forces (e.g. safety, traffic count, parking needs, fire access, etc.) tend to drive roadway size and function independent of drainage and water quality issues. Cities concerned with the impact of roadway runoff normally take the approach of converting normal streets to “green streets” through retrofit projects, which the City of Portland actively engages in, and often in conjunction with neighborhood revitalization or other development projects rather than trying to force pavement reduction through the stormwater charge. The City is currently exploring changes to its technical design standards to incorporate green infrastructure design for roadways.

Recommendation: Exempt all transportation-ways from the stormwater user fee.



2. Stormwater Credits

Question: Why are stormwater credits capped at a maximum of 60%?

Facts:

- Credits are given for either reducing a parcel's "use of" or "benefit from" the public drainage system. Credit is given for approved private investments or actions commensurate with reduced public cost, or which produce a stormwater related public good which is ongoing.
- The credit manual for the kinds of credit have not been developed yet for Portland but they will meeting the requirements set forth in the ordinance and generally recognize the site development requirements that a property must employ to reduce its own impact on the stormwater system and on the quality of receiving waters. There may also be credit offered for private actions that directly reduce the city's program costs, such as drainage system maintenance.
- A rough estimate of the summation of fixed costs, indirect costs, general public responsibility for the roadway impervious area, etc. amounts to about 40% of the total stormwater program.

Reasoning of the Task Force/Consultant/Staff:

- Regardless of what a property owner does on his or her own property they cannot reduce their use of stormwater systems and services to zero. First, there are fixed costs and indirect program-related benefits of any stormwater program in which all citizens participate. Costs include such things as public education, permit compliance, administrative costs per account, etc. Benefits for all users include such things as clean water, flood protection, access to property, access to public waters, etc.
- Secondly, there are "shared impacts" that cannot be reduced. Principle among these is the shared use of the largely impervious area of the roadway system which alone amounts to 33% of the user fee.
- Allocating credits on the same basis as the user fee is calculated makes logical sense.

Recommendation: Fully credit 100% of the stormwater program that relates to the positive impacts of private actions and investment. Reserve the remainder of the program costs and seek to reduce these through sound program management and sound roadway impervious area treatment. This reserved portion of the program is 40%.

3. Stormwater Rate Structure

Question: How was the recommended stormwater rate structure developed?

Background Information:

The rate structure developed for a particular utility is divided into three modules:

- (1) the basic rate methodology;
- (2) modification factors, which can be applied to any of the rate concepts to enhance equity, reduce costs, and meet other objectives; and
- (3) secondary funding methods that can be adopted in concert with the service charges to reduce costs.



Typical modification factors might include: flat rates or tiers for single-family residences, fixed costs per account, and a crediting mechanism.

The following general evaluation criteria were kept in mind when considering various options in the rate structure:

1. Equity – does this policy decision promote equity, or at least not violate equity (fairness) principles?
2. Balance of rates with the level of service – does this policy decision tend to lead toward an intuitive balancing of the fees someone pays and the services they get?
3. Data requirements and compatibility with data processing systems – does this policy decision work well with how we do billing?
4. Cost of implementation and upkeep – does this policy decision have undue administrative burden?
5. Consistency with other financing and rate policies – does this policy decision fit well with the overall rate structure?
6. Revenue sufficiency – does this policy decision, if applicable, result in adequate revenue to make it worthwhile?
7. Revenue stability and sensitivity – does this policy decision impact the stability of the revenue stream or is it overly sensitive to outside factors?
8. Flexibility – are there any flexibility concerns with this policy decision?

The two major policy decisions are discussed here: basic rate methodology and billing unit/ residential treatment.

Basic Rate Methodology

Recommendation: Bill on the basis of impervious area only. Account for unusual cases through the use of a credit system.

Among the various options presented, the choice to use impervious area only as the basic rate methodology was favorable because:

- It is simple and intuitive.
- It is based on things a property owner can control to some degree and incentivizes impervious area reduction or treatment.
- It balances support for green spaces with the impact of gross area on runoff volumes.
- 83% of all stormwater user fees contained in a recent national survey are based on some direct or indirect measure of impervious area only.
- The impervious data is available and the City has invested in obtaining this data.
- It seemed to balance the impacts of shifting CSO costs from the sewer charge to a wet weather fee.

Billing Unit and Residential Treatment

Recommendation: Bill all properties on the same basis with the number of billing units of 1,200 square feet of impervious area rounded to the nearest whole number of billing units.

While the Task Force recommended that residential properties be placed in a two or three tier structure, a number of factors were considered and the decision made by City Staff to move to a consistent billing approach for all classes of property – residential and non-residential. This approach is based on the following information:

- Impervious coverage data is available for all properties.
- There are many residential properties that are substantially larger than the average commercial property.
- Due to the unique nature of the City of Portland housing stock, residential and commercial properties do not differ significantly with respect to their intensity of development.
- The billing rate is significant due to the inclusion of CSO costs in the “stormwater fee”, thus a small billing unit would better recognize smaller differences in size and reduce the “step size” from one unit to another.
- Attempting to use a smaller billing unit size would introduce the possibility of many more impervious area estimation errors.
- There are a large number of very small homes with impervious area well below the average size of 2,341 square feet for whom a reduced charge would make sense. Therefore, a smaller billing unit with rounding to the nearest whole billing unit value would seem more equitable – allowing all properties less than 1,800 square feet of impervious area (400 to 1,800 square feet) to be rounded to one billing unit.
- 1,200 is easily understood and relates to the housing stock as approximately half of the average residential impervious coverage as shown in the figure below.

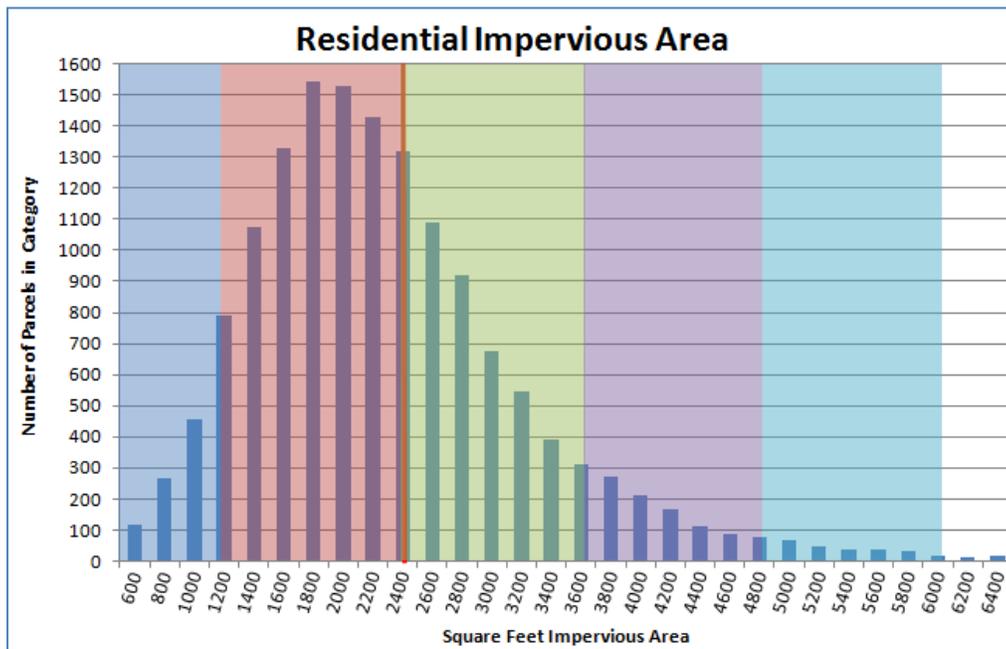


Figure 1. Residential Impervious Area Distribution



4. Comparison with Other Rates

Question: How does the Portland’s proposed stormwater rate compare with others?

Discussion:

The answer to the simple question posed is a complex one. Invariably when comparisons are done they give both clarifying and misleading information. For example, because Portland is choosing to fund both its separate stormwater and its CSO systems fully or partially from the wet weather (stormwater) fee, comparing the level of the fee to other cities with only a separate stormwater program will be misleading. Also, comparing a “fee per billing unit” is misleading because of the different sizes of the billing unit. Finally, CSO programs are so varied in terms of cost, annual increase, and allocation strategy (cost over time) that there is no fair comparison among them.

One way is to look at the cost for a “typical” house for similar stormwater programs. **Table 1** below gives this for the stormwater utilities in Maine on a monthly basis. The Lewiston program may include some CSO charges.

Table 1. Comparison of Stormwater Program Only Charges

Municipality	Monthly Charge for a Typical Residential Structure Small/Larger
Augusta	\$7.55/\$7.55
Bangor	\$1.83/\$2.75
Lewiston	\$3.67/\$3.67
Portland	\$3.57/\$7.14

For comparison purposes, two cities that allocate a portion of their CSO costs to stormwater in a manner somewhat similar to Portland are compared in **Table 2** to the Portland, ME total wet weather fee costs. No attempt has been made to ascertain all the details of the allocation, such as CSO separation costs versus operation and maintenance costs.

Table 2. Comparison of Stormwater and CSO Combined Program Charges

Municipality	Monthly Charge for a Typical Residential Structure Small/Larger
Philadelphia, PA	\$20.15/\$28.44
Portland, OR	\$10.36/\$20.72
Portland, ME	\$6.61/\$13.22

Figure 2 shows stormwater program rates for larger cities or those in the center of larger metropolitan areas. Portland is below the average but above the median.

M E M O R A N D U M

TO: Zach Henderson
FROM: Bill Taylor & Brian Rayback
CC: Seth Garrison
RE: Review of City of Portland's Draft Stormwater Management Ordinance
DATE: January 21, 2013

You asked that we conduct a high-level legal review of the City of Portland's draft stormwater ordinance. Specifically, you stated that our review "should focus on general legal viability of the ordinance in consideration for legal challenges to these types of utility setups and any other issues you might flag related to municipal and state law," with the understanding that we are not doing a detailed analysis of the ordinance itself, the viability of all potential challenges to the ordinance, or the policy questions inherent in any proposed ordinance. You also noted that the City has limited Woodard & Curran's review to Articles I and V of the draft sewer ordinance, and so we have similarly limited our review to those same articles.

DISCUSSION

Our review of the draft ordinance focused on two primary issues: (1) whether it proposes a permissible fee or an impermissible tax under recent Maine case law; and (2) whether it creates a utility subject to the regulation of the Maine Public Utilities Commission (PUC). At this stage, it appears to us that the first issue is significant, whereas the second does not appear to be a concern.

I. Fee vs. Tax

As you know, the primary legal challenge to these kinds of ordinances relates to whether the entity that implements the program (whether called a stormwater utility district or something else) has the authority to assess property owners to fund the stormwater program. These challenges typically allege that the assessment in question is a tax, and that the municipal agency in question lacks the legal authority to assess taxes. Thus, in these cases the courts focus on whether such assessments are permissible fees or impermissible taxes.

The Maine Supreme Court recently upheld the City of Lewiston's stormwater program against just such a challenge by concluding that the assessments in that case were permissible fees.

That case, called *City of Lewiston v. Gladu*, sets out a four part test for analyzing whether an assessment is a fee or a tax, as follows:

1. Whether the primary goal is to raise revenue or is for a regulatory purpose;
2. Whether there is a direct relationship between the assessment and the benefit conferred on the individual that is somehow different from the benefits conferred to the public generally;
3. Whether the assessment is voluntary; and
4. Whether the assessment is a fair approximation of the costs involved in implementing the program.

We understand that the City's own legal staff has reviewed the draft ordinance for compliance with *Gladu*. Therefore, we have not focused on trying to determine conclusively whether the ordinance would withstand a challenge on these grounds. For your review, however, we briefly address some of the key issues under each of the elements of the *Gladu* test for further consideration by the City.

A. Regulatory Purpose

The first question under the *Gladu* analysis is whether the primary goal of the assessment is to raise general revenue or to serve a regulatory purpose. Typically, taxes are used to raise general revenue, whereas fees tend to help defray the costs of a given regulatory program.

In challenging Lewiston's assessment in the *Gladu* case, Gladu argued that the purpose of the assessment was to raise general revenues because 44% of the City's budget goes to debt service, including for debts accrued prior to creation of the stormwater district utility. The Court concluded, however, that the fact that the utility in that case acquired debt for stormwater infrastructure "does not change the fact that the Utility is using the assessment to cover the costs of regulating stormwater runoff, and part of those regulatory costs include maintaining stormwater infrastructure."

You have stated that a portion of the assessment in Portland under the draft ordinance would go toward capital replacement and renewal of infrastructure. Much like the debt service addressed in *Gladu*, these would appear to be proper regulatory purposes, as the City must operate and maintain a functioning stormwater drainage system. Thus, in our view, the City's draft ordinance would probably satisfy this element of the *Gladu* decision.

B. Direct Relationship

The next element of the *Gladu* test is whether there is a direct relationship between the assessment and the benefit conferred. In general, this is a question of whether the person paying the assessment receives enough of an individual benefit from the program to make the assessment more like a fee for a particular service, as opposed to a tax that goes to pay for general fund programs.

In *Gladu*, the Court reasoned that the benefit conferred on Gladu was sufficiently individualized to meet this test because: (1) the assessment was levied only on developed property, and thus only on land that contributes to stormwater pollution; (2) the property being charged receives a benefit of having its stormwater properly managed; and (3) the cost of the service was apportioned based primarily on the amount of impervious cover on that property in question. Thus, the Court concluded that Gladu was receiving personal benefits from payment of the assessment in question, and that this was therefore unlike a tax.

Based on our review of the draft ordinance here, it appears that the City would likely be able to satisfy this criterion, as well.

C. Voluntariness

The next element in the fee/tax analysis under *Gladu* is whether the assessment is voluntary. In general, if an assessment is mandatory, it is more like a tax, whereas a voluntary assessment is more like a fee for service. In *Gladu*, the Court concluded that the Lewiston assessment was voluntary because property owners could take advantage of a possible credit for up to 100% of the assessment. Thus, the Court reasoned, a property owner could make a choice not to pay the assessment by qualifying for the credit (even if, as a practical matter, qualifying for the credit might be unduly expensive for many).

In its analysis, the Court specifically stated that it was offering no opinion on whether the program would still be voluntary absent the option for a 100% credit. It would seem, however, to substantially undermine the voluntariness of the program if the property cannot get a 100% credit, as at least some portion of the assessment would be mandatory in all cases.

Thus, we think that the absence of a 100% credit in the draft ordinance in Portland presents a potentially substantial issue under the *Gladu* case. While the Court did not say that such ordinances must have a 100% credit, the logic of the *Gladu* case certainly seems to suggest that. Thus, to be conservative, we think that the safest route would be to make a 100% credit available (even if, as a practical matter, it would be costly to qualify for it). We realize that this may present policy concerns for the City, not the least of which is how to fund those portions of the system that serve everyone, but it may be that the credit could be structured so that very few would actually qualify for it.

D. Fair Approximation

The final element in the *Gladu* test is whether the assessment fairly approximates the cost of the program to the government and the benefit to the individual. It is clear from *Gladu* that municipalities get a fair amount of leeway in this analysis, but there are two points that may present a concern here.

As an initial matter, the City will have to keep careful records to ensure that it can demonstrate what its costs are to manage stormwater. We understand from you that the City draws upon

personnel and resources from multiple departments to fund, build, operate, and maintain its system, and therefore that this may be a challenge. (This is also relevant to demonstrating that the purpose of the assessment is to satisfy regulatory requirements and not to raise general revenues.)

In addition, it appears that the draft ordinance makes no distinction between those properties that are served by the City's MS4 system and those that are served by the combined sewer system. The question, therefore, is whether the courts would require the City to make a fair approximation of the costs for the entire stormwater system (MS4 and combined sewer combined), or for each individual system.

For example, if we assume for these purposes that the MS4 system is substantially less expensive than the combined sewer system, a property owner living in an area served by the MS4 system might justifiably claim that he is unduly subsidizing the more expensive combined sewer system, which does not directly benefit his property. In other words, in this hypothetical the cost of the assessment would not fairly approximate the cost of managing stormwater from *his* property. On the other hand, if the costs of the two programs are similar, or if the City is able equitably to apportion the costs of the entire system in a manner that smoothes out the differences, then this may not be a problem at all.

We do not have enough information at this stage to advise you on whether this will present a significant problem for the draft ordinance. We do recommend, however, that this be considered further.

II. Regulation by the PUC

In addition to the fee/tax analysis under Gladu, the other primary issue that we considered is whether the City's draft ordinance creates a stormwater utility district subject to regulation by the PUC. The answer, in short, is no. While the PUC does regulate the provision of drinking water to the public, it does not regulate the provision of sewer or stormwater services. Thus, even if the City were to create a new stormwater utility district, as Lewiston did, the PUC would have no authority to regulate its activities, including how it sets rates. 35-A M.R.S. § 103(2) (jurisdiction of PUC limited to "public utilities," which does not include, pursuant to 35-A M.R.S. § 102, entities that provide solely sewer or stormwater services).



Woodard & Curran
41 Hutchins Drive, Portland, ME 04102
Tel: (800) 426-4262; Fax: (207) 774.6635
www.woodardcurran.com



AMEC Environment & Infrastructure, Inc.
511 Congress Street, Portland, ME 04101
Tel: (207) 828-2628; Fax: (207) 772-4762
www.amec.com

MEMORANDUM

TO: Ian Houseal
FROM: Zach Henderson, Rich Niles, Andy Reese, Barry Sheff
DATE: September 19, 2013
RE: Allocations Rationale - Wastewater and Stormwater Program Costs

As the City of Portland considers apportioning revenue requirements from the Sewer Enterprise Fund to an additional Stormwater Enterprise Fund, a fundamental consideration is the partitioning of existing and future costs associated with stormwater and wastewater activities. Currently the majority of activities associated with stormwater are paid out of the Sewer Enterprise fund. The City has requested this memo as a basis for discussing the rationale for equitable redistribution of the costs to be paid out of the Stormwater Enterprise Fund.

The City of Portland established a Sustainable Stormwater Funding Task Force (Task Force) in March 2011 to examine the need for a user fee separate from the existing sanitary sewer fee. The Task Force initially recommended that 50% of the costs for the City's combined sewer overflow (CSO) program should be paid through a future stormwater user charge. At the time, the Task Force did not have a detailed breakdown of costs to distinguish between existing or future debt, or other costs associated with operations, administration or wastewater treatment (which includes stormwater flows).

Costs for the City of Portland's current sewer program have been defined by the City in the following categories:

- New CSO Improvement Projects/Debt
- Existing CSO Debt
- Capital Improvement Projects/Debt
- Wastewater Treatment (aka PWD Assessment)
- Operations

Woodard & Curran (W&C) reviewed existing information for each of these categories to determine what rationale exists for apportionment between stormwater and wastewater. This memo provides a few key items that may be used to justify the allocation of CSO costs. These items include operations, previous combined sewer separation capital improvement projects and the Portland Water District Assessment. The majority of capital costs associated with future combined sewer system improvements will not fall into the above categories; the partitioning of costs for future CSO projects are not easily apportioned to the Sewer or Stormwater Fund, as the systems provide service during both wet and dry weather and there is not currently a standard practice to do so.

On January 15, 2013, W&C and AMEC were asked to present to the Task Force a range of allocation options based on investigation of current City program costs, Table 1 as presented herein. We presented a range including the "Task Force" allocation (Option 3). These allocation options were included in three separate rate models and provided to the City for review and consideration. As of this date, W&C and AMEC have not been involved in any discussions to select a preferred allocation option.

Table 1 – Allocation Options

Allocation Methodology	Cost to be transferred from Sewer Enterprise Fund to Stormwater Enterprise Fund		
	Public Services Operations	Debt Service (includes CSO Abatement, Capital Improvements)	PWD Assessment
Option 1	<ul style="list-style-type: none"> Current SW Operations plus 50% of Sewer Utility Accounting, Admin, and Engineering Future level of service costs 	Future drainage capital improvement and renewal projects only	No costs transferred
Option 2	Previous + <ul style="list-style-type: none"> Current SW Operations plus 50% Communications Future level of service costs 	Previous + <ul style="list-style-type: none"> 25% existing CSO debt 50% green infrastructure/sewer separation 5% WWTP upgrades 	5% of PWD Assessment
Option 3	Same as Above	<ul style="list-style-type: none"> 100% Drainage Capital Improvements 50% Combined Sewer Capital Renewal 50% existing and future CSO debt 25% of WWTP upgrades 	25% of PWD Assessment

The range of allocations was based on the following available information:

- Current operational expenditures on “stormwater” versus “sanitary sewer” portions of the collection system
- Costs of installation of stormwater versus sanitary sewer collection systems during combined sewer separation projects
- Stormwater versus wastewater flows treated at the East End Wastewater Treatment Plant

Current Operational Expenditures

In order to partition operational expenses, Woodard & Curran requested an estimate of work orders tracked through the City’s computerized maintenance management system (CMMS) software. According to a breakdown of work orders provided for the 2012 construction season, the total man hours available during the construction season is 26,880. Of this total, “stormwater” related work orders accounted for 15,440 hours or 57% of work operations efforts during the 2012 construction season. The “stormwater” work orders included cleaning and inspecting catch basins, outfall inspections, repair of catch basins and sweeping streets. “Sewer” work orders included inspection and maintenance of wet wells, pump stations, collection system, and spot repairs.

It should be noted that in email correspondence with John Emerson, Public Services Wastewater Facilities Coordinator, we were informed that the 2012 distribution may not be the ideal programmatic distribution of effort, but only reflects “maintenance or repair priorities”. The City is currently undertaking an evaluation of its wastewater operations program which will enable you to prioritize operational investment based on existing and future needs, which may shift future operational expenditures for stormwater related work.



Cost of Installation of Collection Systems

In order to partition existing combined sewer debt, the cost of installation of sanitary sewer versus stormwater systems was evaluated based on several recent combined sewer separation projects in the City of Portland. The results of these projects are shown in the following, Table 2.

Table 2 – Construction Costs

	Project	Total Sewer Cost*				Total Storm Drain Cost*			Storm%	AVG Storm%
		Sewer Pipe**	Service Connection	Sewer Service	Total	CBs	SD Pipe	Total		
Engineering Estimates	Belfort Commonwealth CSO	\$ 266,420	\$ 43,500	\$ 211,500	\$ 521,420	\$ 137,500	\$ 784,390	\$ 921,890	64%	61%
	College St. CSO	\$ 68,740	\$ 1,365	\$ 7,500	\$ 77,605	\$ 35,000	\$ 71,100	\$ 106,100	58%	
	Dorothy Hicks CSO	\$ 149,520	\$ 15,900	\$ 78,600	\$ 244,020	\$ 63,000	\$ 272,690	\$ 335,690	58%	
	Brewer St. CSO	\$ 15,400	\$ 600	\$ 3,000	\$ 19,000	\$ 3,500	\$ 32,400	\$ 35,900	65%	
Actual Construction Costs	Belfort Commonwealth CSO	\$ 318,631	\$ 36,395	\$ 200,925	\$ 555,951	\$ 125,660	\$ 632,490	\$ 758,150	58%	53%
	Dorothy Hicks CSO	\$ 168,268	\$ 7,950	\$ 64,229	\$ 240,447	\$ 50,022	\$ 175,302	\$ 225,324	48%	
								Average%	58%	
*Note: Costs do not include demolition, utility relocation, roadway repair, stormwater quality treatment, manholes, or outfalls										
**Note: Assumes 8" PVC Pipe ONLY										

On average the cost of installation of new storm drain collection systems are slightly higher than sanitary sewer, based on requirements for larger pipes to provide adequate collection and conveyance.

Stormwater versus Wastewater Flows at the East End Treatment Plant

Woodard & Curran obtained flow volume data at the East End Wastewater Treatment Facility from the City of Portland. It is our understanding that the following table, Table 3, was originally provided to the City by the Portland Water District. The data within Table 3 is one basis of consideration for the allocation of treatment costs for stormwater drainage as part the existing PWD Assessment.

Table 3 – Treatment Plan Flows

Year	Precip	CSO Volume (Untreated Storm flow)	Total Flow at Plant	Base Flow at plant*	Total - Base = Treated Storm (Treated Storm flow)	Percent of Base Flow as Stormwater
2007	32.04	589,203,712	6,033,920,000	5,475,000,000	558,920,000	10%
2008	52.24	883,105,087	6,953,640,000	5,475,000,000	1,478,640,000	27%
2009	56.13	872,751,281	6,262,990,000	5,475,000,000	787,990,000	14%
2010	54.94	780,188,153	6,612,430,000	5,475,000,000	1,137,430,000	21%
AVERAGE						18%
* Base Flow is the August and February Flows of that year normalized over that year. (example: February 16mgd, August 14mgd = 15mgd average x 365 days = 5,475,000,000)						

While average flows at the East End Wastewater Treatment Facility can provide one method of allocation of PWD Assessment costs to stormwater, it is unknown whether actual operational and capital improvement cost percentages can be attributed to stormwater based on current information. Based on our experience, it is our opinion that actual treatment costs attributed to stormwater, and therefore the allocation of cost of the PWD assessment to a Stormwater



Enterprise Fund may be less than the 18% shown in Table 3, and should be further evaluated with input from the Portland Water District.

Summary

The allocation of costs to provide stormwater and sanitary service within a City with combined sewer systems will require continued refinement during development and implementation of sewer and stormwater programs. In most cities, combined sewer maintenance and combined sewer overflow abatement have traditionally been allocated to "sewer" costs. It is well understood that combined sewer overflows are largely driven by stormwater runoff but that many of the pollutants of concern (for public health) in the overflows can be attributed to the sanitary sewer connections. In any case, there is supporting rationale for a revised allocation of CSO costs that is more equitable than the current method of funding when considering a stormwater user fee to apportion costs.

There are several additional methods of evaluating cost allocations associated with future combined sewer overflow abatement capital improvements. One evaluation may include an analysis of "strength of pollutant" within typical combined sewer overflows which would account for both volume and concentration of stormwater and sanitary sewerage. Another option would consider an evaluation of stormwater versus sanitary sewer volumes during design storm events stored in the combined sewer storage systems. The volume based option will result in a much higher proportion of stormwater costs associated with future combined sewer capital improvement projects. It is our recommendation that the strength of pollutant based option be considered as the preferable analysis if necessary.

While these may provide additional justification for combined sewer overflow abatement costs partitioned into stormwater and sewer enterprise funds, a thorough discussion of policy and equitable allocation may preclude the need for more detailed analysis.



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MEMORANDUM

TO: Finance Committee

FROM: Ian Houseal, Assistant to the City Manager, Sustainability Coordinator

DATE: September 26, 2013

SUBJECT: Stormwater Service Charge Impact

The following impact analysis of the stormwater service charge presents the derived rates and the impact to single family residences, highly impacted commercial properties, and the city itself. The derived rates are from the allocation of cost as presented to the Finance Committee on September 12, 2013 representing the Sewer Fund Budget approximately divided between sewer and stormwater: 70% assigned to sewer and 30% assigned to stormwater.

The sewer and stormwater rates are calculated based on a projected sewer volume and estimated number of impervious area in the city. The stormwater rate formula is dollars per increments of 1,200 square feet of impervious area of a developed parcel of land rounded to the nearest 1,200 square feet. (Please see the information provided for this meeting on how the rate was developed.)

The primary driver of impact (positive and negative net change and magnitude) is the allocation of cost. A lesser location to stormwater will result in less magnitude of impact to residential and non-residential properties, but more properties with a negative net change. A greater allocation to stormwater will result in more magnitude of impact to residential and non-residential properties, but more properties with a positive net change. A secondary driver of impact is the increment set for the stormwater service charge; however, this increment impacts residential properties more than non-residential properties.

ESTIMATED RATES

The projected rates for sewer and stormwater user charges based on the above allocation of costs can be seen in Table 1 and Figure 1. Finalizing the first year of rates depends upon approval by the City Council and depends on when the stormwater service charge will be implemented. **Rate setting is for estimating purposes only.** It would be expected that rates would be set each year during setting of the annual operating budget. FY 2014 is used for the analysis below. The assumption is that if the Sewer Fund was split, the resulting dual rate would be:

Table 1: Rate Estimates

		FY 2013	FY 2014	FY 2015	FY2016	FY 2017	FY 2018
Sewer Only	<i>Sewer</i>	8.11	8.35	8.55	9.38	10.09	11.26
	Increase/Decrease		3%	2%	9%	7%	10%
Split Rate	<i>Sewer</i>	8.11	5.68	6.11	6.20	6.28	6.37
	Increase/Decrease		-43%	7%	1%	1%	1%
	<i>Stormwater</i>	-	6.61	7.07	7.96	8.64	9.96
	Increase/Decrease		100%	7%	11%	8%	13%

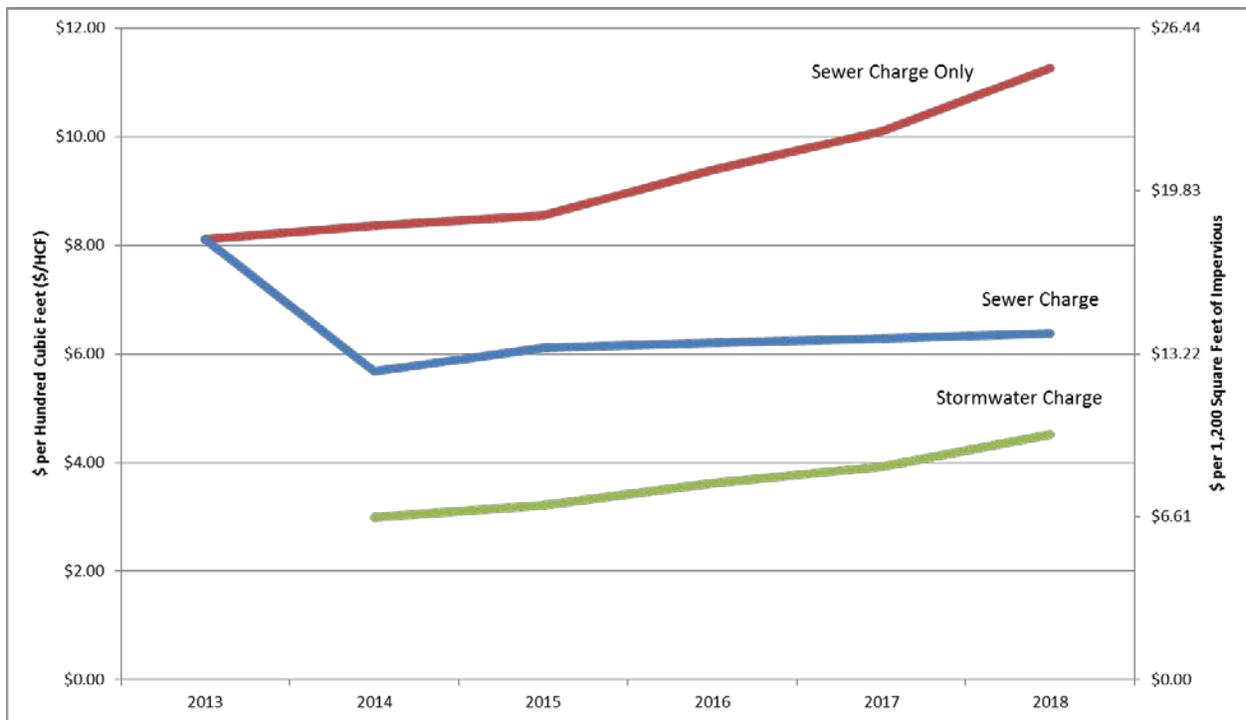


Figure 1: Projected Sewer and Stormwater Rates

IMPACT ESTIMATES

To assess the impact of changing from a sewer charge only to separate sewer and stormwater charges the net change in annual cost to individual properties was evaluated for single family residential (SFR), highly impacted commercial properties, and to City properties. Estimated net change is defined as the difference between of one full year of bills under the sewer only and split rate scenario.¹ Net change is a function of annual sewer volume and impervious area times their respective rates. An estimated net decrease means that the amount that a rate payer would pay in the split rate scenario is less than the

¹ Sewer Volumes for 2011 and impervious area from 2010 were used for the analysis.

sewer only scenario. In this analysis more emphasis is placed on the impact to properties that would experience an estimated net increase and the degree to which they will experience a net increase.

With regard to impact it is important to keep in mind the magnitude different properties will face. The net change is represented as an annual figure and single family properties will experience a magnitude increase or decrease 10 to 100 times less than the impact to commercial properties.

Single Family Residential (SFR)²

There are 9,601 SFR properties³ in Portland with less than 5,400 square feet of impervious area (Figure 2). The average interior buildings square footage is 1,579 square feet⁴ and the average property acreage is ¼ acres. The average impervious area is 2,200 square feet. The average sewer volume is 60 HCF per year (Figure 3).

Overall, those SFR properties will average an estimated net decrease of \$13.00 per year. 5,165 SFR properties will see an estimated net decrease and 4,436 SRF properties will see an estimated net increase.



Figure 2: Estimated Distribution of Single Family Residential Properties Monthly Stormwater Service Charge

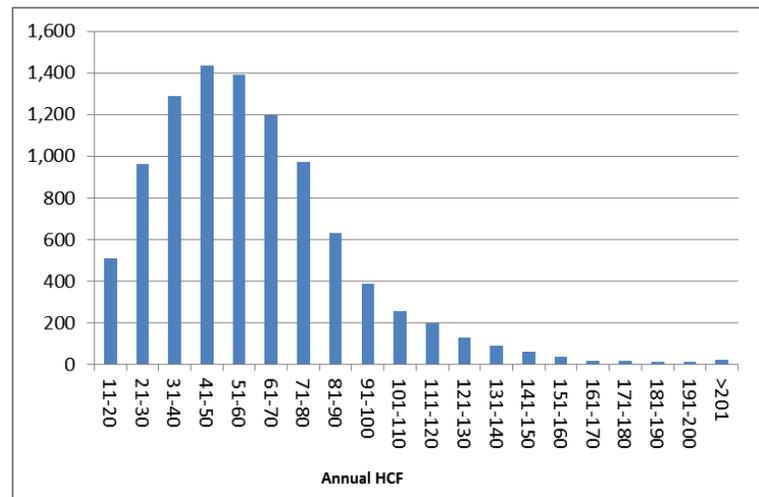


Figure 3: Distribution of Single Family Residential Properties Annual Sewer Volumes

² There are 11,793 SFR properties in Portland. Island properties were excluded (1,329 island SFR properties) from those properties analyzed. 10,346 SFR properties were available to analyze net change.

³ SFR properties with less than 11 HCF of sewer volume per year are excluded from the analysis. These volumes are extremely low and do not reflect normally inhabited buildings.

⁴ Interior buildings square footage represents building size and may include first floor, second floor and finished basement square footage and is not representative of building footprint.

Stormwater Service Charge of \$6.61 per Month

There are 3,219 properties with a stormwater charge of \$6.61 per month. (See Figure 4) The average estimated net decrease is (\$68.00) per year. 2,671 properties will see an estimated net decrease and 548 properties will see an estimated net increase. Those with a net increase all have sewer volumes less than 30 HCF per year. For the estimated maximum impact to this group, a net increase of \$50.00 per year translates into a net increase of \$4.16 per month. These properties can take advantage of credits, but cannot reduce their impervious area further.

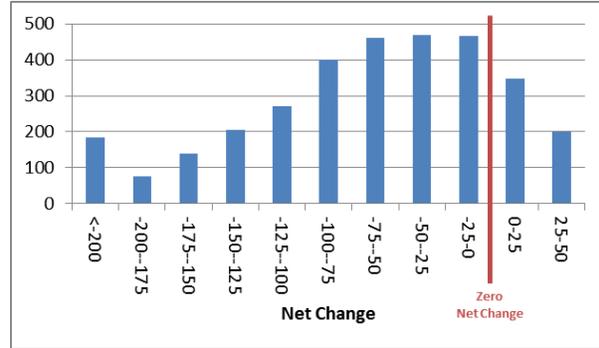


Figure 4: Distribution Net Change for SFR Properties with a Stormwater Service Charge of \$6.61/month

Stormwater Service Charge of \$13.22 per Month

There are 5,021 properties with a stormwater service charge of \$13.22 per month. (See Figure 5) The average estimated net decrease is (\$2.00) per year. 2,273 properties will see an estimated net decrease and 2,748 properties will see an estimated net increase. Those with a net increase all have sewer volumes less than 60 HCF per year. For the estimated maximum impact to this group, a net increase of \$130.00 per year translates into a net increase of \$10.80 per month.

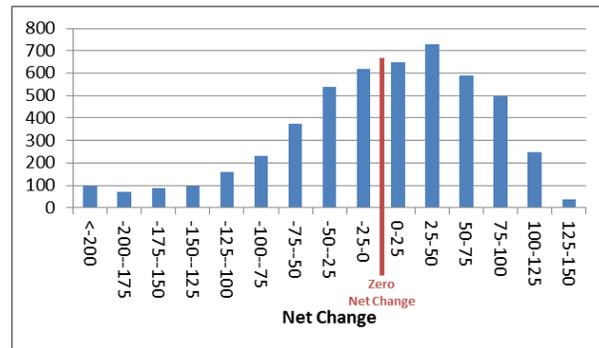


Figure 5: Distribution Net Change for SFR Properties with a Stormwater Service Charge of \$13.22/month

It is estimated that approximately 1,000 properties in this group could take advantage of credits (Figure 6) and approximately 1,000 properties could also reduce their impervious area thus attaining a lower rate. Assuming 1,000 properties in this group took advantage of a credit, the new average estimated net decrease would be (\$41.00) per year and all the properties with a net increase

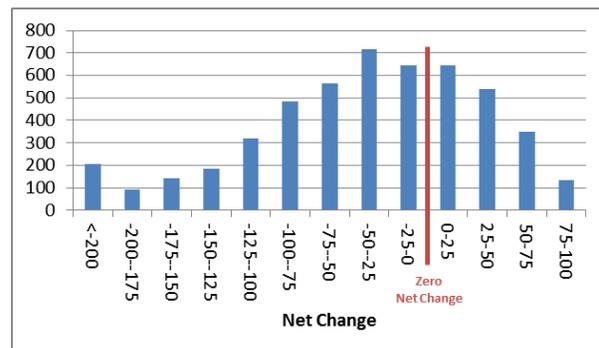


Figure 6: Distribution Net Change for SFR Properties with a Stormwater Service Charge of \$13.22/month assuming use of a Residential Credit

would have sewer volumes less than 45 HCF per year. The new estimated maximum to this group would be a net increase of \$90.00 per year or \$7.50 per month.

Stormwater Service Charge of Greater Than \$13.22 per Month

Of the remaining 1,361 properties in the SFR group, there are 1,160 properties with greater than 3,000 and less than 4,200 square feet of impervious area. For this group, the average net increase is \$65.00 per year or \$5.42 per month. 203 properties will see an estimated net decrease and 957 properties will see an estimated net increase. There are 201 properties with greater than 4,200 and less than 5,400 square feet of impervious area. For this group, the average net increase is \$131.00 per year or \$10.92 per month. 18 properties will see an estimated net decrease and 183 properties will see an estimated net increase.

Highly Impacted Commercial Properties

There were 2,744 commercial properties analyzed for net change. The most highly impacted properties with an estimated net change greater than \$5,000 account for approximately 4% of the total commercial properties. Some of these properties share the same owner; however, if the owner of record is not the same, this analysis will not account for shared ownership. This analysis is by property only. Detail on ownership of these highly impacted properties can be made available.

Table 2: Most Highly Impacted Commercial Properties

Net Increase Greater Than...	Previously Charged for Sewer Services	Not Previously Charged for Sewer Services
\$5,000	114	47
\$10,000	41	13
\$15,000	22	3
\$20,000	13	2
\$25,000	11	1
\$30,000	6	1
\$35,000	3	1
\$40,000	1	1

Net Decrease Greater Than...	Previously Charged for Sewer Services	Not Previously Charged for Sewer Services
\$5,000	86	0
\$10,000	43	0
\$15,000	25	0
\$20,000	18	0
\$25,000	15	0
\$30,000	12	0
\$35,000	11	0
\$40,000	11	0

City Properties

The City's estimated net increase is \$335,000 per year. This net change includes the School Department.

Preliminary Sewer and Stormwater 20 Most Highly Impacted Properties

LEAD_CBL	OWNERNAME ⁽¹⁾	Sewer ONLY (monthly)	Sewer/ Stormwater (monthly)	Stormwater (monthly)	Sewer (monthly)	Net Change (year)
Negative Impact						
357 A001	CITY OF PORTLAND ⁽²⁾	-	3,854	3,854	-	46,244
201 A005	THOMPSON'S POINT INC	1,509	4,874	3,847	1,027	40,373
072 A003	Cassidy Point	15	3,322	3,312	10	39,681
401 A005	North Port Drive	1,397	4,473	3,523	950	36,919
263A A006	CENTRO HERITAGE SPE 4 LLC	591	3,317	2,915	402	32,713
262 A001	EMERY-WATERHOUSE COMPANY RAND RD	394	3,004	2,737	268	31,327
215 B001	UNUM CORP	7,769	10,308	5,024	5,285	30,473
043 D005	IMT, CITY OF PORTLAND	6	2,430	2,426	4	29,086
444 A003	CITY OF PORTLAND	127	2,472	2,386	86	28,149
375 C001	A & D REALTY LLC	987	3,203	2,532	672	26,591
Postive Impact						
037 E007	RB PORTLAND LLC	11,686	8,154	205	7,949	(42,381)
045 C006	MERCY HOSPITAL	11,959	8,161	26	8,135	(45,569)
066 DD001	HP HOOD INC	17,910	12,586	403	12,183	(63,885)
112 C021	PORTLAND HOUSING AUTHORITY	18,189	12,419	46	12,373	(69,239)
354 B002	UNIFIRST CORPORATION TAX DEPT	19,869	14,064	549	13,516	(69,656)
070 B001	WNDK LIMITED LIABILITY CO	21,677	14,997	251	14,746	(80,164)
020 C009	SHIPYARD BREWING COMPANY LIMITED LIABILITY COM	27,307	18,985	410	18,575	(99,864)
447 A001	HERITAGE ACQUISTION CORP	33,870	25,161	2,122	23,040	(104,501)
114A F001	OAKHURST DAIRY	29,179	20,252	403	19,849	(107,125)
070 A001	BARBER FOODS PROPERTY LLC	32,988	23,570	1,130	22,440	(113,016)

Notes:

- General - Values and properties on this list are preliminary. Analysis produced for aggregate use only; not by individual property. Before confidence in that a property is on this list, both impervious area and billed sewer usage must be confirmed for an individual property.
- General - Values do not reflect potential credits.
- General - Values represent individual properties. Companies and owners may have multiple properties and facilities that span multiple properties. Those situations are not represented in this list.
- (1) - Column indicate official owner of record or noted vicinity.
- (2) - No water verifiable accounts were identified for this property; however, it is known that there are multiple water accounts.



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MEMORANDUM

TO: Finance Committee

FROM: Ian Houseal, Assistant to the City Manager, Sustainability Coordinator

DATE: September 26, 2013

SUBJECT: Stormwater Service Charge Ordinance Details

Change to the City Ordinance: Chapter 24 Sewer Code incorporates the inclusion of the stormwater service charge as well as additional housekeeping changes to the existing Code, modernizing language in reference to stormwater and associated changes to other aspects of the Code.

The following is a summary of the changes to the Code highlighting specifics of the proposed stormwater service charge additions found in Article V. Full detail can be found in the amendments to the ordinance itself found as proposed at <http://www.portlandmaine.gov/sustainablestormwaterfunding.htm>.

PURPOSE AND FINDINGS

This section outlines the purpose and findings of providing stormwater services as:

- Meet regulatory obligations to reduce pollution and improve water quality;
- Protect public health, safety, welfare, and the environment. Provide stormwater services and regulations rendering service and benefit to individual properties and all properties in the city;
- Impervious surface is the most important factor influencing cost of providing stormwater service and therefore impervious area is the most appropriate parameter for calculating a periodic stormwater service charge;
- The City operates and owns storm sewers, combined sewers, and the stormwater drainage system and must maintain, improve those systems to manage protect, control, regulate, use, and enhance stormwater service. To do so, the City must have adequate and stable funding;
- Different areas of the City demand different and specific stormwater service, the stormwater service area is all lands and water bodies in the city;
- Stormwater service influences where stormwater runoff flows and is managed, thereby reducing flooding, erosion, and water pollution; and
- The City council finds stormwater services should be accounted for in a separate enterprise fund dedicated to the provision of stormwater services.

DEFINITIONS

This section notes definitions relevant to the stormwater service charge. Of note include the definition of impervious surfaces. Impervious surface is defined as:

“Impervious surfaces are those areas that prevent or impede the infiltration of stormwater into the soil as it entered in natural conditions prior to development. Impervious surfaces include, but are not limited to, rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, compacted gravel surfaces, awnings and other fabric or plastic coverings, and other surfaces that prevent or impede the natural infiltration of stormwater runoff which existed prior to development.”

It is noted that technical standards of impervious surface will be necessary before initiation of the program.

The definitions found in the Chapter as a whole distinguish between sanitary sewers, storm sewers, combined sewers, storm drainage system, and how aspects of each definition may be captured in the other depending on the liquid flowing through components of the full system. For example, the definition of the storm drainage system is:

“Stormwater drainage system shall mean any publicly owned or operated conveyance for stormwater, natural and human-made including, but not limited to, storm sewers, city and state roads including the Maine Turnpike and other physical works with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, culverts, human-made channels, swales, ditches, swamps, rivers, streams, creeks, brooks, reservoirs, ponds, drainage ways, inlets, pipes, head walls, lakes, properties, and improvements which transfer, control, convey or otherwise influence the movement of stormwater runoff and its discharge to and impact upon receiving waters.”

A combined sewers (a pipe) can convey both wastewater and stormwater; a storm sewer can convey groundwater and stormwater, but not wastewater. Stormwater can be conveyed in storm sewers, combined sewers, and the stormwater drainage system.

EXEMPTIONS

All developed properties in the City use the City’s stormwater drainage system. That system is used to reduce flooding on private property, reduce erosion, and reduce pollution resulting from the stormwater discharged from developed properties.

As recommended by the Task Force, all developed properties in the City of Portland are subject to the stormwater service charge with the exception of:

- Land with less than 400 square feet of impervious area is exempt from charges.
- Roads, railroads, and runway (public and private) are exempt from charges.

All City, State, and Federal property is subject to the stormwater service charge. Property tax payers and non-property tax payers are also subject to the charge.

STORMWATER SERVICE CHARGE

As proposed, both residential and commercial properties pay the same rate. That rate is estimated to be approximately \$6.61 per month per 1,200 square feet of impervious area. The square feet of impervious area is rounded to the nearest 1,200 square feet as can be seen in this figure below.

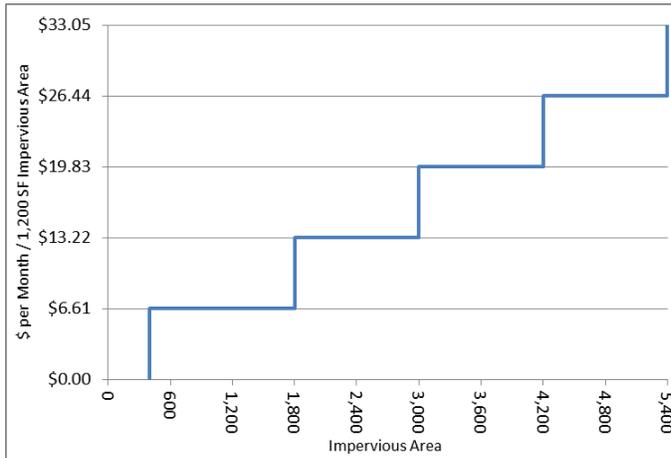


Figure 1: Stormwater Service Charge Rate

CREDITS

Property owners can reduce their stormwater service charges by: reducing the amount of impervious area on a property and reducing the impact that stormwater coming from their property has on the stormwater drainage and combined sewer system by making stormwater runoff reducing improvements and then applying for a credit for those improvements.

As proposed, credits are available to both residential and commercial properties. Credits are either a set charge reduction or a percentage reduction. Credits are additive; meaning that multiple types of credits can be applied to a specific property, potentially resulting in a 100% credit of stormwater charges in some cases. It should be noted that credits available to commercial properties are limited to 60%. See the rationale for limiting the commercial credits as provided by this meeting's material.

To receive a credit, all improvements must be designed, permitted, and built appropriately. Once permitted and built, a property owner may apply for a credit.

Credit applications do not need to be submitted annually; however, an annual self-certification report will be required attesting to continued functionality of the system installed. It should be noted that according to Chapter 32 of the City Code, some properties are required to submit an annual report irrespective of the stormwater service charge.

All properties are eligible for a percentage reduction credit of:

- 35% of the stormwater charge per month for meeting and maintaining the General Standard of Section V of the Technical and Design Standards and Guidelines; and
- 25% of the stormwater charge per month for meeting and maintaining the Flooding Standard of Section V of the Technical and Design Standards and Guidelines.

Residential properties are eligible for a set charge reduction credit of:

- \$3.31 per month for installing and maintaining a cisterns, dry wells, or rain gardens capturing at least 50% of a property's roof area and at least 600 square feet of impervious area;
- \$3.31 per month for installing and maintaining a green roof covering at least 50% of a property's roof area and at least 600 square feet; and
- \$0.52 per month for installing and maintaining up to 5 rain barrels.

Commercial properties are eligible for a set charge reduction credit of \$6.61 per month for installing and maintaining at least 2,400 square feet of green roof.

There are twenty-two commercial projects that would potentially be immediately eligible for a stormwater credit. Twenty-six additional projects are under construction, some of which would potentially be eligible for a credit because they meet parts of the Technical Standard. Thirty-nine other projects would potentially be eligible for a credit given that previous City stormwater standards are equivalent to a credit outlined above; however, it should be noted that not all projects that met the standard, meet the standard without waiver. Projects that received a waiver would not qualify.

BILLING

As proposed, billing will be monthly. Full bill amounts will be sent to the owner of record or approved tenant only if the tenant is also billed for water and sewer charges. Condominiums shall have the full charge equally divided among all condominium owners, unless condominium owners mutually agree to an alternate division of the full charge.

APPEALS

Property owners may request a review of the amount of the stormwater service charge. It is the responsibility of the owner to demonstrate that the stormwater generated by the property is less than the amount used to calculate the stormwater service charge by using impervious area on the property and features of the property available for a credit.

OTHER CHANGES TO THE SEWER CODE

The following is a summary of the changes to the Sewer Code.

Article I. In General

Section 24-1 Purpose

- Add statement about the city's responsibilities for maintaining the sewer system
- Add statement about maintaining a sewer system to convey wastewater and stormwater runoff from private property
- Add statement about maintaining a storm drainage system to convey stormwater, prevent flooding, and reduce pollution
- Add statement about wastewater and stormwater programs needing adequate funding and equitably paid for by properties making use of the sewer and stormwater services provided by the city.

Section 24-2 Definitions

- Consolidate and revise general definitions found in other areas in the Chapter
- Add definition for a "combined sewer"
- Add definition for "discharge"
- Add definition for "storm sewer," "stormwater," "storm drainage system," and "stormwater services"

Section 24-3 Administration

- Consolidate and revise general authority and process to establish rules and regulations as found in other areas of the Chapter

Section 24-4 Enforcement agency

- Consolidate general authority to enforce as found in other areas of the Chapter

Article II. Sewer Construction

Section 24-16 Accepted streets, Section 24-17 Dedicated streets, Section 24-18 Initiative of city council, Section 24-19 Cost

- Clarify definition of "sewer"

Article III. Sewer Use Regulation

Section 24-31 Scope

- Update building facility language from "sanitary" to "wastewater."
- Update building connections language from "drains" to "sewers" and "storm drainage system."

Section 24-34 Definitions

- Consolidate general definitions to Section 24-2

Section 24-35 Sanitary facilities required

- Change language from “be provided with” to “provide” suitable and sufficient sanitary facilities.

Section 24-36 Connection to public sewer required

- Change language from building “drainage system” to “sewer”

Section 24-38 Private wastewater systems discontinued

- Delete additional reference to “of abandonment” from abandoned private wastewater facility timeframe of thirty (30) days
- Replace reference to “health authority” with “city” in general

Section 24-42 Defective building sewers to be repaired or replaced

- Delete reference to other section.

Section 24-44 Public sewer connection limitations and Section 24-45 Connections to public sewer

- Replace sanitary “conveniences” with “facilities”
- Add “domestic” preceding to wastewater related to building systems
- Replace “public storm drain” with “the storm drainage system”
- Delete reference to “and all other unpolluted drainage”

Section 24-47 Prohibited wastes

- Clarify reference to “public works authority” rule

Section 24-51 Public wastewater works not to be damaged and Section 24-52 Right of entry

- Replace “waste works” with “sewer and storm drainage” system
- Replace “storm” with “stormwater” drainage system

Section 24-53 Exclusion of industrial waste

- Replace “municipal” with “public” sewers
- Replace “works” with “system”

Section 24-54 Demolition of buildings

- Replace building “drainage system, sanitary or storm sewer” with building “drain or sewer”
- Delete “and/or facility” sewer
- Replace “city” with “public” sewer

- Add to building drain “or sewer”

Section 24-56 Violations

- Add “including reasonable attorney’s fees” to liable expenses.

Section 24-57 Appeals

- Clarify public works “authority”

Article IV. Sanitary Sewer User and Industrial Pre-Treatment Charges

Section 24-72 Sanitary sewer user charges

- Add “stormwater” treatment to applicable charges
- Update definition of “sewer user charges” to “sanitary sewer user charges”



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MEMORANDUM

TO: Finance Committee

FROM: Ian Houseal, Assistant to the City Manager, Sustainability Coordinator

DATE: September 26, 2013

SUBJECT: Stormwater Charge Billing Options and Recommendation

The question of how to bill customers for sewer and stormwater services that the City provides is imbedded in the recommendation to bill for stormwater services based on impervious area of a property. Currently, the bill that a customer receives is based on the units of water used applied to a sewer rate and a water rate. The revenue generated from the water portion of the bill is used by the Portland Water District to provide drinking water to customers in the city. The revenue generated from the sewer portion of the bill is used by the City to cover the cost of providing sewer and stormwater services (Clean Water) for customers within the city.

As the Sustainable Funding Task Force has pointed out, billing in this manner could be more fair in that it could more equitably tie the cost of providing sewer and stormwater services to the rate payers by including a charge based on impervious area. Billing for stormwater services based on impervious area necessitates either combining the existing customer bill by matching current water/sewer accounts to developed land or billing for stormwater through a separate bill. There are several options for billing for water, sewer, and stormwater services as outlined below along with the recommended option.

BILLING OPTIONS

- **Option 1:** Separate Stormwater Billing – In this billing option, the City will charge for stormwater services through a new bill to property owners. Water and sewer charges would remain on the Portland Water District bill. The City is prepared to implement the fee through this billing method and tentatively has estimated a timeframe of six months to finalize account files and to deliver a first bill. Stormwater charges are based on property area rather than metered services that may be applicable to multiple units on a property, so this approach is the simplest and most straightforward from a relationship to the service standpoint.
- **Option 2:** Sewer and Stormwater Combined Billing – In this billing option, the City would charge for stormwater and sewer services through a combined bill. The City would need to establish procedures for receiving billing information from the Portland Water District as well as establish a relationship between metered accounts and property area for billing purposes. It is believed

that the Water District would be willing to cede billing for sewer services to the City. The mechanics of data transfers as well as creating account files have not been developed. Customer service also presents an issue under this option since billed sewer volume is derived from water volumes and questions about correct billing can be directed appropriately to the Water District if correct water volumes are not applied to sewer billing. Appropriate billing software has also not been explored. The timeframe for implementation would need to be six to eight months under this option; however, since this option has not been explored, the timeframe may be up to a year.

- Option 3: Sewer, Stormwater, and Water Services Combined Billing – In this billing option, the City would need to have the Portland Water District agree to bill for stormwater services on behalf of the City. The mechanics, customer service, and coordination with the Water District present issues with this billing option. The timeframe for implementation would need to be up to a year.
- Option 4: Tax Assessment and Stormwater Billing – In this billing option, the City would combine the tax bill and the stormwater bill. Billing would be twice annually. Additional tax bills would need to be created for some tax-exempt properties. The timeframe for implementation could be six months extended to coinciding with the tax billing schedule.

RECOMMENDATION

Option 2: Combined Sewer and Stormwater Billing, is recommended. From a customer perspective (i.e. receiving one water-related bill), the best option would be Option 3 since it provides the simplest method for water, sewer, and stormwater customers to pay their bill; however, it is unlikely that the Portland Water District would accept this option. The second best option from a customer's perspective is combined sewer and stormwater billing.



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MEMORANDUM

TO: Finance Committee

FROM: Ian Houseal, Assistant to the City Manager, Sustainability Coordinator

DATE: September 12, 2013

SUBJECT: Stormwater Service Charge Implementation

There are two major decisions related to implementation:

- 1. What time of year should the first bill be sent out? and;*
- 2. Should and how should the new charge be phased-in?*

It is staff's recommendation to prepare for and send out the new bill mid-fiscal year. The reason is to avoid any confusion surrounding the summer months; sending out a first bill in the summer may catch some customers unaware. A mid-fiscal year implementation allows time for customers to review, understand, and dispute or accept their billed amount through a sample bill to customers in the fall with a period of time for customers to schedule and meeting with staff to review their bill. Accepting the recommendation to bill in mid-fiscal year would result in an earliest timeframe of the sending out the new bill in January 2015.

As to phasing-in the new charge, the Sustainable Stormwater Funding Task Force recommended that "to reduce the impact on those rate payers that are most impacted by the stormwater use charge, the annual rate change should be limited." This recommendation addresses the impact that certain properties will experience in the first year and subsequent years when the stormwater charge is initiated. The Task Force discussed the option of "capping" the rate for certain properties that were facing a large year-to-year increase in their total sewer and new stormwater charges. In addition, there are other options for addressing the year-to-year impact that properties will experience when the new charge is brought on-line. See options and recommendations below.

PHASE-IN OPTIONS

Option 1: Capping – To limit the impact to the most highly impacted commercial properties a capping program was recommended by the Task Force. The details of that capping program were not developed by the Task Force; however, a rate phase-in for the most highly impacted properties has been proposed. That program would cap the net increase to any owner (not individual properties and with the exception of the City itself) at \$5,000 for the first year for owners experiencing a net increase of under \$10,000

with the full charge in the second year. Owners experiencing a net increase over \$10,000 would be capped at \$10,000 for the first year and \$20,000 the second year with the full charge in the third year.

The Sewer Fund would carry the cost associated with the cap requiring an estimated additional revenue from rate payers of \$700,000 the first year and \$190,000 the second year to cover the cost of the cap. The resulting adjusted sewer rate would be \$5.93 in FY 2014 and \$6.18 in FY 2015.

Option 2: Phased-in Stormwater Charge – A second option is to equally phase-in the stormwater charge for all property. As proposed, this option would set the first year stormwater charge at the stormwater only (not including CSO) rate of \$3.57, with the Sewer Fund carrying the lower stormwater rate revenue deficit. The deficit would be approximately \$3.2 M and the resulting sewer rate would be \$6.85 in FY 2014. As was noted in the impact analysis, this approach is effectively a lower allocation applied to stormwater.

Option 3: Delayed Initiation of the Stormwater Charge – Alternatives to the cap or phased-in approach is a delayed initiation of the stormwater service charge. As proposed, establishing the program through ordinance and setting the rate for a time certain two years in advance would potentially allow for highly impacted properties to invest in taking actions such as reducing impervious area on their property or applying for credits.

Option 4: Full implementation of the Stormwater Charge – This alternative does not contemplate a phased-in initiation of the stormwater charge.

RECOMMENDATION

It is staff's recommendation to proceed with Option 2 for a one to three year period.