



FC QUESTIONS AND RESPONSES

To: Finance Committee

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

Date: September 11, 2014

RE: Stormwater Service Charge Questions from the Finance Committee

Please see the following list of questions recorded from the Finance Committee's August 21, 2014 meeting and responses to those questions:

1. Compare the Task Force Recommendations to the proposed program

See attached memorandum outlining the Task Force recommendations and comparison to the proposed program.

2. Describe water and sewer connection rules and regulations and provide a discussion of stormwater disconnect, enforcement, and cost of disconnection.

See attached memorandum with regard to the above question and to address the Committee's request for addressing stormwater/sewer disconnections a proposed OPTION for the Committee's consideration is to add to the credit program a statement which property owners must sign to the effect of: "to the best of [owners] knowledge there are no known stormwater/sewer cross-connections." Receipt of credits would be contingent upon signing the statement.

3. Provide more budget detail for the Sewer and Stormwater Fund and explain the major cost components of the Sewer Fund and proposed Stormwater Fund

See attached documents providing more budget detail and memo describing the Sewer Program and recent operational changes to the Public Services Department Public Services Division along with a proposal for the Committee's consideration to produce a Sewer and Stormwater Annual Report addressing the sewer and stormwater program. Also for the Committee's consideration, it is staff's recommendation to defer implantation of a water resources board for a year to determine if there are issues significant enough to warrant the board. Additionally, for the Committee's consideration, it is staff's recommendation that if the Committee was to decide upon a regular audit of the Sewer and Stormwater Program that audit should be every two years or more and the audit schedule should not coincide with other regulatory audits in which the City is engaged through the Environmental Protection Agency (EPA) and the State Department of Environmental Protection (DEP) so as to maximize efficiency of staff

time in preparing an audit. The City is currently engaged in a Capacity, Management, Operations, and Maintenance (CMOM) audit of its sewer program being conducted by the EPA and has started a CMOM audit through the EPA of its stormwater program. Some further detail is provided in the response to Question #1.

4. Explain the effectiveness of the Residential Credit

See attached memorandum from the engineering consultant that designed the proposed credit program explaining the effectiveness of the residential credit.

5. Describe the public outreach plan in more detail in preparation for Council's consideration and education plan following Council adoption

A detailed public outreach plan schedule will be provided at the meeting detailing public outreach that will be conducted prior to and post Council decision on the Stormwater Service Charge Program. Review time is needed the week of September 8 in preparation for the Thursday Finance Committee meeting. Documentation will be provided at the Committee meeting.

6. Provide documentation of the discussion with the Portland Water District regarding billing

See attached memorandum describing the decision making process surrounding a separate stormwater bill and the discussions that have taken place with the Portland Water District with regard to billing and also responding to the question about billing for stormwater on the property tax bill: Billing for stormwater on the property tax bill is not legal.

7. Describe the compatibility of the stormwater credits program with historic preservation districts

See attached memorandum from the Planning and Urban Development Department

8. Describe the stormwater system and credits with regard to state statute

A legal review will be provided at a later Finance Committee meeting



TASK FORCE RECOMMENDATIONS COMPARISON

To: Finance Committee

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

Date: September 11, 2014

RE: Question #1 – Comparison of Task Force Recommendations to Proposed Stormwater Service Charge Program

Below is a comparison of the Task Force's recommendations to the proposed stormwater service charge program.

The Task Force recommended:

1. Continuing to fund Portland's wastewater assets through service charges as opposed to taxes.

Recommendation and proposal are the same.

2. Continuing to fund Portland sewer costs through the current sewer use charge which is by-nature derived from water usage billed to rate payers.

Recommendation and proposal are the same.

3. Funding Portland's stormwater costs through a stormwater use charge based impervious area (i.e. an area of a property comprised of rooftops, driveways, and parking lots.) of a property which is a surrogate for stormwater runoff.

Recommendation and proposal are the same.

4. Funding 50% of Portland's combined sewer costs through a stormwater use charge and 50% of Portland's combined sewer costs through the sewer use charge.

Recommendation and proposal are the same. After engineering consultant review and Task Force feedback, the Task Force's recommendation has been defined as 50% of combined sewer debt service moving forward, and stormwater (inclusive of combined sewer) operating costs. Including wastewater treatment costs have not been proposed.

The Task Force recommended developing a stormwater use charge according to the following criteria:

5. The Task Force examined multiple rate methodologies including a flat rate for all properties, a rate based on impervious area only, a rate based on impervious area and gross area, and a rate based on intensity of development. The Task Force believes that Portland should charge on the basis of impervious area only because an impervious only rate is most directly related to stormwater impact on the system.

Recommendation and proposal are the same.

6. The Task Force examined multiple rate structures for single family residential properties including a single tier, two tiers, multiple tiers, and a fully variable rate. The Task Force believes that Portland should use a simplified rate for residential properties consisting of two to three tiers. The tiers for commercial properties should approximate increments comparable to the residential tiers.

Recommendation and proposal are the same. A separate residential rate was unnecessary to meet this recommendation. The rate proposal is simplified, residential properties (4 units and less) are in the first 3 billing increments (tiers) and because there is a single rate, the commercial rate approximates the residential rate.

7. The Task Force considered whether roads should be exempt since roads are part of the conveyance system. The Task Force believes that Portland should exempt roads (i.e. public, private, and the airport runway) and should allocate wastewater costs on the grounds that the funding pool would shift from rate payers to property tax payers if not the case. Furthermore, the airport runway should be exempt on the grounds that it is a road.

Recommendation and proposal are the same. Additionally, island properties with the exception of Peaks Island are proposed as exempt due to the reduced services received.

8. The Task Force considered whether City property should be exempt and determined that City property should not be exempt since other public property in the city might be arguable exempt as well and public property has an impact on the system.

Recommendation and proposal are the same.

9. The Task Force considered a credit system for reducing stormwater use charges. The Task Force believes that the credits system should be tied to existing City development standards. Credits should be capped at 50% of the total stormwater use charge on the grounds that the majority of stormwater costs are unavoidable and due to maintenance and private action by individual properties would not reduce the impact on the system above that level.

Recommendation and proposal are the same: The understanding of the Task Force was a cap as determined by engineering consultant review and recommendation. The Consulting engineer recommended a credit capped at 60% after a detailed review and design of the credit program approximating the Task Force recommendation. The residential credit option is capped at 50% because there is no flood control credit through that credit option. The credit system is tied to existing City development standards and lower credit amounts provided for past development standards as determined by engineering consultant review and recommendation.

Recommendation and proposal differ: The proposal includes a 100% credit option based on review of the court option provided in Gladu versus the City of Lewiston in which the voluntariness of the fee was of primary importance in determining that the user fee was a fee and not a tax. The provision of a credit was essential to the determination of the fees voluntariness. Although the courts opinion was specific to Lewiston, (which has a 100% credit option available): "...we do not consider whether a fee is voluntary if the applicable ordinance does not include a 100% fee credit." In other words, in Maine, a fee with less than a 100% credit available has never been tested in court. The proposed 100% credit options have been

reviewed and recommended by the engineering consultant and have been designed to be appropriate to a 100% credit. As a note: the City of Bangor also provides a 100% credit option, but the typical credit limit is 80%.

10. The Task Force considered incentives and believes that offering one-time incentives for site retrofits that reduce stormwater runoff (i.e. rain barrels or rain gardens) to residential and commercial property is a valuable activity to support the City's stormwater program objectives.

Recommendation and proposal differ. The Task Force recommendation was understood as a commercial credit program (tied to development standards and available to all properties) and one-time incentives targeted to residential properties. At the 2013 Finance Committee's request a simplified residential credit program was developed including site retrofits such as rain gardens, cisterns, permeable pavers, drywells, and modified French drains. The credit program was designed to be effective, efficient, and possible.

Measure to engage the public in stormwater issues such as a one-time incentive have not been proposed, but could be added to the credit program if requested. Such as a one-time incentives or rebates for rain barrels, a pollution reduction pledge, and possibly a roof gutter disconnect are among the options available.

11. The Task force believes 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.

Recommendation and proposal are the same. As written, the recommendation and proposal are the same; however, the Task Force discussed phasing-in the rate for certain properties as it pertains to this recommendation. As proposed, in Recommendation # 4, the projected increase in debt service from year-to-year creates an effective phase-in. Additionally, a delayed start date for billing (1 year from proposed adoption of the program) provides time for properties to adjust in preparation for the program also effectively creating a phase-in. Further documentation of Portland's proposed rate in comparison to rates nationwide and locally found in the documentation of the 2013 Finance Committee material suggest that the initial rate is appropriate as a place to start the program effectively the first step of a phased in rate.

12. The Task Force discussed the importance of an annual audit and believes that an annual audit of stormwater and sewer fund activities should be presented to the City Council annually.

Recommendation and proposal differ. It is understood that part of the public messaging around the program centers on the efficient use of funds used for the dedicated purpose of sewer and stormwater activities. Producing an annual report on sewer and stormwater activities is proposed for the Committee's consideration. Additionally, for the Committee's consideration, it is staff's recommendation that if the Committee was to decide upon a regular audit of the Sewer and Stormwater Program that audit should be every two years or more and the audit schedule should not coincide with other regulatory audits in which the City is engaged through the Environmental Protection Agency (EPA) and the State Department of Environmental Protection (DEP) so as to maximize efficiency of staff time in preparing an audit. The City is currently engaged in a Capacity, Management, Operations, and Maintenance (CMOM) audit of its sewer program being conducted by the EPA and has started a CMOM audit through the EPA of its stormwater program.

13. The Task Force discussed the importance of accountability, continued public involvement and education during the transition period to a new wastewater fee structure and believes that a citizen committee to help with transition would be of value.

Recommendation and proposal differ. It is staff's recommendation to defer implantation of a water resources board for a year to determine if there are issues significant enough to warrant the board.



Michael J. Bobinsky
Director of Public Services

To: Members of the Finance Committee
From: Michael J. Bobinsky, Director of Public Services
Date: September 5, 2014
Subject: Additional Background to Question #2 – Water and Sewer Connection Rules, Regulations and Residential Downspout Disconnects

The Finance Committee had questions about water and sewer connection rules and had specific questions about foundation drains, sump pumps and roof downspouts that are connected to the sanitary or combined sewers in the City. Other questions included consideration of when residential credits are applicable and use of cisterns for gray water re-use.

Chapter 24 of the Sewer Use Ordinance provides guidance on the rules and regulations governing sewer and stormwater connections. Section 44 (b) of the Ordinance prohibits connections of downspouts that collect and drain stormwater runoff into sanitary sewers. Current enforcement of this provision is limited to special circumstances involving system impact investigations, construction projects or major remodeling where building and plumbing permits are issued and sewer connections are verified and corrected as needed.

During the Committee meeting, we discussed the possibility of future enforcement of this provision of the Ordinance. Staff is proposing for the Committee's consideration, linking the offer of residential credit to the contingency that no stormwater connection are made to sewer or combined sewer. While details of this method would need to be developed, staff in general supports this idea. As proposed, a statement on the residential credit application will provide for an endorsement by the applicant indicating that to the best of their knowledge, their property does not have sump pumps, foundation drains or downspouts connected directly into the City's stormwater or sewer collection system. In addition, to existing enforcement levels as described, staff recommends we provide public education around the need to disconnect downspouts from the stormwater or sewer system and use the credit incentive feature as leverage for the change.

There is a range of costs for property owners to come into compliance with this provision including some low cost methods of disconnecting roof downspouts to rain barrels or left to daylight on the property, to more costly measures for removing existing sump pumps, foundation drains. Costs range from \$500 to \$4500-\$5,000+ depending upon the complexity of the property connection and the number of disconnections needed to be made. We will also review the option of financial assistance to property owners to make these modifications through a one-time incentives available through the stormwater program. Staff sees this effort taking place after we have the program up and running and determining levels of need and responses.

With regard to gray water systems, water re-use is still a relatively new concept and presently due to cost and complexities of installation, and low-cost and abundance of excellent water from the public water system, there is little used in the Portland area. However, the new USM Wishcamper Building at USM's Muskie School is an example of installation of water re-uses system for toilets. There are certainly prototypes, but we are hearing from USM facility representatives and Portland Water District officials close to this application, that expanding

beyond this one building does not seem to be in future plans. A few problems that would need to be addressed in City technical design standards or in amendments to the Sewer Use Ordinance includes the use of a meter to track the rainwater used in the plumbing system for billing purposes as the water used is still being discharged into the City's sewer system, and mandatory use of a backflow prevention device on the connection; the USM building has a system where they can go back and forth with the City water supply and external (rainwater) supply so the need for backflow prevention is required to prevent cross contamination into the drinking water supply. Staff will work on developing updated language to be incorporated into the City's Technical Design Standards and updates as needed to the Sewer Use Ordinance to incorporate these mandates to ensure water supply is safe and not exposed to gray water.



Michael J. Bobinsky
Director of Public Services

To: Members of the Finance Committee
From: Michael J. Bobinsky, Director of Public Services
Date: September 5, 2014
Subject: Additional Background to Question #3 – Budget Detail/Operational Changes to the Department of Public Services Addressing New Water Resources Division

Attached is more budget detail for the Sewer and Stormwater Fund detailing the major cost components of those existing and proposed funds.

Attached is a copy of the organizational chart reflecting the new Water Resources Division which is now in operation. A new Water Resources Manager has been hired and staff reporting changes have been implemented according to the organizational chart reflects those changes and highlights the funding source for the position that support Water Resource functions.

For the Committee's consideration, staff is proposing the production of an annual report on the stormwater and sewer program activities. It is staff's recommendation to defer implantation of a water resources board for a year to determine if there are issues significant enough to warrant the board. Additionally, for the Committee's consideration, it is staff's recommendation that if the Committee was to decide upon a regular audit of the Sewer and Stormwater Program that audit should be every two years or more and the audit schedule should not coincide with other regulatory audits in which the City is engaged through the Environmental Protection Agency (EPA) and the State Department of Environmental Protection (DEP) so as to maximize efficiency of staff time in preparing an audit.

The City is currently engaged in a Capacity, Management, Operations, and Maintenance (CMOM) audit of its sewer program being conducted by the EPA and has started a CMOM audit through the EPA of its stormwater program. Some further detail is provided in the response to Question #1.

City of Portland Stormwater Program
Estimated Revenue Requirements Detail - FY2015 thru FY2019

9/5/2014

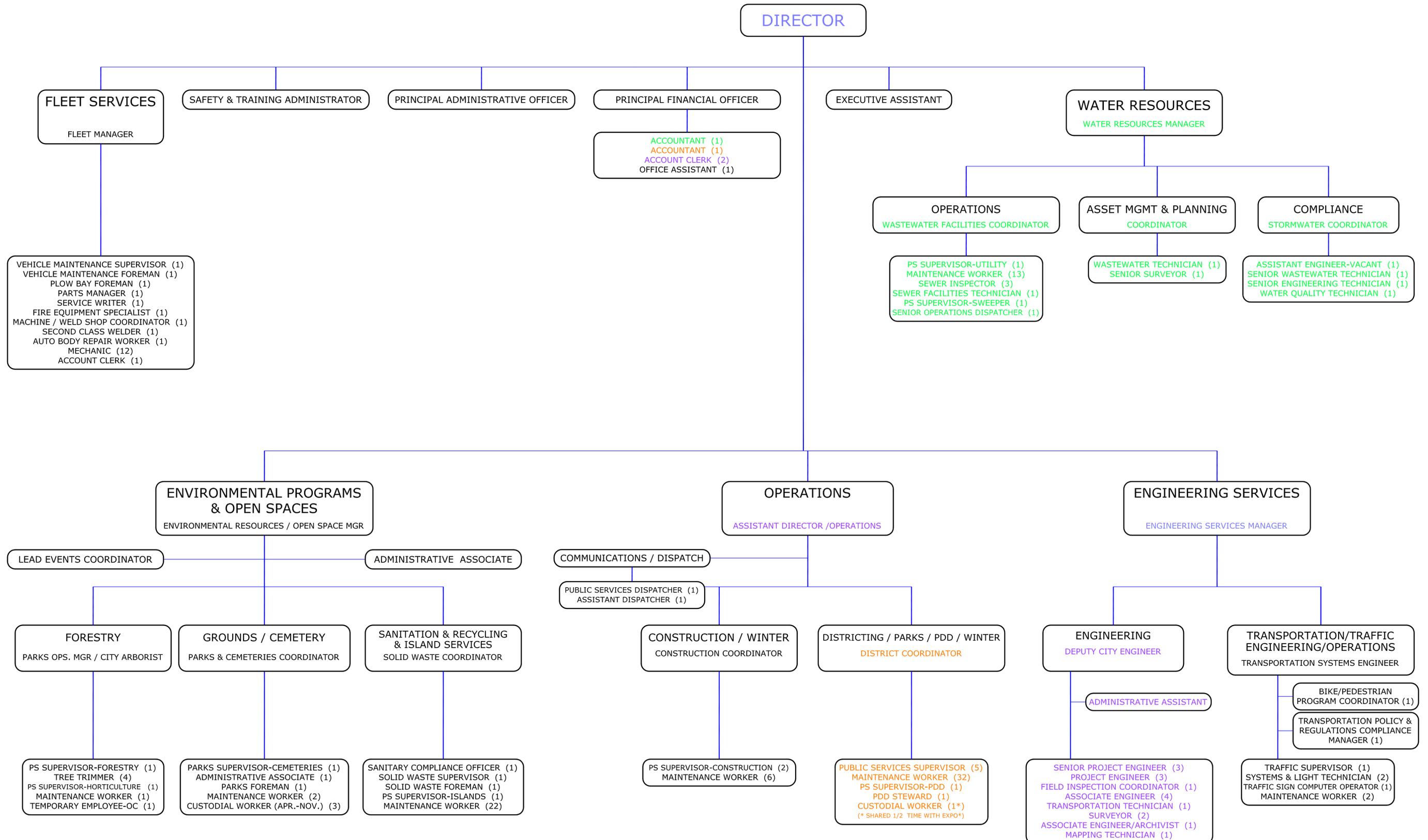
	FY2015 app	FY2016	FY2017	FY2018	FY2019
Revenue Requirement Detail					
ONLY Sewer Fund (no Stormwater Fund)					
Operations	5,519,152	6,152,934	6,160,690	6,481,281	6,655,291
Debt Service	7,607,401	8,348,264	11,194,907	13,215,126	16,097,980
PWD Assessment	11,062,470	11,651,466	12,001,010	12,361,040	13,233,524
Total	24,189,023	26,152,664	29,356,607	32,057,447	35,986,795
Stormwater Fund					
Operations	-	1,838,298	3,773,404	3,870,167	3,969,225
Debt Service	-	187,908	1,431,971	2,079,684	2,844,120
Start-up Repayment		291,860	-	-	-
Total	-	2,318,065	5,205,375	5,949,850	6,813,345
Sewer Fund (with Stormwater Charge)					
Operations	5,519,152	6,340,842	7,592,661	8,560,965	9,499,411
Debt Service	7,607,401	8,160,357	9,762,936	11,135,443	13,253,860
PWD Assessment	11,062,470	11,651,466	12,001,010	12,361,040	13,233,524
Total	24,189,023	26,152,664	29,356,607	32,057,447	35,986,795

Department of Public Services - Organizational Chart

Establishing a Water Resources Division with Existing Positions

Revised April 10, 2014

100% FUNDED BY SEWER FUND
 50% FUNDED BY SEWER FUND
 30% FUNDED BY SEWER FUND
 20% FUNDED BY SEWER FUND
 10% FUNDED BY SEWER FUND



Memorandum

To Ian Houseal & Mike Bobinsky
Consultant Team
Date September 2, 2014

From Andy Reese

Subject **Technical Memorandum: Residential Stormwater Credit Structure, Stormwater Service Charge**

The purpose of this memorandum is to respond to recent questions concerning the residential credit structure for the City of Portland, ME stormwater service charge.

Residential Credit Description

Residential properties are defined as detached dwelling units, duplexes, triplexes and quadraplexes totaling four or fewer units on a property. More than four detached units on a property are considered non-residential for the purposes of stormwater credits.

Residential properties have the option of entering the non-residential credit program to obtain a larger credit, but must meet all the requirements thereof with adequate documentation.

Residential Credit: A maximum water quality credit of 0.5 stormwater billing unit (SBU) is available for every whole increment of 600 sf of impervious area (IA) treated up to a maximum credit of 1.0 SBU as shown in the Table 1 below:

Table 1. Residential Stormwater Credits

Stormwater Billing Units (SBU)	IA Treated	Maximum Available Credit
1 SBU = 400 – 1,799 sf	600 sf	0.5 SBU
2 SBU = 1,800 – 2,999 sf	1,200 sf	1.0 SBU
≥3 SBU = greater than 2,999 sf	1,200 sf	1.0 SBU

The stormwater treatment options available to residential properties to obtain Credits are: Cisterns; Dry Wells; Modified French Drains; Permeable Pavers; and Rain Gardens. These practices can be used in combination or alone up to the maximum available credit. Flood control credits are not available to residential properties.

Discussion of the Residential Credit

The residential credit is consistent with the commercial credit program and differences in residential properties as a class are recognized and treated in a proportional manner according to stormwater billing units. A simplified credit approach was developed for residential properties to alleviate the burden on both the applicant and the City (administration).

Amount

All credits, commercial and residential, are up to 60% of the total fee for normal types of stormwater runoff treatment. A credit of 100% is available for designs that exceed the normal criteria and seek to reduce their adverse stormwater impact to zero. These are handled on a case by case basis.

Credit Distribution

The credit amount is the same for commercial and residential properties and set at 50% for water quality and 10% for flood control with minor differences for the standards to attain this credit.

Effectiveness of the Residential Design Standard

The amount of the residential credit is equal to the commercial credit amount for water quality. Because the small residential properties have a lower intensity of impervious coverage than non-residential properties - 27% versus 68% (i.e., they have more inherent green space), the stormwater design standard has been simplified from full compliance with Chapter 500 to capture of the first inch of runoff.

This stormwater treatment level is seen nationally as both effective and attainable. While treatment of runoff from any individual residential property may not be visible downstream, over time as more development or redevelopment takes place and these types of designs become standard, a transformation to lower impact development can take place.

The flood control credit is not offered for residential properties because there are currently no flood control requirements for individual residential properties and the costs of such construction typically surpass any credit. However, residential properties have the option to attain the flood control credit as discussed below.

Non-Residential Credit "Fall Back" Provision

As seen in the Table 1, the stormwater credit is limited to 1 SBU no matter the size of the residential properties' impervious area. Larger residential properties above 2 SBUs have the option of attaining the same credit as commercial properties but must meet the same standards for design and submittal requirements as commercial properties. This is seen as equitable especially for residential properties with the largest impervious area where the potential benefit of green space could be outweighed by the larger amount of concentrated runoff.



DECISION MAKING PROCESS FOR BILLING

To: Finance Committee

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

Date: September 11, 2014

RE: Question #6: Decision Making Process Leading to Billing for Stormwater on a Separate Bill

The Finance Committee requested documentation of the decision making process leading to the proposed stormwater service charge on a separate bill. The following is documentation of the decision making process ruling out a combined water, sewer, and stormwater bill:

1. On February 13, 2012, Councilor Suslovic, Mike Bobinsky, Director of Public Services, and Ian Houseal, Assistant to the City Manager presented the Sustainable Stormwater Funding Task Force Preliminary Recommendations to the Portland Water District Board of Trustees at a regular trustee board meeting. The Board heard the recommendations of the Task Force and provided feedback. Pertinent feedback was that the board was not interested in expanding its services related to sewer and stormwater provided to the City.
2. On September 11, 2012, Mike Bobinsky, Ellen Sanborn, Director of Finance, and Ian Houseal met with Ron Miller, General Manager and David Kane, Executive Director of Administration, Treasurer to discuss Portland Water District billing for stormwater on the City's behalf. At that meeting Ron Miller stated that for a number of reasons Portland Water District would not be willing to bill for stormwater on the City's behalf.
3. On March 6, 2013, Mark Rees, City Manager and Ron Miller met at the Portland Water District to discuss stormwater billing.
4. On December 13, 2013, Mark Rees, Mike Bobinsky, and Ian Houseal met with Ron Miller and David Kane to discuss Portland Water District billing for stormwater on the City's behalf. At that meeting Ron Miller stated that Portland Water District would not bill for stormwater on the City's behalf.

The stormwater service charge program and how it will be billed is unique to Portland. During this time the City has explored other options for billing for stormwater:

- Tax Bill – It is not legal according to State law to bill for stormwater on the tax bill.

- Combined Sewer/Stormwater Bill – Given that the sewer bill is derived from the water bill, it is most efficient to keep the water and sewer bills on the same bill. Combining sewer and stormwater billing, divorced from the water bill is impractical for the following reasons: Customer service inquiries would have to be directed to the Portland Water District for resolution; Monthly water and sewer billing is far more complicated than stormwater billing which is relatively static; additional staff above the five proposed for the new program would be needed for monthly reconciliation for a sewer and stormwater combined bill potentially taking days to accomplish on a monthly basis if even possible. Some utilities nationwide that bill for sewer and stormwater opt to send separate bills anyway because it is simpler.

Memorandum
Department of Planning and Development
Historic Preservation Program



To: Ian Houseal, Sustainability Coordinator

From: Deb Andrews, Historic Preservation Program Manual *DA*

Date: September 5, 2014

Re: Historic preservation ordinance requirements as they might affect stormwater credit solutions

At your request, I have reviewed the draft Stormwater Credit Manual that is being submitted to the City Council for consideration. Specifically, you have asked that I provide input as to how the historic preservation ordinance review requirements might affect the implementation of various recommended stormwater solutions on private property within Portland's historic districts.

Under Portland's historic preservation ordinance "site alterations, other than vegetation, including, without limitation, fencing, walls, paving and grading" are subject to review and approval. Historic preservation review is only required, however, when the proposed site alterations are "readily visible from a public way." In other words, any stormwater solution made in rear yard or area of side yard that is well back from the street would not be subject to review.

With respect to the various stormwater credit solutions offered in the Manual, I would expect that the introduction of drywells and modified French drains—regardless of where they are installed—would not require historic preservation review and approval as there would be no visual change as a result of the installation. The installation of permeable paving would require review, but my expectation is that there are a number of such paving solutions that would meet the ordinance review standards. *Cisterns* would be reviewed in the same way at-grade condenser units or other ground-mounted mechanicals are reviewed. Applicants would be encouraged to locate the cistern where it is not visually prominent, such as in front of the house. Depending on the nature of the proposed rain garden solutions, these may or may not need review. Where they involved significant grading, terracing, or prominent edging, review might be required.

In most instances, proposed stormwater solutions would require staff review only.