10 Financial Program Review

The objective of the financial program chapter is to identify the total cost of operating and maintaining the City's SSWU and its programs, provide adequate funding to meet the stormwater management utility capital improvement schedule, and assist in establishing cost-based and equitable rates for service.

The financial program is crucial to the successful implementation of the prescribed CIP within this SSWCP as well as ongoing operations. A comprehensive financial program provides a detailed account of methods to fund the CIP and demonstrate that the utility operates in a financially sustainable manner over the course of the planning period.

The methods used in this study followed general industry guidelines for developing utility rates. These general industry guidelines outline that rates must generate sufficient revenue to be self-supporting and financially viable, without undue discrimination toward or against any customer. Detailed exhibits provided in Appendix G outline the development of this study.

Legal authority for a city to operate a surface water utility comes from RCW 35.67.025, which states "any public entity and public property, including the state of Washington and state property shall be subject to rates and charge for storm water control facilities to the same extent private persons and private property are subject to such rate and charges." Additionally, RCW 35.67.020 allows for cities "to fix, alter, regulate, and control the rates and charges for their use," which includes surface water management.

10.1 Past and Present Financial Status

The City's SWMP manages the stormwater runoff within the city's boundaries as well as areas outside of city limits that drain into the City's stormwater system. The goals of the SWMP are to adhere to regulatory requirements, protect public health and safety, and be good stewards of the environment. Much like many other cities across the country, the City of Bellingham has been expanding its program to fulfill its goals and objectives and meet state and federal requirements.

The City operates the SSWU as a self-supporting enterprise fund and provides affordable stormwater management to its customers. Table 10-1 provides the City's historical revenue and expenditures over the last 5 years.

Table 10-1. Historical and budgeted revenue and expenditures

Description table values in $1,000s	FY 2014 Actuals	FY 2015 Actuals	FY 2016 Actuals	FY 2017 Actuals	FY 2018 Actuals	FY 2019 Budget	FY 2020 Budget
Beginning fund balance	$4,847	$4,734	$3,866	$3,176	$5,435	$1,500	$930
Revenue							
Surface water rate revenue	$6,090	$6,476	$7,118	$7,491	$7,615	$8,400	$8,532
Other revenue	$2,455	$10,948	$2,167	$2,759	$5,132	$7,831	$3,671
Total revenue	$8,545	$17,424	$9,284	$10,250	$12,747	$16,231	$12,204
Expenditures							
Salaries and benefits	$1,605	$1,812	$1,992	$2,023	$2,069	$2,957	$3,073
Supplies	$159	$209	$217	$170	$237	$262	$264
Tools and equipment	$10	$85	$28	$41	$33	$48	$44
Services	$1,324	$1,436	$1,290	$1,267	$1,256	$2,348	$1,300
Travel	$6	$13	$6	$11	$7	$14	$14
Interfund expenditures	$2,289	$2,324	$2,728	$2,722	$2,914	$2,520	$2,522
Utilities	$15	$15	$52	$15	$15	$19	$19
Repairs and maintenance	$367	$244	$121	$120	$186	$6,317	$2,062
Miscellaneous expenses	$118	$107	$138	$115	$158	$136	$136
Total expenditures	$5,894	$6,246	$6,571	$6,484	$6,876	$14,622	$9,434
Capital costs	$1,750	$11,043	$1,949	$50	$3,171	$180	$100
Debt service	$0	$0	$249	$444	$415	$479	$477
Taxes	$847	$899	$1,009	$1,046	$1,071	$1,119	$1,119
Operating transfers	$0	$104	$87	$60	$285	$400	$100
Ending fund balance	$4,901	$3,866	$3,285	$5,341	$6,365	$930	$1,904

Stormwater management rate revenue is fairly consistent from year to year because the rate is a set, or flat, per month rate with no variable component. Increases in the stormwater management revenue are mainly due to growth in the number of accounts and any change in the rates charged to customers.

The City also receives a variety of other revenue, which has varied since 2014 with a low of $2.1 million in 2015 to a budgeted high of $7.8 million in 2019. A major cause for this fluctuation is due to transfers in from the Watershed reserve fund of $1 million. The Watershed fund is a subfund of the water fund related to the Lake Whatcom watershed. Stormwater improvements within the Lake Whatcom watershed will lead overall water quality improvements. For this reason, 30 percent of the annual Watershed fund revenue can be used on stormwater capital projects. Another significant revenue source is Ecology grants of $1.3 million in the 2020 budget. Grant revenue should be discounted when projecting other revenue forward because these are not revenue sources the City should rely on in the future. Net of transfers and grants the City has consistently received $1.2 million per year in other revenue. The other significant revenue sources are storm drainage fees, storm and vactor charges, and stormwater permits. Storm drainage fees include SDCs, which are charges for new development.

The City's expenditures have increased annually because of inflation of costs and the increased costs to meet regulatory and City goals and objectives. The increase in expenditures does include some expenses that might be considered one time or intermittent such as one-time projects or studies. The City is expecting, and has budgeted for, ending fund balance to decrease in the last few years because of its expenditures exceeding revenue in those years. This trend will likely continue unless expenditures are reduced significantly or revenue is increased. Revenue increases are the recommended action as reducing expenditures will make it difficult, if not impossible, to meet the requirements of the City's Phase II Permit, address TMDLs for Lake Whatcom, support growth within the city, and meet the overall stormwater management goals and objectives.

10.2 Overview of the Rate Study Process

A comprehensive rate study is a series of three interrelated analyses including a revenue requirement analysis, cost-of-service analysis, and rate design analysis. The goal of the analysis is to adequately fund the utility while maintaining equity among customers.

10.2.1 Generally Accepted Rate-Setting Principles

Utilities should set rates around generally accepted or global principles and guidelines. Utility rates should be:

- Cost-based, equitable, and set at a level that meets the utility's full revenue requirement
- Easy to understand and administer
- Designed to conform to "generally accepted" rate-setting techniques
- Stable in their ability to provide adequate revenues for meeting the utility's financial, operating, and regulatory requirements
- Established at a level that is stable from year to year from a customer's perspective
- Meet legal and regulatory requirements

10.2.2 Revenue Requirement

Most public utilities use the "cash basis" [1] approach for establishing the revenue requirement for rate-setting purposes. This approach conforms to most public utility budgetary requirements.

The cash basis revenue requirement analysis is the comparison of projected revenue and expenses to determine if the current level of revenues is sufficient to responsibly manage the utility. The components of a cash basis revenue requirement are available funds such as rate revenue and miscellaneous revenue, compared to operating expenditures or O&M, rate-funded capital, taxes and transfers, and debt service. In place of these non-cash expenditures the cash basis adds rate-funded capital and debt service. The cash basis is used by public utilities because they are not a profit-seeking enterprise but rather a public service. Table 10-2 shows the general breakdown of a cash basis revenue requirement.

Table 10-2. Cash basis revenue requirement

Overview of a cash basis revenue requirement
+ O&M expense
+ Taxes and transfer payments
+ Rate funded capital (≥ depreciation expense)
+ Debt service (principal + interest)
= Revenue requirement

Revenue requirements are often conducted over a projected period similar to financial plans. Projecting the revenue requirement over several years allows for the utility to set rates on a consistent basis or allow the utility to make proactive steps to deal with a future financial hurdle.

10.2.3 Cost of Service

The cost-of-service analysis is conducted after the revenue requirement is determined and uses one year, often the next fiscal year, as the test year. The cost-of-service analysis takes the test year expenses established in the revenue requirement and equitably distributes them to customer classes of service. The City's current customer classes of service include small footprint, medium footprint, and large footprint. These classes of service were not changed for this analysis. The cost-of-service analysis consists of the following three sequential steps:

[1] "Cash basis" as used in the context of rate setting is not the same as the terminology used for accounting purposes and recognition of revenues and expenses. As used for rate setting, "cash basis" simply refers to the specific cost components to be included within the revenue requirement analysis.

1. Costs and assets are functionalized or grouped into the various cost categories related to providing service (conveyance, water quality, etc.). This step is largely accomplished using the City's chart of accounts.
2. The functionalized costs are allocated to specific cost components. Allocation refers to the arrangement of the functionalized data into cost components. For example, a stormwater utility's costs are typically allocated as impervious surface area, pervious surface area, and customer-related costs.
3. Once the costs are allocated into components, they are proportionally distributed to the customer classes of service (e.g., small footprint, medium footprint, and large footprint). The distribution is based on each customer class's relative contribution (proportional share) of each cost component (i.e., benefits received from and burdens placed on the system and its resources). For example, customer-related costs are distributed to each class of service based on the total number of customers in that class of service. Once costs are distributed, the unit costs from each customer class of service required to achieve cost-based rates can be determined.

10.2.4 Rate Design

The rate design analysis is the final step in a comprehensive rate study. Rate design takes the revenue requirement and the cost-of-service data and establishes rates. The rate design process is guided by the previous analysis conducted but also considers the utility's goals and objectives. Rate design also may consider the structure of the rates. Rate structure refers to the means of charging the rates, such as a flat rate, per acre charge, or charge per impervious surface area.

10.3 Financial Policies

Financial policies are an important component of the healthy management of a utility. Financial policies are generally measures meant to provide a framework so that the utility will be managed in a consistent way and avoiding politically expedient decisions. It is important to stay within the bounds of adopted policies when conducting a rate study.

10.3.1 The City's Financial Policies

In 2010 the City adopted Financial Management Guidelines through Resolution 2010-17. The Financial Management Guidelines document is extensive and deals with many aspects of the City' financial management. Strong financial policies are important for continuity of financial management and help City leadership make decisions that are good for the long-term sustainability of the City and not short-sighted, politically expedient decisions. The City's policies are extensive and important but the few that are most relevant for the SWMP are stated below.

General Budget Policy 8: <u>Reserves.</u> The use of reserves as a balancing resource within the proposed budget shall be clearly and specifically identified. Use of reserves is subject to reserve policy standards and limits as presented within this document. When any proposed budget for

a fund causes reserves to fall below the minimum reserve target for that fund, the budget document shall include a proposed plan for "replenishing" the reserve to at least the minimum target as stated with the attached fund reserve goal table. (This is text from the financial management guidelines; the table it is referring to is not included in this document.)

Revenue Guideline 2: Charges for Services. Charges for services benefiting specific users should be established at a rate that recovers full costs, including all direct and capital costs. Departments imposing fees or service charges should prepare and periodically update cost-of-service studies for such services. A subsidy of the costs for such services may be considered when the City Council determines it is in the public interest. Any subsidy of service costs shall be specifically identified to the council prior to presentation for approval of fees or service charges.

Revenue Guideline 3: One-time Revenue. The City will not use revenues received that are considered to be available for only a limited period; to fund ongoing employment costs, staff will ensure that the source of revenue is available for at least 3 years.

Reserve Policies

The City will maintain adequate reserves. Reserves shall be sufficient to meet the following needs:

- Provide adequate liquidity
- Provide for unanticipated economic downturns
- Maintain credit ratings
- Provide for services and costs during a declared emergency
- Provide for long-term capital needs
- Meet mandated reserve requirement

Operating Fund 430: Target. Five percent of current year budget operating expenditures plus 10 percent of its total budgeted 5-year capital plan. Minimum of 5 percent of current year budgeted operating expenditures plus $400,000.

10.3.2 Industry Standard Financial Policies

In addition to financial policies identified in the City's Financial Management Guidelines, this analysis used a few generally accepted guidelines used for rate making. The following financial guidelines were observed in the development of this analysis:

- **Enterprise fund:** The Governmental Accounting Standards Board (GASB) defines an enterprise fund as a fund that operates a business-like activity and is funded primarily by user fees, such as stormwater rates. Because of the SSWU's distinction as an enterprise fund, it must be self-sustaining and recover its operating and capital costs. Enterprise funds should not be subsidized or subsidize another fund, including the City's General Fund.

- **Reserve levels:** Reserve balances are necessary to cover current costs and future capital expenditures. Adequate cash reserves help the utility run smoothly and maintain stable rates in the future. There are generally two types of reserve funds, or sub-funds: an operating fund and a capital fund.
    - **Operating reserves** provide day-to-day funding of operations, and the balance must be sufficient to cover the utility's bills, payroll, one-time, and unexpected costs. Healthy operating reserve balances are also useful for smoothing rate adjustments over several years. Common operating reserve targets range between 45 and 90 days of O&M expense or between 12 and 25 percent annual O&M expense.
    - A **capital reserve** holds funds for future capital improvements. The capital reserve commonly contains restricted cash flow as well as current revenue intended for current and future capital expenditures. The City does not currently maintain a separate fund for capital funding. In this case the operating fund acts as both an operating reserve and a capital reserve.
- **Capital funding through rates:** Capital funding through rates is the amount of rate revenue that is dedicated for use on capital projects. The purpose of capital funding through rates is to provide for the replacement of aging system facilities to ensure sustainability of the system for ongoing operations. The current industry standard is to allocate an amount no less than annual depreciation expense from current revenue. The analysis provides for primarily funding capital with current rate revenue and fund balance. This strategy exceeds the depreciation expense minimum standard.
- **Debt service coverage ratio (DSCR):** The industry standard minimum coverage requirement on outstanding revenue bonds is 1.25 times annual revenue bond debt service, using the net revenues of the utility. DSCR is calculated by subtracting operations and maintenance, taxes, and debt payments from revenue then dividing by current annual debt payments. Having a 1.25 DSCR provides that the utility has sufficient revenue to pay its debt service payments on an annual basis.

$$\frac{Revenue - expenditures - taxes}{Debt\ service} => 1.25$$

Some of the above guidelines are similar to, or complementary of, the City's existing financial policies, while the other guidelines are used as a framework to which the analysis is structured.

10.4 Establishing a Revenue Requirement

As mentioned earlier in this chapter, a revenue requirement is the sum of the utility's O&M expense, taxes and transfer payments, debt service, and rate-funded capital. The revenue requirement is then compared to the revenue at the existing rate plus miscellaneous revenue to determine if the existing rates are sufficient.

10.4.1 Sources of Funds

Sources of funds are simply the revenue available for the utility to fund its operations on an annual basis. Stormwater management revenue is derived from rate revenue and miscellaneous revenues such as SDCs, stormwater permit review fees, developer contributions, bank earnings, and grants. Figure 10-1 below shows that the vast majority of the operating fund's revenue is received through rate revenue collections.

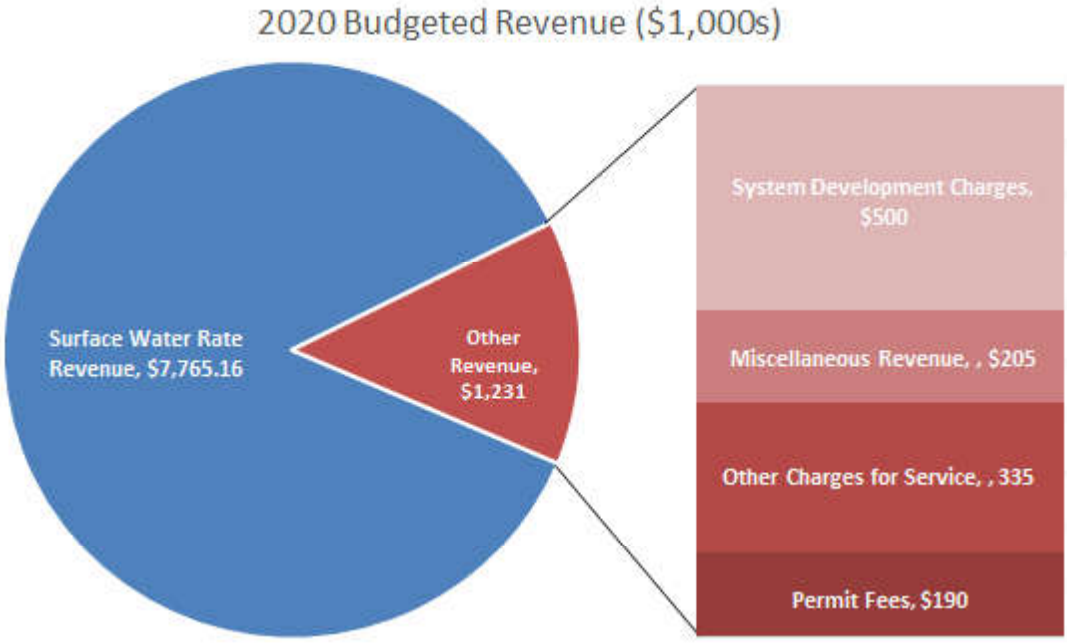

Figure 10-1. Revenue sources 2020 budget

10.4.2 Application of Funds

Application of funds refers to the various components that make up the revenue requirement. O&M expenses comprise a variety of costs associated with the day-to-day operation and maintenance of the SSWU. Salaries, benefits, supplies, inter-fund payments, and utilities are a few of the largest O&M expenses. Growth rates for these expenditures vary widely. Total salaries, the largest component of O&M, generally can be reduced only by reducing staff, as individual salaries generally rise with an index such as the Consumer Price Index (CPI) or similar index, often negotiated with union contract terms. Benefits comprise a wide range of items such as health insurance and pensions. Historically, health benefits have been growing at a rate significantly higher than inflation. As part of the plan a personnel gap analysis was conducted to analyze if the SSWU had sufficient personnel to accomplish the tasks associated with the Phase II Permit. The analysis determined that four additional FTEs would be needed to adequately perform the necessary Phase II Permit activities. The costs of the additional FTEs was added to

the forecasted expenditures. The timing for the new FTE costs was spread out with one FTE added in 2020, another in 2021, and then the two added in 2023 for a total of four FTEs.

Figure 10-2 shows the City's expected O&M expenditures for the 2020 budget year.

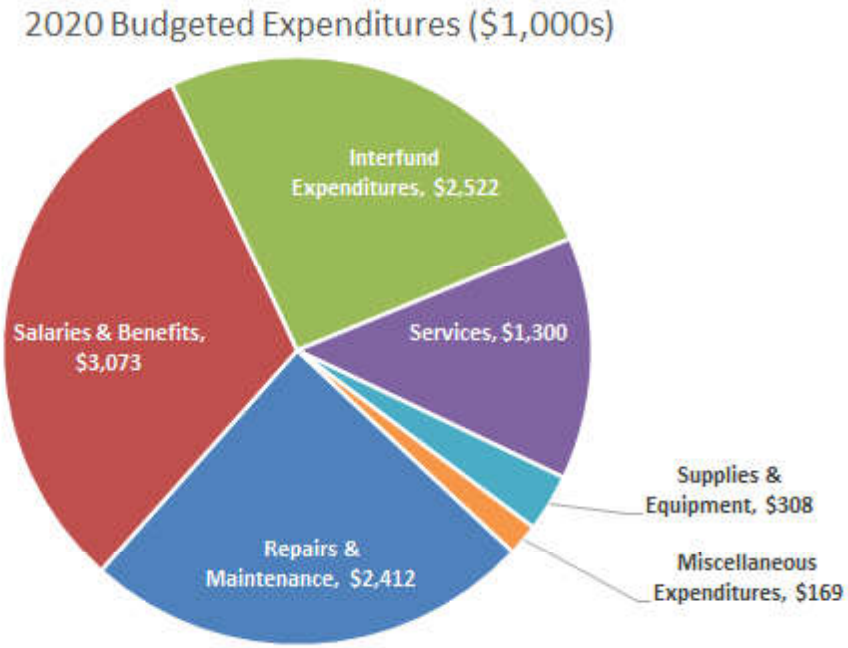

Figure 10-2. 2020 budgeted expenditure by type

Taxes

The SSWU pays a state tax of 1.5 percent, which is charged to all surface water sales. The City also pays a utility tax to the City's general fund of 11.5 percent. The City and State tax is calculated as a percentage of revenue; when rates are increased, additional City and State taxes are incurred.

Capital Funding

Utilities fund capital improvements in many ways—through rate revenues, SDCs, reserves, or long-term debt in the form of loans or bonds. Often utilities employ several means of funding capital projects and for a variety of reasons.

Rate-Funded Capital. Rate-funded capital is an allocation of current rate revenue dedicated to fund capital projects. Some utilities choose to fund their capital plan entirely through current revenue and reserve funds. However, most utilities use a mix of capital funding mechanisms such as rate revenue and long-term debt. As it happens, the amount of rate-funded capital is indicative of the financial health of the utility. Rate-funded capital is intended to represent an average of capital expense on an annual basis. Excess rate-funded capital in one year is

intended to be saved for times when capital expenses exceed rate-funded capital allocation. This is sometimes called a "pay as you go" approach, thereby initiating a project only when the funds have accumulated to pay for the project.

Debt Service. Debt service is the payment of principal and interest on debt issued by the utility, generally when a utility desires to initiate capital projects ahead of having the funds available. Often when a utility issues debt, the issuer imposes covenants on the utility to ensure that the utility is financially sound to be able to repay the debt.

Reserves. Utilities commonly use reserve funds to fund capital. Using reserve funds allows utilities to save excess funds in one year and use them in another year for capital costs that exceed their current revenue funding.

System Development Charges. SDCs or connection charges are a one-time charge to new development. These charges are essentially buy-in to the system. SDCs are a commonly used source of capital funding.

10.4.3 Projected Revenue and Expenditures

For this analysis, the City's 2020 budget was used as a starting point for projecting the revenue requirement. Beyond 2020, escalation factors were used to project both revenue and expenditures. The escalation factors used for rate revenue and SDCs were projected at the expected average annual growth rate. Escalation factors for expenditures ranged from 0 percent to 6 percent, depending on the particular type of expense. These escalation factors were based on a conservative interpretation of historical trends in the Seattle-Tacoma-Bremerton CPI and recent trends witnessed among other utilities. Table 10-3 provides the escalation factors used in the financial plan.

Table 10-3. Escalation factors

Average annual escalation factors	2021–2030
Revenue	
Customer growth	1.50%
Connection charges	1.50%
Miscellaneous revenue	0.50%
Expenditures	
Labor	3.75%
Materials and supplies	3.00%
Equipment	3.75%
Professional services	3.50%
Medical benefits	6.00%
Utilities	2.00%
Miscellaneous	2.50%
Repairs and maintenance	3.25%

10.4.4 Capital Plan Scenarios

The City requested that multiple levels of capital projects be explored for its consideration. Essentially, four cost-of-service studies were prepared to provide rates based on the four capital improvement project levels. The capital projects proposed for the CIP scenarios are to be constructed over a 6-year period, 2021 through 2026. The variables that change depending on the capital level are the assumed capital funding levels from rate-funded capital, use of reserve funds, staffing levels, and the changes to rates. In addition to these variables, there are also financial constraints. The primary constraint that was impacting the development of the analysis was reserve fund balance. Reserve fund balance is the cash on hand to fund the utility's operating and capital expenses. As mentioned in the financial policy discussion, the City has a target ending fund balance of 5 percent of current budgeted operating expenditures plus 10 percent of the 5-year CIP and a minimum ending fund balance, which is 5 percent of current operating expenditures plus $400,000. The SSWU fund's operating balance is currently at the low end of the spectrum with a beginning fund balance for 2019 of $930,037. Because the current fund balance is so close to the minimum of $898,000 for 2019, the ability to float or phase in rate adjustments is minimal. While the Stormwater Management Fund has issued debt in the past, the City has decided to cash fund the CIP going forward; therefore, no new debt was assumed for any of the four scenarios.

The capital options developed for the City were as follows:

- **Baseline:** Rates are adjusted at an inflationary level throughout the analysis period (2021–2026). Funds available for capital were essentially the remaining funds after subtracting operating costs from revenue. The available funds under the Baseline scenario starting in 2021 is $1.1 million growing to $1.3 million in 2026 totaling approximately $6 million over the duration of the CIP. The funds available for the Baseline capital scenario are derived primarily from the SDCs and contingent on the implementation of the maximum allowable SDCs as presented in Section 10.7 of this chapter. Any reduction in the level of SDC will also reduce the potential funding available for capital.
- **Small CIP:** CIP consists of only the highest-priority capital projects.
- **Medium CIP:** CIP consists of the highest-priority capital projects plus a second tier of projects deemed medium priority.
- **Large CIP:** CIP consists of all of the recommended projects, including high, medium, and low priority.

To incorporate the CIPs into the rate study, the annual amount of assumed capital funding was set at the one-sixth of the plan costs per year. After establishing the annual funding level the annual capital costs were escalated annually to account for inflation of the construction costs. Table 10-4 presents the Small, Medium, and Large CIPs. It should be noted that Table 10-4 also includes a vactor truck that was not included in the projects in Chapter 8.

Table 10-4. CIP scenarios

Project title	Scenario		
Table values in $1,000s	Small	Medium	Large
Filtration treatment vaults			
Filtration Treatment Vaults	$537	$537	$537
Baker Creek Regional Water Quality	0	3,700	3,700
Bioretention	762	762	1,500
Fish Passage	1,200	2,200	7,200
Conveyance Improvements	5,450	7,320	9,471
Pipe Upsizing	6,000	6,000	20,042
PURC/Condition	1,528	1,528	1,528
Vactor Truck	600	600	600
	$16,077	$22,647	$44,577

Numbers do not always sum exactly to annual totals because of rounding.

Another aspect of the capital scenarios is there was also an analysis of the level of capital spending and number of projects that would require additional personnel. To establish a basis for how many FTEs would be needed to support the proposed CIPs, past capital spending and FTEs that supported that effort was reviewed. At a high level, it was found that on average one engineering staff member supported approximately $5 million in capital spending per year. Note, these FTEs are in addition to the FTEs identified in the gap analysis for the Phase II Permit compliance. Table 10-5 shows the projected additional total FTEs for the period.

Table 10-5. New FTEs to support CIP

CIP	2020	2021	2022	2023	2024	2025	2026	Total
Baseline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small CIP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medium CIP	0.0	**0.5**	0.0	0.0	0.0	**0.5**	0.0	**1.0**
Large CIP	0.0	**1.0**	0.0	0.0	0.0	**1.0**	0.0	**2.0**

The Baseline and Small CIP scenarios assumed no new FTEs while the Medium CIP scenario added one FTE and the Large CIP scenario assumed two FTEs. For modeling purposes the new FTEs were spread out over the CIP planning period. In practice the City should add actual FTEs as the workload would require to allow for completion of planned projects.

Given all of the preceding data and assumptions, the revenue requirement analysis was developed for each of the four CIP alternatives. The revenue requirement was designed to minimize rates to the extent possible, maintain target reserve balances through 2026, and fund the identified capital for each scenario. Beyond 2026 the fund balance rises above the

minimum because a lower level of capital projects was assumed in the final years of the revenue requirement. Table 10-6, Table 10-7, Table 10-8, and Table 10-9 provide the result of the revenue requirement for the Baseline, Small, Medium, and Large CIP scenarios, respectively.

Table 10-6. Baseline CIP revenue requirement analysis

Table values in $1,000s	Forecast									
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue										
Surface water rate revenue at current rates	$8,561	$7,886	$8,004	$8,123	$8,367	$8,492	$8,618	$8,746	$8,877	$9,009
Non-rate revenue	$3,571	$1,963	$2,006	$2,051	$2,150	$2,201	$2,253	$2,306	$2,361	$2,418
Total revenue	$12,132	$9,849	$10,010	$10,174	$10,517	$10,693	$10,871	$11,053	$11,237	$11,427
Expenditures										
Operating expenses	$9,784	$7,849	$8,110	$8,379	$8,946	$9,245	$9,553	$9,872	$10,203	$10,544
Capital funded through rates	$500	$400	$400	$700	$1,000	$1,200	$1,400	$1,500	$1,500	$1,500
Taxes and transfers	$1,219	$1,108	$1,124	$1,141	$1,174	$1,191	$1,209	$1,226	$1,244	$1,262
Debt service	$477	$742	$761	$349	$185	$176	$166	$166	$166	$166
Total expenditures	**$11,980**	**$10,099**	**$10,395**	**$10,569**	**$11,306**	**$11,811**	**$12,328**	**$12,765**	**$13,113**	**$13,472**
Cumulative balance (deficiency) of funds	$152	($250)	($386)	($395)	($789)	($1,119)	($1,456)	($1,712)	($1,875)	($2,045)
Cumulative deficiency (balance) as a percentage of rates	-1.8%	3.2%	4.8%	4.9%	9.4%	13.2%	16.9%	19.6%	21.1%	22.7%
Proposed rate adjustment	**0.0%**	**2.5%**	**2.5%**	**2.5%**	**2.5%**	**2.5%**	**2.5%**	**2.5%**	**2.5%**	**2.5%**
Rate revenue after adjustment	$0	$197	$405	$625	$1,099	$1,356	$1,626	$1,910	$2,209	$2,523

Table 10-7. Small CIP revenue requirement analysis

Table values in $1,000s	Forecast									
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue										
Surface water rate revenue at current rates	$8,561	$7,886	$8,004	$8,123	$8,367	$8,492	$8,618	$8,746	$8,877	$9,009
Non-rate revenue	$3,571	$1,961	$2,005	$2,051	$2,150	$2,203	$2,258	$2,316	$2,377	$2,440
Total revenue	$12,132	$9,847	$10,009	$10,174	$10,516	$10,694	$10,876	$11,063	$11,254	$11,449
Expenditures										
Operating expenses	$9,970	$8,235	$8,511	$9,211	$9,842	$10,174	$10,517	$10,872	$11,240	$11,621
Capital funded through rates	$500	$1,312	$1,352	$1,394	$1,582	$1,628	$1,677	$1,727	$1,778	$1,932
Taxes and transfers	$1,219	$1,108	$1,124	$1,141	$1,174	$1,191	$1,209	$1,226	$1,244	$1,262
Debt service	$477	$742	$761	$349	$185	$176	$166	$166	$166	$166
Total expenditures	$12,166	$11,397	$11,748	$12,094	$12,783	$13,169	$13,568	$13,991	$14,428	$14,980
Cumulative balance (deficiency) of funds	($34)	($1,550)	($1,739)	($1,921)	($2,267)	($2,474)	($2,692)	($2,928)	($3,175)	($3,531)
Cumulative deficiency (balance) as a percentage of rates	0.4%	19.7%	21.7%	23.6%	27.1%	29.1%	31.2%	33.5%	35.8%	39.2%
Proposed rate adjustment	0.0%	21.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Rate revenue after adjustment	$0	$1,656	$1,923	$2,203	$2,808	$3,133	$3,475	$3,834	$4,210	$4,605

Table 10-8. Medium CIP revenue requirement analysis

	Forecast									
Table values in $1,000s	FY 2020	FY 2021	FY 2022	FY 2023	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue										
Surface water rate revenue at current rates	$8,561	$7,886	$8,004	$8,123	$8,367	$8,492	$8,618	$8,746	$8,877	$9,009
Non-rate revenue	$3,571	$1,961	$2,005	$2,052	$2,153	$2,207	$2,264	$2,323	$2,385	$2,449
Total revenue	$12,132	$9,847	$10,009	$10,175	$10,520	$10,699	$10,882	$11,069	$11,261	$11,459
Expenditures										
Operating expenses	$9,970	$8,332	$8,611	$9,315	$10,065	$10,406	$10,758	$11,122	$11,499	$11,890
Capital funded through rates	$500	$2,412	$2,552	$2,594	$2,782	$2,828	$2,977	$3,027	$3,178	$3,232
Taxes and transfers	$1,219	$1,108	$1,124	$1,141	$1,174	$1,191	$1,209	$1,226	$1,244	$1,262
Debt service	$477	$742	$761	$349	$185	$176	$166	$166	$166	$166
Total expenditures	$12,166	$12,594	$13,048	$13,398	$14,207	$14,601	$15,109	$15,541	$16,088	$16,550
Cumulative balance (deficiency) of funds	($34)	($2,747)	($3,039)	($3,223)	($3,687)	($3,902)	($4,227)	($4,472)	($4,826)	($5,091)
Cumulative deficiency (balance) as a percentage of rates	0.4%	34.8%	38.0%	39.7%	44.1%	46.0%	49.1%	51.1%	54.4%	56.5%
Proposed rate adjustment	0.0%	40.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Rate revenue after adjustment	$0	$3,155	$3,482	$3,825	$4,563	$4,959	$5,374	$5,809	$6,265	$6,743

Table 10-9. Large CIP revenue requirement analysis

Table values in $1,000s	Forecast									
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue										
Surface water rate revenue at current rates	$8,561	$7,886	$8,004	$8,123	$8,367	$8,492	$8,618	$8,746	$8,877	$9,009
Non-rate revenue	$3,571	$1,961	$2,006	$2,053	$2,159	$2,216	$2,276	$2,340	$2,408	$2,480
Total revenue	$12,132	$9,847	$10,010	$10,176	$10,526	$10,708	$10,894	$11,087	$11,285	$11,489
Expenditures										
Operating expenses	$9,970	$8,429	$8,711	$9,419	$10,289	$10,638	$10,999	$11,372	$11,759	$12,159
Capital funded through rates	$500	$6,212	$6,352	$6,494	$6,882	$7,028	$7,177	$7,327	$7,578	$7,732
Taxes and transfers	$1,219	$1,108	$1,124	$1,141	$1,174	$1,191	$1,209	$1,226	$1,244	$1,262
Debt service	$477	$742	$761	$349	$185	$176	$166	$166	$166	$166
Total expenditures	$12,166	$16,490	$16,949	$17,402	$18,531	$19,033	$19,550	$20,091	$20,747	$21,319
Cumulative balance (deficiency) of funds	($34)	($6,643)	($6,939)	($7,226)	($8,004)	($8,326)	($8,656)	($9,004)	($9,462)	($9,830)
Cumulative balance (deficiency) as a percentage of rates	0.4%	84.2%	86.7%	89.0%	95.7%	98.0%	100.4%	102.9%	106.6%	109.1%
Proposed rate adjustment	0.0%	98.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Rate revenue after adjustment	$0	$7,729	$8,240	$8,775	$9,919	$10,531	$11,171	$11,839	$12,538	$13,268

Figure 10-3 illustrates the Baseline, Small, Medium, and Large CIP scenario revenue requirement from FY 2020 to FY 2030.

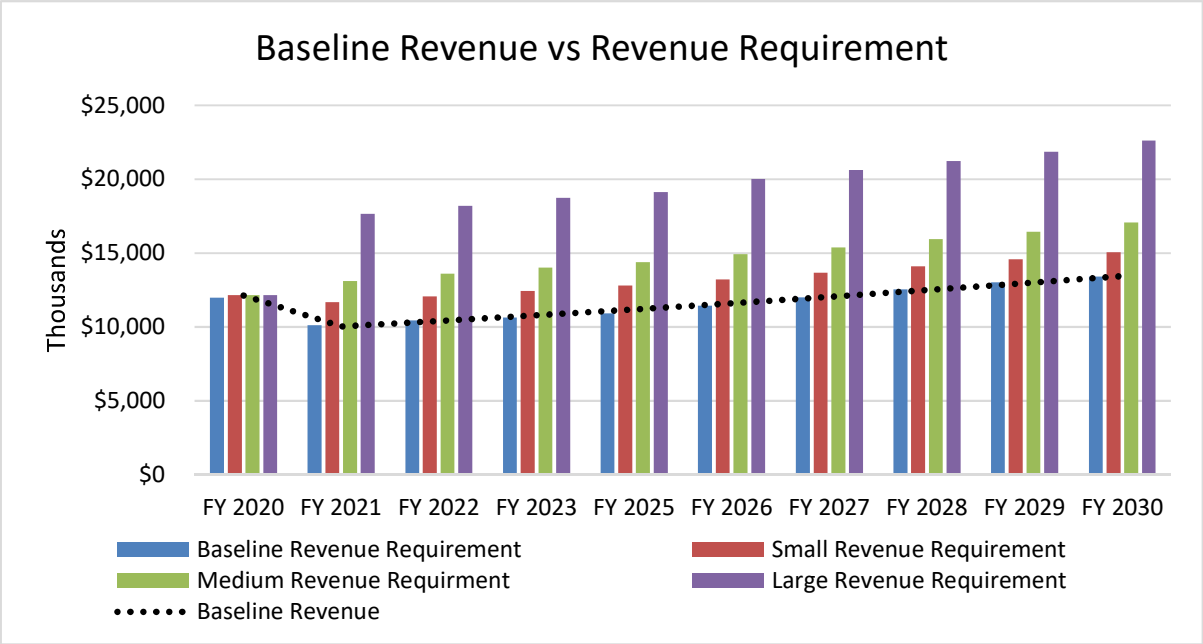

Figure 10-3. Baseline revenue versus revenue needs

The Baseline scenario assumes rate increases equal to what is likely to be implemented based on the City's current policy on rates. As can be expected, the differences in the percentage change in rates between the Baseline and each of the Small, Medium, and Large scenarios is due to the increased CIP expenditures. Other alternative funding sources like grants were not assumed during the analysis period for any of the scenarios as they are not guaranteed in the future. If other alternative funding sources were identified and successfully awarded it could reduce future overall rate adjustments. Table 10-10 shows the revenue adjustment for each CIP scenario as a percentage of rate revenue.

Table 10-10. Revenue adjustment as a percentage of rates

CIP scenario	2021	2022	2023	2024	2025	2026
Baseline	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Small	21.0%	2.5%	2.5%	2.5%	2.5%	2.5%
Medium	40.0%	2.5%	2.5%	2.5%	2.5%	2.5%
Large	98.0%	2.5%	2.5%	2.5%	2.5%	2.5%

10.5 Cost of Service

A cost-of-service analysis determines the equity between a utility's customer classes of service. While the revenue requirement is a projection over several future years, a cost-of-service

analysis is a snapshot in a point of time, for the cost-of-service test period. The test period is a single period chosen from one of the years from the previously developed revenue requirement. The test year for the cost-of-service analysis was chosen to be 2021. Additional assumptions used for the development of a cost-of-service analysis are assumptions related to the design of the stormwater system and customer characteristics.

10.5.1 Customer Characteristics

The first step of a cost-of-service analysis is to determine the customer classes of service, or rate schedules, for the analysis. To do this an analysis of the City's customers was conducted to determine if the current customer classes of service are appropriate for the cost-of-service analysis. The current classes of service are small footprint, medium footprint, and large footprint.

The small footprint customer class comprises 13 percent of the total number of customers and 1.6 percent of the total square feet of hard surface. The medium footprint customer class is the largest customer class by number of customers, totaling 70 percent of all customers but only comprises 18.6 percent of the total square footage of hard surface.

The medium footprint customer class includes the majority of single family customers given the range of impervious areas that the medium footprint includes. Figure 10-4 shows the historical medium footprint rates.

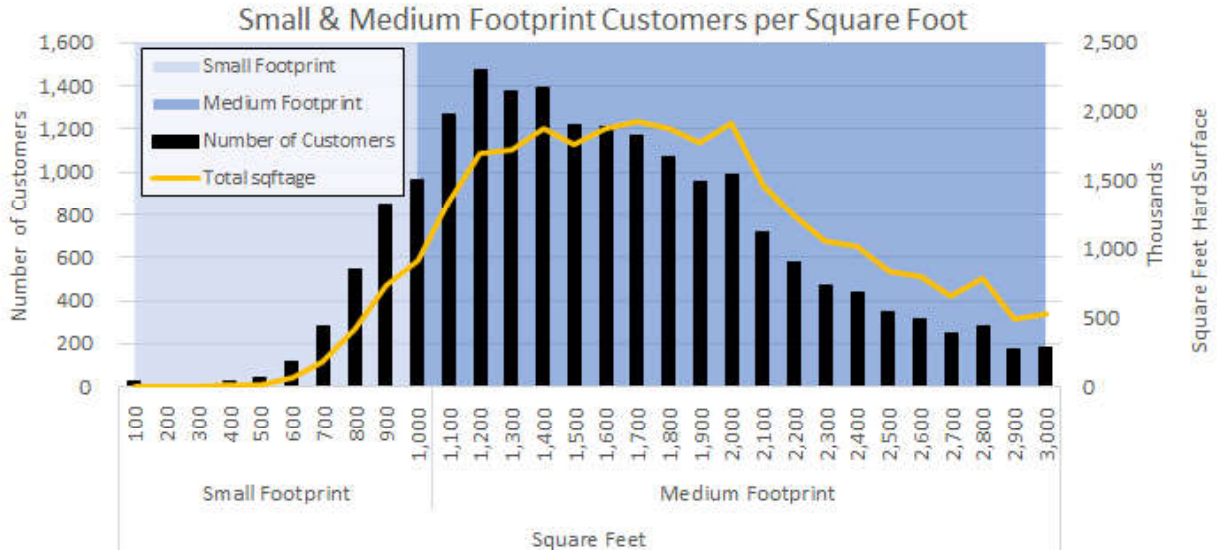

Figure 10-4. Historical medium footprint (single-family) monthly rates

Figure 10-4 shows how small and medium footprint customer classes compare by number of customers and the square footage of hard surface.

Large footprint customers include all customers with 3,000 ft^2 of hard surface and greater. The large footprint customer class differs from the small and medium footprint customer classes by charging each customer by square footage of hard surface rather than a flat rate per customer. The large footprint customer class comprises 17.3 percent of total customer accounts and

nearly 80 percent of total square footage of hard surface. Figure 10-5 shows the large footprint customer data for 3,000 to 25,000 ft².

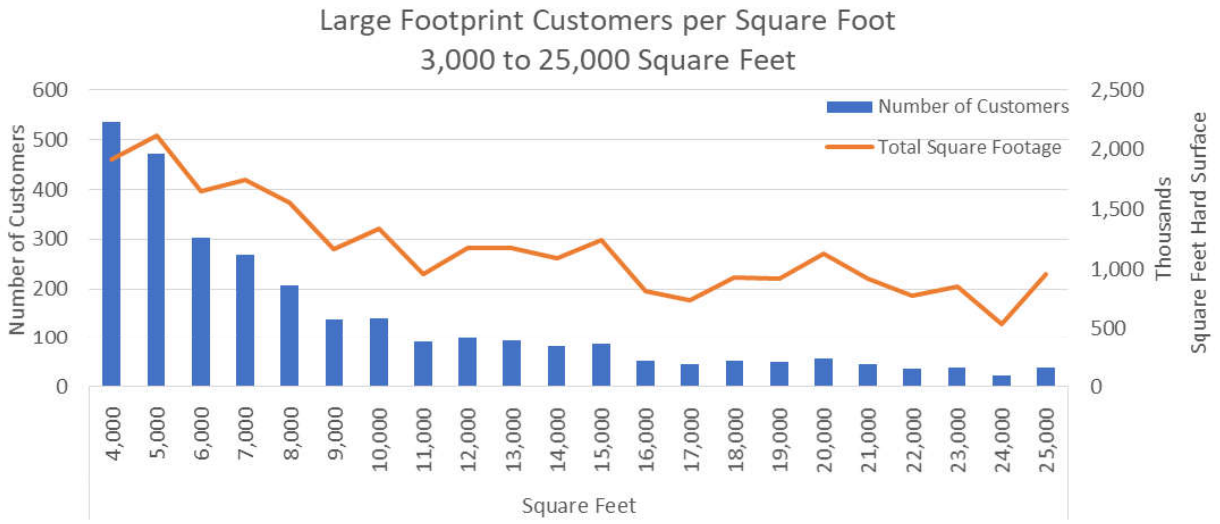

Figure 10-5. Historical large footprint (single-family) monthly rates

Figure 10-5 shows both the number of customers per size of hard surface and the total square feet per customer size. Figure 10-6 shows the large footprint customer data for greater than 30,000 ft².

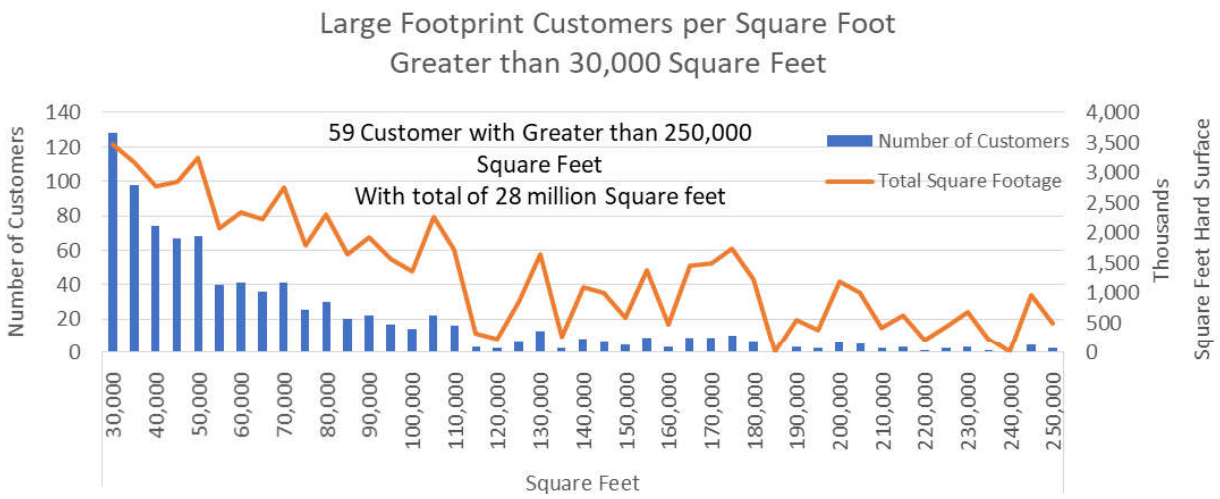

Figure 10-6. Historical large footprint (single-family) monthly rates

Figure 10-6 shows the customer characteristics for customers between 30,000 and 250,000 ft² of hard surface. There are 59 customers more with impervious surface area above 250,000 ft² not shown in the above figure.

10.5.2 Conducting a Cost-of-Service Analysis

A cost-of-service analysis consists of the three steps: functionalization, allocation, and distribution of costs.

Functionalization

The first analytical step in the cost-of-service process is called functionalization. Functionalization is the arrangement of expenses and asset (e.g., wells, distribution system) data by major operating functions (e.g., conveyance, retention, etc.).

Allocation

The second analytical task performed in a cost-of-service analysis is the allocation of the costs. The allocation of costs examines why the expenses were incurred or what type of need is being met. The allocation of costs is a critical step in developing cost-based and proportional rates for each customer class of service as utilities do not track costs by customer type. The following cost allocators were used to develop the cost-of-service analysis:

- **Impervious surface area:** Impervious surface area costs are the costs associated with the amount of impervious area associated with each customer class. Impervious surfaces are the main driver behind the overall volume of stormwater that ultimately flows through the City's stormwater system.
- **Customer-related:** Some costs associated with the surface water utility may vary with the number of customers within the stormwater system. They do not vary with system output or volume levels. An example of customer-related costs are the costs related to producing customer bills.
- **Revenue-related:** Some costs associated with the surface water utility vary with the amount of revenue-related costs. An example of this is state utility taxes, which are calculated based on gross revenue.

Table 10-11 provides the allocation of costs for each of the scenarios.

Table 10-11. Allocation of costs by scenario

Classification ($1,000s)	Impervious area	Customer-related	Revenue-related
Baseline CIP			
Small footprint	$117	$48	$0
Medium footprint	1,315	268	0
Large footprint	6,055	71	0
Publicly funded educational institutions	208	0	0
Total	**$7,696**	**$388**	**$0**
Small CIP			
Small footprint	$139	$49	$0
Medium footprint	1,563	272	0
Large footprint	7,199	72	0
Publicly funded educational institutions	247	0	0
Total	$9,148	$394	$0
Medium CIP			
Small footprint	$162	$50	$0
Medium footprint	1,818	278	0
Large footprint	8,371	74	0
Publicly funded educational institutions	288	0	0
Total	$10,639	$402	$0
Large CIP			
Small footprint	$231	$53	$0
Medium footprint	2,595	295	0
Large footprint	11,951	78	0
Publicly funded educational institutions	411	0	0
Total	$15,188	$427	$0

Publicly funded educational institutions is not a separate class of service but was analyzed separately to assess their cost of service in light of the publicly funded institution credit provided.

Distribution of Costs

Once the allocation process is complete, and the customer groups have been defined, the various allocated costs were distributed to each customer group. The City's allocated costs were allocated to the previously identified customer groups using the following distribution factors.

Impervious Surface Area Distribution Factor. To establish the impervious surface factor, each customer class's impervious surface area is added up and compared to the impervious surface as a whole. The result is a percentage that can be applied to the allocated costs. Table 10-12 provides the breakdown of the impervious surface area distribution factor by customer class.

Table 10-12. Impervious surface area distribution factor

Classification ($1,000s)	Square feet of impervious surface	Percentage of impervious surface
Small footprint	2,489,218	1.5%
Medium footprint	27,950,036	17.1%
Large footprint	128,700,724	78.7%
Publicly funded educational institutions	4,421,630	2.7%
Total	163,561,607	100.0%

Customer-Related Factor. The customer-related factor is used to distribute costs that have been allocated as customer costs to individual customer classes of service. Table 10-13 provides the breakdown by customer class of the customer distribution factor.

Table 10-13. Customer distribution factor

Classification ($1,000s)	Number of customers	Percentage of customers
Small footprint	3,016	12.5%
Medium footprint	16,665	69.1%
Large footprint	4,426	18.3%
Publicly funded educational institutions	25	0.1%
Total	24,132	100.0%

Revenue-Related Factor. The revenue-related factor is another factor commonly used to distribute costs to customer classes. This factor is based on the amount of revenue generated for each customer class. Table 10-14 shows revenue-related distribution factor.

Table 10-14. Revenue-related distribution factor

Classification ($1,000s)	Revenue	Percentage of revenue
Small footprint	$246	3.1%
Medium footprint	2,294	29.1%
Large footprint	5,290	67.1%
Publicly funded educational institutions	56	0.7%
Total	$7,886	100.0%

Table 10-15 provides the results of the allocation and distribution of those costs to each customer class for the impervious surface costs. The majority of costs were allocated as impervious area, which is very common among surface water cost-of-service studies. The logic behind this method for cost allocation is that if not for impervious surfaces the "urban" surface water drainage structures would not be necessary. While this may not be completely the case for every surface water system, it is an industry standard approach to quantify customers' impact on the surface water system. Customer- and revenue-related allocated costs made up a much smaller portion of the total system costs. Table 10-16 shows distribution of the allocated customer-related costs.

Table 10-15. Distribution of impervious area among customer classes by scenario

Classification ($1,000s)	Percent impervious	Baseline	Small CIP	Medium CIP	Large CIP
Small footprint	1.5%	$117	$139	$162	$231
Medium footprint	17.1%	1,315	1,563	1,818	2,595
Large footprint	78.7%	6,055	7,199	8,371	11,951
Publicly funded educational institutions	2.7%	208	247	288	411
Total	100.0%	$7,696	$9,148	$10,639	$15,188

Table 10-16. Distribution of the allocated customer-related costs

Classification ($1,000s)	Percentage of customers	Baseline	Small CIP	Medium CIP	Large CIP
Small footprint	12.5%	$48	$49	$50	$53
Medium footprint	69.1%	268	272	278	295
Large footprint	18.3%	71	72	74	78
Publicly funded educational institutions	0.1%	0	0	0	0
Total	100.0%	$388	$394	$402	$427

Table 10-17 provides the results of the cost-of-service analysis. The table compares the customer current revenue to the allocated revenue and provides the percent change in rate needed to bring the rate up to their cost of service. It is generally believed that if a customer class is within 5 percent of the overall rate adjustment, it is within an acceptable range to be considered at the cost of service.

Table 10-17. Cost-of-service analysis results

Cost-of-service summary	Small footprint	Medium footprint	Large footprint	Publicly funded educational institutions	Total
Revenues at present rates	$246	$2,294	$5,290	$56	$7,886
Baseline					
Allocated costs	$166	$1,583	$6,126	$208	$8,084
$ change	($81)	($711)	$837	$152	$197
Percent change	-32.8%	-31.0%	15.8%	271.9%	2.5%
Small					
Allocated costs	$188	$1,835	$7,271	$248	$9,542
$ change	($58)	($459)	$1,981	$192	$1,656
Percent change	-23.5%	-20.0%	37.5%	342.0%	21.0%
Medium					
Allocated costs	$212	$2,096	$8,445	$288	$11,041
$ change	($34)	($199)	$3,155	$232	$3,155
Percent change	-13.9%	-8.7%	59.7%	413.9%	40.0%
Large					

Cost-of-service summary	Small footprint	Medium footprint	Large footprint	Publicly funded educational institutions	Total
Allocated costs	$285	$2,890	$12,029	$411	$15,615
$ change	$38	$596	$6,739	$355	$7,729
Percent change	15.4%	26.0%	127.4%	633.4%	98.0%

Note: Table values in $1,000s.

The final component of a cost-of-service study is the development of unit costs. Table 10-18 provides the unit costs for the cost-of-service results and is useful for comparing customer classes to each other on a common basis, such as their cost per acre of impervious surface area or their cost per acre in total.

Table 10-18. Cost-of-service unit costs: Small CIP scenario

Unit cost summary	Current revenue per unit		Cost-of-service results per unit		
	Current revenue/ft²	Current revenue/ customer	Impervious area cost/ft² impervious	Customer- and revenue-related cost/ customer	Total cost/ customer
Small footprint	$0.83	$6.81	$0.47	$1.36	$5.21
Medium footprint	$0.68	$11.47	$0.47	$1.36	$9.18
Large footprint	$0.34	$99.59	$0.47	$1.36	$136.90
Publicly funded educational institutions	$0.11	$186.81	$0.47	$1.36	$825.73

10.6 Stormwater Rates

The City's current rate structure is based on size of hard surface and consists of three rate categories of small, medium, and large footprint. Small and medium footprint customers are charged a flat rate bimonthly, per parcel, per customer depending on the size of the square footage of hard surface. Large footprint is also charged bimonthly but charged per square foot of impervious surface.

10.6.1 Current Rates

Small footprint customers are charged $14 per 2-month period for square footage up to 1,000 ft². Medium footprint charges $23.32 for a 2-month period for square footage of hard surface between 1,001 and 2,999 ft². Large footprint customers pay $0.00778 per 1 ft² of hard surface per 2 months. Table 10-19 provides the current rates with their defined ranges of impervious surface if applicable. Publicly funded educational institutions are contained within the large footprint class of service but receive a 70 percent credit from the City.

Table 10-19. Current (2020) rates

Rate category	Rate description	Rate	Rate type
Small footprint	Impervious surface less than 1,000 ft^2	$14.00	Per parcel/bimonthly
Medium footprint	Impervious Surface 1,001–2,999 ft^2	$23.32	Per parcel/bimonthly
Large footprint	Impervious surface greater than 3,000 ft^2	$0.00778	Per ft^2/bimonthly

10.6.2 Historical Rates

Over the past 8 years the City has adjusted its rates annually. The rate increases have varied in size over the 8-year period ranging from $0.53 to $2.94 bimonthly and averaging an increase of $1.33 per billing period (bimonthly) for medium footprint. As rates have been increased over the last 8 years the proportional relationship between the small, medium, and large footprint stormwater rates has not changed. The lack of a change in proportionality between customer classes is indicative that there have been no adjustments to account for the cost of service among the City's customer classes. Figure 10-7 shows the rates from 2012 to 2020.

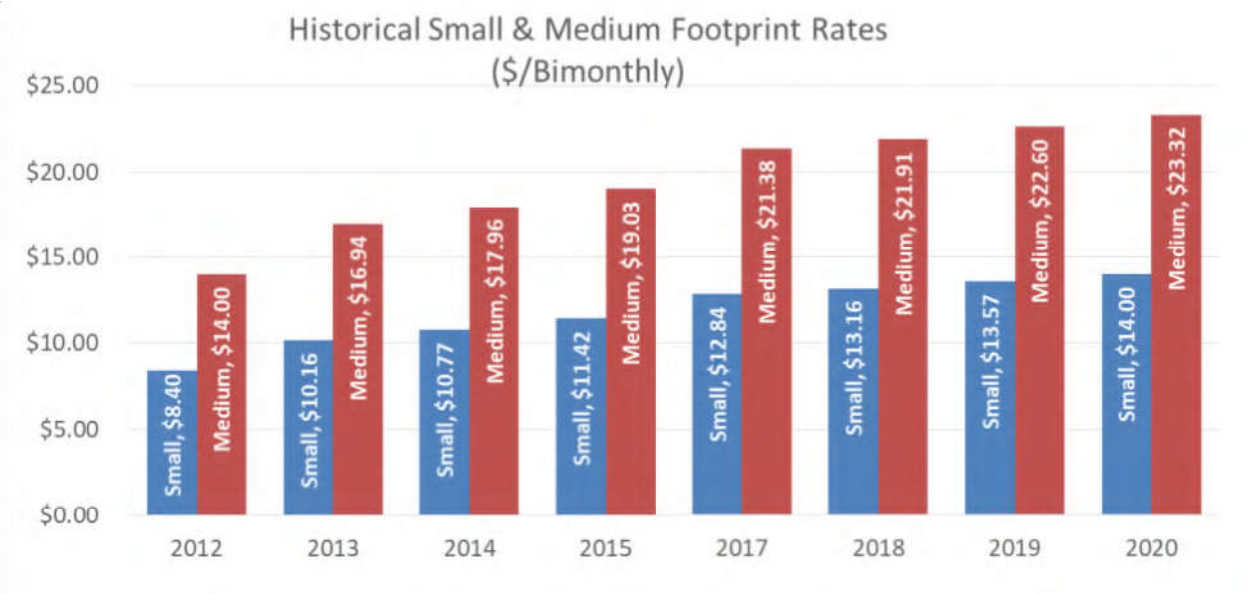

Figure 10-7. Historical small and medium footprint (single-family) monthly rates

Figure 10-8 shows the large footprint bimonthly rates from 2012 to 2020.

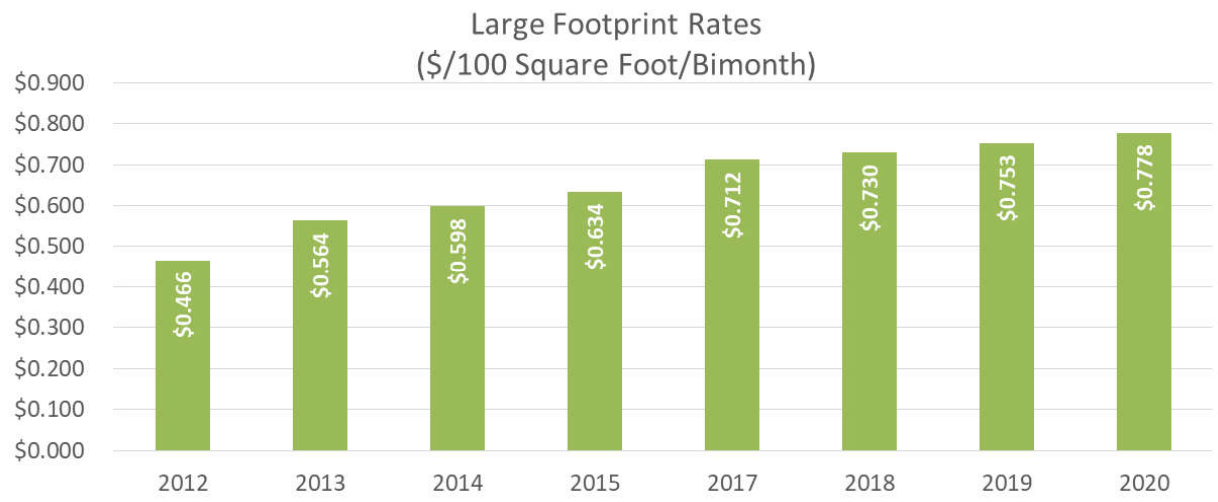

Figure 10-8. Historical large footprint bimonthly rates

10.7 Development of Rate Design

There are several factors around which rates may be set. The cost-of-service analysis provides cost-based rates through the development of unit costs. However, several other factors may be considered when designing rates. Washington State law gives cities flexibility when setting rates, leaving the City to consider factors other than strictly cost of service. The primary goal the City has indicated for this study is to set the rates at a level sufficient to fund the capital needs, in addition to maintaining compliance with the Phase II Permit and current O&M practices. Four rate alternatives have been prepared corresponding to the four levels of capital funding. The City has indicated that one principle it would like to pursue when designing rates is keeping rates stable from year to year from the customer's perspective.

To accommodate the goal of stable rates over time rate designs were developed to phase in over a period of time to transition to more cost-based rates. As shown in the cost-of-service analysis small and medium footprint customer class rates are greater than their cost of service while large footprint customer class rates are less than their cost of service. Rather than reducing small and medium rates, small and medium rates were held flat over a period until their rate would be greater than their current rate. Conversely, large footprint rates would be increased at a slower rate than indicated by the cost of service until small and medium footprint rates catch up with their cost of service.

10.7.1 Exemption, Credits, and Adjustments

The City currently provides several credits that can be applied against customers' bimonthly stormwater bills. The City proposes making some changes to the credits contained in the BMC, which are provided in Table 10-20. Table 10-20 shows existing stormwater rate credits and whether the credits should be maintained or eliminated.

Table 10-20. Rate credits

Credit	Maintain	Eliminate
B Credits for qualified existing stormwater facilities, which includes:		
1. Any property with properly maintained water quantity and quality facility that meets or exceeds the design requirements of the 1992 Department of Ecology Stormwater Technical Manual		✓
2. Any property that has an active and valid NPDES permit		✓
C Credits for qualified existing stormwater facilities with special discharge limits		
1. Discharge directly into marine waters or waters under tidal influence with no connection to the city systems	✓	
2. Discharge of stormwater is to an infiltration facility meeting the requirements of Ecology for stormwater treatment and groundwater protection	✓	
D Public education credits. Credit is provided a reimbursement of the cost of environmental science curriculum.		✓
E Special credits for partially gravel or approved pervious surfacing.		
1. The customer has at least 6,000 ft^2 of gravel for the 20% credits.		✓
2. Pervious surfaces meeting infiltration standards receive a credit 50% on the pervious surface square footage.		✓

Table 10-20 shows which credits it intends to maintain and which it intends to eliminate. These changes to the credits were decided based on a variety of reasons including the effectiveness of the credits, impact on the City's stormwater system, and because the initial purpose of the credit was to encourage stormwater mitigation facilities now required by Ecology's current recommendations and requirements in the Phase II Permit. The City also provides a credit for lower-income and senior citizens but currently does not have this credit in the BMC. The City intends to maintain this credit and add it to the BMC. Eliminating the proposed credits increases the revenue collected within the large footprint customer class, resulting in a reduction in the rate impact for the large footprint class of service due to the resulting increase in revenue. At present rate levels, the elimination of these credits results in an increase of approximately $500,000 in revenue per year.

Another change to the credits provided in the BMC is to address RCW 35.67.020 Section 3. This section states:

> The rate a city or town may charge under this section for storm or surface water sewer systems or the portion of the rate allocable to the storm or surface water sewer system of combined sanitary sewage and storm or surface water sewer systems shall be reduced by a minimum of ten percent for any new or remodeled commercial building that utilizes a permissive rainwater harvesting system. Rainwater harvesting systems shall be properly sized to utilize the available

> roof surface of the building. The jurisdiction shall consider rate reductions in excess of ten percent dependent upon the amount of rainwater harvested.

The City interprets the above RCW as meaning that the rainwater harvesting system is to be an offset to potable water use. The credits to be eliminated do not apply to this RCW.

Publicly Funded Primary and Secondary Educational Institution Credits

The City has a Public Education Credit up to 70 percent available to the school district provided that the school district's curriculum includes environmental science. The credit is essentially a reimbursement of costs incurred by the school district providing an environmental science curriculum and specifically the cause and effect of stormwater pollution. This credit is provided in BMC 15.16.040. Eliminating this credit would require council action to change the municipal code. The BMC states that the amount of the credit is established by a contract between the City and the school.

The contract that is currently active became effective in 2001 through 2003 with automatic extensions each year following 2003. Per Section VI of the contract, the contract can be terminated by either party with or without cause upon 30 days' written notice to the other party. This credit is not provided to the school district because it has a lower cost of service but rather was a policy decision to provide the credit to encourage curriculum for environmental science. Prior to the credit the school district pays approximately $200,000. The school district then applies for reimbursement of approximately $140,000 showing the costs it wishes to be reimbursed.

This analysis leaves publicly funded primary and secondary education institutions in the large footprint class of service and phases out the credit over a 4-year period. Table 10-21 shows the publicly funded primary and secondary educational institution credit phase-out schedule.

Table 10-21. Publicly funded primary and secondary educational institution credit phase-out schedule

2020 (current)	2021	2022	2023	2024
70%	53%	35%	18%	0%

10.7.2 Charges for Streets and Highways

The City currently charges WSDOT for the areas within the city. Washington State law, RCW 90.03.525, stipulates that WSDOT properties including state highway ROW or any section of state highway ROW for the construction, operation, and maintenance of stormwater control facilities be charged 30 percent of the comparable rate and further stipulates that if WSDOT is charged for stormwater, the City must also charge City streets. Some cities choose to charge WSDOT and by extension their own streets while others do not. WSDOT revenue was approximately $73,000 while the City's street department pays approximately $718,000 annually at its current rate out of the street fund, which is funded from general taxes originating from the City's General Fund. If the street department is not charged for stormwater, the City's General Fund will benefit from the reduction in charges. Recently RCW

90.03.525 was amended, adding conditions and restriction to paragraph 2 of that section requiring cities that charge WSDOT for stormwater to use that revenue for stormwater control facilities that directly reduce state highway runoff impacts or implementation of BMPs that will reduce the need for such facilities and, in coordination with WSDOT, develop a plan for the expenditure of the charges for that calendar year. Because the requirements have become more onerous to continue to charge WSDOT the City no longer is required to charge the City's streets department for stormwater. For this analysis, the City would no longer charge either WSDOT or the City's street department. As a result, the stormwater department will lose approximately $800,000, which is the City street department and WSDOT revenue combined. Losing the $800,000 will require stormwater rates to be increased to offset the loss.

10.7.3 Rate Scenarios

The scenarios for Baseline, Small CIP, Medium CIP, and Large CIP were reviewed for both the cost of service rate design results and the phase-in approach for rate designs. Table 10-22 through Table 10-25 show the rates for each of the scenarios.

Table 10-22. Baseline rate design

Rate class	Current	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Baseline							
Small footprint (0–1,000 ft²)/month							
Cost of service	$14.00	$9.41	$9.64	$9.88	$10.13	$10.38	$10.64
Phase-in approach	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00
Medium footprint (1,001–2,999 ft²)/month							
Cost of service	$23.32	$16.09	$16.49	$16.91	$17.33	$17.76	$18.21
Phase-in approach	$23.32	$23.32	$23.32	$23.32	$23.32	$23.32	$23.32
Large footprint (greater than 3,000 ft²)/month							
Cost of service	$0.778	$0.857	$0.874	$0.896	$0.917	$0.939	$0.963
Phase-in approach	$0.778	$0.778	$0.778	$0.805	$0.830	$0.858	$0.888

The City currently has a policy to adjust rates annually at the same rate as CPI. The Baseline scenario assumes that overall, revenue will increase at CPI in line with the City's policy but individual customer classes will adjust based on cost-of-service results. With that, small and medium footprint customer class rates would decrease while large footprint rates would increase, resulting in an overall increase in rate revenue equal to CPI. The phase-in approach shown on Table 10-22 differs on the implementation of the cost of service by leaving small and

medium footprint steady while increasing large footprint rates to a lesser extent than the pure cost-of-service rate scenario while still increasing revenue at CPI.

Table 10-23. Small CIP rates design

Customer class	Current	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Small CIP							
Small footprint (0–1,000 ft²)/month							
Cost of service	$14.00	$10.71	$10.97	$11.25	$11.53	$11.82	$12.11
Phase-in approach	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00
Medium footprint (1,001–2,999 ft²)/month							
Cost of service	$23.32	$18.66	$19.12	$19.60	$20.09	$20.59	$21.11
Phase-in approach	$23.32	$23.32	$23.32	$23.32	$23.32	$23.32	$23.32
Large footprint (greater than 3,000 ft²)/month							
Cost of service	$0.778	$1.017	$1.037	$1.063	$1.088	$1.115	$1.143
Phase-in approach	$0.778	$0.947	$0.980	$1.011	$1.041	$1.074	$1.109

Table 10-23 shows the two rate scenarios for the Small CIP scenario, one that aligns rates with the cost-of-service results in the first year and another where rates for small and medium footprint remain the same, phasing in the rate adjustments over time so that the rate impacts are brought into line with the cost of service over the 6-year period.

Table 10-24. Medium CIP rate design

Customer class	Current	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Medium CIP							
Small footprint (0–1,000 ft²)/month							
Cost of service	$14.00	$12.05	$12.35	$12.66	$12.98	$13.30	$13.63
Phase-in approach	$14.00	$14.00	$14.00	$14.00	$14.00	$14.00	$14.03
Medium footprint (1,001–2,999 ft²)/month							
Cost of service	$23.32	$21.30	$21.83	$22.38	$22.94	$23.51	$24.10
Phase-in approach	$23.32	$23.32	$23.32	$23.32	$23.32	$23.51	$24.10
Large footprint (greater than 3,000 ft²)/month							
Cost of service	$0.778	$1.182	$1.205	$1.235	$1.263	$1.295	$1.327
Phase-in approach	$0.778	$1.150	$1.188	$1.224	$1.258	$1.293	$1.327

Table 10-24 shows the rate scenarios similar to the Medium CIP scenario, with a scenario that follows the cost-of-service results and another that phases in the cost-of-service results over the 6-year period.

Table 10-25. Large CIP rate design

Customer class	Current	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Large CIP							
Small footprint (0–1,000 ft²)/month							
Cost of service	$14.00	$16.16	$16.56	$16.98	$17.40	$17.84	$18.28
Phase-in approach	$14.00	$16.16	$16.56	$16.98	$17.40	$17.84	$18.28
Medium footprint (1,001–2,999 ft²)/month							
Cost of service	$23.32	$29.38	$30.11	$30.87	$31.64	$32.43	$33.24
Phase-in approach	$23.32	$29.38	$30.11	$30.87	$31.64	$32.43	$33.24
Large footprint (greater than 3,000 ft²)/month							
Cost of service	$0.778	$1.683	$1.717	$1.759	$1.800	$1.845	$1.891
Phase-in approach	$0.778	$1.683	$1.717	$1.720	$1.803	$1.845	$1.835

Table 10-25 shows the rate scenarios for the Large CIP scenario similar to the Small and Medium CIP scenarios, with both a cost-of-service and a phased-in approach. The results of the Large CIP scenario do differ from the Small and Medium CIP rate scenarios because each class of service requires a rate increase, whereas the Small and Medium CIP scenarios did not.

The Baseline scenario is the lowest overall rate adjustment and the impact of the phase-in approach to the rates is the most pronounced. The small and medium footprint rates do not catch up over the 6-year period to the cost of service.

10.7.4 Comparisons with Other Cities

Several western Washington cities' stormwater rates were compiled to compare how Bellingham's stormwater current and proposed rates compare. Figure 10-9 shows a survey of monthly stormwater rates for single-family or moderately developed or medium footprint as a comparison to the City's current rates.

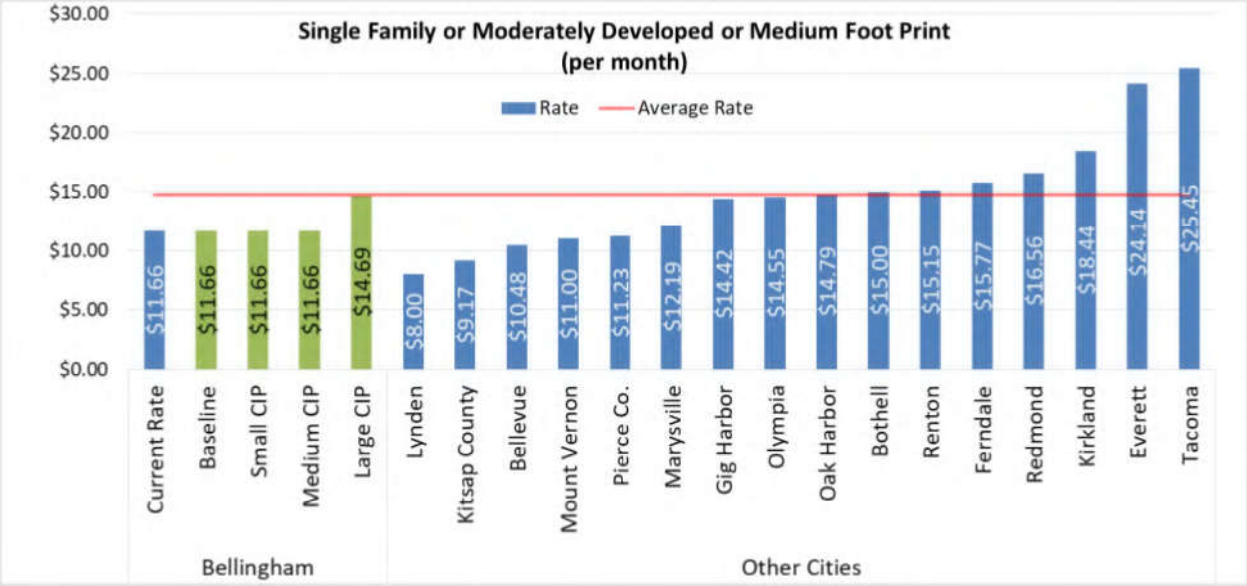

Figure 10-9. Survey of single-family or moderately developed or medium footprint (per month)

The City's rates in Figure 10-9 are provided on a monthly basis for comparison purposes.

The City's current and proposed stormwater rates are at or below the average of several western Washington communities. The average among the communities surveyed was approximately $15 per month. The Cities of Everett and Tacoma were particularly high when compared to the other cities surveyed. Excluding Everett and Tacoma, the average stormwater rate was $13.34. It should be noted that comparing rates with other cities gives some context, but it ignores underlying factors that dictate the level at which the rates are set. Factors that may play a significant factor in the level at which stormwater rates are set include geology, topography, age of the system, how well the system has been maintained, and to what degree the city goes to manage its stormwater system.

An important consideration when setting rates is affordability. The affordability of utility rates has been a subject of increasing importance as utility rates have increased significantly in recent times. While there have been some studies of affordability for other utilities such as water and sewer, the stormwater rates have not been included in these studies. One reason for the lack of information on affordability in stormwater rates is that stormwater rates are typically much lower than water or sewer rates and stormwater utilities have become prevalent only in the last 20 to 30 years.

What is considered affordable can be an abstract concept. The most common way of viewing affordability is as a percentage of MHI. MHI is not a perfect measure of affordability but it does provide some insight. According to the American Water Works Association (AWWA), water and sewer rates are assumed to be affordable below 4.0 percent of MHI. A similar measure of affordability has not been established for stormwater rates. There is still value in incorporating MHI when comparing rates among other cities. Figure 10-10 shows how other western Washington cities compare when factoring in MHI. Figure 10-10 shows the stormwater rates for the City and other cities as a percentage of MHI as a comparison.

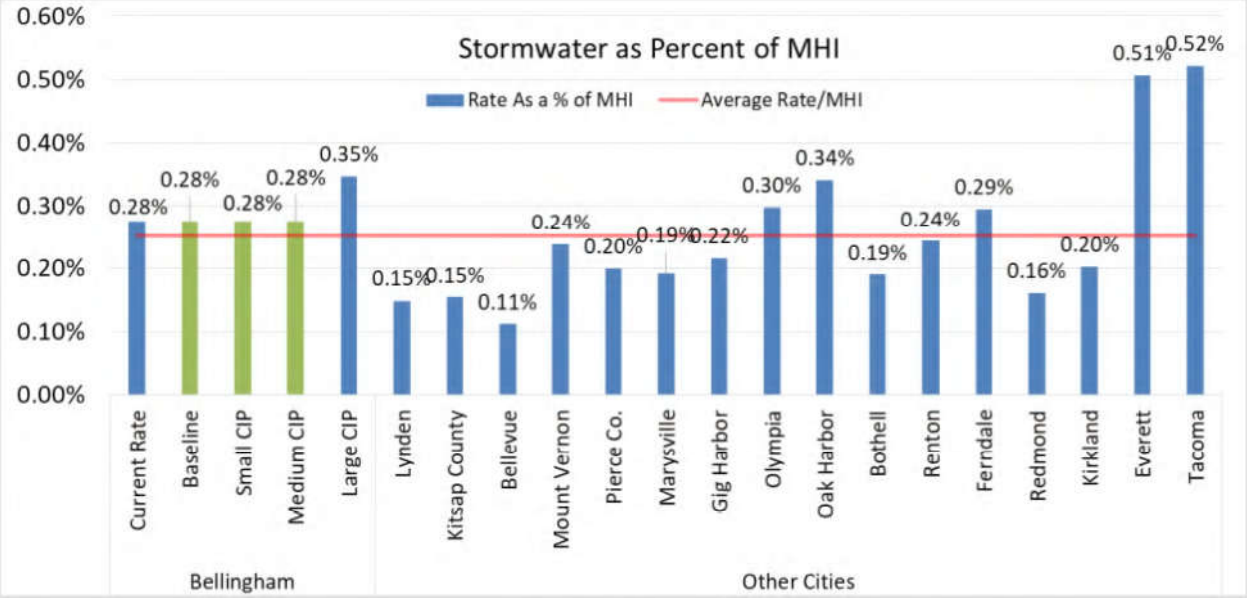

Figure 10-10. Stormwater as a percentage of median household income

Figure 10-10 does not say what is affordable but rather gives a sense of where Bellingham's stormwater rates are compared to other cities when incorporating MHI. MHI varies widely among the cities studied and Bellingham is on the lower end of the spectrum with an MHI of approximately $51,000 compared to the average of $76,000. To help get a sense of context it is helpful to consider other customer bills as a percentage of MHI. As a percentage of MHI, wireless phone is 2.5 percent, cable/satellite television is 1.5 percent, and general utilities and public transportation are 7.7 percent according to expenditures from the U.S. Bureau of Labor Statistics (U.S. Bureau of Labor Statistics 2019) and MHI from the U.S. Census Bureau (U.S. Census Bureau 2019).

10.8 System Development Charges

An important part of the City's CIP is how the City intends to fund the needed projects. One funding source that many utilities employ is through SDCs. SDCs are a one-time charge for new developments or connections to the system. An SDC is intended to accomplish two things: pay back existing customers' investment for excess capacity in the system and create a funding source for future capital projects that increase system capacity.

10.8.1 Defining System Development Charges

The first step in establishing cost-based SDCs is to gain a better understanding of what they are and what they are not. An SDC is defined as follows:

> System development charge are one-time charges paid by new development to finance construction of public facilities needed to serve them (Nelson 1995)

Put another way, SDCs are contributed capital to either reimburse existing customers for the available capacity in the existing system, or help finance planned future growth-related capital projects. An SDC is not a revenue source for the utility to fund ongoing operations and maintenance. Not charging an SDC or charging an outdated fee puts the burden of development on ratepayers and not on those who are causing the need for expansion.

10.8.2 Economic Theory and System Development Charges

SDCs are generally imposed as a condition of service. The objective of SDCs is not to generate revenue for the utility, but to create fiscal balance between existing customers and new customers so that all customers seeking to connect to the utility's system bear an equitable share of the cost of capacity that is invested in both the existing and any future growth-related expansion. Through the implementation of equitable SDCs, existing customers will not be unduly burdened with the cost of new development. By updating the SDC, the City continues an important step in providing adequate infrastructure to meet growth-related needs while providing the infrastructure to new customers in a cost-based and equitable manner.

10.8.3 System Development Charge Criteria

Several criteria are considered when determining an SDC, including the following:

- State/local laws
- System planning criteria
- Financing criteria
- Customer understanding

Many state and local communities have enacted laws that govern the calculation and imposition of SDCs. These laws must be followed in the development of SDCs. For utilities in Washington, RCW 35.92.025 provides the approach to establishing SDCs. Washington State law allows historical asset costs to include 10 years' worth of interest. This calculation is done to reflect the fact that existing customers have provided for excess capacity in the system and hence need to be reimbursed for not only their initial investment, but also the "carrying cost"

on that investment. The reimbursement to existing customers is accomplished by the fact that without SDCs, rates would otherwise be higher than they would be with SDCs. Inclusion of interest in future capital costs reflects the method used to finance the plant and hence the "true cost" to construct future infrastructure. The basic principle that needs to be followed under Washington State law is that the charge be based on a proportionate share of the costs of the system required to provide service and that adoption of charges and accounting be in compliance with State of Washington law.

The use of system planning criteria is an important aspect in calculating SDCs. System planning documents provide the criteria basis for the rational nexus between the amount of infrastructure necessary to provide service and the charge to the customer. The rational nexus test requires that there be a connection (nexus) established between new development and the new or expanded facilities required to accommodate new development, and appropriate apportionment of the cost to the new development in relation to benefits reasonably received.

The financing criteria for establishing SDCs relates to the method used to finance infrastructure on the system and ensures that customers are not paying twice for infrastructure—once through SDCs and again through rates (i.e., debt service on the financed infrastructure). The financing criteria also contemplate contributed capital and ensure that the customer is not charged for infrastructure that was provided (contributed) by developers.

10.8.4 Existing System Development Charge

The City's SDC currently is $678 for a single-family home and $0.226/ft^2 for other customer types and has remained unchanged since 2005. Under this SDC cost structure it can be implied that a single-family charge is equal to 3,000 ft^2; the charge divided by 3,000 ft^2 equals the per square-foot charge. The current SDC does not match up to the classes of service for usage rates. Missing from the SDC charge is a small footprint rate representing impervious surface with less than 1,000 ft^2.

10.8.5 Calculating the New System Development Charge

The calculation of an SDC is based on a four-step process, summarized as follows:

1. Determine system planning criteria
2. Determine impervious units
3. Calculate system component costs
4. Determine any SDC credits

The City's asset records were used to develop the cost basis to calculate the buy-in component of the SDC. The cost basis is the current value of the City's stormwater system. This value includes all of the assets that make up the stormwater system such as the culverts, catch basin, detention facilities, outfalls, and other components of the stormwater system. The next step is to identify and remove contributed assets donated by developers. After the contributed or donated assets are removed a maximum of 10 years of interest is applied to the remaining original value of the assets. The interest adjusted asset value is $77.7 million.

The capital program developed in this document was used to establish the cost basis for the incremental method for calculating SDCs. Each capital project is examined to determine if and to what extent the project will benefit new development. The capital projects identified as beneficial for new development were determined to be only 13 percent growth-related, so only 13 percent of the capital project cost were included in the SDC calculation.

The final step in calculating the stormwater SDC was to determine if a credit for payment on debt service is applicable for the utility's outstanding and future planned loans and bonds. Credits for debt service payments paid through customer rate revenue are determined to prevent charging the customer twice for debt, once through rates and once through SDCs. Customers pay for debt-financed infrastructure through their monthly utility rates and those costs are removed from the SDC calculation. Total debt is compared with projected annual ERUs to show a dollar per ERU each year.

Based on the sum of the component costs calculated above, the net allowable stormwater SDC can be determined. "Net" refers to the "gross" SDC, net of any debt service credits. "Allowable" refers to the concept that the calculated SDC is the City's cost-based SDC. The City, as a matter of policy, may charge any amount up to the allowable SDC, but not over that amount. Charging an amount greater than the allowable SDC would not meet the nexus test of a cost-based SDC related to the benefit derived by the customer.

Based on City records, there are approximately 154 million ft^2 of hard surface in the city. The net value eligible for SDC is divided by the total impervious surface equaling the SDC by 100 ft^2. Table 10-26 provides the breakdown of the SDC calculation by the four CIP levels.

Table 10-26. SDC calculation

SDC component	Baseline	Small CIP	Medium CIP	Large CIP
Collection system value	$77,766	$77,766	$77,766	$77,766
Eligible capital	0	1,765	2,019	4,221
Outstanding principal	(4,749)	(4,749)	(4,749)	(4,749)
Net allowable SDC asset value	$73,017	$74,782	$75,036	$77,238
Impervious surface (100 ft^2)	154,462,096	154,462,096	154,462,096	154,462,096
SDC per 100 ft^2 of impervious surface	$0.473	$0.484	$0.486	$0.500

With the establishment of the SDC per square feet a small and medium footprint rate can be calculated. The existing single-family SDC is the square footage charge times 3,000. The 3,000 ft^2 is the same impervious area used for the medium footprint customer rate. However, there is not an equivalent SDC for the small footprint customer class. If a small footprint equivalent were to be developed it would be calculated as 1,000 ft^2 times the per square foot SDC charge.

Table 10-27 contains the maximum allowable SDC charges for the four CIP scenarios plus a new charge for the small footprint.

Table 10-27. Maximum allowable SDC charges by CIP scenario

Customer class	Current charge	Baseline	Small	Medium	Large
Small footprint	$678.00	$472.71	$484.14	$485.79	$500.04
Medium footprint	$678.00	$1,418.14	$1,452.42	$1,457.36	$1,500.13
Per square foot	0.226	$0.473	$0.484	$0.486	$0.500

There is not a broad difference between SDCs for the four CIP scenarios. In round terms each of the new SDCs by CIP scenario is more than double the existing SDC with the exception of the newly calculated small footprint SDC. The difference in the SDC lies with the amount of eligible capital. Table 10-28 shows SDC charges by CIP scenario reduced by 25 percent.

Table 10-28. SDC charges by CIP scenario reduced by 25 percent

Customer class	Current charge	Baseline	Small	Medium	Large
Small footprint	$678.00	$354.54	$363.11	$364.34	$375.03
Medium footprint	$678.00	$1,063.61	$1,089.32	$1,093.02	$1,125.10
Per square foot	0.226	$0.355	$0.363	$0.364	$0.375

Table 10-29 provides a more modest increase at 50 percent of the maximum allowable SDC.

Table 10-29. SDC Charges by CIP scenario reduced by 50 percent

Customer class	Current charge	Baseline	Small	Medium	Large
Small footprint	$678.00	$236.36	$242.07	$242.89	$250.02
Medium footprint	$678.00	$709.07	$726.21	$728.68	$750.07
Per square foot	0.226	$0.236	$0.242	$0.243	$0.250

The City can choose a level of subsidy or phase in the full SDC over a few years. As an example, the City can choose to implement the 50 percent subsidy for 2021, then 25 percent for 2022, and then no subsidy for 2023, or any variation as long as the fee does not exceed the maximum allowable fee. Many states including Washington allow cities to update their SDCs annually to reflect the increase in construction costs. Many cities use the Construction Cost Index (CCI) published by the *Engineering News-Record*. It is recommended that a full SDC study be performed when the system or CIP is changed significantly, or in 5 to 10 years.

The City currently has a credit for its SDC available for lower-income housing developments. No change to this credit is proposed. The lower-income SDC credit provides no more than 80 percent of the applicable SDC. This credit is conditioned on the development's housing expenses charged to tenants and can be no more than 30 percent of 80 percent of the median family income adjusted for family size. This credit is provided to developers as an incentive to build lower-income housing. Providing incentives is intended to spur development of lower-income housing, which is in support of the City's Legacies and Strategic Commitments statement under the heading "Equity and Social Justice," where it is stated that the City "supports safe, affordable housing" and "support services for lower income residents." This credit has been used several times in past years helping to provide affordable housing.

10.9 Permit Fees

As part of the cost-of-service analysis the City requested additional assistance with updating its permit fees. Permit fees are customer charges for inspection and plan review of construction activities to ensure that the developer or contractor is adhering to City regulations and standards when impacting the stormwater system. There are general principles for establishing charges:

- The beneficiary of a service should pay for the service
- Services provided for benefit of specific individuals or groups should not be paid with general utility revenue
- Services provided to a person or entity that are not customers of the utility should not be paid for by general utility revenue
- Services for where there are charges are generally voluntary
- The price of a service may be used to change user behavior and demand for the good or service
- The level-of-service charges should be related to the cost of providing the service
- The cost of administering the charge should not exceed the revenue

The above are general principles for setting fees or charges, but there is not a legal requirement to adhere to any of them. There are a number of ways utilities set permit fees such as establishing an average hourly cost and then the cost per permit, using an allocation factor to establish the fee, applying a percentage of the value, or by arbitrarily picking a number. None of these are inherently wrong as long as the method fulfills the City's goals and objectives. Permit fees receive much less attention than rates and are often overlooked or not updated for several years because of the relatively small amount of revenue generated for the utility.

10.9.1 Permit Fee Structures

The fee structure is a means by which the utility collects revenue to support permit fee activity. A common goal is to set fees in a way that reflects the effort to issue the permit. This can be accomplished in a few different ways. Below are a few ways that cities charge permit fees:

- **Hourly rates:** Hourly rates are based on a calculated composite cost per hour to issue a permit. The benefit of this method for charging a permit fee is that it recognizes that each situation is different and potentially the complexity of the site may require more time than another of a similar size.
    - **Hourly rate with a minimum charge:** Some utilities charge a set minimum number of hours up front and then send a bill for each additional hour.
- **Surface area of disturbed surface:** This fee type is set by calculating cost per surface area of disturbed surface area. The benefit of this method is that the cost is easily anticipated by the customer.
- **Volume of earth moved:** This method is similar to the surface area method but takes into account the volume of earth that is moved. The fee structure is often expressed in cubic feet. This method could better reflect the increased complexity of a job site where the slope is more or less than the average.

Despite the way a city charges for a permit the intent is to recover some level of cost to issue the permit. Some cities charge an hourly rate, some charge based on the area of disturbed surface area, and others are based on the volume of earth moved. The City currently charges a flat rate based on the amount of area disturbed or area of new or hard surface. The City has said that it wants its fees to be easily anticipated by permittees and consistent. The City's current structure is likely the best structure for consistency because it is easy to establish what the area pertaining to the permits is and the corresponding fee.

10.9.2 Current Permit Fee Methodology

The City's current permit fees were adopted after a Permit Fee Study was conducted in 2005. Prior to the 2005 study, at that time, the City had two levels of permits, small parcel and large parcel. The 2005 study indicated that the existing fees were collecting only approximately 7 percent of the cost to issue permits. The 2005 study suggested a much higher level of cost recovery from the permit fees.

The 2005 study describes a process of accumulating the complete cost to issue permits in three components: direct service costs, indirect costs, and overhead costs. The estimated full cost of issuing permits was $297,085. The next step in the process was to estimate the number of hours spent on issuing the permits. It was estimated that the total hours spent working on issuing permits was 4,224. To arrive at an hourly cost the cost to issue the permit, the cost per hour was calculated by dividing $297,085 by the hours to issue the permit of 4,225, equaling $70.32 per hour.

The fees proposed in the 2005 study were changed to be based on the amount of impervious surface and the square feet of clearing and grading to be done as well as increasing the number of levels to four. The next step in the 2005 study was to establish the average number of hours spent on issuing the four new permit levels. An important point to note is that permit fees 1 and 2 were set to recover their full cost but levels 3 and 4 were set below the estimated cost of issuance. The 2005 report states that data were not detailed enough to accurately establish full cost recovery for levels 3 and 4. Table 10-30 provides the number of hours upon which the

permit fee was based. As mentioned previously, level 3 and 4 hours are lower than would be assuming full cost recovery.

Table 10-30. 2005 permit fee hour basis

Permit level	Hours to complete permit
Level 1 permit (fee per site)	1.6
Level 2 permit (fee per site)	4.5
Level 3 permit (fee per site)	9.0
Level 4 permit (fee per acre)	12.0

The calculated hourly rate was multiplied by the hours to complete to establish the permit fees for the four permit levels. Table 10-31 provides the permit fees resulting from the 2005 study.

Table 10-31. Current permit fees (2005 study)

Permit level	Amount of impervious surface	Amount of clearing and grading	Current fee
Level 1 permit (fee per site)	300–1,000 ft^2	500–5,000 ft^2	$113.00
Level 2 permit (fee per site)	1,000–5,000 ft^2	5,000–30,000 ft^2	316.00
Level 3 permit (fee per site)	5,000 ft^2–1 acre	More than 30,000 ft^2	633.00
Level 4 permit (fee per acre)	More than 1 acre	NA	844.00

HDR's opinion is that the 2005 study calculated the permit fees using generally accepted methods. Levels 3 and 4 were not set at a level to achieve full cost recovery, which left approximately $90,000 to be recovered from general rate revenue.

10.9.3 Proposed Permit Fee Methodology

HDR's proposed method is similar to the 2005 study but has grouped costs and arrived at the number of hours per permit in a slightly different way. The 2005 study was helpful in establishing the new fees as it gave a means of comparison. Steps used to accumulated costs for the permit fee calculation are provided below:

1. Identify capital investment made to provide service
2. Estimate direct labor costs, including salary, benefits, sick and vacation leave, and training
3. Determine other direct costs such as vehicles, fuel, and maintenance of equipment
4. Determine indirect costs such as other department support services, finance, legal, and human resources

No capital costs were associated with permit fee issuance. Two FTEs are allocated to perform permits for the stormwater utility, one engineer and one inspector. Salaries for the engineer and inspector staff were assumed to be approximately $95,000 and $75,000, respectively. Benefits were assumed to be approximately 55 percent of each FTE's salary. These benefits include health and dental insurance and retirement. The percentage for benefits was calculated by comparing budgeted salaries to budgeted benefits for the Public Works department. Also included in the costs was 41 percent of salary to account for indirect costs such as rent paid to the general fund for office space, transportation costs, equipment, and other general government costs charged to the utility like purchasing, legal, and information technology costs. Table 10-32 lists the estimated permit costs based on salary, 55 percent benefits, and 41 percent overhead.

Table 10-32. Estimated permit costs

Cost component	Engineer	Inspection	Total
Salary	$95,228	$74,725	$169,952
Benefits (55% of salary)	52,375	41,099	93,474
Overhead (41% of salary)	39,043	30,637	69,680
Total permit costs per FTE	$186,646	$146,460	$333,106

Establishing the Weighted Average Hourly Cost

The next step in the process is to establish the hours of working time for the two FTEs. FTEs are paid for 2,080 hours per year. However, the FTE does not have all of those hours available to devote to permitting activities because he/she also has paid time off for holidays, sick leave, and vacation. An average number of days of paid leave per FTE was assumed to be 28 days total. Deducting paid time off, 1,856 hours remained per FTE, equaling 3,712 hours for two FTEs.

Dividing the total permit costs by the total available hours for permit issuance, an average cost per hour was calculated to be $89.74.

Five years of permit history was reviewed to establish an average number of permits per year. The assumed number of permits per permit level is an important factor in establishing the new fees. Table 10-33 contains the 5 years of stormwater permit data.

Table 10-33. 5-year historical stormwater permits

Permit level	2015	2016	2017	2018	2019	5-year average
Level 1	352	260	260	469	409	350
Level 2	178	224	265	214	171	210
Level 3	18	28	36	35	36	31
Level 4 (acres)	7	12	38	12	22	18
Total # of permits	555	524	599	730	638	609

Establishing the Hours to Issue Permits

The next step in the fee calculation was to determine the average time spent on each level of permit. There are a few ways of determining hours per permit, including surveying staff to get an opinion of the time spent on each type of permit, which was done in 2005, and establishing allocation factors. The new calculation for the permit fees was done using the allocation factor method. The two variables used to calculate allocation factors were number of permits and area of impervious surface. The principle behind this method is similar to the process used in the cost-of-service analysis performed to establish stormwater rates. It was assumed that 25 percent of the cost to issue permits was simply a function of the number of permits, while 75 percent of the cost of permit issuance was related to the size of the impervious area. These two allocation factors are provided in Table 10-34 below.

Table 10-34. Allocation factors

Permit level	Number of permits	Percent of permits	Impervious ft^2/permit level	Percent ft^2
Level 1	350	57%	227,500	10%
Level 2	210	34%	630,000	26%
Level 3	31	5%	752,680	31%
Level 4	18	3%	784,080	33%
Total	609	100%	2,394,260	100%

The allocation percentages from the table above are then multiplied by the allocation weighting and then again by the total number of permit hours. Table 10-35 below shows the hours allocated to each level of permits as well as the two allocation factors.

Table 10-35. Distribution of allocated costs

Permit level	Hours based on number of permits	Hours based on ft² of permits	Total permit hours
Percent allocation weighting	25%	75%	
Level 1	533	265	798
Level 2	320	733	1,053
Level 3	47	875	922
Level 4	27	912	939
Total hours	928	2,784	3,712

Once total hours are allocated to the different levels of permits, they are divided by the number of permits to arrive at the average hours per permit level. The hours per permit are then multiplied by the average cost per hour to arrive at the new fee. Table 10-36 provides the assumed hours per permit level and the new fees at three levels: full cost recovery, the fee with 25 percent subsidy (75 percent of full cost recovery), and the fee with a 50 percent subsidy (50 percent of full cost recovery).

Table 10-36. Proposed permit fee

Permit level	Hours/permit	New fee: full cost recovery	New fee: 25% subsidy	New fee: 50% subsidy
Level 1	2.3	$205	$153	$102
Level 2	5.0	$450	$337	$225
Level 3	29.8	$2,670	$2,003	$1,335
Level 4	52.2	$4,682	$3,512	$2,341

Now that the fees have been recalculated and are set to recover the full cost of permit issuance, it is important that the fees be updated so that the fee revenue keep up with the cost. Eighty percent of the cost of permit issuance is for salary and benefits. It is recommended that the fee be updated annually by increasing the fee by either the CPI published by the U.S. Bureau of Labor and Statistics for the Seattle/Tacoma/Bellevue metropolitan statistical area, or a weighted average of salaries and benefits with the weighting of 65 percent and 35 percent, respectively. The City's budget office would likely have calculated an assumed increase in salary and benefits as a part of the budget process.

10.9.4 Conclusion

The City's stormwater management system is operated as an enterprise fund, which means that it is a self-sustaining entity. As a self-sustaining entity rates and fees are the sole source of funding and are critical to the effectiveness and efficiency of utility operation.

The stormwater management system must fund two key functions, operating the utility on a day-to-day basis and constructing and expanding the system to meet the goals and objectives of the City and utility. Sufficient rates are necessary to fund these key functions.

A major consideration with the level of rates proposed was to provide sufficient revenue to meet the requirements of the City's Phase II Permit addressing TMDL limits for Lake Whatcom and support the City's goals and objectives for the stormwater management system. To address this issue additional personnel have been proposed for the Small, Medium, and Large CIP scenarios to fill resource gaps identified for the City's Phase II Permit program.

In addition to the City's Phase II Permit program, capital funding was a concern for the City. The City recognizes that maintaining its current infrastructure is an effective cost-saving activity that prevents catastrophic system failures in the future. Much of the capital projects proposed in the three capital scenarios are intended to repair deficiencies that hinder the operation of the system and to make improvements to the system so that it meets the City's high standard of stewardship of the environment. The City has undoubtedly avoided higher costs by keeping its stormwater system in good working order. It is strongly recommended the City continue to invest in its stormwater system to prevent possible future system failures and the subsequent higher cost.