



BENCHMARKING COMPARSION

City of Kirkland Surface Water Master Plan July 2022



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1. Benchmark Purpose and Methodology

In support of the Surface Water Master Plan Update, the City of Kirkland wanted to research how the City's program and organizational approach compares to other jurisdictions in the region.

Three jurisdictions of similar size and geography were selected for comparison and interviews were conducted with personnel who manage the surface water programs for their respective cities. Relevant documentation, including budget information, surface water program documentation (i.e., comprehensive plans, NPDES annual reports, organizational charts, etc.), and on-line data were reviewed, and questions were provided to participants in advance of interviews. An effort was made to identify successful elements of surface water programs implemented elsewhere that could be beneficial to Kirkland, if replicated.

2. Jurisdictions Interviewed

The following jurisdictions and personnel were researched and interviewed by Erin Nelson (Altaterra Consulting) for this benchmarking effort in late July/early August 2021:

Bellevue Brian Landau, Engineering Planning Manager
Bellingham Jason Porter, Storm and Surface Water Manager

Redmond Steve Hitch, Environmental and Utility Services Division Interim Engineering

Manager

3. General Comparisons

Some general comparisons can be made between Kirkland and the jurisdictions interviewed, including size, population, the overall surface water program budget, and general staffing. However, budget and staff comparisons also need to be considered in the context of each jurisdiction's organizational structure because some surface water functions are sourced to other work groups or budgeted differently. The nuances of some of these organizational differences are described in more detail below.

3.1 City Size and Population

Table 1 shows the comparison of jurisdictional sizes – geography and population. Bellingham is most comparable to Kirkland, based on city population, although it covers a wider geographic area. Redmond is smaller than Kirkland in both population and geography. Bellevue is an outlier in the jurisdictional comparisons because it covers a large geographic area and has a big population. Bellevue's organization, budget, and approach, discussed below, is consistent with that of a larger city.



Table 1. Summary of Jurisdiction Characteristics

Characteristic	Kirkland	Bellevue	Bellingham	Redmond
Geographic Size (square				
miles)	22	37.5	30.5	17.2
Population (2019)	89,500	144,400	88,700	65,600

3.2 Surface Water Assets Maintained by Jurisdictions Interviewed

Population and geographic area are not directly correlated with jurisdictional surface water management resource needs due to differences in the nature and layout of surface and stormwater systems. 2020 NPDES Annual reports were reviewed to compare the number of assets that require annual inspection (i.e., catch basins and municipally owned surface water facilities/BMPs owned and operated by each jurisdiction and private facilities that require inspection) and miles of stormwater conveyance pipes to get a snapshot of each jurisdictions' stormwater system. Jurisdictions were also asked about numbers of flooding complaints they are asked to resolve, and how they manage stormwater facilities on short-plats.

Numbers of surface water assets do not provide a comprehensive picture, as Surface and Storm Water Utilities are responsible for much more than just catch basins, surface water facilities, and pipes, however, when comparing staffing for operations and maintenance, it's helpful to understand the context and general number of assets in the system. Table 2 show the numbers of catch basins, surface water facilities, and miles of stormwater pipes, respectively, owned and operated by each jurisdiction interviewed in comparison to Kirkland.

Table 2. Comparison of Number of Assets Owned and/or Inspected by Jurisdictions

Asset (units)	Kirkland	Bellevue	Bellingham	Redmond
Catch Basins				
(numbers)	16,243	23,932	12,564	10,404
Stormwater				
Facilities/BMPs				
(numbers)	684	1,255	754	483
Stormwater				
Facilities				
(Required				
Private				
Inspection)*	41	168	Unknown	185
Stormwater				
Pipes (linear				
miles)	375	400	280	363

^{*}These numbers are from the NPDES Annual Report or compliance documentation for the year 2020.



3.2.1 Flooding Calls

Jurisdictions were asked about the number of flooding calls that they receive and respond to each year. Since 2010, Bellevue has received an average of about 7 calls per year for occupied structure flooding, and about 90 – 150 reports of roadway ponding during storms per year. Bellingham on the other hand, receives very few flood-related calls; less than 12 per year. Bellingham reports that the adoption of frequently flooded areas in their critical areas code and mapped floodplain areas that limit development has led to less calls. We did not receive information from Redmond regarding flooding.

3.2.2 Stormwater Facilities on Short-Plats

Kirkland is interested in the approaches other jurisdictions take with short-plats and maintenance of stormwater facilities associated with these types of development. Kirkland has been assuming ownership of stormwater facilities on short plats to ensure that these facilities are properly maintained and that there are fewer impacts from these facilities on the City's public stormwater system. The implications of this approach include a larger facility inventory to maintain, and challenges associated with maintaining facilities in hard to access locations on residential parcels.

Bellevue determines ownership of a facility by types of surfaces that are collected (public or private). Generally, this results in plats (10+ lots) as public systems and short plats (2 - 9 lots) as private systems.

Bellingham has been using an approach similar to Kirkland's. They have been taking over the maintenance of stormwater facilities on 4-lot short plats and larger to ensure that these facilities are maintained and functioning properly since they connect to the City's system.

Redmond did not respond to our request for information about their approach to taking over private facilities for City maintenance. However, a review of their public GIS information suggests that stormwater facilities on short-plats or other private properties remain private and are not maintained by the City.

3.3 Staffing

Table 1 provides a summary of how Kirkland specifically compares to other jurisdictions for where different surface water management responsibilities are implemented in the organization. Organizational structure for each jurisdiction is described in more detail in Section 4.

Table 3. Comparison of Organizational Differences in Surface Water Management Responsibilities

Surface Water Management				
Responsibilities	Kirkland	Bellevue	Bellingham	Redmond
General NPDES		Operations and		Environmental and
Compliance	SW Engineering	Maintenance	SW Program Mgmt.	Utility Services
Education and		Operations and	Education and	Environmental and
Outreach	SW Engineering	Maintenance	Outreach	Utility Services



		New program has		
		been approved and		
Chemical and		will be starting up		
Biological		in the next year in	Ecology and	Environmental and
Monitoring	SW Engineering	Utility Engineering.	Restoration	Utility Services
				Environmental and
CIP Support	SW Engineering	Utility Engineering	SW Program Mgmt.	Utility Services
			Planning,	
Development			Development, and	Environmental and
Review	SW Engineering	Utility Engineering	Permitting	Utility Services
Watershed and				
Retrofit				Environmental and
Planning	SW Engineering	Utility Engineering	SW Program Mgmt.	Utility Services

Some key points to understand about staffing include the following:

- There are no education and outreach staff in Bellingham's Surface Water Management group. Education and Outreach is its own section that supports all groups within Public Works.
- Bellingham does not currently have an NPDES permit coordinator but will be adding that
 position to the Surface Water Management Group. Three other NPDES support staff will be
 added to Operations and Maintenance.
- Other groups in the Bellingham Natural Resources Division (i.e., Environmental Policy and Ecology and Restoration) support Surface and Storm Management in Bellingham with tasks that the Surface Water group in Kirkland handles by itself.
- Redmond Engineering and Utility Services Division includes education and outreach staff, planners, science and analytical technical staff, GIS, and engineers that work on storm and surface water management.
- Kirkland, Bellingham, and Redmond do not utilize seasonal workers for Operations and Maintenance. However, Bellevue does rely on seasonal help to maintain surface and stormwater facilities.

Based on follow-up conversations with Bellevue and Bellingham, both felt like they do not have adequate staff resources to do their jobs. Bellingham reported having understaffed maintenance crews. Bellevue has only one Surface Water Engineer and one Environmental Scientist in the group that conducts Surface Water Utility planning. This group is reportedly under-resourced and needs additional surface water engineers and technicians to support project development and management of the natural resource aspects of Bellevue's surface water systems.

3.4 Budget

Table 4 shows the reported revenue, capital, and operating budgets for the Surface Water Utility Funds in the jurisdictions reviewed. Data was pulled from the most recent budget documents.

Bellevue's capital budget was reported for the 6-year CIP. For comparison purposes, one-third of Bellevue's reported 6-year CIP budget was assumed for years 2021- 2022. Operating budget for Bellevue is not shown because the portion of the Utility operating budget (i.e., water, sewer, and stormwater) allocated to stormwater is not indicated in Bellevue's budget document. The operating budget



breakdown for Bellevue's stormwater portion was requested but not received. If information becomes available, this document will be updated.

Table 4. Budget Summary by Jurisdiction

Budget Element (in millions of \$)	Kirkland	Bellevue	Bellingham	Redmond
Revenue	29.8	55.5	28.4 ¹	39.6
Capital				
Budget	5.10	14.0	15.6	13.6
Operating				
Budget	25.5	Not included ²	12.8	27.5
			50% of Capital	
		50% of Total Utility	(approximately	No information
Reserves	11.9 ³	Budget	\$7.8M in 2021)	obtained.

¹Bellingham's receives additional revenue from the Watershed fund (not accounted for in the revenue value here).

Key differences in jurisdiction budgets:

- Bellingham receives additional revenue from the Watershed Fund which helps fund property
 acquisition for capital projects. The Watershed Fund is part of the Water Fund for activities
 related to the Lake Whatcom Watershed and watershed fees associated with water use. The
 adopted Watershed Fund reserve balance is \$12.4 million in FY2022. Surface water receives
 approximately 30% of this fund for property acquisition.
- Each city collects rates using slightly different methods including using:
 - o development scaling factors on top of a base rate (Bellevue)
 - o base residential rates that are used for calculation of commercial rates by scaling the number of residential impervious units or service units (Redmond and Kirkland).
 - o a flat rate model for residential parcels that are lightly or heavily developed, and a per square foot of impervious charge for larger parcels (Bellingham). *Section 3.4.2 describes stormwater rates.*
- Capital facility charges that are collected for new development or redevelopment are widely variable among the cities reviewed. Kirkland's is among the lowest and Redmond's is generally higher depending on which sub-basin development occurs (i.e., Downtown and Overlake subbasins have higher CFCs).
 - Currently, Redmond collects citywide stormwater capital facilities charge of \$1,342 for each multiple of impervious unit, which is equivalent to 2,000 square feet of impervious surface area. Additional sub-basin specific stormwater capital facilities charges are imposed in different areas of the city, including Downtown (\$5,979/impervious unit) and

²Bellevue's operating budget is not included because it includes the entire Utility (water, surface water and wastewater).

³Kirkland's estimated Surface Water Utility reserve balances beginning in 2021 (working capital, capital contingency, and construction reserve).



Overlake (\$10,929/impervious unit). More specific information can be found in Redmond's Ordinance

2921(https://www.redmond.gov/DocumentCenter/View/810/Stormwater-Rates---Ordinance-2921-PDF).

- Bellevue collects monthly system recovery charges for 10 years after a project is constructed from the property owner after it has been developed.
- Kirkland and Bellingham scale system development charges to the amount of increased impervious surface on the parcel. Additional comparisons of capital facility charges are discussed below.

3.4.1 Budget Reserves

Each jurisdiction maintains reserves and reports the reserves in different ways. Bellingham maintains approximately 50% reserve funding in their capital budget, which was approximately \$7.8 million in 2021. Bellevue maintains approximately 50% reserves of their total utility budget, which includes all utilities (water, sewer, and stormwater). Approximately 20% of their total utility budget expenditure is allocated for capital. Information was not obtained from Redmond on how much is maintained in surface water reserve funds for capital or operating expenditures.

3.4.2 Comparison of Stormwater Rates and Capital Facility Charges

Stormwater rates and capital facility charges are calculated and implemented slightly differently between jurisdictions. Tables 5 and 6 show how a hypothetical residential or commercial parcel would be charged for stormwater rates (Table 5) and capital facility charges (Table 6).

Hypothetical property characteristics used to compare rates are as follows:

Residential property

Type of property = single family residential (SFR)

Size = 6,500 square feet

Impervious surface = 2,600 square feet

Commercial property

Type of property = commercial or multi-family residential (MFR)

Size = 12,000 square feet

Impervious surface = 10,000 square feet



Table 5. Comparison of Stormwater Rates for different hypothetical parcels

			Surface Water Rate (Annual)	
Jurisdiction	Basis for Calculation	Size of ESU ¹ or ISU ² (sq. ft)	Residential Property	Commercial Property
	SFR charged at rate of 1 Equivalent			
	Service Unit (ESU). All other properties (commercial and MFR) charged based on			
Kirkland	number of ESUs (rounded down).	2,600	\$221.28	\$885
	Base rate plus square foot charge per	,		
	each 2000 SF of property based on how			
	much development (% impervious). In			
the example, residential property is				
	moderately developed, and commercial			
Bellevue	property is very heavily developed.	Not applicable	\$313.36	\$731
	Rates are calculated by impervious			
	surface area footprint (small, medium, or			
	large). Residential example is medium,			
Bellingham	and commercial property is large.	Not applicable	\$142.20	\$474
	SFR are charged at a rate of 1 Impervious			
	Surface Unit (ISU). All other properties			
	are charged based on the number of			
	impervious surface units times a rate			
	adjustment depending on percent			
	impervious surface coverage and			
Redmond	stormwater credits.	2,000	\$198.72	\$1,559

¹ ESU = Equivalent Service Unit

Table 6. Comparison of Capital Facility Charges for hypothetical parcels

		Capital Facility tim	
Jurisdiction	Basis for Calculation	New Residential Property	New Commercial Property
	SFR charge is \$508. All other properties charged based on		
	impervious surface added/2600 SF (ESU), rounded down,		
Kirkland	times base rate of \$508.	\$508	\$1,524
	Monthly fee (\$6.35) per 2000 SF of chargeable area over 10	\$2,286 (over	\$4,572 (over
Bellevue ¹	years.	10 years)	10 years)
	SFR charges are scaled (under 1,000 SF hard surface [\$364 per		
	SFR], 1000- 3,000 SF hard surfaces [\$1093 per SFR]). Separate		
Bellingham	category for all other types (\$0.364/SF of hard surface).	\$1,093	\$3,640

² ISU = Impervious Surface Unit



		Capital Facility tim	· · · · · · · · · · · · · · · · · · ·
Jurisdiction	Basis for Calculation	New Residential Property	New Commercial Property
Redmond	Charge is based on number of created or replaced ISU. Example new residential property on a vacant lot is 1.3 ISUs and commercial property is 5 ISUs.	\$1,744.60 (base only) ²	\$6710 (base only) ²

¹Bellevue's capital facilities charges are "storm recovery charges" that are assessed to the property owner as a monthly fee over a period of 10 years.

As shown in Table 2, Kirkland's surface water rates are comparable (plus or minus 5-15%) to Bellevue and Redmond's residential and commercial rates, and 35-45% higher than Bellingham's surface water rates. Bellingham also collects a Watershed Fee for the Lake Whatcom Watershed that supplements the Surface Water Fund, so this could be one reason for the difference. The single-family Lake Whatcom Watershed Land Acquisition and Preservation Program Charge fee is \$174 for parcels that are in Bellingham city limits.

Kirkland capital facility charges are substantially less than each other jurisdiction. All other jurisdictions reviewed charge at least twice as much as Kirkland does for capital facilities charges, and some charge many times more than Kirkland.

4. Organizational Structure

Each jurisdiction reviewed has slightly different approaches for how surface water utility functions are incorporated into the overall City organizational structure, as described in Section 3.3 - Staffing. Except for Bellevue, the jurisdictions reviewed generally have separate divisions or groups that manage surface and storm water independently from sewer, water, or solid waste utility functions. Bellevue Utilities Department's Engineering, Corporate Strategies, and Operations and Maintenance Divisions are responsible for all Utility functions (sewer, stormwater, water, and solid waste) that fall within their purview. Simplified organizational charts are shown in Figures 1 through 4, color-coded to indicate where key surface and stormwater functions are carried out. Surface and Stormwater Functions at the cities of Bellingham, Redmond, and Kirkland are within the Public Works Department with engineering and planning in separate groups/divisions than operations and maintenance. Education and outreach is generally conducted with engineering and planning, except for Bellingham, which has a separate group dedicated to education and outreach. Capital improvement projects are also generally designed and implemented in separate divisions than surface and stormwater engineering. The organizational charts shown in Figures 1 through 4 are color-coded as follows:

Engineering and Planning = purple
Maintenance = Orange
Education and Outreach = Green
CIP design and implementation = Gray

² Redmond's capital facilities charge includes a city-wide fee (shown here) based on impervious surface units. Additional fees (up to \$10,929 per impervious surface unit in the Overlake sub-basin) are charged to new development and redevelopment in the Downtown sub-basin and the Overlake sub-basin. In the above examples, the additional regional fee for the downtown area would be \$7,772 for the residential property and \$29,895 for the commercial property, assuming no credit for infiltration.



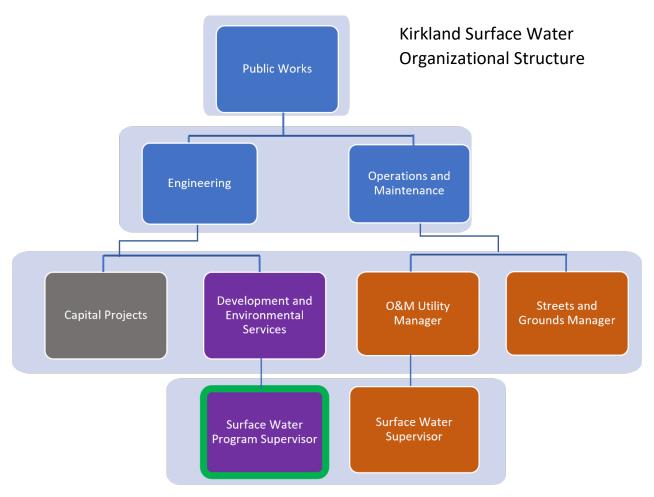
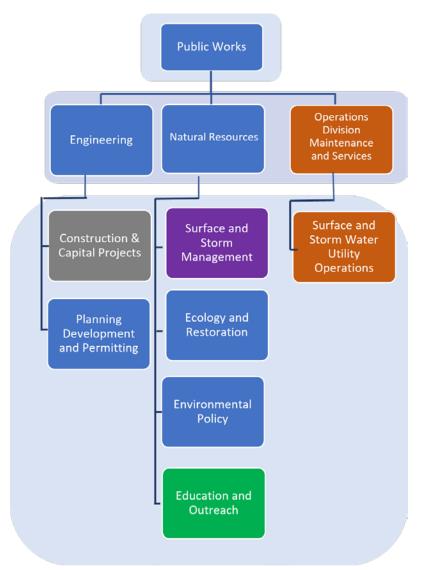


Figure 1. Kirkland organizational chart, indicating key storm and surface water functions. Engineering, planning, and education and outreach functions are in Development and Environmental Services Division within the Engineering Section. Operations and Maintenance functions are under the Operations and Maintenance Section, and Capital Projects are in the Capital Projects Division within the Engineering Section.





Bellingham Surface Water Organizational Structure

Figure 2. Bellingham organizational chart, indicating key storm and surface water functions. Engineering and planning functions are in the Surface and Storm Management Group under the Natural Resources Division. Education and Outreach is a separate group within the Natural Resources Division. Operations and Maintenance functions are under the Operations Division Maintenance and Services, and Capital Projects are in the Construction and Capital Projects Group under the Engineering Division.



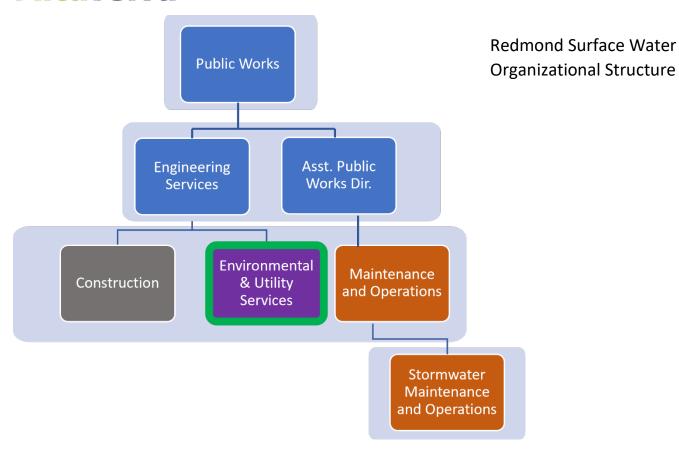


Figure 3. Redmond organizational chart, indicating key storm and surface water functions. Engineering, planning, and education and outreach functions are in the Environmental and Utility Services Division under the Engineering Services Department.

Operations and maintenance functions are in the Stormwater Maintenance and Operations Group under the Maintenance and Operations Division. Capital Projects are in the Construction Division under the Engineering Services Department.



Bellevue Utility Organizational Structure Utilities (all) Utilities Deputy Director Utilities Deputy Director Utilities Deputy Director Operations and Maintenance (Services Mgmt., Field Services [Water, Wastewater, Surface Water], Technical Services, NPDES Permit Coordination)

Figure 4. Bellevue organizational chart, indicating key storm and surface water functions. As described in the text above, Bellevue operates all its Utilities together under one umbrella. Engineering and planning are conducted under one division, and operations and maintenance, including NPDES Permit coordination and education and outreach are conducted another.



Most surface and stormwater functions are the responsibility of groups shown on the organizational charts in Figures 1 through 4, but there are some responsibilities that are accomplished by other departments. For instance, Bellevue's Parks Department is responsible for all vegetation maintenance, including street trees, low impact development facilities, and vegetation within the right-of-way. Redmond's Environmental Utility and Services Division is only responsible for trees in the native growth protection area, and the Parks Department currently maintains low impact development facilities. The Redmond surface and stormwater group is getting trained to take over this body of work. Bellingham's surface water group maintains its low impact development and vegetated facilities. Additionally, the City of Redmond contributes funds to the City's urban forestry initiative because it is a City-wide priority, whereas Bellevue does not.

All surface water planning and engineering staff in the jurisdictions interviewed are responsible for identifying and prioritizing surface and stormwater capital projects, but they turn the projects over to a different capital projects engineering group for implementation and construction. Project proponents in the surface water groups retain involvement in the capital projects until completion. For instance, Bellevue completes an alternatives analysis and preliminary design in the surface water planning group to refine project scope (Parametrix 2021).

5. Jurisdiction Challenges and Approaches

During the interviews, surface water program managers described some of the challenges they have encountered and successful approaches that have been used to address the challenges. Some of these approaches may work equally well for Kirkland.

5.1 Bellingham

Challenge: Capital Project Coordination

Like Kirkland and other cities, Bellingham often has multiple Utility or Transportation projects scheduled for the same neighborhood or vicinity that could benefit from advance coordination to maximize efficient use of resources and lessen neighborhood disruption. Likewise, emergency projects or other opportunities often come up in one department or group. Other groups could benefit if made aware that a project is happening that could impact their work plans.

Solution: Public Utility Replacement Committee

Bellingham formed a group called PURC (Public Utility Replacement Committee) with representative managers from streets, sewer, stormwater, water, and development engineering to discuss opportunities and work plans and to make decisions about project coordination and priorities. They also meet whenever an emergency project or opportunity comes up. The benefits of this group are a better understanding of capital projects throughout the city, and better coordination where it is appropriate and makes sense.

Challenge: Public and Council Support and Understanding of Surface Water Program/Initiatives

Bellingham's Surface Water Program was previously not very well understood by the public and City Council.

Solution: Enhanced Education and Outreach



Education and outreach staff are their own group at the City of Bellingham and provide internal as well as external outreach services. They spend a lot of time showcasing the work and accomplishments of the Surface Water Program. This results in a high degree of understanding and confidence from City Council about the work that is getting done. When there is an ask for funding, it is more likely to be approved.

Challenge: Funding system improvements with system development charges

Much of Bellingham's stormwater system needs improvement and upgrades are often accomplished through new development or redevelopment and associated system development charges (SDCs). The cost to upgrade is expensive and SDCs need to increase to pay for new infrastructure.

Solution: Subsidized SDCs and Permit Fees

Bellingham made the decision to subsidize SDCs (25%) through fees collected from residential customers to spread the cost of infrastructure improvements over a larger number of rate payers. Additionally, permit fees are also subsidized at 50% from fees collected from residential customers.

5.2 Redmond

Challenge: Institutional Knowledge Loss

Redmond has many long-term employees, some of which are retiring or moving on to different jobs. This has resulted in the loss of some institutional knowledge of procedures, city geography, and other Redmond-specific information.

Solution: Lunch and Learns

The city has started holding "Lunch and Learns" with wide-ranging topics each week for staff. Presenters volunteer to talk about something they know—it can be a demonstration of a particular skill, an example of how to do something routine, or a presentation on some technical area. The discussions are well attended, and staff are learning about other people's jobs in the organization.

6. Funding Approaches

Each jurisdiction approaches budget priorities in a different manner. Bellingham is most like Kirkland in how they develop budgets by department and capital projects. Redmond and Bellevue emphasize citywide budgeting by community priorities. In the City of Redmond, this means that projects supporting community priorities are elevated for funding and may include surface water funds if there is a connection. For instance, urban forestry is a priority for Redmond that meets the Health and Sustainable Community priority. The Parks Department is the lead for this priority, but funding comes from a variety of sources, including surface water revenue. Similarly, Bellevue follows a budgeting by priority model.

Within Bellevue's Utility, CIP Plans are funded for projects and programs in the 6-year CIP. The CIP includes both specific projects and larger programs composed of like projects and usually higher funding levels (i.e., infrastructure rehabilitation, fish passage improvement, flood control, etc.). Within CIP programs, individual projects are identified, but a program budget allows the Utility greater flexibility for which projects get funded in each budget cycle.



Discussion and Recommendations

The primary findings of a comparison of Kirkland's surface water program relative to the jurisdictions reviewed are listed below.

- Surface water staff (engineering and operations and maintenance together) are comparable to other jurisdictions.
- Revenue is less when considering size and population.
- Capital budget is significantly less.
- Surface water rates are comparable.
- Capital facilities charges are significantly less than other jurisdictions.
- Operations and maintenance organization is similar for all jurisdictions.
- Surface water engineering and planning staff are organized differently in every jurisdiction reviewed but all jurisdictions appear to be accomplishing similar work elements.

Based on the benchmarking analysis, several themes emerged for consideration in Kirkland's Surface Water Program implementation. These are discussed below.

7.1 Capital Project Implementation:

As discussed above, Kirkland staff suggested earlier coordination between surface water and transportation to find opportunities to work together on transportation projects during stakeholder interviews. Bellingham has formalized a process for project coordination and priorities among their utilities. A similar approach could work well for Kirkland.

The Kirkland CIP group prefers having projects grouped by type of project and goal (i.e., flooding, water quality, infrastructure, habitat). It would be even more helpful to have flexibility within a project category to pick projects out of a grouping that make sense in the context of the rest of the CIP program (i.e., near other projects that can be managed by the same project manager). Using Bellevue's model of funding "programs", Kirkland could provide CIP with lists of prioritized projects within a program for greater flexibility on implementation. Update: This suggestion has been implemented during this Master Planning process.

7.2 Urban Forestry:

The role of urban forestry in the management of surface water has been a challenge for Kirkland to quantify, both technically from a surface water benefit standpoint, and financially from a funding standpoint. Redmond's surface water program contributes to the Urban Forestry program in Redmond that is managed by Parks, and Bellevue does not fund any urban forestry activities out of surface water funds. Since urban forestry is a priority for Kirkland, it makes sense that it is a funded activity, and that surface water contributes. Funded urban forestry activities should be better aligned to surface water programs such as habitat restoration, and riparian benefits. Kirkland should evaluate how surface water funding is currently aligned and could be better aligned in the future.

7.3 Education and Outreach:

Kirkland staff suggested in interviews that it is challenging to sustain Council awareness, interest, and support for the importance of surface water programs. Additionally, some departments are not thinking critically about surface water or critical areas impacts for their projects until too late in the process. Bellingham has had success with overcoming some of these same issues by doing more internal



education. When internal staff and Council understand and are on-board with the mission of the Surface Water Division, they can become ambassadors for the work in the community. Kirkland should consider increasing internal outreach via web-based information portals and advertisement of Utility produced plans and work products.

7.4 Evaluate Capital Facilities Charges:

Kirkland's capital facilities charges are significantly less than its counterparts for single-family residential properties and commercial or multi-family residential properties. Kirkland should consider evaluating its capital facilities charges for cost recovery of surface water infrastructure improvements. Evaluation of the capital facilities charges could be conducted in lieu of the stormwater rate study task included in the Surface Water Master Plan or in conjunction with a Public Works-wide capital facilities charge evaluation. Update: Capital Facilities Charges are being assessed with the utility rate modeling process for 2023-2024.

7.5 Conduct Stormwater Utility Audit/Evaluation:

The Surface Water Utility would benefit from a comprehensive review of its organizational structure, staffing model, support facilities, and equipment used to operate and maintain the City's infrastructure. As indicated by this benchmarking study, there are alternative approaches for managing surface and stormwater resources. As the City grows and the Utility matures, it's worth a fresh look at alternative models for potentially improving efficiency and positioning the Utility to meet future challenges. Update: The stormwater utility structure is being assessed and recommendations are expected by midyear 2022.

8. References Used

City of Bellevue, 2021. City of Bellevue 2021- 2022 Adopted Budget. 2021-2027 Capital Investment Program Plan. Council Action: December 2020, Publish Date: April 2021

City of Bellingham, 2021. 2021-2022 City of Bellingham Adopted Biennial Budget.

City of Bellingham, 2021a. City of Bellingham Stormwater Management Program Attachment A to the NPDES Phase II Permit Annual Report. March 31, 2021.

City of Kirkland, 2021. City of Kirkland 2021-22 Budget. Investing in a more equitable, safe, and resilient Kirkland.

City of Redmond, 2021. City of Redmond Adopted Budget, 2021-2022.

City of Redmond, Ordinance No. 2921.

HDR, 2020. Surface and Stormwater Comprehensive Plan, City of Bellingham, August 20, 2020.

Parametrix, 2021. CIP Delivery Model Evaluation Summary Memorandum, June 25, 2021.