

2017 Bellevue Utilities Business Profile



A Nationally Accredited Public Utility Agency



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Bellevue Utilities
450 110th Avenue NE
Bellevue, WA 98004

utilities.bellevuewa.gov

City Phone Numbers

General Information	425-452-6932
City Recycling Information.....	425-452-6932
Customer Service/Billing	425-452-6973
Drinking Water Quality.....	425-452-6192
Engineering.....	425-452-6977
Permit Center (Utilities).....	425-452-4187
Stream Team Volunteers	425-452-5200
Utilities Maintenance & 24-Hour Emergencies.....	425-452-7840
Flooding, water main breaks, no water, sewer overflows, pollutant spills	

Non-city Phone Numbers

Factoria Transfer Station	206-296-4466
Household Hazardous Waste	206-296-4692
Republic Services	425-452-4762
Recycling, Organics,/Yard Waste, Garbage	



Bellevue Utilities provides high quality, essential services that customers rely on every day – drinking water, wastewater, storm and surface water, and solid waste. We take pride in making sure these services are dependable, a good value for the money, and delivered with the customer in mind.

A few things I'd like you to know about Bellevue Utilities:

We're ready to help 24 hours a day.

Our employees are on call to respond to emergencies 24 hours a day. If customers experience flooding, a water main break, sewer overflow, or need to report a pollutant spill, they can call Utilities Operations and Maintenance at 425-452-7840 any time.

Customers give us a high satisfaction rating.

Our satisfaction rating with customers remains high, based on the city's annual surveys. In 2016, 93 percent of those surveyed were very satisfied or satisfied with our services.

Using advanced technologies to bring the best customer service.

Advances in technology are changing the way that Bellevue Utilities serves our customers. In the next couple of years, we will be bringing new Smart Water Meters to Bellevue. These new meters will automatically alert you if you have a water leak in your home. They will also enable you to proactively control your water usage.

We're a nationally accredited agency.

Our practices meet or exceed national standards. When 139 of our industry standard practices were compared with agencies nationwide, we achieved a 100 percent compliance rating. The American Public Works Association (APWA) awarded us accreditation in 2004, and re-accreditation in 2007, 2011, and 2015.

Our rates are competitive with other cities.

While we pass on wholesale costs from Cascade (for drinking water) and King County (for sewage treatment) to our customers, our rates for water, wastewater (sewer), and storm and surface water are lower than many neighboring cities.

We are financially stable and have a high bond rating.

Utilities has an Aa1 bond rating, the highest bond rating possible for a utility our size. This rating is from Moody's Investors Service, one of the three largest national bond rating agencies.

We have many challenges before us, such as aging infrastructure, meeting growth demands, and keeping rates low while meeting financial policies. However, we are working to meet these challenges and will continue to provide excellent utility services that our customers can count on each day in homes and businesses across the city.

Nav Otal
Utilities Director

The mission of Bellevue Utilities is to actively support public health and safety, quality neighborhoods, and a healthy and sustainable environment and economy by effectively managing:

- Drinking Water
- Wastewater
- Storm and Surface Water
- Solid Waste

Bellevue Utilities is a financially self-supporting enterprise operating as a department within the City of Bellevue.

We are comprised of four lines of business: Drinking Water, Wastewater, Storm and Surface Water, and Solid Waste.

- Each utility service is a stand-alone business operating within the city and must be financially sustainable.

Our services are critical to human health and safety needs, yet are largely unseen.

- Much of our infrastructure – water, wastewater, and stormwater systems – is underground, supporting the city’s economic engine.

Our services are both immediate and exceptionally long-range.

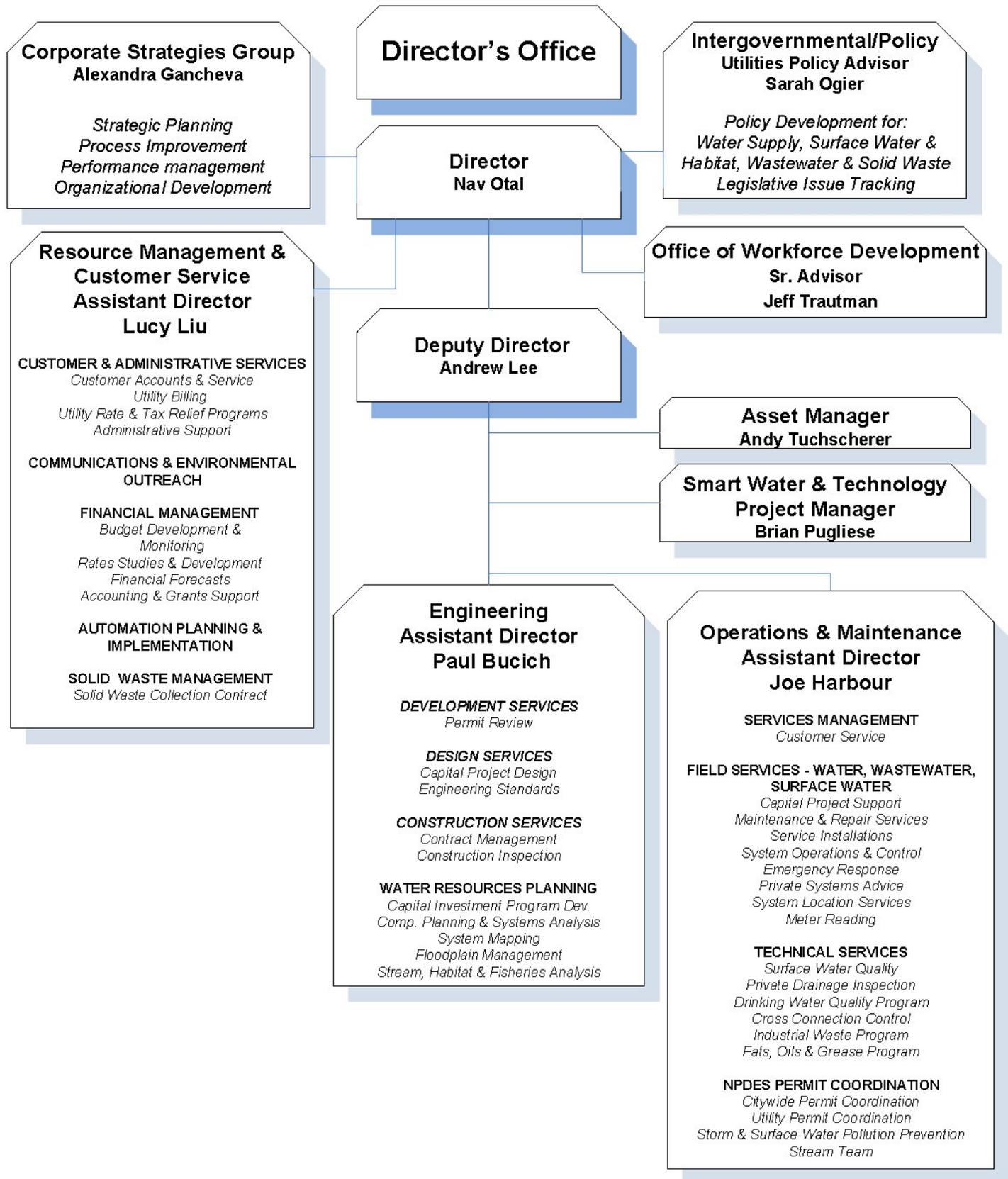
- Providing customer service 24 hours a day, year-round.
- Point of service is at the customer’s home or business – Utilities goes to them.
- Because of the long lives of utility systems, our planning horizon extends 75 to 100 years.

Our systems are getting old, and increases in maintenance and capital investment are inevitable.

- System failures are on the rise.
- Robust maintenance programs can extend infrastructure life and minimize life-cycle costs.
- Utilities future capital investment will focus largely on renewal and replacement of aging infrastructure.

The City Council’s investments, financial policies, and consistent commitment have placed Bellevue Utilities in a solid financial position.

As a result, utility rates are competitive with our neighboring communities and should be even more competitive in the future.



The Utilities Department has 174 employees in three divisions. Members of the Executive Team are:



Nav Ota – Director, Director’s Office

Nav Ota has over 29 years of experience in utilities management, finance, and research and development. Prior to becoming Director in 2011, she was Deputy Director of Bellevue Utilities for six years. Nav has been with the City of Bellevue since 1993 and has worked in operations, budget development, fiscal and strategic planning, and policy development. Prior to coming to the city, Nav worked as a researcher in cancer endocrinology. Nav holds a BS degree in Biochemistry and a master’s in Business Administration. She is a member of the Government Finance

Officers Association, American Water Works Association, and Association of Metropolitan Water Agencies.

Andrew Lee - Deputy Director

Andrew Lee has over 18 years of experience in utilities, having worked for Seattle Public Utilities, the San Francisco Public Utilities Commission, and two private engineering consulting firms. Andrew joined Bellevue Utilities in 2014. Andrew, who is a Professional Engineer, has extensive experience in capital planning and program management, regulatory compliance and negotiations, asset management, and drainage, wastewater, and drinking water engineering. He has a BS degree in Civil and Environmental Engineering and an MS degree in Environmental Engineering and Sciences, both from Stanford University. Andrew is a member of the Project Management Institute, and has been a past member of the American Water Works Association and the Water Environment Federation.



Paul Bucich – Assistant Director, Engineering

Paul Bucich has over 30 years of experience in water resources. Paul joined Bellevue Utilities in 2012. He has designed and evaluated regional stormwater facilities, developed stormwater management and site development manuals for compliance with the National Pollutant Discharge Elimination System Permit (NPDES), developed local and state codes and regulations, and worked on a multitude of water resource projects and issues. Paul completed graduate studies at and has a BSCE civil engineering degree from Washington State University. Paul has been involved in the American Public Works Association’s Surface Water Managers Sub-Committee since

1988. He has been a past member of the International Erosion Control Association, American Society of Civil Engineers, and the American Water Works Association.

Joe Harbour – Assistant Director, Operations & Maintenance

Joe Harbour has over 31 years of utilities experience, working for the cities of Bellevue, Seattle, and Pullman. Since joining the Bellevue Utilities in 1996, Joe has worked in a wide variety of capacities, from water, wastewater, surface water, and streets operations and maintenance to managing Utilities drinking water quality, cross-connection, industrial waste, and emergency management programs, to his current role managing the O&M Division. He holds a BA from Washington State University in Political Science/Public Administration and has been an active member of the American Water Works Association since 2004.





Lucy Liu – Assistant Director, Resource Management & Customer Service

Lucy Liu has over 23 years of financial and managerial based experience. Lucy has been with the city for 15 years, working as Tax Division Manager before joining Utilities. She is also a former revenue auditor for the Washington State Department of Revenue. In the private sector, Lucy worked as a senior tax manager and consultant. Lucy has a BA degree in Business Administration with an Accounting Concentration from the University of Washington. She is a Certified Public Accountant, Chartered Global Management Accountant.

Sarah Ogier – Utilities Policy Advisor, Director’s Office

Sarah Ogier has over 25 years of experience in natural resources policy and utility management. Most recently before coming to Bellevue Utilities, Sarah was with the King County Wastewater Division leading the Office of Sustainability and Innovation. Her work has given her an understanding of federal, local and regional issues impacting utility programs and operations in the Pacific Northwest. Sarah holds a BA in Urban & Environmental Planning from Evergreen State College and MA in Water Resources Management & Planning from the University of Washington.



Jeff Trautman – Senior Advisor, Office of People Development

Jeff Trautman joined Bellevue Utilities in 2014 after 18 years of commercial and public sector work as a career and leadership development specialist. His background includes 13 years of director and executive level leadership. Having worked at the City of Bellevue as contracted leadership and team effectiveness coach, Jeff brings a wealth of understanding and success to his mission of assisting in the selecting, promoting, and retaining of great talent across the utilities. Jeff holds a BA from Spring Arbor University and a MA from the University of Michigan.

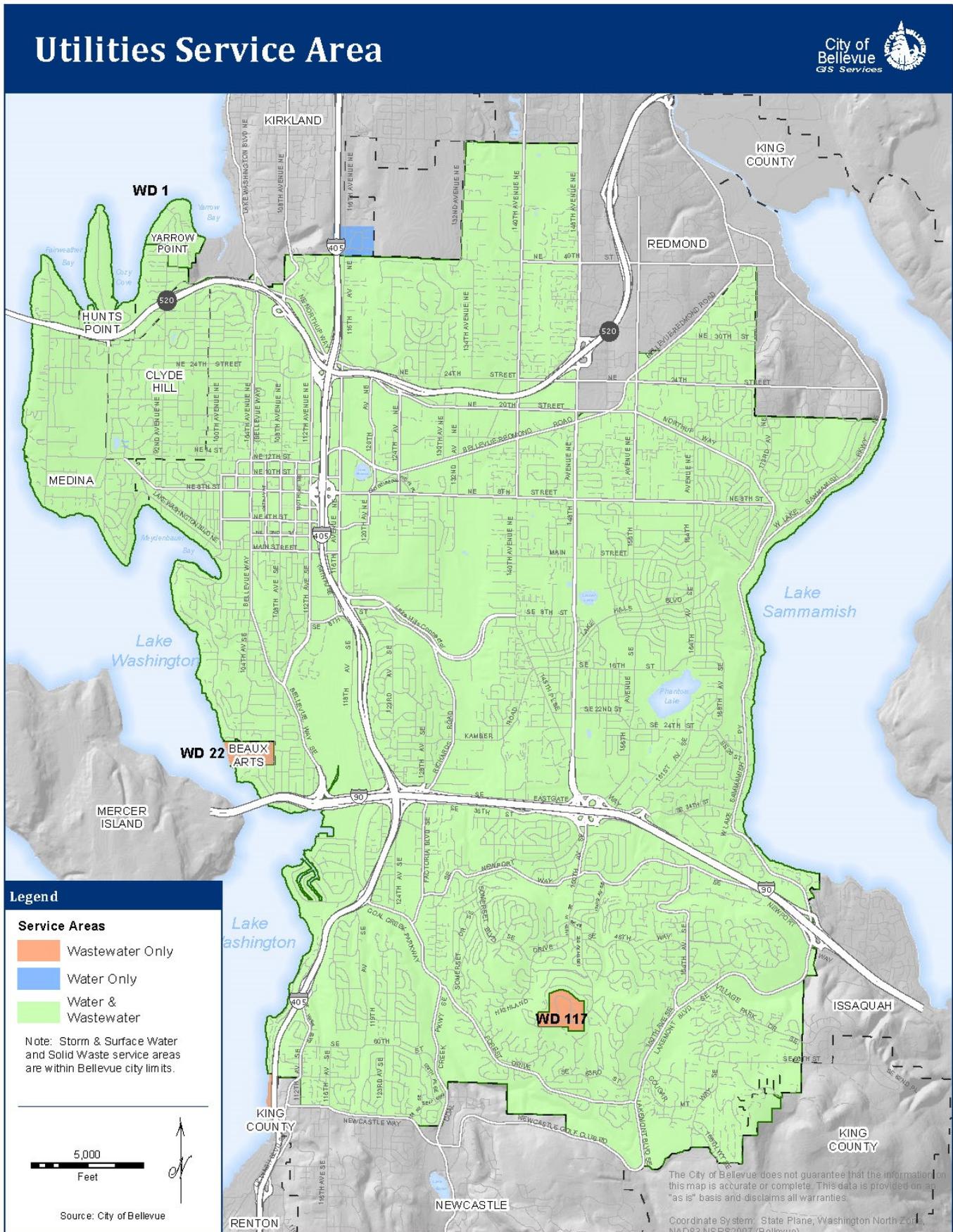
Aleksandra Gancheva – Corporate Strategies Manager, Director’s Office

Aleksandra (Alex) Gancheva-Kachakov joined Bellevue Utilities in 2012. She has over 13 years of management consulting experience, working with water and power utilities, city and county departments, and other public agencies. Her background includes strategic planning, business process analysis and improvement, market research and analysis, performance analysis and management. She has a BA degree and MA degree from Cyril and Methodius University in Bulgaria, an MBA degree from Cleveland State University, and has a Project Management Professional (PMP) certificate from the Project Management Institute.



Katie LaFree – Senior Administrative Assistant, Director’s Office

Katie LaFree has 28 years of experience with the City of Bellevue. She has worked in Utilities since it was formed in 1993 and worked in the former Storm and Surface Water Department. Katie supports the Executive Team and is also staff support for the Environmental Services Commission.



Mission Statement

Provide a reliable supply of safe, secure, high-quality drinking water that meets all the community's water needs in an environmentally responsible manner.

Major Issues

- Bellevue Utilities drinking water infrastructure is aging and most of the system is well past its midlife. Utilities has a strategic asset management plan in place to repair or replace failing components that includes a 75-year financial plan and rate model to minimize system failures and mitigate future rate spikes.
- Slightly more than 40 percent of the water main is asbestos cement (AC) pipe, generally the oldest pipe in Bellevue's water system and the type that wears out the fastest. Ductile and cast iron pipe comprise almost 60 percent of the system. Whereas ductile iron pipe failures often start out as small leaks that can be detected before much damage is done, AC pipe fails "catastrophically" without warning. Replacing AC pipe is the focus of our replacement program.
- Cascade Water Alliance, Bellevue's primary water supplier, will likely make significant investments in new infrastructure over the next 20-50 years. Financial impacts to Bellevue Utilities will depend on the extent and timing of the investments.
- State and federal water quality mandates are increasing.
- Investment is needed to build facilities that provide capacity for Bellevue's expected growth.



Service Area

Bellevue's drinking water utility serves 36,642 customer accounts, and the service area covers over 37 square miles, including the adjacent communities of Clyde Hill, Hunts Point, Medina, Yarrow Point, and sections of the Kirkland.

System	Employees
<ul style="list-style-type: none">• 40,000+ water connections• 611 miles of water main pipes• 24 water reservoirs with a total storage of 41.5 million gallons• 22 pump stations• 62 pressure zones• 5,800+ fire hydrants	<ul style="list-style-type: none">• 71
	2017 Operating Budget Without Reserves
	<ul style="list-style-type: none">• \$53 Million

Cascade Water Alliance

Bellevue's drinking water comes from the Cedar River and Tolt River watersheds in the Cascade Mountains. It is purchased from Cascade Water Alliance, an organization that provides water to Bellevue and six other cities and water districts in the Puget Sound region.

To ensure that members have water for the future, Cascade will be developing new water supplies and connecting regional systems. In 2010, Cascade and Puget Sound Energy finalized the purchase of Lake Tapps in Pierce County. During the next 20-50 years, Cascade will develop a new municipal water supply while managing the lake for recreation and enhancing fish habitat in the White River.

Smart Water Meter Program

Starting in 2019 Bellevue Utilities will change all customer water meters to new Smart Water Meters. The largest benefits to customers will be early detection of water leaks inside their homes and the ability to proactively control their water usage. The new meters will wirelessly transmit customer water usage data. Meter readers will no longer need to visit homes and customers will be able to monitor their water usage in near real time.

Mission Statement

Provide a reliable wastewater disposal system that ensures public health and safety, and protects the environment.

Major Issues

- Bellevue Utilities wastewater infrastructure is aging, and most of the system is well past its midlife. Utilities has a strategic asset management plan in place to repair or replace failing components that includes a 75-year financial plan and rate model, to minimize system failures and mitigate future rate spikes.
- The full cost to repair or replace the aging sewer mains, especially in-lake submerged wastewater pipes (also known as lake lines), will be substantial.
- Bellevue Utilities contracts with King County for treatment and disposal of wastewater at their South Treatment Plant in Renton and their Brightwater Treatment Plant in Woodinville. This service accounts for approximately 58 percent of our wastewater budget and will likely increase in the coming years due to costs of Brightwater, enhanced treatment requirements at the South Treatment Plant, and liability for the Lower Duwamish River Superfund Site clean-up.
- Investment is needed to build facilities that provide capacity for Bellevue’s expected growth.



Service Area

Bellevue’s wastewater utility serves 33,611 customer accounts, and the service area covers over 37 square miles, including the adjacent communities of Beaux Arts, Clyde Hill, Hunts Point, Medina, and Yarrow Point.

System <ul style="list-style-type: none"> • 13,000+ maintenance holes • 516 miles of mainline pipes • 127 miles of lateral pipes connecting mainline pipes to customer side sewers • 46 pump and flush stations • 34 major connections to King County wastewater system 	Employees <ul style="list-style-type: none"> • 52 2017 Operating Budget Without Reserves <ul style="list-style-type: none"> • \$61 Million
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Lake Lines

Bellevue Utilities owns 15 miles of submerged wastewater pipeline in Lake Washington and 4 miles of submerged wastewater pipeline in Lake Sammamish. These "lake lines" were constructed in the late 1950s and 1960s and may be nearing the end of their useful life. Most are buried within the lakebed or near shore on land; others are in deeper water, sometimes 5 to 10 feet deep. Almost all are hard to access. The city monitors and maintains them and is evaluating the condition of the pipes to determine when rehabilitation and/or replacement will be necessary. The cost for this work will be substantial. Maintenance of the lake lines has a direct connection to maintaining and protecting water quality in Lake Washington and Lake Sammamish, protecting Chinook salmon spawning grounds, and reducing the potential for direct human contact with raw wastewater.

Growth in Bellevue

Bellevue is essentially built out and will not require significant new utility extensions. Most remaining undeveloped property is in the service area’s southeast corner, where localized sewer extensions will be needed. Like the drinking water system, however, Bellevue’s wastewater system will be impacted by multifamily and commercial growth in the downtown area and new development projects expected in the Bel-Red corridor, which was rezoned for higher density. Periodic Wastewater System Plan updates monitor redevelopment progress and forecasts to ensure infrastructure will be in place to support planned growth as it happens.

Mission Statement

Provide a storm and surface water system that controls damage from storms, protects surface water quality, supports fish and wildlife habitat, and protects the environment.

Major Issues

- Infrastructure is aging and most of the system is well past its midlife. Utilities has a strategic asset management plan in place to repair or replace failing components that includes a 75-year financial plan and rate model to minimize system failures and mitigate future rate spikes.
- The storm and surface water system is a combination of private and public systems. These systems, over half of which are private, work together to convey stormwater, control flooding, and protect water quality. Utilities establishes the standards for private property owners to develop and manage their systems to comply with local, state, and federal regulations and to protect surface water.
- Compliance with the city’s National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, a Federal Clean Water Act mandate that affects programs citywide, has significant impacts on the way the city does business, on city expenses, and on private development costs.
- Utilities updated the Storm and Surface Water System Plan in 2015 to address changes in regional practices as well as to identify strategic initiatives for the Utility to work towards for the next 10 years.



Stormwater flows off streets and sidewalks, enters storm drains and flows, without treatment, into streams, lakes, and wetlands.

Service Area

Bellevue Utilities provides storm and surface water utility service to all properties in the City of Bellevue, (33,064 customer accounts). There are 26 drainage basins in the city, most with year-round streams.

System

- 81 miles of open streams
- 864 acres of protected wetlands
- 20,472 public storm drains
- 411 miles of pipes
- 86 miles of open ditches
- 11 city-owned regional detention facilities
- 350+ city-owned residential detention facilities
- 900+ privately-owned detention facilities

Employees

- 50

2017 Operating Budget Without Reserves

- \$24 Million

Protecting Waterways; Reducing flooding

Bellevue’s storm and surface water utility was established in 1974 — one of the first in the nation. The city’s philosophy emphasizes maintaining and protecting streams, lakes, and wetlands. This is accomplished in large part by requiring runoff controls (for quality and quantity) for new land development to mitigate the impacts of urbanization to the natural and constructed drainage system.

Bellevue adopted a “natural determinants” ordinance in the 1980s, which established significant land use protection and development restrictions on properties with streams, wetlands, steep slopes, and flood plains. Regional runoff control facilities built in the 1970s and 1980s help protect city properties from flooding due to prior development. Water Quality and flow control facilities within the system filter out pollutants and slow the rate of flow of stormwater to reduce flooding.

NPDES Permit

The NPDES Permit is a requirement of the Federal Clean Water Act, intended to protect and restore waters for “fishable, swimmable” uses. The permit requires development/redevelopment projects to use low impact best management practices, which are viewed as state of the art for stormwater management. It also has increased requirements in Utilities stormwater operations and maintenance. The state issues a new permit every five years with revised conditions intended to improve surface water quality. The next permit is set to be issued in August of 2019.

Mission Statement

Provide a convenient, unobtrusive solid waste collection system that contributes to a healthy and pleasing cityscape in an environmentally sensitive way.

The city contracts with Republic Services to provide solid waste services to residents and businesses.

Major Issues

- Bellevue will work to ensure that the city's interests are represented in the 2001 King County Comprehensive Solid Waste Management Plan update.
- Bellevue will work to promote waste prevention, reuse, and recycling strategies in its service area — and throughout the region — to extend the life of Cedar Hills Regional Landfill.
- Bellevue will work with King County to maintain a geographically balanced system of solid waste transfer and disposal facilities.
- Bellevue will work with its partners to ensure the proper handling and disposal of hazardous household products and the use of non-toxic alternatives.



Customer Accounts:	Employees
<ul style="list-style-type: none">• 29,793 single-family residential• 348 multifamily• 1,432 commercial	<ul style="list-style-type: none">• 1
	2017 Operating Budget Without Reserves
	<ul style="list-style-type: none">• \$1.3 Million

Republic Services

Republic Services contracts with the city for the collection of solid waste generated in Bellevue. The 7-year contract, beginning June 2014, provides garbage, recycling, and organics collection services to single-family, multifamily, and commercial customers, along with citywide litter control and customer service/billing services.

Bellevue Utilities

The city manages the solid waste contract with Republic Services and provides outreach, education, and technical assistance to residents and businesses aimed at promoting waste prevention, recycling, and proper disposal of hazardous and moderate risk wastes. In addition, the city offers special recycling collection events to single-family and multifamily residents. The recycling rates for Bellevue are (2016):

- Single-family (Republic Services only): 68.2 percent
- Multifamily/Commercial (Republic Services only): 19.9 percent
- Overall (Republic Services only): 40.1 percent

King County

The county provides solid waste planning, transfer, and disposal services under the Solid Waste Interlocal Agreement (ILA). King County is in the process of updating the 2001 Comprehensive Solid Waste Management Plan. King County operates the Cedar Hills Regional Landfill and 10 transfer stations throughout the county, including the Factoria Transfer Station, located in Bellevue.

Private Vendors

Under state law, commercial entities can independently contract for the collection of their recyclable materials. Several private recycling companies provide commercial service.

Capital Investment Program

Bellevue's Capital Investment Program (CIP) is a plan and budget for major public facility improvements that will be implemented over a seven-year period. The CIP for Bellevue Utilities defines investments for three utilities — Water, Wastewater, and Storm and Surface Water. Key drivers for Utilities 2017-2023 CIP are:

- Renewing and replacing aging infrastructure
- Adding system capacity to support anticipated growth
- Preserving the natural environment
- Customer service enhancements
- Meeting legal mandates

Aging Infrastructure

Utilities owns, operates, and maintains over \$3.5 billion of infrastructure assets, with over 1,500 miles of pipeline to provide drinking water, wastewater, and storm and surface water services. This infrastructure was primarily constructed from the 1940s through the 1980s, and most of the assets are well past midlife. As the infrastructure ages, it becomes less reliable and more failures occur. As a result, the cost to operate, maintain, rehabilitate, and replace the various assets increases. Over the next 75 years, approximately \$2.4 billion will be needed to renew or replace infrastructure within the three utilities. System renewal is and will continue to be the most significant driver of the Utilities CIP.

Utilities has a strategic asset management plan in place to maintain customer service by minimizing system failures and to mitigate future rate spikes through proactive planning focused on optimal system life costs.

Renewal and Replacement Fund

Recognizing that the cost to replace Utilities aging infrastructure would be significant, The Bellevue City Council established the Renewal and Replacement (R&R) Fund in 1995 for system renewal and replacement as identified in the Utilities CIP. Through proactive planning consistent with Utilities financial policies, funds are accumulated in advance of major expenses to supplement rate revenue, enabling infrastructure replacement when needed, all while minimizing utility rate impacts and maintaining intergenerational equity.

Each utility is in a different stage of system replacement; therefore, the rate increases necessary to fund current capital investments and future system renewal and replacement differ for each utility. By establishing the R&R Fund early and continuing to update and refine a 75-year financial model, Bellevue Utilities is better prepared than many utilities to meet increasing infrastructure replacement requirements while maintaining customer service.



The Coal Creek Culvert/Bridge Project created a safer roadway, a pedestrian connection to the Coal Creek trail, and improved salmon habitat through stream restoration. It was awarded the 2015 Project of the Year award in the Environment Category by the Washington State Chapter of the American Public Works Association .

Water System

Over 600 miles of pressurized water pipeline comprise the backbone of Bellevue's water system. Most was built 30-50 years ago and is past its midlife. About 40 percent of the pipes are asbestos cement (AC), which are wearing out faster than anticipated, with the small diameter AC pipes having the shortest life. The rest of the water system pipes are predominantly ductile or cast iron, with an average expected life of 125 years.

Based on failure rates and life cycle assessments, Bellevue Utilities determined that a ramp-up of the water main replacement rate was necessary to maintain system functionality and meet customer service levels for the future. Utilities is halfway into a 10-year program to ramp up to a sustainable replacement rate of 5 miles of AC water line every year.

Although the water system will not need to expand very much because the city is essentially built out geographically, two areas of the city have been rezoned for higher density development – downtown and the Bel-Red Corridor. Because these two areas are expected to grow in the next 15 years, new water system infrastructure with increased capacity (pipes and reservoir storage) will be needed to meet that anticipated growth.

**Total Estimated Cost for 2017-2023 Drinking Water CIP:
\$128.7 million**

What type of projects are needed and why?

- A significant portion of the Drinking Water Utility's 7-year CIP addresses replacement of aging infrastructure and rehabilitation of systems. Sometimes complete systems do not need replacing, just components. A good example is when pumps need replacing, but the pump stations that house them do not. A total of \$103 million is budgeted for replacement and rehabilitation of aging infrastructure.
- The drinking water system is complex. Sometimes gravity is all that is needed to deliver water to residents and businesses. In other areas, pumps are required to move water to reservoirs or directly to customers. To equalize the water pressure through the system, Utilities relies on special devices called Pressure Reducing Valves to ensure that water flows out of the tap with acceptable pressure. Like all mechanical devices, these valves wear out and have to be replaced. Utilities has budgeted \$3.1 million for this effort.
- Similarly, reservoirs experience wear and tear and occasionally, depending on age, require structural retrofitting for earthquakes. With 25 reservoirs in the system, Utilities is spending \$7.3 million to ensure water is consistently available, even after emergencies, for peak demands and to fight fires.
- New growth brings with it many challenges, including increased water needs. Utilities continues to look at and provide means to satisfy these demands either through expansion of existing storage and supply inlet facilities or by optimizing system operation. The cost is estimated to be \$6.8 million in new or improved infrastructure.
- The current manual meter reading program faces the following challenges: customers have access to water usage data once every two months; the existing system does not allow for timely detection of leaks; and almost half of existing meters are at or approaching the end of their useful life. To address these challenges all customer's meters will be upgraded with Smart Water Meters. The total cost is estimated to be \$23.1 million with \$16.2 million allocated to the Water CIP.



Construction of the new Horizon View #1 Reservoir nears its end. The new reservoir will better withstand earthquakes, ensuring water supply for the Somerset neighborhood of Bellevue.

Wastewater System

Bellevue's wastewater system, comprised of pipes and pump stations, is more than halfway through its useful life. Ongoing condition assessments, coupled with monitoring of damage claims, help in planning for replacement of wastewater system assets. Much of the system will soon need significant repair or replacement.

For the wastewater system, replacement of pipeline infrastructure is only just beginning. In many cases, repair of pipe defects has been and will continue to be a cost-effective way to extend the life of sewer pipes. However, to continue to deliver safe, reliable wastewater service, a significant increase in capital investment for pipeline replacement will be necessary. Pipes that convey sewage along the shores of Lake Washington and Lake Sammamish (lake lines) will be particularly difficult and expensive to replace.

Typically, wastewater systems rely on gravity sewers to pass flows to major regional lines ("trunklines"). In some locations, pump stations are needed to lift the sewage to higher levels to again take advantage of gravity flow. For the lake lines, low-pressure flush stations periodically "flush" the sewer lake lines with lake water to keep the lines clean. Pump and flush stations have electrical and mechanical components that must be replaced every 25-40 years.

As with the water system, increased system capacity (larger pipes and pump stations) will be needed to meet new growth in the downtown area and Bel-Red Corridor as these two areas develop to higher density zoning.

Total Estimated Cost for 2017-2023 Wastewater CIP: \$48 million

What types of projects are needed and why?

- A major portion of the work for the Wastewater Utility's 7-year CIP addresses replacement of aging infrastructure and rehabilitation of systems. Sewer pump stations needing upgrades or replacement have significant costs associated with them. Utilities has budgeted \$35 million for replacement of pipe infrastructure and rehabilitation of systems such as pumping (lift) stations.
- A significant infrastructure project planned is the replacement of wastewater pipelines submerged along the shores of Lake Washington. These lake lines comprise about 14 miles of infrastructure and will require replacement starting in 2020 and lasting about 10 years. Utilities also owns and operates lake lines in Lake Sammamish; however replacement is not expected until 2060. Due to the complexity and expense associated with lake line work, Utilities has budgeted \$4 million for initiation of this work within the current CIP horizon.
- Similar to the Water CIP, Wastewater CIP investment is necessary to accommodate future growth within the downtown and Bel-Red corridor. Utilities has budgeted \$925,000 for this work. This cost is reimbursed by new development.
- For Bellevue's aging manual read water metering system – water use informs sewer charges assessed to customers – Utilities has budgeted a total of \$23.1 million with \$6.9 million from the Sewer CIP toward its new Smart Water Meter Program.



Work on the East Central Business District Sewer Trunkline Improvements along 112th Avenue SE adjacent to the Surrey Downs neighborhood were completed in 2016. The improvements were needed to increase sewer capacity that will serve the downtown area as it continues to grow, and to replace aging infrastructure.

Storm and Surface Water System

Bellevue's storm and surface water system is comprised of pipes, culverts, open streams, local detention facilities, and large regional detention and water quality facilities. Because much of the infrastructure was built by King County and private developers before the Storm and Surface Water Utility was created in 1974, information is limited regarding the system's condition. The Stormwater Utility is unique in that drainage is a combination of publicly and privately-owned components working together to carry water to lakes, streams, and wetlands.

Annual capital investment increases will be needed to replace infrastructure prior to failure to prevent property damage and protect the environment. To date, infrastructure replacement has consisted primarily of replacing some major culverts in danger of failure and that were known to be barriers to fish migration. Additional information is being collected to determine asset inventory and condition, which will result in a more complete and accurate forecast for predicting appropriate timing for asset replacement. Preventing damage from storms is integral to the Stormwater Utility's mission. Flood protection and projects to restore stream health and environmental habitat are key components of the storm CIP program.



The Kelsey Creek Culvert Replacement Project will replace this aging culvert that lies beneath NE 8th Street. The project will improve fish passage for migrating salmon under a road that carries over 23,000 vehicles a day. Construction is expected to begin and conclude in 2018.

Total Estimated Cost for 2017-2023 Storm and Surface Water CIP: \$44 million

(Approximately \$18 million will be funded through the King County Flood Control Zone District.)

What types of projects are needed and why?

- The Flood control is a vital component of Bellevue Utilities' work. The Lower Coal Creek Flood Hazard Reduction Project is a \$14 million project funded by the King County Flood Control District. It will ease flooding in the Newport Shores neighborhood through replaced culverts and relocated stormwater outfalls. The district also assists in funding smaller projects throughout the city, with the utility receiving around \$600,000 a year.
- Utilities rehabilitates or replaces defective drainage pipelines and rehabilitates roadside ditches annually in the amount of almost \$1 million. With close to 400 miles of piped system alone, this program will continue in perpetuity. The 7-year CIP planning horizon allocates \$10.4 million toward this effort.
- The culvert under NE 8th Street at Kelsey Creek will be replaced due to age and fish passage issues. This replacement is budgeted for \$3.6 million.
- The stream channel modification program works to resolve unstable stream sections on public land to protect banks, in-stream habitat, and sediment movement. The budget for this work is \$2.4 million.
- Nine critical publicly-owned culverts remain as full or partial fish passage barriers. They will be replaced with new designs that allow for fish passage. The budget for this effort is \$2.9 million.

Funding for Environmental Restoration in the Bel-Red Corridor

- As part of the Mobility and Infrastructure Initiative, Utilities is planning stream restoration in the Bel-Red Corridor. Approximately \$4.8 million will be collected over the 7-year CIP for this future effort.

Major Issues

Bellevue Utilities services are both immediate and exceptionally long-range. Due to the long lives of our systems, our financial planning horizon extends 75 years.

Because most of our systems are well past midlife, growth in maintenance and capital investments is inevitable. Capital programs will focus largely on renewal and replacement of aging infrastructure.

The National Pollutant Discharge Elimination System Permit (NPDES) requirements, authorized by the Clean Water Act to protect surface waters, will have significant long-term impacts on the way the city does business, city expenses, and private development costs.

Financial Policies – Planning for the Future

The city's Drinking Water, Wastewater, and Storm and Surface Water Utilities were established with the goals of financial stewardship, self-sufficient funding, and comprehensive planning.

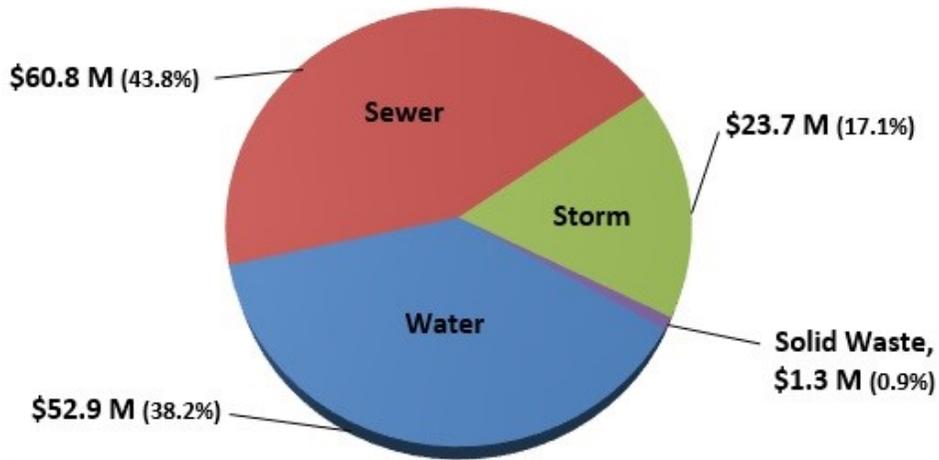
Bellevue Utilities Financial Policies:

- *Plan for long term investment in infrastructure*
- *Accumulate funds in advance of major expenses*
- *Maintain existing levels of service by renewing and replacing systems*
- *Keep rate increases gradual and uniform*
- *Maintain equity – each generation should pay its fair share*
- *Use debt sparingly and maintain financial flexibility*
- *Pass wholesale costs through to customers*

Utilities financial planning includes rate-setting and management of operating and renewal and replacement reserves. Short- and long-term planning serve as the foundation for these activities. Key financial operating and capital planning policies and practices, originally adopted by the City Council in the early 1990s, include:

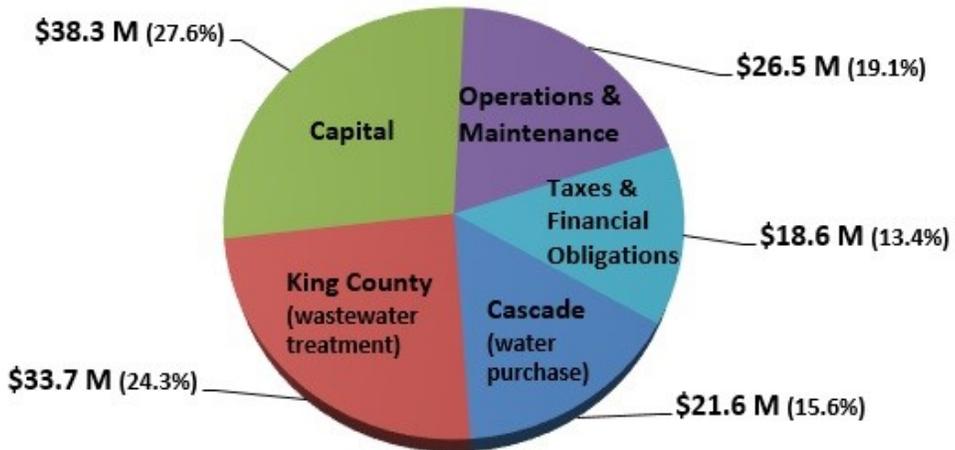
- **Rate-setting** – Rate revenues are the primary source of funding for Utilities. During the biennial budget process, the Environmental Services Commission reviews Utilities budgets and rates in detail and makes a recommendation to Council. The Council reviews and adopts rates every two years. Utilities rates are set as low as possible, while still allowing Utilities to accomplish ongoing operations, maintenance, repair, long-term renewal and replacement, system improvements, and its general business.
- **Reserves** – Reserves are purposefully set aside to help ensure uninterrupted service through normal fluctuations within the billing cycle, adverse financial performance, or significant failure of a Utilities system.
- **Capital Planning** – Bellevue Utilities is better prepared than most utilities to meet increasing infrastructure resource requirements due to the Renewal and Replacement Fund and our use of long-term planning and a 75-year financial model.

2017 Utilities Budgeted Revenue = \$138.7 M



Note: Revenues shown above exclude reserves.

2017 Utilities Budgeted Expenses = \$138.7 M



2017 Budgeted Equipment and Operating Reserves (\$ in Millions)

	Water	Sewer	Storm	Solid Waste	Totals
Equipment Replacement	\$3.7	\$3.0	\$3.5	\$0.0	\$10.2
Operations	10.1	4.3	1.7	1.1	17.3
Total Reserves	\$13.8	\$7.3	\$5.2	\$1.1	\$27.5

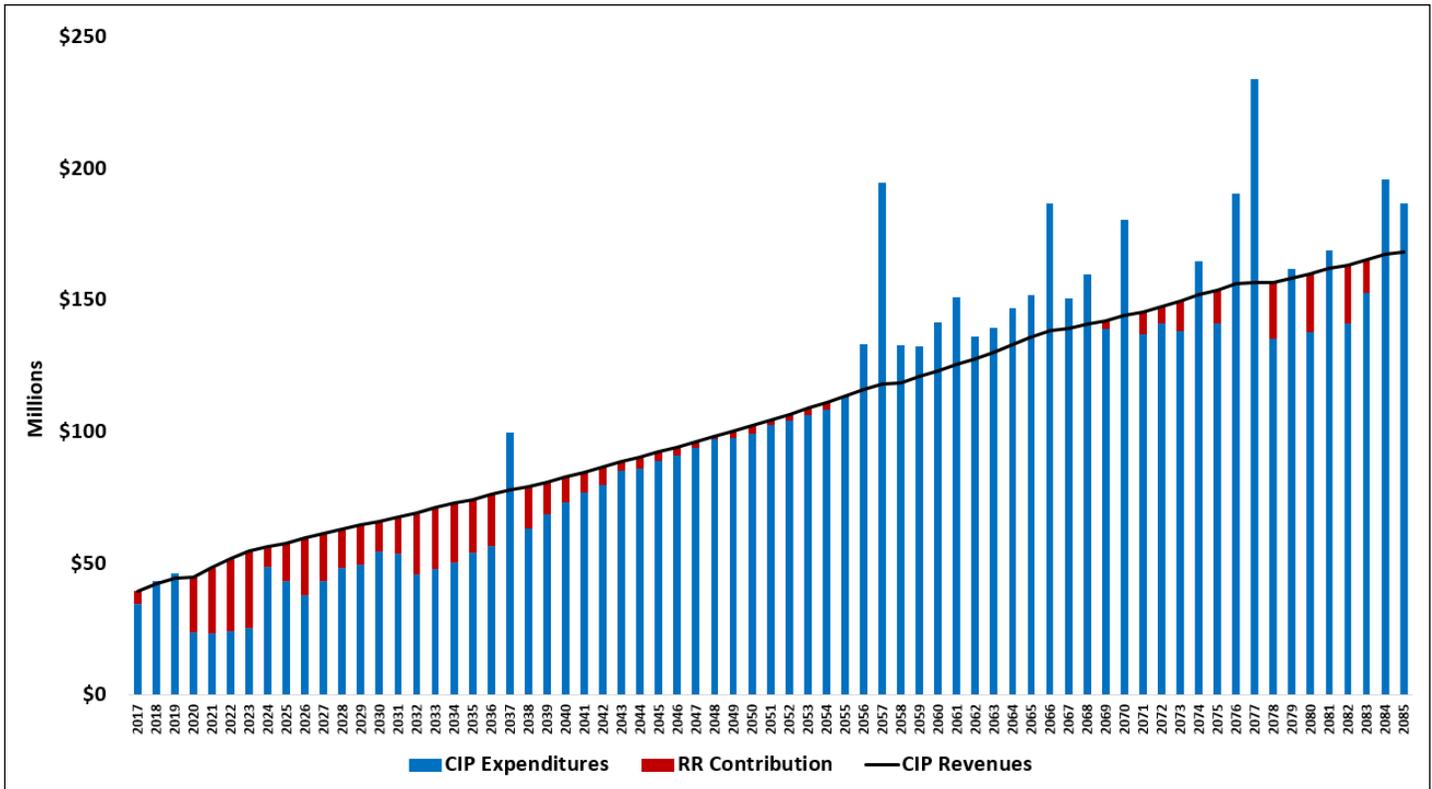
Long-term Renewal and Replacement Fund

In 1995, City Council created the Renewal and Replacement Fund to accumulate funds necessary to replace infrastructure as it ages. This account allows Utilities to:

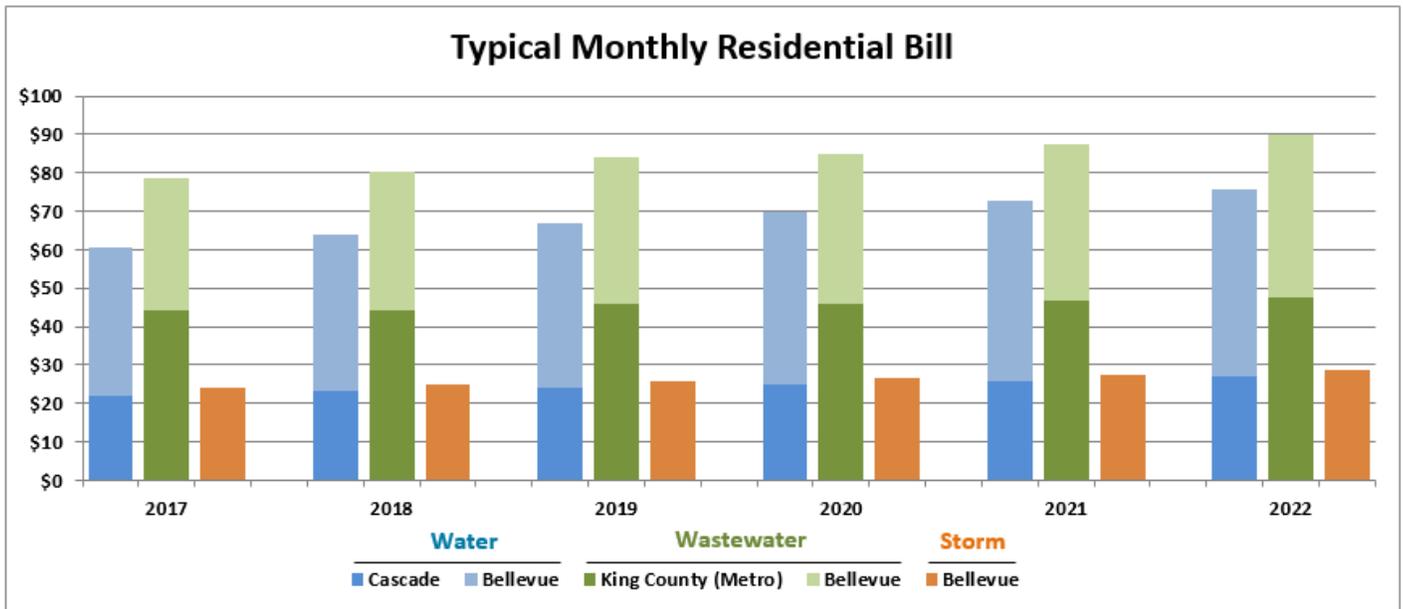
- Amortize major pending liabilities over a long time span, while maintaining current service levels.
- Keep rate increases gradual and uniform.
- Maintain equity – each generation should pay its fair share.

Spending on system renewal and replacement will increase significantly in the next ten years to adequately address the needs of aging infrastructure.

Water, Sewer, and Storm & Surface Water CIP Renewal and Replacement 75-year Forecast



Business Line	2017 Budgeted R&R Fund Balances
Drinking Water	\$46 M
Wastewater (Sewer)	\$64 M
Storm & Surface Water	\$56 M



Typical Monthly Single-Family Residential Bill

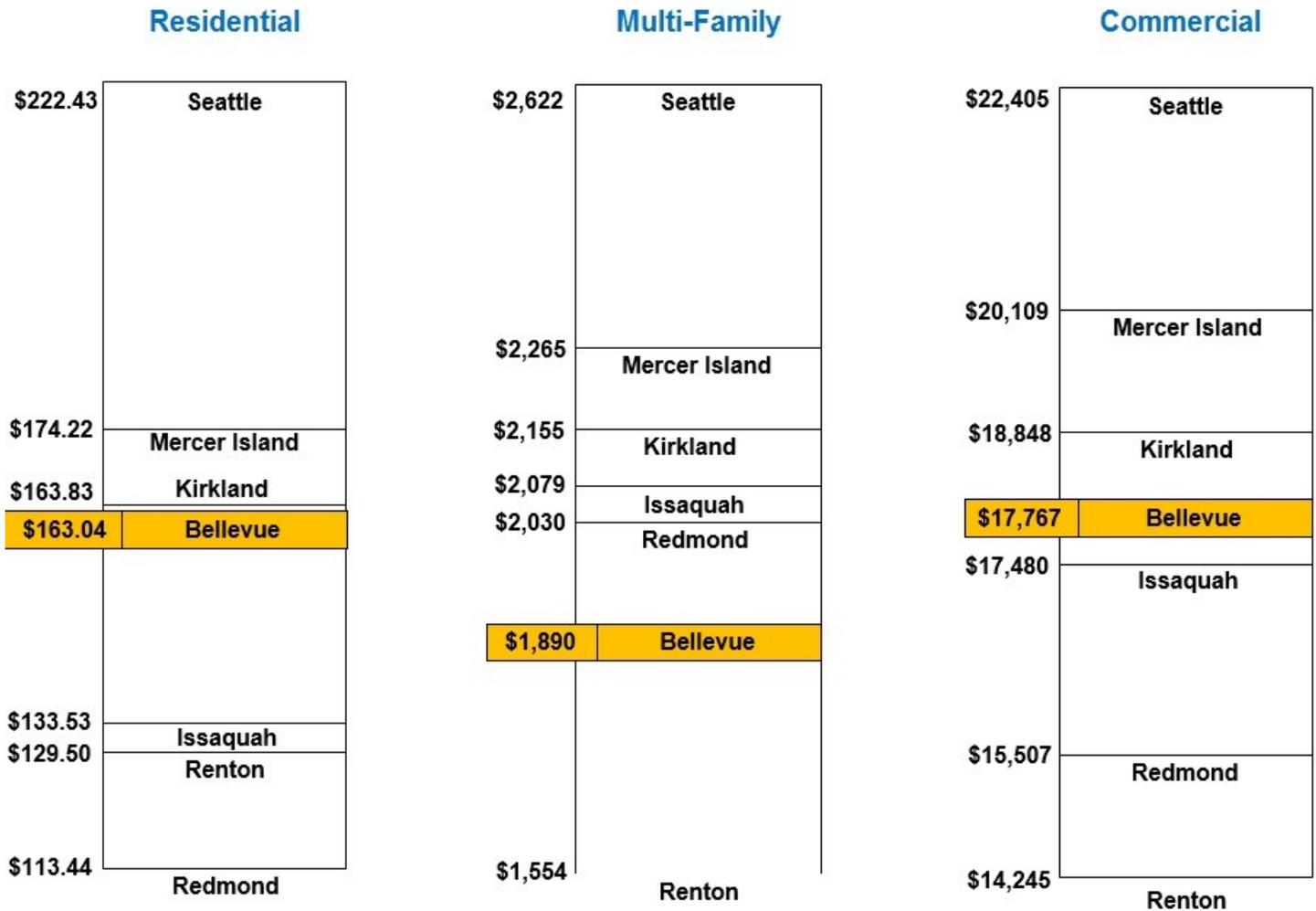
Service Year		adopted 2017	adopted 2018	projected 2019	projected 2020	projected 2021	projected 2022
Water	Cascade Drinking Water Utility	21.91	23.07	23.97	24.91	25.88	26.91
	Total	60.42	64.13	66.95	69.90	72.97	75.82
	Total Rate Increase	3.4%	6.1%	4.4%	4.4%	4.4%	3.9%

Sewer	King County Wastewater Utility	44.22	44.22	45.85	45.85	46.64	47.79
	Total	78.68	80.38	83.91	84.84	87.30	89.83
	Total Rate Increase	4.4%	2.2%	4.4%	1.1%	2.9%	2.9%

Storm	Total	23.94	25.04	25.91	26.77	27.68	28.62
	Total Rate Increase	4.3%	4.6%	3.5%	3.3%	3.4%	3.4%

Total Monthly Bill	163.04	169.55	176.77	181.51	187.95	194.27
Total Rate Increase - All Three Utilities		4.0%	4.3%	2.7%	3.5%	3.4%

Water, Sewer, and Storm & Surface Water Utilities 2017 Combined Monthly Bill Comparison



Comparisons based on the following criteria:

- **Water:** Consumption of 8.5 ccf (6,358 gallons)/month, 3/4" water meter
- **Wastewater:** Use of 7.5 ccf (5,610 gallons)/month, bill includes Metro charge
- **Storm:** 10,000 square-foot lot, moderately developed area

The following Supplemental References are included in this section:

Asset Management

- Supplemental Reference 1 – Asset Management

Drinking Water Quality

- Supplemental Reference 2 – Drinking Water Quality

Growth

- Supplemental Reference 3 – Growth Impacts
- Supplemental Reference 4 – Bel-Red Area Transformation

National Pollutant Discharge Elimination System (NPDES)

- Supplemental Reference 5 - National Pollutant Discharge Elimination System Municipal Stormwater Permit

Regulatory Mandates

- Supplemental Reference 6 – Mandates

Solid Waste

- Supplemental Reference 7 – Solid Waste System



A new challenge for Bellevue Utilities is performing necessary maintenance and construction work downtown now that many residents have chosen to live here for the urban experience. New city residents don't like the noise at night or early morning, which used to be opportune times for utility work because retail/office buildings and streets were vacant. Utilities is working to balance these issues so that important work can be done with the least impact to downtown residents.

Key Points

- The purpose of Utilities' Asset Management Program is to proactively manage more than \$3 billion worth of water, sewer and stormwater assets to meet service goals and manage risk while minimizing total life-cycle cost to rate-payers.
- The City plans on spending \$26 million per year on Utility infrastructure rehabilitation/replacement over the next seven years.

New Asset Management Initiatives

Successful implementation of Utilities' Asset Management Program involves:

- Establishing service levels

Although Utilities has been executing its Asset Management Program since 2006, the department continues to look for new and better ways to improve the program and ultimately realize financial savings or reduced risk for its ratepayers. In 2016-17, Utilities initiated 139 new projects/programs with the goal of improving the program. Two of those initiatives, both of which have the goal of optimizing the replacement/rehabilitation schedule for the two largest asset classes – water and wastewater pipelines – are described further below.

Water/Wastewater Pipeline Life Cycle Cost Optimization Project:

This project will develop an economic model which Utilities will use to optimize its pipe replacement/rehabilitation strategies. The model will calculate and use risk costs and replacement costs to determine the optimal replacement/rehabilitation timing for each pipeline asset. This will enable Utilities to optimize its short and long-term pipeline replacement/rehabilitation strategies and budgets.

New Technologies for Water Main Condition Assessment:

In 2016, Utilities incorporated a new method of evaluating pipe condition. The technology uses sound waves to determine pipe wall thickness. The level of pipe wall degradation is translated into an estimation of expected remaining life. The method to derive this information is non-invasive since the pipe does not need to be removed and no special test locations need to be installed. An ongoing program to evaluate pipes with this technology was created after a test pilot was performed in 2015. This technology has been used to evaluate 4.5 miles of water pipe in Bellevue since the beginning of 2016. Since these evaluations there have been two locations where the accuracy of the assessment was confirmed through field verification activities. Utilities has used the information from this technology to make replacement decisions at high consequence of failure locations, thereby significantly reducing the risk to rate-payers.

Key Points

- Utilities is a member of the Cascade Water Alliance. The City's drinking water is provided by Seattle Public Utilities via the Alliance.
- The City does not perform treatment of the drinking water, therefore drinking water quality is relatively unchanged from the point it is provided by SPU to the point that we deliver it to our customers.
- For safety, we monitor drinking water quality thousands of times per year across our system to ensure public health is protected, and to fully comply with regulatory requirements.

Objective

To provide safe, high-quality drinking water in full compliance with regulatory requirements.

Background

The City of Bellevue's water distribution system provides drinking water to nearly 224,000 people each day. The system is subject to regulatory oversight under the federal Safe Drinking Water Act and the Washington Administrative Code.

Bellevue's drinking water comes from the Tolt River and Cedar River watersheds, and fully meets all state and federal drinking water standards. From a system standpoint, Bellevue Utilities designs, operates and maintains the city's water storage and distribution system to ensure delivery of high-quality, safe drinking water. This occurs in a number of ways:

- Ongoing inspection and cleaning reduces leaks and removes accumulated sediments from reservoirs;
- Computer modeling of the distribution system helps keep water fresh by reducing the amount of time the water spends in the system;
- Water quality testing stations located throughout the water system ensure citywide monitoring for potential contaminants; and
- A backflow prevention program makes every effort to prevent air or fluid contaminants from entering the city's water system through back-pressure or backsiphonage.

Issues

- Drinking water concerns are increasingly spotlighted in the media, such as the lead issue in Flint, Michigan, or the *E. coli* outbreak on Mercer Island. In addition, potential health effects from new contaminants that may be found in source water are increasingly being researched by the public and the media (endocrine disrupting compounds, personal care products, microplastics, perfluorinated compounds, etc.). When these issues are prominent in the news, Utilities must prepare for and respond to numerous questions and concerns from customers, regulators and the media. Compounding the challenge is the proliferation of advocacy groups, which use water quality goals to imply the City's water is unfit to drink, even though water quality regulations are being met.
- For many similar cities, aging infrastructure can result in more line breaks and a greater potential for contamination of the city's drinking water. Utilities has embarked on numerous projects designed to replace aging infrastructure with the expectation that these investments will help ensure the consistent delivery of high-quality drinking water. Projects include assessment and/or replacement of aging system components, such as pump stations, distribution main lines, sample stands, chlorine analyzers and air valves.
- Consistently evolving regulatory mandates for water purveyors, specifically a greater emphasis on backflow prevention, system monitoring and reporting, may result in budget and resource impacts.
- As development continues, additional fire flow capacity may be needed. Storing additional water for fire-fighting can result in increased water age, which can degrade water quality. Bellevue monitors water quality and water age within storage reservoirs to ensure we deliver high quality water to our customers.

Key Points

- Planning for growth is coordinated throughout the city and is critical to ensure that adequate utilities capacity is available for new development.
- Utilities capacity improvements needed for growth, while initially rate-funded, are ultimately paid for by the benefited properties.
- Residential growth in the downtown area is presenting challenges with regard to the scheduling of maintenance work, construction, and garbage collection.

Objective

To strategically plan utility capacity to meet the needs of anticipated growth throughout the city, to ensure that capital project costs directly associated with growth are borne by the benefited properties, and to balance utility services and necessary construction and maintenance work so it has the least impact on the growing residential community in the downtown area.

Background

Increased densities downtown, in the Bel-Red Corridor (see Issue Paper 3), as well as in-fill development throughout the city, will significantly impact the drinking water, wastewater, and storm and surface water systems, as well as add thousands of new customers.

The growing number of residents moving into downtown Bellevue for an urban living experience is presenting new challenges for Utilities. Maintenance work, construction, and garbage collection that used to occur at night or early morning when office buildings and streets were mostly vacant is now causing challenges because these “off-hours” are when residents are sleeping. Many residents do not want to listen to construction noise on weekends either. Moreover, business owners do not want daytime or weekend construction to keep customers away from their shops. No matter when the maintenance or construction activities take place, someone may be disturbed or inconvenienced. Bellevue Utilities is challenged with balancing downtown residential and business concerns with necessary operations, maintenance, and the continued provision of essential services.

Utilities works closely with the city’s Planning and Community Development Department to predict the timing and type of anticipated growth to ensure consistency in development of the various system plans, and to make sure infrastructure capacity is available when needed. Utility System Plans, the primary tools used to strategically plan for growth, are updated as follows:

- Washington State Department of Health requires an update to the drinking Water System Plan every 6 -10 years.
- Washington State Department of Ecology requires the comprehensive Wastewater (Sewer) System Plan to be kept up-to-date to adequately address changing conditions and regulations. Due diligence requires that the Wastewater System Plan be updated every 6 to 10 years.
- The Storm and Surface Water System Plan is updated every 10 years.

Issues

- Planning is not an exact science; therefore, growth projections and resultant forecasted capacity requirements must be periodically reassessed to ensure Utilities is prepared for new growth and redevelopment.
- Growth-related capital projects are initially funded by rates. The project costs are then recovered over time from new development or re-development as it occurs.
- Utilities must work to balance the concerns, such as noise and traffic impacts, of new residential customers in the city center with the necessary delivery of services, construction, and maintenance.

Key Points

- The Bel-Red Corridor is undergoing a major transformation from an older, light industrial area to mixed use neighborhoods consisting of residential, office, and retail development close to two light rail stations.
- By 2030, the Bel-Red area is expected to generate 10,000 new jobs and 5,000 new housing units.
- New development in the Bel-Red Corridor will require water, wastewater, storm and surface water, and solid waste services and infrastructure.
- The Bel-Red Plan calls for stream/wetland restoration and improvements to surface water quality.

Objective

To ensure that the city's utilities provide sufficient capacity to meet the needs of projected growth in the Bel-Red Corridor and to support environmental restoration to improve streams, habitat, water quality, stormwater run-off, and native landscaping.

Background

The Bel-Red Corridor is a 900-acre area that stretches from I-405 to 148th Avenue NE, and from SR 520 southward to Bel-Red Road. When major employers began moving out of the area, the city worked with businesses, residents, and other stakeholders between 2005 and 2009 to come up with an overall plan for the growth and development of the Bel-Red area. In 2009, the City Council rezoned the area from light industrial to a mixture of retail, office, and residential uses, including mid-rises and high-rises. The vision for the Bel-Red Corridor became urban living and working – neighborhoods with residential, office, and retail close to light rail (two Sound Transit East Link stations are planned for this area – the Spring District/120th Station and the Bel-Red/130th Avenue Station). The plan also calls for parks, open space, stream and wetland restoration, and improvements to surface water quality.

The first project to break ground (on the old Safeway Distribution Center site at NE 12th Street and 120th Avenue NE) in September 2013 was the Spring District, a \$2.3 billion, mixed-use urban neighborhood development. The 36-acre site will include apartments, office buildings, restaurants, and hotels to encompass 16 city blocks. It will be close to Sound Transit's East Link Spring District 120th Station that will connect the Spring District to downtown Bellevue, Seattle, and Redmond. More developments are expected to come on line, especially with light rail ready to roll in 2023.

Issues

Utilities workload will continue to escalate for the next 15 years with the transformation of the Bel-Red Corridor, from permitting projects, inspecting plans, identifying and resolving issues prior to construction, coordinating with private utilities, scheduling shut-offs of services to existing tenants, etc.

- Two of Bellevue's six East Link light rail stations will be located in the Bel-Red Corridor, which will require permitting, inspections, and coordinating with multiple underground utilities.
- Although private developers will be installing much of the utility infrastructure, the city will eventually own the infrastructure, which will require operations and maintenance by Utilities.
- Day-lighted streams, wetland restoration, and other environmental rehabilitation taking place by private development in the Bel-Red Corridor will require Utilities staff to coordinate with Sound Transit and private development, review mitigation plans, coordinate with Parks and Development Services on riparian corridor improvements, design and implement native vegetation improvement plans on Utilities properties, and design and install new culverts on Bel-Red Road for the West Tributary and Goff Creek.

Key Points

- Everyday activities, such as fertilizing lawns, washing cars, and failing to scoop pet waste, can affect surface water quality.
- Protecting surface water quality requires a societal and cultural shift in resident behavior, combined with local, state, and federal actions. Bellevue has done and will continue to do its part in protecting water quality.
- One way to protect water quality is by continuing to implement the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, a Federal Clean Water Act mandate that affects programs citywide to prevent water pollution.

Objective

To coordinate citywide implementation of the NPDES Municipal Stormwater Permit to protect water quality and ensure compliance, while containing costs.

Background

The NPDES Permit program is a requirement of the Federal Clean Water Act intended to protect and restore waters for “fishable, swimmable” uses. In Washington, the Environmental Protection Agency has delegated permit authority to the Department of Ecology.

Bellevue is a “Phase II” permittee. The city’s first permit was issued in 2007 and ended July 31, 2013. A new permit took effect August 1, 2013; it was modified, effective January 15, 2015, and ends July 31, 2019. The permit authorizes the discharge of stormwater runoff from the city’s drainage systems into Washington’s surface waters (streams, rivers, lakes and wetlands) as long as the city implements permit-specified “best management practices” (BMPs) over the permit term. These BMPs reduce the discharge of stormwater pollutants to the “maximum extent practicable” and help protect water quality. The permit-specified BMPs are collectively referred to as the Stormwater Management Program and grouped under the following program components:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Controlling Runoff from New Development, Redevelopment and Construction Sites
- Municipal Operations and Maintenance
- Compliance with Total Maximum Daily Load Requirements (maximum amount of a pollutant that a body of water can receive, where applicable).
- Monitoring and Assessment

Issues

- The permit requires new development/redevelopment projects to use a list of low impact development (LID) best management practices (BMPs), such as bioretention facilities (ex. rain gardens) and pervious pavements, unless infeasible. Cost impacts to projects will vary based on site conditions.
- Post-construction maintenance cost impacts for LID BMPs are unknown.
- The permit required municipalities to review and amend citywide policies and regulations to require LID land use management strategies that minimize impervious surfaces and native vegetation loss. The goal is to make “LID the preferred and commonly-used approach to site development.” The permit sets no metrics. Instead City Council will be asked to set policy between equally critical growth management and water quality objectives to implement this requirement. Changes in city codes to meet this goal were implemented in December 2016.
- The permit increases requirements in the Utilities stormwater operations and maintenance and illicit discharge and detection programs that may result in budget and resource impacts.

Key Points

- Utilities monitors potential future regulatory mandates and works to proactively influence their outcome when appropriate.
- Utilities uses resources effectively and efficiently to comply with current regulatory mandates.
- As Utilities faces new and stricter regulatory mandates, additional resources may be required to remain in compliance.

Objective

To comply with local, state, and federal regulatory mandates while using resources effectively and efficiently, and to monitor potential mandates that may have an impact on the city and proactively influence their outcome when appropriate.

Background

Regulatory mandates can affect Bellevue Utilities on numerous fronts and vary from fairly easy to comply with to more difficult with far-reaching consequences and impacts to resources. An example of a mandate that is fairly easy to comply with is the requirement concerning personal protective equipment for staff. An example of a mandate with more far-reaching consequences and impacts to resources is our compliance with the Federal Safe Drinking Water Act.

Issues

- Utilities continues to focus on backflow prevention compliance rates mandated by the Federal Safe Drinking Water Act and the State Department of Health. The number of backflow prevention assemblies (devices that protect drinking water from contamination due to backflow) has grown 12 percent per year since 2001 and now totals over 12,000. The state has announced and resourced to place an increased focus on high health hazard cross connections and will be examining programs in more detail in the next biennium. Stricter state and federal standards will likely be promulgated within the next 5 years and result in the need for expanded drinking water system monitoring activities that may require additional resources.
- Ensuring compliance with King County regulations related to fats, oils, and grease (FOG) will continue to be a focus of Bellevue Utilities. (The accumulation of FOG from food preparation in the sewer system is a leading cause of blockages.) Increased density in downtown Bellevue, expansion of food services citywide to nearly 400, and aging wastewater infrastructure are major drivers in the number of FOG-related discharges and resultant blockages. In addition to preventive maintenance, Utilities conducts outreach to restaurants and other customers to reduce incidences of FOG related blockages.
- Continuing changes in the way we use, treat, and dispose of water will have impacts to the city in the future. Natural drainage practices and low impact development are examples of “smart development” that are being increasingly codified in local, state, and federal regulations.

Key Points

- Increased waste prevention and recycling by city customers will help extend the useful life of the Cedar Hills Regional Landfill and keep solid waste rates down.
- Utilities works with its solid waste collection hauler to ensure high-quality, efficient, reliable, and cost-effective solid waste collection services that protect public health and the environment.

Objective

To provide a convenient, unobtrusive solid waste collection system that contributes to a healthy and pleasing cityscape in an environmentally sensitive way.

Background

Through a contract with Bellevue, Republic Services provides garbage, recycling, and organics collection services to single-family, multifamily, and commercial customers, along with citywide litter control and customer service/billing services. Other items are collected at the curb and at Republic's Recycling Center in Bellevue.

The city's 120,000 annual tons of garbage is hauled to the Factoria and Houghton Transfer Stations, located in Bellevue and Kirkland, respectively, where it is consolidated and transported for final disposal to Cedar Hills. In May 2016, the Factoria Transfer Station opened a new 70,000-square-foot building. The larger building has reduced customer wait times and the number of transfer trailers needed to transport garbage to the landfill on local roadways, as well as minimized noise, dust and odors.

King County operates the Cedar Hills Regional Landfill and 10 transfer stations located throughout the county. Cedar Hills Regional Landfill is the only active landfill remaining in the county. Located in the Maple Valley area, Cedar Hills Regional Landfill has operated since 1965 and is projected to close in 2030 or later. Its useful life may be extended due to changes in daily landfill operations, the natural settling of the waste through decomposition, and ongoing waste prevention and recycling efforts. The county is currently exploring additional ways to maximize the capacity and lifespan of Cedar Hills Regional Landfill. The county also plans to consider the benefits of diverting a portion of the waste stream from Cedar Hills Regional Landfill to another disposal option before the landfill closes. Partial "early diversion" of waste from Cedar Hills Regional Landfill would further extend the life of the landfill and provide an opportunity to assess the feasibility and cost of other options before it is necessary to make a final decision on the successor facility to the Cedar Hills Regional Landfill.

In 1988, Bellevue entered into the Solid Waste Interlocal Agreement (ILA) with King County, under which the county provides solid waste planning, transfer and disposal services. The ILA runs through 2028, and the city has chosen not to enter into a new ILA. The current Comprehensive Solid Waste Management Plan, which is in the process of being updated, lays out a road map for the county's entire solid waste system, including the transfer and disposal system, waste prevention and recycling goals, and service standards for a 20-year planning period.

Issues

- Ensuring the updated King County Comprehensive Solid Waste Management Plan aligns with city interests.
- Implementing waste prevention and recycling strategies that help extend the useful life of the Cedar Hills Regional Landfill.
- Planning for how the city will manage its solid waste beginning in 2028 upon termination of the ILA.



Bellevue Utilities' Stream Team volunteers join forces on Earth Day to add native plants to the banks of Kelsey Creek. Join us by emailing streamteam@bellevuewa.gov or calling 425-452-5200.

A Nationally Accredited Public Utility Agency

