CITY OF NANAIMO
THE HARBOUR CITY



BUSINESS PLAN 2027

Public Works

PUBLIC WORKS AND ENGINEERING

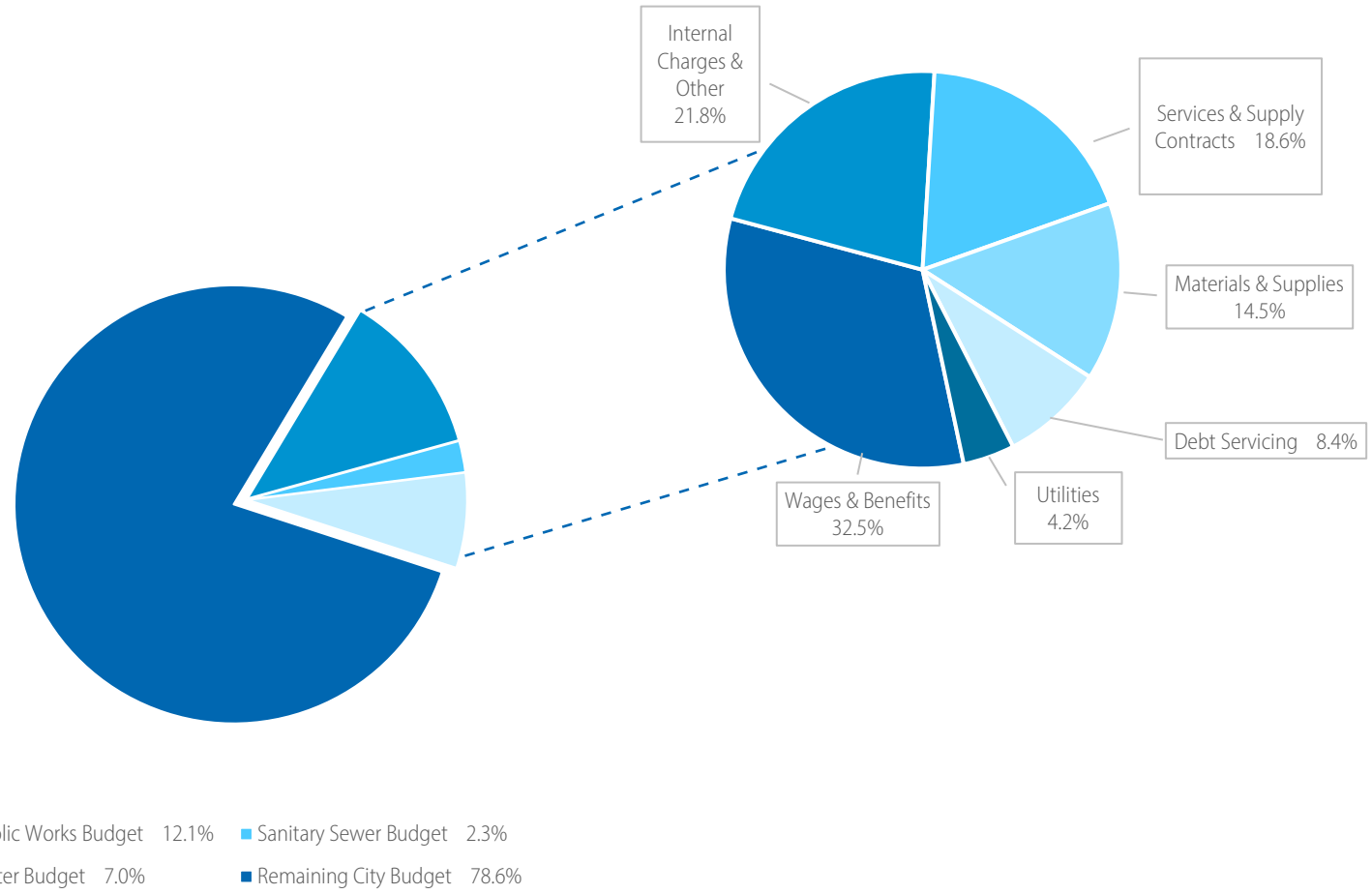
DEPARTMENT OVERVIEW

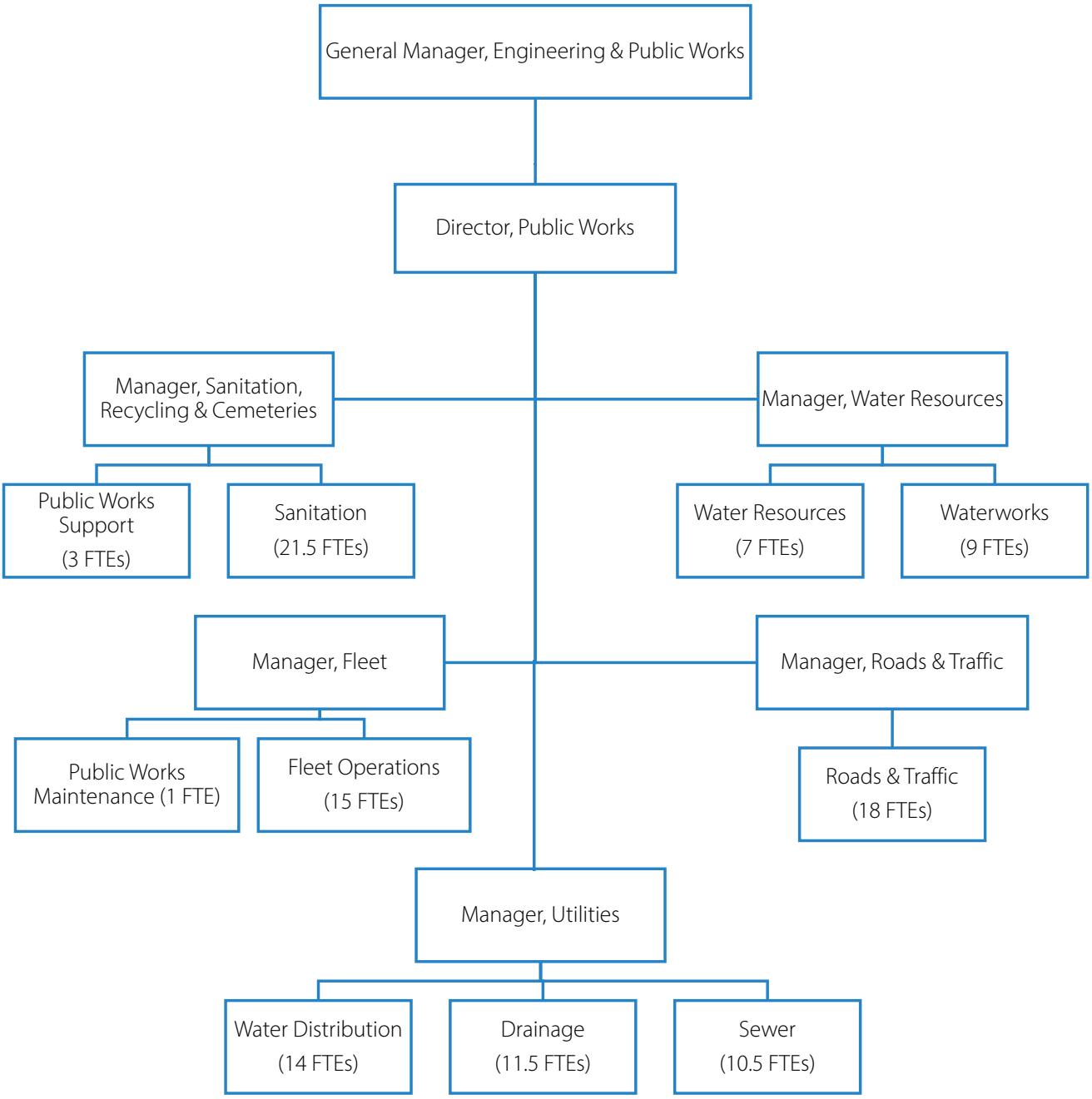
The Public Works Department constructs, operates and maintains critical City owned infrastructure. These include drinking water supply, treatment and distribution, sanitary sewer and storm drainage collection, sanitation, recycling, cemeteries, roads and traffic and corporate fleet services. Public Works and Engineering together plan, design, construct and maintain infrastructure while continually performing condition assessments and feedback to continue the asset management life cycle.

The Public Works Department is composed of six primary groups:

- Administration
- Sanitation & Cemeteries
- Roads and Traffic
- Utilities
- Water Resources
- Fleet

Department's Share of the Operating Expense Budget: 51.0 M





Excludes the following FTEs:

- Two Water Meter Readers, funded from Water and report to Finance

ADMINISTRATION

The Administration of Public Works provides essential support to the City's operations and services. These are front-line staff who interact with the public, provide clerical and financial support, records management, organize and ensure that other staff have the day-to-day resources they need.

Administrative services for the Public Works Department is provided by three staff located at the Public Works yard. Seasonal and temporary staff provide additional support as required.

The strong and diverse knowledge base and high level of service and public interaction provided by Administration, deflect calls from supervisors and managers resulting in efficiency and higher operational productivity.

Level of Service:

- Public Works is the primary point of contact for the public for many operational requests, questions or concerns. A front counter is available at Public Works for the public to access and reach staff in Public Works during normal working hours.
- Provide information and generate work orders in a range of areas including: solid waste, street cleaning, roads and utilities.
- Permit processing and approvals including water use, third party utility construction, etc.
- After Hours call response to emergency inquiries.
- 24/7 remote alarm monitoring of infrastructure throughout the City.
- Records management for the department.
- Assistance for financial transactions and processing of invoices.
- Public Works Administration provides both an interface for residents and a dispatch centre for operations. Fleet Services also has internal administrative functions.

2026 Accomplishments

Of the phone calls and emails received, it is estimated that around 50 per cent are resolved by the Administration staff person providing the information. The rest result in the creation of a work order, for assignment to field personnel.

Administration staff created, dispatched and closed:

- 45,624 tasks in 2024
- 42,601 for 2025
- 19,935 by end of June 2026

Administration staff received and responded to the following phone calls:

Calls Received	2023	2024	2025	2026 Projection
Number of Calls	20,000	12,250	15,082	16,100
Duration of Calls	600:00:00	319:13:07	318:12:25	360:00:00

Administration staff received and responded to the following emails:

Emails Received	2023	2024	2025	2026 Projection
Number of Emails Received	12,949	14,118	13,757	13,000
Number of Emails Sent	7,801	8,126	8,690	8,000
Total	20,750	22,244	22,447	21,000

2027 Opportunities And Considerations

The public-facing level of service in this area is high. Each resident who calls is able to speak with a member of the admin team and residents are accustomed to this service. It is increasingly rare in cities of this size with many opting to move to an automated answering service, including taking advantage of the power of AI tools. While staff do not feel this is necessary at this time, there are events that make this high level of service hard to maintain. In 2027 staff will continue to use the voicemail box to provide information during periods of high call volumes.

- Call volumes decreased in 2024, likely as a result of two factors: detailed information included in phone tree messages and a shift to email as a preference. This reduction appears to have reversed somewhat in 2025.
- The implementation of Cartegraph for asset and work management tasks has streamlined administrative operations. While the number of individual tasks is a significant increase over prior years, the vast majority of these are generated by field staff as part of normal operations. Administration staff are generating approximately 10% of the tasks.

SOLID WASTE MANAGEMENT

The City provides weekly curbside collection of garbage, recycling and kitchen/yard waste organic materials. The service uses standardized carts and automated collection vehicles. User fees fully cover the costs of this service, which is provided more than 31,000 single-family and multi-family (up to and including four-plexes) residential addresses. Larger multi-family, strata, commercial and industrial solid waste collection is serviced by the private sector.

- Provide residential solid waste collection including weekly collection of food and yard waste and bi-weekly collection of residential garbage and recyclables.
- Monitor contamination of recycling and organic materials.
- Provide public education and promotion for waste reduction and recycling and support waste reduction activities and education for public events.
- Provide public spaces cleaning services.
- Support other departments in clean up of encampment debris.
- Sanitation services support the City Plan goals of Green Nanaimo - Resilient & Regenerative Ecosystems, Connected Nanaimo- Equitable Access, Healthy Nanaimo- Community Wellbeing & Livability and Prosperous Nanaimo - Thriving & Resilient Economy.

Level of Service:

- Servicing waste receptacles throughout the community.
- Collection of illegally dumped items from public property and dumped hazardous items including needles.
- The delivery of curbside collection services is a daily activity that requires a high level of management and effort to match the high degree of complexity. Any failure in delivery results in a high level of public interest.
- Clean up littering and other unsightly areas of public property.
- Perform daily cleaning and sweeping around the downtown area.



In addition to collection, the Sanitation Section facilitates other initiatives including:

- The Partners in a Cleaner Community Program - working with local community groups to litter pick city roadsides.
- Reuse Rendezvous - The city wide swap meet.
- The Nanaimo Recycle Trunk Sale- a free event for residents to give used items a new life.
- A WildSafeBC coordinator - funded jointly with PRC and Development Engineering to provide education on preventing wildlife conflicts.

2026 Accomplishments

- Nanaimo is among some municipalities collecting three different types of waste with a single vehicle – many others use multiple vehicles.
- Injuries in the sanitation section have fallen significantly since the implementation of the automated program in summer 2018.
- Continued optimization has reduced service delays to a very low level.
- Continued replacement of aging collection vehicles.

- Curbside audits of recyclables since summer 2023 have resulted in substantial reductions in contamination rates, sufficient for the Contamination Remediation Plan to no longer be required.
- Delivery of dedicated Clean Team vehicles specially equipped with pressure washers for spot cleaning.
- Work orders relating to missed collections and other operational issues have reduced significantly.
- Continued to provide staff training specific to their area to stay current with technology.

Service User (HH)	2023	2024	2025	2026 Projection
Total	30,144	30,340	30,882	31,100

Gradual increase in total collection due to population along with increases in household waste generation rates. Higher recycling and organics diversion rates contributed significantly to the overall waste volume increases:

Total Volume (tonne)	2025	End of June 2026	2026 Projection	2027 Projection
Recycling	3,441	1,642	3,300	3,300
Organics	8,635	4,353	9,030	9,200
Garbage	7,534	3,832	8,070	8,250

Notable increase in collected Garbage and organics volumes in 2026 over 2025 and far above pre-pandemic levels.

Kilograms per household	2025	End of June 2026	2026 Projection	2027 Projection
Recycling	111.42	106.34	106.00	106.00
Organics	279.61	281.91	285.00	290.00
Garbage	243.96	248.17	260.00	260.00

The 2026 year-to-date diversion rate is 62 per cent.

2027 Considerations and Opportunities

To ensure that residential curbside collection remains efficient and sustainable in the face of urban growth and increasing waste volumes, the City is undertaking another review of its collection system to optimize service delivery for 2027. As part of this initiative, each of the City's ten collection zones will be divided into approximately 4, 4.5 and 5 sub-routes. This approach will help address seasonal fluctuations across the various waste streams while improving route balancing and maximizing operational efficiency.

CEMETERIES

The City owns, operates and maintains three cemeteries:

Location	Status	Total internments
Townsite/ Chinese Cemetery	Open for sales of new plots.	1,139
Bowen Cemetery	Closed for sales of new plots. Open to burials in existing plots.	14,904
Wellington Cemetery	Closed for sales of new plots. Open to burials in existing plots (very uncommon).	125

Public Works operates these sites under the Cremation, Interment and Funeral Services Act and City of Nanaimo "Cemetery Bylaw 2009 No. 7084". A contractor maintains the cemetery grounds. As a public service, the cemeteries are operated as an alternative to private burial services. The Revenue Services Section (Finance Department) receives and administers requests for plot purchase, burials and genealogy research requests. The trend appears to be an increasing preference for cremation burials.

2026 Accomplishments

Through June, there were 24 interments conducted, including one full burial and 23 cremation burials.

- Interment of cremated remains accounted for 95 per cent of interments in 2026, up from 85 per cent in 2025.

2027 Considerations and Opportunities

There are currently no dedicated cemetery staff. This means that opportunities may be missed to develop and expand service offerings, revenue potential and cultural significance of the sites. Burial work is carried out by the sanitation section which can put undue pressure on the department who is primarily focused on delivering daily waste collection services.

- Transfer of some administrative tasks from Finance to Public Works Administration to improve customer service and operational effectiveness.
- The public interest in these sites can be tied to emotional reactions, so a high level of empathy and emotional intelligence is required for employees who come into contact with interested members of the public or family members of those interred.
- Townsite/Chinese Cemetery is the only site with remaining capacity for new plots. To continue offering burial services, alternative memorials could be explored including columbarium, ash gardens, etc.
- Staff launched a business model review in 2023 to address the limited space available for expansion and to provide a long-term and sustainable business model and service plan. This work is ongoing and supports City Plan's goals of a Thriving and Resilient Economy and Equitable Access and Mobility. Once complete, a report for decision is expected to be presented to Council for their consideration.

ROADS AND TRAFFIC

Apart from Provincial Highways 19 and 19A and Trans-Canada Highway 1, the City owns and maintains its road network, including pavement management, winter maintenance, signage and pedestrian and cycling facilities.

In 2026, there were:

- 527 kms of roads, 459 kms of sidewalks and 75 kms of bicycle lanes/cycle tracks,
- 55 signalized intersections, 6 roundabouts, 6 traffic circles and 22,586 traffic signs,
- 1,576 pay parking spaces (285 on-street and 1,291 off-street),
- 20 bridges and 29 railroad crossings,
- 4,957 City owned streetlights and 4,189 lights leased from BC Hydro and
- 1,238 marked crosswalks and 84 pedestrian activated crosswalk warning beacons.
- With ongoing development, new assets are being constructed and transferred to Public Works for operations and maintenance each year, increasing the average effort and expenditures required. In 2025, 925m of new sidewalk, 555m of new curb and gutter and 11 new streetlights were added to the City inventory.



Level of Service

- Snow and Ice Control (SNIC) reduces risk and maintains functionality of the transportation network during adverse weather. Routes are prioritized with the goal of clearing major routes first, particularly emergency and transit routes. Local streets are the lowest priority and are cleared once higher priority routes have been completed. No service is provided to laneways.
- Potholes - Roads crews respond to complaints from the public and reports from staff and repair as identified.
- Traffic Signals - 50 per cent of the system is inspected once per year and conflict monitors are tested every year.
- Street Sweeping - Major roads are swept once per month, other streets once per year.
- Sidewalk Sweeping - Downtown sidewalks are swept twice per week.
- Sidewalk Cleaning - Downtown pressure washing takes place every second year.
- Street garbage receptacles are provided and maintained. Currently there are over 100 streetside receptacles in the city that are emptied at least weekly.
- Sidewalk settlements that are greater than 25 mm vertical displacement are repaired.
- Boulevard and roadside vegetation control is completed once per year during the summer.
- Centreline road markings are repainted every year. Stop signs and yield signs are inspected annually; other signs are replaced as needed.
- Crosswalks are renewed based on road classification and wear history.
- Traffic Safety - Respond to traffic concerns and provide technical data collection and analysis.
- Provide and maintain transit amenities including bus shelters, benches, garbage cans and signs, in partnership with RDN Transit.
- Crack Sealing - Roughly 40,000 lineal metres of roadway is crack sealed every year. This is a decrease from prior years due to continued increases in pricing.
- Asphalt Rehabilitation and Patching – There are programs in place to patch and renew asphalt with the aim to maintain the travel and driving surfaces.
- Annual road works and dust suppression for gravel tracks on Protection Island.

2026 Accomplishments

- Renewed asphalt road surface, including on Biggs Rd, Westwood Rd, East Wellington and multiple locations on Hammond Bay Rd, Bowen Rd, Dover Rd and Rutherford Rd.
- Upgrades of rail crossings at Albert St., Townsite and St. George Rds.
- Completed 38,100 lin. m. of crack sealing.
- Promptly and effectively responded to pothole and sidewalk repair requests.
- Provided a high level of service in supporting other City departments.
- Assisted utility operations with sidewalk reinstatement and paving repairs following underground utility work.
- Supported Culture and Events section in completing the street banner program and road closures for parades.
- Supported Downtown Nanaimo Business Improvement Area and Old City Quarter in their local promotions (banners, custom street name signs, etc.).
- Supported Engineering in project delivery.
- Installation of new and upgraded traffic signals and pedestrian accessibility improvements.
- Coordinated efforts with Parks Operations to clear Active Transportation corridors.
- Continued to work with Urban Design Roster artists to wrap traffic control cabinets.
- Successfully converted Crane Truck Operator to Roads Serviceperson 2, providing increased capacity for tasks and projects while retaining operational flexibility.
- Successfully transitioned Traffic Marking Specialist to temporary summer position, reflecting the seasonal nature of the work required.
- Completed detailed survey of road conditions and completed second year of 3-year trial of visual computing platform for road condition assessment
- To mid-June, 6,520 tasks were completed.
- Continued to provide staff training to stay current with technology.

2027 Considerations and Opportunities

There is a steady rise in expectations for levels of service. This ranges from concerns with congestion or lack of sidewalk connectivity, to feelings of inadequate parking. Balancing resources to meet these expectations is a major challenge for staff.

- Staff retention and succession planning is critical as most of the entry level positions within the department are temporary or casual. This prevents junior staff from acquiring the full range of skills necessary to qualify for more senior positions. City and CUPE are considering positions where wage rates could be appropriately linked to progression.
- With implementation of new Complete Street Standards, operation and maintenance requirements are increasing as well. Public Works has engaged a contractor to clear debris from Metral Drive cycle tracks as a way to gauge service levels and future maintenance costs for other similar infrastructure.
- Wellcox Trestle is deteriorating rapidly and requires significant ongoing maintenance efforts and investment until such time as it can be replaced.
- Road Rehabilitation Asset Management: The asphalt on the City's roads is deteriorating faster than it is being rehabilitated. The City typically has funding for several million dollars per year of asphalt renewal, unchanged significantly for many years. The Asset Management Plan update will provide as opportunity to model potential service level changes in an effort to close the funding gap.
- Rail Crossings and Cost – There are 29 rail crossings in the City for either roads or trails. There are annual costs attributed to maintaining these crossings and considerable costs any time road or trail improvements are undertaken near the crossing. Significant changes to Federal rail standards (coming into force in 2027) mean these crossings are a financial and regulatory barrier to undertaking road and trail improvements along the entire length of the tracks in the city.
- Traffic Medians and Boulevard Maintenance – The increase in assets continues to cause challenges for operations and maintenance. The level of service demanded by the public is higher than what the City is currently able to provide (financially and personnel). Public Works and Parks Operations are reviewing options to allow residents to beautify boulevards fronting their properties without creating liability for the City.
- Retaining Walls – There are currently no maintenance activities planned for structural retaining walls. As these age, new activities will need to be defined and funded and the asset class added to our Asset Management Plan.
- Continuing escalation of material and contract costs, as well as new assets inherited from development activities, may result in reduced quantity of work if budgets remain unchanged.

UTILITIES AND WATER RESOURCES
WATER SUPPLY, TREATMENT AND DISTRIBUTION

The City operates and manages a water supply and distribution system for consumption and fire protection to the residents and businesses of Nanaimo, South West Extension, Snuneymuxw First Nation and the District of Lantzville. This infrastructure includes dams, reservoirs, pump stations, pressure reducing stations, supply mains, distribution mains, services and water meters.

The City's drinking water supply originates from the protected South Nanaimo River Watershed, consisting of over 209 sq.km of privately managed forest land. The City owns and operates two dams within the watershed to ensure consistency of supply throughout the year and release of water to maintain the environmental health of the river. Two parallel pipelines run from the South Fork Dam in the watershed to the South Fork Water Treatment Plant (WTP).

The plant filters and conditions the water to a quality exceeding Canadian Drinking Water Guidelines. Following treatment, drinking water is distributed through water supply transmission mains to nine balancing reservoirs with a combined system storage of 59 million litres. Water is then delivered to customers, primarily by gravity, through supply and distribution piping.

Characteristics of the system include:

- Two Water Supply Dams, Jump Lake Reservoir and South Fork Reservoir
- One South Fork Dam Intake
- One South Fork Water Treatment Plant
- 94 kms of transmission watermain as of July 2026
- 565 kms of distribution watermain as of July 2026
- nine reservoirs (storage tanks)
- five pump stations
- three stand-by pump stations (including the emergency pump station)
- Two Water Filling Stations
- One Energy Recovery Facility
- 54 Pressure Reducing Stations
- 3,376 Fire Hydrants
- 9,789 valves as of July 2026 (8,973 line valves and 816 air valves)
- 28,017 service connections as of July 2026
- 6.2 billion litres of treated water produced and supplied as of July 2026

Level of Service

- Operate and maintain water storage and distribution infrastructure including main flushing, water testing, air valve and valve maintenance and inspection in compliance with the Drinking Water Protection Regulation.
- Provide water supply for fire suppression and for environmental health of the river.
- Operate telemetry system to monitor water system 24/7 in real time.
- Watermain Breaks – Provide 24/7 response by certified water operators.
- Operation of a membrane water filtration plant to supply the entire City and neighbouring communities with a maximum capacity of 116 million litres per day.
- 1996 hydrants serviced and 925 hydrants painted during annual 2025 maintenance program.
- 111 Hydrants flushed during annual 2026 flushing program.



- Rigorous raw and treated water sampling and testing program:
  - 49 raw water tests in the watershed
  - 1,379 treated water tests at the WTP
  - 99 treated water tests at in town reservoirs
  - 1,200 treated water tests throughout the system
- Current Water Audit revealed a very low level of real losses of 1,139 million litres, corresponding to an Infrastructure Leakage Index (ILI) of 1.13, (the lowest level of losses that can be achieved).
- Complete dam inspections and reporting for 10 dams (two for potable water and eight for recreation/conservation), in accordance with the British Columbia Dam Safety Regulations and Canadian Dam Association Guidelines.

2026 Accomplishments

- Continued implementation of the Water Supply Strategy recommendations, goals and objectives as part of the City Plan. This will develop further understanding of the impacts of climate change on drinking water supply and the infrastructure upgrades needed to support the future population growth of the region.
- Continued water conservation demand management measures in cooperation with the RDN WaterSmart team. The average daily consumption of water for all users in Nanaimo during 2025, was approximately 334 litres per capita per day. The average daily consumption of water for residential users in 2025, was approximately 183 litres per person per day.

- Continued implementation of operational resiliency within the Water Resources group. Continuing efforts focused on building a proactive, strengthened and adaptable team and water supply system that can deliver objectives and manage the risks.
- Reviewed timing and priorities of major capital projects such as the Towers Water Project, North End Water Supply project, South Town Water Supply project and South Fork Dam Upgrades to prioritize the 10 Year and Long Term Plans.
- Continued Water Supply Cathodic Protection review to provide technical data for managing the metallic water infrastructure assets.
- Continued valve maintenance on supply and distribution systems.
- Provided 24/7 emergency response for watermain breaks and all water supply and distribution emergencies by certified water operators.
- Completed the 2026 flushing program, maintaining high quality of potable water.
- Continued the Cross Connection Control (CCC) Program which improves the level of protection to the water system and reduces the risk of contamination. By the end of 2025, a total of 3267 backflow devices across 1621 facilities were managed with registered accounts under this bylaw.
- The Energy Recovery Facility located at Reservoir No.1 generated $44,562 after the first half of 2026 with 374 MWh generated and put into the BC Hydro electricity grid. From 2014 to June 2026 the station generated 9,332 MWh of power for a total of $1,079,254.
- Water filling stations generated $116,973 after the first half of 2026 with 24,480 m3 of water used. From January 2020 to June 2026 the stations have pulled 329,024 m3 of water through the three ports for a total of $1,277,141.
- Complete updates to the OMS manuals for all City owned dams and continue to complete dam safety works in accordance with dam inspection recommendations through City's Dam Safety Action Plan. This includes continuing communication and security upgrades at the Jump Creek and South Fork Reservoirs.
- Complete the 2026 Formal Annual Dam Safety Inspection Reports for all City-owned dams.
- In compliance with reporting the Dam Safety Inspections, Reviews and supporting Studies as of July 2026 with the provincial regulatory body.
- Continued to provide staff training to stay current with technology.

2027 Considerations and Opportunities

- Continue operational maintenance and restoration for the aging watermain infrastructure. The City has a mixture of pipes and other components ranging from very new to very old that form the Water Distribution System. Infrastructure such as pipes, have a limited lifespan and eventually require renewal to remain reliable. Approximately 6 percent of the infrastructure (with a value of about $60 million) is near the end of the typical useful life and requires heightened monitoring and eventual replacement.
- Continue restoration and repairs for Watermain Breaks. The majority of breaks are on pipes made from Asbestos Cement that were installed in the 1960's and 1970's. Typically, the City experiences several breaks a year on this type of pipe. Significant progress has been made replacing AC watermain older than 40 years with pressure of 80 psi or higher, whenever repaving and if adjacent to a capital project.
- Continue restoration and support for service connection repairs. Individual service connection piping to each property has reached the end of its lifespan and causing water leaks throughout the city; while not major, these create nuisance and expense for property owners and the City.
- Development and update of a Water Supply Operations and Maintenance Program.
- Continue to support strategic planning with the review of timing, priority and cost of major capital projects such as the North End Water Supply project, South Town Water project and multiple dam projects for inclusion and prioritization within the 10 Year and Long-Term Plans.
- Continue the Water Supply Cathodic Protection program with design and installation of cathodic protection sites to extend the life of metallic water supply assets.
- Increase the storage capacity of an area of the City with the design of the Towers Reservoir Project.
- Initiate the Preliminary Design for the South Town Water Project, an infrastructure upgrade project for the water supply and distribution system.

- Continue to provide technical information for the operation and planning resiliency of the water supply system for both water system asset condition and community growth.
- Completion of 2027 Formal Annual Dam Safety Inspections for all water supply and recreational dams and reported to the provincial regulatory body.
- Update Water Supply and Recreational Dam Emergency Plans.
- Development and update of the Public Safety Management Plan for the City's Recreational dams.
- The growth in population and corresponding increase in infrastructure, such as more pipes, valves, pump stations, reservoirs, etc., requires additional staff resources and operational funding. Over the past 10 years, the City has seen population growth of about 23 per cent without a corresponding increase in staffing. Over this 10-year time period, an additional $6 million in water distribution infrastructure has been added to the City through transfer from development. A business case will be put forward for an additional water operator when budget conditions allow for staff increase.

SANITARY SEWER

The City provides and maintains a safe and healthy sanitary sewer collection system for residential, multi-family, commercial and industrial properties. The City works closely with the RDN who operate the Greater Nanaimo Pollution Control Centre, treating sewage to a secondary level before discharge to the ocean.

Characteristics of the system include:

- 580 km of gravity sewer mains and 18 km of forcemains (pressure pipes from pump stations).
- 26,882 lateral sewer service lines totaling 290 km to individual properties.
- 9,169 manholes
- 15 lift stations.
- Four low-pressure sewer systems in specific neighborhoods.
- 15 flow monitor stations.
- Three chemical injection sites to control fat buildup or odours.



Level of Service

- Ongoing maintenance and upgrades of sewer services to properties in the City.
- Conduct routine sewer main flushing of certain pipes. There are pipes on 1, 3, 6 and 12 month flushing programs to ensure they remain operational.
- Ongoing maintenance and cleaning of sewer pump stations.

- Provide 24/7 emergency response for all sewer related emergencies by certified wastewater operators.
- Video inspections of sewers to monitor and evaluate physical condition.
- Maintain annual Pipe Condition Assessment program.
- Conduct inflow and infiltration monitoring and remediation program.

2026 Accomplishments

- Maintain yearly sewer flow and rainfall monitoring program for city wide sewer model calibration.
- Ongoing implementation of Cartegraph Asset Management Software for sewer.
- Video inspection and condition assessment of sewer pipe completed by City staff and contractor to date.
- Manhole inspections for public safety and infiltration and inflow issues.
- Infiltration and inflow maintenance in easements and rights-of-ways.
- Large scale smoke testing program in Harewood area revealing eight residential and two commercial cross connections of storm to sanitary sewer.
- Responded to and completed 4,846 Cartegraph tasks in 2025, 2,321 to date (Jul 21, 2026).
- 124 service repairs/ upgrades in 2025, 73 to date (Jul 21, 2026).
- 89 kms flushed 2025, 45kms to date (Jul 21, 2026).
- Upgrade remote data acquisition and recording of pump station maintenance information.
- Upgraded Seventh & Park Sewer lift station with new odor mitigation station.
- Maintained operational effectiveness as PW Yard size was reduced for new Operations and Fleet Buildings.
- Continued to provide staff training to stay current with technology.

2027 Considerations and Opportunities

- The City has a mixture of pipes, manholes and other components ranging from very new to very old that form the sewer system. Infrastructure, such as pipes, have a limited lifespan and eventually require renewal to remain reliable. Approximately four per cent of the sewer infrastructure, with a value of about $25 million, is near the end of the typical useful life and requires heightened monitoring and near term replacement.
- Continued reduction of infiltration and inflows into sanitary sewer system, reducing the costs of treatment, through manhole grouting and smoke testing of the sewer system.
- Pipes in poor condition introduce unnecessary flow from rainfall and groundwater infiltration in the system causing system capacity reduction and treatment issues.
- Some of the major trunk sewers have greater volume than the Provincial requirements allow and monitoring stations have been installed to better understand the risks.
- Revenue from user fees and development cost charges are not keeping up with the need to expand sewers, creating financial pinch points.
- Population growth and the increase in infrastructure will need staff resources and operational funding. Over the past 10 years, the City has seen population growth of about 15 per cent without a corresponding increase in staffing. Additional pipes require flushing, inspection and maintenance. As growth continues, without additional funding and staff, the condition and reliability of the sanitary sewer system infrastructure will decline. Over this 10 year time period, an additional $5.5 million in sanitary sewer infrastructure has been added to the City through transfer from development. A business case will be put forward for an additional sewer operator when budget conditions allow for staff increase.
- Climate change impacts capacity and inflow and infiltration. With increasing storm intensity and rainfall events, the peak flows the system is required to handle increase.
- Continue to work closely with RDN on source control issues and monitoring.
- As the PW operations yard is reduced in size for the construction of the new Operations and Fleet Buildings., sewer budget and effectiveness will be impacted by the loss of the dump site in the yard. Alternative options will result in higher disposal costs.

DRAINAGE (RAINWATER)

Drainage infrastructure, such as pipes, ditches, culverts, catch basins and detention ponds delivers rainwater to natural water bodies. The overall goals are to convey water away from roads, properties and buildings in a safe and sustainable way, while mitigating adverse impacts on natural watercourses and contribute to the health of natural areas.

Characteristics of the system include:

- 619 kms of storm drainage mains
- 558 kms of ditches
- 16,738 storm lateral services totaling 158 km
- 7,559 manholes
- 14,074 catch basins
- 42 detention or pond facilities

Level of Service

- Catch basins (Road and Boulevard) are cleaned annually to prevent harmful sediments entering waterways and ensure environmental sustainability.
- Inlets and outlets are inspected regularly before and during major rainfall events to ensure storm drainage is working correctly, mitigating flooding.
- Monitoring and maintenance of natural watercourse to ensure flow of water and to prevent flooding.
- Ongoing monitoring of the North Slope erosion area during king tides and major rainfall.
- Flushing and video inspection of storm pipe and culvert infrastructure.
- Annual vegetation control maintenance around storm infrastructure such as inlets, outlets and detention ponds to ensure free flow and access.
- Inspections of stormwater infrastructure in new subdivisions.
- Water Quality Control program sampling for City of Nanaimo swimming beach areas to ensure safe recreational swimming and published.
- Respond to reports of oil spills that are near or in waterways, catch basins and provide remedial actions for cleanup and containment.



2026 Accomplishments

- Video inspection and condition assessment of 3.7 kms of drainage pipe to date.
- Maintain yearly storm drainage monitoring program for two flow stations and nine level stations.
- Continued implementation of Cartegraph Asset Management Software for drainage.
- 10,500 catch basins cleaned to prevent sediment and heavy metal contaminants from entering storm system to date.
- Coordination of Road Rehab and Traffic Calming programs to improve safety.
- Responded to 24 oil spills, implemented remediation measures and reporting of spills to Ministry of Environment.
- Tracked and identified source of major oil spill into Dodds Narrows from Duke Point Industrial Park, coordinated with SFN, Coast Guard, Min. of Environment and Fisheries and Oceans, resulting in fines to polluter.
- Completed City wide storm drain infrastructure inventory for SD model.

- Replaced and upgraded over 298 m of failed corrugated steel pipe.
- Responded to 20, 096 Cartegraph tasks (2025).
- Upgraded and repaired 37 storms services, (2025).
- Conducted seasonal water sampling program from May to September for fecal coliform on local area beaches.
- Monitored Stormceptor at bottom of PW Yard to prevent pollution of Northfield Ck and sewer system.
- Maintained contract with Generating Resources for Tomorrow (GRT) for environmentally friendly disposal of catch basin waste, street sweeping waste and hydro vac waste. Transported 358 metric tonnes of CB spoil to site in 2025, currently at 145 metric tonnes for 2026.
- Maintained operational effectiveness as PW Yard size was reduced for new operations and fleet buidings.

2027 Considerations and Opportunities

- Climate change has increased the intensity and strength of storm events. Drainage infrastructure may not be able to handle events especially the short duration, high intensity events. Increased flooding of low lying areas and properties may result due to more frequent storm events.
- Sea level rise is expected to restrict the amount of stormwater runoff and increase erosion on shorelines.
- Annual water quality coliform testing program at various water courses and swim beaches within the City.
- Managing growth of storm infrastructure with competing priorities for General Revenue funding and staffing needs.
- Increased focus on Cottle Creek, Departure Creek and Wexford Creek for sediment removal to prevent flooding of properties during heavy winter and spring flows.
- The City will need to upgrade funding model to budget for an aging drainage infrastructure and consider the benefits of a stormwater utility, current model is not keeping up with the asset deterioration. We have more assets requiring upgrading and replacement resulting in a further backlog of infrastructure in need of repair.
- Ongoing GIS data collection program to fill in gaps in existing records.
- Increased attention to minor catchbasin repairs (grouting), extending the life of existing utilities and avoiding added costs of full replacements.
- There are increasing amounts of private drainage infrastructure that play an important environmental role in both quantity and quality of stormwater. These systems require maintenance to prevent contamination and continued operation. Education and messaging to property owners will be important as these systems age and need attention.
- As the PW operations yard is reduced in size for the construction of the new operations and fleet buildings, drainage budget and effectiveness will be impacted by the loss of the dump site in the yard. Alternative options will result in higher disposal costs.
- Continued to provide staff training to stay current with technology.

FLEET

The Fleet Section provides support, oversight and maintenance of the City's transportation and mobile equipment inventory. The group includes 16 permanent staff and a manager.

Characteristics of the system include:

- Maintains over 280 fleet assets which include light, medium and heavy-duty vehicles, tractors, backhoes, loaders, excavators, trailers, fire trucks and ice resurfacers. 25 of these assets are 100% battery electric, which includes 21 light-duty vehicles and 4 ice resurfacers.
- Maintains over 450 pieces of equipment including generators, mowers, compressors, trailers, attachments, etc.
- Maintains 43 emergency generators and pumps located across the city.
- Generates and completes over 3,500 work orders per year for vehicle maintenance and repair.
- Maintenance facility includes 6 service bays, 1 welding bay and 1 small equipment shop.

Level of Service

- Operates several fleet maintenance shifts from 6:00 am - 8:00 pm to ensure adequate coverage and avoid equipment downtime.
- Maintains a government certified Designated Inspection Facility Licence. Preventative maintenance work and commercial vehicle inspections are completed to government standards and timelines. Annual audits from Commercial Vehicle Safety and Enforcement are conducted for compliance.
- Maintains fuel management system and provides monthly fuel consumption statistics for all departments.
- Works with ICBC and service providers to maintain insurance on the fleet.
- Provides oversight and advisory services for purchases or new additions to the fleet.
- Procures and deploys 15 - 25 new vehicles and pieces of equipment per year.
- Conducts 10 - 12 "Worksafe BC recognized" equipment operator training sessions per year.

2026 Accomplishments

- Continued to implement City's Green Fleet Strategy in order to reduce Green House Gas (GHG) emissions and fuel consumption.
- Continued active participation in province-wide fleet management group.
- Generated over 3,500 work orders for vehicle maintenance and repair.
- Completed over 60 commercial vehicle inspections.
- Purchased and deployed 20 new vehicles.
- Conducted 11 heavy equipment training sessions that allowed 82 staff to complete "Worksafe BC - recognized" courses.
- Continued to provide staff training to stay current with technology.



- Published expression of interest (EOI) to fleet industry to demo EV garbage trucks.

2027 Considerations and Opportunities

- As the City continues to grow, the size and complexity of the City's fleet and equipment is also increasing. Staffing levels and operational funding will need to increase to accommodate this growth.
- As advancement in green technologies continue, fleet services will continue to pursue the corporate Green Fleet Strategy by exploring alternative fuel solutions in order to reduce GHG emissions and decrease fuel consumption. Electric vehicles are becoming more accessible; however, they are still not prevalent in the medium and heavy-duty vehicle class.
- Create a new Fleet SharePoint website to increase efficiency and better communication with all departments.
- Work alongside IT to develop and implement a new asset management system for small equipment.
- Continue to build strong relationships with other municipalities and local governments. The sharing of technical specifications and procurement solutions is highly beneficial amongst agencies.

2027 KEY INITIATIVES

Roads and Traffic

Strategic Priority: Maintaining and Growing Current Services
Continue to assess and implement maintenance requirements for Complete Streets Standards, focusing on cycle tracks and boulevards in particular
Complete update to Asphalt Maintenance Plan, incorporating latest condition assessment data (as part of Corporate Asset Management Plan update)

Develop and implement boulevard, median and island maintenance standards, in conjunction with Parks Operations

Strategic Priority: Capital Projects

Coordinate asphalt rehabilitation and patching with capital projects to optimize necessary expenditures

Strategic Priority: Communicating with the Community

Provide operations and maintenance project update information to homeowners, businesses and the travelling public

Water

Strategic Priority: Implementing City Plan

IAP Priority Action #20 - Water Supply Strategy: Implemented Water Supply Strategy which applies current climate science to estimate water supply storage and distribution infrastructure required to meet future growth and build resilience.

IAP Priority Action #21 - Drinking Water and Watershed Protection Plan: Continue to support the Regional District of Nanaimo's Drinking Water and Watershed Protection Technical Advisory Committee.

IAP Priority Action #22 - Water Conservation: Continue the City's Water Saving Rebate Programs to reduce water consumption.

IAP Priority Action #24 – Identify and communicate infrastructure capacity deficiencies impacting existing and future growth.

Utilities

Strategic Priority: Implementing City Plan

IAP Priority Action #15 - Departure Creek Enhancement: Continue to work with the Pacific Salmon Foundation, Departure Creek Streamkeepers and Snuneymuxw First Nation partners to enhance the Departure Creek intake and side channel project with riparian restoration and consider creating wetland habitat and flood management at Departure Bay Centennial Park on Departure Creek.

IAP Priority Action #23 - Sewer Inflow and Infiltration: Continue to work with the Regional District of Nanaimo towards reducing infiltration and inflow from the City's sewer system in support of the Regional District of Nanaimo's Liquid Waste Management Plan

IAP Priority Action #27 – Stormwater Utility: Continue to Investigate and pursue stormwater utility to support viability and resilience of the City's grey and green stormwater system.

Strategic Priority: Capital Projects

Continue to support maturation of Corporate Asset Management Systems (CAMS) - Cartegraph.

Continue to focus on Inflow and Infiltration removal from sewer system.

Strategic Priority: Communicating with the Community

Provide operations and maintenance project update information to homeowners, businesses and the traveling public.

Sanitation, Cemeteries and Administration

Strategic Priority: Social, Health and Public Safety Challenges

Public Waste Diversion:

Install 25 additional multi-stream waste receptacles (recycling, organics and garbage) in high-traffic areas to provide residents and visitors with convenient waste disposal options. This initiative will support proper waste sorting, increase diversion rates and enhance the cleanliness and sustainability of public spaces throughout the city.

Strategic Priority: Maintaining and Growing Current Services

Solid Waste Management:

Re-evaluating the solid waste collection system to develop a dynamic collection model that allows resources to be deployed where and when they are needed. By implementing this approach, the cost and environmental impact of providing curbside collection services can be minimized while maintaining a sustainable, reliable and efficient service for a growing number of residents for years to come.

Strategic Priority: Capital Projects

Cemetery Business Model Proposal:

Develop and implement a comprehensive cemetery service model that offers a range of interment and memorialization options, including traditional full burials, ash burials, columbarium niches, scattering gardens and other innovative memorial options. This diversified approach will maximize the use of existing cemetery land, extend the lifespan of the City's cemeteries and provide residents with a broader selection of affordable and meaningful end-of-life services.

The proposed model will address changing community preferences, increase accessibility to lower-cost burial and cremation-related options and create a sustainable framework for long-term cemetery operations. By optimizing available space and expanding service offerings, the City can continue to meet community needs while preserving cemetery capacity for future generations and maintaining financial sustainability.

Strategic Priority: Communicating with the Community

Community Engagement and Education:

Attend community group meetings and public events to engage with residents and provide educational materials on waste reduction, recycling, organics diversion and proper waste management practices. This outreach will increase public awareness, encourage participation in diversion programs and support the city's sustainability goals.

Fleet

Governance and Corporate Excellence

Continue to electrify fleet and prioritize green Fleet procurement

PROPOSED OPERATING BUDGET

Public Works

	2026 Approved Budget	2027 Draft Budget	2028 Draft Budget	2029 Draft Budget	2030 Draft Budget	2031 Draft Budget
Revenues						
Cemetery Operations	$ 87,000	$ 92,000	$ 87,670	$ 88,547	$ 89,432	$ 90,327
Drainage	1,385	2,885	2,928	2,971	3,015	3,059
Fleet Operations	-	-	-	-	-	-
Public Works Support Services	1,136,000	1,057,500	1,089,720	1,158,448	1,251,753	1,349,260
Solid Waste Management	9,437,706	9,294,212	9,465,753	9,364,691	9,516,474	9,605,710
Transportation	47,365	38,865	39,254	39,647	57,544	66,445
Annual Operating Revenues	**$ 10,709,456**	**$ 10,485,462**	**$ 10,685,325**	**$ 10,654,304**	**$ 10,918,218**	**$ 11,114,801**
Expenditures						
Cemetery Operations	$ 299,372	$ 353,381	$ 363,038	$ 369,045	$ 377,924	$ 383,952
Drainage	2,710,787	2,877,693	2,960,563	3,026,426	3,087,242	3,149,323
Fleet Operations	4,031,069	4,303,581	4,416,658	4,515,324	4,610,212	4,707,454
Public Works Support Services	2,975,449	3,730,284	6,141,477	7,614,225	7,821,644	7,963,783
Solid Waste Management	9,650,733	9,592,364	9,768,242	9,723,329	9,908,292	10,061,905
Transportation	7,639,102	8,036,767	8,206,401	8,397,273	8,503,699	8,689,805
Annual Operating Expenditures	**$ 27,306,512**	**$ 28,894,070**	**$ 31,856,379**	**$ 33,645,622**	**$ 34,309,013**	**$ 34,956,222**
Net Annual Operating Expenditures	**$ 16,597,056**	**$ 18,408,608**	**$ 21,171,054**	**$ 22,991,318**	**$ 23,390,795**	**$ 23,841,421**
Staffing (FTEs) - Budgeted	75.2	75.2	75.2	75.2	75.2	75.2

***For 2026 funding for the new CUPE contract and management increases is budgeted in committed contingency under Corporate Services*

	Budget	Budget	Budget	Budget	Budget	Budget
Expenditure Summary						
Wages & Benefits	$ 9,511,198	$ 10,229,106	$ 10,599,350	$ 10,883,472	$ 11,136,149	$ 11,397,937
Services & Supply Contracts	7,408,149	7,481,006	7,584,460	7,598,358	7,703,882	7,852,729
Materials & Supplies	3,632,019	3,827,685	3,901,447	3,910,229	3,999,837	4,064,550
Utilities	1,723,250	1,821,950	1,858,389	1,895,556	1,933,466	1,972,136
Internal Charges & Other	4,626,832	4,399,515	4,571,613	4,783,305	4,818,849	4,876,905
Debt Servicing	402,564	1,132,308	3,338,620	4,572,202	4,714,330	4,789,465
Grants & Subsidies	2,500	2,500	2,500	2,500	2,500	2,500
Annual Operating Expenditures	**$ 27,306,512**	**$ 28,894,070**	**$ 31,856,379**	**$ 33,645,622**	**$ 34,309,013**	**$ 34,956,222**

Sanitary Sewer

	2026 Approved Budget	2027 Draft Budget	2028 Draft Budget	2029 Draft Budget	2030 Draft Budget	2031 Draft Budget
Revenues						
Sanitary Sewer	$ 11,407,720	$ 11,837,754	$ 12,723,192	$ 13,527,436	$ 14,222,735	$ 14,952,637
Annual Operating Revenues	**$ 11,407,720**	**$ 11,837,754**	**$ 12,723,192**	**$ 13,527,436**	**$ 14,222,735**	**$ 14,952,637**
Expenditures						
Sanitary Sewer	$ 5,101,855	$ 5,538,187	$ 6,044,231	$ 7,110,216	$ 7,249,143	$ 7,409,674
Annual Operating Expenditures	**$ 5,101,855**	**$ 5,538,187**	**$ 6,044,231**	**$ 7,110,216**	**$ 7,249,143**	**$ 7,409,674**
Net Annual Operating Revenues	**$ 6,305,865**	**$ 6,299,567**	**$ 6,678,961**	**$ 6,417,220**	**$ 6,973,592**	**$ 7,542,963**
Staffing (FTEs) - Budgeted	10.8	10.8	10.8	10.8	10.8	10.8

	2026 Approved Budget	2027 Draft Budget	2028 Draft Budget	2029 Draft Budget	2030 Draft Budget	2031 Draft Budget
Expenditure Summary						
Wages & Benefits	$ 1,297,975	$ 1,457,070	$ 1,509,719	$ 1,546,140	$ 1,577,395	$ 1,609,319
Services & Supply Contracts	401,165	443,310	452,176	461,214	470,438	479,846
Materials & Supplies	719,917	743,568	785,363	827,378	859,856	897,932
Utilities	57,400	58,000	59,160	60,343	61,550	62,781
Internal Charges & Other	2,050,178	2,146,923	2,188,606	2,231,120	2,274,489	2,318,722
Debt Servicing	572,455	686,316	1,046,207	1,981,021	2,002,415	2,038,074
Grants & Subsidies	2,765	3,000	3,000	3,000	3,000	3,000
Annual Operating Expenditures	**$ 5,101,855**	**$ 5,538,187**	**$ 6,044,231**	**$ 7,110,216**	**$ 7,249,143**	**$ 7,409,674**

Water

	2026 Approved Budget	2027 Draft Budget	2028 Draft Budget	2029 Draft Budget	2030 Draft Budget	2031 Draft Budget
Revenues						
Water	$ 29,014,314	$ 30,417,997	$ 31,957,319	$ 33,299,982	$ 34,344,209	$ 35,420,374
Annual Operating Revenues	**$ 29,014,314**	**$ 30,417,997**	**$ 31,957,319**	**$ 33,299,982**	**$ 34,344,209**	**$ 35,420,374**
Expenditures						
Water	$ 15,813,332	$ 16,537,425	$ 17,556,513	$ 18,129,631	$ 18,526,939	$ 18,923,035
Annual Operating Expenditures	**$ 15,813,332**	**$ 16,537,425**	**$ 17,556,513**	**$ 18,129,631**	**$ 18,526,939**	**$ 18,923,035**
Net Annual Operating Revenues	**$ 13,200,982**	**$ 13,880,572**	**$ 14,400,806**	**$ 15,170,351**	**$ 15,817,270**	**$ 16,497,339**
Staffing (FTEs) - Budgeted	32.5	32.5	32.5	32.5	32.5	32.5

	2026 Approved Budget	2027 Draft Budget	2028 Draft Budget	2029 Draft Budget	2030 Draft Budget	2031 Draft Budget
Expenditure Summary						
Wages & Benefits	$ 4,485,828	$ 4,883,548	$ 5,066,101	$ 5,197,170	$ 5,312,623	$ 5,431,677
Services & Supply Contracts	1,490,243	1,547,350	1,578,298	1,609,858	1,642,053	1,674,889
Materials & Supplies	2,697,193	2,823,000	2,919,168	2,845,102	2,914,725	2,986,127
Utilities	244,150	252,200	257,244	262,388	267,636	272,989
Internal Charges & Other	4,638,646	4,551,655	4,637,637	4,725,227	4,814,604	4,896,002
Debt Servicing	2,252,603	2,474,863	3,093,256	3,485,077	3,570,489	3,656,542
Grants & Subsidies	4,669	4,809	4,809	4,809	4,809	4,809
Annual Operating Expenditures	**$ 15,813,332**	**$ 16,537,425**	**$ 17,556,513**	**$ 18,129,631**	**$ 18,526,939**	**$ 18,923,035**