

CITY OF NANAIMO

BUSINESS CASE – Sanitary Sewer Section: Operator in Training Position

CURRENT OVERVIEW

Sanitary Sewer services are supported in the 2022 City Plan under the goal, “A Green Nanaimo: Resilient & Regenerative Ecosystems”. As part of policy C1.5, the desired outcomes for sanitary sewer services include:

- Continued provision of an efficient sewer system to the urban areas of the city that meets public health and environmental standards and supports thoughtful urban growth
- A strong link between growth and servicing capacity planning so that utility expansion and upgrades are strategic and efficient.

The Sanitary Sewer section oversees the operation and maintenance of the sewer collection system, consisting of over 594 km of gravity sewer mains, 31 km of sewer forcemains, 284 km of lateral service lines, 8,879 manholes, including 15 lift stations. This includes 17 sewer catchment areas, four low pressure sewer collection systems, 13 flow monitoring stations and 3 chemical injection sites. The collection system consists of assets that were installed as early as the 1930’s to present day. Over the past ten years, the population of the City has increased 19.2% to 99,863. In order to serve this increase in population, the sanitary sewer manhole system assets have increased upwards of 36%. During this time frame there has only been an increase of one sewer staff to maintain the system. The City is projected to grow by another 40,000 residents over the next 25 years.

There are currently 9.5 FTEs in the Sanitary Sewer Section:

Position	# of FTEs
Lead Supervisor, Wastewater Collection (also oversees Drainage Section)	0.5
Supervisor, Sewer	1
Utilities Technician	1
CCTV Wastewater Operator	1
Waste & Storm Water Systems Operator	1
Wastewater/Drainage Operators	4
Wastewater Operator in Training	1
Total	9.5

Six months each year, two temporary Wastewater Operator in Training staff are added to the team to assist in carrying out the maintenance programs.

The Sanitary Sewer Section performs maintenance programs on cleaning sewer mains and some services on a regular basis to ensure the sanitary sewer system performs well to help reduce the risk of sewer backups to homes, business and overflows to the environment. Included in this is the regular inspection and maintenance of the sewer lift stations and CCTV inspection of the sewer infrastructure to ensure all aspects of the system are functioning properly providing safe and environmental friendly conveyance to the Regional District of Nanaimo Pollution Control Centre.

BUSINESS ISSUE

As the City's sanitary sewer infrastructure & assets continue to grow through population growth and development, there is a need to add additional staff. The Sanitary Sewer Section is the smallest group at Public Works and are unable to complete regular scheduled maintenance programs. Crews are having to spend more time on reactive repairs and maintenance decreasing efficiencies and increasing the risk of back ups and overflows causing property and environmental damage.

EXPECTED OUTCOME

The addition of a Sanitary Sewer Operator in Training will help to continue to enhance the sanitary sewer collection system maintenance and extend life of the existing infrastructure by:

- Allowing existing staff to maintain and service sewer infrastructure & assets at scheduled intervals;
- Reducing reactive repairs and maintenance;
- Becoming more preventative, planning repairs instead of reacting to emergency repairs.

OPTIONS

Option #1 – Add one Sanitary Sewer Section Operator in Training Position

Addition of one permanent full-time Sanitary Sewer Section Operator in Training position reporting to the Supervisor, Sewer.

Benefits:

- Provides a needed semi-skilled worker resource;
- Reduces risk and liability in sewer collection system from less blockages and overflows to the environment or backups into homes and businesses;
- Improves asset management capacity of the Sanitary Sewer Section by increasing proactive maintenance of sewer infrastructure;
- Residents will experience better maintained sewer collection system;
- Crews will increase focus on inflow and infiltration reduction into the system, increasing longevity;
- Improves the City's ability to proactively work towards protecting and enhancing the Environment;
- Supports City Plan goal: "A Green Nanaimo: Resilient & Regenerative Ecosystems".

Weaknesses:

- Permanent increase to operating budget of the Sanitary Sewer Section.

Financial Analysis:

- The position will be a CUPE level 4 working 40 hours/week.
- After completion of one year experience and passing of the EOCP level I exam, the position will be paid CUPE level 6. After three years experience and completion of the level II exam, the position will be paid CUPE level 9.
- Estimated budget impact for 2023 wages and benefits is \$65,600 based on an April 1st start date.
- Additional annual costs are estimated at \$600 in 2023 for memberships, training, and footwear.
- There are no projected additional one-time costs as this position will be using existing equipment and vehicles.
- The cost of the position will be funded from sewer user fees. Future sewer rate increases will take into account the additional cost of this position.

Option# 2 – Status Quo

Continue with no additional Operator in Training position in the Sanitary Sewer Section.

Benefits:

- No increase to operating budget for Sanitary Sewer Section.

Weaknesses:

- Continuation of break-fix maintenance model resulting in higher costs due to emergency repairs;
- Decreased level of service in responding to and repairing issues in sanitary sewer collection system;
- Reduces the ability to provide an efficient sewer system and proactively work towards protecting and enhancing the environment and meeting the City Plan goal: “A Green Nanaimo: Resilient & Regenerative Ecosystems”.

RECOMMENDATION

Option #1 – Add one permanent full-time Operator in Training position to the Sanitary Sewer Section.