

DATE OF MEETING SEPTEMBER 13, 2023

AUTHORED BY POUL ROSEN, DIRECTOR, ENGINEERING LAURA MERCER, DIRECTOR, FINANCE

SUBJECT SEWER DCC PROJECTS

# **OVERVIEW**

## Purpose of Report:

To provide Council with information on the status of the City's sanitary sewer system and how it is faring with the strong population growth.

# BACKGROUND

Development cost charges (DCCs) are fees collected from land developers to help fund the cost of growth-related infrastructure. This helps ensure developers pay their fair share of the costs required to support the additional service needs. The last update to the City of Nanaimo's (City) DCC program was completed in 2018 with a Council approved Bylaw effective as of April 23, 2018. Previous to this, the most recent update to the DCC Bylaw was in 2008.

The City collects DCC funds over the years and when sufficient, the next highest priority project is undertaken. Occasionally the timing of certain projects can be problematic if the need is present, but funds are not available yet. This is becoming the case with growth-related sewer projects.

Over the past 5 years, 15 Sewer DCC projects have been completed totalling 5km of upgrades valued at approximately \$14.3 million. Although these upgrades are substantial, the high growth rate in many areas has triggered the need for numerous additional upgrades beyond those already completed. The pace of funding availability has not kept up with the need to complete more projects, more quickly. This has resulted in a backlog of sewer projects awaiting funding. Without these projects completed, there are increased risks of sewer overflows or backups. Overall, this translates to an inability to provide the services needed to support growth.

### DISCUSSION

While the City does not have a history of significant sewer overflows, there are various locations or bottlenecks that are at risk during storm events. To maintain a clear picture of the sewer system capacity, the City operates a network of flow monitoring stations and hydraulic models. This intelligence allows the City to prioritize and schedule upgrades for growth to maximize the value of the existing network and upgrade just in time. As upgrades are identified they are prioritized using a triple bottom line risk assessment methodology that considers environmental, social, and economic consequences of failure for each pipe segment.



Within the proposed 5-year project plan there are about \$13.2 million worth of funded sewer DCC projects. Although this value is similar to the previous 5 years, with the impact of inflation there are less upgrades possible with this same level of funding. There are also about \$16 million worth of projects that would ideally be in the 5-year capital plan if funding levels permitted. This unfunded \$16 million presents the City with a risk of sewer overflows or backups if not mitigated.

While the DCC program anticipates the need for the upgrades over the 25-year planning horizon, the funding for the work doesn't come in until development occurs. The upgrades are needed to support the growth, but the growth is what funds the upgrades. There is a lag between the need and the funding availability. While this is not a new issue, it has been historically dealt with by rigorous engineering and sufficient financial reserves. It is becoming more and more challenging for the following reasons:

- The current DCC rates were established using 2017 construction values and significant inflation since then has reduced the amount of sewers that can be upgraded with the available funds
- The need for sewers (or water) is immediate with development, unlike other services like transportation that can grow later (with a temporary dip in level of service)
- Rapid growth in the past 5 years has accelerated the need for the buildout of the DCC sewer program

Updates to the City's DCC program are underway, including a review of the sewer DCC projects and fees. In the short term, it is anticipated that even with a new DCC bylaw and rates the City will still incur challenges in financing sewer DCC projects until sufficient reserves can be accumulated. Council may need to consider alternative strategies to mitigate the risk.

There are several options, including:

- 1. Fund urgent projects from Sewer Utility Reserves. This option would mitigate the risk but would mean that growth related projects are funded by existing users. This would also put a large unexpected financial pressure on the sewer utility.
- 2. Take measures to limit increased sewer flows upstream of areas that are identified as problematic.
- 3. Retain status quo. This option would retain the risk of sewer overflows and that risk would grow as the population expands and rainfall intensity increases with climate change.

There are aspects of each of these options that are problematic. The preferred course of action will likely be situation specific.

# **CONCLUSION**

The focus of this report is to raise awareness of the challenging financial situation for context within the Financial Planning process. Decisions on specific sewer projects will be brought forward to Council as needed when the risks reach levels that require action.



## SUMMARY POINTS

- The last update of the City's DCC program was completed in 2018 with a Council approved Bylaw effective as of April 23, 2018.
- The timing of the sanitary sewer DCC revenue collection is not matching or accumulating as quickly as needed to fund sanitary sewer capital construction.
- Managing the sewer risk from City growth will need to be strategic and approached differently for each project.

### Submitted by:

Poul Rosen Director, Engineering

Laura Mercer Director, Finance

## Concurrence by:

Bill Sims General Manager, Engineering and Public Works

Dale Lindsay Deputy CAO, General Manager, Development Services