RECOMMENDATION

That the Board endorse the following projects for submission under the Investing in Canada Infrastructure Program - Green Infrastructure: Environmental Quality Sub-stream, with a commitment to contribute the Regional District of Nanaimo’s share of the project costs:

- French Creek Pollution Control Centre Expansion and Odour Control Project
- Departure Bay Pump Station and Forcemain Upgrade
- Nanoose Bay Pollution Control Centre Secondary Treatment Upgrade
- Duke Point Pollution Control Centre UV Upgrade.

SUMMARY

Applications are being received until February 26, 2020 for the second intake of the Green Infrastructure – Environmental Quality grant fund. Grants will provide up to 73.3% of eligible project costs. Applications for funding must include an endorsement of the project by the Regional District of Nanaimo (RDN) Board.

Consideration was given to identifying potential projects across the RDN, including Parks and Recreation, Transit and Emergency Services, Water, Wastewater, and Solid Waste Services. The following projects are recommended for submission for funding:

- French Creek Pollution Control Centre Expansion and Odour Control Project
- Departure Bay Pump Station and Forcemain Upgrade
- Nanoose Bay Pollution Control Centre Secondary Treatment Upgrade
- Duke Point Pollution Control Centre UV Upgrade

BACKGROUND

On September 25, 2019, the Canadian and British Columbia governments committed up to $150 million towards the second intake of the Green Infrastructure – Environmental Quality program to support cost-sharing for public infrastructure projects.
More details can be found on the program website at: https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/investing-in-canada-infrastructure-program/green-infrastructure/environmental-quality

Eligible projects will support public infrastructure that would achieve at least one of the following outcomes:

- Increased capacity to treat and/or manage wastewater and/or stormwater
- Increased access to potable water
- Increased capacity to reduce and/or remediate soil and/or air pollutants

The deadline for applications is February 26, 2020. A Board motion endorsing the projects is required. To be eligible, construction may not commence, or a tender not be awarded prior to the date of execution of a grant agreement for the project. Funding is available for up to 73.3% of eligible project costs (40% Government of Canada, 33.3% Province of BC). Projects must be completed before March 31, 2026.

The program guidance documents note that it is anticipated applications will exceed available funding, and consideration be given to fair distribution of the limited funds across British Columbia. They recommend phasing larger projects and submitting applications for discrete phases of projects that optimize the opportunity for successfully obtaining grant funding under this intake.

Grant applications for the following projects are recommended:

(1) **French Creek Pollution Control Centre Expansion and Odour Control Project**

The French Creek Pollution Control Centre provides secondary wastewater treatment for the Parksville, French Creek and Qualicum Beach communities. Expansion is required to meet population growth, to upgrade ageing infrastructure, and to improve odour control and environmental performance. The current budget in the Five-Year Financial Plan is $30.9 million.

The application will focus on the odour control upgrades and sustainable technologies phase of the project, with a value in the range of $10 million, recognizing the timing constraints described above, and phasing that will maximize our opportunity for successfully obtaining grant funding.

(2) **Departure Bay Pump Station and Forcemain Upgrade.**

Sanitary sewer flow from the City of Nanaimo and the Snuneymuxw First Nation is transported along Hammond Ray Road by the Departure Bay Pump Station and Forcemain to Greater Nanaimo Pollution Control Centre.

The pump station located near Departure Bay beach and forcemain along Hammond Bay Road have been identified as a key capacity constraint needing to be upgraded to allow the RDN to serve planned population growth in the region. Electrical and mechanical upgrades are also necessary as the pump station was constructed in 1974.

This project will include engineering design, improvements to force main integrity, electrical, mechanical, and pumping upgrades. Sea level rise and energy efficiency will be important considerations of the design. The current budget in the Five-Year Financial Plan is $7.4 million.
(3) **Nanoose Bay Pollution Control Centre Secondary Treatment Upgrade**

The Nanoose Bay Pollution Control Centre provides primary wastewater treatment to approximately 1,350 people in Nanoose. The RDN’s Liquid Waste Management Plan (LWMP) requires the NBPCC to be upgraded to secondary treatment by 2023. This requirement is also reflected in Federal and Provincial legislation.

This upgrade will improve effluent quality from the Nanoose community. The current budget in the Five-Year Financial Plan is $5.2 million.

(4) **Duke Point Pollution Control Centre Ultraviolet Disinfection Upgrade.**

Wastewater from Duke Point service area in the City of Nanaimo and the Cedar sewer service receives secondary treatment at the Duke Point Pollution Control Centre (DPPCC). DPPCC provides secondary treatment by a Sequencing Batch Reactor process.

To meet the requirement of DPPCC’s operational certificate, treated effluent from wastewater treatment plant receives ultraviolet disinfection. The ultraviolet disinfection system is at the end of its service life and requires replacement to continue to function effectively. The current budget in the Five-Year Financial Plan is $250,000. This project is planned for 2021.

**ALTERNATIVES**

1. That the Board endorse the following projects for submission under the Investing in Canada Infrastructure Program - Green Infrastructure: Environmental Quality Sub-stream, with a commitment to contribute the Regional District of Nanaimo’s share of the project costs:
   - French Creek Pollution Control Centre Expansion and Odour Control Project
   - Departure Bay Pump Station and Force main Upgrade
   - Nanoose Bay Pollution Control Centre Secondary Treatment Upgrade
   - Duke Point Pollution Control Centre UV Upgrade.

2. Provide alternate direction.

**FINANCIAL IMPLICATIONS**

The estimated budget of the four projects is presented in the Background section. Project scope and cost will be further refined during the grant application process. Without grant funding, the RDN would provide the full funding for the above projects. Obtaining grant funding has the potential to significantly reduce the financial impact of these projects on RDN residents. However, it should be noted this grant funding stream is very competitive, and demand tends to exceed the available funds.

**STRATEGIC PLAN IMPLICATIONS**

Environmental Stewardship - Continue to improve the quality of treated wastewater in the Region.
These four projects will improve the quality of wastewater treatment and will increase the capacity of the wastewater system to meet population growth in the region. Grant funding has the potential to significantly reduce the financial impact of these projects on RDN residents.

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January 10, 2020

Reviewed by:
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