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SAANICH PENINSULA WASTEWATER COMMISSION

Notice of Meeting on **Thursday, October 15, 2020 at 9 a.m.**

Meeting Room #6 Greenglade Community Centre, 2151 Lannon Way, Sidney BC

For members of the public who wish to listen to the meeting via telephone please call 1-833-353-8610 and enter the Participant Code 1911461 followed by #. You will not be heard in the meeting room but will be able to listen to the proceedings.

P. Wainwright (Chair)	D. Kelbert	G. Orr	R. Windsor
R. Barnhart (Vice Chair)	Z. King	M. Weisenberger	
M. Doehnel	C. McNeil-Smith	M. Williams	

AGENDA

- 1. TERRITORIAL ACKNOWLEDGEMENT**
- 2. APPROVAL OF AGENDA**
- 3. ADOPTION OF MINUTES 3**

Recommendation: That the minutes of the July 16, 2020 meeting be adopted.

4. CHAIR’S REMARKS

5. PRESENTATIONS/DELEGATIONS

Presentations and delegations requests can be made online [here](#), a printable form is also available. Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

6. COMMISSION BUSINESS

6.1. 2019-2022 Wastewater Service Planning 7

*Recommendation: The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:
That Appendix A Community Need Summary – Wastewater be approved as presented and advanced to the October 28, 2020 Provisional budget review process.*

6.2. Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget...17

Recommendation: The Saanich Peninsula Wastewater Commission recommends that the CRD Board:

- 1. Approve the 2021 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget; and*
- 2. Balance the 2020 actual revenue and expense on the transfer to capital reserve fund.*

To ensure a quorum, advise Denise at 250.360.3087 if you or your alternate cannot attend.

6.3. Bylaw No. 4372, Transfer of Funds from Development Cost Charges Reserve to Related Capital Reserve.....55

Recommendation: That the Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

- 1. *That Bylaw No. 4372 cited as “Saanich Peninsula Water and Wastewater Development Cost Charges Transfer to Capital Reserve Bylaw No. 1, 2020” be introduced and read a first, second, and a third time.*
- 2. *That Bylaw No. 4372 be referred to the Inspector of Municipalities for review as required by the Local Government Act and Community Charter.*

6.4. Reay Creek Environmental Incident (Verbal Report)

7. SAANICH PENINSULA WASTEWATER COMMISSION APPOINTMENT LETTERS EXPIRING TERMS – DECEMBER 31, 2020

8. NEW BUSINESS

9. ADJOURNMENT

Next Meeting: December 17, 2020



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MINUTES OF A MEETING OF THE SAANICH PENINSULA WASTEWATER COMMISSION
Held Thursday, July 16, 2020 in Meeting Room #6 at Greenglade Community Centre, 2151
Lannon Way, Sidney BC

PRESENT: Commissioners: P. Wainwright (Chair); R. Barnhart (Vice Chair); M. Doehnel; B. Fallot for C. McNeil-Smith; G. Orr; M. Weisenberger; M. Williams;
By WebEx: D. Kelbert; Z. King; R. Windsor

Staff: T. Robbins, General Manager, Integrated Water Services; L. Hutcheson, General Manager, Parks & Environmental Services; P. Kickham, Manager, Environmental Regulations, Environmental Protection; M. Cowley, Manager Wastewater Engineering & Planning; D. Dionne (recorder)

By WebEx: E. Elder, Senior Financial Advisor

The meeting was called to order at 9:06 a.m.

Chair Wainwright provided a territorial acknowledgement.

1. APPROVAL OF AGENDA

MOVED by Commissioner Weisenberger, **SECONDED** by Commissioner Orr,
 That the July 16, 2020 Agenda be approved as circulated.

CARRIED

2. ADOPTION OF MINUTES

MOVED by Commissioner Barnhart, **SECONDED** by Commissioner Weisenberger,
 That the minutes of the June 18, 2020 meeting be adopted.

CARRIED

3. APPROVAL OF RESOLUTION

1. That this resolution applies to the Saanich Peninsula Wastewater Commission for the meetings being held between July1, 2020 and December 31, 2020.
2. That the attendance of the public at the place of the meeting cannot be accommodated in accordance with the applicable requirements or recommendations under the *Public Health Act*, despite the best efforts of the Saanich Peninsula Wastewater Commission, because:
 - a. The available meeting facilities cannot accommodate more than (8) people in person, including members of the Saanich Peninsula Wastewater Commission and staff, and
 - b. There are no other facilities presently available that will allow physical attendance of the Saanich Peninsula Wastewater Commission and the public in sufficient numbers; and
3. That the Saanich Peninsula Wastewater Commission is ensuring openness, transparency, accessibility and accountability in respect of the open meeting by the following means:
 - a. By allowing the public to hear or participate via teleconference or electronic meeting software,
 - b. By providing notice of the meeting in newspaper or local notice Board, including the methods for providing written or electronic submissions,

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- c. By making the meeting agenda, as well as the other relevant documents, available on the CRD website, and directing interested persons to the website by means of the notices provided in respect of the meeting,
- d. By strongly encouraging the provision of, and subsequently receiving and distributing to members, written correspondence from the public in advance of the meeting, and
- e. By making the minutes of the meeting available on the CRD website following the meeting.

MOVED by Commissioner Weisenberger, **SECONDED** by Commissioner Williams,
That the Saanich Peninsula Wastewater Commission adopt the resolution as presented.

CARRIED

4. CHAIR'S REMARKS

Chair Wainwright made no remarks.

5. PRESENTATIONS/DELEGATIONS

There were none.

6. COMMISSION BUSINESS

6.1. EEP 20-32 Management of Saanich Peninsula Wastewater Residual Solids

P. Kickham summarized the report as presented.

Staff responded to questions from the Commission and the following additional information was presented:

- Concerns with pharmaceuticals and personal care products
 - o The Biosolids Beneficial Reuse Strategy involves the majority of the biosolids being trucked to the lower mainland and incinerated in a cement kiln. A small amount would be used at Hartland Landfill as engineered bio-cover to mitigate greenhouse gas emissions.
 - o Bioaccumulation of Pharmaceuticals – personal care products and pharmaceuticals are generally not Bioaccumulation substances.
 - o In terms of the destruction of those products in the combustion process they are components of the biosolids that will combust at relatively low temperatures.
- The ash from the cement kilns will most likely be used in cement factories who will incorporate it into their cement production.
- Long-term options for the biosolids – under the Provincial Municipal Waste Regulation, there are a number of beneficial reuse options available to municipalities handling residual solids. One is land application, which Capital Regional District (CRD) is not doing, other options include, co-combustion and gasification.
- The CRD is working on releasing a Requests for Expressions of Interests (RFEOI) for options analysis and pilot testing of the full suite of potential beneficial reuse options under the Municipal Waste Regulation.
- The RFEOI will be structured to review scaleable volumes to get a sense of the capacity required to beneficially utilize all of the region's residuals, or simply just the

- Core Area's. Staff can then work with those proponents to pursue different options that will include the Saanich Peninsula residuals component.
- The Province may direct SPWWC to use the Residuals Treatment Facility (RTF).
 - Due to the high dollar value of the grant funding contributed by the Province to construct the RTF, the Province may not be agreeable to grant funding for a different sub-regional solution.
 - RTF Capacity
 - o The RTF was designed with enough capacity to serve as a merchant facility to receive solids from Saanich Peninsula Wastewater Treatment Plant (SPWWTP) and potentially Sooke and the wastewater treatment plants on the Southern Gulf Islands.
 - o The capacity is designed to accept all the Core Area residuals for 20 years. For the interim period there is surplus capacity based on the residuals received from McLoughlin Treatment Plant. It will be determined over the course of time, what the actual capacity is compared to the projections.
 - o Over and above the 20-year capacity, there is opportunity for an expansion of the facility to provide a further 25 years of capacity. Bringing the capacity up to 2065.
 - o Beyond 2045, it has been projected that a second wastewater treatment facility would need to be built for the Core Area, likely on the Westshore.
 - Odour control
 - o Odour threshold requirements are built into the contract, with an obligation to control odours regardless of where those odours may be generated at facility.
 - o The area where the trucked solids are disposed of is under vacuum and will be treated.
 - Use of Pyrolysis – Biosolids feedstock can be highly variable depending on which municipality you're in. A review has shown that large facilities have required very expensive retrofits in the first two or three years of operation. Therefore staff are proposing a small scale pilot to evaluate these options.

MOVED by Commissioner Orr, **SECONDED** by Commissioner Weisenberger,

The motion was amended to include "after receiving and analyzing Requests for Expressions of Interests for options" at the end of the paragraph.

That the Saanich Peninsula Wastewater Commission direct staff to prepare the 2021 service operating budget with the intent to haul residual solids to the Hartland Residual Solids Treatment Facility for processing and beneficial reuse, and direct staff to evaluate options for sub-regional processing and disposal/beneficial reuse of the Saanich Peninsula Wastewater Treatment Plant residual solids after receiving and analyzing Requests for Expressions of Interests for options.

Discussion ensued regarding:

- Options and literature research for addressing concerns with pharmaceuticals, personal care products and micro plastics in the residual solids
- Other processing technologies

MOVED by Commissioner King, **SECONDED** by Commissioner Doehnel,
That the motion be further amended to include the following sentence at the end of the motion:

And that staff report back with best information to address the concerns of pharmaceuticals, personal care products and micro plastics.

CARRIED

Opposed: Barnhart, Wiesenberger, Windsor

That the Saanich Peninsula Wastewater Commission direct staff:

1. to prepare its 2021 budget with the intent to haul residual solids to the Hartland Residual Solids Treatment Facility for processing and beneficial reuse;
2. to evaluate options for sub-regional processing and disposal/beneficial reuse of the Saanich Peninsula Wastewater Treatment Plant residual solids after receiving and analyzing Requests for Expressions of Interests for options; and
3. report back with best information to address the concerns of pharmaceuticals, personal care products and micro plastics.

CARRIED

Opposed: Windsor

7. NEW BUSINESS

Staff responded to a request from the Commission regarding an opportunity to tour the McLoughlin Wastewater Treatment Plant advising that the request would be brought to the Board Chair for his review.

Staff advised that the next meeting is planned for October, however if something emerges a September meeting is possible.

8. ADJOURNMENT

MOVED by Commissioner Weisenberger, **SECONDED** by Commissioner Doehnel,
That the Saanich Peninsula Wastewater Commission meeting be adjourned at 10:14 a.m.

CARRIED

CHAIR

SECRETARY



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SPWWC 20-03

**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION
MEETING OF THURSDAY, OCTOBER 15, 2020**

SUBJECT 2019-2022 Wastewater Service Planning

ISSUE SUMMARY

To provide the Saanich Peninsula Wastewater Commission with an overview of relevant initiatives undertaken by Integrated Water Services department in 2020 and planned for 2021 to deliver on approved Board Priorities and the Corporate Plan.

BACKGROUND

The CRD Board completed its strategic planning early in 2019 and approved the CRD Board Strategic Priorities 2019-2022.

The four priorities are:

1. Community Wellbeing – Transportation & Housing;
2. Climate Action & Environmental Stewardship;
3. First Nations Reconciliation; and
4. Advocacy, Governance & Accountability.

The priorities were confirmed at the annual check-in on May 13, 2020.

The 2019-2022 CRD Corporate Plan is aligned to the Board direction. It highlights the initiatives the CRD needs to deliver over the Board's four-year term to address the region's most important needs. The Corporate Plan identified initiatives under the Wastewater initiative, that fall under the various CRD wastewater collection, conveyance and treatment services.

Appendix A *Community Need Summary - Wastewater 2021* is a summary of the planned activities for 2021. It contains details about core service levels, new initiatives proposed and performance metrics.

Appendix B *Wastewater - Initiatives Progress Report* provides insights into what has been delivered through the two delivery initiatives approved last year, for delivery in 2020.

The Service Planning process gathered information necessary to assemble a provisional budget for Committee/Commission and Board review. The purpose of this report is to explain how the adjustments to the work program connects to the Board Priorities, Corporate Plan and provisional budget.

ALTERNATIVES

Alternative 1

The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

That Appendix A Community Need Summary - Wastewater be approved as presented and advanced to the October 28, 2020 provisional budget review process.

Alternative 2

The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

That Appendix A Community Need Summary - Wastewater be approved as amended and advanced to the October 28, 2020 provisional budget review process.

IMPLICATIONS

Financial Implications

Initiatives identified in the Corporate Plan (including Board Priorities) cannot be undertaken without resourcing. The Board determines resourcing through its annual review and approval of financial plans. To support the Board's decision-making, staff, through the service planning process, provide recommendations on funding, timing and service levels.

During this years' service planning process, staff have been mindful of the fiscal challenges facing the region in the months ahead. To that end, budget increases or other impacts have been mitigated, where possible. However, for the Saanich Peninsula Wastewater Service, the annual budget has been increased to address residuals treatment and the beneficial use of biosolids. An on-going budget allowance has also been included to fund the development and implementation of the inflow and infiltration reduction program for the Saanich Peninsula.

Service Delivery Implications

The Community Need Summary provides an overview of all work that needs to be undertaken in order to meet our regulatory requirements, satisfy Board direction and meet the needs of the communities we serve.

Alignment with Board & Corporate Priorities

Staff have identified the initiatives that will have budget and/or staffing implications for 2021 (Table 1 below); the Saanich Peninsula Liquid Waste Management Plan initiative directly relates to the service and is described further below.

Table 1: Community Needs Summary - Wastewater, Delivery Initiatives

#	Initiative	Description	Year(s)	FTE impacts in 2021	Budget Impacts in 2021
8a-1.1	Wastewater Planning	Advance management of liquid waste management through a review and update of the core area liquid waste management plan	2021	0	Included in Provisional Budget
8a-1.1	Wastewater Management	Advance strategy for construction/maintenance of facilities	2021	4 Ongoing	Included in Provisional Budget
8a-1.2	Facilities Management Centralization Strategy	Facility operations and maintenance support for CAWTP facilities.	2021	1 Ongoing	Included in Provisional Budget
8a-1.3	Saanich Peninsula Liquid Waste Management Plan	Development of a detailed inflow and infiltration reduction program for the Peninsula	2021	0	Included in Provisional Budget

Blue highlighted areas are initiatives that directly address a Board Priority.

Delivery Initiatives

8a-1.1 Wastewater Planning

The recent changes to Core Area wastewater management need to be incorporated into an updated Liquid Waste Management Plan. The Plan was recently consolidated and audited and the next steps are to update the Plan (individual chapters) and revise the document in consultation with the regulator. This will also include some public consultation.

8a-1.1 Wastewater Management and 8a-1.2 Facilities Management Centralization Strategy

The CRD is responsible for implementing wastewater treatment in the Core Area. Construction of new and upgraded wastewater facilities will be completed in Q3 and Q4 of 2020. The new facilities will help protect the marine receiving environment by providing tertiary treatment for wastewater from the core area municipalities (Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood) and the Esquimalt and Songhees First Nations. This is the final stage of a large scale multi-year, capital project led by the CRD with funding assistance from the federal and provincial governments.

The operation of the new and upgraded facilities requires additional staff to ensure effective operations and maintenance of facilities going forward. To this end and building on new staffing

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2019-2022 Wastewater Service Planning**

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positions filled in 2019/2020, initiative 8a-1.1 seeks to create four ongoing positions in the Infrastructure Operations division and initiative 8a-1.2 seeks to create one additional position in the Facilities Management & Engineering Services division. These positions are critical to ensure adequate maintenance support for building systems, including safety inspections, and other operational duties. The positions will be filled between late 2020 and end of 2021.

8a-1.3 – Saanich Peninsula Liquid Waste Management Plan

A recent audit of the Saanich Peninsula Liquid Waste Management Plan has identified unfulfilled commitments to evaluate and manage inflow and infiltration (I&I) to the sanitary sewer. The Saanich Peninsula Wastewater system has not had any documented wet weather related overflows but inflow and infiltration increases as infrastructure ages so it would be prudent to manage this risk proactively.

This initiative seeks to develop a more detailed inflow and infiltration reduction program for the Peninsula. Developing flow calculations for each catchment area will allow the CRD and municipalities to plan and implement the most cost-effective capital upgrades/replacement program for the sanitary sewer infrastructure. This work will build on the 2020 work done to collect additional flow data and pinpoint areas with the highest inflow and infiltration levels in the Saanich Peninsula conveyance system.

CONCLUSION

Staff have been progressing initiatives and actions identified in the Corporate Plan, including Board Priorities. The Board determines resourcing through its annual review and approval of financial plans. As per previous years, to support the Board's decision-making, staff are providing recommendations on funding, timing and service levels through the service and financial planning processes. The comprehensive budget information for the Saanich Peninsula Wastewater Service, including the above noted initiatives, is presented under a separate report to the Commission.

RECOMMENDATION

The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

That Appendix A Community Need Summary - Wastewater be approved as presented and advanced to the October 28, 2020 provisional budget review process.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Submitted by:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENTS

Appendix A: Community Need Summary - Wastewater
Appendix B: Initiatives Progress Report - Wastewater

Community Need



2021 Summary

Wastewater

Strategy

Target Outcome

We envision efficient and effective management of the region's wastewater

Strategic Context

Strategies

- [Core Area Liquid Waste Management Plan](#)
- Transition to stable operation of McLoughlin Point Wastewater Treatment Plant and Residuals Treatment Facility
- Transition of residual solids from other wastewater treatment facilities to the Residuals Treatment Facility
- Continue to effectively operate and maintain the Saanich Peninsula Wastewater Treatment Plant.
- Continue to effectively operate and maintain five small wastewater systems in the Electoral Areas.

Trends, risks and issues

- Monitoring programs for new wastewater infrastructure in the Core Area to be implemented
- Enhanced Key Manhole study to inform CRD source control initiatives and wastewater operations to be completed 2021-2022.
- Biosolids short-term implementation, and long term planning, options analysis and pilot testing
- Transition of residual solids from other wastewater treatment facilities to the Residuals Treatment Facility
- Optimization of operation and maintenance of new infrastructure in the Core Area
- Continued onboarding of new staff to operate and maintain the new infrastructure
- Continue to operate and maintain the other wastewater infrastructure in the Core Area, Saanich Peninsula, and the Electoral Areas. This infrastructure is of various ages and in several cases large scale infrastructure renewal is required.
- Facilities Management's role in supporting maintenance of superstructures in wastewater is evolving.

Community Need



2021 Summary

Services

Core Services Levels	
Service	Levels
Core Area, Saanich Peninsula Wastewater Systems and Small Wastewater Systems in the Electoral Areas Services include wastewater conveyance and tertiary treatment for Core Area, and conveyance and secondary treatment for Saanich Peninsula, and the small wastewater systems in the Electoral Areas.	
Wastewater System Operations Wastewater treatment collection and transmission system operation and monitoring. System and facility maintenance, consumables management and preventative maintenance	<ul style="list-style-type: none"> • Wastewater treatment • System operation, monitoring and maintenance • Consumables management
Emergency Response/System Failure Wastewater overflows and unplanned service interruptions	<ul style="list-style-type: none"> • Wastewater overflows and public and environmental health protection • Unplanned service interruptions
Capital Project Delivery and Works Project design, procurement and delivery of projects planned each year, on time and budget. Installations, equipment replacement and capital projects support	<ul style="list-style-type: none"> • Capital program value for seven services • Infrastructure renewal and upgrades • Capital project support
Infrastructure planning Strategic asset management for all services/systems including modeling and capacity analysis, vulnerability assessment, infrastructure renewal plans.	<ul style="list-style-type: none"> • Asset management Plans • Manage capital plans for seven wastewater services
Engineering services Support of Infrastructure Operations through engineering services such as process, civil, electrical and mechanical troubleshooting	<ul style="list-style-type: none"> • Engineering support of utility operations for the seven wastewater services.
Environmental Protection Regulatory and non-regulatory services and a support role across the organization that focuses on contaminant reduction, monitoring and assessment associated with liquid waste treatment.	
Regional Source Control Administration, monitoring, and reporting of compliance with regional bylaw	<ul style="list-style-type: none"> • Inspect, monitor and enforcement for businesses and institutions connected to sanitary sewer • Promote contaminant reduction associated with sanitary and stormwater systems.

Community Need



2021 Summary

Core Services Levels	
Service	Levels
<p>Core Area and Saanich Peninsula Wastewater & Marine Environmental Program</p> <p>Oversight for wastewater monitoring and assessment and reporting to meet regulatory requirements</p>	<ul style="list-style-type: none"> • Marine outfall monitoring, assessment and reporting services to demonstrate compliance with federal and provincial legislation • Update of Liquid Waste Management Plans
<p>Residuals Treatment Facility</p> <p>Administration of the Project Agreement for operation of the RTF and biosolids beneficial use strategy</p>	<ul style="list-style-type: none"> • Monitoring and compliance reporting
<p>Onsite Wastewater Management</p> <p>Regulatory oversight for onsite wastewater systems and education and outreach services across the region</p>	<ul style="list-style-type: none"> • Promote and monitor compliance with regional bylaw
<p>Septage Service</p> <p>Administration, monitoring and reporting of regional septage service</p>	<ul style="list-style-type: none"> • Negotiate and manage one septage disposal contract servicing the capital region
<p>Watershed Management Program</p> <p>Promote environmental stewardship associated with sanitary and stormwater systems, contaminants and flows</p>	<ul style="list-style-type: none"> • Promote public awareness and stewardship initiatives • Public education and engagement in the region to promote sustainable behavior through campaigns, initiatives and services
<p>Support Services</p> <p>The core services listed rely on the support of several corporate and support divisions to effectively operate on a daily basis. These services are reported on in the Accountability Community Need Summary.</p>	<ul style="list-style-type: none"> • Services include Human Resources & Corporate Safety, Corporate Communications, Asset Management, Financial Services, Information Technology & GIS, Information Services, Legislative Services, Facility Management, Fleet Management, Legal Services, Risk & Insurance and Real Estate Services.

Community Need



2021 Summary

Initiatives					
Ref	Initiative	Description	Year(s)	Status	2021 impacts
8a-1	Wastewater Management through LWMP	Advance management of wastewater & storm water through liquid waste management planning & construction/ maintenance of facilities Update of Core Area and Saanich Peninsula liquid waste management plans	2020	Absorbed in Core, see 8a-1.1-3 for follow-on initiatives	
8a-1.1	Wastewater Management	New resources to support Core Area Wasterwater Treatment facility coming into service at the end of 2020 Biosolids short-term implementation, and long term planning, options analysis and pilot testing	2021	NEW Not started	4.0 Ongoing
8a-1.2	Facilities Centralization Strategy – FMW (CAWTP)	New facility operationas and maintenance support for Core Area Wasterwater Treatment facility coming into service at the end of 2020	2021	NEW Not started	1.0 Ongoing
8a-1.3	Saanich Peninsula Liquid Waste Management Plan – I&I	Develop detailed inflow and infiltration reduction program for the Peninsula	2021	NEW Not started	

*New – Initiatives not in the 2019-2022 Corporate Plan

Initiative approved in prior years which have now been delivered or absorbed in Core Services:

- 8a-2 – Stormwater Contaminant Sources

Community Need



2021 Summary

Business Model

Funding

Who contributes

- Core Area Municipalities (Colwood, Esquimalt, Langford, Oak Bay, Saanich, Victoria, View Royal) and Songhees and Esquimalt First Nations
- Saanich Peninsula Municipalities (Central Saanich, North Saanich, Sidney) and Saanich Peninsula First Nations Bands
- Local Wastewater Service Areas in the Electoral Areas
- Support Services: varies per service

Funding Sources

- Requisitions

Reporting Structure

- [Core Area Liquid Waste Management Committee](#)
- [Saanich Peninsula Wastewater Commission](#)

Community Need Key Performance Indicator (KPI)

Discussion

Link to Target Outcome

The following KPIs link to the CRD's goals of safe, resilient and environmentally sound wastewater conveyance and treatment for our customers in the Capital Region and protection of the environmental and public health. These KPIs are being established with new performance targets that will be reported in future service plans.

- Compliance with provincial and federal regulatory requirements and operational certificates
- Total volume of wastewater collected and treated
- Operating cost per megaliter of wastewater collected and treated
- Energy use per megalitre of wastewater treated
- Volume/percent of biosolids beneficially used
- Utilization of gas generated at the Residuals Treatment Facility
- Annual number of wet-weather related sanitary sewer overflow events from CRD systems (resulting in near-shore discharges/beach closures)
- Delivery of annual capital program
- Number of complaints related to operation (noise/odour)

Community Need



Initiative Progress Report

Wastewater

Initiatives approved in 2020 Budget		
Ref	Initiative	Progress to date
8a-1	Wastewater Management through Liquid Waste Management Plan (LWMP)	<p>Progressing</p> <ul style="list-style-type: none"> Regulatory approval of new wastewater infrastructure discharges (McLoughlin WWTP and RTF) Implementation of short-term biosolids plan, initiated planning for long-term biosolids management. Audit of Core Area LWMP, to be followed by review and update of LWMP chapters.
8a-2	Stormwater Contaminant Sources	Part of core service delivery

* New - Initiatives not in the 2019-2022 Corporate Plan



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SPWWC 20-02

**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION
MEETING OF THURSDAY, OCTOBER 15, 2020**

SUBJECT Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget

ISSUE SUMMARY

To provide an overview of the 2021 Saanich Peninsula Wastewater Service operating and capital budget, highlighting the changes from the 2020 budget and the proposed 2021 budget figures. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

BACKGROUND

The draft 2021 Saanich Peninsula Wastewater Service budget has been prepared for the Saanich Peninsula Wastewater Commission's (the Commission) consideration. The Commission will make budget recommendations to the Capital Regional District (CRD) Board. As in previous years, the draft 2021 budget has been prepared considering the CRD Board's 2021 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential synergies or efficiencies between departments and services, reviewing of service levels and adjustments related to regulatory compliance, and undertaking infrastructure improvements to maintain service levels across the service area. The following sets out the key components of the budget.

2020 Year-end Financial Projections

The estimated actual 2020 overall expense for trunk sewer and treatment plant operations is projected to be \$67,268 under budget due to lower expenditures in heat recovery operations and unplanned equipment repairs and maintenance, which helped offset higher than budgeted chemical costs this year. This operating expense variance is offset by a reduction in anticipated revenue from Panorama Recreation Center (PRC) due to the pool shutdown in response to COVID-19 and system shutdown early in the year as a result of corrective maintenance issues. The District Energy System (DES) is projected to generate about \$44,545 in revenue from the sale of energy to the PRC for the year. This revenue is \$101,426 below the budgeted revenue of \$145,971. The net impact of these expense and revenue differences is \$34,158 and as such, the 2020 capital reserve fund transfer is projected to decrease to \$274,605 to balance the year-end budget.

Operating Budget

A net increase in the 2021 operating expenses in the amount of \$519,371 is planned for trunk sewer and treatment plant operations; \$114,371 of this increase results from non-discretionary expense adjustments such as wage/salary increases, departmental support service allocations, and adjustments to other operating expenses such as chemical costs. The remaining \$405,000 of this increase is due to the cost for residuals disposal and treatment at the Residuals Treatment Facility (RTF), and beneficial end-use, as well as updated residuals trucking costs for bin hauling to the RTF, as directed by the Commission earlier this year.

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Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget

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The 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget, have also been prepared. The budgets are reflecting a 1.7% requisition increase, with the exception of the LWMP program budget which has an on-going annual requisition increase of \$41,000 to fund development of the Saanich Peninsula inflow and infiltration management program in order to meet the LWMP commitment and manage this risk proactively. The marine monitoring program costs are included in the overall conveyance and treatment operating budget.

The planned transfer to the maintenance reserve fund in 2021 is \$49,650. At year-end 2020, the maintenance reserve fund balance is estimated to be \$500,984, which is available to fund significant maintenance tasks that do not occur annually, such as odour control system carbon replacement, outfall inspections, and DES heat exchanger cleaning.

Operating Revenue

Although the operating expenses are almost entirely funded through requisition based on each participant's percentage of total wastewater input, the DES system is budgeted to generate \$79,226 in revenue in 2021 from the sale of energy to the PRC. This level of revenue is determined by annual energy rate adjustments based on prior year natural gas market rates and projected energy consumption. The rate used to determine the 2021 revenue is based on the 2020 natural gas rate and anticipated reduced demand.

2021 cost sharing percentages based on prior year flows will be finalized in October and are not expected to change significantly from the 2020 cost sharing figures. The overall requisition for Saanich Peninsula trunk sewers, treatment and disposal for 2021 has been set at \$4,115,433 which is a 14.18% increase over 2020.

Capital Budget

The planned capital expenditures for 2021 total \$3,957,500 and are funded from reserves. This includes \$2,990,000 in projects initiated in 2020 or prior, most of which are instream, multi-year projects. The 2021 capital program consists of several new projects related to replacement of equipment that is at the end of the service life and projects required to address operational issues. Three major projects included in the 2021 budget are relining segments of the asbestos cement trunk sewer main and manhole replacements, and, at the wastewater treatment plant, concrete tank repairs and replacement of the rotary presses.

The planned transfer to the capital reserve fund in 2021 is \$336,913. At year-end 2020, with a \$1.7 million transfer from Development Cost Charges (DCC) reserve, the capital reserve fund balance is estimated to be \$1,521,718, which is available to fund major capital projects. The planned transfer to the equipment replacement fund in 2021 is \$115,708. At year-end 2020, the equipment replacement fund balance is estimated to be \$675,661 which is available to fund minor capital and operating machinery and equipment replacements.

The value of the five year (2021 to 2025) capital plan is \$8,020,000. With the current capital reserve and equipment replacement fund balances, planned contributions, transfers, and expenditures, there is sufficient funding available for the five year capital plan. Although there are projected funds remaining in the capital reserve after the application of the five year plan, there is

Saanich Peninsula Wastewater Commission – October 15, 2020
Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget

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a limited balance available for unplanned expenditures. Given this declining reserve balance, the 2021 budget includes a 10% annual increase in transfers to reserves (both Equipment Replacement Fund and Capital) and, as noted above a \$1.7 million transfer from DCC reserve. Unforeseen capital expenditures may trigger the need to borrow funds in the near future in the Saanich Peninsula Wastewater Service. There is currently no debt associated with the Saanich Peninsula Wastewater Service.

The DCC program represents \$150,000 of the capital plan which reflects the projects included in the 2018 DCC program update. Pending ministry approval of the proposed 2020 DCC transfer to capital reserve (\$1.7 million), at year-end in 2020 the DCC reserve fund balance is estimated to be \$35,004.

RECOMMENDATION

The Saanich Peninsula Wastewater Commission recommends that the CRD Board:

1. Approve the 2021 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget; and
2. Balance the 2020 actual revenue and expense on the transfer to capital reserve fund.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENT

Appendix A: Draft Budget Document

CAPITAL REGIONAL DISTRICT

2021 BUDGET

SAANCH PENINSULA WASTEWATER

COMMISSION REVIEW

October 2020

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CAPITAL REGIONAL DISTRICT

2021 BUDGET

Saanich Peninsula Wastewater

COMMISSION REVIEW

October 2020

Service: 3.718 Saanich Peninsula Wastewater

APPENDIX A
Commission: Saanich Peninsula Waste Water

DEFINITION:

Provision of sewage treatment and disposal through treatment plant facilities and outfall for member participants.

SERVICE DESCRIPTION:

This program is for the provision of wastewater collection and treatment to the Saanich Peninsula municipalities of Central Saanich, North Saanich, and Sidney. Although the largest component of the program budget is for the operation and maintenance of the systems, many other key programs are funded through and support these budgets including engineering (capital projects), odour control, and marine monitoring and protection.

PARTICIPATION:

Operating costs to be recovered by requisition to all participating members based on measured flow from previous year.

MAXIMUM LEVY:

Establishment Bylaw No. 2388/2439 - Greater of \$5,663,000 or \$1.56 / \$1,000 of actual assessed value of land and improvements.

MAXIMUM CAPITAL DEBT:

See Debt Budget 3.775 - debt fully retired in 2016

SPWWS SEWER SYSTEM:

<u>Location</u>	<u>Allocation for 2020</u>
Airport	1.88%
Sidney	39.67%
Pauquachin	0.87%
Central Saanich	41.71%
North Saanich	15.34%
Tseycum	0.36%
IOS	0.17%
Total	100.00%

FUNDING:

Requisition

RESERVE FUND:

Saanich Peninsula Wastewater Commission approved that operating surpluses be transferred to capital reserve fund, starting with 2009 budget (approved Nov 6, 2008).

Change in Budget 2020 to 2021

Service: 3.178 SanPen Wastewater Treatment

Total Expenditure**Comments****2020 Budget****3,849,705****Other Changes:**

Biosolids disposal and contract for services	405,000	RTF tipping fees and renegotiated trucking contract
Capital reserve contributions	34,000	10% increase in reserve contributions to fund planned projects
Allocations	42,000	Standard overhead, IWS ops, Enviro programs & Water quality
Supplies - Chemicals	26,000	Bioxide purchases
Other costs	48,241	General increase 1.7% and other minor cost changes
Total Other Changes	555,241	

2021 Budget**4,404,946**

% expense increase from 2020:

14.4%

% Requisition increase from 2020 (if applicable):

14.2%

Requisition funding is 97% of service revenue

Overall 2020 Budget Performance

(expected variance to budget and surplus treatment)

Estimated Actuals 2020:

There is a one time favourable variance of \$78,266 in operations due to savings in lab costs, heat recovery operations and biosolids management. This is partially offset by increased costs related to waste sludge disposal during ongoing capital projects and electricity cost overages totaling \$10,998 and leaving a net favorable operating variance of \$67,268. This variance is offset by a reduction in anticipated revenue due to the close of Panorama Recreation Center and corresponding decrease in internal revenues from the heat recovery system of \$101,426. The net impact of these differences is \$34,158 and will be removed from the transfer to Capital Reserve, which has an expected year end balance transfer of \$274,605.

3.718 - SAANICH PENINSULA WASTEWATER			BUDGET REQUEST							
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
OPERATING COSTS:										
Operating	2,366,992	2,377,990	2,477,627	-	-	2,477,627	2,501,432	2,550,984	2,601,533	2,653,082
Lab	170,136	158,530	185,557	-	-	185,557	187,055	190,973	194,963	199,048
Heat Recovery	145,971	129,572	143,899	-	-	143,899	146,768	149,689	152,673	155,718
Biosolids Mgmt.	649,001	598,740	1,035,913	-	-	1,035,913	1,056,631	1,077,764	1,099,319	1,121,305
Corporate Overhead	51,205	51,205	59,680	-	-	59,680	69,019	70,400	71,808	73,244
TOTAL OPERATING COSTS	3,383,305	3,316,037	3,902,676	-	-	3,902,676	3,960,905	4,039,810	4,120,296	4,202,397
*Percentage Increase over prior year	0.00%	-1.99%	15.35%	0.00%	0.00%	15.35%	1.49%	1.99%	1.99%	1.99%
CAPITAL / RESERVE										
Transfer to Operating Reserve Fund	47,439	47,439	49,650	-	-	49,650	51,983	54,429	56,996	59,687
Transfer to Equipment Replacement Fund	110,198	110,198	115,708	-	-	115,708	121,493	127,568	133,947	140,644
Transfer to Reserve Fund	308,763	274,605	336,912	-	-	336,912	367,931	401,998	439,416	480,522
TOTAL CAPITAL / RESERVES	466,400	432,242	502,270	-	-	502,270	541,407	583,995	630,359	680,853
TOTAL COSTS	3,849,705	3,748,279	4,404,946	-	-	4,404,946	4,502,312	4,623,805	4,750,655	4,883,250
*Percentage Increase over prior year	0.00%	-2.63%	14.42%	0.00%	0.00%	14.42%	2.21%	2.70%	2.74%	2.79%
Internal Recovery - Other	(218,850)	(117,879)	(153,311)	-	-	(153,311)	(156,377)	(159,504)	(162,693)	(165,949)
Recovery - Other	(455)	-	-	-	-	-	-	-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	3,630,400	3,630,400	4,251,635	-	-	4,251,635	4,345,935	4,464,301	4,587,962	4,717,301
*Percentage Increase over prior year	0.00%	0.00%	17.11%	0.00%	0.00%	17.11%	2.22%	2.72%	2.77%	2.82%
SOURCES OF FUNDING (REVENUE)										
Surplus / (Deficit)										
Balance C/F from Prior to Current year	-	-	-	-	-	-	-	-	-	-
Grants In Lieu of Taxes	(6,098)	(6,098)	(6,202)	-	-	(6,202)	(6,326)	(6,452)	(6,581)	(6,714)
Transfer From Own Funds	(20,000)	(20,000)	(130,000)	-	-	(130,000)	(55,000)	(130,000)	(110,000)	(20,000)
TOTAL REVENUE	(26,098)	(26,098)	(136,202)	-	-	(136,202)	(61,326)	(136,452)	(116,581)	(26,714)
REQUISITION	(3,604,302)	(3,604,302)	(4,115,433)	-	-	(4,115,433)	(4,284,609)	(4,327,849)	(4,471,381)	(4,690,587)
*Percentage Increase over prior year	0.00%	0.00%	14.18%	0.00%	0.00%	14.18%	4.11%	1.01%	3.32%	4.90%

**CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

Service No.	3.718	Carry						
Saanich Peninsula Wastewater		Forward from	2021	2022	2023	2024	2025	TOTAL
		2020						

EXPENDITURE

Buildings	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	E	\$175,000	\$192,500	\$17,500	\$0	\$0	\$0	\$210,000
Land	L	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	S	\$2,815,000	\$3,765,000	\$950,000	\$400,000	\$1,635,000	\$1,060,000	\$7,810,000
Vehicles	V	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$2,990,000	\$3,957,500	\$967,500	\$400,000	\$1,635,000	\$1,060,000	\$8,020,000

SOURCE OF FUNDS

Capital Funds on Hand	Cap	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Debenture Debt (New Debt Only)	Debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Replacement Fund	ERF	\$175,000	\$342,500	\$167,500	\$150,000	\$150,000	\$150,000	\$960,000
Grants (Federal, Provincial)	Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	Res	\$2,715,000	\$3,515,000	\$800,000	\$250,000	\$1,485,000	\$910,000	\$6,960,000
		\$2,990,000	\$3,957,500	\$967,500	\$400,000	\$1,635,000	\$1,060,000	\$8,020,000

CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM
2021 & Forecast 2022 to 2025

Service #: 3.718

Service Name: Saanich Peninsula Wastewater

Proj. No.
The first two digits represent first year the project was in the capital plan.

Capital Exp. Type
Study - Expenditure for feasibility and business case report.
New - Expenditure for new asset only
Renewal - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service
Replacement - Expenditure replaces an existing asset

Funding Source Codes
 Debt = Debenture Debt (new debt only)
 ERF = Equipment Replacement Fund
 Grant = Grants (Federal, Provincial)
 Cap = Capital Funds on Hand
 Other = Donations / Third Party Funding

Funding Source Codes (cont)
 Res = Reserve Fund
 STLoan = Short Term Loans
 WU = Water Utility

Asset Class
 L - Land
 S - Engineering Structure
 B - Buildings
 V - Vehicles
 E - Equipment

Capital Project Title
Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

Capital Project Description
Briefly describe project scope and service benefits.
For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".

Total Project Budget
This column represents the total project budget not only within the 5-year window.

FIVE YEAR FINANCIAL PLAN

Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
WASTEWATER TREATMENT PLANT													
16-06	New	Biosolids Treatment & Disposal Options Study	Study to determine viable options for treatment and disposal of biosolids from the SPWWTP.	\$100,000	S	Cap	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
19-01	Replacement	SPWWTP Replacement of Rotary Presses	Assess dewatering options of sludge and implement prior to possible failure of the rotary presses.	\$1,190,000	S	Res	\$800,000	\$900,000	\$0	\$0	\$0	\$0	\$900,000
20-01	Renewal	Isolation Valve Installation for Oxidation Ditches	To maintain operator safety isolation valves are required prior to the oxidation ditches at the SPWWTP.	\$130,000	S	Res	\$40,000	\$40,000	\$0	\$0	\$0	\$0	\$40,000
20-02	Renewal	Replace Aerators in Oxidation Ditches	The existing 75hp aerators are at end of life and need to be upsized to 100hp to provide additional dissolved oxygen for future loading/increased strength of the wastewater.	\$200,000	E	ERF	\$175,000	\$175,000	\$0	\$0	\$0	\$0	\$175,000
20-06	Renewal	SPWWTP Road Upgrades & Repairs	The existing asphalt road at the SPWWTP requires some repairs and road extension around the clarifier tank.	\$300,000	S	Res	\$0	\$0	\$0	\$0	\$285,000	\$0	\$285,000
21-01	Renewal	SPWWTP Concrete Tank Repairs	Stantec completed an assessment and provided recommendations to repair significant internal corrosion in the clarifier, sludge tank, and process drain sump and this project will implement the repairs.	\$850,000	S	Res	\$0	\$850,000	\$0	\$0	\$0	\$0	\$850,000
21-03	Renewal	SPWWTP Screenings Bin	Debris from the raw sewage screenings is being commingled with dewatered sludge. It must be separated into its own bin so that dewatered sludge can be beneficially re-used.	\$300,000	S	Res	\$0	\$0	\$0	\$50,000	\$250,000	\$0	\$300,000
21-05	Renewal	SPWWTP HVAC Fan Replacements	The HVAC Fan's were identified in Stantec's 2014 condition assessment as requiring replacement, funds are required to reassess the fans, design replacement and carry out replacement.	\$200,000	S	Res	\$0	\$50,000	\$150,000	\$0	\$0	\$0	\$200,000

FIVE YEAR FINANCIAL PLAN													
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
23-03	Renewal	SPWWTP Solids Handling Equipment Removal	The old RDP Lime Stabilization biosolids process equipment has not been used for many years and no longer is operable. This equipment should be removed and recycled making way for other solids handling upgrades pending the outcome of the Biosolids Options Study.	\$400,000	S	Res	\$0	\$0	\$0	\$0	\$100,000	\$300,000	\$400,000
23-02	Study	Bazan Bay Outfall Inspection	Follow-up electromagnetic inspection of Bazan Bay Outfall based upon the 2018 inspection.	\$200,000	S	Res	\$0	\$0	\$0	\$200,000	\$0	\$0	\$200,000
PUMP STATIONS													
21-02	Renewal	Sidney Pump Station Wet Well Upgrades	The existing inlet gate to the wet well and the forcemain knife gate valves are seized and need to be replaced, and the catwalk in the wet well needs to be cleaned and painted to protect it from corrosion.	\$300,000	S	Res	\$0	\$50,000	\$250,000	\$0	\$0	\$0	\$300,000
GENERAL													
19-03	Renewal	Corrosion Prevention Program	In conjunction with the RWS and JdF system a corrosion protection program to assess and monitor assets susceptible to corrosion	\$120,000	S	Res	\$20,000	\$20,000	\$0	\$0	\$0	\$60,000	\$80,000
19-06	Renewal	Odour Control Upgrades	Based upon the 2018 KWL Odour Control Program study, upgrades to odour control systems like the biofilter at SPWWTP will be undertaken.	\$575,000	S	Res	\$150,000	\$150,000	\$400,000	\$0	\$0	\$0	\$550,000
21-04	Replacement	Voice Radio Replacement	Replacement of the voice radios, in coordination with the RWS, SPW, JdF, and Core Area services.	\$35,000	E	ERF	\$0	\$17,500	\$17,500	\$0	\$0	\$0	\$35,000
18-10	Replacement	Equipment Replacement - Annual Provisional	Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.	\$750,000	S	ERF	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
GRAVITY SEWERS & MANHOLES													
20-03	Renewal	Trunk Sewer Relining	Based upon CCTV inspection, high priority relining of about 1,300m of 500mm dia asbestos cement sewer will start in 2020. Another 800m may need to be relined within the next 5 years.	\$2,200,000	S	Res	\$1,100,000	\$1,100,000	\$0	\$0	\$550,000	\$550,000	\$2,200,000
20-04	Renewal	Manhole Repairs and Replacement	Based upon inspections, high priority repairs and relining will start on some MH's in Central Saanich and Sidney 2020. Other repairs/relining will be scheduled in the next 5 years.	\$500,000	S	Res	\$475,000	\$225,000	\$0	\$0	\$250,000	\$0	\$475,000
PRESSURE PIPES & APPURTENANCES													
DEVELOPMENT COST CHARGE (DCC) PROJECTS													
19-04	Renewal	Asset Management Plan Update	Update the asset management plan to inform future works - DCC Share.	\$100,000	S	Res	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
19-04	Renewal	Asset Management Plan Update	Update the asset management plan to inform future works - Cap Reserve Share	\$30,000	S	Res	\$30,000	\$30,000	\$0	\$0	\$0	\$0	\$30,000
23-01	Renewal	DCC Program - 5-year Update	5-year update of the DCC program.	\$50,000	S	Res	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000
GRAND TOTAL				\$8,530,000			\$2,990,000	\$3,957,500	\$967,500	\$400,000	\$1,635,000	\$1,060,000	\$8,020,000

Service: 3.718 **Saanich Peninsula Wastewater**

Proj. No. 16-06	Capital Project Title Biosolids Treatment & Disposal Options Study	Capital Project Description Study to determine viable options for treatment and disposal of biosolids from the SPWWTP.
Asset Class S	Board Priority Area Climate Action & Environmental Stewardship	Corporate Priority Area Wastewater
Project Rationale <i>A study to determine viable options for treatment and disposal of biosolids from the SPWWTP will be undertaken.</i>		

Proj. No. 18-10	Capital Project Title Equipment Replacement - Annual Provisional	Capital Project Description Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.</i>		

Proj. No. 19-01	Capital Project Title SPWWTP Replacement of Rotary Presses	Capital Project Description Assess dewatering options of sludge and implement prior to possible failure of the rotary presses.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>The 2013 Stantec condition assessment of the SPWWTP highlighted that the rotary presses will reach their end of life approximately 2020. It is proposed to replace the rotary presses before they fail so that the SPWWTP can maintain operation. Funding is required to assess replacement thickening options (2019) and complete the design and installation of new replacement units (2020).</i>		

Service: 3.718 **Saanich Peninsula Wastewater**

Proj. No. 19-03	Capital Project Title Corrosion Prevention Program	Capital Project Description In conjunction with the RWS and JdF system a corrosion protection program to assess and monitor assets susceptible to corrosion
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>The Saanich Peninsula Wastewater system is comprised of numerous steel infrastructure among other materials. The Regional Water and Juan du Fuca water systems will be utartinga corrosion protection program in 2018 that the SPWW system can be assessed and monitored as well. Funds are required to retain a corrosion prevention specialist to produce a program for assessing and monitoring corrosion prevention within the Saanich Peninsula Wastewater system.</i>		

Proj. No. 19-04	Capital Project Title Asset Management Plan Update	Capital Project Description Update the asset management plan to inform future works - DCC Share.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>An update to the strategic plan to inform future works will be undertaken.</i>		

Proj. No. 19-06	Capital Project Title Odour Control Upgrades	Capital Project Description Based upon the 2018 KWL Odour Control Program study, upgrades to odour control systems like the biofilter at SPWWTP will be undertaken.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>In 2017 KWL was retained to conduct an audit of the odour control systems in the Core Area and Saanich Peninsula Wastewater systems. KWL made recommendations on remediation, works include: SPWWTP odour control management study and Sidney and Keating PS ventilation study (2019); SPWWTP Odour Control Improvements Design (2020); SPWWTP Odour Control Improvements Construction (2021).</i>		

Proj. No. 20-01	Capital Project Title Isolation Valve Installation for Oxidation Ditches	Capital Project Description To maintain operator safety isolation valves are required prior to the oxidation ditches at the SPWWTP.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>The oxidation ditches at SPWWTP currently have outlet piping with no isolation valves to allow for repairs. Funding is required to procure two 600mm diameter valves and install outside the oxidation ditches.</i>		

Service: 3.718		Saanich Peninsula Wastewater	
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Proj. No. 20-02	Capital Project Title Replace Aerators in Oxidation Ditches	Capital Project Description The existing 75hp aerators are at end of life and need to be upsized to 100hp to provide additional dissolved oxygen for future loading/increased strength of the wastewater.
Asset Class E	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>The current aerators are at the end of life and are undersized necessitating replacement to maintain the treatment capacity of the existing WWTP. Funds are required to procure and install new aerators.</i>		

Proj. No. 20-03	Capital Project Title Trunk Sewer Relining	Capital Project Description Based upon CCTV inspection, high priority relining of about 1,300m of 500mm dia asbestos cement sewer will start in 2020. Another 800m may need to be relined within the next 5 years.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>The trunk sewer mains were inspected in 2018-2019 resulting in approximately 1,300 m of 500 mm diameter asbestos cement sewer pipe requiring relining to maintain integrity. Funds are required to retain a contractor to conduct the pipe relining.</i>		

Proj. No. 20-04	Capital Project Title Manhole Repairs and Replacement	Capital Project Description Based upon inspections, high priority repairs and relining will start on some MH's in Central Saanich and Sidney 2020. Other repairs/relining will be scheduled in the next 5 years.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>During the trunk sewer main inspections in 2018-2019, the manholes were inspected as well. A number of manholes were identified with major defects requiring repairs or relining, mostly in Central Saanich and Sidney. Funds are required to retain a contractor to carry out manhole repairs.</i>		

Service: 3.718 **Saanich Peninsula Wastewater**

Proj. No. 20-06 **Capital Project Title** SPWWTP Road Upgrades & Repairs **Capital Project Description** The existing asphalt road at the SPWWTP requires some repairs and road extension around the clarifier tank.

Asset Class S **Board Priority Area** Climate Action & Environmental **Corporate Priority Area** Wastewater

Project Rationale *The SPWWTP site's access road and existing bin loading area is having pavement failure, additionally, the gravel route around the facility is being used more often to alleviate traffic along the bin hauling route and it is creating dust. Funds are required to fix failed pavement and pave the route around the treatment plant.*

Proj. No. 21-01 **Capital Project Title** SPWWTP Concrete Tank Repairs **Capital Project Description** Stantec completed an assessment and provided recommendations to repair significant internal corrosion in the clarifier, sludge tank, and process drain sump and this project will implement the repairs.

Asset Class S **Board Priority Area** Climate Action & Environmental **Corporate Priority Area** Wastewater

Project Rationale *required repairs for significant internal corrosion in the clarifier, sludge tank, and process drain sump and this project will implement the repairs.*

Proj. No. 21-02 **Capital Project Title** Sidney Pump Station Wet Well Upgrades **Capital Project Description** The existing inlet gate to the wet well and the forcemain knife gate valves are seized and need to be replaced, and the catwalk in the wet well needs to be cleaned and painted to protect it from corrosion.

Asset Class S **Board Priority Area** Climate Action & Environmental **Corporate Priority Area** Wastewater

Project Rationale *The existing inlet gate to the wet well and the forcemain knife gate valves are seized and need to be replaced, and the catwalk in the wet well needs to be cleaned and painted to protect it from corrosion.*

Proj. No. 21-03 **Capital Project Title** SPWWTP Screenings Bin **Capital Project Description** Debris from the raw sewage screenings is being co-mingled with dewatered sludge. It must be separated into its own bin so that dewatered sludge can be beneficially re-used.

Asset Class S **Board Priority Area** Climate Action & Environmental **Corporate Priority Area** Wastewater

Project Rationale *Debris from the raw sewage screenings is being co-mingled with dewatered sludge. It must be separated into its own bin so that dewatered sludge can be beneficially re-used.*

Service: 3.718 **Saanich Peninsula Wastewater**

Proj. No. 21-04	Capital Project Title Voice Radio Replacement	Capital Project Description Replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.
Asset Class E	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale End of life replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.		

Proj. No. 21-05	Capital Project Title SPWWTP HVAC Fan Replacements	Capital Project Description The HVAC Fan's were identified in Stantec's 2014 condition assessment as requiring replacement, funds are required to reassess the fans, design replacement and carry out replacement.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale The HVAC Fan's were identified in Stantec's 2014 condition assessment as requiring replacement, funds are required to reassess the fans, design replacement and carry out replacement.		

Proj. No. 23-01	Capital Project Title DCC Program - 5-year Update	Capital Project Description 5-year update of the DCC program.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale This item is for a planned review and update of the DCC Program.		

Proj. No. 23-02	Capital Project Title Bazan Bay Outfall Inspection	Capital Project Description Follow-up electromagnetic inspection of Bazan Bay Outfall based upon the 2018 inspection.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale Follow-up electromagnetic inspection of Bazan Bay Outfall based upon the 2018 inspection.		

Service: 3.718	Saanich Peninsula Wastewater
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Proj. No. 23-03	Capital Project Title SPWWTP Solids Handling Equipment Removal	Capital Project Description The old RDP Lime Stabilization biosolids process equipment has not been used for many years and no longer is operable. This equipment should be removed and recycled making way for other solids handling upgrades pending the outcome of the Biosolids Options Study.
Asset Class S	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>The old RDP Lime Stabilization biosolids process equipment has not been used for many years and no longer is operable. This equipment should be removed and recycled making way for other solids handling upgrades pending the outcome of the Biosolids Options Study.</i>		

Proj. No. 21-04	Capital Project Title Voice Radio Replacement	Capital Project Description Replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.
Asset Class E	Board Priority Area Climate Action & Environmental	Corporate Priority Area Wastewater
Project Rationale <i>End of life replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.</i>		

3.718 Saanich Peninsula Wastewater Asset and Reserve Summary

Summary Schedule

2021 - 2025 Financial Plan

Asset Profile

Saanich Peninsula Wastewater Assets

Construction of the Saanich Peninsula Wastewater Treatment Plant (SPWWTP) was completed in January 2000 to provide wastewater service for Central Saanich, North Saanich and Sidney, as well as the local First Nations, Victoria Airport Authority, and the Institute of Ocean Sciences Centre. Annually, the SPWWTP produces on average 3,600 tonnes of sludge which is currently hauled to the Hartland landfill for disposal as controlled waste. Treated effluent is discharged through the Bazan Bay Outfall to the marine environment. The SPWWTP heat recovery system was commissioned in February 2011 and has supplied treatment plant effluent waste heat to the Panorama Recreation Center for heating its swimming pools since then. Assets in the Saanich Peninsula Wastewater System include land, the SPWWTP and a secondary treatment plant, three pumping stations, PRV station, thermal recovery and other buildings, 14 kilometres of collections and conveyance (gravity & pressure) mains, and two marine outfalls.

Summary

SPWWTP Reserve/Fund Summary Projected year end balance	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Maintenance Reserve Fund	500,984	420,634	417,616	342,046	289,042	328,730
Sewer Capital Reserve Funds	1,556,722	1,263,635	1,001,566	1,323,563	397,980	138,502
Equipment Replacement Fund	675,661	623,869	577,862	555,430	539,377	530,020
Total projected year end balance	2,733,367	2,308,137	1,997,044	2,221,040	1,226,399	997,252

See attached reserve schedules for projected annual cash flows.

**3.718 Saanich Peninsula Wastewater
Operating Reserve Summary
2021 - 2025 Financial Plan**

Profile

Saanich Peninsula Wastewater

Starting in 2003, maintenance reserve accounts were established for operating and maintenance activities that typically do not occur annually. These maintenance activities are large expense and to and to avoid large swings in the operating budget, funds are set aside annually to undertake this maintenance. The maintenance activities are the replacement and disposal of the odour control carbon at the treatment plant approximately every 2 years, replacement and disposal of the odour control carbon at Keating Pump Station every 5 years, the regulatory inspection of the Bazan Bay marine outfall every 5 years and the cleaning and rebuild of the District Energy Sharing System heat exchanger every 5-8 years.

Operating Reserve Schedule

Operating Reserve Schedule Fund: 1500 Fund Center: 105204	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	460,448	500,984	420,634	417,616	342,046	289,042
Planned Purchase	(20,000)	(130,000)	(55,000)	(130,000)	(110,000)	(20,000)
Transfer from Ops Budget	47,439	49,650	51,983	54,430	56,996	59,688
Interest Income*	13,097	-	-	-	-	-
Total projected year end balance	500,984	420,634	417,616	342,046	289,042	328,730

Assumptions/Background:

Maintenance Reserve Account: Outfall Inspection, Odour Control Carbon Replacement, Heat Recovery Exchange System Cleaning

* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

3.718 Saanich Peninsula Wastewater
Equipment Replacement Reserve Fund Schedule
2021 - 2025 Financial Plan

ERF Reserve Fund Schedule SPWWTP

ERF: SPWWTP ERF or PERS Fund for Equipment

Equipment Replacement Fund- SPWWTP Fund: 1022 Fund Center: 101700	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	929,158	675,661	623,869	577,862	555,430	539,377
Planned Purchase (Based on Capital Plan)	(375,000)	(167,500)	(167,500)	(150,000)	(150,000)	(150,000)
Transfer IN (from Ops Budget)	110,198	115,708	121,493	127,568	133,946	140,644
Interest Income*	11,305	-	-	-	-	-
Ending Balance \$	675,661	623,869	577,862	555,430	539,377	530,020

Assumptions/Background:
The ERF funds the replacement or repair of equipment with a service life of 15 years or less. In the past the ERF has also been referred to as a Priority Equipment Replacement Strategy (PERS). There are three individual ERF funds; Wastewater Treatment Plant (E00561), Trunk Sewers (E00562) and Saanich Peninsula Laboratory Equipment (E00586)

* Interest in planning years nets against inflation which is not included.

3.718 Saanich Peninsula Wastewater
Capital Reserve Fund Schedule
2021 - 2025 Financial Plan

Capital Reserve Fund Schedule - SPWWTP

Capital Reserve Fund SPWWTP - DCC Portion and Capital Reserve Portion

Bylaw 2760 established a Reserve Fund for the Saanich Peninsula Wastewater System. There are two portions in the Reserve Fund: Development Cost Charges is deposited in the DCC portion and expenditures are restricted. Surplus funds from the Operating budget are deposited to the Capital Reserve portion and expenditures provide for capital works.

DCC Portion Fund: 1012 Fund Center: 101356	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	1,534,961	35,004	205,004	375,004	545,004	65,004
Planned Capital Expenditure (Based on Capital Plan)	-	-	-	-	(50,000)	-
Transfer OUT - To Capital Reserve	(1,700,000)	-	-	-	(600,000)	(200,000)
Transfer IN - DCC Funding	170,000	170,000	170,000	170,000	170,000	170,000
Interest Income	30,043	-	-	-	-	-
Ending Balance \$	35,004	205,004	375,004	545,004	65,004	35,004

Assumptions/Background:

Surplus funds from the Operating budget are deposited to the Capital Reserve portion and expenditures provide for capital works.
Approved capital expenditures to be funded by DCC to be determined, as under review.

3.718 Saanich Peninsula Wastewater
Capital Reserve Fund Schedule
2021 - 2025 Financial Plan

Capital Reserve Fund Schedule - SPWWTP

Capital Reserve Fund SPWWTP - DCC Portion and Capital Reserve Portion

Bylaw 2760 established a Reserve Fund for the Saanich Peninsula Wastewater System. There are two portions in the Reserve Fund: Development Cost Charges is deposited in the DCC portion and expenditures are restricted. Surplus funds from the Operating budget are deposited to the Capital Reserve portion and expenditures provide for capital works.

Capital Reserve Portion Fund: 1012 Fund Center: 102022	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	2,141,215	1,521,718	1,058,630	626,561	778,559	332,976
Planned Capital Expenditure	(2,610,000)	(800,000)	(800,000)	(250,000)	(1,485,000)	(910,000)
Transfer from Ops Budget	274,605	336,913	367,931	401,998	439,417	480,522
Planned transfer from DCC Funds	1,700,000	-	-	-	600,000	200,000
Interest Income*	15,898	-	-	-	-	-
Ending Balance \$	1,521,718	1,058,630	626,561	778,559	332,976	103,498

CAPITAL REGIONAL DISTRICT

2021 BUDGET

L.W.M.P. (Peninsula)

COMMISSION REVIEW

October 2020

Service: 3.720 L.W.M.P. (Peninsula)

Commission: Saanich Peninsula Waste Water

DEFINITION:

Implementation of the Liquid Waste Management Plan for the Saanich Peninsula. Bylaw No. 2388 (1996), amended by Bylaw No. 2439 (1996) and Bylaw No. 3073 (2003)

SERVICE DESCRIPTION:

To manage the Saanich Peninsula Liquid Waste Management Plan (SPLWMP) and implement the commitments approved under the plan as required:

- planning, reporting, amendment preparation, implementation of commitments, biosolids management program, resource recovery development and inflow/infiltration enhancement program

PARTICIPATION:

MAXIMUM LEVY:

Greater of \$5,663,000 or \$1.56 / \$1,000 of actual assessments (2020 - \$24,155,979).

MAXIMUM CAPITAL DEBT:

Nil

COMMITTEE:

Parks & Environment

FUNDING:

Requisition

RESERVE FUND:

Bylaw No. 4144 Operating Reserve Fund

Service: 3.720 L.W.M.P. (Peninsula)

Commission: Saanich Peninsula Waste Water

	<u>Operating</u>
Central Saanich	43.12%
North Saanich (*see note below)	15.87%
Sidney	41.01%
Total	<u>100.00%</u>

Note:

* North Saanich taxes all of North Saanich, including the Airport, as LWMP benefits all of North Saanich, and not just the sewer area. (March 18, 2002)

3.720 - LWMP (PENINSULA)	BUDGET REQUEST									
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
OPERATING COSTS:										
Operating Expenditures	21,875	21,877	41,738	41,000	-	82,738	107,341	24,080	24,557	25,047
Contract For Services	25,000	20,000	-	-	-	-	11,799	-	-	-
Contingency	-	-	-	-	-	-	-	-	-	-
TOTAL OPERATING COSTS	46,875	41,877	41,738	41,000	-	82,738	119,140	24,080	24,557	25,047
*Percentage Increase over prior year	0.00%	-10.66%	-10.96%	87.47%	0.00%	76.51%	44.00%	-79.79%	1.98%	2.00%
CAPITAL / RESERVE										
Transfer to Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-
Transfer to Operating Reserve Fund	-	4,998	-	-	-	-	-	-	-	-
TOTAL CAPITAL / RESERVES	-	4,998	-	-	-	-	-	-	-	-
Debt Expenditures	-	-	-	-	-	-	-	-	-	-
MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
TOTAL COSTS	46,875	46,875	41,738	41,000	-	82,738	119,140	24,080	24,557	25,047
*Percentage Increase over prior year	0.00%	0.00%	-10.96%	87.47%	0.00%	76.51%	44.00%	-79.79%	1.98%	2.00%
Internal Recoveries	-	-	-	-	-	-	-	-	-	-
Recovery - Other	-	-	-	-	-	-	-	-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	46,875	46,875	41,738	41,000	-	82,738	119,140	24,080	24,557	25,047
*Percentage Increase over prior year	0.00%	0.00%	-10.96%	87.47%	0.00%	76.51%	44.00%	-79.79%	1.98%	2.00%
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit)										
Balance C/F from Prior to Current year	-	-	-	-	-	-	-	-	-	-
Grants in Lieu of Taxes	(200)	(200)	(210)	-	-	(210)	(210)	(210)	(210)	(210)
Transfer From Operating Reserve	(35,000)	(35,000)	(29,658)	-	-	(29,658)	-	-	-	-
TOTAL REVENUE	(35,200)	(35,200)	(29,868)	-	-	(29,868)	(210)	(210)	(210)	(210)
REQUISITION	(11,675)	(11,675)	(11,870)	(41,000)	-	(52,870)	(118,930)	(23,870)	(24,347)	(24,837)
*Percentage Increase over prior year	0.00%	0.00%	1.67%	351.18%	0.00%	352.85%	124.95%	-79.93%	2.00%	2.01%
PARTICIPANTS: Central Saanich, North Saanich, Sidney										
AUTHORIZED POSITIONS:										
Salaried	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Term	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.720 L.W.M.P. Peninsula
Operating Reserve Summary
2021 - 2025 Financial Plan

Profile

L.W.M.P. Peninsula

Established by Bylaw No. 4144 to enable CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, as well as to mitigate fluctuations in revenue.

Operating Reserve Schedule

Operating Reserve Schedule Fund: 1500 Fund Center: 105527	Est. Actual	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	59,471	30,371	713	713	713	713
Planned Purchase	(35,000)	(29,658)	-	-	-	-
Transfer from Ops Budget	4,998	-	-	-	-	-
Interest Income*	902	-	-	-	-	-
Total projected year end balance	30,371	713	713	713	713	713

Assumptions/Background:
Retain reserve balance for future LWMP planning projects.

* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

CAPITAL REGIONAL DISTRICT

2021 BUDGET

Saanich Peninsula - Stormwater Quality Management

COMMISSION REVIEW

October 2020

Service: 1.537 Saanich Peninsula - Stormwater Quality Management

Commission: Saanich Peninsula Waste Water

DEFINITION:

Establishment Bylaw No. 3642 (2009), as amended by Bylaw No. 4141 (2017), to identify pollution in stormwater run-off from land in the service area.

SERVICE DESCRIPTION:

The service provides a stormwater quality program in the Saanich Peninsula to coordinate and provide information for management of stormwater quality and surface water resources. The program identifies levels of contaminants in stormwater discharges and prioritizes the level of public health and environmental concern posed by the discharges and then works to reduce/eliminate the contaminants.

PARTICIPATION:

Districts of Central Saanich, North Saanich and Town of Sidney.

MAXIMUM LEVY:

Greater of \$106,017 or \$0.0103/\$1,000 of actual assessments. The actual assessment for 2020 was \$109,946.

MAXIMUM CAPITAL DEBT:

Nil

COMMITTEE:

Saanich Peninsula Wastewater Commission

FUNDING:

The apportionment of annual operating costs among the participating areas shall be on the basis of one sixth in proportion to the population of the participating areas, one sixth in proportion to the land area of the participating areas, one sixth in proportion to the length of shoreline in each of the participating areas, and one half in proportion to the number of high and medium priority discharges of stormwater to the environment in the prior year within the boundaries of each of the participating areas, as determined by the Capital Regional District Board.

USER CHARGE:

N/A

Service: 1.537 Saanich Peninsula - Stormwater Quality Management

Commission: Saanich Peninsula Waste Water

	<u>Stormwater</u>
Central Saanich	27.58%
North Saanich	35.68%
Sidney	24.33%
Tsawout Band	4.49%
Tsartlip Band	5.57%
Pauquachin Band	0.98%
Tseycum Band	1.37%
Total	<u>100.00%</u>

Note:

* Service established effective 2010; previously provided by agreement

1.537 SOURCE CONTROL STORMWATER - SAANICH PENINSULA	2020		BUDGET REQUEST				2022			
	BOARD BUDGET	ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
<u>OPERATING COSTS:</u>										
Operating Expenditures	72,938	83,005	75,443	-	-	75,443	77,371	78,919	80,488	82,091
Contract For Services	29,857	17,500	22,500	-	-	22,500	22,529	22,980	23,452	23,919
Consultant Expenses	11,000	2,000	15,000	-	-	15,000	15,300	15,610	15,920	16,240
TOTAL OPERATING COSTS	113,795	102,505	112,943	-	-	112,943	115,200	117,509	119,860	122,250
*Percentage Increase over prior year	0.00%	-9.92%	-0.75%	0.00%	0.00%	-0.75%	2.00%	2.00%	2.00%	1.99%
<u>CAPITAL / RESERVE</u>										
Transfer to Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-
Transfer to Operating Reserve Fund	-	11,290	2,787	-	-	2,787	2,840	2,891	2,950	3,010
TOTAL CAPITAL / RESERVES	-	11,290	2,787	-	-	2,787	2,840	2,891	2,950	3,010
Debt Expenditures	-	-	-	-	-	-	-	-	-	-
MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
TOTAL COSTS	113,795	113,795	115,730	-	-	115,730	118,040	120,400	122,810	125,260
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	2.00%	2.00%	2.00%	1.99%
Internal Recoveries	-	-	-	-	-	-	-	-	-	-
Recovery - Other	-	-	-	-	-	-	-	-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	113,795	113,795	115,730	-	-	115,730	118,040	120,400	122,810	125,260
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	2.00%	2.00%	2.00%	1.99%
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit)										
Balance C/F from Prior to Current year	-	-	-	-	-	-	-	-	-	-
Grants in Lieu of Taxes	(3,849)	(3,849)	(3,910)	-	-	(3,910)	(3,980)	(4,060)	(4,140)	(4,220)
Transfer From Operating Reserve	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE	(3,849)	(3,849)	(3,910)	-	-	(3,910)	(3,980)	(4,060)	(4,140)	(4,220)
REQUISITION	(109,946)	(109,946)	(111,820)	-	-	(111,820)	(114,060)	(116,340)	(118,670)	(121,040)
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	2.00%	2.00%	2.00%	2.00%
PARTICIPANTS: Central Saanich, North Saanich, Sidney										
AUTHORIZED POSITIONS:										
Salaried	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Term	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**1.537 Saanich Peninsula - Source Control Stormwater
Operating Reserve Summary
2021 - 2025 Financial Plan**

Profile

Saanich Peninsula - Source Control Stormwater

Established by Bylaw No. 4147 to enable CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, as well as to mitigate fluctuations in revenue.

Operating Reserve Schedule

Operating Reserve Schedule Fund: 1500 Fund Center: 105520	Est. Actual	Budget				
	2020	2021	2022	2023	2024	2025
Projected year end balance						
Beginning Balance	27,114	38,816	41,603	44,443	47,334	50,284
Planned Purchase	-	-	-	-	-	-
Transfer from Ops Budget	11,290	2,787	2,840	2,891	2,950	3,010
Interest Income*	411	-	-	-	-	-
Total projected year end balance	38,816	41,603	44,443	47,334	50,284	53,294

* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

CAPITAL REGIONAL DISTRICT

2020 BUDGET

Saanich Peninsula - Source Control Stormwater

COMMISSION REVIEW

October 2020

Service: 1.538 Saanich Peninsula - Source Control Stormwater

Commission: Saanich Peninsula Waste Water

DEFINITION:

To regulate, prohibit and impose requirements in respect of discharges to the municipal stormwater system and water courses Bylaw No. 3906 (adopted August, 2013), amended by Bylaw No. 4140 (2016).

SERVICE DESCRIPTION:

The service provides a regulatory stormwater source control program in the Saanich Peninsula to manage stormwater quality in the municipal drainage systems.

PARTICIPATION:

Districts of Central Saanich, North Saanich and Town of Sidney.

MAXIMUM LEVY:

Maximum Levy: Greater of \$51,715 or \$0.005/\$1,000 of actual assessments. The actual assessment for 2020 was \$77,423.

MAXIMUM CAPITAL DEBT:

Nil

COMMITTEE:

Saanich Peninsula Wastewater

FUNDING:

The annual costs for the service, net of grants and other revenues, shall be apportioned on the basis of:

- a) The population of the participating areas; and
- b) The population estimate as determined annually by the Regional Planning Services department of the Capital Regional District.

USER CHARGE:

N/A

Service: 1.538 Saanich Peninsula - Source Control Stormwater

Commission: Saanich Peninsula Waste Water

	<u>2020</u>
Central Saanich	42.86%
North Saanich	28.14%
Sidney	28.99%
Total	<u><u>100.00%</u></u>

Note:
Bylaw No. 3906 (adopted August, 2013).

1.538 STORMWATER QUALITY MANAGEMENT - SAANICH PENINSULA	BUDGET REQUEST						2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL				
<u>OPERATING COSTS:</u>										
Operating Expenditures	48,033	45,149	55,480	-	-	55,480	46,463	47,390	48,329	49,290
Contract For Services	13,400	2,500	7,000	-	-	7,000	7,140	7,280	7,430	7,580
Contingency	-	-	-	-	-	-	-	-	-	-
TOTAL OPERATING COSTS	61,433	47,649	62,480	-	-	62,480	53,603	54,670	55,759	56,870
*Percentage Increase over prior year	0.00%	-22.44%	1.70%	0.00%	0.00%	1.70%	-14.21%	1.99%	1.99%	1.99%
<u>CAPITAL / RESERVE</u>										
Transfer to Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-
Transfer to Operating Reserve Fund	-	9,684	-	-	-	-	2,217	2,260	2,311	2,360
TOTAL CAPITAL / RESERVES	-	9,684	-	-	-	-	2,217	2,260	2,311	2,360
Debt Expenditures	-	-	-	-	-	-	-	-	-	-
MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
TOTAL COSTS	61,433	57,333	62,480	-	-	62,480	55,820	56,930	58,070	59,230
*Percentage Increase over prior year	0.00%	-6.67%	1.70%	0.00%	0.00%	1.70%	-10.66%	1.99%	2.00%	2.00%
Internal Recoveries	-	-	-	-	-	-	-	-	-	-
Recovery - Other	-	-	-	-	-	-	-	-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	61,433	57,333	62,480	-	-	62,480	55,820	56,930	58,070	59,230
*Percentage Increase over prior year	0.00%	-6.67%	1.70%	0.00%	0.00%	1.70%	-10.66%	1.99%	2.00%	2.00%
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit)										
Balance C/F from Prior to Current year	(3,519)	(3,519)	-	-	-	-	-	-	-	-
Grants in Lieu of Taxes	(1,550)	(1,550)	(1,580)	-	-	(1,580)	(1,610)	(1,640)	(1,670)	(1,700)
Transfer From Operating Reserve	(4,100)	-	(7,750)	-	-	(7,750)	-	-	-	-
TOTAL REVENUE	(9,169)	(5,069)	(9,330)	-	-	(9,330)	(1,610)	(1,640)	(1,670)	(1,700)
REQUISITION	(52,264)	(52,264)	(53,150)	-	-	(53,150)	(54,210)	(55,290)	(56,400)	(57,530)
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	1.99%	1.99%	2.01%	2.00%
PARTICIPANTS: Sooke AUTHORIZED POSITIONS:										
Salaried	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Term	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**1.538 Saanich Peninsula -Stormwater Quality Management
Operating Reserve Summary
2021 - 2025 Financial Plan**

Profile

Saanich Peninsula -Stormwater Quality Management

Established by Bylaw No. 4147 to enable CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, as well as to mitigate fluctuations in revenue.

Operating Reserve Schedule

Operating Reserve Schedule	Est. Actual	Budget				
	2020	2021	2022	2023	2024	2025
Projected year end balance						
Beginning Balance	48,986	59,413	51,663	53,880	56,140	58,451
Planned Purchase	-	(7,750)	-	-	-	-
Transfer from Ops Budget	9,684	-	2,217	2,260	2,311	2,360
Interest Income*	743	-	-	-	-	-
Total projected year end balance	59,413	51,663	53,880	56,140	58,451	60,811

* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.



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SPWWC 20-04

**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION
MEETING OF THURSDAY, OCTOBER 15, 2020**

SUBJECT **Bylaw No. 4372, Transfer of Funds from Development Cost Charges Reserve to Related Capital Reserve**

ISSUE SUMMARY

A bylaw is required to transfer funds from the Saanich Peninsula Wastewater Development Cost Charge (DCC) reserve to its related capital reserve fund.

BACKGROUND

The Capital Regional District (CRD) established a combined water and wastewater development cost charges program with the intent of funding growth and capacity related improvements to the CRD Saanich Peninsula water and wastewater systems, initially under, now-repealed, *Bylaw No. 2569, Capital Regional District Sewage Facilities Development Cost Charge Bylaw No 1, 1998* and its current successor, *Bylaw No. 3208, Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 1, 2004*.

The current Saanich Peninsula Wastewater (SPWW) system was constructed in 1999 and included spare capacity to accommodate future growth. The justification for establishment of the wastewater DCC program was to collect funds from development to pay for the additional capacity and capital cost that was built into the SPWW system. The total value of the additional capacity and capital cost is \$9.205 million.

In July 2018, the Saanich Peninsula Wastewater Commission received a DCC Program Review Report prepared by Kerr Wood Leidal Associates (KWL) which applied updated growth projections to 2037. The result of the report was a DCC rate update, and a DCC capital program covering 2018 to 2037. This capital program totals \$0.73 million and includes a strategic plan update in 2019, a replacement of the Turgoose Pump Station in 2019, and a subsequent DCC update in 2023. KWL recommended that remaining funds left over in the DCC reserve fund be transferred into the SPWW capital reserve fund to pay for the additional capacity and capital cost built into the system.

The SPWWC service has completed its strategic plan update and is finalizing the Turgoose Pump Station replacement project. Combined, these project make up \$0.68 million of the DCC eligible project to 2037. The DCC reserve fund opening balance in 2020 is \$1.5 million. The only project left in the DCC capital program is the DCC update in 2023 estimated at \$50,000. Following the recommendations in the 2018 DCC program review and, consistent with the objective of the DCC initiation, the attached DCC's transfer bylaw (Appendix A) will establish the authority to transfer funds and requires approval by the Inspector of Municipalities.

Saanich Peninsula Wastewater Commission – October 15, 2020
Bylaw No. 4372, Transfer of Funds from DCC to the Capital Reserve

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IMPLICATIONS

Financial Implications

As detailed in the fund continuity schedule below, staff recommend an initial transfer of \$1.7 million to be completed in 2020. Until such time as the capital cost of the additional capacity is covered by DCC fund transfers to capital reserve, staff will put forward additional bylaws to transfer funds as the DCC capital program allows. Without the recommended transfer, the service would have to borrow funds to maintain current capital project spending.

Figure 1: Development Cost Charges Reserve Continuity

DCC Portion Fund: 1012 Fund Center: 101356	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	1,534,961	35,004	205,004	375,004	545,004	65,004
Planned Capital Expenditure (Based on Capital Plan)	-	-	-	-	(50,000)	-
Transfer OUT - To Capital Reserve	(1,700,000)	-	-	-	(600,000)	(200,000)
Transfer IN - DCC Funding	170,000	170,000	170,000	170,000	170,000	170,000
Interest Income	30,043	-	-	-	-	-
Ending Balance \$	35,004	205,004	375,004	545,004	65,004	35,004

RECOMMENDATION

That the Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

1. That Bylaw No. 4372 cited as "Saanich Peninsula Water and Wastewater Development Cost Charges Transfer to Capital Reserve Bylaw No. 1, 2020" be introduced and read a first, second, and a third time.
2. That Bylaw No. 4372 be referred to the Inspector of Municipalities for review as required by the *Local Government Act* and *Community Charter*.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENT

Appendix A: Bylaw No. 4372

CAPITAL REGIONAL DISTRICT

BYLAW NO. 4372

A BYLAW TO AUTHORIZE FUND TRANSFERS FROM SAANICH PENISULA WASTEWATER DEVELOPMENT COST CHARGE RESERVE TO THE SAANICH PENISULA WASTEWATER CAPITAL RESERVE

WHEREAS:

- A. By Supplementary Letters Patent, Division VII dated December 28, 1967, the Capital Regional District was granted the function of acquisition, design, construction, operation, maintenance, renewal and administration of trunk sewers and sewage disposal facilities within all member municipalities of the Regional District, except the then electoral areas of Sooke and Outer Gulf Islands;
B. Under Bylaw No. 2569, Capital Regional District Sewage Facilities Development Cost Charge Bylaw No 1, 1998, and its successor Bylaw No. 3208, Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 1, 2004, the Regional District imposed development cost charges for the Saanich Peninsula Wastewater System, and under Bylaw No. 2760, Saanich Peninsula Wastewater System Capital Reserve Fund Bylaw No. 1, 2000, established a capital reserve fund to hold the development cost charge monies for wastewater system upgrades and other related capital expenses;
C. Pursuant to sections 377 and 559 of the Local Government Act and section 189 of the Community Charter, the Regional District desires to transfer monies to the capital reserve fund.

NOW THEREFORE, the Board of the Capital Regional District enacts as follows:

- 1. One million seven hundred thousand dollars (\$1.7 million) shall be transferred from the Saanich Peninsula Wastewater System Development Cost Charge reserve fund established by Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 1, 2004 (Bylaw No. 3208) to the Saanich Peninsula Wastewater System Capital reserve fund established by Saanich Peninsula Wastewater System Capital Reserve Fund Bylaw No. 1, 2000 (Bylaw No. 2760);
2. This bylaw may be cited as the "Saanich Peninsula Water and Wastewater Development Cost Charges Transfer to Capital Reserve Bylaw No. 1, 2020".

READ A FIRST TIME THIS ___ day of 2020
READ A SECOND TIME THIS ___ day of 2020
READ A THIRD TIME THIS ___ day of 2020
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS ___ day of 2020
ADOPTED THIS ___ day of 2020

CHAIR

CORPORATE OFFICER