

#### SAANICH PENINSULA WASTEWATER COMMISSION

Notice of Meeting on **Thursday, October 21, 2021 at 9:30 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.

M S	a. Barnhart (Chair) I. Doehnel (Vice Chair) . Duncan . Kelbert	Z. King C. McNeil-Smith G. Orr M. Weisenberger	M. Williams R. Windsor		
		AGENDA			
1.	TERRITORIAL ACKNOWLEDGE	EMENT			
2.	APPROVAL OF AGENDA				
3.	ADOPTION OF MINUTES		3		
	Recommendation: That the minutes of the May 20, 2021 meeting be adopted.				
4.	CHAIR'S REMARKS				
5.	PRESENTATIONS/DELEGATIO	NS			
	This meeting will be held without the public present. A phone in number is provided above that will allow the public to listen to the meeting.				
	Presentation and Delegation requests can be made online or complete this printable form (PDF). Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.				
6.	COMMISSION BUSINESS				
	6.1. 2022 Service Planning - W	/astewater	5		
	Committee of the Whole recon	nmend to the Capital Regional	er Commission recommends the I District Board: be approved as presented and form		

the basis of the 2022-2026 Financial Plan.

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#### 6.2. Saanich Peninsula Wastewater Service 2022 Operating and Capital Budget ......18

**Recommendation:** The Saanich Peninsula Wastewater Commission recommends that the Committee of the Whole recommend the CRD Board:

- Approve the 2022 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2022 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. Direct staff to balance the 2021 actual revenue and expense on the transfer to capital reserve fund.
- 7. COMMISSION MEMBERSHIP
- 8. NOTICE(S) OF MOTION
- 9. NEW BUSINESS
- **10. ADJOURNMENT**

Next Meeting: Thursday, November 18, 2021



MINUTES OF A MEETING OF THE Saanich Peninsula Wastewater Commission, Held Thursday, May 20, 2021 at 9:30 a.m., Meeting Room #6 Greenglade Community Centre, 2151 Lannon Way, Sidney BC

PRESENT: Commissioners: R. Barnhart; M. Doehnel; S. Duncan (EP); Z. King (EP); C. McNeil-Smith (EP); G. Orr (EP); M. Weisenberger; M. Williams; R. Windsor (EP); M. Underwood

**Staff:** T. Robbins, General Manager, Integrated Water Services; G. Harris, Senior Manager, Environmental Protection; S. Irg, Senior Manager, Infrastructure Water Operations (EP); M. Cowley, Manager, Wastewater Engineering & Planning; P. Kickham, Manager, Environmental Regulations; A. Hoge, Manager, Corporate Finance and Treasury (EP); D. Dionne (recorder)

**REGRETS:** D. Kelbert

EP = Electronic Participation

The meeting was called to order at 10:40 a.m.

#### 1. TERRITORIAL ACKNOWLEDGEMENT

A Territorial Acknowledgement was provided in the preceding meeting.

#### 2. APPROVAL OF AGENDA

**MOVED** by Commissioner Weisenberger, **SECONDED** by Commissioner Williams, That the agenda be approved.

**CARRIED** 

#### 3. ADOPTION OF MINUTES

**MOVED** by Commissioner Doehnel, **SECONDED** by Commissioner Williams, That the minutes of the March 18, 2021 meeting be adopted.

CARRIED

#### 4. CHAIR'S REMARKS

The Chair made no remarks.

#### 5. PRESENTATIONS/DELEGATIONS

There were no presentations or delegations.

#### 6. COMMISSION BUSINESS

#### 6.1. Saanich Peninsula Wastewater Inflow and Infiltration Update 2021

P. Kickham spoke to the report. Discussion ensued and staff responded to questions regarding:

- Identifying priorities and planning for any adjustments required
- Portable flow meters available for municipalities
- Inflow and Infiltration in relation to pressure on the treatment plant

**MOVED** by Commissioner Orr, **SECONDED** by Commissioner Williams, That the Saanich Peninsula Wastewater Commission receive this report for information.

**CARRIED** 

#### 7. NOTICE(S) OF MOTION

There were none.

Minutes - May 20, 2021

#### 8. NEW BUSINESS

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Commissioner Duncan asked staff what preparations are in place for dealing with emergency preparedness related to sewage and whether there is a role that the Wastewater Commission could have in that.

T. Robbins advised that there hasn't been much work done on developing a post disaster plan related to wastewater collection or treatment. Key wastewater facilities have been built to post disaster standards and anticipate that those pump stations and facilities will continue to operate in post disaster. Wastewater distribution for the most part flows by gravity and during a post disaster situation most wastewater can continue to convey. There is a need to develop a post disaster plan related to wastewater.

#### 9. ADJOURNMENT

MOVED by Commissioner Williams,	SECONDED by Commissioner Weisenberger,
That the May 20, 2021 meeting be a	diourned at 10:49 a.m.

	CARRIED
CHAIR	
SECRETARY	



**SPWWC 21-04** 

# REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION MEETING OF THURSDAY, OCTOBER 21, 2021

#### **SUBJECT** 2022 Service Planning – Wastewater

#### **ISSUE SUMMARY**

To provide the Saanich Peninsula Wastewater Commission with an overview of core service levels, new and progressing initiatives and performance metrics related to the Wastewater Community Need. These activities are undertaken by both the Integrated Water Services and Parks & Environmental Services Department, and deliver on approved Board Strategic Priorities and the Capital Regional District (CRD) Corporate Plan.

#### **BACKGROUND**

The CRD Board identified its strategic priorities in early 2019. Subsequently, staff prepared the 2019-2022 CRD Corporate Plan to align with this direction. The CRD Corporate Plan presents the work the CRD needs to deliver over the Board term to meet the region's fifteen most important needs (community needs). These initiatives are delivered in conjunction with the mandated core services and regulatory requirements that the CRD is accountable for delivering. The priorities were reconfirmed by the CRD Board at the annual check-ins on May 13, 2020 and May 12, 2021.

At the start of the Board term, staff identified that the ambitious plan for the region would require a significant amount of effort and resources to action and implement Board and Corporate Priorities, and to keep pace with the anticipated increase in service demands, primarily driven by population growth and construction activity. The general level of effort deployed by the organization has been increasing to keep pace since the direction was set and, in some cases, emerging trends and changes in economic activity have had a significant impact on the demand for services driving additional resource requirements.

This is the final year of service plan and budget approvals for this CRD Board, as well as the final year of implementation of its strategic priorities. For 2022, staff are recommending a significant package of work to finalize the delivery of the strategic priorities and CRD Corporate Plan. Implementation timeframes for much of the work initiated in 2022 will carry into 2023.

2022 is a transition year for the CRD Board. Staff anticipate that any service planning requests for 2023 will be focused on operational adjustments while the Board is determining its strategic priorities for the 2023-2026 term.

The Community Need Summary Report (Appendix A) provides an overview of the strategic context for service areas by department, core service levels for services, new initiatives and a summary of the business model and performance metrics associated with targeted outcomes.

A summary of the capital investment made in support of the Community Need (Appendix B) and the initiatives progressed over the course of this Board's term (Appendix C) have been appended to this report.

#### **ALTERNATIVES**

2022 Service Planning – Wastewater

#### Alternative 1

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The Saanich Peninsula Wastewater Commission recommends the Committee of the Whole recommend to the Capital Regional District Board:

That Appendix A, Community Need Summary – Wastewater be approved as presented and form the basis of the 2022-2026 Financial Plan.

#### Alternative 2

That Appendix A, Community Need Summary – Wastewater be approved as amended and form the basis of the 2022-2026 Financial Plan.

#### <u>IMPLICATIONS</u>

#### Financial Implications

The Executive Leadership Team (ELT) is taking steps to mitigate the financial impacts resulting from the work. ELT has reviewed the phasing of the work for 2022 to ensure that the activities and resources are allocated as efficiently as possible. Phasing out the initiatives over a longer period of time helps avoid delays that can occur when staff are too thinly spread across projects. Additionally, timing initiatives to start mid-year will also reduce the impact in 2022, but will have an incremental annualization impact in 2023 for ongoing impacts.

The CRD continues to look for ways to fund its services in a manner that relieves affordability pressure for the taxpayer. This is reflected in the policy for reserve balance measures and gaps/surplus, which was approved by the CRD Board on July 14, 2021. The CRD has had other funding successes optimizing capital funding and leveraging grant funding in a more aggressive way than ever before.

Finally, where feasible, an incremental change management strategy has been adopted for larger projects. This means that divisions are testing out the objectives and delivery approach with a proof-of-concept and then deploying out more broadly, if the benefits can be demonstrated. This has been a successful strategy adopted for our enterprise asset management strategy deployment, for example.

A comprehensive overview of the resources required to advance the initiatives listed in all Community Need Summaries, including all proposed staffing changes, will be presented to the Committee of the Whole at the 2022 provisional budget review.

#### Service Delivery Implications

In May 2021, the CRD's Parks & Environmental Services staff assumed responsibility for the contract management of the new Residuals Treatment Facility. Delays in commissioning have required staff to reorganize program priorities to accommodate the extended timeline to address administrative, technical and operational issues.

As a result of incremental work content and resourcing through the following initiatives in support of the community need, there is an additional 0.5 fixed term FTE in the area of Finance and

Technology to administer required corporate functions.

See Appendix A for more details about core service delivery.

#### New initiatives proposed for 2022:

Staff have identified three initiatives in support of this community need that will have budget implications in 2022 (Table 1). The key drivers for this work are:

- 1. The operationalization of capital investment (Core Area Wastewater Treatment Plant and Residuals Treatment Facility): follow-up adjustments to the operational model to optimize service and meet regulatory obligations.
- 2. Minimize the materialization of risk through preventative maintenance planning: the finalization of a program of work to collect data and manage risks related to inflow and infiltration to the sanitary sewage system on the Saanich Peninsula.

**Table 1: Wastewater Community Need Initiatives** 

#	Initiative Description		Year(s)	FTE impacts (2022)	Cost impacts (2022)	Funding source
8a-1.3	Saanich Peninsula Liquid Waste Management Plan	Development of a detailed inflow and infiltration reduction program for the Peninsula	2022		\$65K	Requisition
8a-1.4	Biosolids Research Assistant	Development of short- and long-term biosolids management plans	2022-23	+1.0 FTE Term	\$92K	Requisition
8a-1.5	Lab Services Core Area Wastewater Treatment Plant	Support for lab services during evaluation of longer-term Core Area Wastewater Treatment Plant requirements	2022	+1.0 FTE Term	\$105K	Requisition

This information reflects the business case costs, which the ELT reviewed as part of its annual assessment of initiatives.

#### 8a-1.3 Saanich Peninsula Liquid Waste Management Plan

An 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 I&I increases as infrastructure ages, so it would be prudent to manage this risk proactively. It will also ensure the Saanich Peninsula Municipalities manage sanitary flow in accordance with the BC Municipal Wastewater Regulation.

Initiative 8a-1.3 is the third and final initiative related to I&I planning for the Saanich Peninsula. The final stage is to develop custom I&I management plans for Sidney, North Saanich and Central

Saanich, complete with high-level actions, timelines and costs. The work builds on the 2020 work done to collect additional flow data and pinpoint areas with the highest I&I levels, and 2021 work to develop flow calculations for each catchment area to plan for the most cost-effective capital upgrades/replacement program for the sanitary sewer infrastructure.

#### 8a-1.4 Biosolids Research Assistant – Term Position

The commissioning of the Residuals Treatment Facility requires the implementation of a short-term biosolids management plan (2021-24). In addition, the Province requires the development of a long-term biosolids management plan, which must be submitted by mid-2024. This is a regulatory requirement under the Environmental Management Act. Initiative 8a-1.4 seeks to create a new term position in the Environmental Protection division to support both the implementation of the short-term management plan and development of the longer-term biosolids management operations and analysis for public consultation.

#### 8a-1.5 Lab Services Core Area Wastewater Treatment Plant

The initial commissioning and operational start-up of the Core Area Wastewater Treatment Plant is now underway. Lab (analytical) services is an essential component of wastewater service delivery as data produced supports the optimization of plant operations. The service levels at McLoughlin Point Wastewater Treatment Plant have been materially higher than planned so far and therefore a staffing optimization evaluation is underway to assess the long-term requirements.

Initiative 8a-1.5 seeks to create a one-year term position in the Environmental Protection division to support additional lab services in 2022 while the treatment plant is optimized.

The proposed initiatives will also increase demand and requirements for financial support (e.g. budget and transaction processing etc.). This initiative, alongside others, will result in a small adjustment to the Financial Services staffing model to accommodate the demand. To provide full transparency, the financial impact of the initiative reflects the whole cost of delivering the work, including flow-down impacts on support services.

#### Alignment with Board & Corporate Priorities

The direction given to staff was to bring forward work that is of essential nature. This was defined as:

- initiatives that provide public health and safety and/or deliver on a regulatory requirement.
- initiatives that are required to deliver the Board Strategic Priorities.
- initiatives that will prevent the materialization of significant negative impacts on service customers, partners, the region, local services or the CRD's finances.
- initiatives that minimise the materialization of financial, reputational or other risks and liabilities for the CRD by ensuring the organization is keeping pace with expectations and demand.
- there is an imperative to deliver the work immediately and/or quickly.

The ELT has reviewed and assessed all business cases against the criteria. The consolidated package of work is appropriate and commensurate to the challenge facing the organization.

#### **CONCLUSION**

Staff have been progressing initiatives and actions identified in the Capital Regional District (CRD) Corporate Plan, including Board Strategic Priorities. The CRD 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.

#### **RECOMMENDATION**

The Saanich Peninsula Wastewater Commission recommends the Committee of the Whole recommend to the Capital Regional District Board:

That Appendix A, Community Need Summary – Wastewater be approved as presented and form the basis of the 2022-2026 Financial Plan.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

#### <u>ATTACHMENTS</u>

Appendix A: Community Need Summary – Wastewater

Appendix B: Capital Plan Report

Appendix C: Initiatives Progress Report

# Community Need



## 2022 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 (MPWWTP) 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 continue to be implemented; ongoing commissioning and operational refinement requires additional samples to be collected and analyzed. Lab Services requires additional resources to support the wastewater operations at MPWWTP for 2021.
- 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.
- Commissioning of the Residuals Treatment Facility (RTF) has been extended, which has resulted in extra regulatory, technical and administrative oversight for CRD staff.
- 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



# 2022 Summary

## **Services**

Core Servi	ices Levels			
Service	Levels			
Core Area, Saanich Peninsula Wastewater Systems and Services include wastewater conveyance and tertiary to secondary treatment for Saanich Peninsula, and the smaller streams are secondary treatment.	reatment for Core Area, and conveyance and			
Wastewater System Operations Wastewater treatment collection and transmission system operation and monitoring. System and facility maintenance, consumables management and preventative maintenance.	<ul> <li>Wastewater treatment</li> <li>System operation, monitoring and maintenance</li> <li>Consumables management</li> </ul>			
Emergency Response/System Failure Wastewater overflows and unplanned service interruptions.	<ul> <li>Wastewater overflows and public and environmental health protection</li> <li>Unplanned service interruptions</li> </ul>			
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> <li>Capital program value for seven services</li> <li>Infrastructure renewal and upgrades</li> <li>Capital project support</li> </ul>			
Infrastructure planning Strategic asset management for all services/systems including modeling and capacity analysis, vulnerability assessment, infrastructure renewal plans.	<ul> <li>Asset management Plans</li> <li>Manage capital plans for seven wastewater services</li> </ul>			
Engineering services Support of Infrastructure Operations through engineering services such as process, civil, electrical and mechanical troubleshooting.	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> <li>Inspect, monitor and enforcement for businesses and institutions connected to sanitary sewer.</li> <li>Promote contaminant reduction associated with sanitary and stormwater systems.</li> <li>Service level adjusted, see IBC 8a-1.3</li> </ul>			

# Community Need



2022 Summary

Core Services Levels					
Service	Levels				
Core Area and Saanich Peninsula Wastewater & Marine Environmental Program  Oversight for wastewater monitoring and assessment and reporting to meet regulatory requirements.	<ul> <li>Marine outfall monitoring, assessment and reporting services to demonstrate compliance with federal and provincial legislation.</li> <li>⇒ Service level adjusted, see IBC 8a-1.5</li> <li>Update of Liquid Waste Management Plans.</li> </ul>				
Residuals Treatment Facility  Administration of the Project Agreement for operation of the RTF and biosolids beneficial use strategy.	<ul> <li>Monitoring and compliance reporting.</li> <li>→ Service level adjusted, see IBC 8a-1.4</li> </ul>				
On-site Wastewater Management Regulatory oversight for onsite wastewater systems and education and outreach services across the region.	Promote and monitor compliance with regional bylaw.				
Septage Service  Administration, monitoring and reporting of regional septage service.	Negotiate and manage one septage disposal contract servicing the capital region.				
Watershed Management Program Promote environmental stewardship associated with sanitary and stormwater systems, contaminants and flows.	<ul> <li>Promote public awareness and stewardship initiatives.</li> <li>Public education and engagement in the region to promote sustainable behavior through campaigns, initiatives and services.</li> </ul>				
Support Services  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.	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



2022 Summary

	Initiatives							
Ref	Ref Initiative Description			2022 iı	2022 impacts			
8a-1.3	Saanich Peninsula Liquid Waste Management Plan	Development of a detailed inflow and infiltration reduction program for the Peninsula.	2022		\$65K requisition			
8a-1.4	Biosolids Research Assistant (Term)	Development of short- and long-term biosolids management plans.	2022- 23	+1.0 FTE	\$92K requisition			
8a-1.5	Lab Services CAWTP	Support for lab services during evaluation of longer-term CAWTP requirements.	2022	+1.0 FTE	\$105K requisition			

#### **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

Performance					
Definition and Source	2020 Actual	2021 Forecast	2022 Target		
TBC					

# Community Need



2022 Summary

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)

#### APPENDIX B

# Community Need



## Capital Plan Report

#### Wastewater

#### Highlights since 2019

- The CRD has allocated **over \$480M** on projects that advance the Wastewater Community Need. This was primarily funded through debenture debt, reserves and capital funds at hand.
- The projects included:
  - Construction of the Core Area Wastewater Treatment Plant (CAWTP), including the McLoughlin Point Wastewater Treatment Plant, Residuals Treatment Facility and Residuals Solids Conveyance Line. The CRD, through the Project Board, planned, procured and constructed the Wastewater Treatment Project from May 2016 to May 2021. Work took place across three municipalities and within the traditional territories of the Esquimalt, Songhees, Tsartlip, Tsawout, Tseycum and Pauquachin Nations.
  - o Infrastructure upgrades to rehabilitate a number of existing sewer systems including Ganges on Salt Spring Island, the North West Trunk and Bowker in the Core Area and the Saanich Peninsula Wastewater Trunk Sewer
  - o Remediation of the Milltream Meadows contaminated site

#### Planned for 2022

- The CRD will allocate **over \$15M** on projects that advance the Wastewater Community Need. Projects to be undertaken include:
  - Update of condition assessment studies for CAWTP to incorporate long-term asset management plans and expected level-of service requirements
  - o Improvements and upgrade of the Magic Lake wastewater treatment plant (Phase 1)
  - Replacement program for existing, end-of-life vehicles that support ongoing integrated water system operations and purchase of new vehicles for CAWTP operations

# Community Need



# Capital Plan Report

- o Infrastructure upgrades to rehabilitate a number of existing sewer systems including Ganges on Salt Spring Island, Bowker in the Core Area, the Saanich Peninsula Wastewater Trunk Sewer and Port Renfrew Sewer
- This work is funded through debenture debt, grant and some reserves (including equipment reserve fund) and capital funds on hand.



# Community Need Initiative Progress Report



## Wastewater

	Initiatives approved in 2020 and 2021						
Ref	Initiative	% complete	Progress to date				
8a-1	Wastewater Management through LWMP	100%	Lead: Environmental Protection (2020)  Part of core services delivery – operational handover of most components to CRD complete				
8a-1.1	Wastewater Management	100%	Lead: Infrastructure Operations Wastewater (2021) Part of core services delivery – operational handover of most components to CRD complete				
8a-1.2	FM Centralization Strategy - FMW (CAWTP)	100%	Lead: Facilities Management & Engineering Services (2021)  Completed – recruitment completed in March 2021				
8a-1.3	Saanich Peninsula Liquid Waste Mgmt. Plan – I&I	20%	Lead: Environmental Protection (2021)  Progressing – Phase 2 – development of I&I modelling underway				
8a-2	Stormwater Contaminant Sources	100%	Lead: Environmental Protection (2020) Part of core services				



**SPWWC 21-05** 

# REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION MEETING OF THURSDAY, OCTOBER 21, 2021

#### **SUBJECT** Saanich Peninsula Wastewater Service - 2022 Operating and Capital Budget

#### **ISSUE SUMMARY**

To provide an overview of the 2022 Saanich Peninsula Wastewater Service operating and capital budget, highlighting the changes from the 2021 budget and the proposed 2022 budget figures. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

#### **BACKGROUND**

The draft 2022 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 through the Committee of the Whole in October. As in previous years, the draft 2022 budget has been prepared considering the CRD Board's 2022 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential 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.

#### 2021 Year-end Financial Projections

The estimated actual 2021 overall expense for trunk sewer and treatment plant operations is projected to be \$296,866 under budget primarily due to lower biosolids management expenditures resulting from Hartland Residuals Treatment Facility commissioning and operational challenges. This operating expense variance is offset by a shortfall in anticipated revenue from Panorama Recreation Center (PRC) due to reduced opportunities to provide adequate heat energy for the pool through the District Energy System (DES). The DES experienced some equipment failures this year and staff have been troubleshooting a temperature drop issue along the fluid loop. The District Energy System (DES) is projected to generate about \$52,874 in revenue from the sale of energy to the PRC for the year. This revenue is \$26,352 below the budgeted revenue of \$79,226. The net impact of these expense and revenue differences is \$142,454 and as such, the 2021 capital reserve fund transfer is projected to increase to \$479,367 to balance the year-end budget.

#### **Operating Budget**

A net increase in the 2022 operating expenses in the amount of \$241,830 is planned for trunk sewer and treatment plant operations which includes \$185,000 in cyclical maintenance expenses to undertake an outfall inspection and odour control system media replacement; the cyclical maintenance expenses are funded from a transfer from the Maintenance Reserve Fund. The balance of the increase results from non-discretionary expense adjustments such as wage/salary increases, departmental support service allocations, and adjustments to other operating expenses such as electricity and chemical costs.

The 2022 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget, the Saanich Peninsula Stormwater Source Control budget, and the Peninsula Harbour Environmental Action budget, have also been prepared. The budgets are reflecting a 2% requisition increase, with the exception of the LWMP program budget which has a one-time requisition increase of \$65,000 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 2022 is \$50,640. At year-end 2021, the maintenance reserve fund balance is estimated to be \$572,389, 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 \$80,810 in revenue in 2022 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 2022 revenue is based on the 2021 natural gas rate and anticipated reduced demand.

2022 cost sharing percentages based on prior year flows will be finalized in October and are not expected to change significantly from the 2021 cost sharing figures. The overall requisition for Saanich Peninsula trunk sewers, treatment and disposal for 2022 has been set at \$4,336,038 which is a 5.3% increase over 2021.

#### Capital Budget

The planned capital expenditures for 2022 total \$3,137,500 and are funded from reserves. This includes \$1,320,000 in projects initiated in 2021 or prior, most of which are instream, multi-year projects. The 2022 capital program consists of instream projects and new projects related to replacement of equipment that is at the end of the service life and projects required to address operational issues. The major projects included in the 2022 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 odour control system biofilter.

The planned transfer to the capital reserve fund in 2022 is \$367,930. At year-end 2021, with a \$250,000 funding return for a capital project deferred to 2024, the capital reserve fund balance is estimated to be \$1,347,270, which is available to fund major capital projects. The planned transfer to the equipment replacement fund in 2022 is \$118,020. At year-end 2021, the equipment replacement fund balance is estimated to be \$498,677 which is available to fund minor capital and operating machinery and equipment replacements.

The value of the five year (2022 to 2026) capital plan is \$7,112,500. With the current capital reserve and equipment replacement fund balances, planned contributions, transfers, and expenditures, there is insufficient 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 a limited balance available for unplanned expenditures. Therefore, the budget assumes capital financing will be required beginning in 2024. A loan authorization process is anticipated in 2023, for a loan in the amount of approximately \$10 million to fund the 2024-2028 capital plan. There is currently no debt associated with the Saanich Peninsula Wastewater Service.

The DCC program represents \$50,000 of the capital plan which reflects the projects included in the 2018 DCC program update. At year-end in 2021 the DCC reserve fund balance is estimated to be \$209,109.

#### **ALTERNATIVES**

#### Alternative 1

The Saanich Peninsula Wastewater Commission recommends that the Committee of the Whole recommend the CRD Board:

- Approve the 2022 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2022 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. Direct staff to balance the 2021 actual revenue and expense on the transfer to capital reserve fund.

#### Alternative 2

The Saanich Peninsula Wastewater Commission recommends that the Committee of the Whole recommend the CRD Board:

- Approve as amended, the 2022 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2022 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. Direct staff to balance the 2021 actual revenue and expense on the transfer to capital reserve fund.

#### <u>IMPLICATIONS</u>

If the proposed budget is amended, the implications could vary depending on how the budget is amended and the impact on specific programs, on-going operations, or the capital work program. 'One-time' reductions in reserve fund contributions could be considered by the Commission to help mitigate the budget and rate increases, but additional capital financing could result in the longer term.

#### **CONCLUSION**

This 2022 Saanich Peninsula Wastewater Service budget has been prepared for the Saanich Peninsula Wastewater Committee's consideration. The Committee will make budget recommendations to the Capital Regional District Board through the Committee of the Whole. The 2022 budget reflects the operating costs of the Saanich Peninsula Wastewater Treatment Plant and the conveyance system, as well as the environmental program and capital costs. The financial implications of the 2022 operating and capital budget vary by participant, depending on the operating and capital cost apportionments associated with annual flow and allocated treatment capacity.

#### **RECOMMENDATION**

The Saanich Peninsula Wastewater Commission recommends that the Committee of the Whole recommend the CRD Board:

- Approve the 2022 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2022 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. Direct staff to balance the 2021 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, FCPA, FCMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

#### **ATTACHMENT**

Appendix A: 2022 Draft Budget Document

# CAPITAL REGIONAL DISTRICT 2022 BUDGET

# **SAANCH PENISULA WASTEWATER**

# **COMMISSION REVIEW**

OCTOBER 2021

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# CAPITAL REGIONAL DISTRICT 2022 BUDGET

# Saanich Peninsula Wastewater

# **COMMISSION REVIEW**

OCTOBER 2021

Service: 3.718 Saanich Peninsula Wastewater Commission: Saanich Peninsula Wastewater

#### **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>	Allocation for 2022
Airport	1.96%
Sidney	39.57%
Pauquachin	0.84%
Central Saanich	41.89%
North Saanich	15.26%
Tseycum	0.36%
IOS	0.12%
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 ii	n Budget 2021 to 2022		
Service:	3.718 Saanich Peninsula Wastewater	Total Expenditure	Comments
2021 Bud	get	4,404,945	
Change ii	n Salaries:		
_	Base salary change Step increase/paygrade change Other (explain as necessary)	- - -	
	Total Change in Salaries	<del></del>	
Other Cha	anges:		
	Repairs and Maintenance Reserve Contributions Labour Allocation Standard Allocation Building Occupancy Enviromental Programs Other	162,793 34,820 31,880 18,377 13,500 9,372 5,408	cyclical maintenance costs, offset with ops reserve funding increase of reserves to align with future replacement costs IWS labour, RWS engineering  FM providing maintenance services to treatment plant and conveyance
	Total Other Changes	276,150	
2021 Bud	get	4,681,095	
	% expense increase from 2021:	6.3%	
	% Requisition increase from 2021 (if applicable):	5.3%	Requisition funding is 95.8% of service revenue

Overall 2021 Budget Performance (expected variance to budget and surplus treatment)

There is a one time favourable variance of \$142k (3.2%) due mainly to tipping solids at Hartland instead of the Residual Treatment Facility. This variance will be moved to the Capital Reserve Fund, which has an expected year end balance of \$1.2M before this transfer.

				BUDGET F	REQUEST			FUTURE PRO	JECTIONS	
3.718 - Saanich Peninsula Wastewater	202			202	22					
	BOARD BUDGET	ACTUAL	CORE BUDGET	ONGOING	ONE-TIME	TOTAL	2023	2024	2025	2026
OPERATING COSTS										
Operating	2,511,037	2,617,869	2,728,416	-	-	2,728,416	2,621,987	2,743,122	2,746,263	2,884,693
Labour Charges	185,557	187,941	189,264	-	-	189,264	192,610	196,650	200,770	204,970
Heat Recovery Biosolids Mgmt.	110,488 1,035,913	117,700 622,619	113,742 1,035,026	-	-	113,742 1,035,026	115,570 1,055,730	117,430 1,076,842	119,320 1,098,376	121,230 1,120,342
Allocation - Standard Overhead	59,680	59,680	78,057	-	-	78,057	79,615	81,207	82,831	84,488
TOTAL OPERATING COSTS	3,902,675	3,605,809	4,144,505	-	_	4,144,505	4,065,512	4,215,251	4,247,560	4,415,723
*Percentage Increase over prior year		-7.61%	6.20%	0.00%	0.00%	6.20%	-1.91%	3.68%	0.77%	3.96%
CAPITAL / RESERVE										
Transfer to Operating Reserve Fund	49,650	49,650	50,640	-	-	50,640	51,650	52,680	53,740	54,810
Transfer to Equipment Replacement Fund Transfer to Reserve Fund	115,708 336,913	115,708 479,367	118,020 367,930	-	-	118,020 367,930	125,390 402,000	133,270 439,420	141,700 480,530	150,730 525,690
Debt Reserve Fund	-	- 1	-	-	-	-	-	20,150	3,500	2,500
MFA Principal Payment	-	-	-	-	-	-	-	-	114,429	134,305
MFA Interest Payment	-	-	-	-	-	-	-	14,609	60,973	70,398
TOTAL CAPITAL / RESERVES	502,270	644,725	536,590		-	536,590	579,040	660,129	854,872	938,433
TOTAL COSTS	4,404,945	4,250,534	4,681,095	-	-	4,681,095	4,644,552	4,875,380	5,102,432	5,354,156
*Percentage Increase over prior year		-3.51%	6.27%	0.00%	0.00%	6.27%	-0.78%	4.97%	4.66%	4.93%
Internal Recovery - Other Recovery - Other	(153,310)	(126,958)	(156,380)	-		(156,380)	(159,500) -	(162,690) -	(165,950) -	(169,270) -
OPERATING COSTS LESS INTERNAL RECOVERIES	4,251,635	4,123,576	4,524,715	-	-	4,524,715	4,485,052	4,712,690	4,936,482	5,184,886
*Percentage Increase over prior year		-3.01%	6.42%	0.00%	0.00%	6.42%	-0.88%	5.08%	4.75%	5.03%
SOURCES OF FUNDING (REVENUE)										
Surplus / (Defecit)										
Balance C/F from Prior to Current Year	(0.077)	(5.040)	(0.077)			(0.077)	(0.077)	(0.077)	(0.077)	(0.077)
Grants in Lieu of Taxes Transfer from Own Funds	(3,677) (130,000)	(5,618)	(3,677) (185,000)	_	-	(3,677) (185,000)	(3,677) (30,000)	(3,677) (100,000)	(3,677) (50,000)	(3,677) (135,000)
TOTAL REVENUE	(133,677)	(5,618)	(188,677)		_	(188,677)	(33,677)	(103,677)	(53,677)	(138,677)
		, , ,		<u> </u>		, , ,	•			
REQUISITION	(4,117,958)	(4,117,958)	(4,336,038)	-	-	(4,336,038)	(4,451,375)	(4,609,013)	(4,882,805)	(5,046,209)
*Percentage increase over prior year		0.00%	5.30%	0.00%	0.00%	5.30%	2.66%	3.54%	5.94%	3.35%
PARTICIPANTS: C. Saanich, N. Saanich, Sidney, Airport, Pauquachin, Tseycum										

CAPITAL REGIONAL DISTRICT

FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2022 to 2026

Service No.	3.718 Saanich Peninsula Wastewater	Carry Forward from 2021	2022	2023	2024	2025	2026	TOTAL
<u> </u>		2021						
	EXPENDITURE							
	Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Equipment	\$50,000	\$67,500	\$0	\$1,180,000	\$0	\$0	\$1,247,500
	Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Engineered Structures	\$1,270,000	\$3,070,000	\$550,000	\$1,285,000	\$560,000	\$400,000	\$5,865,000
	Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$1,320,000	\$3,137,500	\$550,000	\$2,465,000	\$560,000	\$400,000	\$7,112,500
	SOURCE OF FUNDS							
	Capital Funds on Hand	\$100,000	\$50,000	\$50,000	\$0	\$0	\$0	\$100,000
	Debenture Debt (New Debt Only)	\$0	\$0	\$0	\$2,015,000	\$350,000	\$250,000	\$2,615,000
	Equipment Replacement Fund	\$0	\$417,500	\$150,000	\$150,000	\$150,000	\$150,000	\$1,017,500
	Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Reserve Fund	\$1,220,000	\$2,670,000	\$350,000	\$300,000	\$60,000	\$0	\$3,380,000
		\$1,320,000	\$3,137,500	\$550,000	\$2,465,000	\$560,000	\$400,000	\$7,112,500

#### CAPITAL REGIONAL DISTRICT

#### Project Number

Project number format is "yy-##"

"yy" is the last two digits of the year the project is planned to start. "##" is a numberical value. For example, 22-01 is a project planned to start in 2022.

For projects in previous capital plans, use the same project numbers previously assigned.

#### Capital Expenditure 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

#### Capital Project Title

Input title of project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

#### Capital Project Description

Total Project Budget

Provide the total project

budget, even if it extends

beyond the 5 years of this

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".

Debt = Debenture Debt (new debt only)

Other = Donations / Third Party Funding

If there is more than one funding source, use additional rows for the

ERF = Equipment Replacement Fund

Grant = Grants (Federal, Provincial)

Cap = Capital Funds on Hand

STLoan = Short Term Loans

Res = Reserve Fund

WU - Water Utility

project.

Funding Source Codes

#### Carryforward from 2021

Input the carryforward amount frin tge 2021 capital plan that is remaining to be spent Forecast this spending in 2022 to 2026.

#### Project Drivers

Maintain Level of Service = Project maintains existing or improved level of service. Advance Board or Corporate Priority = Project is a Board or Corporate priority.

**Emergency** = Project is required for health or safety reasons.

**Cost Benefit** = Economic benefit to the organization.

Other = Project is not driven by one of the other options provided.

or enhances technology in delivering that service

**Replacement** - Expenditure replaces an existing asset

#### Asset Class

capital plan.

L - Land

S - Engineering Structure

B - Buildings

V - Vehicles

#### Long-term Planning

Master Plan / Servicing Plan = Plan that identifies new assets required to meet future needs.

Asset Management Plan / Sustainable Service Delivery Plan = Integrated plan that identifies asset replacements based on level of service, criticality, condition, risk, replacement costs as well as external impacts.

**Replacement Plan** = Plan that identifies asset replacements based primarily on asset age or asset material/type.

Condition Assessment = Assessment that identifies asset replacements based on asset condition.

#### Cost Estimate Class

Class A ( $\pm$ 10-15%) = Estimate based on final drawings and specifications; used to evaluate tenders.

Class B (±15-25%) = Estimate based on investigations, studies or prelimminary design; used for budget planning.

Class C ( $\pm 25-40\%$ ) = Estimate based on limited site information; used for program planning.

Class D ( $\pm 50\%$ ) = Estimate based on little/no site information; used for long-term planning.

Service #: 3.718

Service Name: Saanich Peninsula Wastewater

Project Li	st and Budget	t											
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2021	2022	2023	2024	2025	2026	5 - Year Total
WASTEWAT	ER TREATMENT	Γ 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	Сар	\$100,000	\$50,000	\$50,000	\$0	\$0	\$0	\$100,000
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	Res	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$50,000
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.	\$800,000	E	Debt	\$0	\$0	\$0	\$800,000	\$0	\$0	\$800,000
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	Debt	\$0	\$0	\$0	\$285,000	\$0	\$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 tanks, and process drain sump and this project will implement the repairs.	\$1,850,000	S	Res	\$100,000	\$1,100,000	\$0	\$0	\$0	\$0	\$1,100,000
21-03	Renewal	SPWWTP Screenings Bin	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.	\$300,000	S	Res	\$0	\$0	\$50,000	\$250,000	\$0	\$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	\$100,000	\$0	\$0	\$0	\$150,000
23-04	Replacement	Replace SCADA Servers and Ethernet Upgrades	Existing servers are EOL and need to be replaced to meet current CRD specifications and standards	\$250,000	S	ERF	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000
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	Debt	\$0	\$0	\$0	\$50,000	\$100,000	\$250,000	\$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	\$200,000	\$0	\$0	\$0	\$200,000
PUMP STAT	IONS												_
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.	\$250,000	S	Debt	\$0	\$0	\$0	\$250,000	\$0	\$0	\$250,000
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.	\$50,000	S	Res	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Service #: 3.718

Service Name: Saanich Peninsula Wastewater

Project Li	st and Budget	l .											
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2021	2022	2023	2024	2025	2026	5 - Year Total
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	\$60,000	\$0	\$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	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000
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	\$0	\$0	\$0	\$0	\$17,500
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
22-02	New	Microwave Radio Upgrades	To provide a high bandwidth communications backbone to the SPW/SPWW systems, a microwave communications system will be installed.	\$150,000	E	Debt	\$0	\$0	\$0	\$150,000	\$0	\$0	\$150,000
24-02		Replace IWOps Trailer F00774 1998 G & M Generator Trailer	Vehicle replacement - end of life	\$230,000	E	Debt	\$0	\$0	\$0	\$230,000	\$0	\$0	\$230,000
CD AVIITY C	THERE C ALANIE	TOLES.											
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	\$1,050,000	\$1,050,000	\$0	\$0	\$0	\$0	\$1,050,000
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	Debt	\$0	\$0	\$0	\$250,000	\$250,000	\$0	\$500,000
PRESSURE	PIPES & APPERT	TUNANCES											
DEVELOPM	NT COST CHAR	GE (DCC) PROJECTS											
23-01	Renewal	DCC Program - 5-year Update	5-year update of the DCC program.	\$50,000	S	Res	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
			GRAND TOTAL	\$9,510,000			\$1,320,000	\$3,137,500	\$550,000	\$2,465,000	\$560,000	\$400,000	\$7,112,500

The existing 75hp aerators are at end of

|--|

Project Number 16-06

Capital Project Title

Biosolids Treatment & Disposal Options Study

Capital Project Description treatment and disposal of biosolids from the SPWWTP.

Project Rationale A study to determine viable options for treatment and disposal of biosolids from the SPWWTP will be undertaken.

Project Number 20-02 Capital Project Title Replace Aerators in Oxidation Ditches

Replace Aerators in Oxidation Ditches

Capital Project Description provide additional dissolved oxygen for future loading/increased strength of the wastewater.

Project Rationale 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.

Project Number 20-06 Capital Project Title SPWWTP Road Upgrades & Repairs Capital Project Description requires some repairs and road extension around the clarifier tank.

Project Rationale The SPWWTP site's access road and existing bin loading area is having payment 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 payement and paye the route around the treatment plant.

Stantec completed an assessment and provided recommendations to repair

Project Number 21-01

Capital Project Title SPWWTP Concrete Tank Repairs

Capital Project Description significant internal corrosion in the clarifier, sludge tanks, and process drain sump and this project will implement the repairs.

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

Project Number 21-03

Capital Project Title SPWWTP Screenings Bin

Capital Project Description It must be separated into its own bin so that dewatered sludge can be beneficially re-used.

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.

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.

rvice:	3.718	Saanich Peninsula Wastewater			
Project Number	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.
Project Rationale	The HVAC Fan's were identified in	Stantec's 2014 condition assessment as re	equiring replacement, funds are required to	o reassess the fans, design replace	ment and carry out replacement.
Project Number	23-04	Capital Project Title	Replace SCADA Servers and Ethernet Upgrades	Capital Project Description	Existing servers are EOL and need to be replaced to meet current CRD specifications and standards
Project Rationale	SCADA Server Infrastructure Upg	rade - Upgrade SCADA server to be under	IT care/control		
Project Number	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.
Project Rationale		osolids process equipment has not been us the outcome of the Biosolids Options Study		ele. This equipment should be remo	oved and recycled making way for other
Project Number	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.
Project Rationale	Follow-up electromagnetic inspect	ion of Bazan Bay Outfall based upon the 20	118 inspection.		
Project Number	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.
	The existing inlet gate to the wet w				

Service: 3.718 Saanich Peninsula Wastewater In conjunction with the RWS and JdF system a corrosion protection program to Project Number 19-03 Capital Project Title Corrosion Prevention Program **Capital Project Description** assess and monitor assets susceptible to Project Rationale 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. Based upon the 2018 KWL Odour Control Program study, upgrades to odour control Project Number 19-06 Capital Project Title Odour Control Upgrades **Capital Project Description** systems like the biofilter at SPWWTP will be undertaken. Project Rationale 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). Replacement of the voice radios, in Project Number 21-04 Capital Project Title Voice Radio Replacement Capital Project Description coordination with the RWS, SPW, JDF, and Core Area services. Project Rationale End of life replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services. Funds are required for emergency Capital Project Title Equipment Replacement - Annual Provisional replacement of equipment that is Project Number 18-10 **Capital Project Description** unplanned and outside maintenance contingencies. Project Rationale Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies. To provide a high bandwidth communications backbone to the SPW/SPWW systems, a microwave **Project Number 22-02** Capital Project Title Microwave Radio Upgrades **Capital Project Description** communications system will be installed. Project Rationale Multiple facilities throughout the CRD RWS system require additional bandwidth to allow for proper monitoring and control. This project will enable the initial design and preliminary installation of a high bandwidth microwave backbone that will be able to be leveraged by multiple CRD operational groups. The installation of this backbone will be coordinated with the other IWS service areas.

Service: 3.718 Saanich Peninsula Wastewater

Capital Project Title Replace IWOps Trailer F00774 1998 G & M Generator Trailer Project Number 24-02

Capital Project Description Vehicle replacement - end of life

Project Rationale Funds are required for replacement of an aging generator trailer

Project Number 20-03

Capital Project Title Trunk Sewer Relining

relining of about 1,300m of 500mm dia Capital Project Description asbestos cement sewer will start in 2020. Another 800m may need to be relined

within the next 5 years.

Based upon CCTV inspection, high priority

Project Rationale 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.

**Project Number 20-04** 

Capital Project Title Manhole Repairs and Replacement

Based upon inspections, high priority repairs and relining will start on some MH's Capital Project Description in Central Saanich and Sidney 2020. Other repairs/relining will be scheduled in the next 5 years.

Project Rationale 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.

Project Number 23-01

Capital Project Title DCC Program - 5-year Update

Capital Project Description 5-year update of the DCC program.

Project Rationale This item is for a planned review and update of the DCC Program.

3.718 Saanich Peninsula Wastewater Asset and Reserve Summary Summary Schedule
2022 - 2026 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 being treated at the Residuals Treatment Facility at Hartland. 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, thermal recovery and other buildings, 14 kilometres of collections and conveyance (gravity & pressure) mains, and a marine outfalls.

	Reserve/Fund	d Summary								
	Estimated	Budget								
	2021	2022	2023	2024	2025	2026				
Sewer Capital Reserve Funds	1,556,289	644,219	866,219	1,175,639	1,766,169	2,461,859				
Equipment Replacement Fund	498,677	199,197	174,587	157,857	149,557	150,287				
Maintenance Reserve Fund	572,389	438,029	459,679	412,359	416,099	335,909				
Total	2,627,355	1,281,445	1,500,485	1,745,855	2,331,825	2,948,055				

See attached reserve schedules for projected annual cash flows.

#### **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	Estimated			Budget		
Fund Center: 101356	2021	2022	2023	2024	2025	2026
Beginning Balance	74,628	209,019	179,019	349,019	169,019	139,019
Planned Capital Expenditure (Based on Capital Plan)	-	-	-	(50,000)	-	-
Transfer OUT - To Capital Reserve	-	(200,000)	-	(300,000)	(200,000)	-
Transfer IN - DCC Funding Interest Income	133,363 1,027	170,000	170,000 -	170,000 -	170,000 -	170,000
Ending Balance \$	209,019	179,019	349,019	169,019	139,019	309,019

#### 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.

#### Capital Reserve Portion

Fund: 1012	Estimated			Budget		
Fund Center: 102022	2021	2022	2023	2024	2025	2026
14.14 66.116.11 102.02.2	2022	2022	2023	202-7	2023	2020
Beginning Balance	1,862,129	1,347,270	465,200	517,200	1,006,620	1,627,150
Planned Capital Expenditure	(1,272,410)	(1,450,000)	(350,000)	(250,000)	(60,000)	-
Transfer from Ops Budget	479,367	367,930	402,000	439,420	480,530	525,690
Planned transfer from DCC Funds	-	200,000	-	300,000	200,000	-
Funding return	250,000					
Interest Income*	28,184	-	-	-	-	-
Ending Balance \$	1,347,270	465,200	517,200	1,006,620	1,627,150	2,152,840

Saanich Peninsula Commission approved that operating surpluses be transferred to capital reserve fund each year, starting with 2009 budget.

<sup>\*</sup> 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.

# **ERF Reserve Fund Schedule SPWWTP**

**ERF:** SPWWTP ERF or PERS Fund for Equipment

ERF Reserve to fund replacement of equipment that lasts less than 15 years in the NWT System. Also called PERS (Priority Equipment Replacement). Example motors, pumps... There are 2 PERS, Trunks and Treatment Plant; and 1 ERF for SPWWTP Lab Equipment

# **Equipment Replacement Fund- SPWWTP**

Fund: 1022	Estimated			Budget		
Fund Center: 101700	2021	2022	2023	2024	2025	2026
Beginning Balance	719,095	498,677	199,197	174,587	157,857	149,557
Planned Purchase (Based on Capital Plan)	(342,500)	(417,500)	(150,000)	(150,000)	(150,000)	(150,000)
Transfer IN (from Ops Budget) Interest Income*	115,708 6,374	118,020	125,390	133,270	141,700	150,730
Ending Balance \$	498,677	199,197	174,587	157,857	149,557	150,287

# 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)

<sup>\*</sup> Interest in planning years nets against inflation which is not included.

### 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	Estimated	Budget					
Fund: 1500 Fund Center: 105204	2021	2022	2023	2024	2025	2026	
Beginning Balance	517,714	572,389	438,029	459,679	412,359	416,099	
Planned Purchase	-	(185,000)	(30,000)	(100,000)	(50,000)	(135,000)	
Transfer from Ops Budget Interest Income*	49,650 5,024	50,640 -	51,650 -	52,680 -	53,740 -	54,810 -	
Ending Balance \$	572,389	438,029	459,679	412,359	416,099	335,909	

# Assumptions/Background:

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

<sup>\*</sup> 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.

L.W.M.P. (Peninsula)

**COMMISSION REVIEW** 

Service: 3.720 L.W.M.P. (Peninsula) Committee: Environmental Services

# **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

# **MAXIMUM LEVY:**

Greater of \$5,663,000 or \$1.56 / \$1,000 of actual assessments

# **MAXIMUM CAPITAL DEBT:**

Nil

# **COMMITTEE:**

Parks & Environment

# **FUNDING:**

Requisition

# **RESERVE FUND:**

Bylaw No. 4144 Operating Reserve Fund

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Service: 3.720 L.W.M.P. (Peninsula) Committee: Environmental Services

	<u>Operating</u>
Central Saanich	43.31%
North Saanich (*see note below)	15.78%
Sidney	40.91%
Total	100.00%

# Note:

<sup>\*</sup> 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)

				BUDGET R	EQUEST					
3.720 - LWMP (PENINSULA)	2021 BOARD BUDGET	2021 ESTIMATED ACTUAL	2022 CORE BUDGET	2022 ONGOING	<b>2022</b> ONE-TIME	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL	2026 TOTAL
OPERATING COSTS:										
Operating Expenditures Contract For Services	82,728	82,807	34,766 -	-	65,000 -	99,766	35,460 -	36,168 -	36,890	37,624
TOTAL OPERATING COSTS	82,728	82,807	34,766	-	65,000	99,766	35,460	36,168	36,890	37,624
*Percentage Increase over prior year	0.00%	0.10%	-57.98%	0.00%	78.57%	20.60%	-64.46%	2.00%	2.00%	1.99%
CAPITAL / RESERVE Transfer to Equipment Replacement Fund Transfer to Operating Reserve Fund	- -	-	- 19,361	:	-	19,361	- 19,750	- 20,146	20,550	20,965
TOTAL CAPITAL / RESERVES	-	-	19,361	-	-	19,361	19,750	20,146	20,550	20,965
Debt Expenditures MFA Debt Reserve	-	-	- -	-	-	-		-	- -	-
TOTAL COSTS	82,728	82,807	54,127	-	65,000	119,127	55,210	56,314	57,440	58,589
*Percentage Increase over prior year	0.00%	0.10%	-34.57%	0.00%	78.57%	44.00%	-53.65%	2.00%	2.00%	2.00%
Internal Recoveries Recovery - Other	-	-	-	-	-	-		-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	82,728	82,807	54,127	-	65,000	119,127	55,210	56,314	57,440	58,589
*Percentage Increase over prior year	0.00%	0.10%	-34.57%	0.00%	78.57%	44.00%	-53.65%	2.00%	2.00%	2.00%
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit) Balance C/F from Prior to Current year Grants in Lieu of Taxes Transfer From Operating Reserve	(200) (29,658)	(200) (29,737)	(200) -	- - -	- - -	(200)	(204)	(208)	- (212) -	(216) -
TOTAL REVENUE	(29,858)	(29,937)	(200)			(200)	(204)	(208)	(212)	(216)
REQUISITION	(52,870)	(52,870)	(53,927)	-	(65,000)	(118,927)	(55,006)	(56,106)	(57,228)	(58,373)
*Percentage Increase over prior year	0.00%	0.00%	2.00%	0.00%	122.94%	124.94%	-53.75%	2.00%	2.00%	2.00%
PARTICIPANTS: Central Saanich, North Saanich, Sidney AUTHORIZED POSITIONS: Salaried Term	0.00 0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00

# Harbours Environmental Actions Service - Peninsula

# **COMMISSION REVIEW**

Service: 3.756 Harbours Environmental Actions Service - Peninsula Committee: Saanich Peninsula Wastewater Commission

# **DEFINITION:**

Harbours Environmental Action Service for Saanich Peninsula support environmental stewardship on the Peninsula in response to increasing stressors on the marine environment. Establishment Bylaw No. 4391, March 10th, 2021

# SERVICE DESCRIPTION:

The service coordinates and implement harbours, waterbodies, and watercourses environmental protection and improvement initiaives on and surrounding the Saanich Peninsula, namely Sidney, North Saanich, and Central Saanich

# PARTICIPATION:

	2021
Sidney	28.99%
District of North Saanich	28.15%
District of Central Saanich	42.86%
TOTAL	100.00%

# **MAXIMUM LEVY:**

Greater of \$75,000 or \$0.0049 per \$1,000 of actual assessments

# **MAXIMUM CAPITAL DEBT:**

N/A

# **COMMISSION:**

Saanich Peninsula Wastewater Commission

# **FUNDING:**

Requisition

# **RESERVE FUND:**

N/A

CAPITAL REGIONAL DISTRICT

			J050L	EQUEST					
<b>2021</b> BOARD BUDGET	2021 ESTIMATED ACTUAL	<b>2022</b> CORE BUDGET	<b>2022</b> ONGOING	<b>2022</b> ONE-TIME	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL	2026 TOTAL
3,100 - - - 62,190	2,877 - - 62,413	46,856 11,000 4,300 4,440	- - -	- - -	46,856 11,000 4,300 4,440	47,794 11,220 4,390 4,524	48,750 11,440 4,480 4,617	49,724 11,670 4,570 4,708	50,718 11,900 4,660 4,807
65,290	65,290	66,596	-	-	66,596	67,928	69,287	70,672	72,085
0.00%	0.00%	2.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	-	<u>-</u>	- -	-		- -	- -	-	- -
-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-
65,290	65,290	66,596	-	-	66,596	67,928	69,287	70,672	72,085
0.00%	0.00%	2.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
-	-	-	-	-		- -	-	-	- -
65,290	65,290	66,596	-	-	66,596	67,928	69,287	70,672	72,085
0.00%	0.00%	2.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	- - - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
-	-	-	-	-	-	-	-	-	-
(65,290)	(65,290)	(66,596)	-	-	(66,596)	(67,928)	(69,287)	(70,672)	(72,085)
0.00%	0.00%	2.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
-	I	-	Ī	-	:	-	<u>.</u>		- -
	BOARD BUDGET  3,100 62,190  65,290  0.00% 65,290  0.00%	BOARD BUDGET ACTUAL  3,100 2,877 62,190 62,413  65,290 65,290  0.00% 0.00%  65,290 65,290  0.00% 0.00%  65,290 65,290  0.00% 0.00%  65,290 65,290  0.00% 0.00%	BOARD BUDGET         ESTIMATED ACTUAL         CORE BUDGET           3,100         2,877         46,856           -         -         11,000           62,190         62,413         4,440           65,290         65,290         66,596           0.00%         0.00%         2.00%           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -	BOARD   BUDGET   STIMATED   BUDGET   SUDGET	BOARD   BUDGET   STIMATED   BUDGET   ONGOING   ONE-TIME	BOARD   BUDGET   ACTUAL   BUDGET   ONGOING   ONE-TIME   TOTAL	BOARD   BUDGET   ACTUAL   BUDGET   ONGOING   ONE-TIME   TOTAL	BOARD ESTIMATED BUDGET ONGOING ONE-TIME TOTAL  3,100 2,877	BUDGET ACTUAL    CORE BUDGET   ONGOING   ONE-TIME BUDGET   TOTAL     3.100   2.877

3.720 L.W.M.P. Peninsula Operating Reserve Summary 2022 - 2026 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	Estimated			Budget		
Fund: 1500 Fund Center: 105527	2021	2022	2023	2024	2025	2026
Beginning Balance	40,947	11,597	30,958	50,708	70,854	91,404
Planned Purchase		-	-	-	-	-
Transfer from Ops Budget	(29,737)	19,361	19,750	20,146	20,550	20,965
Interest Income*	387	-	-	-	-	-
Total projected year end balance	11,597	30,958	50,708	70,854	91,404	112,369

# Assumptions/Background:

Retain reserve balance for future LWMP planning projects.

<sup>\*</sup> 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.

Saanich Peninsula - Stormwater Quality Management

# **COMMISSION REVIEW**

APPENDIX A

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.

### **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

**APPENDIX A** 

Service:	1.537	Saanich Peninsula - Stormwater Quality Management	Commission: Saanich Peninsula Waste Water

	Stormwater
Central Saanich	31.79%
North Saanich	33.30%
Sidney	24.33%
Tsawout Band	2.26%
Tsartlip Band	4.70%
Pauquachin Band	2.18%
Tseycum Band	1.44%
Total	100.00%

# Note:

<sup>\*</sup> Service established effective 2010; previously provided by agreement

				BUDGET R	EQUEST					
1.537 Saanich Peninsula - Stormwater Quality Mgmt	<b>2021</b> BOARD BUDGET	2021 ESTIMATED ACTUAL	2022 CORE BUDGET	<b>2022</b> ONGOING	2022 ONE-TIME	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL	2026 TOTAL
OPERATING COSTS:										
Operating Expenditures Contract For Services Consultant Expenses	75,443 22,500 15,000	83,615 17,500 2,000	80,701 22,000 15,300	- - -	- - -	80,701 22,000 15,300	82,308 22,440 15,610	83,954 22,890 15,920	85,628 23,350 16,240	87,338 23,820 16,560
TOTAL OPERATING COSTS	112,943	103,115	118,001	-	-	118,001	120,358	122,764	125,218	127,718
*Percentage Increase over prior year	0.00%	-8.70%	4.48%	0.00%	0.00%	4.48%	2.00%	2.00%	2.00%	2.00%
CAPITAL / RESERVE Transfer to Equipment Replacement Fund Transfer to Operating Reserve Fund	- 2,822	12,650	- -	-	- -	-				
TOTAL CAPITAL / RESERVES	2,822	12,650	-	-	-	-	-	-	-	-
Debt Expenditures MFA Debt Reserve	-		- -	-	- -	-		- -	-	-
TOTAL COSTS	115,765	115,765	118,001	-	-	118,001	120,358	122,764	125,218	127,718
*Percentage Increase over prior year	0.00%	0.00%	1.93%	0.00%	0.00%	1.93%	2.00%	2.00%	2.00%	2.00%
Internal Recoveries Recovery - Other	-	-	-	-	-	-	-	-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	115,765	115,765	118,001	-	-	118,001	120,358	122,764	125,218	127,718
*Percentage Increase over prior year	0.00%	0.00%	1.93%	0.00%	0.00%	1.93%	2.00%	2.00%	2.00%	2.00%
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit) Balance C/F from Prior to Current year Grants in Lieu of Taxes Transfer From Operating Reserve	(3,945) -	- (3,945) -	(3,945) -	- - -	: :	- (3,945) -	(4,020) -	- (4,100) -	(4,180) -	- (4,260) -
TOTAL REVENUE	(3,945)	(3,945)	(3,945)	-	-	(3,945)	(4,020)	(4,100)	(4,180)	(4,260)
REQUISITION	(111,820)	(111,820)	(114,056)	-	-	(114,056)	(116,338)	(118,664)	(121,038)	(123,458)
*Percentage Increase over prior year	0.00%	0.00%	2.00%	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
PARTICIPANTS: Central Saanich, North Saanich, Sidney AUTHORIZED POSITIONS: Salaried Term	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00

1.537 Saanich Peninsula - Stormwater Quality Mgmt Operating Reserve Summary 2022 - 2026 Financial Plan

# Profile

# Saanich Peninsula - Stormwater Quality Mgmt

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	Estimated					
Fund: 1500 Fund Center: 105520	2021	2022	2023	2024	2025	2026
Projected year end balance						
Beginning Balance	27,632	40,543	40,543	40,543	40,543	40,543
Planned Purchase	-	-	-	-	-	-
Transfer from Ops Budget	12,650	-	-	-	-	-
Interest Income*	261	-	-	-	-	-
Total projected year end balance	40,543	40,543	40,543	40,543	40,543	40,543

<sup>\*</sup> 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.

Saanich Peninsula - Source Control Stormwater

**COMMISSION REVIEW** 

APPENDIX A

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.

# **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

Commission: Saanich Peninsula Waste Water

	2021
Central Saanich North Saanich	43.05%
Sidney	28.07% 28.88%
Total	100.00%

1.538 Saanich Peninsula - Source Control Stormwater

Note:

Service:

Bylaw No. 3906 (adopted August, 2013).

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	BUDGET REQUEST									
1.538 San Pen - Source Control Stormwater	<b>2021</b> BOARD BUDGET	2021 ESTIMATED ACTUAL	2022 CORE BUDGET	2022 ONGOING	<b>2022</b> ONE-TIME	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL	2026 TOTAL
OPERATING COSTS:										
Operating Expenditures Contract For Services	55,480 7,000	45,347 2,500	50,724 5,000	-	-	50,724 5,000	51,614 5,190	52,654 5,290	53,715 5,390	54,787 5,500
TOTAL OPERATING COSTS	62,480	47,847	55,724	-	-	55,724	56,804	57,944	59,105	60,287
*Percentage Increase over prior year	0.00%	-23.42%	-10.81%	0.00%	0.00%	-10.81%	1.94%	2.01%	2.00%	2.00%
CAPITAL / RESERVE Transfer to Equipment Replacement Fund Transfer to Operating Reserve Fund	- -	- 6,817	- -	-	-	-		-	-	-
TOTAL CAPITAL / RESERVES	-	6,817	-	-	-	-	-	-	-	-
Debt Expenditures MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
TOTAL COSTS	62,480	54,664	55,724	-	-	55,724	56,804	57,944	59,105	60,287
*Percentage Increase over prior year	0.00%	-12.51%	-10.81%	0.00%	0.00%	-10.81%	1.94%	2.01%	2.00%	2.00%
Internal Recoveries Recovery - Other	-	-	-	-	-	-	-	-	-	-
OPERATING COSTS LESS INTERNAL RECOVERIES	62,480	54,664	55,724	-	-	55,724	56,804	57,944	59,105	60,287
*Percentage Increase over prior year	0.00%	-12.51%	-10.81%	0.00%	0.00%	-10.81%	1.94%	2.01%	2.00%	2.00%
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit) Balance C/F from Prior to Current year Grants in Lieu of Taxes Transfer From Operating Reserve	(1,514) (7,816)	- (1,514) -	(1,514) -	- - -	- - -	- (1,514) -	(1,514) -	(1,544) -	(1,575) -	(1,607) -
TOTAL REVENUE	(9,330)	(1,514)	(1,514)	-	-	(1,514)	(1,514)	(1,544)	(1,575)	(1,607)
REQUISITION	(53,150)	(53,150)	(54,210)	-	-	(54,210)	(55,290)	(56,400)	(57,530)	(58,680)
*Percentage Increase over prior year	0.00%	0.00%	1.99%	0.00%	0.00%	1.99%	1.99%	2.01%	2.00%	2.00%
PARTICIPANTS: Central Saanich, North Saanich, and Sidney AUTHORIZED POSITIONS: Salaried Term	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00

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1.538 San Pen - Source Control Stormwater Operating Reserve Summary 2022 - 2026 Financial Plan

# **Profile**

# San Pen - 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 / FC: 105521)	Estimate	Budget						
	2021	2022	2023	2024	2025	2026		
Projected year end balance								
Beginning Balance	50,680	57,975	57,975	57,975	57,975	57,975		
Planned Purchase	-	-	-	-	-	-		
Transfer from Ops Budget	6,817	-	-	-	-	-		
Interest Income*	478	-	-	-	-	-		
Total projected year end balance	57,975	57,975	57,975	57,975	57,975	57,975		

<sup>\*</sup> 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.