



Notice of Meeting and Meeting Agenda Saanich Peninsula Wastewater Commission

Thursday, February 5, 2026

9:35 AM

Mary Winspear Centre - Room 3
2243 Beacon Ave, Sidney, BC

Members of the public can view the live meeting via MS Teams link: [Click here](#)

E. Diller, M. Doehnel, C. Graham, D. Halldorson, P. Jones, C. McNeil-Smith, R. Novek,
S. Shrivastava, R. Windsor

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We pledge to make our meetings a place where all feel welcome and respected.

1. Territorial Acknowledgement

2. Election of Chair

3. Election of Vice Chair

4. Approval of Agenda

5. Adoption of Minutes

5.1. [26-0028](#) Minutes of the Saanich Peninsula Wastewater Commission Meeting of November 20, 2025

Recommendation: That the minutes of the Saanich Peninsula Wastewater Commission meeting of November 20, 2025 be adopted as circulated.

Attachments: [Minutes - November 20, 2025](#)

6. Chair's Remarks

7. Presentations/Delegations

The public are welcome to attend CRD meetings in-person.

Delegations will have the option to participate electronically. Please complete the online application at www.crd.ca/address no later than 4:30 pm two days before the meeting and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the Commission at LegServ@crd.bc.ca.

8. Commission Business

8.1. [26-0031](#) General Manager's Verbal Update - February

Recommendation: There is no recommendation. This verbal update is for information only.

8.2. [26-0032](#) Saanich Peninsula Wastewater Service Capital Plan Update

Recommendation: The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:
That the 2026 Saanich Peninsula Wastewater Service Capital Plan be updated to reflect the changes outlined in Appendix B.

Attachments: [Staff Report: SPWWS Capital Plan Update](#)
[Appendix A: SPWWTP - Priority Sequencing of Identified Works - Memo](#)
[Appendix B: Updated 2026-2030 SPWWS Five-Year Capital Plan](#)

9. Notice(s) of Motion

10. New Business

11. Adjournment

The next meeting is April 2, 2026.

To ensure quorum, please advise Megan MacDonald (mmmacdonald@crd.bc.ca) if you or your alternate cannot attend.

Meeting Minutes

Saanich Peninsula Wastewater Commission

Thursday, November 20, 2025

9:30 AM

Sidney Community Safety Building
2245 Oakville Ave., Sidney, BC

PRESENT:

Commissioners: M. Doehnel (Vice Chair), E. Diller, D. Halldorson, C. Stock (on behalf of P. Jones), S. Duck (on behalf of R. Novek), S. Shrivastava

STAFF: A. Fraser, General Manager, Infrastructure and Water Services; G. Harris, Senior Manager, Environmental Protection (EP); J. Marr, Senior Manager, Infrastructure Planning and Engineering (EP); R. Tooke, Senior Manager, Environmental Innovation; P. Kickham, Manager, Environmental Regulations; D. Green, Senior Supervisor Regional Source Control; C. Lowe, Supervisor, Environmental Monitoring; M. Lagoa, Deputy Corporate Officer (EP); M. MacDonald, Legislative Services Coordinator (Recorder)

EP - Electronic Participation

Regrets: Commissioners C. McNeil-Smith, P. Jones, Z. King, R. Novek, R. Windsor

The meeting was called to order at 9:31 am.

1. Territorial Acknowledgement

Vice Chair Doehnel provided the Territorial Acknowledgement.

2. Approval of Agenda

MOVED by Commissioner Diller, **SECONDED** by Alternate Commissioner Stock,
That the agenda for the Saanich Peninsula Wastewater Commission meeting of
November 20, 2025 be approved.
CARRIED

3. Adoption of Minutes

- 3.1. [25-1121](#) Minutes of the Saanich Peninsula Wastewater Commission Meetings of
July 17, 2025 and October 21, 2025

MOVED by Commissioner Diller, **SECONDED** by Commissioner Halldorson,
That the minutes of the Saanich Peninsula Wastewater Commission meetings of
July 17 and October 21, 2025 be adopted as circulated.
CARRIED

4. Chair's Remarks

Vice Chair Doehnel noted that recent changes to the *Local Government Act*
have changed the requirements for closed meetings.

5. Presentations/Delegations

There were no presentations or delegations.

6. Commission Business

6.1. [25-1185](#) General Manager's Verbal Update - November

A. Fraser presented Item 6.1. for information and provided an update that the wastewater treatment plant was recently impacted by unanticipated toxic waste.

Discussion ensued regarding:

- work ongoing to grow healthy microbes and restore balance
- mandatory reporting requirements, environmental regulator is aware
- regulatory response not anticipated at this time

6.2. [25-1166](#) Saanich Peninsula Liquid Waste Management Plan - Programs Summary and Update

P. Kickham presented Item 6.2. for information.

Discussion ensued regarding:

- identification of inflow and infiltration problem areas is ongoing
- Saanich Peninsula Wastewater Treatment Plant typically runs at half capacity
- municipalities play a role in repairs, staff are working together

7. Notice(s) of Motion

7.1. [25-1235](#) Motion with Notice: Staff Investigation into Expansion of Waste Heat District Energy System (Commissioners Kelbert/King/Diller)

Commissioner Diller spoke to Item 7.1.

Discussion ensued regarding:

- replacement of other heating forms was not included in the motion
- capital expenditure to install heat pumps and gas pipes to each house
- system near capacity heating current homes during peak demand times
- lifecycle emissions ultimately may not provide climate benefit
- a study is underway on system capacity
- efficiencies for Panorama Recreation Center heating are being investigated
- institutional customers are preferred over single family dwellings

MOVED by Alternate Commissioner Duck, SECONDED by Commissioner Halldorson,

That the motion be tabled.

CARRIED

MOVED by Alternate Commissioner Duck, SECONDED by Alternate Commissioner Stock,
That the motion be referred to staff for more information and to ask staff to bring back a report on existing system efficiencies, operations and potential for future expansions.
CARRIED

8. New Business

8.1. Committee Appointments

Vice Chair Doehnel requested information on the Commission appointment process.

M. Lagoa noted that letters requesting appointments to the Commission have been sent to municipalities. Responses are being received and processed as available.

9. Adjournment

MOVED by Alternate Commissioner Duck, SECONDED by Commissioner Diller,
That the Saanich Peninsula Wastewater Commission meeting of November 20, 2025 be adjourned at 10:16 am.
CARRIED

Chair

Recorder

REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION MEETING OF FEBRUARY 5, 2026

SUBJECT **Saanich Peninsula Wastewater Service Capital Plan Update**

ISSUE SUMMARY

To recommend an amendment to the Saanich Peninsula Wastewater Service 2026-2030 Capital Plan.

BACKGROUND

On October 21, 2025, the Saanich Peninsula Wastewater Commission (Commission) recommended approval of the 2026 Operating and Capital Budget and the Five-Year Capital Plan to the Capital Regional District (CRD) Board. The CRD Board subsequently approved the provisional budget on October 29, 2025.

The 2026-2030 Capital Plan presented on October 21, 2025, included a total capital budget of \$27,997,028 divided between twenty-two (22) capital plan line items. Of the projects on the capital plan, the projects listed below have a commonality in that they were identified to address structural degradation and health and safety concerns stemming from foul air impacts at the Saanich Peninsula Wastewater Treatment Plant (SPWWTP).

Table 1: Capital Projects Addressing SPWWTP Foul Air Impacts

Capital Plan Project #	Project Title	Total Budget previously proposed
23-03	Odour Control Upgrade Construction	\$4,500,000
26-01	Replace Covers on Primary Clarifier	\$200,000
24-01	Sludge Tank, Process Sump Cleaning and Primary Clarifier 2 Repairs	\$3,000,000
Total =		\$7,700,000

In October 2025, CRD staff undertook a tender evaluation for “Invitation to Tender (ITT) Infrastructure and Water Services (IWS) 2025-026 – Saanich Peninsula Wastewater Treatment Plant Odour Control Upgrades” to address Capital Project #23-03. Of the four (4) bids received, only one (1) bid was within the available project budget and this bidder was deemed to have an insufficient safety record and demonstrated experience to be awarded the project. Based on this, the tender was cancelled with the intent to undertake value engineering assessment to review the scope included within the tender package. In the meantime, this also afforded staff the opportunity to undertake a project priority sequencing assessment for multiple identified projects addressing foul air impacts at the SPWWTP.

The priority sequencing assessment reviewed four improvement projects, as shown in Table 2,

which have some commonality in that foul air impacts are the main contributor driving the need for the projects. The assessment concluded that the primary clarifier cover replacement needed to be actioned as top priority, given significant health and safety concerns. Rehabilitation efforts for primary clarifier 2, sludge tanks and process sump were placed as a second priority, given that this will rehabilitate existing degradation and provide a protective coating to slow further deterioration, methods that have been implemented successfully already on Primary Clarifier 1. Priority 3 & 4 were previously combined in the ITT noted earlier and will undergo value engineering, but not proceed until after these earlier initiatives are advanced and the success of the remedial measures assessed. For a more detailed assessment of the priority sequencing, please refer to the internal staff memo (Appendix A).

Table 2: Priority Sequencing Assessment

Description	Consequence of Failure (CoF)	Probability of Failure (PoF)	Overall Rating	Priority Ranking
Primary Clarifier 2 Cover Replacement	5	5	25	1
Primary Clarifier 2, Sludge Tanks and Process Sump Rehabilitations	5	4	20	2
Process Building HVAC Upgrades ¹	4	3	12	3
Primary Clarifier and Sludge Tank Headspace Odour Control Upgrades ¹	4	3	12	4

1. The scope of both of these items were originally proposed to be addressed under Capital Project #23-03.

This Capital Plan update is required to reflect the priority sequencing and is being presented to combine all four of the above noted projects into a single program level budget, replacing projects “23-03 Odour Control Upgrade Construction”, “26-01 Replace Covers on Primary Clarifiers” and “24-01 Sludge Tanks and Process Sump Cleaning and Repairs” with a new and combined program titled “26-01 WWTP Corrosion and Air Management Improvements Program”, which would continue to address the overall intent of the previously separated projects.

This approach is used often in capital project delivery and will allow staff to progress the higher priority projects to construction in the short term, while undertaking value engineering to reassess scope, timelines and future year budget requirements for the two lower priority scored items.

The revised Capital Plan is attached for reference (Appendix B). The updates have been completed such that the total budget and funding source allocations for 2026 are consistent with the previously approved 2026 Capital Plan and the total debt funding within the plan does not exceed the current loan authorization bylaw. Future year budgets may be adjusted to reflect work completed and revised estimates that become available.

ALTERNATIVES

Alternative 1

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

That the 2026 Saanich Peninsula Wastewater Service Capital Plan be updated to reflect the changes outlined in Appendix B.

Alternative 2

That the 2026 Saanich Peninsula Wastewater Service Capital Plan not be updated and work be deferred to future years.

IMPLICATIONS

Financial Implications

This Capital Plan update only reflects a change in delivery sequencing. The total 2026 budget and funding allocations remain consistent with the previously approved Capital Plan and thus there are no changes to rates from what was originally presented on October 21, 2025. Approving this update will allow CRD staff to progress critical upgrades in 2026 without needing to defer work to a subsequent calendar year.

Service Delivery Implications

The priority adjustment outlined is required to address worker health and safety concerns and to rehabilitate concrete deterioration in the SPWWTP primary clarifier 2, sludge tanks and process sump. The concrete rehabilitation methods being proposed have been successfully implemented already on primary clarifier 1 and continuing these improvements will help slow the rate of more substantial structural damage occurring in these spaces, extending the service life of the asset and delaying the need for larger structural repair investments in the future.

CONCLUSION

To reflect recent priority sequencing assessment for projects driven by foul air implications, the Capital Plan update included in Appendix B is proposed to address multiple projects within a single program budget titled “26-01 WWTP Corrosion and Air Management Improvements”.

RECOMMENDATION

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

That the 2026 Saanich Peninsula Wastewater Service Capital Plan be updated to reflect the changes outlined in Appendix B.

Submitted by:	Jared Kelly, P.Eng., Manager, Capital Projects
Concurrence:	Alicia Fraser, P. Eng., General Manager, Infrastructure and Water Services
Concurrence:	Varinia Somosan, CPA, CGA, Acting Chief Financial Officer & General Manager, Finance & Technology
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: SPWWTP - Priority Sequencing of Identified Works - Memo
Appendix B: Updated 2026-2030 SPWWS Five-Year Capital Plan

Memorandum



TO: File

FROM: Cody Allison, P.Eng.
Project Engineer, Corporate Capital Project Delivery Services

DATE: December 11, 2025 **FILE:** 0110-01

SUBJECT: Saanich Peninsula Wastewater Treatment Plant Upgrades – Priority Sequencing of Identified Works

ISSUE SUMMARY

To identify the priority sequence for the upcoming planned capital projects at the Saanich Peninsula Wastewater Treatment Plant.

BACKGROUND

As result of previous and current consulting engineer efforts, the CRD has been made aware of the necessity for several upgrade and remediation projects to the existing Saanich Peninsula Wastewater Treatment Plant. Specifically, the identified upgrade projects are listed below, including the identifying consultant group and year.

- Process Building HVAC Upgrades (KWL, 2021)
- Primary Clarifier and Sludge Tank Headspace Odour Control Upgrades (KWL, 2021)
- Primary Clarifier 2, Sludge Tank and Process Sump Rehabilitation (Stantec, 2025)
- Primary Clarifier Cover Replacement (Stantec, 2025)

While funding for each project had previously been carried for in the CRD's Capital Plan, the results of the most recent engineer's estimates and tender pricing exercises have identified that the combined budgets allocated for all the above noted work is insufficient. As such, CRD staff have determined the need to investigate project prioritization and value engineering options for the above noted items.

FINANCIALS

The current funding for the identified upgrade and remediation projects are via a collection of 2025 Capital Plan line items, as listed in the table below.

Capital Plan No.	WBS Item	Total Budget	Available Funds ¹
19-06	CE.682 – SPWWTP Odour Control Upgrades	\$ 575,000	\$ 45,754
23-03	CE.835 - Odour Control Upgrade Construction ²	\$ 4,500,000	\$ 4,500,000
24-01	CE.897 – Sludge Tanks and Process Sump Repair ³	\$ 950,000	\$ 816,143

Saanich Peninsula Wastewater Treatment Plant Upgrades – Priority Sequencing of Identified Works

24-04	CE.905 – SPWWTP OCU PLC Replacement ⁴	\$ 85,000	\$ 60,000
26-01	TBD – Primary Clarifier Cover Replacement	\$ 200,000	\$ 200,000
Total		\$ 6,260,000	\$ 5,621,897

¹ Available funds have been determined by subtracting actual and committed costs from the current WBS budgets.

² Early approvals has been granted for the 2026 budget to increase funding for Capital Plan No. 23-03 – Odour Control Upgrade Construction to \$4,500,000.

³ Early approvals has been granted for the 2026 budget to increase funding for Capital Plan No. 24-01 – Sludge Tanks and Process Sump Repairs to \$950,000.

⁴ Total budget for WBS Item CE.905 is \$500,000, however only \$85,000 has been allocated to Odour Control PLC Replacement via WBS leg CE.905.7502.

The estimated construction costs for each of the identified project scopes were obtained through a combination of engineer's estimates and formal procurement processes. These costs have been summarized below for reference. For full project costing, estimates of staff and consultant efforts have also been listed.

Scope Description	Basis of Estimates	Estimated Construction Costs	Estimated Duration (Weeks)	Estimated Consultant & Staff ² Costs	Total Estimated Costs
Process Building HVAC Upgrades	ITT IWS 2025-026 RFP 2023-853	\$ 1,980,000	32 Weeks	\$ 140,000	\$ 2,120,000
Primary Clarifier and Sludge Tank Headspace Odour Control Upgrades	ITT IWS 2025-026 HDR COR #6	\$ 2,350,000	32 Weeks	\$ 205,000	\$ 2,555,000
Primary Clarifier 2, Sludge Tank and Process Sump Rehabilitation	2025 Condition Assessment of Tank Structures (Stantec) SPWWTP Phase 2 Proposal (Stantec)	\$ 2,360,000	12 Weeks	\$ 70,000	\$ 2,430,000
Primary Clarifier 2 Cover Replacement	2025 Condition Assessment of Tank Structures (Stantec) SPWWTP Phase 2 Proposal (Stantec) ^{***}	\$ 240,000	3 Weeks	\$ 20,000	\$ 260,000
Totals		\$ 6,930,000	N/A	\$ 435,000	\$ 7,365,000

¹ Stantec estimate assumed that Primary Clarifier 2 Cover Replacement would occur as part of tank repair project. Pricing has been updated to assume works would be separated; however potential savings exist if completed under the same contract.

² Staff costs for Project Management have been estimated at 40% (14 hours) per week for the duration of construction.

³ Stantec proposal for SPWWTP Phase 2 Condition Assessments included a 12-week construction period. A 3-week period has been assumed if the Primary Clarifier 2 Cover Replacement is performed as a stand-alone scope, with Stantec's rates applied for this duration.

As is evident in the above tables, there is an approximate \$1.7 million shortfall in funding relative to the total costs of the four identified scopes of work. While some optimization potentials exist, it is unlikely that these will be able to overcome the current gap in funding. Funding for projects in the Saanich Peninsula Wastewater Capital Plan is primarily provided through debt via a loan authorization bylaw. While it is noted that there are additional line items on the Saanich Peninsula Wastewater Capital Plan utilizing debt funding, for the nature of this exercise, staff-maintained focus on prioritizing between these key initiatives at the wastewater treatment plant.

TECHNICAL FINDINGS & EVALUATION

Due to the level of cost escalations noted during both the engineer's estimates and competitive pricing exercises, a prioritization of the identified project is required in order to determine a sequence for works to proceed while budgeting concerns and value engineering efforts are undertaken. Priority is measured by first determining the Project Driver, being the category of the highest criticality, and then performing a comparison of both Probability (PoF) and Consequence of Failure (CoF). Ratings are applied independently for both PoF and CoF on a 1 to 5 scale, as detailed in the attached Appendix F. An overall rating is then determined by multiplying PoF by CoF to provide a value between 1 to 25. Ranking of the overall values from highest to lowest will provide a priority sequence for the works.

Process Building HVAC Upgrades:

Following the 2021 consultant (KWL) assessment of the existing Odour Control systems at the Saanich Peninsula Wastewater Treatment Plant, it was identified that the existing air extraction and treatment systems within the Process Building areas are under capacity. As result, the space is not able to achieve requirements as per BC Building Code (BCBC), Canadian Electrical Code (CEC) and/or National Fire Protection Association (NFPA) and upgrades are required. Both Preliminary (KWL) and Detailed Designs (HDR) have also been completed for these works, in conjunction with the Headspace Odour Control Upgrades, and the full consultant assessment, preliminary and detailed design reports are available in the attached Appendices A, B and C.

As per the 2021 assessment finding, the existing system is insufficient to achieve compliance as per BCBC, CEC and NFPA requirements within the occupied buildings. As result, CoF and PoF ratings of 4 and 3, respectively, have been assigned as per the table below due to the known potential implications on occupant health and safety.

Project Driver	Worker / Public Safety
Consequence of Failure	4
Probability of Failure	3
Overall (CoF x PoF)	12

Primary Clarifier and Sludge Tank Headspace Odour Control Upgrades:

Following the 2021 consultant assessment (KWL) of the existing Odour Control systems at the Saanich Peninsula Wastewater Treatment Plant, it was identified that the existing air extraction from the headspaces within the "wet areas" are insufficient to achieve corrosion control from H₂S attack. This assessment included each of the Primary Clarifiers, Sludge Tanks and Process Sump areas. A dedicated "wet area" air extraction and treatment system was recommended, however was noted as not a mandatory item to achieve regulatory compliance. Following this assessment, 2022 Preliminary Design (KWL) identified a high cost for the adoption of the dedicated odour control system and instead recommended several minor short-term upgrades to prolong the need for the new system. A Detailed Design (HDR) was completed in 2025, in conjunction with the Process Building HVAC Upgrades, to provide sufficient air extraction for long-term corrosion prevention within the process tank headspaces. The full consultant assessment, preliminary and detailed design reports are available in the attached Appendices A, B and C.

As per the 2021, 2022 and 2025 report findings, system upgrades are required to prevent long-term corrosion due to H₂S attack, however, is not a regulatory requirement and does not improve the immediate plant operations or worker health and safety. As result, CoF and PoF ratings of 4 and 3, respectively, have been assigned as per the table below due to there being no known potential implications on occupant health and safety.

Saanich Peninsula Wastewater Treatment Plant Upgrades – Priority Sequencing of Identified Works

Project Driver	Process / System / Equipment Criticality
Consequence of Failure	4
Probability of Failure	3
Overall (CoF x PoF)	12

Primary Clarifier 2, Sludge Tanks and Process Sump Rehabilitation:

Following the summer 2023 repairs to the adjacent Primary Clarifier 1, visual and tactile condition assessments of Primary Clarifier 2, the Sludge Tanks and Process Sump were undertaken by structural consultant (Stantec) in Spring 2025. The assessment findings noted concrete deterioration up to 15mm in depth to the upper walls and suspended roof slab of the Primary Clarifier 2. Assessment of the Sludge Tanks and Process Sump also identified concrete deterioration within a range of 10mm to 20mm. Further laboratory testing confirmed the deterioration to be due to H₂S attack and that the layers of deteriorated concrete currently do not provide structural support. Structural analysis was then completed for each of the assessed locations, and it was noted that Primary Clarifier 2's suspended slab has experienced a 31% reduction in live load capacity. If placed in continuous operation, deterioration of Primary Clarifier 2 will likely reach an extreme level within 2-3 years and result in destabilization of the suspended slab. It is also expected that continued operation of the sludge tanks and process sump will cause deterioration to reach the reinforcement steel zone, thus leading to reduced structural capacities, within a similar timeframe. The full consultant assessment report and findings are available in the attached Appendix D.

As per the 2025 condition assessment findings, significant concrete deterioration has been noted in each of assessed locations, with structural analysis identifying reduced live load capacity on the suspended slab of Primary Clarifier 2. With these findings, as well as the expectation for deterioration to reach extreme levels within 3-5 years, CoF and PoF ratings of 4 and 5, respectively, have been assigned as per the table below due to the known reduced structural capacity and anticipated timeline for failure.

Project Driver	Process / System / Equipment Criticality
Consequence of Failure	4
Probability of Failure	5
Overall (CoF x PoF)	20

Primary Clarifier 2 Cover Replacement:

Corrosion was noted on the structural supports to the Primary Clarifier 2 tank covers during annual inspection by staff in Spring 2025. A structural consultant (Stantec) was then engaged to preform a detailed condition assessment of the structural members. The findings of this assessment noted significant corrosion resulting in an approximate 80% reduction in structural capacity. With corrosion expected to further progress under normal operating conditions, the structures were recommended to be replaced by Spring 2026. The full assessment report and findings are available via the attached Appendix E.

As per the 2025 condition assessment findings, the extreme reduction in structural capacity already experienced identifies an imminent likelihood of failure. A rating of 5 for both CoF and PoF have been applied due to the operation impacts, hazard to personal and likelihood of failure as per Stantec's assessment.

Saanich Peninsula Wastewater Treatment Plant Upgrades – Priority Sequencing of Identified Works

Project Driver	Worker / Public Safety
Consequence of Failure	5
Probability of Failure	5
Overall (CoF x PoF)	25

Summary:

The Consequence and Probability of Failure ratings for each of the noted projects are summarized and ranked in the summary table on the following page. The listed rankings illustrate the priority sequence for which construction works on the basis of Consequence and Probability of Failure.

Description	Consequence of Failure (CoF)	Probability of Failure (PoF)	Overall Rating	Priority Ranking
Primary Clarifier 2 Cover Replacement	5	5	25	1
Primary Clarifier 2, Sludge Tanks and Process Sump Rehabilitations	5	4	20	2
Process Building HVAC Upgrades	4	3	12	3
Primary Clarifier and Sludge Tank Headspace Odour Control Upgrades	4	3	12	4 ₍₁₎

¹ As both the Process Building HVAC and Primary Clarifier and Sludge Tank Headspace Odour Control Upgrades tied in their overall rating scores, and evaluation of secondary project drivers was required to confirm prioritization between these works. When considering that the Process Building HVAC works were initialized due to deficiencies relating to worker safety, then it becomes clear that the HVAC upgrades take the higher level of precedence. By comparison, the Headspace Odour Control works were initialized for long-term improvements to plant operations.

CONCLUSION

Previous consultant assessment and design efforts have identified four unique scopes for upgrades to the existing Saanich Peninsula Wastewater Treatment Plant. However, comparison of recent engineers estimates and procurement activities against the existing budget as per the 2025 Capital Plan has identified a significant shortfall in funding. As result, a priority sequence was required to be determined prior to proceeding with project construction works. By applying ratings of 1 to 5 on the basis of both the Consequence and Probability of Failure, an overall rating for each project could be obtained, thus allowing for a ranking of highest to lowest priority to be determined.


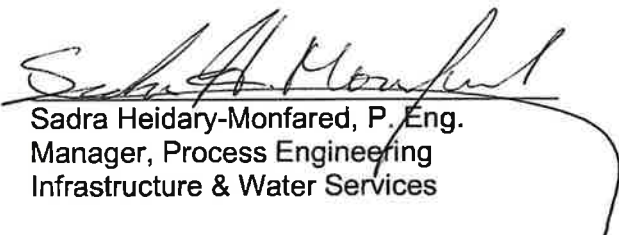
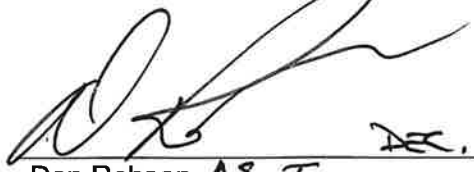
Based on this ranking, replacement of the Primary Clarifier 2 covers is the work of highest priority due to its likelihood for imminent failure, impacts to operations and hazard to operations staff. As per Stantec's cost estimate, there exists a potential for cost savings if these works are performed in conjunction with the second highest priority works, being the rehabilitation of the Primary Clarifier 2, Sludge Tanks and Process sumps. In comparison of the estimated costs to the available budget, there is sufficient funding available to proceed with these both of these works immediately.

Furthermore, Process Building HVAC and the Primary Clarifier and Sludge Tank Headspace Odour Control both tied for third priority works. Further consideration of the project initiations identified that a high precedence should be applied to the Process Building HVAC Upgrades due

Saanich Peninsula Wastewater Treatment Plant Upgrades – Priority Sequencing of Identified Works

to its impacts on worker safety. As identified above, there is not currently sufficient budget to perform these works in addition to the Priority 1 and 2 items. Once a more accurate estimation of costs for the Priority 1 and 2 works are known, additional value-engineering efforts should be undertaken for Priority 3 & 4, as per previous approvals, with additional funding requests potentially being required following the outcome of these efforts.

This memo outlines the prioritization review completed by a cross section of key CRD staff, as documented hereunder. As the priority sequence of works does not reflect the existing allocation of funds as per the Capital Plan, CRD staff will proceed with progressing a Capital Plan Amendment to reflect the new prioritization, for authorization by the Saanich Peninsula Wastewater Commission.


Cody Allison, P. Eng
Project Engineer, CCPDS
Infrastructure & Water Services
Jared Kelly, P. Eng
Manager, Integrated Water Capital
Projects
Infrastructure & Water Services
Natalie Tokgoz, P. Eng
Manager, Wastewater Engineering
Infrastructure & Water Services
Sadra Heidary-Monfared, P. Eng.
Manager, Process Engineering
Infrastructure & Water Services
Dan Robson *ASCT* *Dec. 17, 2025*
Manager, Saanich Peninsula and Gulf Island
Operations**ATTACHMENT(S)**

- Appendix A: SPWWTP – Odour Control Assessment Report – KWL 2021
- Appendix B: SPWWTP – Odour Control Upgrades Preliminary Design – KWL 2021
- Appendix C: SPWWTP – Basis of Design – HDR 2025
- Appendix D: SPWWTP – Condition Assessment of Tank Structures
- Appendix E: SPWWTP – Primary Clarifier 2 Access Hatch Review
- Appendix F: Consequence and Probability of Failure Rating Tables

Attachments Omitted

CAPITAL REGIONAL DISTRICT

5 YEAR CAPITAL PLAN

2026 - 2030

Service #:

3.718

Service Name:

Saanich Peninsula Wastewater

PROJECT DESCRIPTION				PROJECT BUDGET & SCHEDULE									
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2025	2026	2027	2028	2029	2030	5 - Year Total
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward	Year 1	Year 2	Year 3	Year 4	Year 5	Year Total
WASTEWATER TREATMENT PLANT													\$ -
26-01	Renewal	WWTP Corrosion and Air Management Improvements Program	Program level budget to address and mitigate degradation from foul air at the Saanich Peninsula Wastewater Treatment Plant.	\$ 7,500,000		Debt	\$ -	\$ 3,910,000	\$ 2,000,000	\$ 1,500,000	\$ -	\$ -	\$ 7,410,000.00
26-01	Renewal	WWTP Corrosion and Air Management Improvements Program				Res	\$ -	\$ 500,000					\$ 500,000.00
23-03	Renewal	Odour Control Upgrade—Construction	Odour control upgrades are required in numerous rooms and spaces at the treatment plant in order to meet health and safety requirements and prevent ongoing corrosion in some concrete tanks.	\$ 1,000,000	S	Res	\$ 500,000	\$ 500,000					\$ 500,000
23-03	Renewal	Odour Control Upgrade—Construction		\$ 3,500,000	S	Debt	\$ 2,300,000	\$ 3,500,000					\$ 3,500,000
26-01x	Renewal	Replace Covers on Primary Clarifiers	Replace covers over clarifiers to more easily removable geomembrane cover system.	\$ 200,000	E	ERF			\$ 200,000				\$ 200,000
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	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000
24-01	Renewal	Sludge Tanks and Process Sump Cleaning and Repairs	Detailed structural assessment of the primary clarifier No. 2 and sludge tanks to determine whether repairs are required—Cleaning, repair and apply protective coating on concrete surfaces inside of the sludge tanks and process sump is required to prevent ongoing corrosion and extensive structural damage.	\$ 2,050,000	S	Grant			\$ 2,050,000				\$ 2,050,000
24-01	Renewal	Sludge Tanks and Process Sump Cleaning and Repairs		\$ 850,000	S	Debt	\$ 10,000	\$ 410,000	\$ 450,000				\$ 860,000
28-01	Study	Bazan Bay Outfall Inspection	Follow-up inspection of Bazan Bay Outfall	\$ 250,000	S	Res		\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000
24-02	Replacement	Standby Power Assessment and Replacement	Original standby genset is nearing end of life and AECOM recommended completing a power load assessment and upgrading to a new genset that can provide standby power to the whole treatment plant.	\$ 30,000	E	Res	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24-02	Replacement	Standby Power Assessment and Replacement	Original standby genset is nearing end of life and AECOM recommended completing a power load assessment and upgrading to a new genset that can provide standby power to the whole treatment plant.	\$ 920,000	E	Debt	\$ 30,000	\$ 180,000	\$ 650,000		\$ -	\$ -	\$ 830,000
24-03	Replacement	SCADA Equipment Replacement	Project to review and address the maturation of SCADA hardware throughout the service areas.	\$ 1,000,000	E	Debt	\$ 200,000	\$ 200,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 50,000	\$ 1,000,000
24-04	Replacement	SPWWTP PLC Replacement	PLC and CPUs at SPWWTP are at the end of life and must be replaced. The Schneider product currently used at the SPWWTP was discontinued in 2018 and will no longer be supported as of 2026.	\$ 500,000	E	Debt	\$ 50,000	\$ 100,000	\$ 250,000	\$ -	\$ -	\$ -	\$ 350,000
26-02	Study	Wastewater Treatment Plant Model Development	Initial assessment and plant modelling exercise to help assess future plant optimization.	\$ 150,000	E	Res		\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ 150,000
26-03	Renewal	Decarbonization Improvements at SPWWTP	Project to carry out decarbonization improvement recommendations as developed through the 2024 Low Carbon Electrification Study.	\$ 120,000	E	Res	\$ 120,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,000
26-03	Renewal	Decarbonization Improvements at SPWWTP		\$ 1,080,000	E	Grant		\$ -	\$ 500,000	\$ 580,000	\$ -	\$ -	\$ 1,080,000
PUMP STATIONS													
24-05	Replacement	Keating Pump Station - Pump Replacement	The existing pumps are nearing end of life and are becoming more difficult to maintain.	\$ 600,000	S	ERF	\$ 230,000	\$ 530,000	\$ -	\$ -	\$ -	\$ -	\$ 530,000
GENERAL													
21-04	Replacement	Voice Radio Replacement	Replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.	\$ 85,000	E	ERF	\$ 30,000	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ 30,000
18-10	Replacement	Equipment Replacement - Annual Provisional	Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.	\$ 1,200,000	S	ERF	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,000,000
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.	\$ 550,000	E	Res	\$ 150,000	\$ 250,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ 450,000
24-06	Replacement	IT Core Infrastructure Replacement	Replacement of Core IT infrastructure such as servers, network switches, UPS, etc for equipment end of life	\$ 240,000	E	ERF	\$ 45,000	\$ 60,000	\$ -	\$ 180,000	\$ -	\$ -	\$ 240,000
29-01	Study	Inflow and Infiltration (I&I) Management Plan Update	Future update to the Saanich Peninsula Wastewater I&I Plan	\$ 50,000	S	Res		\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000
26-04	Study	Wastewater Strategic Planning	Create a strategic plan for wastewater within the CRD to guide decision making and long-term planning	\$ 50,000	S	Res		\$ 50,000					\$ 50,000.00
GRAVITY SEWERS & MANHOLES													\$ -
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. Repairs/relining will be scheduled in the next 5 years.	\$ 100,000	S	Res	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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. Repairs/relining will be scheduled in the next 5 years.	\$ 850,000	S	Debt	\$ 50,000	\$ 375,000	\$ -	\$ 500,000	\$ -	\$ -	\$ 875,000
27-02	Renewal	Trunk Sewer Relining - Ph2	Based upon CCTV inspection, about another 1600m of 500mm dia asbestos cement sewer should be lined in 2029.	\$ 1,450,000	S	Grant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,450,000	\$ 1,450,000
27-02	Renewal	Trunk Sewer Relining - Ph2		\$ 750,000	S	Res	\$ -	\$ -	\$ 50,000	\$ 700,000	\$ -	\$ -	\$ 750,000
27-03	Renewal	Flushing and CCTV Inspection	SPWW sewers should be cleaned and inspected on a 5-basis. The next 5-year inspection is planned for 2027.	\$ 150,000	S	Res		\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ 150,000
27-04	Renewal	I&I Flow Monitoring	Flow Monitoring leading up to I&I Plan Updates	\$ 150,000	S	Res		\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ 150,000
PRESSURE PIPES & APPURTENANCES													\$ -
DEVELOPMENT COST CHARGE (DCC) PROJECTS													\$ -

Service #:

3.718

Service Name:

Saanich Peninsula Wastewater

PROJECT DESCRIPTION				PROJECT BUDGET & SCHEDULE									
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2025	2026	2027	2028	2029	2030	5 - Year Total
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward	Year 1	Year 2	Year 3	Year 4	Year 5	Year Totalauto-populate
23-01	Renewal	DCC Program - 5-year Update	5-year update of the DCC program.	\$ 75,000	S	Res	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
													\$ -
			Grand Total	\$ 25,800,000			\$ 3,895,000	\$ 6,855,000	\$ 4,300,000	\$ 3,660,000	\$ 1,200,000	\$ 1,700,000	\$ 17,715,000

Service: **3.718** **Saanich Peninsula Wastewater**

Project Number	26-01	Capital Project Title	WWTP Corrosion and Air Management Improvements Program	Capital Project Description	Program level budget to address and mitigate degradation from foul air at the Saanich Peninsula Wastewater Treatment Plant.
Project Rationale	Foul air (incl H ₂ S) at the Saanich Peninsula Wastewater Treatment Plant has caused degradation in areas including Primary Clarifier Covers and concrete deterioration in Primary Clarifier No. 2, process sump and sludge tanks. A program level budget is proposed to address multiple improvements over time, in a prioritized sequence. Replacement of primary clarifier covers and concrete rehabilitation will be some of the primary work addressed. Value engineering is also being conducted to assess the cost-benefit of improvements to the HVAC and Odour Control systems to improve air extraction from key spaces. Budget will be adjusted in subsequent years to align with estimates for upcoming work phases.				

Project Number	23-03	Capital Project Title	Odour Control Upgrade Construction	Capital Project Description	Odour control upgrades are required in numerous rooms and spaces at the treatment plant in order to meet health and safety requirements and prevent ongoing corrosion in some concrete tanks.
Project Rationale	Construction improvements to be implemented based on recommendations made in the KWL report. Odour control upgrades are required in numerous rooms and spaces at the treatment plant in order to meet health and safety requirements and prevent ongoing corrosion in some concrete tanks.				

Project Number	26-01x	Capital Project Title	Replace Covers on Primary Clarifiers	Capital Project Description	Replace covers over clarifiers to more easily removable geomembrane cover system.
Project Rationale	The existing aluminum checker plate covers on the clarifiers are difficult to remove. A more easily removable geomembrane cover system will allow for better operation and maintenance of the clarifiers and prolong carbon life in the odour control system.				

Service: 3.718 Saanich Peninsula Wastewater

Project Number

24-01

Capital Project Title

Sludge Tanks and Process Sump Cleaning and Repairs

Capital Project Description

Detailed Structural assessment of the primary clarifier No. 2 and sludge tanks to determine whether repairs are required. Cleaning, repair and apply protective coating on concrete surfaces inside of the sludge tanks and process sump is required to prevent ongoing corrosion and extensive structural damage.

Project Rationale

Primary Clarifier No. 1 and the oxidation tanks have had detailed structural assessments, funds are required to conduct a detailed assessment of primary clarifier No. 2 and the sludge tanks to determine whether concrete repairs are required similar to the oxidation tanks and primary clarifier No. 1.