



Making a difference...together

**SAANICH PENINSULA WATER COMMISSION**  
Notice of Meeting on **Thursday, October 19, 2023 at 9:30 am**  
Meeting Room, Sidney Community Safety Building (Fire Hall),  
2245 Oakville Ave, 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.

- |                         |                 |                |
|-------------------------|-----------------|----------------|
| D. Kelbert (Chair)      | W. Helgason     | C. Pinches     |
| M. Doehnel (Vice Chair) | P. Jones        | S. Shrivastava |
| S. Duncan               | Z. King         | R. Windsor     |
| D. Halldorson           | C. McNeil-Smith |                |

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**AGENDA**

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

*Recommendation: That the minutes of the September 28, 2023 meeting be adopted.*

- 4. CHAIR’S REMARKS**
- 5. PRESENTATIONS/DELEGATIONS**

*Delegations will have the option to participate electronically. Please complete the [online](#) application for “Addressing the Board” on our website and staff will respond with details.*

*Alternatively, you may email your comments on an agenda item to the Saanich Peninsula Water Commission at [iwsadministration@crd.bc.ca](mailto:iwsadministration@crd.bc.ca). Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.*

- 6. GENERAL MANAGER’S REPORT**
- 7. COMMISSION BUSINESS**
- 7.1. Service Planning 2024 – Water Community Need Summary .....6**

*Recommendation: The Saanich Peninsula Water Commission recommends the Committee of the Whole recommend to the Capital Regional District Board:  
That Appendix A, Community Need Summary – Water, be approved as presented and form the basis of the 2024-2028 Financial Plan.*

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*To ensure quorum, advise [iwsadministration@crd.bc.ca](mailto:iwsadministration@crd.bc.ca) if you cannot attend.*

**7.2. Saanich Peninsula Water Service 2024 Operating and Capital Budget .....25**

**Recommendation:**

*The Saanich Peninsula Water Commission recommends that the Committee of the Whole recommend that the Capital Regional District Board:*

1. *Approve the 2024 operating and capital budget;*
2. *Approve the 2024 Saanich Peninsula bulk water rate of \$1.1978 per cubic metre, and the Agricultural Research Station water rate of \$1.2330 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;*
3. *Direct staff to balance the 2023 actual revenue and expense on the transfer to capital reserve fund;*
4. *Direct staff to update carry forward balances in the 2024 Capital Budget for changes after year end; and,*
5. *Direct staff to amend the Bulk Water Rates Bylaw accordingly.*

**7.3. Summary of Recommendations from Other Water Commissions .....48**

*There is no recommendation, this report is for information only.*

**7.4. Water Watch Report .....49**

*There is no recommendation, this report is for information only.*

**8. MOTION(S) WITH NOTICE**

**8.1. Speaker Series: Commissioners King, Doehnel and Chair Kelbert.....55**

*Whereas, there is a need for the commission to engage with citizens about water and wastewater trends, technologies and ideas, and*

*Whereas, the benefits of engaging with the community before tackling pressing issues will move the relationship with the public beyond a transactional exchange and toward increased trust, and*

*Whereas hearing from outside experts on topics of public interest will benefit staff, leaders and the community.*

*Therefore, be it resolved that the Saanich Peninsula Water Commission direct staff to organize an annual speaker series for the peninsula, dedicated to presentations by researchers and public interest groups that are focused on emerging topics concerning water and wastewater.*

**9. NEW BUSINESS**

**10. ADJOURNMENT**

**Next Meeting:** Thursday, November 16, 2023



Making a difference...together

**MINUTES OF A MEETING OF THE Saanich Peninsula Water Commission, held Thursday, September 28, 2023 at 10:25 am, Sidney Community Safety Building, 2245 Oakville Ave, Sidney BC**

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**PRESENT: Commissioners:** D. Kelbert (Chair); M. Doehnel (Vice Chair); S. Duncan (EP); D. Halldorson; Z. King; C. McNeil-Smith; C. Pinches; S. Shrivastava; R. Windsor  
**Staff:** A. Fraser, General Manager, Integrated Water Services; J. Marr, Senior Manager, Infrastructure Engineering; J. Dales, Senior Manager, Wastewater Infrastructure Operations; S. Irg, Senior Manager, Water Infrastructure Operations; C. Lowe, Environmental Science Officer, Environmental Monitoring Programs; D. Dionne, Administrative Coordinator, Integrated Water Services (Recorder)

**REGRETS:** D. Helgason; P. Jones

EP = Electronic Participation

The meeting was called to order at 10:25 am.

**1. TERRITORIAL ACKNOWLEDGEMENT**

An acknowledgment was provided in the preceding meeting.

**2. APPROVAL OF AGENDA**

**MOVED** by Commissioner McNeil-Smith, **SECONDED** by Commissioner Pinches,  
That the agenda be approved.

**CARRIED**

**3. ADOPTION OF MINUTES**

**MOVED** by Commissioner McNeil-Smith, **SECONDED** by Commissioner Halldorson,  
That the minutes of the July 20, 2023 meeting be adopted.

**CARRIED**

**4. CHAIR'S REMARKS**

The Chair made no remarks.

**5. PRESENTATIONS/DELEGATIONS**

There were no presentations or delegations.

**6. GENERAL MANAGER'S REPORT**

**6.1. Watermain Leak Repair, McTavish Road - Update**

A. Fraser reported that:

- Staff received a resident notification of a leak on McTavish Road West of East Saanich Road on September 2, 2023.
- The source of the leak was the Transmission Main No. 4, a 600-millimeter concrete cylinder pipe which is the primary feed for the Saanich Peninsula.
- She noted there were some unique challenges with this leak.

- Staff reviewed various solutions to address the repair and a location was identified where a temporary line stop could be installed, which allowed for diversion of the water through the Lowe Road pumping station and through the reservoir system.
- Public service announcements were issued to the communities to help reduce flows by reducing water usage.
- Crews worked around the clock from Friday, September 8 to Tuesday, September 11 to undertake the repair.
- It was found that a very short section of pipe had been damaged from what looks like construction from some adjacent infrastructure where a temporary patch had been applied and grated over.
- The entire section has now been replaced and the pipe outside of the replaced section was still in very good condition.
- She noted that this was a very successful repair; the team undertook a lot of procedures and processes seamlessly and the water was restored to the communities quickly.
- Key success factors were:
  - The team had critical spare parts on hand; a lot of the pipe and couplings used could have taken weeks to manufacture and we had those on hand, which was very good forethought.
  - This was not a traditional repair. The team had undergone training in advance in order to make sure they were prepared in the event of such a leak.
  - The collaboration among the teams, Integrated Water Services, CRD corporately and with staff from the Public Works in North Saanich – an impressive group effort.
- Lessons learned:
  - Need to review an alternate feed to the Peninsula, which is planned, and has just gone to tender with the Bear Hill interconnect planned for 2024.
  - Need for a review of where there is storage capacity needs to facilitate these repairs when there is a single supply.

Commissioner Windsor left the meeting.

## 7. COMMISSION BUSINESS

### 7.1. Recommendations from Other Water Commissions

Commissioner Doehnel stated that there was a Water Advisory Committee meeting on Tuesday and noted the following information:

- The Committee received some excellent presentations from Capital Regional District staff.
- Discussions around agricultural water rates are ongoing.
- One of the Committee members had a document on the history of once through cooling systems in terms of not wasting that water. Commissioner Doehnel will provide a copy of the report to the Commission.

## 7.2. Water Watch Report

Received for information.

## 8. NOTICE(S) OF MOTION

The following notice of motion was provided by Commissioners King, Doehnel and Chair Kelbert, for consideration at the next meeting:

### 8.1. Speaker Series: Commissioners King, Doehnel and Chair Kelbert

Whereas, there is a need for the commission to engage with citizens about water and wastewater trends, technologies and ideas, and

Whereas, the benefits of engaging with the community before tackling pressing issues will move the relationship with the public beyond a transactional exchange and toward increased trust, and

Whereas hearing from outside experts on topics of public interest will benefit staff, leaders and the community.

Therefore, be it resolved that the Saanich Peninsula Water Commission direct staff to organize an annual speaker series for the peninsula, dedicated to presentations by researchers and public interest groups that are focused on emerging topics concerning water and wastewater.

## 9. NEW BUSINESS

There was no new business.

## 10. ADJOURNMENT

**MOVED** by Commissioner Shrivastava, **SECONDED** by Commissioner Pinches,  
That the September 28, 2023 meeting be adjourned at 10:40 am.

**CARRIED**

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
SECRETARY



**REPORT TO SAANICH PENINSULA WATER COMMISSION  
MEETING OF THURSDAY, OCTOBER 19, 2023**

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**SUBJECT**     **Service Planning 2024 – Water Community Need Summary**

**ISSUE SUMMARY**

To provide strategic context and an overview of services, initiatives and performance data related to the Water Community Need.

**BACKGROUND**

The Capital Regional District (CRD) Board approved the 2023-2026 Board Priorities on March 8, 2023. Staff then developed the 2023-2026 CRD Corporate Plan which was approved by the CRD Board on April 12, 2023.

The CRD Corporate Plan presents the work the organization needs to deliver over the four-year term, along with the critical regional, sub-regional and local services, to meet the region's most important needs (i.e., Community Needs) and advance the Board's Vision and Priorities. Board Priorities, Corporate Plan initiatives and core service delivery form the foundation of the five-year financial plan.

The 2024 planning cycle marks the first year of the implementation of the 2023-2026 CRD Corporate Plan. The CRD's annual service plans, known as Community Need Summaries, provide an overview of the operational and strategic context, services levels, initiatives, and performance data for each Community Need. They also provide details of the initiatives, associated staffing, timing and service levels required to advance the work in future years.

The Water Community Need Summary is attached as Appendix A. The desired outcome is safe drinking water and a resilient water supply.

The CRD reports on the progress of its initiatives and services on a regular basis. The Board receives updates about the Board Strategic Priorities through the Chief Administrative Officer Quarterly Progress Reports. The Board also receives an overview of progress made on delivering the Corporate Plan twice a year at the strategic check-in and provisional budget meetings, which take place in the spring and fall respectively. The next strategic check-in will take place in spring 2024. During the year, standing committees and commissions also fulfill an oversight and advisory role in relation to the work.

**ALTERNATIVES**

*Alternative 1*

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

That Appendix A, Community Need Summary – Water, be approved as presented and form the basis of the 2024-2028 Financial Plan.

### *Alternative 2*

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

That Appendix A, Community Need Summary – Water, be approved as amended and form the basis of the 2024-2028 Financial Plan.

## **IMPLICATIONS**

### *Governance Implications*

In 2024, staff have prioritized programs and initiatives that:

- Advance 2023-2026 Board Priorities or Corporate Plan initiatives;
- Operationalize capital investments; and/or
- Are necessary to maintain a core service level following a regulatory change or where there is a safety risk to customers, communities, or staff.

The Executive Leadership Team (ELT) has reviewed and assessed all business cases and confirmed alignment with the criteria. ELT has determined that the consolidated package of work is appropriate and a proportional response to the CRD Board's and communities' expectations of the organization.

### *Financial Implications*

To exercise constraint and cost containment, the CRD Board directed staff to keep the core inflationary adjustment to 3.5% through the 2024 Service and Financial Planning Guidelines. Staff and management have taken the necessary steps to mitigate the financial impact of proposed initiatives as well as cost escalation and high inflation rate experienced in 2022 through to 2023.

The 2024 operating costs include non-negotiable collective agreement increases that were effective for 2024, as well as retroactively capturing increases from 2023 which were finalized after the 2023 water rate approval. As a result, the 2024 core operating cost increase exceeds the 3.5% threshold.

Financial and staff impacts for initiatives will be summarized and included in the provisional budget which will be presented at the Committee of the Whole meeting scheduled for October 25, 2023. Starting this year, this will also include a five-year forecast of staffing level changes, which will be reviewed annually.

### *Service Delivery Implications*

Appendix A includes information about existing service delivery, operational considerations and performance. Additional information has been provided below about the proposed changes for 2024/2025.

#### *1. Proposed changes for 2024*

Staff are proposing to advance four new initiatives for the Water Community Need that have financial implications for 2024, as shown in Table 1. The key drivers for the initiatives are:

1. advancing a Board or Corporate Plan Priority;
2. operationalizing capital investments; and
3. adjustments to core service levels to maintain safety.

Table 1. Water Community Need Initiatives (2024)

Initiative	Implementation year(s)	Staff impacts (2024)	Incremental cost (2024)	Funding source
2a-2.1 Contracts Coordinator	2024–ongoing	1 Auxiliary Converted	\$92,000	Fee-for-service
2a-2.2 Purchaser	2024–ongoing	1 New Ongoing	\$205,000	Fee-for-service & Requisition
2a-8.1 Water Quality Sampling Technician	2024-ongoing	Increase to daily hours	\$38,000	Fee-for-service & Requisition
2b-1.1 Dam Safety Program – Integrated Water Services	2024–ongoing	2 New Ongoing	\$375,000	Fee-for-service

The information in Table 1 reflects the business case costs which ELT reviewed as part of their annual assessment of initiatives. The financial impacts reflect full program costs, including cost of staffing.

### 2a-2.1 Contracts Coordinator

Timely contract assembly and completion is essential to reducing financial risks (e.g., from rapid increases in material costs) and schedule risks (e.g., from inability to start projects as planned). The Integrated Water Services Administration division has experienced an exponential increase in the volume of contract-related work due to the growth of the water and wastewater capital programs, the expanded core area wastewater service and the adoption of the 30-year Regional Water Supply 2022 Master Plan.

Initiative 2a-2.1 seeks to convert existing auxiliary hours to one regular ongoing Contracts Coordinator position to meet the increasing demand for contract management, coordination and related contracts and records management functions within the department.

### 2a-2.2 Purchaser

The Integrated Water Services purchasing division has operated with one purchaser for over a decade. Integrated Water Services' staff, budgets, and purchasing needs, both for operating and capital, have increase significantly over that period. With more buying comes more legal and financial risk, and trained purchasers provide critical first-stage advice to avoid later stage disputes or litigation matters.

Initiative 2a-2.2 seeks to create a new regular ongoing Purchaser position in the Legal & Risk Management division to increase support for the Integrated Water Services centralized purchasing function and increase organizational capacity by freeing up specialized staff to focus on service delivery and spend less time on procurement activities.

### 2a-8.1 Water Quality Sampling Technician (Regular)

The CRD is required to meet drinking water monitoring requirements to ensure compliance with provincial laws. Keeping monitoring and system oversight in step with regional growth in drinking water is part of its commitment to provide high-quality and safe drinking water to the region. The

Greater Victoria Drinking Water System is rapidly expanding to meet the region's growth. Regulatory requirements for drinking water monitoring are growing relative to population growth and additional water sampling staff resources are needed to keep up.

Initiative 2a-8.1 seeks to increase existing Environmental Protection staff hours from a 7 hour workday to 8 hour workday to achieve this.

### **2b-1.1 Dam Safety Program - Integrated Water Services**

Integrated Water Services manages 23 water supply dams, 15 of which are directly related to the Regional Water Supply System. The remaining eight dams are located within three other water services: Magic Lake Estates on North Pender Island (4), Lyall Harbour/Boot Cove on Saturna Island (1), and Wilderness Mountain near East Sooke (3).

Integrated Water Services is responsible for the operation, maintenance, and surveillance of the dams, as well as regulatory compliance activities and resolving safety issues through capital and operational safety improvements. Dams are essential for storing water for delivery to customers, but they are inherently risky. The failure of a dam can result in catastrophic consequences, including loss of life, economic impacts (e.g., property damage), and environmental and social impacts.

The Dam Safety program is currently led by the Infrastructure Engineering division, with support from various divisions in Integrated Water Services and other parts of the organization. In accordance with regulatory requirements, staff conduct regular safety reviews and studies to assess the state of the infrastructure and compare the CRD's dam management approaches against best management practices. This monitoring has highlighted that the number of safety issues has been trending up since 2017. It has now become clear that to successfully manage dam-related risks moving forward the department needs a proactive strategy and dedicated, experienced staff with a robust understanding of the complexities of dam safety projects.

Initiative 2b-1.1 seeks to consolidate resources and create a dedicated Dam Safety division with operational and engineering staff to operate, maintain and monitor dams in a 'safe condition', prioritize and resolve known deficiencies, identify and manage new risks, adapt to changing climatic conditions, and ensure compliance with the Dam Safety Regulation and Water Sustainability Act.

As a starting point, the division seeks to create two new regular ongoing positions in 2024 in the Infrastructure Engineering and the Water Infrastructure Operations divisions to start this process. Additional resources requests are expected to follow in 2025 and 2026 as the function becomes established.

### *2. Planned changes in 2025*

There is one initiative planned for 2025, shown in Table 2. The CRD Board will consider approval next year.

**Saanich Peninsula Water Commission – October 19, 2023  
Service Planning 2024 – Water Community Need Summary**

Table 2. Forecast of Future Initiatives: Water Community Need

Initiative	Implementation year(s)	Staff impacts (2025)	Incremental cost (2025)	Funding source
2b-2.1 Utility Operator Team Lead – Water Operations	2025-ongoing	1 New Ongoing	\$153,000	Fee-for-service & Requisition

The information in Table 2 also reflects the business case costs.

### **2b-2.1 Utility Operator - Water Operations**

The Water Operations division maintains and operates the Juan de Fuca Water Distribution system for Colwood, Langford, Metchosin, View Royal, Sooke, Highlands and the Juan de Fuca Electoral Area (East Sooke), serving approximately 60,000 customers. The system continues to expand due to development and, as the system ages, additional maintenance and infrastructure renewal is required. The Water Operations division has identified several challenges related to the system's reliability, and efficiency including aging infrastructure, maintenance frequency, and increasing demand.

To address these challenges, initiative 2b-2.1 seeks to create one new regular ongoing Utility Operator position. This position will be responsible for ensuring operational activities are planned in a safe manner and compliant with regulatory requirements, while increasing the resilience of the drinking water systems.

### **CONCLUSION**

Capital Regional District (CRD) staff are progressing initiatives identified in the 2023-2026 CRD Corporate Plan, including the Board Priorities. The CRD Board, and commissions with delegated authorities, determine resourcing through the annual review and approval of the provisional financial plan. To support decision-making, staff provide recommendations on funding, timing and service levels through the service and financial planning processes.

### **RECOMMENDATION**

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

That Appendix A, Community Need Summary – Water, be approved as presented and form the basis of the 2024-2028 Financial Plan.

Submitted by:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

### **ATTACHMENT(S)**

Appendix A: Community Need Summary – Water

## 2 Water



Safe drinking water and a resilient water supply

### 01 Strategy

#### STRATEGIES & PLANS

- › Regional Water Supply Strategic Plan
- › Regional Water Supply Master Plan 2022-2050
- › Regional Growth Strategy

#### CORPORATE PLAN GOALS

- 2a High quality, safe drinking water
- 2b Reliable & efficient drinking water transmission system

### 02 Contacts

Alicia Fraser, General Manager, Integrated Water Services	@ <a href="#">email</a>	T. 250.360.3061
Annette Constabel, Senior Manager, Watershed Protection	@ <a href="#">email</a>	T. 250.391.3556
Glenn Harris , Senior Manager, Environmental Protection	@ <a href="#">email</a>	T. 250.360.3090
Jan Van Niekerk, Senior Manager, Customer & Technical Services	@ <a href="#">email</a>	T. 250.474.9655
Joseph Marr , Senior Manager, Infrastructure Engineering	@ <a href="#">email</a>	T. 250.474.9656
Shayne Irg, Senior Manager, Water Infrastructure Operations	@ <a href="#">email</a>	T. 250.474.9661

## 03 Operating Context

### ACHIEVEMENTS IN 2023

#### Infrastructure Engineering:

1. Started procurement of a design consultant for replacement of sections of Regional Supply Main No.3 and No.4. These projects will replace aging infrastructure and improve seismic resilience in the regional transmission system. High quality, safe drinking water.
2. Completed Phase 1 and started Phase 2 of the Regional Water Development Cost Charge Program. The need for such a program was identified in the CRD 2023-2026 Corporate Plan and will be used to fund future growth-related regional water supply system improvements.
3. Completed major projects in the Juan de Fuca Water distribution system including two new pump stations and three water storage tanks. These projects replaced aging infrastructure and provided additional capacity for growth within the Juan de Fuca Water Distribution system.

#### Watershed Protection:

1. Completion of two autogates to prevent recreation driven trespass into the Greater Victoria Water Supply Area and public safety around the Goldstream Water Treatment Facilities.
2. Completion of an upgraded Goldstream Entrance to the Greater Victoria Water Supply Area to provide more functional access control, security and visible security presence.
3. Implementation of an infrared wildfire detection camera on a tower on Mount Healy for more effective surveillance and monitoring of any wildfire starts in the Sooke Water Supply Area (WSA).

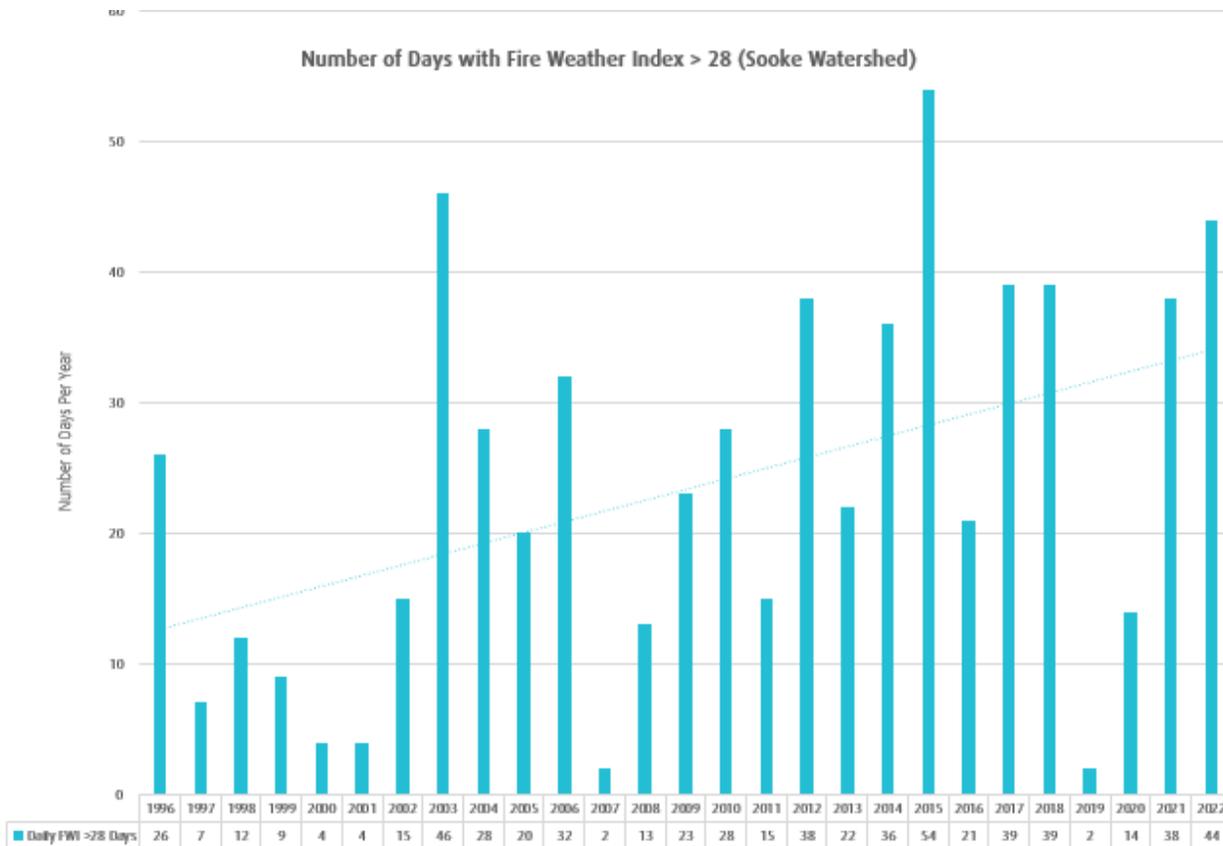
### FACTORS THAT WILL AFFECT OUR OPERATIONS IN 2024 AND BEYOND

- **Security and patrols:** there is an ongoing need to monitor for and respond to recreational pressure into the Greater Victoria Water Supply Area from Sooke Hills Wilderness Regional Park and from the rapidly developing residential area around Langford and Goldstream. During Extreme Fire Danger Rating, this creates additional risk to the Greater Victoria Water Supply Area and additional pressure on the Watershed team.
- **Climate Action:** the most significant risks for water services relate to climate and environmental changes. Predicted trends of drier, hotter summers will impact the water services in several ways:
  - Demand for water, including for local agricultural activities – this is monitored closely and evaluated against historical trends. Model predictions are updated for areas exhibiting higher than predicted demands. This will inform future infrastructure upgrades to meet growing demands.
  - Water quality may be affected due to increased biological growth in the source water and distribution system. The 2022 Regional Water Supply Master Plan recommends implementing filtration as a step in the treatment process by 2037.
  - In the Greater Victoria Water Supply Area, increasing periods of elevated wildfire risk, peak flows from winter storms, drought stress on trees which could lead to increased mortality and forest pests/diseases.
  - Increased risk of power outages.

- **Infrastructure Vulnerability, Resiliency, and Emergency Preparedness:** there are increases in operational and system maintenance demands from a growing region combined with aging infrastructure. The 2022 Regional Water Supply Master Plan identified a strategy to address supply (quantity) and critical delivery infrastructure (redundancy) needs over the next 30 years. In addition to continuing to replace and refresh our existing assets to ensure they remain in a state of good repair, preliminary studies will also commence on the large elements identified in the Regional Water Supply Master Plan.
- **Asset Management:** the ongoing trend in reviewing, updating and completing asset management plans and the continuous upgrading, replacement and growth of assets in the water and wastewater systems rely on having an up-to-date asset registry, as well as an asset onboarding process. Both the Scottish Water Review in 2018 and the EMA Readiness Assessment of 2020 highlighted the need for a reliable asset registry for Water and Wastewater.
  - The risk of assets not being maintained, replaced in a timely manner and failing could impact the CRD's ability to provide the expected water and wastewater level of service and could even result in environmental and public health and safety risks.
  - The asset registry is an important step in ensuring that assets are captured in the Maintenance Management System and Preventative Maintenance Plans are developed. This information is also critical with regards to capital and financial planning for the utility services.
- **Operational cost increases:** the costs of essential water system operating supplies, such as disinfection chemicals, have been increasing 30-40% year over year which is impacting the cost-of-service delivery. This trend has been seen across North America.
- **Regional Water Supply Strategic Plan (2017):** Actions and initiatives to support the strategic priorities and commitments will be updated, starting in 2023. The revised plan, which will be published in 2024, will look to address future needs for the 2025-2029 period.
- **Rate Structure Review:** A new service delivery model for First Nations water servicing is being advanced with implementation expected in late 2023/early 2024. Through the agreement, the Regional Water Supply Service will become the service provider for participating First Nations governments.

**OPERATIONAL STATISTICS**

An example of the effect of climate change on the number of days of elevated wildfire risk for the Greater Victoria Water Supply Area:



## 04 Services

The services listed below rely on the support of several corporate and support divisions to operate effectively on a daily basis. More information about these services is available in the Corporate Services and Government Relations Community Need Summaries.

### Water Supply & Distribution

Wholesale water supply to approximately 400,000 consumers in Greater Victoria and residents in three municipalities on the Saanich Peninsula, water distribution system within Langford, Sooke, View Royal, Colwood, East Sooke, Metchosin and Highlands and the small water systems in the Electoral Areas (EAs) supported through the following key service areas:

#### SERVICE BUDGET REFERENCES<sup>1</sup>

- › 2.670 Regional Water Supply
- › 2.680 Juan de Fuca Water Distribution
- › 2.610 Saanich Peninsula Water
- › Small water systems in the Electoral Areas

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### 1. WATER SYSTEMS OPERATIONS AND MAINTENANCE

#### Description

Water treatment, supply and distribution system operation and monitoring. System and facility maintenance, consumables management and preventative maintenance. Respond to water main breaks and other system emergencies.

#### What you can expect from us

- ▶ 24/7 water treatment operations for two facilities for Greater Victoria
- ▶ Supply and distribution system operation
- ▶ System monitoring
- ▶ Customer service
- ▶ System and facility maintenance
- ▶ Consumables management
- ▶ Component preventative maintenance
- ▶ 24/7 emergency response to water main breaks and other system emergencies

#### Staffing Complement

Water Infrastructure Operations: **61 FTE (including 5 Managers and Administrative Support)**

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<sup>1</sup> Service budget(s) listed may fund other services

## 2. INFRASTRUCTURE PLANNING

### Description

Strategic asset management for all services/systems including modeling and capacity analysis, vulnerability assessment, infrastructure renewal plans.

### What you can expect from us

- ▶ Asset management and capital planning
- ▶ Adjust plans for 15 water services
- ▶ System expansion and growth planning
- ▶ Proactive capital planning for all 15 water services with a 15-year outlook
- ▶ Ongoing condition assessment to inform the capital program and ensure water systems assets remain in a state of good repair
- ▶ Incorporating growth and expansion demands into future plans

### Staffing Complement

Water Supply Engineering and Planning: **4 FTE**

Water Distribution Engineering and Planning: **6 FTE (including 1 Manager)**

## 3. CAPITAL PROJECT DELIVERY

### Description

Project design, procurement and delivery of capital projects annually on time/budget. Main installations, dam upgrades, equipment replacement and capital projects support.

### What you can expect from us

- ▶ Infrastructure renewal and upgrades
- ▶ Capital Program for 15 water services (including Salt Spring Island)
- ▶ Engineering support of utility operations for the 15 water services.

### Staffing Complement

Capital Projects **8 FTE (including 1 Manager)**

## Watershed Protection

Forest land management of the 20,611 hectares of the Greater Victoria Water Supply Area to ensure high-quality source drinking water for the Regional Water Supply System through following service areas:

### SERVICE BUDGET REFERENCE<sup>2</sup>

- › 2.670 Regional Water Supply

## 5. WILDFIRE, SECURITY & EMERGENCY RESPONSE

### Description

Watershed security, wildfire and spill preparedness, prevention and response.

### What you can expect from us

- ▶ 24/7 watershed emergency duty officer standby
- ▶ Security/wildfire patrols and standby (weekends and holidays; daily during elevated fire conditions)
- ▶ Wildfire detection air patrol during high and extreme fire hazard; infrared camera detection for the Sooke WSA

### Staffing Complement

Watershed Protection: 8 FTE (including 1 Manager and Administrative Support) + leadership support

## 6. WATERSHED OPERATIONS

### Description

Silviculture, forest health and forest fuel management; invasive plant management; vegetation management and road maintenance, upgrades and rehabilitation

### What you can expect from us

- ▶ Winter/summer road maintenance
- ▶ Culvert and bridge upgrades to accommodate higher peak flows to higher standards and changing climate
- ▶ Forest fuel and forest resilience treatments and fire smarting maintenance including brushing, thinning and chipping or burning of woody debris
- ▶ Brushing dam faces and around facilities, gates and fences
- ▶ Danger tree assessment and removal along roads and powerlines
- ▶ Invasive plants management

### Staffing Complement

Watershed Protection: 10 FTE (including 1 Manager) + leadership support

<sup>2</sup> Service budget(s) listed may fund other services

## 7. RESOURCE PLANNING

### Description

Wildlife management, ecological inventories and analyses, risk assessment and management, and GIS and data management.

### What you can expect from us

- ▶ Development of a comprehensive watershed hydrology monitoring program
- ▶ Annual forest health survey
- ▶ Partnering in climate change and other research in the Greater Victoria Water Supply Area
- ▶ Management of beaver, Canada geese and bullfrogs
- ▶ School and public tours of the Water Supply Area and facilities

### Staffing Complement

Watershed Protection: 8 FTE (including 1 Manager) + leadership support

## ENVIRONMENTAL PROTECTION

Regulatory and non-regulatory services and a support role across the organization that focuses on enhanced integration of drinking water quality protection programs and integration of communication initiatives.

### SERVICE BUDGET REFERENCES:<sup>3</sup>

- |   |   |
|---|---|
| › 1.531 Stormwater Quality Management - Sooke | › 3.707 On Site System Management Program                               |
| › 1.576 Environmental Engineering Services    | › 3.720 Saanich Peninsula Liquid Waste Management Plan - Implementation |
| › 1.578 & 1.579 Environmental Protection      | › 3.755 Regional Source Control Program                                 |
| › 3.701 Millstream Remediation                |   |

## 8. WATER QUALITY 1.0

### Description

Monitoring, data analysis, assessment, reporting and technical advice to meet water quality regulatory requirements.

### What you can expect from us

- ▶ Source water and distribution system monitoring, assessment and reporting
- ▶ Physical, chemical and biological analytical services, assessment and reporting

### Staffing Complement

Environmental Protection: 6 + lab staff FTE + leadership support

<sup>3</sup> Service budget(s) listed may fund other services

## 9. DEMAND MANAGEMENT

### Description

Research and data to inform capital planning, water conservation, and communications and education.

### What you can expect from us

- ▶ Accurate data
- ▶ Per capita targets (residential and Industrial, Commercial and Institutional)

### Staffing Complement

Environmental Protection: **1.0 FTE + leadership support**

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## 10. CROSS CONNECTION CONTROL

### Description

Identification, registration, tracking and reporting of potential cross connection contamination sources in the Greater Victoria Drinking Water System.

### What you can expect from us

- ▶ Contamination prevention through facility inspections, testing and education for backflow prevention devices
- ▶ Monitor and track (>28,000) backflow prevention devices

### Staffing Complement

Environmental Protection: **4.6 FTE**

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## 11. COMMUNICATIONS & ENVIRONMENTAL EDUCATION

### Description

Public education and engagement in the region to promote sustainable behavior through campaigns, initiatives and services. Position is shared 80:20 with Wastewater communications support.

### What you can expect from us

- ▶ Increased public awareness of CRD messages and subsequent behavior changes (declining trend in per capita and per sector water use)

### Staffing Complement

Environmental Protection: **0.8 FTE + leadership support**

## 05 Initiatives

Below are the initiatives listed in the [Capital Regional District 2023-2026 Corporate Plan](#) and the related initiative business cases (IBCs), including financial and staffing impacts, proposed for 2024. The financial impacts reflect full program costs, including cost of staffing.

Initiative	Implementation year(s)	Impacts in 2024
2a-1 Update the Regional Water Supply Strategic Plan	2023	-
2a-2 Implement the 2022-2050 Regional Water Supply Master Plan	Ongoing	-
▶ <b>NEW IBC</b> 2a-2.1 Contracts Coordinator	2024-ongoing	\$92K fee-for-service 1 Auxiliary Converted
▶ <b>NEW IBC</b> 2a-2.2 Purchaser	2024-ongoing	\$205K fee-for-service + requisition 1 New Ongoing
2a-3 Review water rates in service agreements with First Nations	2024	Continued negotiation and implementation
2a-4 Review and determine appropriate level of water subsidy used for agriculture	2024	Ongoing, no change in subsidy in 2024
2a-5 Active forest/ecological management to enhance forest health and resilience in the Water Supply Areas	Planned for 2025	-
2a-6 Collect and analyze information for climate adaptation, reservoir management and the siting of new major infrastructure	Ongoing	-
2a-7 Implement a development cost charge program for the Regional Water Service	2024	-
▶ <b>NEW IBC</b> 2a-8.1 Water Quality Sampling Technician*	2024-ongoing	\$38K other Increase from 7 to 8-hour shifts

Initiative	Implementation year(s)	Impacts in 2024	
2b-1 Enhance safety of aging dams, meet increasing regulatory requirements and mitigate against the risk of failures ▶ <b>NEW IBC</b> 2b-1.1 Dam Safety Program – Integrated Water Services	2024  2024-ongoing	\$375K <small>fee-for-service</small>	2 New Ongoing
2b-2 Invest in and maintain capital assets, and undertake regulatory monitoring, to service current and future population and climate adaptation ▶ <b>FUTURE IBC</b> 2b-2.1 Utility Operator Team Lead – Water Operations	2024  Planned for 2025	\$153K <small>fee-for-service + requisition</small>	1 New Ongoing

*\*Not captured in the 2022-2026 Corporate Plan*

## 06 Performance

### GOAL 2A: HIGH QUALITY, SAFE DRINKING WATER

#### Targets & Benchmarks

The performance measures link to the CRD's goals of safe, sustainable and resilient water resources for the Capital Region.

#### Measuring Progress

Performance Measure(s)	Service	Type	2022 Actual	2023 Forecast	2024 Target
<b>1. Regulatory Compliance<sup>1</sup></b>	Regional Water Supply	Quantity	None	None	None
	Juan de Fuca Water Distribution	Quantity	None	None	None
	Saanich Peninsula Water Supply	Quantity	None	None	None
	Local Services	Quantity	8	3	None
<b>2. Water Quality Sampling (raw)<sup>2</sup></b>	Regional Water Supply	Quantity	15,589	17,174	17,174
	Local Services	Quantity	3,670	4,218	4,218
<b>3. Water Quality Sampling (treated)<sup>3</sup></b>	Regional Water Supply	Quality	1,787	1,888	1,888
	Juan de Fuca Water Distribution	Quality	7,531	7,378	7,762
	Saanich Peninsula Water Supply	Quality	2,102	3,701	3,701
	Local Services	Quality	24,904	17,893	17,893
<b>4. Demand<sup>4</sup></b>	Regional Water Supply	Quantity	359	340	340
	Juan de Fuca Water Distribution	Quantity	314	300	300
	Saanich Peninsula Water Supply	Quantity	479	420	420
	Local Services	Quantity	227.8	216.5	215.8

<sup>1</sup> Non-compliance with Island Health, provincial and federal regulatory requirements and operational certificates that result in Boil Water Advisories or Do Not Consume Events

<sup>2</sup> Water quality samples analyzed annually from source reservoirs (raw water)

<sup>3</sup> Water quality samples analyzed annually from transmission/distribution systems (treated water)

<sup>4</sup> Average day per capita water use (litres per capita per day)

#### Discussion

Measure 4. Demand: average day per capita water use (litres per capita per day)

- Regional Water Supply: Demand is plateauing due to the replacement of inefficient appliances and a surge of new high-density buildings with built-in water efficiencies
- Saanich Peninsula Water Supply: Driven by agricultural demand and lack of residential densification
- Local Services: Values represent the average of twelve services

**GOAL 2B: RELIABLE & EFFICIENT DRINKING WATER TRANSMISSION SYSTEM**

Target & Benchmarks

The performance measures link to the CRD’s goals of safe, sustainable and resilient water resources for the capital region.

Measuring Progress

Performance Measure(s)	Service	Type	2022 Actual	2023 Forecast	2024 Target
<b>5. Operating cost<sup>5</sup></b>	Regional Water Supply	Quantity	\$111	\$112	\$115
<b>6. Energy usage<sup>6</sup></b>	Regional Water Supply	Quantity	62.5	66	66
<b>7. Watershed water release<sup>7</sup></b>	Regional Water Supply	Quantity	11,229	11,500	12,000
<b>8. Water-main leak repairs<sup>8</sup></b>	Juan de Fuca Water Distribution	Quantity	8.2	10	8
	Local Services	Quantity	1	1	1
<b>9. Preventative maintenance<sup>9</sup></b>	Regional Water Supply	Quality	86%	96%	98%
	Juan de Fuca Water Distribution	Quality	84%	94%	96%
	Saanich Peninsula Water Supply	Quality	97%	98%	98%
	Local Services	Quality	91%	98%	98%

<sup>5</sup> Annual operating cost per megaliter of drinking water treated and supplied/distributed

<sup>6</sup> Annual energy use (kWh) per megaliter of drinking water treated and supplied/distributed

<sup>7</sup> Volume of raw water released annually from Regional Water Supply watersheds to rivers to support fish habitat (megaliters)

<sup>8</sup> Number of water-main leak repairs and service line leaks annually per 100 kilometers of pipe (distribution systems)

<sup>9</sup> Preventative maintenance completed (% of planned)

Discussion

- N/A

## 07 Business Model

### Water Supply & Distribution, Watershed Protection

**PARTICIPANTS** **Regional Water Supply:** All Municipalities, Juan de Fuca Electoral Area, First Nations (via Distribution Systems)

**Saanich Peninsula Water Supply:** Municipalities (Central Saanich, North Saanich, Sidney)

**JDF Water Distribution:** Langford, Colwood, View Royal, Metchosin, Highlands, Sooke, Juan de Fuca Electoral Area

**Local Water Service Areas in the Electoral Areas**

**FUNDING SOURCES** **Regional Water Supply:** Bulk water sales revenue

**Juan de Fuca Water Distribution System:** Retail water sales revenue in West Shore Municipalities

**Saanich Peninsula Water:** Wholesale water sales revenue

**GOVERNANCE** [Regional Water Supply Commission](#)  
[Water Advisory Committee](#)  
[Saanich Peninsula Water Commission](#)  
[Juan de Fuca Water Distribution Commission](#)  
[Various Local Services Commissions](#)

### Environmental Protection

**PARTICIPANTS** **Water Quality Service:** Allocation from Integrated Water Services and Local Service Areas (LSA) from the municipalities of Regional Water Supply area, Juan de Fuca and various local service areas, Sidney, North Saanich, Central Saanich and Peninsula First Nations

**Demand Management, Cross Connection Control Services:** water rate from all Municipalities and Electoral Areas

**Communications and Environmental Education:** all Municipalities and Electoral Areas

**FUNDING SOURCES** Water rate and requisition

**GOVERNANCE** [Regional Water Supply Commission](#)  
[Water Advisory Committee](#)  
[Saanich Peninsula Water Commission](#)  
[Juan de Fuca Water Distribution Commission](#)  
[Various Local Services Commissions](#)



Making a difference...together

SPWC 23-04

**REPORT TO SAANICH PENINSULA WATER COMMISSION  
MEETING OF THURSDAY, OCTOBER 19, 2023**

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**SUBJECT    Saanich Peninsula Water Service - 2024 Operating and Capital Budget**

**ISSUE SUMMARY**

To provide an overview of the 2024 Saanich Peninsula Water Service operating and capital budget, highlighting the changes from the 2023 budget and the proposed 2024 budget figures. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

**BACKGROUND**

The draft 2024 Saanich Peninsula Water Service budget has been prepared for the Saanich Peninsula Water Commission's (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 2024 budget has been prepared considering the CRD Board's 2024 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.

**2023 Year End Financial Projections**

The actual 2023 operating expense is projected to be \$1,700 under budget at year end. The actual bulk water purchase expense is estimated to be \$204,000 over budget at \$5,080,680, which corresponds with water sales revenue that is projected to be \$303,000 over budget. To balance the budget at year end, the proposed transfer to the capital reserve fund has been increased by \$100,565 to \$900,565.

**Operating Budget**

An increase in the 2024 operating expense in the amount of \$79,400 is planned and results primarily from non-discretionary expense adjustments such as wage/salary increases, corporate support service allocations, insurance costs, and other operating expense increases such as electricity costs. This represents a 4.72% increase from 2023.

The bulk water purchase expense, based on the proposed 2024 Regional Water Supply wholesale water rate and the 2024 Saanich Peninsula Water budget demand volume, has been set at \$5,180,160, an increase of \$303,000 over 2023.

**Capital Budget**

The planned transfer to the capital reserve fund in 2024 is \$800,000, this is consistent with the 2023 contribution. At year-end 2023, the capital reserve fund balance is estimated to be \$3,228,620 which is available to fund major capital projects. A new loan authorization in the amount of \$12,900,000 was approved in 2021 to allow continued partial funding of the five-year capital plan. The debt servicing costs associated with this loan will begin in 2024.

**Saanich Peninsula Water Commission – October 19, 2023**  
**Saanich Peninsula Water Service - 2024 Operating and Capital Budget**

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The planned transfer to the equipment replacement fund in 2024 is \$50,000. At year-end 2023, the equipment replacement fund balance is estimated to be \$1,700,620, which is available to fund minor capital and operational equipment replacements including vehicles.

There are a number of capital projects planned for 2024 with a total value of \$11,155,000 including \$4,005,000 in projects that are in progress or multi-year projects, including the Saanich Peninsula Water System Upgrades and Expansion project which includes the Bear Hill Reservoir interconnect project along East Saanich Road, the Hamsterly Pump Station Backup Generator installation project, and the Keating fly-over water main replacement project (funding agreement). The value of the five-year (2024-2028) capital plan is currently \$21,509,000 including an on-going budget allowance for post-disaster water supply equipment and infrastructure improvements.

The Development Cost Charge (DCC) program represents \$659,579 of the five-year (2024-2028) capital plan, and reflects the projects included in the DCC program update. At year-end 2023, the DCC reserve fund balance is estimated to be \$2,035,605.

#### Water Demand

Total water demand across the Saanich Peninsula Water Service area has generally continued to increase year over year recently due to the continued rate of development and growth. This trend, combined with a dry summer season, is expected to result in actual demand exceeding budget demand in 2023: the 2023 year-end demand is projected to be 265,000 cubic metres over budget at 6,600,000 cubic metres.

The recommended 2024 water rate has been calculated using a budget demand of 6,400,000 cubic metres (Page 3 of the budget document, Appendix A), which is 65,000 cubic metres more than the volume used in the 2023 budget.

#### 2024 Water Rates

The 2024 CRD Regional Water Supply wholesale water rate of \$0.8094 per cubic metre, a 5.14% increase over the 2023 rate, is being recommended to the Regional Water Supply Commission. The 2024 agricultural rate of \$0.2105 per cubic metre will also be recommended. The Regional Water Supply agricultural water rate budget funds the difference between the municipal retail water rate and the CRD agricultural water rate. An agricultural water rate review and options study is being undertaken in 2022/2023 under the Regional Water Supply Service. The consultation phase of the study will involve the key stakeholders on the Saanich Peninsula including the Commission. It is anticipated that any changes to the rate or rate methodology resulting from the study would take effect in 2025. A summary of the agricultural water volumes and agricultural water rate payments for 2011 to 2022 is attached as Appendix C.

The recommended Saanich Peninsula Bulk Water Rate is \$1.1978 per cubic metre, a 4.71% increase over the 2023 rate. The increase in annual bulk water cost for the average household using 235 cubic metres per year would be \$12.67.

The Agricultural Research Station Rate has been set at \$1.2330 per cubic metre.

The Saanich Peninsula Water rate and Regional Water Supply rate history and projection is attached as Appendix B. The rates may be adjusted in the future to reflect actual revenue and expenditure circumstances and water demand volumes.

## **ALTERNATIVES**

### *Alternative 1*

The Saanich Peninsula Water Commission recommends that the Committee of the Whole recommend that the Capital Regional District Board:

1. Approve the 2024 operating and capital budget;
2. Approve the 2024 Saanich Peninsula bulk water rate of \$1.1978 per cubic metre, and the Agricultural Research Station water rate of \$1.2330 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2023 actual revenue and expense on the transfer to capital reserve fund;
4. Direct staff to update carry forward balances in the 2024 Capital Budget for changes after year end; and
5. Direct staff to amend the Bulk Water Rates Bylaw accordingly.

### *Alternative 2*

The Saanich Peninsula Water Commission recommends that the Committee of the Whole recommend that the Capital Regional District Board:

1. Approve the 2024 operating and capital budget as amended;
2. Approve the 2024 Saanich Peninsula bulk water rate, and the Agricultural Research Station water rate as amended, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2023 actual revenue and expense on the transfer to capital reserve fund;
4. Direct staff to update carry forward balances in the 2024 Capital Budget for changes after year end; and,
5. Direct staff to amend the Bulk Water Rates Bylaw accordingly.

## **IMPLICATIONS**

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**

The draft 2024 Saanich Peninsula Water Service budget has been prepared for the Saanich Peninsula Water Commission's consideration. The budget has been prepared considering the Commission and CRD Board's 2024 service planning and financial expectations. A proposed increase in operating and capital funding that includes an increase in the wholesale water costs from the Regional Water Supply Service, combined with an adjusted revenue budget, is resulting in a recommended bulk water rate of \$1.1978 per cubic metre, a 4.71% increase over the 2023 rate.

**Saanich Peninsula Water Commission – October 19, 2023**  
**Saanich Peninsula Water Service - 2024 Operating and Capital Budget**

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**RECOMMENDATION**

The Saanich Peninsula Water Commission recommends that the Committee of the Whole recommend that the Capital Regional District Board:

1. Approve the 2024 operating and capital budget;
2. Approve the 2024 Saanich Peninsula bulk water rate of \$1.1978 per cubic metre, and the Agricultural Research Station water rate of \$1.2330 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2023 actual revenue and expense on the transfer to capital reserve fund;
4. Direct staff to update carry forward balances in the 2024 Capital Budget for changes after year end; and,
5. Direct staff to amend the Bulk Water Rates Bylaw accordingly.

Submitted by:	Alicia Fraser, P.Eng., 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:	Ted Robbins, B.Sc., C.Tech., Chief Administrative Officer

**ATTACHMENTS**

Appendix A: 2024 Saanich Peninsula Water Service Budget

Appendix B: Saanich Peninsula Water Rate and Regional Water Supply Rate History and Projection

Appendix C: Agricultural Water Volumes and Rate Payments 2011 - 2022

# **CAPITAL REGIONAL DISTRICT**

## **2024 BUDGET**

### **Saanich Peninsula Water Supply**

#### **COMMISSION REVIEW**

OCTOBER 2023

Service: 2.610

Saanich Peninsula Water Supply

Committee: Saanich Peninsula Water

**DEFINITION:**

To purchase water and to acquire, design, construct, reconstruct, purchase, maintain and operate facilities and to acquire property easements, licences and authorities for the supply of water to Central Saanich, North Saanich, and Sidney, for distribution by the municipalities. Letters Patent, December 22, 1976; revised Sept. 27, 1984. Amended SLP April 27, 1978 and March 19, 1986.

**SERVICE DESCRIPTION:**

This service provides for the purchase of bulk water for supply to Central Saanich, North Saanich, and Sidney, for distribution within their municipalities. Included in the program is the responsibility to provide design, construction, operation and maintenance, licenses, and water quality monitoring to the service area.

**PARTICIPATION:**

Central Saanich / North Saanich / Sidney

**MAXIMUM LEVY:****MAXIMUM CAPITAL DEBT:**

As established by Inspector of Municipalities.

**COMMISSION:**

Saanich Peninsula Water Commission established by Letters Patent to advise the Board with respect to this function.

**FUNDING:**

Costs are recovered through the sale of bulk water.

**CAPITAL DEBT:**

Authorized:	\$12,900,000 2021 - (MFA Bylaw No. 4411 - Saanich Peninsula Water Supply Water Works)
Borrowed:	\$0
Remaining:	\$12,900,000

**Change in Budget 2023 to 2024**

Service: 2.610 Saanich Peninsula Water Supply

Total Expenditure

Comments

2023 Budget

7,407,397

**Change in Labour:**

59,300

Labour charges (salaries and overhead)

Total Change in Labour

59,300

**Other Changes:**

Bulk Water Purchase

303,477

Principal and Interest Costs

102,392

Standard Overhead Allocation

7,276

Electricity

6,055

Other Costs

6,369

Total Other Changes

425,569

**2024 Budget****7,892,266**

## Summary of % Expense Increase

Increased bulk water consumption

3.5%

Additional cost due to increased bulk water rate

0.7%

Principal and Interest costs

1.4%

Balance of increase

1.0%

% expense increase from 2022:

**6.5%****Overall 2023 Budget Performance**

(expected variance to budget and surplus treatment)

*Favourable water sales variance of \$300,000 (4%) due to higher than budgeted water demand largely a result of dry summer weather. This additional revenue will be used to offset bulk water purchase overages. The net surplus of \$100,000 will be transferred to the Capital Reserve Fund.*

## SAANICH PENINSULA WATER SUPPLY

### 2024 Demand Estimate

#### Retail Demand

Years	Actual Demand cu.metre	Budgeted Demand cu.metre
2018	7,044,786	6,300,000
2019	6,928,173	6,500,000
2020	6,860,322	6,800,000
2021	7,556,244	6,800,000
2022	7,239,389	6,900,000
2023	6,600,000 *	6,335,000 **
<b>2024 Demand Estimate</b>	<b><u>6,400,000</u></b>	

\* Projected consumption for 2023

\*\* 2023 Demand estimate reduction reflects First Nations becoming wholesale customers of Regional Water Supply

## SAANICH PENINSULA WATER SUPPLY

### Summary of Supply Water Rates to Participating Municipalities

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Change</u>	<u>% change</u>
<b>Retail (direct) water rate</b>							
Sannich Peninsula Retail cost per cu.m.	\$1.0223	\$1.0536	\$1.0886	\$1.1439	\$1.1978	\$0.0539	4.7%
Agricultural Research Station cost per cu.m.	\$1.0575	\$1.0888	\$1.1238	\$1.1791	\$1.2330	\$0.0539	4.6%

### Summary of Bulk Water Purchase Rates from Regional Water Supply

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Change</u>	<u>% change</u>
<b>CRD Bulk water purchase cost per cu.m.</b>	\$0.6968	\$0.7148	\$0.7332	\$0.7698	\$0.8094	\$0.0396	5.14%

## SAANICH PENINSULA WATER SUPPLY

### Summary of Supply Water Rates to Participating Municipalities

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Change</u>	<u>% change</u>
<b>Retail (direct) water rate</b>							
Unit cost per cu.m.	\$ 1.0223	\$ 1.0536	\$ 1.0886	\$ 1.1439	1.1978	\$ 0.0539	4.71%

### Retail Water Rate Increase Impact on Participating Municipalities Water Bill

Average consumption: 235.0 cubic meters

	<u>Year</u>	<u>Annual charge</u>	<u>2024 Annual Change \$</u>
<u>Charge for Twelve Months Consumption</u>			
Average Consumption	2023	\$ 268.82	
	2024	\$ 281.48	\$ 12.67
Half Average Consumption	2023	\$ 134.41	
	2024	\$ 140.74	\$ 6.33
Twice Average Consumption	2023	\$ 537.63	
	2024	\$ 562.97	\$ 25.34

Program Group: CRD-Saanich Peninsula Water Supply	2024 BUDGET REQUEST						FUTURE PROJECTIONS			
	2023 BOARD BUDGET 2	2023 ESTIMATED ACTUAL 3	2024 CORE BUDGET 4	2024 ONGOING 5	2024 ONE-TIME 6	TOTAL (COL 4, 5 & 6) 7	2025 8	2026 9	2027 10	2028 11
<b>SUMMARY</b>										
1										
<b>OPERATING EXPENDITURES:</b>										
ALLOCATION - OPERATIONS	1,110,880	1,084,410	1,171,082	-	-	1,171,082	1,194,502	1,218,388	1,242,755	1,267,612
UTILITIES	225,129	225,000	231,205	-	-	231,205	237,443	242,191	247,035	251,976
OPERATING - OTHER COSTS	183,910	208,790	189,748	-	-	189,748	194,541	200,100	205,531	211,153
ALLOCATION - STANDARD OVERHEAD	160,795	160,795	168,071	-	-	168,071	171,433	174,861	178,359	181,926
<b>TOTAL OPERATING EXPENDITURES</b>	<b>1,680,714</b>	<b>1,678,995</b>	<b>1,760,106</b>	<b>-</b>	<b>-</b>	<b>1,760,106</b>	<b>1,797,919</b>	<b>1,835,540</b>	<b>1,873,680</b>	<b>1,912,667</b>
*Percentage increase over prior year board budget			4.72%			4.72%	2.15%	2.09%	2.08%	2.08%
<b>TOTAL BULK WATER EXPENDITURES</b>	<b>4,876,683</b>	<b>5,080,680</b>	<b>5,180,160</b>	<b>-</b>	<b>-</b>	<b>5,180,160</b>	<b>5,618,595</b>	<b>6,093,100</b>	<b>6,730,125</b>	<b>7,470,540</b>
<b>CAPITAL EXPENDITURES &amp; TRANSFERS</b>										
TRANSFER TO CAPITAL RESERVE FUND	800,000	900,565	800,000	-	-	800,000	400,000	400,000	400,000	400,000
TRANSFER TO EQUIPMENT REPLACEMENT FUND	50,000	50,000	50,000	-	-	50,000	100,000	150,000	150,000	200,000
<b>TOTAL CAPITAL EXPENDITURES &amp; TRANSFERS</b>	<b>850,000</b>	<b>950,565</b>	<b>850,000</b>	<b>-</b>	<b>-</b>	<b>850,000</b>	<b>500,000</b>	<b>550,000</b>	<b>550,000</b>	<b>600,000</b>
<b>DEBT SERVICING</b>										
DEBT-INTEREST & PRINCIPAL	-	-	102,000	-	-	102,000	674,950	953,426	1,142,301	1,186,796
<b>TOTAL DEBT EXPENDITURES</b>	<b>-</b>	<b>-</b>	<b>102,000</b>	<b>-</b>	<b>-</b>	<b>102,000</b>	<b>674,950</b>	<b>953,426</b>	<b>1,142,301</b>	<b>1,186,796</b>
<b>TOTAL EXPENDITURES</b>	<b>7,407,397</b>	<b>7,710,240</b>	<b>7,892,266</b>	<b>-</b>	<b>-</b>	<b>7,892,266</b>	<b>8,591,464</b>	<b>9,432,066</b>	<b>10,296,106</b>	<b>11,170,003</b>
<b>SOURCES OF FUNDING-OPERATIONS</b>										
REVENUE -WATER SALES	(7,246,597)	(7,549,740)	(7,665,966)	-	-	(7,665,966)	(8,386,794)	(9,223,666)	(10,108,094)	(10,981,330)
REVENUE -OTHER	(160,800)	(160,500)	(226,300)	-	-	(226,300)	(204,670)	(208,400)	(188,012)	(188,673)
<b>TOTAL SOURCES OF FUNDING FROM OPERATIONS</b>	<b>(7,407,397)</b>	<b>(7,710,240)</b>	<b>(7,892,266)</b>	<b>-</b>	<b>-</b>	<b>(7,892,266)</b>	<b>(8,591,464)</b>	<b>(9,432,066)</b>	<b>(10,296,106)</b>	<b>(11,170,003)</b>
<b>SOURCES OF FUNDING-REQUISITION</b>										
PROPERTY TAX REQUISITION FOR DEBT	-	-	-	-	-	-	-	-	-	-
<b>TOTAL REQUISITION</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
TRANSFER FROM PRIOR YEAR	-	-	-	-	-	-	-	-	-	-
TRANSFER TO FOLLOWING YEAR	-	-	-	-	-	-	-	-	-	-
<b>TOTAL CARRY FORWARD (SURPLUS)/ DEFICIT</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL SOURCES OF ALL FUNDING</b>	<b>(7,407,397)</b>	<b>(7,710,240)</b>	<b>(7,892,266)</b>	<b>-</b>	<b>-</b>	<b>(7,892,266)</b>	<b>(8,591,464)</b>	<b>(9,432,066)</b>	<b>(10,296,106)</b>	<b>(11,170,003)</b>
Percentage increase over prior year's board budget			6.55%			6.55%	8.86%	9.78%	9.16%	8.49%
Water Rate \$ per cu. m.	\$ 1.1439					\$ 1.1978				
Percentage increase	5.08%					4.71%				

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2024 to 2028**

<b>Service No.</b>	<b>2.610</b>	<b>Carry Forward from 2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>TOTAL</b>
	<b>Saanich Peninsula Water Supply</b>							

**EXPENDITURE**

Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$450,000	\$800,000	\$300,000	\$300,000	\$100,000	\$0	\$1,500,000	
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Engineered Structures	\$3,555,000	\$10,355,000	\$4,404,000	\$3,400,000	\$1,000,000	\$850,000	\$20,009,000	
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	<b>\$4,005,000</b>	<b>\$11,155,000</b>	<b>\$4,704,000</b>	<b>\$3,700,000</b>	<b>\$1,100,000</b>	<b>\$850,000</b>	<b>\$21,509,000</b>	

**SOURCE OF FUNDS**

Capital Funds on Hand	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debenture Debt (New Debt Only)	\$0	\$6,000,000	\$3,000,000	\$3,000,000	\$600,000	\$300,000	\$12,900,000
Equipment Replacement Fund	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$4,005,000	\$4,955,000	\$1,504,000	\$500,000	\$300,000	\$350,000	\$7,609,000
	<b>\$4,005,000</b>	<b>\$11,155,000</b>	<b>\$4,704,000</b>	<b>\$3,700,000</b>	<b>\$1,100,000</b>	<b>\$850,000</b>	<b>\$21,509,000</b>

CAPITAL REGIONAL DISTRICT

5 YEAR CAPITAL PLAN

2024 - 2028

Service #: 2.610  
 Service Name: Saanich Peninsula Water Supply

				PROJECT BUDGET & SCHEDULE									
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward	2024	2025	2026	2027	2028	5 - Year Total
<b>SYSTEM UPGRADES AND REPLACEMENTS</b>													
18-04	New	Post Disaster Emergency Water Supply	Identify and procure emergency systems for post disaster preparedness	\$ 1,200,000	S	Res	\$ 100,000	\$ 250,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 850,000
20-02	New	Hamsterly Pump Station Backup Power Generator	Addition of a backup power generator at the Hamsterly Pump Station	\$ 1,100,000	S	Res	\$ 750,000	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ 750,000
21-01	New	Level of Service Agreement	Determine and develop appropriate level of service agreements with the participating municipalities for water supply.	\$ 75,000	S	Res	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000
21-04	Renewal	SCADA Upgrades	SCADA upgrades and planning in conjunction with the Juan de Fuca Water Distribution, Saanich Peninsula Water and Wastewater, and Core Area Wastewater Services.	\$ 1,150,000	E	Res	\$ 450,000	\$ 650,000	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ 1,050,000
21-05	Renewal	SPW System Upgrade and Expansion	Upgrade vulnerable sections of the SPW system to a resilient system better able to withstand a seismic event, and extend sections of the system to have dual feed redundancy. Vulnerable sections are cement pipe material which are susceptible to failure during a seismic event. This is part of a project in partner with the RWS system.	\$ 14,700,000	S	Res	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000
21-05					S	Debt	\$ -	\$ 6,000,000	\$ 3,000,000	\$ 3,000,000	\$ 600,000	\$ 300,000	\$ 12,900,000
22-01	Study	Water Strategic Plan Update	Update the strategic plan to inform future works and identify hydraulic deficiencies.	\$ 116,972	S	Res	\$ 77,981	\$ 77,981	\$ -	\$ -	\$ -	\$ -	\$ 77,981
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.	\$ 450,000	E	Res	\$ -	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ 450,000
22-03	New	Keating Cross Road Water Main	MoTI driven project, MoTI has expectation of CRD contributing (TBD), approximately 500m of 500mm DI. agreement not in place yet	\$ 1,000,000	S	Res	\$ 990,000	\$ 990,000	\$ -	\$ -	\$ -	\$ -	\$ 990,000
23-01	Study	DCC Program Update	5-year update of the DCC program.	\$ 500	S	Res	\$ 400	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ 400
23-04	Renewal	RTU & PLC Upgrade and Replacement	Upgrade RTU programming within the SPWS service, upgrade the PLC at the Deep Cove pump station, and upgrade the telecommunications from the Hamsterly PS.	\$ 140,000	E	ERF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25-01	New	Hamsterly Pump Station Capacity Upgrade	Increase the capacity of the Hamsterly Pump Station to address increased water demand. This is the service's contribution to the DCC project.	\$ 6,040	S	Res	\$ -	\$ -	\$ 6,040	\$ -	\$ -	\$ -	\$ 6,040
24-01	Decommission	Dean Park Road Well Decommissioning	Decommissioning of a groundwater well at 1557 Dean Park Road.	\$ 250,000	S	Res	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ 150,000	\$ 250,000
24-02	New	Reservoir Seismic Isolation Valves	Addition of seismic isolation valves at various Saanich Peninsula tanks.	\$ 800,000	S	Res	\$ -	\$ 400,000	\$ 400,000	\$ -	\$ -	\$ -	\$ 800,000
26-01	Decommission	Decommissioning of Various Sites/Components	Various existing facilities within SPWS have redundant valves and piping that require removal.	\$ 150,000	S	Res	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 150,000
<b>Sub-Total System Upgrades and Replacements</b>				<b>\$ 21,138,512</b>			<b>\$ 3,943,381</b>	<b>\$ 10,893,381</b>	<b>\$ 3,906,040</b>	<b>\$ 3,500,000</b>	<b>\$ 900,000</b>	<b>\$ 650,000</b>	<b>\$ 19,849,421</b>
<b>ANNUAL PROVISIONAL ITEMS</b>													
24-03	Renewal	Pump Station, Meter Station, Valve Repair, Transmission Main & Storage Tank Repairs, Replacements and decommissioning.	Planned and unplanned infrastructure and equipment renewal.	\$ 1,000,000	S	ERF	\$ -	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,000,000
<b>Sub-Total Annual Provisional Items</b>				<b>\$ 1,000,000</b>			<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 1,000,000</b>
<b>DEVELOPMENT COST CHARGE (DCC) PROGRAM</b>													
22-01	New	Water Strategic Plan Update	Update the strategic plan to inform future works and identify hydraulic deficiencies.	\$ 33,028	S	Res	\$ 22,019	\$ 22,019	\$ -	\$ -	\$ -	\$ -	\$ 22,019
23-01	New	DCC Program Update	5-year update of the DCC program.	\$ 49,500	S	Res	\$ 39,600	\$ 39,600	\$ -	\$ -	\$ -	\$ -	\$ 39,600
25-01	New	Hamsterly Pump Station Capacity Upgrade	Increase the capacity of the Hamsterly Pump Station to address increased water demand.	\$ 597,960	S	Res	\$ -	\$ -	\$ 597,960	\$ -	\$ -	\$ -	\$ 597,960
<b>Sub-Total Development Cost Charge (DCC) Program</b>				<b>\$ 680,488</b>			<b>\$ 61,619</b>	<b>\$ 61,619</b>	<b>\$ 597,960</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 659,579</b>
<b>x GRAND TOTAL</b>				<b>\$ 22,819,000</b>			<b>\$ 4,005,000</b>	<b>\$ 11,155,000</b>	<b>\$ 4,704,000</b>	<b>\$ 3,700,000</b>	<b>\$ 1,100,000</b>	<b>\$ 850,000</b>	<b>\$ 21,509,000</b>
\$ -													
\$ -													

Service: **2.610** **Saanich Peninsula Water Supply**

<b>Project Number</b>	18-04	<b>Capital Project Title</b>	Post Disaster Emergency Water Supply	<b>Capital Project Description</b>	Identify and procure emergency systems for post disaster preparedness
<b>Project Rationale</b>	In the event of a disaster, it is proposed to have in place the ability to source, treat (if required) and distribute drinking water during the initial and sustained response and recovery phases to the public. This item will see the study of the issue in 2017 and 2018 with the anticipated purchase of one or more emergency distribution systems in 2018 and beyond. Initial investigation has highlighted areas, such as having hardened hydrants/standpipes that the CRD should be investing in. Additional funds are required to start implementing these additional works.				

<b>Project Number</b>	20-02	<b>Capital Project Title</b>	Hamsterly Pump Station Backup Power Generator	<b>Capital Project Description</b>	Addition of a backup power generator at the Hamsterly Pump Station
<b>Project Rationale</b>	From the 2018 DCC Update, KWL identified that the addition of backup power at the Hamsterly Pump Station is required. Funds are required to design and construct backup power for the Hamsterly Pump Station.				

<b>Project Number</b>	21-01	<b>Capital Project Title</b>	Level of Service Agreement	<b>Capital Project Description</b>	Determine and develop appropriate level of service agreements with the participating municipalities for water supply.
<b>Project Rationale</b>	The SPW Service has numerous transfer points with the participating municipalities. Funding is required to determine the pressure and flow at transfer points with the participating municipalities for water supply.				

Service: **2.610** **Saanich Peninsula Water Supply**

<b>Project Number</b>	21-04	<b>Capital Project Title</b>	SCADA Upgrades	<b>Capital Project Description</b>	SCADA upgrades and planning in conjunction with the Juan de Fuca Water Distribution, Saanich Peninsula Water and Wastewater, and Core Area Wastewater Services.
<b>Project Rationale</b> The existing SCADA system is nearing end of life for equipment. The SCADA system provides vital operational monitoring and control information for the Saanich Peninsula Water System. Additionally, the Juan de Fuca Water Distribution, Saanich Peninsula Wastewater, Regional Water System, and Core Area Wastewater services require similar upgrades and integration. This project will be carried out with the other services so that an fully integrated system can be implemented.					

<b>Project Number</b>	21-05	<b>Capital Project Title</b>	SPW System Upgrade and Expansion	<b>Capital Project Description</b>	Upgrade vulnerable sections of the SPW system to a resilient system better able to withstand a seismic event, and extend sections of the system to have dual feed redundancy. Vulnerable sections are cement
<b>Project Rationale</b> This project is for design and replacement of cement pipe sections that are susceptible to failure during a seismic event. Funds are required for detailed design and construction of the Bear Hill section of transmission main from Mt Newton to the Dean Park Lower tank along East Saanich Road including a new PRV, detailed design of the transmission main from McTavish Tank to Mills Road. The budget breakdown of the works: Bear Hill Section design and construction of new transmission main and PRV station \$14,200,000; conceptual and detailed design of the transmission main from Mctavish Reservoir to Mills Road \$500,000. Budget also includes preliminary design for replacement of permastrand and AC pipe between Dean Park Feeder Main between Dean Park Lower and Dean Park Middle Tanks.					

<b>Project Number</b>	22-01	<b>Capital Project Title</b>	Water Strategic Plan Update	<b>Capital Project Description</b>	Update the strategic plan to inform future works and identify hydraulic deficiencies.
<b>Project Rationale</b> A water distribution system changes with development demand. A periodic update of the strategic plan to identify hydraulic deficiencies and inform future works is periodically required to ensure the level of service.					

<b>Project Number</b>	22-02	<b>Capital Project Title</b>	Microwave Radio Upgrades	<b>Capital Project Description</b>	To provide a high bandwidth communications backbone to the SPW/SPWW systems, a microwave communications system will be installed.
<b>Project Rationale</b> 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: **2.610** **Saanich Peninsula Water Supply**

**Project Number** 22-03 **Capital Project Title** Keating Cross Road Water Main **Capital Project Description** MoTI driven project, MoTI has expectation of CRD contributing (TBD), approximately 500m of 500mm DI, agreement not in place yet

**Project Rationale** MoTI driven project, MoTI has expectation of CRD contributing (TBD), approximately 500m of 500mm DI

**Project Number** 23-01 **Capital Project Title** DCC Program Update **Capital Project Description** 5-year update of the DCC program.

**Project Rationale** Review of the DCC program and identify any projects that may require a full DCC update.

**Project Number** 23-04 **Capital Project Title** RTU & PLC Upgrade and Replacement **Capital Project Description** Upgrade RTU programming within the SPWS service, upgrade the PLC at the Deep Cove pump station, and upgrade the telecommunications from the Hamsterly PS.

**Project Rationale** Equipment and programming upgrades are required system wide but specifically at the Deep Cove and Hamsterly pump stations to deal with equipment and technology nearing end of life.

**Project Number** 25-01 **Capital Project Title** Hamsterly Pump Station Capacity Upgrade **Capital Project Description** Increase the capacity of the Hamsterly Pump Station to address increased water demand. This is the service's contribution to the DCC project.

**Project Rationale** In the 2018 KWL DCC Update report, the Hamsterly Pump Station was identified to require addition of a third pump to meet increased water demand. This is for the Saanich Peninsula Water service's contribution to the DCC project. Funds are required for the design and construction of the additional pump.

Service: **2.610** **Saanich Peninsula Water Supply**

<b>Project Number</b>	24-01	<b>Capital Project Title</b>	Dean Park Road Well Decommissioning	<b>Capital Project Description</b>	Decommissioning of a groundwater well at 1557 Dean Park Road.
<b>Project Rationale</b>	Decommissioning of a former groundwater well at 1557 Dean Park Road. Initial decommissioning may only including well sealing for compliance with provincial regulations but eventually the electrical and concrete structure will also need to be decommissioned.				

<b>Project Number</b>	24-02	<b>Capital Project Title</b>	Reservoir Seismic Isolation Valves	<b>Capital Project Description</b>	Addition of seismic isolation valves at various Saanich Peninsula tanks.
<b>Project Rationale</b>	Seismic valve upgrades at Cloake Hill, Bear Hill, Dawson and Lower Dean Tanks.				

<b>Project Number</b>	26-01	<b>Capital Project Title</b>	Decommissioning of Various Sites/Components	<b>Capital Project Description</b>	Various existing facilities within SPWS have redundant valves and piping that require removal.
<b>Project Rationale</b>	Various decommissioning. Also see See SPW020SOW and Drinking Water Safety Plan DWSP-SP-003.				

<b>Project Number</b>	24-03	<b>Capital Project Title</b>	Pump Station, Meter Station, Valve Repair, Transmission Main & Storage Tank Repairs, Replacements and decommissioning.	<b>Capital Project Description</b>	Planned and unplanned infrastructure and equipment renewal.
<b>Project Rationale</b>	Annual Provisional Account to address planned and unplanned infrastructure and equipment renewals.				

<b>Project Number</b>		<b>Capital Project Title</b>	#N/A	<b>Capital Project Description</b>	#N/A
<b>Project Rationale</b>					

**2.610 Saanich Peninsula Water  
Summary Schedule  
2024 - 2028 Financial Plan**

**Asset Profile**

**Saanich Peninsula Water**

One of the 16 CRD drinking water systems across the region, Saanich Peninsula Water Supply obtains treated drinking water from the Regional Water Supply System and is responsible for the bulk trunk water supply systems for Central Saanich, Sidney & North Saanich. Assets include land, 46 kilometres of water supply mains, nine balancing reservoirs, nine pumping stations, two pressure reducing stations, nine supply meters and two rechlorination stations.

**Reserve/Fund Summary**

	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
DCC Reserve Account	2,035,605	2,035,605	1,437,645	1,437,645	1,437,645	1,437,645
Equipment Replacement Fund	1,700,620	1,600,620	1,550,620	1,500,620	1,450,620	1,450,620
Capital Reserve	3,128,055	2,978,055	2,074,055	1,974,055	2,074,055	2,124,055
<b>Total</b>	<b>6,864,280</b>	<b>6,614,280</b>	<b>5,062,320</b>	<b>4,912,320</b>	<b>4,962,320</b>	<b>5,012,320</b>

**2.610 Saanich Peninsula Water  
Development Cost Charges  
2024 - 2028 Financial Plan**

**Development Cost Charges Reserve Schedule**

**Reserve Fund: Saanich Peninsula Water Development Cost Charges (Bylaw # 3208)**

Fund: 1009 Fund Center: 101353- DCC Water System only	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
Beginning Balance	2,073,133	2,035,605	2,035,605	1,437,645	1,437,645	1,437,645
Transfers to Reserve						
Transfers from Reserve based on DCC-capital plan	(82,528)	-	(597,960)	-		-
DCC's received from Member Municipalities						
Interest Income*	45,000					
<b>Ending Balance \$</b>	<b>2,035,605</b>	<b>2,035,605</b>	<b>1,437,645</b>	<b>1,437,645</b>	<b>1,437,645</b>	<b>1,437,645</b>

General Comments:

Saanich Peninsula Water Development Cost Charges (DCC's) was adopted in 2005 for the purpose of providing funds to assist with the capital costs of providing, constructing, altering or expanding the Districts water & wastewater systems that services the Member Municipalites.

The above cash flow only reflects DCC Reserve information for Water System only (Wastewater's information will be provided in the Wastewater budgets). These Reserve funds are received from member municipalities as Development Cost Charges (DCC's) to provide for the capital costs of water capacity system improvements within the service areas.

In December 2018 the bylaw was ammended to remove Development Cost Charges on new projects to recognize that the fund's balance exceeded the total of current development projects.

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

2.610 Saanich Peninsula Water  
Equipment Replacement Reserve Schedule  
2024 - 2028 Financial Plan

**Equipment Replacement Reserve Schedule**

**Reserve Fund:** Saanich Peninsula Water-Equipment Replacement Reserve (covered by CRD-ERF Bylaw)

Fund: 1022 Fund Center: 101452	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
Beginning Balance	1,857,620	1,700,620	1,600,620	1,550,620	1,500,620	1,450,620
Equipment purchases (Based on Capital Plan)	(220,000)	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)
Transfer from Operating Budget	50,000	100,000	150,000	150,000	150,000	200,000
Interest Income*	13,000					
<b>Ending Balance \$</b>	<b>1,700,620</b>	<b>1,600,620</b>	<b>1,550,620</b>	<b>1,500,620</b>	<b>1,450,620</b>	<b>1,450,620</b>

General Comments: The fund is used to replace water system infrastructure throughout the system as failing components are identified and not funded through operating budgets.

\* 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.

2.610 Saanich Peninsula Water  
 Capital Reserve Fund  
 2024 - 2028 Financial Plan

**Capital Reserve Fund Schedule**

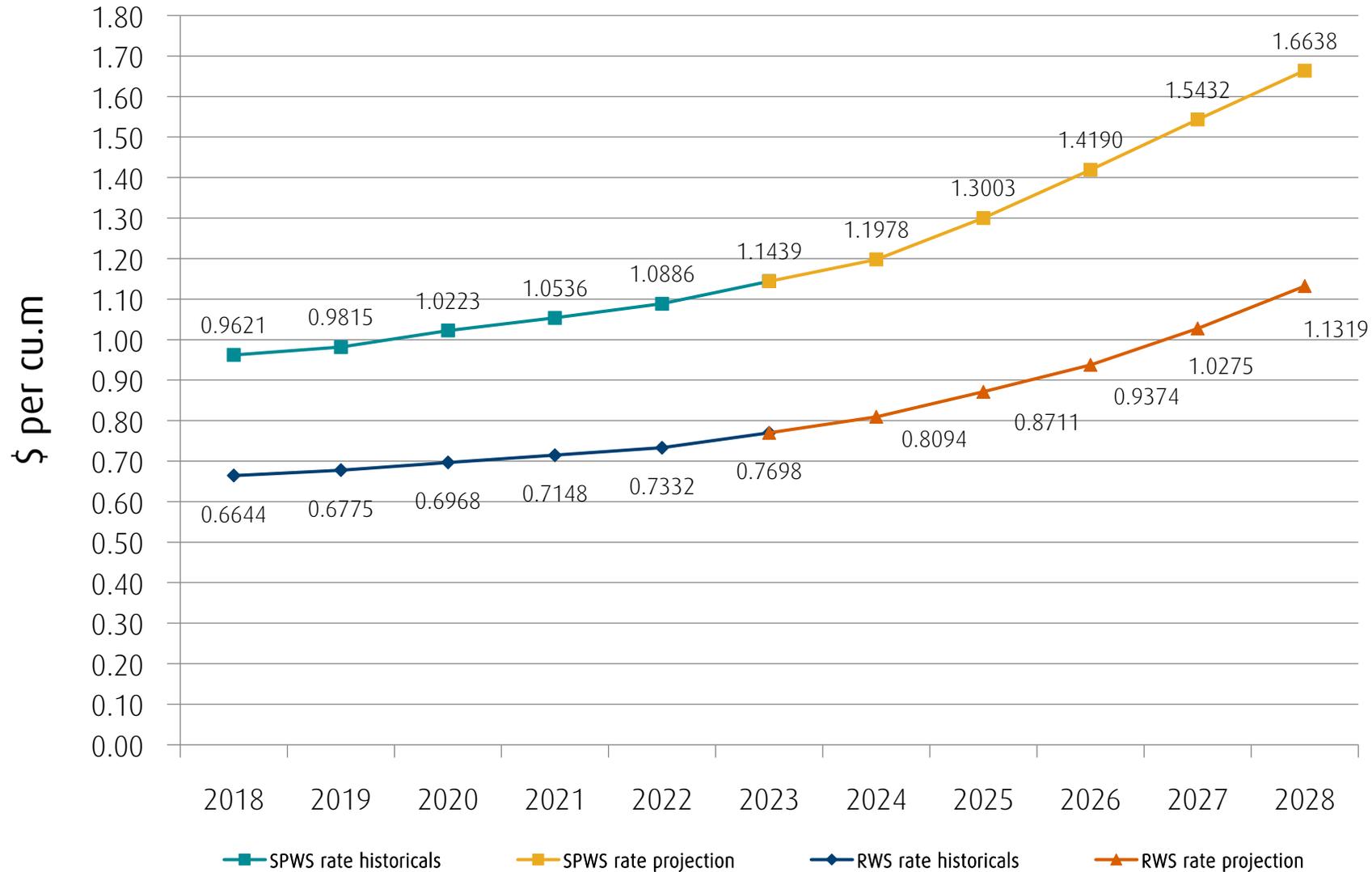
**Reserve Fund: Saanich Peninsula Water Capital Reserve Fund ( Bylaw #1397)**

Fund: 1009 Fund Center: 102159	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
<b>Beginning Balance</b>	3,330,527	3,128,055	2,978,055	2,074,055	1,974,055	2,074,055
<b>Transfers from Reserve based on capital plan</b>	(1,092,472)	(950,000)	(1,504,000)	(500,000)	(300,000)	(350,000)
<b>Transfer from Capital Reserve (Unspent)</b>	-	-	-	-	-	-
<b>Transfer from Other (MFA etc.)</b>	-	-	-	-	-	-
Transfer unspent capital funds from LA funds						
<b>Transfer from Operating Budget</b>	800,000	800,000	600,000	400,000	400,000	400,000
<b>Interest Income*</b>	90,000					
<b>Ending Balance \$</b>	<b>3,128,055</b>	<b>2,978,055</b>	<b>2,074,055</b>	<b>1,974,055</b>	<b>2,074,055</b>	<b>2,124,055</b>

General Comments:  
 Saanich Peninsula Water Capital Reserve Fund was adopted in 1985 for the purpose of capital payments including planning, engineering and legal costs for providing, latering or expanding water system infrastructure related to the Saanich Peninsula Water Supply System.  
  
 The fund is used for the purpose of funding the Service Capital infrastructure related directly or indirectly to water facilities, (excluding DCC) capital expenditures.

\* 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 Water Rate and Regional Water Supply Rate, History and Projection



REGIONAL WATER SUPPLY COMMISSION  
Agricultural Water Rate Funding Comparisons 2011 - 2022

	No. of AR Accounts	No. of AG Accounts	AR Volume m3	AG Volume m3	Avg AR Volume m3 (Vol/Accts)	Avg AG Volume m3	Agri Rate Consumption Costs	Agri Fixed Charge Costs	Total Agri Subsidy Paid out (Cons + Fixed)	Avg Agri Cost \$ (Paid/Accts)	%age of Total Paid out	Rate Differential		
												Municipal Rate m3 A	Agri Rate m3 B	Muni-CRD Diff A - B
<b>Western Communities &amp; Sooke *</b>														
2022	85	17	45,564	37,292	536	2,194	\$ 181,612	\$ -	\$ 181,612	\$ 1,781	10.6%	\$ 2,4024	\$ 0.2105	\$ 2,1919
2021	84	16	53,773	63,222	640	3,951	\$ 245,409	\$ -	\$ 245,409	\$ 2,454	12.3%	\$ 2,3081	\$ 0.2105	\$ 2,0976
2020	84	15	42,432	51,118	505	3,408	\$ 187,605	\$ -	\$ 187,605	\$ 1,895	11.9%	\$ 2,2159	\$ 0.2105	\$ 2,0054
2019	86	14	36,598	50,277	426	3,591	\$ 165,297	\$ -	\$ 165,297	\$ 1,653	11.1%	\$ 2,1132	\$ 0.2105	\$ 1,9027
2018	95	18	40,657	19,669	428	1,093	\$ 112,411	\$ -	\$ 112,411	\$ 995	7.9%	\$ 2,0739	\$ 0.2105	\$ 1,8634
2017	81	11	33,458	11,628	413	1,057	\$ 76,754	\$ -	\$ 76,754	\$ 834	5.6%	\$ 1,9129	\$ 0.2105	\$ 1,7024
2016	80	11	41,248	8,652	516	787	\$ 84,950	\$ -	\$ 84,950	\$ 934	5.9%	\$ 1,9129	\$ 0.2105	\$ 1,7024
2015	79	11	33,537	7,078	425	643	\$ 64,968	\$ -	\$ 64,968	\$ 722	5.1%	\$ 1,8101	\$ 0.2105	\$ 1,5996
2014	79	11	29,419	9,074	372	825	\$ 60,769	\$ -	\$ 60,769	\$ 675	5.6%	\$ 1,7892	\$ 0.2105	\$ 1,5787
2013	80	11	25,532	5,578	319	507	\$ 46,438	\$ -	\$ 46,438	\$ 510	4.7%	\$ 1,7032	\$ 0.2105	\$ 1,4927
2012	79	13	23,617	5,932	299	456	\$ 40,828	\$ -	\$ 40,828	\$ 444	4.3%	\$ 1,5922	\$ 0.2105	\$ 1,3817
2011	75	11	27,910	4,893	372	445	\$ 43,641	\$ -	\$ 43,641	\$ 507	5.2%	\$ 1,5409	\$ 0.2126	\$ 1,3283
<b>Central Saanich</b>														
2022	277	50	398,069	279,385	1,437	5,588	\$ 1,005,694	\$ 7,050	\$ 1,012,744	\$ 3,097	59.3%	\$ 1,8600	\$ 0.2105	\$ 1,6495
2021	277	50	466,809	307,970	1,685	6,159	\$ 1,150,198	\$ 7,050	\$ 1,157,248	\$ 3,539	57.9%	\$ 1,8600	\$ 0.2105	\$ 1,6495
2020	278	49	375,646	233,214	1,351	4,759	\$ 873,579	\$ 6,768	\$ 880,347	\$ 2,692	56.0%	\$ 1,8047	\$ 0.2105	\$ 1,5942
2019	276	47	421,804	210,499	1,528	4,479	\$ 862,430	\$ 2,162	\$ 864,592	\$ 2,677	58.0%	\$ 1,7260	\$ 0.2105	\$ 1,5155
2018	278	49	378,593	297,433	1,362	6,070	\$ 866,699	\$ 7,003	\$ 873,702	\$ 2,672	61.3%	\$ 1,6350	\$ 0.2105	\$ 1,4245
2017	296	49	398,087	298,522	1,345	6,092	\$ 792,125	\$ 7,003	\$ 799,128	\$ 2,316	58.7%	\$ 1,5575	\$ 0.2105	\$ 1,3470
2016	297	51	446,241	303,419	1,502	5,949	\$ 879,396	\$ 7,191	\$ 886,587	\$ 2,548	61.1%	\$ 1,5139	\$ 0.2105	\$ 1,3034
2015	294	51	412,060	246,292	1,402	4,829	\$ 739,282	\$ 7,144	\$ 746,426	\$ 2,164	58.4%	\$ 1,4582	\$ 0.2105	\$ 1,2477
2014	294	49	361,801	190,895	1,231	3,896	\$ 596,515	\$ 6,808	\$ 603,323	\$ 1,759	55.7%	\$ 1,4033	\$ 0.2105	\$ 1,1928
2013	296	45	321,518	194,848	1,086	4,330	\$ 542,837	\$ 4,186	\$ 547,023	\$ 1,604	55.7%	\$ 1,3799	\$ 0.2105	\$ 1,0525
2012	280	41	325,663	210,906	1,163	5,144	\$ 518,454	\$ 5,658	\$ 524,112	\$ 1,633	55.6%	\$ 1,2841	\$ 0.2105	\$ 0,9662
2011	210	38	312,702	169,206	1,489	4,453	\$ 462,183	\$ 5,244	\$ 467,427	\$ 1,885	56.1%	\$ 1,2867	\$ 0.2126	\$ 0,9667
<b>North Saanich **</b>														
2022	107	19	52,167	107,838	488	5,676	\$ 235,367	\$ -	\$ 235,367	\$ 1,868	13.8%	\$ 1,6815	\$ 0.2105	\$ 1,4710
2021	105	18	62,904	126,579	599	7,032	\$ 265,276	\$ -	\$ 265,276	\$ 2,157	13.3%	\$ 1,6105	\$ 0.2105	\$ 1,4000
2020	102	16	57,433	108,453	563	6,778	\$ 223,532	\$ -	\$ 223,532	\$ 1,894	14.2%	\$ 1,5580	\$ 0.2105	\$ 1,3475
2019	94	15	59,278	95,030	620	6,335	\$ 201,370	\$ -	\$ 201,370	\$ 1,847	13.5%	\$ 1,5240	\$ 0.2105	\$ 1,3135
2018	100	16	57,574	70,726	976	4,420	\$ 220,982	\$ -	\$ 220,982	\$ 1,905	15.5%	\$ 1,5240	\$ 0.2105	\$ 1,3135
2017	100	13	151,773	53,551	1,518	4,119	\$ 245,456	\$ -	\$ 245,456	\$ 2,172	18.0%	\$ 1,4643	\$ 0.2105	\$ 1,2538
2016	100	12	148,450	36,774	1,485	3,065	\$ 230,697	\$ -	\$ 230,697	\$ 2,060	15.9%	\$ 1,4560	\$ 0.2105	\$ 1,2455
2015	106	14	151,656	38,066	1,431	2,719	\$ 230,948	\$ -	\$ 230,948	\$ 1,925	18.1%	\$ 1,4278	\$ 0.2105	\$ 1,2173
2014	98	14	133,853	30,372	1,366	2,169	\$ 194,919	\$ -	\$ 194,919	\$ 1,740	18.0%	\$ 1,3974	\$ 0.2105	\$ 1,1869
2013	102	13	141,845	30,647	1,391	2,357	\$ 200,004	\$ -	\$ 200,004	\$ 1,739	20.4%	\$ 1,3700	\$ 0.2105	\$ 1,1595
2012	99	13	117,497	45,227	1,187	3,479	\$ 188,679	\$ -	\$ 188,679	\$ 1,685	20.0%	\$ 1,3700	\$ 0.2105	\$ 1,1595
2011	101	13	106,393	34,921	1,053	2,686	\$ 163,558	\$ -	\$ 163,558	\$ 1,435	19.6%	\$ 1,3700	\$ 0.2126	\$ 1,1574
<b>Saanich</b>														
2022	66	56	36,146	129,467	548	2,312	\$ 267,879	\$ 11,330	\$ 279,209	\$ 2,289	16.3%	\$ 1,8280	\$ 0.2105	\$ 1,6175
2021	74	55	49,933	158,309	675	2,878	\$ 318,923	\$ 11,050	\$ 329,973	\$ 2,558	16.5%	\$ 1,7420	\$ 0.2105	\$ 1,5315
2020	68	53	40,416	144,443	594	2,725	\$ 268,877	\$ 10,867	\$ 279,745	\$ 2,312	17.8%	\$ 1,6650	\$ 0.2105	\$ 1,4545
2019	68	51	37,086	140,512	545	2,755	\$ 249,436	\$ 10,278	\$ 259,714	\$ 2,182	17.4%	\$ 1,6150	\$ 0.2105	\$ 1,4045
2018	70	49	37,503	111,896	536	2,284	\$ 208,786	\$ 9,996	\$ 218,782	\$ 1,839	15.3%	\$ 1,5910	\$ 0.2105	\$ 1,3805
2017	80	50	38,201	132,092	478	2,642	\$ 229,604	\$ 9,719	\$ 239,324	\$ 1,841	17.6%	\$ 1,5600	\$ 0.2105	\$ 1,3495
2016	71	53	36,409	139,764	513	2,637	\$ 237,745	\$ 10,056	\$ 247,802	\$ 1,998	17.1%	\$ 1,5600	\$ 0.2105	\$ 1,3495
2015	75	51	74,841	129,225	998	2,534	\$ 226,276	\$ 9,727	\$ 236,003	\$ 1,873	18.5%	\$ 1,5420	\$ 0.2105	\$ 1,3315
2014	72	53	46,230	177,633	642	3,352	\$ 213,981	\$ 9,883	\$ 223,863	\$ 1,791	20.7%	\$ 1,4560	\$ 0.2105	\$ 1,2455
2013	65	50	35,745	122,456	550	2,449	\$ 179,004	\$ 9,655	\$ 188,659	\$ 1,641	19.2%	\$ 1,3420	\$ 0.2105	\$ 1,1315
2012	68	47	38,212	138,455	562	2,946	\$ 180,466	\$ 9,235	\$ 189,701	\$ 1,650	20.1%	\$ 1,2320	\$ 0.2105	\$ 1,0215
2011	71	46	101,235	121,896	1,426	2,650	\$ 149,584	\$ 9,118	\$ 158,703	\$ 1,356	19.0%	\$ 1,1530	\$ 0.2126	\$ 0,9404
<b>Totals</b>														
2022	535	142	531,946	553,982	994	3,901	\$ 1,690,553	\$ 18,380	\$ 1,708,933	\$ 2,524	100%			
2021	540	139	633,419	656,080	1,173	4,720	\$ 1,979,806	\$ 18,100	\$ 1,997,906	\$ 2,942	100%			
2020	532	133	515,927	537,228	970	4,039	\$ 1,553,594	\$ 17,635	\$ 1,571,229	\$ 2,363	100%			
2019	524	127	553,766	496,318	1,057	3,908	\$ 1,478,533	\$ 12,440	\$ 1,490,973	\$ 2,290	100%			
2018	543	132	554,327	499,724	1,021	3,786	\$ 1,408,879	\$ 16,999	\$ 1,425,878	\$ 2,112	100%			
2017	557	123	621,519	495,793	1,116	4,031	\$ 1,343,940	\$ 16,722	\$ 1,360,663	\$ 2,001	100%			
2016	548	127	672,348	488,609	1,227	3,847	\$ 1,432,788	\$ 17,247	\$ 1,450,036	\$ 2,148	100%			
2015	554	127	672,094	420,661	1,213	3,312	\$ 1,261,474	\$ 16,871	\$ 1,278,344	\$ 1,877	100%			
2014	543	127	571,304	407,973	1,052	3,212	\$ 1,066,184	\$ 16,691	\$ 1,082,874	\$ 1,616	100%			
2013	543	119	524,640	353,529	966	2,971	\$ 968,283	\$ 13,841	\$ 982,124	\$ 1,484	100%			
2012	526	114	504,989	400,520	960	3,513	\$ 928,426	\$ 14,893	\$ 943,320	\$ 1,474	100%			
2011	457	108	548,240	330,916	1,200	3,064	\$ 818,967	\$ 14,362	\$ 833,329	\$ 1,475	100%			

\* Western Communities do not charge a fixed charge

\*\* North Saanich charges the fixed charge on property taxes

\*\*\* AR - Agriculture/Residential customers receive a rebate on consumption over 455 cubic meters annual as the meter feeds both premise and land.  
AG - Agriculture customers receive a rebate on the entire consumption annually as the meter is dedicated only for land.



## Capital Regional District HOTSHEET AND ACTION LIST

### Juan de Fuca Water Distribution Commission

Tuesday, October 3, 2023

12 PM

Goldstream Meeting Room  
479 Island Highway  
Victoria, BC

The following is a quick snapshot of the FINAL Juan de Fuca Water Distribution Commission decisions made at the meeting. The minutes will represent the official record of the meeting. A name has been identified beside each item for further action and follow-up.

#### 3. ADOPTION OF MINUTES

That the minutes of the July 4, 2023 meeting be adopted.

**CARRIED**

#### 7. COMMISSION BUSINESS

##### 7.1 2024 Service Planning – Water

**Recommendation:** The Juan de Fuca Water Distribution Commission recommends the Committee of the Whole recommend to the Capital Regional District Board:  
That Appendix A, Community Need Summary – Water, be approved as presented and form the basis of the 2024-2028 Financial Plan.

**CARRIED**

##### 7.2 Juan de Fuca Water Distribution Service 2024 Operating and Capital Budget

**Recommendation:** The Juan de Fuca Water Distribution Commission recommends the Committee of the Whole recommend that the Capital Regional District Board:

1. Approve the 2024 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2024 Juan de Fuca Water Distribution Service retail water rate of \$2.6927 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
3. Approve the increase of Equipment Replacement Fund expenditure for 2023 to \$1,287,000;
4. Direct staff to balance the 2023 actual operating deficit or surplus on the 2023 capital fund transfer;
5. Direct staff to update carry forward balances in the 2024 Capital Budget for changes after year end; and
6. Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

**CARRIED**

**CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES****Water Watch**

Issued October 10, 2023

**Water Supply System Summary:****1. Useable Volume in Storage:**

Reservoir	October 31 5 Year Ave		October 31/22		October 8/23		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	63,852	14,047	64,026	14,086	60,310	13,268	65.0%
Goldstream	6,113	1,345	7,971	1,754	7,469	1,643	75.3%
Total	69,964	15,392	71,997	15,839	67,779	14,911	66.0%

**2. Average Daily Demand:**

For the month of October	129.1 MLD	28.39 MIGD
For week ending October 08, 2023	127.7 MLD	28.09 MIGD
Max. day October 2023, to date:	138.6 MLD	30.48 MIGD

**3. Average 5 Year Daily Demand for October**

Average (2018 - 2022)	117.7 MLD <sup>1</sup>	25.90 MIGD <sup>2</sup>
-----------------------	------------------------	-------------------------

<sup>1</sup>MLD = Million Litres Per Day      <sup>2</sup>MIGD = Million Imperial Gallons Per Day**4. Rainfall October:**

Average (1914 - 2022):	169.9 mm
Actual Rainfall to Date	11.2 mm (7% of monthly average)

**5. Rainfall: Sep 1- Oct 8**

Average (1914 - 2022):	91.8 mm
2022/2023	40.9 mm (45% of average)

**6. Water Conservation Action Required:**

To avoid possible leaks this spring, now is the time to winterize your sprinkler system.  
Visit our website at [www.crd.bc.ca/water](http://www.crd.bc.ca/water) for more information.

If you require further information, please contact:

Alicia Fraser, P. Eng.  
General Manager, CRD - Integrated Water Services  
or  
Glenn Harris, Ph D., RPBio  
Senior Manager - Environmental Protection

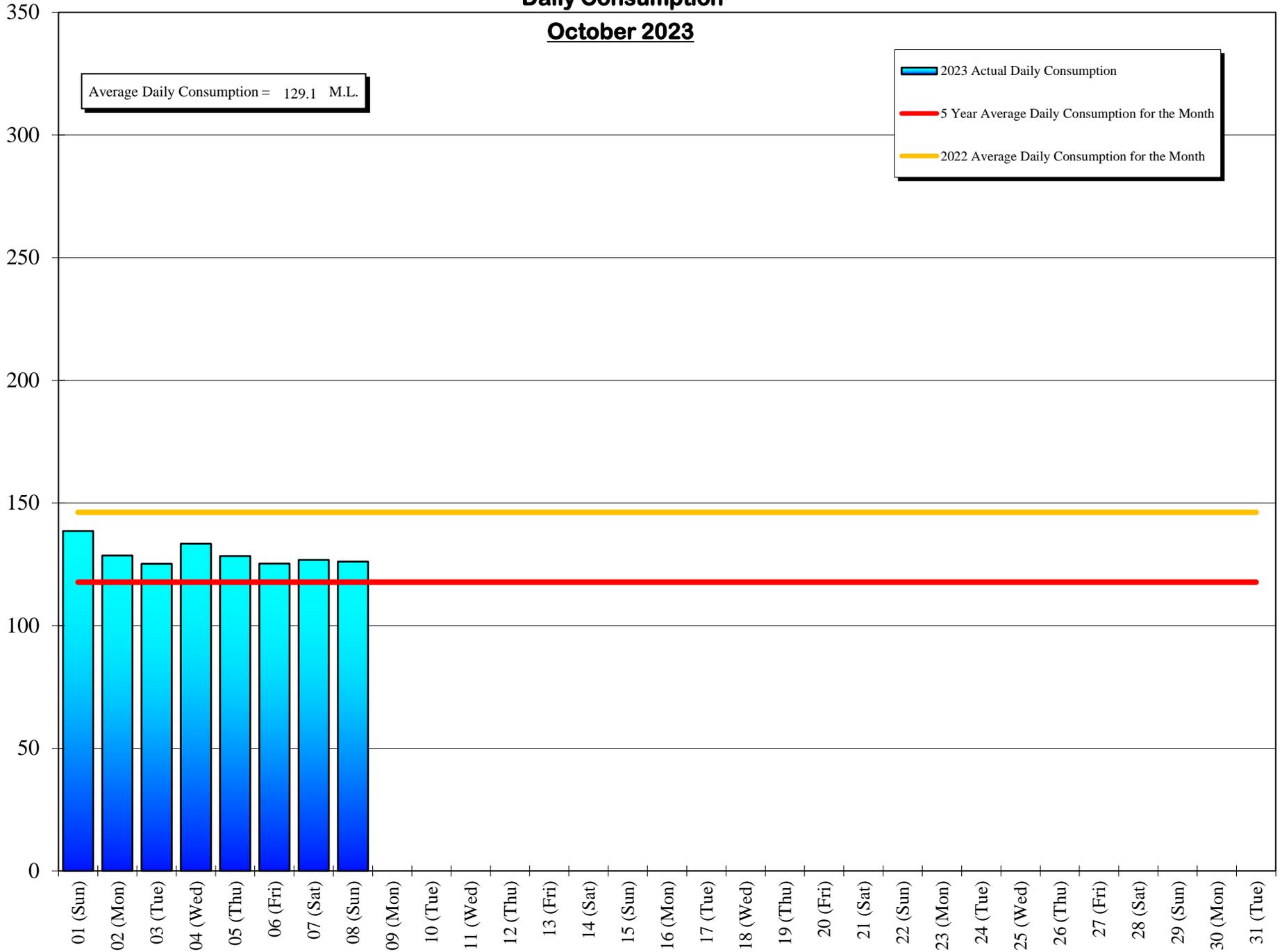
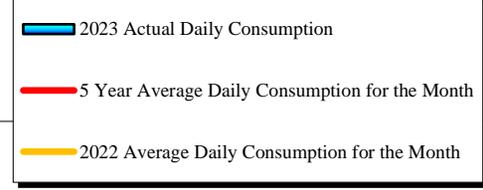
Capital Regional District Integrated Water Services  
479 Island Highway  
Victoria, BC V9B 1H7  
(250) 474-9600

### Daily Consumption

October 2023

Consumption (Million Litres)

Average Daily Consumption = 129.1 M.L.



Day

## Daily Consumptions: - October 2023

Date	Total Consumption		Air Temperature @ Japan Gulch		Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am			
	(ML) <sup>1</sup>	(MIG) <sup>2</sup>	High (°C)	Low (°C)		Rainfall (mm)	Snowfall <sup>3</sup> (mm)	Total Precip.	
01 (Sun)	138.6	<=Max	30.5	18	6	Sunny	0.0	0.0	0.0
02 (Mon)	128.6		28.3	12	10	Cloudy / Showers	11.2	0.0	11.2
03 (Tue)	125.2	<=Min	27.5	16	8	Sunny / P. Cloudy	0.0	0.0	0.0
04 (Wed)	133.4		29.3	18	9	Sunny / P. Cloudy	0.0	0.0	0.0
05 (Thu)	128.4		28.3	17	9	Cloudy / P. Sunny	0.0	0.0	0.0
06 (Fri)	125.3		27.6	22	10	Sunny	0.0	0.0	0.0
07 (Sat)	126.8		27.9	22	11	Sunny	0.0	0.0	0.0
08 (Sun)	126.1		27.7	17	11	Cloudy / P. Sunny	0.0	0.0	0.0
09 (Mon)									
10 (Tue)									
11 (Wed)									
12 (Thu)									
13 (Fri)									
14 (Sat)									
15 (Sun)									
16 (Mon)									
17 (Tue)									
18 (Wed)									
19 (Thu)									
20 (Fri)									
21 (Sat)									
22 (Sun)									
23 (Mon)									
24 (Tue)									
25 (Wed)									
26 (Thu)									
27 (Fri)									
28 (Sat)									
29 (Sun)									
30 (Mon)									
31 (Tue)									
<b>TOTAL</b>	1032.4 ML		227.1 MIG				11.2	0	11.2
<b>MAX</b>	138.6		30.48	22	11		11.2	0	11.2
<b>AVG</b>	129.1		28.39	17.8	9.3		1.4	0	1.4
<b>MIN</b>	125.2		27.53	12	6		0.0	0	0.0

1. ML = Million Litres

2. MIG = Million Imperial Gallons

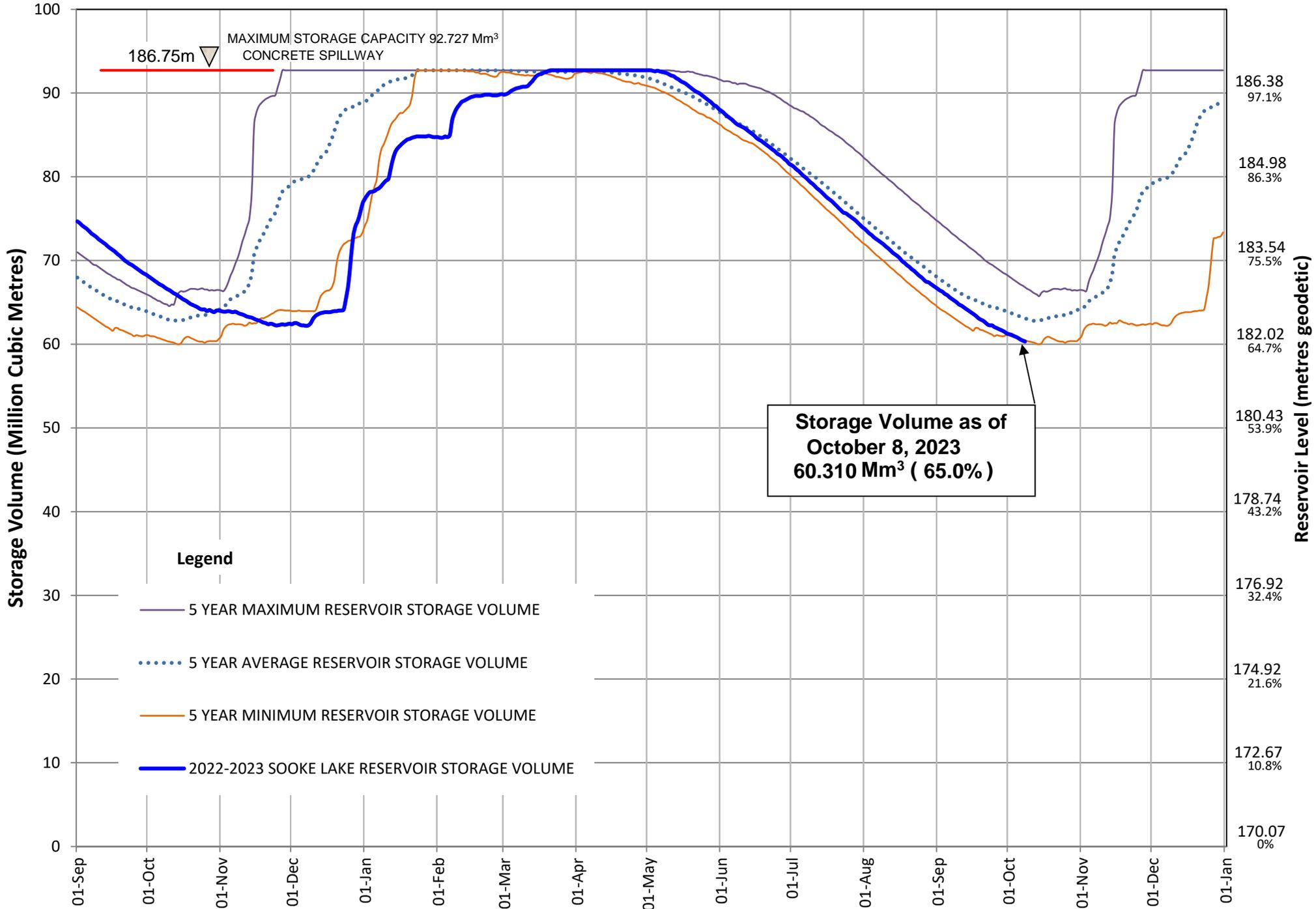
3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

Average Rainfall for October (1914-2022)	169.9 mm
Actual Rainfall: October	11.2 mm
% of Average	7%
Average Rainfall (1914-2022): Sept 01 - Oct 08	91.8 mm
Actual Rainfall (2022/23): Sept 01 - Oct 08	40.9 mm
% of Average	45%

Number days with precip. 0.2 or more
1

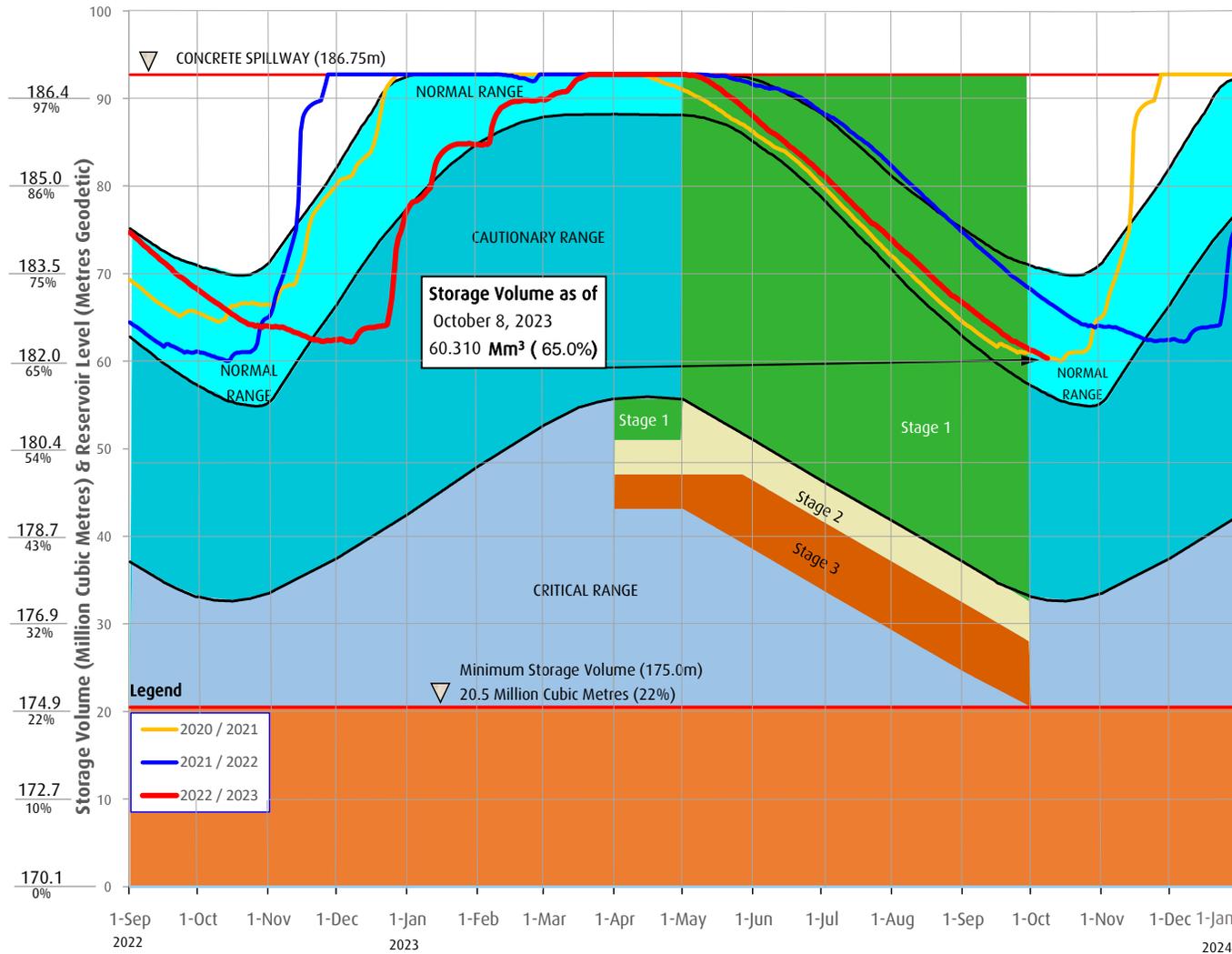
Water spilled at Sooke Reservoir to date (since Sept. 1) = 0.00 Billion Imperial Gallons  
 = 0.00 Billion Litres

# SOOKE LAKE RESERVOIR STORAGE SUMMARY 2022 / 2023



# Sooke Lake Reservoir Storage Level

## Water Supply Management Plan



## FAQs

How are water restriction stages determined?

Several factors are considered when determining water use restriction stages, including,

1. Time of year and typical seasonal water demand trends;
2. Precipitation and temperature conditions and forecasts;
3. Storage levels and storage volumes of water reservoirs (Sooke Lake Reservoir and the Goldstream Reservoirs) and draw down rates;
4. Stream flows and inflows into Sooke Lake Reservoir;
5. Water usage, recent consumption and trends; and customer compliance with restriction;
6. Water supply system performance.

The Regional Water Supply Commission will consider the above factors in making a determination to implement stage 2 or 3 restrictions, under the Water Conservation Bylaw.

At any time of the year and regardless of the water use restriction storage, customers are encouraged to limit discretionary water use in order to maximize the amount of water in the Regional Water Supply System Reservoirs available for nondiscretionary potable water use.

Stage 1 is normally initiated every year from May 1 to September 30 to manage outdoor use during the summer months. During this time, lawn watering is permitted twice a week at different times for even and odd numbered addresses.

Stage 2 is initiated when it is determined that there is an acute water supply shortage. During this time, lawn water is permitted once a week at different times for even and odd numbered addresses.

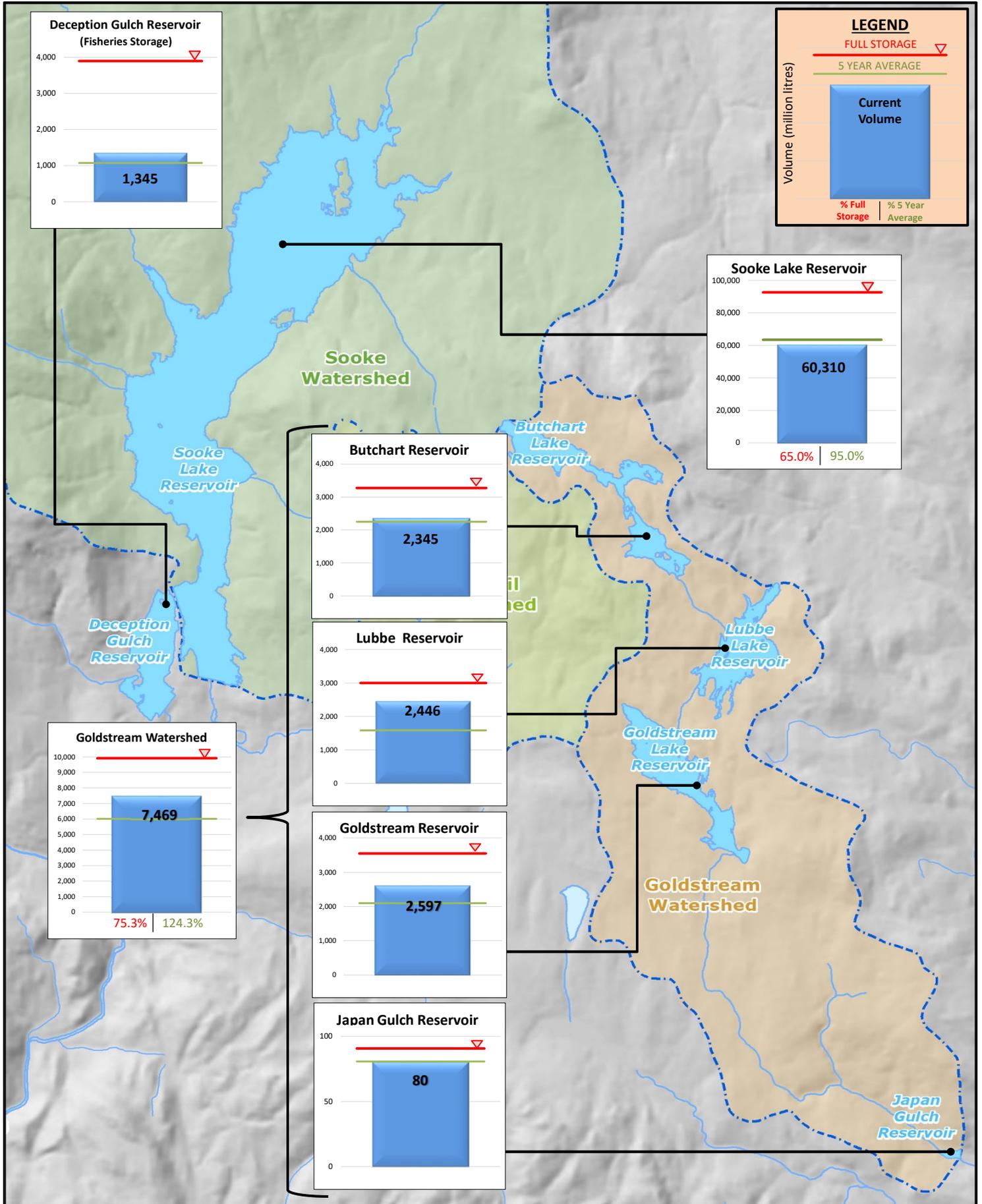
Stage 3 is initiated when it is determined that there is a severe water supply shortage. During this time, lawn watering is not permitted. Other outdoor water use activities are restricted as well.

For more information, visit [www.crd.bc.ca/drinkingwater](http://www.crd.bc.ca/drinkingwater)





# Useable Reservoir Volumes in Storage for October 08, 2023



**Motion with Notice Saanich Peninsula Water  
Commission Thursday, October 19, 2023**

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**SUBJECT** Speaker Series

**BACKGROUND**

Whereas, there is a need for the commission to engage with citizens about water and wastewater trends, technologies and ideas, and

Whereas, the benefits of engaging with the community before tackling pressing issues will move the relationship with the public beyond a transactional exchange and toward increased trust, and

Whereas hearing from outside experts on topics of public interest will benefit staff, leaders and the community.

**RECOMMENDATION**

Therefore, be it resolved that the Saanich Peninsula Water Commission direct staff to organize an annual speaker series for the peninsula, dedicated to presentations by researchers and public interest groups that are focused on emerging topics concerning water and wastewater.

**SUBMITTED BY:**

Commissioners:

- Zeb King
- Mike Doehnel
- David Kelbert