



Making a difference...together

## SAANICH PENINSULA WATER COMMISSION

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

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

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

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

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### AGENDA

#### 1. TERRITORIAL ACKNOWLEDGEMENT

#### 2. APPROVAL OF AGENDA

#### 3. ADOPTION OF MINUTES .....3

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

#### 4. CHAIR'S REMARKS

#### 5. PRESENTATIONS/DELEGATIONS

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

#### 6. COMMISSION BUSINESS

##### 6.1. 2019-2022 Water Service Planning .....6

*Recommendation: The Saanich Peninsula Water Commission recommends to the Capital Regional District Board:*

*That Appendix A Community Need Summary – Water be approved as presented and advanced to the October 28, 2020 Provisional budget review process.*

##### 6.2. Saanich Peninsula Water Service - 2021 Operating and Capital Budget .....19

*Recommendation: The Saanich Peninsula Water Commission recommends that the Capital Regional District Board:*

1. Approve the 2021 operating and capital budget;
2. Approve the 2021 Saanich Peninsula bulk water rate of \$1.0536 per cubic metre, and the Agricultural Research Station water rate of \$1.0888 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2020 actual revenue and expense on the transfer to capital reserve fund; and
4. Direct staff to amend the Bulk Water Rates Bylaw accordingly.

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

**Saanich Peninsula Water Commission  
Agenda – October 15, 2020**

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**6.3. Summary of Recommendations from Other Water Commissions .....42**

***Recommendation:** That the Summary of Recommendations from other water commissions be received for information.*

**6.4. Water Watch Report .....47**

***Recommendation:** That the October 5, 2020 Water Watch Report be received for information.*

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

**8. NEW BUSINESS**

**9. ADJOURNMENT**

**Next Meeting:** December 17, 2020

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

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

**Staff:** T. Robbins, General Manager, Integrated Water Services; L. Hutcheson, General Manager, Parks & Environmental Services; P. Kickham, Manager, Environmental Regulations, Environmental Protection; M. Cowley, Manager Wastewater Engineering & Planning; D. Dionne (recorder)  
**By WebEx:** E. Elder, Senior Financial Advisor

**REGRETS:** M. Underwood

The meeting was called to order at 9:00 a.m.

Chair Wainwright welcomed the online participants and introduced in the room:

- Commissioner Williams, who is joining the Saanich Peninsula Water and Wastewater Commissions as the Town of Sidney ratepayer representative; and
- Alternate Commissioner Fallot who is in attendance for Commissioner McNeil-Smith. He also advised that she will be attending meetings as his alternate going forward.

Chair Wainwright provided a territorial acknowledgement.

**1. APPROVAL OF AGENDA**

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

**CARRIED**

**2. ADOPTION OF MINUTES**

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

**CARRIED**

**3. APPROVAL OF RESOLUTION**

1. That this resolution applies to the Saanich Peninsula Water Commission for the meetings being held between July 1, 2020 and December 31, 2020.
2. That the attendance of the public at the place of the meeting cannot be accommodated in accordance with the applicable requirements or recommendations under the *Public Health Act*, despite the best efforts of the Saanich Peninsula Water Commission, because:
  - a. The available meeting facilities cannot accommodate more than (8) people in person, including members of the Saanich Peninsula Water Commission and staff, and

- b. There are no other facilities presently available that will allow physical attendance of the Saanich Peninsula Water Commission and the public in sufficient numbers; and
- 3. That the Saanich Peninsula Water Commission is ensuring openness, transparency, accessibility and accountability in respect of the open meeting by the following means:
  - a. By allowing the public to hear or participate via teleconference or electronic meeting software,
  - b. By providing notice of the meeting in newspaper or local notice Board, including the methods for providing written or electronic submissions,
  - c. By making the meeting agenda, as well as the other relevant documents, available on the CRD website, and directing interested persons to the website by means of the notices provided in respect of the meeting,
  - d. By strongly encouraging the provision of, and subsequently receiving and distributing to members, written correspondence from the public in advance of the meeting, and
  - e. By making the minutes of the meeting available on the CRD website following the meeting.

**MOVED** by Commissioner Orr, **SECONDED** by Commissioner Barnhart,  
 That the Saanich Peninsula Water Commission adopt the resolution as presented.

**CARRIED**

#### **4. CHAIR'S REMARKS**

Chair Wainwright made no remarks.

#### **5. PRESENTATIONS/DELEGATIONS**

There were none.

#### **6. COMMISSION BUSINESS**

##### **6.1. Summary of Recommendations from Other Water Commissions**

**MOVED** by Commissioner Weisenberger, **SECONDED** by Commissioner Williams,  
 That the Summary of Recommendations from other water commissions be received for information.

**CARRIED**

##### **6.2. Water Watch Report**

T. Robbins advised that water demand is down over the five-year average and that with some warmer weather expected in July and August the demand should increase.

He advised that, at the Regional Water Supply Commission meeting yesterday, there was a question about demand-related impacts as a result of COVID-19. He noted that with hotels and businesses closed during the early days of COVID-19 there was an

**Saanich Peninsula Water Commission  
Minutes – Thursday, July 16, 2020**

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effect on the Institutional, Commercial and Industrial water demand. Staff will be reviewing the impact and will report on that in October.

Commissioner Doehnel reported that he has noticed the agriculture water demand rate is also down and that some farms are implementing new, more efficient watering systems.

**MOVED** by Commissioner Barnhart, **SECONDED** by Commissioner Orr,  
That the July 6, 2020 Water Watch Report be received for information.

**CARRIED**

**7. NEW BUSINESS**

**MOVED** by Commissioner Barnhart, **SECONDED** by Commissioner Weisenberger,  
That the Saanich Peninsula Water Commission, subject to the ability to appoint alternate representatives to the Water Advisory Committee, appoint Mike Doehnel as alternate to Ron Barnhart to the Water Advisory Committee.

**CARRIED**

**8. ADJOURNMENT**

**MOVED** by Commissioner Weisenberger, **SECONDED** by Commissioner Doehnel,  
That the Saanich Peninsula Water Commission meeting be adjourned at 9:06 a.m.

**CARRIED**

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CHAIR

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SECRETARY

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

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**SUBJECT     2019-2022 Water Service Planning**

**ISSUE SUMMARY**

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

**BACKGROUND**

The Capital Regional District (CRD) Board completed its strategic planning early in 2019 and approved the CRD Board Strategic Priorities 2019-2022.

The four priorities are:

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

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

The 2019-2022 CRD Corporate Plan is aligned to the Board direction. It highlights the initiatives the CRD needs to deliver over the Board's four-year term to address the region's most important needs. The Corporate Plan identified six initiatives under Water, that fall under the mandate of the various water supply and distribution services.

Appendix A *Community Need Summary - Water 2021* is a summary of the planned activities for 2021. It contains details about core service levels, new initiatives proposed and performance metrics. Although none of the initiatives are directly related to the Saanich Peninsula Water Service, the service plan sets out the various programs and service levels that support all of the CRD drinking water services.

Appendix B *Water - Initiatives Progress Report* provides insights into what has been delivered through the initiatives related to the Water Community Need that included in the provisional budget last year, for delivery in 2020. Two of the initiatives (10a-7 Salt Spring Island and Southern Gulf Island Water Operations and 10d-4 SSI Watershed Protection) were approved through the Electoral Areas Community Need Summary as they directly addressed a local need.

The Service Planning process gathered information necessary to assemble a provisional budget for Committee and Board review. The purpose of this report is to explain how the Integrated Water Services divisional programs of work connect to the Board Priorities, Corporate Plan and provisional budget.

## **ALTERNATIVES**

### *Alternative 1*

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

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

### *Alternative 2*

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

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

## **IMPLICATIONS**

### *Financial Implications*

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

During this years' service planning process, staff have been mindful of the fiscal challenges facing the region in the month ahead. To that end, any budget increase or other impacts have been mitigated, as much as possible.

### *Service Delivery Implications*

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

### *Alignment with Board & Corporate Priorities*

Staff have identified three initiatives that will have budget implications for 2021 (Table 1).

Table 1: Community Needs Summary - Water, Delivery Initiatives

#	Initiative	Description	Year(s)	FTE impacts in 2021	Budget Impacts in 2021
10a-0.1	Watershed Security Position	Create new shift position to respond to security issues and wildfire risk.	2021	1.0 ongoing	Included in provisional budget
10a-2.1	Water Infrastructure Resilience	Review infrastructure redundancy & improvements, renew/replace infrastructure to avoid infrastructure deficits & ensure reliable, safe service delivery & resilience	2020 – 2021	1.0 ongoing	Included in provisional budget
10d-3	Watershed Hydrology Monitoring*	Expand and increase watershed hydrology monitoring in the Greater Victoria Water Supply Area	2020 – 2021		Included in provisional budget

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

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

### **Delivery Initiatives**

#### **10a-0.1 – Watershed Security Position**

A core service of the Watershed Protection division is to conduct wildfire and security patrols. Historically, this function has been fulfilled by divisional staff volunteering for shifts and one regular position for which an alternative shift structure was negotiated in 2017 to include weekend patrols. However, year-on-year increases in trespassing and security incidents have made it challenging to ensure adequate watershed security and worker safety is maintained at all times. This initiative would address this challenge and ensure the core operational function of patrolling continues.

The initiative proposes to create one new ongoing position in the division with a focus on security and wildfire (including weekend patrols). This will help ensure an active field security presence seven days a week. The estimated cost of the position in 2021 will be partially offset by a reduction in auxiliary costs which will no longer be required. Recruitment is expected to be complete by Q2 2021.

#### **10a-2.1 – Water Infrastructure Resilience**

A combination of system expansion in the Juan de Fuca (JdF) Water Distribution System and aging water infrastructure in JdF and the Regional Water Supply (RWS) system are driving demand for an increase in resources.

The initiative proposes to create one new ongoing position in the Infrastructure Operations division to ensure the continued safe and effective delivery of potable water going forward and to



meet the regulatory requirements related to dam safety. Increasing capacity in the division will also help reduce the risk of higher capital costs in future by facilitating the completion of annual maintenance and inspections for the 14 dams in the RWS.

The cost of the position in 2021 is included in the provisional budgets and will be cost shared between all of the large water services. Recruitment is expected to be completed by Q1 2021.

#### 10d-3 – Watershed Hydrology Monitoring\*

There is hydrological and meteorological (hydromet) monitoring in place for the Sooke and Goldstream Water Supply Areas. We also have newly installed instrumentation at Leech Water Supply Area. This equipment is critical to monitor and respond to questions about current and future water quality and supply.

Hydromet monitoring supports the Climate Action & Environmental Stewardship Board Priority by monitoring the environment of the Greater Victoria Water Supply Area and detecting trends and events related to climate and environmental variables (e.g. climate change, forest change, wildfires).

This initiative is to procure the services of a specialist contractor to support the ongoing installation, modification and maintenance of hydromet instruments and collect, quality assure and analyse the data to support hydrological model development and upgrade. The cost for the service contract in 2021 is included in the provisional budget, and is to be renewed annually. The contract was funded through a new single supplementary budget request in 2020.

### **CONCLUSION**

Staff have been progressing initiatives and actions identified in the Corporate Plan, including Board Priorities. The Board determines resourcing through its annual review and approval of financial plans. As per previous years, to support the Board's decision-making, staff are providing recommendations on funding, timing and service levels through the service and financial planning processes.

### **RECOMMENDATION**

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

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

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENTS**

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

# Community Need



## 2021 Summary

### Water

#### Strategy

##### Target Outcome

We envisage a sustainable and resilient water supply

##### Strategic Context

###### Strategies

- [Regional Water Supply Strategic Plan](#)
- [Regional Growth Strategy](#)
- [Special Task Force on First Nations Relations](#)
- [Statement of Reconciliation](#)

###### Trends, risks and issues

- **Security and patrols:** there have been an increased number of security incursions/recreational pressure into the Greater Victoria Water Supply Area (GVWSA) from Sooke Hills Wilderness Regional Park and from the rapidly developing residential area around Langford and Goldstream. This is putting 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 a number of ways:
  - Demand for water, including for local agricultural activities, will continue to increase which will in turn increase the risk of water shortages; addressing this challenge will require a continued focus on water conservation effort, watershed protection, ongoing monitoring and awareness of the need for good governance of the water service
  - Water quality may be affected due to increased biological growth in the source water and distribution system; expecting to see increasing pressure to include filtration as a step in the RWS treatment process
  - In the GVWSA, 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:** we are seeing increases in operation and maintenance demand from a growing region combined with aging infrastructure. An

# Community Need



## 2021 Summary

updated Water Management Plan for water supply will identify a strategy to address supply (quantity) and critical delivery infrastructure (redundancy) needs

## Services

Core Services Levels	
Service	Levels
<b>Regional Water Supply (RWS), Juan de Fuca (JdF) Water Distribution, Saanich Peninsula Water and Small Water Systems in the Electoral Areas</b> Wholesale water supply to the 370,000 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 supported through following key service areas:	
<b>Water Systems Operations and Maintenance</b> Water treatment, supply and distribution system operation and monitoring. System and facility maintenance, consumables management and preventative maintenance	<ul style="list-style-type: none"> <li>• Water treatment</li> <li>• Supply and distribution system operation</li> <li>• System monitoring</li> <li>• Customer service</li> <li>• System and facility maintenance</li> <li>• Consumables management</li> <li>• Component preventative maintenance</li> </ul>
<b>Emergency Response/System Failure</b> Water main breaks	<ul style="list-style-type: none"> <li>• 24/7 emergency response to water main breaks and other system emergencies</li> </ul>
<b>Infrastructure Planning</b> Strategic asset management for all services/systems including modeling and capacity analysis,	<ul style="list-style-type: none"> <li>• Asset management and capital planning</li> <li>• Adjust plans for 15 water services</li> <li>• System expansion and growth planning</li> </ul>

# Community Need



## 2021 Summary

vulnerability assessment, infrastructure renewal plans.	
<b>Capital Project Delivery and Works</b> Project design, procurement and delivery of capital projects annually on time/budget. Main installations, dam upgrades, equipment replacement and capital projects support	<ul style="list-style-type: none"> <li>• Capital program delivery</li> <li>• Water main installations and equipment replacement</li> <li>• Dam maintenance and upgrade projects</li> <li>• Capital project support</li> </ul>
<b>Engineering Services</b> Development referrals, survey and mapping, engineering support to utility operations, and dam safety inspections and administration.	<ul style="list-style-type: none"> <li>• Engineering support of utility operations for the 15 water services.</li> </ul>
<b>Watershed Protection</b> Forest land management of the 20,550 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:	
<b>Wildfire, Security &amp; Emergency Response:</b> Watershed security, and wildfire and spill preparedness, prevention and response	<ul style="list-style-type: none"> <li>• 24/7 watershed emergency duty officer standby</li> <li>• Security/wildfire patrols (weekends and holidays; daily during elevated fire conditions)</li> <li>• Wildfire detection air patrol during high and extreme fire hazard</li> </ul>
<b>Watershed Operations</b> Silviculture, forest health and forest fuel management; invasive plant management; vegetation management and road maintenance, upgrades and rehabilitation	<ul style="list-style-type: none"> <li>• Winter/summer road maintenance</li> <li>• Culvert and bridge upgrades to accommodate higher peak flows to higher standards and changing climate</li> <li>• Fuel management treatment and fire smarting maintenance</li> <li>• Brushing around facilities, dams, for tree release</li> <li>• Danger tree assessment and removal along roads and powerlines</li> <li>• Invasive plant management</li> </ul>
<b>Resource Planning</b> Wildlife management, ecological inventories and analyses, risk assessment and management, and GIS and data management	<ul style="list-style-type: none"> <li>• Development of a comprehensive hydrology monitoring program</li> <li>• Annual forest health survey</li> <li>• Partnering in climate change and other research in the GVWSA</li> </ul>

# Community Need



## 2021 Summary

	<ul style="list-style-type: none"> <li>• Management of beaver, Canada geese and bullfrogs</li> <li>• Public tours of the Water Supply Area and facilities</li> </ul>
<b>Environmental Protection</b> 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.	
<b>Water Quality</b> Monitoring, assessment, reporting and technical advice to meet water quality regulatory requirements	<ul style="list-style-type: none"> <li>• Source water and distribution system monitoring, assessment and reporting</li> <li>• Physical, chemical and biological analytical services, assessment and reporting</li> </ul>
<b>Demand Management</b> Research and data to inform capital planning, water conservation, and communications and education	<ul style="list-style-type: none"> <li>• Accurate data</li> <li>• Per capita targets (residential and ICI)</li> </ul>
<b>Cross Connection Control</b> Oversight, monitoring and reporting of potential sources of contamination that may flow in a reverse direction into the Regional Water Supply	<ul style="list-style-type: none"> <li>• Contamination prevention through facility inspections, testing and education for backflow prevention devices</li> <li>• Monitor and track (&gt;28,000) backflow prevention devices</li> </ul>
<b>Communications &amp; Environmental Education</b> Public education and engagement in the region to promote sustainable behavior through campaigns, initiatives and services	<ul style="list-style-type: none"> <li>• Increased public awareness of CRD messages and subsequent behavior changes (declining trend in per capita and per sector water use)</li> </ul>
<b>Support Services</b>	
<b>Support Services</b> The core services listed rely on the support of several corporate and support divisions to effectively operate on a daily basis. These services are reported on in the Accountability Community Need Summary.	<ul style="list-style-type: none"> <li>• Services include Human Resources &amp; Corporate Safety, Corporate Communications, Asset Management, Financial Services, Information Technology &amp; GIS, Information Services, Legislative Services, Facility Management, Fleet Management, Legal Services, Risk &amp; Insurance and Real Estate Services.</li> </ul>

# Community Need



## 2021 Summary

Initiatives					
Ref	Initiative	Description	Year(s)	Status	2021 impacts
10a-1	Post-Disaster Water Supply Plan	Implement approved Post-Disaster Water Supply Plan, including undertaking seismic resiliency study of critical water supply infrastructure	2020-2022	In progress	
10a-3	RWSSP Update	Update Regional Water Supply Strategic Plan	2022-2023	In progress	
10d-1	Future Water Supply + Infrastructure	Conduct population & land use studies & estimate growth-related water demand & future water supply & infrastructure needs	2020-2022	In progress	
10a-4	Cross Connection Control (CCC) Inspector*	CCC Program: convert a current temporary CCC Inspector position to permanent to meet the requirements by Island Health and protect the public health	2021	Completed	1.0 Converted
10d-2	Leech River Water Quality Operations*	Water Quality Operations Program: This multi-year initiative is to collect and analyze water quality data from the Leech River Watershed, the future water supply for the Greater Victoria Drinking Water System	2021	In progress	0.4 Ongoing
10a-0.1	Watershed Security Position	Create new shift position to respond to security issues and wildfire.	2021	NEW	1.0 ongoing
10a-2.1	Water Infrastructure Resilience	Review infrastructure redundancy & improvements, renew/replace infrastructure to avoid infrastructure deficits & ensure reliable, safe service delivery & resilience	2020-2021	NEW additional request for 2021	1.0 ongoing
10d-3	Watershed Hydrology Monitoring*	Expand and increase watershed hydrology monitoring in the Greater Victoria Water Supply Area	2020-2021	NEW additional request for 2021	

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

# Community Need



## 2021 Summary

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

- 10a-5 – Water Billing
- 10a-7 – Salt Spring Island + Southern Gulf Islands Water Operations
- 10b-1 – Water Conservation through Demand Management
- 10c-1 – Agricultural Water Subsidy
- 10d-4 – SSI Watershed Protection

## Business Model

### Funding

#### Who contributes

##### Water Supply and Distribution:

- Regional Water Supply: All Municipalities, JDF EA, 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, JDF EA
- Local Water Service Areas in the Electoral Areas

##### Environmental Protection

- Water Quality Service: Allocation from Integrated Water Services and Local Service Areas (LSA) from municipalities of RWS area, JDF 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

##### Support Services

- Varies per service

#### Funding Sources

- Regional Water Supply: Bulk water sales revenue
- JdF Water Distribution System: Retail water sales revenue in West Shore Municipalities
- Saanich Peninsula Water: Wholesale water sales revenue
- Environmental Protection services: water rate and requisition

# Community Need



## 2021 Summary

### Reporting Structure

[Regional Water Supply Commission](#) – [Water Advisory Committee](#) – [Saanich Peninsula Water Commission](#) – [JDF Water Distribution Commission](#)

– [Various LSA Commissions](#) (Port Renfrew, Lyall Harbour/Boot Cove, Magic Lake Estates, Skana, Beddis, Cedar Lane, Cedars of Tuam, Fernwood, Fulford, Highland, Sticks Allison, Surfside Park, Wilderness Mountain)

### Community Need Key Performance Indicator (KPI)

#### Discussion

#### Link to Target Outcome

The following KPIs link to the CRD's goals of safe, sustainable and resilient water resources for the Capital Region. These KPIs are being established with new performance targets that will be reported in future service plans.

- Compliance with Island Health, provincial and federal regulatory requirements and operational certificates
- Water quality samples analyzed from source reservoirs (raw water) and transmission/distribution systems (treated water)
- Peak day per capita water use and average day per capita water use
- Operating cost per megaliter of drinking water treated and supplied/distributed
- Energy use per megalitre of drinking water treated and supplied/distributed
- Delivery of annual capital program
- Volume of raw water released from RWS watersheds to rivers to support fish habitat
- Number of water quality complaints
- Number of leak repairs annually per kilometer of pipe (distribution systems)
- Number of water main failures annually per kilometer of pipe (distribution systems)



# Community Need



## Initiative Progress Report

### Water

Initiatives approved in 2020 Budget		
Ref	Initiative	Progress to date
10a-1	Post-Disaster Water Supply Plan	Progressing – Continued implementation of resilient infrastructure including hardened hydrants and restrained pipe, as well as acquisition of emergency distribution supplies. Additional education and coordination with municipal distributors and emergency services planned for 2021
10a-2	Water Infrastructure Resilience	Progressing – Infrastructure renewal programs continue with appropriate funding levels; recruitment of new staffing approved in 2020 complete
10a-3	RWSSP Update	Progressing – making progress on strategic plan initiatives; progress report will be presented to RWSC in October 2020
10a-4	Cross Connection Control Inspector *	<b>Part of core service</b> – position converted from term to ongoing, continues to be part of day-to-day operations
10a-5	Water Billing *	Progressing – recruitment of new staff underway
10a-7	SSI + SGI Water Operations *	<b>On-going - Core service delivery</b>
10b-1	Water Conservation through Demand Management	<b>Part of core service</b> - updated Water Conservation Bylaw in 2020. Demand Management work progressing – per capita demand rates being developed for each sector.
10c-1	Agricultural Water Subsidy	Agricultural land use inventory and agricultural water demand model completed and presented to Commissions in 2020. Agricultural water rate review will be completed in 2021.
10d-1	Future Water Supply + Infrastructure	Regional Water Master Plan Update will be completed in 2021 with a focus on long term water supply and infrastructure.
10d-2	Leech River Water Quality Operations *	<b>Progressing</b> – sampling underway
10d-3	Watershed Monitoring*	<b>Progressing</b> – Hydromet station maintenance, upgrade and discharge measurement contracts have been executed, work is in progress.

# Community Need



## Initiative Progress Report

Initiatives approved in 2020 Budget		
Ref	Initiative	Progress to date
10d-4	SSI Watershed Protection *	<b>Progressing</b> – Subject to the recommendations from the water optimization study examining challenges in operating multiple water distribution and treatment systems on an unincorporated island electoral area.

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

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

**SUBJECT**     **Saanich Peninsula Water Service - 2021 Operating and Capital Budget**

**ISSUE SUMMARY**

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

**BACKGROUND**

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

**2020 Year End Financial Projections**

The actual 2020 operating expense is projected to be \$46,314 over budget at year end primarily due to corrective Remote Telemetry Unit software upgrades that were required to address system control programming issues at various sites/facilities and higher than anticipated electricity costs at the Deep Cove and Hamsterly Pump Stations, which staff continue to investigate. The actual bulk water purchase expense is estimated to be on budget at \$4,738,240 which corresponds with water sales revenue that is projected to be on budget. To balance the budget at year end, the proposed transfer to the capital reserve fund has been decreased by \$52,115 to \$597,885.

**Operating Budget**

An increase in the 2021 operating expense in the amount of \$40,228 is planned and results primarily from non-discretionary expense adjustments such as wage/salary increases, departmental support service allocations, and other operating expense increases such as electricity costs.

The bulk water purchase expense, based on the proposed 2021 Regional Water Supply wholesale water rate and the 2021 Saanich Peninsula Water budget demand volume, has been set at \$4,860,640.

The drinking water quality sampling, testing and reporting function for the Saanich Peninsula Water System, as well as the three Peninsula municipalities is funded through the Regional Water Supply Service budget.

### Capital Budget

The planned transfer to the capital reserve fund in 2021 is \$700,000. At year-end 2020, the capital reserve fund balance is estimated to be \$5,472,657 which is available to fund major capital projects. The planned transfer to the equipment replacement fund in 2021 is \$50,000. At year-end 2020, the equipment replacement fund balance is estimated to be \$1,771,473, which is available to fund minor capital and operational equipment replacements.

There are a number of capital projects planned for 2021 with a total value of \$4,713,000 including \$760,000 in projects that are in progress or multi-year projects. The value of the five-year (2021-2025) capital plan is currently \$30,983,500 including an on-going budget allowance for post-disaster water supply equipment and infrastructure improvements. Most of the capital plan budget is attributed to the project to replace vulnerable sections of the No. 4 Transmission Main, completing the Bear Hill Reservoir interconnect pipe (3 kilometres of 450mm pipe between Mt. Newton and Dean Park), and providing resilient bulk water supply service connections to the First Nations Reserves. As the Committee is aware, an application has been submitted under Infrastructure Canada's Disaster Mitigation and Adaptation Fund, which if successful, would provide approximately \$13.3 (Saanich Peninsula Water Service share) in grant funding towards this project; the application also included Regional Water Supply Service and First Nations funding components. If the project proceeds, financing will be required in order to fund the service's funding share and a new loan authorization would be required by 2022. If unsuccessful, staff will be seeking a capital plan amendment in 2021 to budget for the Bear Hill Reservoir interconnect pipe project, funded from capital reserves, as recommended during the 2020 budget presentation.

The Development Cost Charge (DCC) program represents \$843,000 of the five-year (2021-2025) capital plan, and reflects the projects included in the DCC program update. At year-end 2020, the DCC reserve fund balance is estimated to be \$2,091,494. There is one DCC project continuing from 2020 into 2021 under the DCC program, which is to install a backup power generator at the Hamsterly Pumpstation. The project budget has been set at \$430,000; \$95,000 will be funded from the DCC reserve fund and \$335,000 will be funded from the capital reserve fund.

### Water Demand

Although 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, the total 2020 year end demand is projected to be 6,800,000 cubic metres which is on budget.

The cooler than normal temperatures and above average precipitation in June (140% of the monthly average precipitation), did significantly affect total daily demand in June which can often be a high demand month. In addition, staff have analyzed the impact of the COVID-19 pandemic on local water demand, particularly across the residential and business sectors. Overall, the Regional Water Supply System experienced a net reduction of 6% in total water demand over the March – August 2020 period compared to the previous three year average over the same period. This equates to a reduction in consumption of 624 million litres of water across the Region. At the regional level, May demand was down 12.9% and June demand was down 17.7% compared to 2019 demand. These reductions are primarily tied to school, office, restaurant and hotel closures, and virtually no tourism. In summary, the pandemic health directives and public response have had a negative impact on water demand across all water service areas.

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

3

The recommended 2021 water rate has been calculated using a budget demand of 6,800,000 cubic metres (Page 5 of the budget document), which is the same volume used in the 2020 budget.

**2021 Water Rates**

The 2021 CRD Regional Water Supply wholesale water rate of \$0.7148 per cubic metre, a 2.58% increase over the 2020 rate, is being recommended to the Regional Water Supply Commission. The 2021 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 planned for 2021 under the Regional Water Supply Service. This consultation phase of the study will involve the key stakeholders on the Saanich Peninsula including the Commission. A summary of the agricultural water volumes and agricultural water rate payments for 2011 to 2019 is attached for information (Appendix C).

The recommended Saanich Peninsula Bulk Rate is \$1.0536 per cubic metre, a 3.1% increase over the 2020 rate. The increase in annual bulk water cost for the average household using 235 cubic metres per year would be \$7.36.

The Agricultural Research Station Rate has been set at \$1.0888 per cubic metre.

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

**RECOMMENDATION**

The Saanich Peninsula Water Commission recommends that the Capital Regional District Board:

1. Approve the 2021 operating and capital budget;
2. Approve the 2021 Saanich Peninsula bulk water rate of \$1.0536 per cubic metre, and the Agricultural Research Station water rate of \$1.0888 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2020 actual revenue and expense on the transfer to capital reserve fund; and
4. Direct staff to amend the Bulk Water Rates Bylaw accordingly.

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

**ATTACHMENTS**

Appendix A: 2021 Budget Document

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

Appendix C: Agricultural Water Volumes and Rate Payments 2011 - 2019

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **Saanich Peninsula Water Supply**

#### **COMMISSION REVIEW**

OCTOBER 2020

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:**

Water rates and debt cost allocation to be established by bylaw, charged to the individual municipalities.

**Bulk Water Rate**

To cover 100% of operating costs, billed monthly to each municipality.

**Requisition**

To cover 100% of debt costs by formula: levy of \$0.115 / \$1,000 of total hospital assessments for all members plus 1/3 of balance on each of members: number of connections, specified area school assessments and population.

**CAPITAL DEBT:**

All Bylaws have expired.

## CAPITAL REGIONAL DISTRICT

Program Group: CRD-Saanich Peninsula Water Supply	2021 BUDGET REQUEST						FUTURE PROJECTIONS			
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	CORE BUDGET	ONGOING	ONE-TIME	TOTAL (COL 4, 5 & 6)	2022	2023	2024	2025
	2	3	4	5	6	7	8	9	10	11
<b>SUMMARY</b>										
1										
<b><u>OPERATING EXPENDITURES:</u></b>										
ALLOCATION - OPERATIONS	1,041,844	1,091,858	1,059,266	-	-	1,059,266	1,080,104	1,101,360	1,123,041	1,145,157
UTILITIES	214,440	232,040	218,086	-	-	218,086	222,447	226,896	231,434	236,063
OPERATING - OTHER COSTS	169,615	148,315	172,795	-	-	172,795	176,251	179,773	183,359	187,020
ALLOCATION - STANDARD OVERHEAD	93,232	93,232	109,212	-	-	109,212	123,961	126,440	128,969	131,548
<b>TOTAL OPERATING EXPENDITURES</b>	<b>1,519,131</b>	<b>1,565,445</b>	<b>1,559,359</b>	<b>-</b>	<b>-</b>	<b>1,559,359</b>	<b>1,602,763</b>	<b>1,634,469</b>	<b>1,666,803</b>	<b>1,699,788</b>
*Percentage increase over prior year board budget			2.65%			2.65%	2.78%	1.98%	1.98%	1.98%
<b>TOTAL BULK WATER EXPENDITURES</b>	<b>4,738,240</b>	<b>4,738,240</b>	<b>4,860,640</b>	<b>-</b>	<b>-</b>	<b>4,860,640</b>	<b>4,959,920</b>	<b>5,153,040</b>	<b>5,308,080</b>	<b>5,505,280</b>
<b><u>CAPITAL EXPENDITURES &amp; TRANSFERS</u></b>										
TRANSFER TO CAPITAL RESERVE FUND	650,000	597,885	700,000	-	-	700,000	750,000	550,000	300,000	250,000
TRANSFER TO EQUIPMENT REPLACEMENT FUND	50,000	50,000	50,000	-	-	50,000	50,000	50,000	50,000	50,000
<b>TOTAL CAPITAL EXPENDITURES &amp; TRANSFERS</b>	<b>700,000</b>	<b>647,885</b>	<b>750,000</b>	<b>-</b>	<b>-</b>	<b>750,000</b>	<b>800,000</b>	<b>600,000</b>	<b>350,000</b>	<b>300,000</b>
<b><u>DEBT SERVICING</u></b>										
DEBT-INTEREST & PRINCIPAL	-	-	-	-	-	-	57,800	311,356	691,413	923,664
<b>TOTAL DEBT SERVICING EXPENDITURES</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>57,800</b>	<b>311,356</b>	<b>691,413</b>	<b>923,664</b>
<b>TOTAL EXPENDITURES</b>	<b>6,957,371</b>	<b>6,951,570</b>	<b>7,169,999</b>	<b>-</b>	<b>-</b>	<b>7,169,999</b>	<b>7,420,483</b>	<b>7,698,865</b>	<b>8,016,296</b>	<b>8,428,732</b>
<b><u>SOURCES OF FUNDING-OPERATIONS</u></b>										
REVENUE - WATER SALES	(6,951,571)	(6,951,570)	(7,164,199)	-	-	(7,164,199)	(7,414,683)	(7,693,065)	(8,010,496)	(8,422,932)
REVENUE -OTHER	(5,800)	-	(5,800)	-	-	(5,800)	(5,800)	(5,800)	(5,800)	(5,800)
<b>TOTAL SOURCES OF FUNDING FROM OPERATIONS</b>	<b>(6,957,371)</b>	<b>(6,951,570)</b>	<b>(7,169,999)</b>	<b>-</b>	<b>-</b>	<b>(7,169,999)</b>	<b>(7,420,483)</b>	<b>(7,698,865)</b>	<b>(8,016,296)</b>	<b>(8,428,732)</b>
<b><u>SOURCES OF FUNDING-REQUISITION</u></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>(6,957,371)</b>	<b>(6,951,570)</b>	<b>(7,169,999)</b>	<b>-</b>	<b>-</b>	<b>(7,169,999)</b>	<b>(7,420,483)</b>	<b>(7,698,865)</b>	<b>(8,016,296)</b>	<b>(8,428,732)</b>
Percentage increase over prior year's board budget			3.06%			3.06%	3.49%	3.75%	4.12%	5.14%



Change in Budget 2020 to 2021

Service: 2.610 Saanich Peninsula Water Supply	Total Expenditure	Comments
2020 Budget	6,957,371	
Change in Salaries:		
Change in Labour	17,000	Labour charges (Salaries and overhead, including corpo
Total Change in Salaries	17,000	
Other Changes:		
Bulk Water Purchase	122,400	
Transfers to Capital Reserve	50,000	
Standard Overhead Allocation	15,980	
Other Costs	7,248	
Total Other Changes	195,628	
2021 Budget	7,169,999	
% expense increase from 2020:	3.1%	
% Requisition increase from 2020 (if applicable):	n/a	Requisition funding is (x)% of service revenue

Overall 2020 Budget Performance  
(expected variance to budget and surplus treatment)

Water sales and revenue are in line with budget for the year. Operating costs are \$46,000 (3.0%) over budget due to one time unplanned corrective system maintenance. The transfer to the Capital Reserve Fund will be reduced by the net deficit of \$52,000.

## SAANICH PENINSULA WATER SUPPLY

### 2021 Demand Estimate

#### Retail Demand

Years	Actual Demand cu.metre	Budgeted Demand cu.metre
2016	6,870,557	6,270,000
2017	6,549,588	6,270,000
2018	7,044,786	6,300,000
2019	6,928,173	6,500,000
2020	6,800,000*	6,800,000
<b>2021 Demand Estimate</b>	<b>6,800,000</b>	

\* Projected consumption for 2020

## SAANICH PENINSULA WATER SUPPLY

### Summary of Supply Water Rates to Participating Municipalities

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>% change</u>
<b>Retail (direct) water rate</b>							
Sannich Peninsula Retail cost per cu.m.	\$0.9111	\$0.9621	\$0.9815	\$1.0223	\$1.0536	\$0.0313	3.1%
Agricultural Research Station cost per cu.m.	\$0.9463	\$0.9973	\$1.0167	\$1.0575	\$1.0888	\$0.0313	3.0%

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

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>% change</u>
<b>CRD Bulk water purchase cost per cu.m.</b>	\$0.6375	\$0.6644	\$0.6775	\$0.6968	\$0.7148	\$0.0180	2.6%

## SAANICH PENINSULA WATER SUPPLY

### Summary of Supply Water Rates to Participating Municipalities

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>% change</u>
<b>Retail (direct) water rate</b>								
Unit cost per cu.m.	\$ 0.9073	\$ 0.9111	\$ 0.9621	\$ 0.9815	\$ 1.0223	\$ 1.0536	\$ 0.0313	3.1%

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

Average consumption: 235.0 cubic meters

<u>Charge for Twelve Months Consumption</u>	<u>Year</u>	<u>Annual charge</u>	<u>2021 Annual Change \$</u>
Average Consumption	2020	\$ 240.24	
	2021	\$ 247.60	\$ 7.36
Half Average Consumption	2020	\$ 120.12	
	2021	\$ 123.80	\$ 3.68
Twice Average Consumption	2020	\$ 480.48	
	2021	\$ 495.19	\$ 14.72

**Schedule A**  
**Asset Useful Life Assignments - PSAB**

<u>Classes:</u>	<u>Code</u>	<u>Asset Categories</u>	<u>Useful Life, Years</u>
<b>Land</b>	LAND	Land & Rights of Way * (Note 1)	N/A
<b>Building</b>	BLDG	Building, Permanent	50
	BLOT	Building, Temporary/ Portable	20
	BLFX	Building fixture ( <i>sprinklers</i> )	20
<b>Equipment</b>	BOAT	Boats & Marine Equipment	10
	COMP	Computer Equipment ( <i>includes software</i> )	5
	ELEC	Electronic Equipment( <i>hydromet, weather stn eqpt</i> )	5
	FIRE	Fire & Safety Equipment	10
	GENT	Generator	20
	HYDR	Hydrants and Standpipes	20
	HYDY	Hydrology	10
	MTRS	Meters	20
	OFFE	Office Equipment	5
	OFFF	Office Furniture	10
	SCDA	SCADA Equipment	10
	SCRN	Intake Screens/Membranes ( <i>stop logs</i> )	20
	SHOP	Shop Equipment	10
	TELE	Telecommunication Eqpt ( <i>radios, phone systems</i> )	10
	WEQP	Water Works Eqpt( <i>W. Quality lab, Wshed eqpt</i> )	10
	NEW GRP	Weather stn & communication tower	15
<b>Vehicle</b>	VEHC	Vehicles	8
<b>Engineering</b>	BRDG	Bridge	50
<b>Structure</b>	CANL	Canal	50
	DAMS	Dam Structures	100
	PIPE	Pipelines, includes Vaults, Kiosks, Valve chambers	75
	PIPF	Pipelines, fittings	20
	PLPV	Parking lot paved	40
	PSEQ	Pump Station Equipment	20
	PSHS	Pump Station Housing	50
	PRVS	Valves, Flushes & PRV's	20
	RDGR	Roads gravel	20
	RDPV	Roads paved	40
	RESS	Reservoirs (steel & concrete)	50
	REST	Reservoirs (tower/tank)	35
	TANK	Storage tank	40
	TELP	Telephone and Power Lines	50
	TUNN	Tunnel, Culvert and Diversions	50
	WATP	Water Treatment Plant	25
	WELL	Wet well/ Well	50
<b>Other Assets</b>	CSTU	Capital Management Studies	5
	FENC	Fences	15
	LIMP	Land & Yard Improvements	20

Note 1: Land is not depreciated so a useful life assignment is not applicable

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

<b>Service No.</b>	<b>2.610 Saanch Peninsula Water Supply</b>	<b>Carry Forward from 2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>
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**EXPENDITURE**

Buildings	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	E	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000
Land	L	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	S	\$805,000	\$4,683,000	\$6,754,000	\$11,270,000	\$7,720,000	\$1,324,500	\$31,751,500
Vehicles	V	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		<b>\$805,000</b>	<b>\$4,758,000</b>	<b>\$6,754,000</b>	<b>\$11,270,000</b>	<b>\$7,720,000</b>	<b>\$1,324,500</b>	<b>\$31,826,500</b>

**SOURCE OF FUNDS**

Capital Funds on Hand	Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debenture Debt (New Debt Only)	Debt	\$0	\$0	\$2,550,000	\$5,550,000	\$4,500,000	\$300,000	\$12,900,000
Equipment Replacement Fund	ERF	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
Grants (Federal, Provincial)	Grant	\$0	\$1,200,000	\$3,450,000	\$5,450,000	\$3,000,000	\$200,000	\$13,300,000
Donations / Third Party Funding	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	Res	\$805,000	\$3,498,000	\$694,000	\$210,000	\$160,000	\$764,500	\$5,326,500
		<b>\$805,000</b>	<b>\$4,758,000</b>	<b>\$6,754,000</b>	<b>\$11,270,000</b>	<b>\$7,720,000</b>	<b>\$1,324,500</b>	<b>\$31,826,500</b>

CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM

2021 & Forecast 2022 to 2025

Service #:

2.610

Service Name:

Saanich Peninsula Water Supply

Proj. No.

The first two digits represent first year the project was in the capital plan.

Capital Exp. Type

Study

 - Expenditure for feasibility and business case report.

New

 - Expenditure for new asset only

Renewal

 - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service

Replacement

 - Expenditure replaces an existing asset

Funding Source Codes

Debt = Debenture Debt (new debt only)

ERF

 = Equipment Replacement Fund

Grant

 = Grants (Federal, Provincial)

Cap

 = Capital Funds on Hand

Other

 = Donations / Third Party Funding

Funding Source Codes (con't)

Res = Reserve Fund

STLoan

 = Short Term Loans

WU

 - Water Utility

Asset Class

L - Land

S

 - Engineering Structure

B

 - Buildings

V

 - Vehicles

E

 - Equipment

Capital Project Title

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

Capital Project Description

Briefly describe project scope and service benefits.

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

Total Project Budget

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

FIVE YEAR FINANCIAL PLAN													
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
SYSTEM UPGRADES AND REPLACEMENTS													
Planning													
19-02	New	Asset Management Plan Update	Update the asset management plan with recent study information (post disaster emergency water supply, Elk Lake Main Removals, ...)	\$100,000	S	Res	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
Capital													
17-01	New	Reservoir Seismic Isolation Valves	Assessment, design and installation of seismic isolation valves at 7 of the reservoirs, and installation of restrained hydrants at reservoirs where possible.	\$500,000	S	Res	\$290,000	\$290,000	\$0	\$0	\$0	\$0	\$290,000
18-02	New	Site Security Assessment & Improvements	Assess the security of facilities and make improvements for the public and operators	\$215,000	S	Res	\$185,000	\$185,000	\$0	\$0	\$0	\$0	\$185,000
18-04	New	Post Disaster Emergency Water Supply	Identify and procure emergency systems for post disaster preparedeness	\$1,050,000	S	Res	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
19-01	Renewal	Corrosion Protection Program	Carry out an investigation and monitoring program in conjunction with other services to prevent infrastructure failure due to corrosion	\$110,000	S	Res	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
20-02	New	Hamsterly Pump Station Backup Power Generator	Addition of a backup power generator at the Hamsterly Pump Station	\$335,000	S	Res	\$285,000	\$285,000	\$0	\$0	\$0	\$0	\$285,000
21-01	New	Level of Service Agreement	Determine and develop appropriate level of service agreements with the participating municipalities for water supply.	\$75,000	E	Res	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000
21-02	Renewal	Stewart's Well Decommissioning	Decommission the well, and demolish the structures.	\$175,000	S	Res	\$0	\$75,000	\$100,000	\$0	\$0	\$0	\$175,000
21-03	Renewal	Upper Dean Reservoir Roof Replacement	Replace the roof membrane due to leaks.	\$400,000	S	Res	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000
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.	\$350,000	S	Res	\$0	\$100,000	\$250,000	\$0	\$0	\$0	\$350,000

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 grant funded project in partner with the RWS system.	\$14,700,000	S	Res	\$0	\$1,800,000	\$0	\$0	\$0	\$0	\$1,800,000	
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 grant funded project in partner with the RWS system.		S	Debt	\$0	\$0	\$2,550,000	\$5,550,000	\$4,500,000	\$300,000	\$12,900,000	
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 grant funded project in partner with the RWS system.	\$13,300,000	S	Grant	\$0	\$1,200,000	\$3,450,000	\$5,450,000	\$3,000,000	\$200,000	\$13,300,000	
21-06	Renewal	Voice Radio Replacement	Replacement of the aging voice radio system with the Core Area, RWS, JDF and Saanich Peninsula Wastewater systems.	\$67,000	S	Res	\$0	\$33,000	\$34,000	\$0	\$0	\$0	\$67,000	
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.	\$6,500	S	Res	\$0	\$0	\$0	\$0	\$0	\$6,500	\$6,500	
Sub-Total System Upgrades and Replacements				\$31,383,500			\$760,000	\$4,653,000	\$6,544,000	\$11,160,000	\$7,660,000	\$666,500	\$30,683,500	
ANNUAL PROVISIONAL ITEMS														
17-02	Renewal	Provisional Equipment Replacements	Funds to conduct emergency and unplanned repairs outside of normal Operations.	\$300,000	S	ERF	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000	
DEVELOPMENT COST CHARGE (DCC) PROGRAM														
20-02	New	Hamsterly Pump Station Backup Power Generator	Addition of a backup power generator at the Hamsterly Pump Station	\$95,000	S	Res	\$45,000	\$45,000	\$0	\$0	\$0	\$0	\$45,000	
22-01	New	Water Strategic Plan Update	Update the strategic plan to inform future works and identify hydraulic deficiencies.	\$150,000	S	Res	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000	
23-01	New	DCC Program Update	5-year update of the DCC program.	\$50,000	S	Res	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000	
25-01	New	Hamsterly Pump Station Capacity Upgrade	Increase the capacity of the Hamsterly Pump Station to address increased water demand.	\$598,000	S	Res	\$0	\$0	\$0	\$0	\$0	\$598,000	\$598,000	
Sub-Total Development Cost Charge (DCC) Program				\$893,000			\$45,000	\$45,000	\$150,000	\$50,000	\$0	\$598,000	\$843,000	
			GRAND TOTAL	\$32,576,500				\$805,000	\$4,758,000	\$6,754,000	\$11,270,000	\$7,720,000	\$1,324,500	\$31,826,500



Service: 2.610 Saanich Peninsula Water Supply			
Proj. No.	19-02	Capital Project Title	Asset Management Plan Update
Capital Project Description	Update the asset management plan with recent study information (post disaster emergency water supply, Elk Lake Main Removals, ...)		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Update the strategic asset management plan based upon recent studies such as the DCC Program Update, Post Disaster Response Plan, and Site Security Assessment. The update will inform future capital works.		
Proj. No.	17-01	Capital Project Title	Reservoir Seismic Isolation Valves
Capital Project Description	Assessment, design and installation of seismic isolation valves at 7 of the reservoirs, and installation of restrained hydrants at reservoirs where possible.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Commission has indicated a desire to include seismic valves on each of the 8 Saanich Peninsula Water System reservoirs. At present, the Dean Park Middle Reservoir is the only reservoir equipped with a seismic valve. In summary a seismic valve is simple actuated system to shut the outlet valve(s) automatically if a seismic event (of a specific magnitude) is experienced. Each site is unique and installation complexity and associated costs will vary. The first task in this project will be to further define the proposed solution and budget for each site. The resulting detailed project will be reviewed in conjunction with the Strategic Asset Management Plan for the system to confirm affordability and value prior to initiating construction works.		
Proj. No.	18-02	Capital Project Title	Site Security Assessment & Improvements
Capital Project Description	Assess the security of facilities and make improvements for the public and operators		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Saanich Peninsula Water system is comprised of various pump stations, pressure control stations, meter facilities and storage tanks. The facilities have varying levels of security with no consistent intent. A site security assessment is proposed to secure all facilities so that operators can safely maintain the sites and keep the public and infrastructure safe. Funding is required to assess all facilities and conduct improvements to secure them.		

Service: 2.610			Saanich Peninsula Water Supply		
Proj. No.	18-04	Capital Project Title	Post Disaster Emergency Water Supply	Capital Project Description	Identify and procure emergency systems for post disaster preparedness
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<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.					
Proj. No.	19-01	Capital Project Title	Corrosion Protection Program	Capital Project Description	Carry out an investigation and monitoring program in conjunction with other services to prevent infrastructure failure due to corrosion
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<b>Project Rationale</b> The Saanich Peninsula Water System comprises of many material types including steel. An investigation and monitoring program will be developed to prevent infrastructure failure due to corrosion. Funds are required to retain a qualified corrosion specialist to assess and aid in developing a monitoring program.					
Proj. No.	20-01	Capital Project Title	#N/A	Capital Project Description	#N/A
Asset Class	#N/A	Board Priority Area	#N/A	Corporate Priority Area	#N/A
<b>Project Rationale</b> Staff produced the 2018 Elk Lake Main Decommissioning Study to highlight regions of the abandoned main requiring capital works to reduce risk to public safety if the abandoned infrastructure failed. Funds are required to demolish or properly decommission abandoned and unused infrastructure.					
Proj. No.	20-03	Capital Project Title	#N/A	Capital Project Description	#N/A
Asset Class	#N/A	Board Priority Area	#N/A	Corporate Priority Area	#N/A
<b>Project Rationale</b> KWL carried out a water audit of the Saanich Peninsula Water system in 2017 and recommended that the meters be replaced at the Lochside PRV, Martindale meter station and Tsawout meter station. Funds are required to replace the meters and complete any associated upgrades at the stations.					

Service: 2.610 Saanich Peninsula Water Supply			
Proj. No.	21-01	Capital Project Title	Level of Service Agreement
Capital Project Description	Determine and develop appropriate level of service agreements with the participating municipalities for water		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	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.		
Proj. No.	17-02	Capital Project Title	Provisional Equipment Replacements
Capital Project Description	Funds to conduct emergency and unplanned repairs outside of normal Operations.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Replace various system equipment that may fail during the year that is not specifically identified and funded through the operating and capital budgets.		
Proj. No.	20-02	Capital Project Title	Hamsterly Pump Station Backup Power Generator
Capital Project Description	Addition of a backup power generator at the Hamsterly Pump Station		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	From the 2018 DCC Update, KWL identified that the addition of backup power at the Hamsterly Pump Station. Funds are required to design and construct backup power for the Hamsterly Pump Station.		
Proj. No.	22-01	Capital Project Title	Water Strategic Plan Update
Capital Project Description	Update the strategic plan to inform future works and identify hydraulic deficiencies.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	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.		

**2.610 Saanich Peninsula Water  
Summary Schedule  
2021 - 2025 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**

	<b>Actual</b>	<b>Estimated</b>	<b>Budget</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
DCC Reserve Account	2,092,293	2,091,494	2,091,494	1,941,494	1,891,494	1,891,494	1,293,494
Equipment Replacement Fund	1,751,473	1,771,473	1,771,473	1,771,473	1,771,473	1,771,473	1,771,473
Capital Reserve	5,552,657	5,472,657	3,479,657	3,685,657	4,075,657	4,215,657	4,299,157
<b>Total</b>	<b>9,396,423</b>	<b>9,335,624</b>	<b>7,342,624</b>	<b>7,398,624</b>	<b>7,738,624</b>	<b>7,878,624</b>	<b>7,364,124</b>

2.610 Saanich Peninsula Water  
Development Cost Charges  
2021 - 2025 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	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
Beginning Balance	1,996,923	2,092,293	2,091,494	2,091,494	1,941,494	1,891,494	1,891,494
Transfers to Reserve							
Transfers from Reserve based on DCC-capital plan	-	(95,000)	-	(150,000)	(50,000)	-	(598,000)
DCC's received from Member Municipalities	69,201	69,201					
Interest Income*	26,169	25,000					
Ending Balance \$	2,092,293	2,091,494	2,091,494	1,941,494	1,891,494	1,891,494	1,293,494

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 Municipalities.

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 Develoment 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  
2021 - 2025 Financial Plan

**Equipment Replacement Reserve Schedule**

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

Fund: 1022 Fund Center: 101452	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
Beginning Balance	1,733,094	1,751,473	1,771,473	1,771,473	1,771,473	1,771,473	1,771,473
Equipment purchases (Based on Capital Plan)	(54,176)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Transfer from Operating Budget	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Interest Income*	22,555	20,000					
<b>Ending Balance \$</b>	<b>1,751,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</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  
2021 - 2025 Financial Plan**

**Capital Reserve Fund Schedule**

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

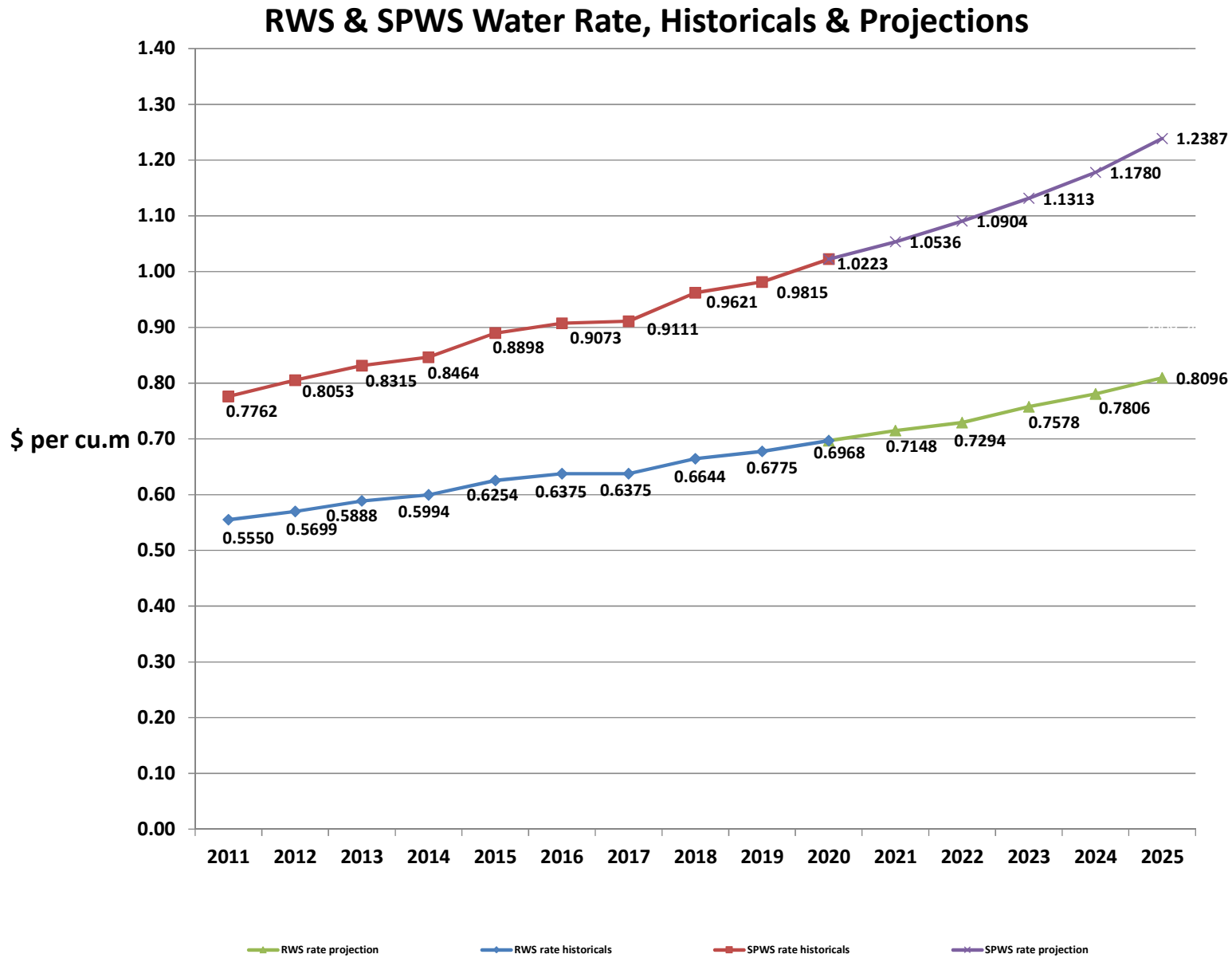
Fund: 1009 Fund Center: 102159	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
<b>Beginning Balance</b>	5,129,591	5,552,657	5,472,657	3,479,657	3,685,657	4,075,657	4,215,657
<b>Transfers from Reserve based on capital plan</b>	(455,000)	(780,000)	(2,693,000)	(544,000)	(160,000)	(160,000)	(166,500)
<b>Transfer from Operating Budget</b>	825,627	650,000	700,000	750,000	550,000	300,000	250,000
<b>Interest Income*</b>	52,440	50,000					
<b>Ending Balance \$</b>	<b>5,552,657</b>	<b>5,472,657</b>	<b>3,479,657</b>	<b>3,685,657</b>	<b>4,075,657</b>	<b>4,215,657</b>	<b>4,299,157</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.





**REGIONAL WATER SUPPLY COMMISSION**  
**Agricultural Water Rate Funding Comparisons 2011 - 2019**

		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	Agri Rate m3	Muni-CRD Diff m3
													A	B	A - B
Western Communities & Sooke *															
	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
Central Saanich															
	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
North Saanich **															
	2019	94	15	58,278	95,030	620	6,335	\$ 201,370	\$ -	\$ 201,370	\$ 1,847	13.5%	\$ 1.5240	\$ 0.2105	\$ 1.3135
	2018	100	16	97,574	70,666	976	4,417	\$ 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
Saanich															
	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
Totals															
	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	499,664	1,021	3,785	\$ 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.



Making a difference...together

**CAPITAL REGIONAL DISTRICT  
JUAN DE FUCA WATER DISTRIBUTION COMMISSION  
Meeting held Tuesday, October 1, 2019**

**MEETING HOTSHEET  
(ACTION LIST)**

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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.

**2. Adoption of Minutes of July 2, 2019 meeting**

That the minutes of the July 2, 2019 Juan de Fuca Water Distribution Commission meeting be adopted as circulated.

**CARRIED**

**7. Commission Business**

**7.1. JWDC 19-12 Juan de Fuca Water Distribution Service – 2020 Operating and Capital Budget**

That the Juan de Fuca Water Distribution Commission recommends that the Capital Regional District Board:

1. Approve the 2020 Capital Budget and the Five Year Capital Plan;
2. Approve the 2020 Operating Budget;
3. Approve the 2020 Juan de Fuca Water Distribution Service retail water rate of \$2.2159 per cubic metre, adjusted if necessary by any change in the Regional Water Supply wholesale water rate; and
4. Amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

**CARRIED**



**CAPITAL REGIONAL DISTRICT REGIONAL WATER SUPPLY COMMISSION**  
**Wednesday, July 15, 2020 at 11:30 AM**

**MEETING HOTSHEET**  
**(ACTION LIST)**

The following is a quick snapshot of the FINAL Regional Water Supply Commission decisions made at the meeting. The minutes will represent the official record of the meeting.

**2. APPROVAL OF AGENDA**

That the correspondence from M. Doehnel regarding the Agricultural Study be added to the agenda as Item 8.1.2.

**CARRIED**

**3. ADOPTION OF MINUTES**

That the minutes of the June 17, 2020 meeting be adopted.

**CARRIED**

**4. APPROVAL OF RESOLUTION**

1. That this resolution applies to the Regional Water Supply Commission for the meetings being held between July 1, 2020 and December 31, 2020.
2. That the attendance of the public at the place of the meeting cannot be accommodated in accordance with the applicable requirements or recommendations under the *Public Health Act*, despite the best efforts of the Regional Water Supply Commission, because:
  - a. The available meeting facilities cannot accommodate more than 38 people in person, including members of the Regional Water Supply Commission and staff, and
  - b. There are no other facilities presently available that will allow physical attendance of the Regional Water Supply Commission and the public in sufficient numbers; and
3. That the Regional Water Supply Commission is ensuring openness, transparency, accessibility and accountability in respect of the open meeting by the following means:
  - a. By allowing the public to hear or participate via teleconference or electronic meeting software,
  - b. By allowing the public to see and hear the live webcasting of the meeting on the CRD website,
  - c. By providing notice of the meeting in newspaper or local notice Board, including the methods for providing written or electronic submissions,
  - d. By making the meeting agenda, as well as the other relevant documents, available on the CRD website, and directing interested persons to the website by means of the notices provided in respect of the meeting,

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

- e. By strongly encouraging the provision of, and subsequently receiving and distributing to members, written correspondence from the public in advance of the meeting, and
- f. By making the minutes of the meeting available on the CRD website following the meeting.

That the Regional Water Supply Commission adopt the resolution as presented.

**CARRIED**

## **7. WATER ADVISORY COMMITTEE REPORT**

### **7.2. Draft Minutes of the June 25, 2020 Water Advisory Committee Meeting**

That the Regional Water Supply Commission receive the Draft Minutes for information.

**CARRIED**

## **8. COMMISSION BUSINESS**

### **8.1. RWSC 20-05 Remediation of Leech Water Supply Area Gravel Pit**

That the Regional Water Supply Commission receive the report for information.

**CARRIED**

That the Regional Water Supply Commission directs staff to review the costs and process for moving forward with a Certificate of Completion to remove the site from the contaminated sites list and report back to the Commission.

**CARRIED**

### **8.2. EEP 20-29 Review of the Agricultural Water Subsidy Rate and Rate Methodology**

The Regional Water Supply Commission recommends:

That staff be directed to maintain the current agricultural water rate for the 2021 budget year, and undertake an agricultural rate review that considers the current rate, rate model and rate application, the implications of these elements, and presents rate/rate model options for the Commission's consideration.

**CARRIED**

### **8.3. Summary of Recommendations from Other Water Commissions**

That the Summary of Recommendations from Other Water Commissions be received for information.

**CARRIED**

### **8.4. Water Watch Report**

That the July 6, 2020 Water Watch report be received for information.

**CARRIED**

## **9. NOTICE OF MOTION**

### **9.1. Request for a Review and Update of Bylaw No. – Commissioner St-Pierre**

**BE IT RESOLVED** that the Regional Water Supply Commission recommends that the Electoral Area Services Committee recommends to the CRD Board:

That staff be requested to review and update the building bylaw 3780 with respect to onsite water collection to align with the CSA B805-18 Canadian National Rainwater Harvesting Standard.

**CARRIED**

**11. MOTION TO CLOSE THE MEETING**

**In accordance with the Community Charter, Part 4, Division 3, 90(1)(e)** the acquisition, disposition or expropriation of land or improvements.

**CARRIED**



**CAPITAL REGIONAL DISTRICT REGIONAL WATER SUPPLY COMMISSION**  
**Wednesday, September 16, 2020 at 11:30 AM**

**MEETING HOTSHEET**  
**(ACTION LIST)**

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The following is a quick snapshot of the FINAL Regional Water Supply Commission decisions made at the meeting. The minutes will represent the official record of the meeting.

**2. APPROVAL OF AGENDA**

**3. ADOPTION OF MINUTES**

That the minutes of the July 15, 2020 meeting be adopted.

**CARRIED**

**8. COMMISSION BUSINESS**

**8.1. Remediation of Leech Water Supply Area Gravel Pit – Completion of Certificate of Compliance**

That this report be received for information, and that staff be directed not to pursue a Certificate of Compliance for the site.

**CARRIED**

**8.2. RWSC 20-07 August 17, 2020 Lightning Strike Wildfires in the Greater Victoria Water Supply Area**

That this report be received for information.

**CARRIED**

**8.3. Summary of Recommendations from Other Water Commissions**

That the Summary of Recommendations from Other Water Commissions be received for information.

**CARRIED**

**8.4. Water Watch Report**

That the September 8, 2020 Water Watch report be received for information.

**CARRIED**

## CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

### Water Watch

Issued October 05, 2020

#### Water Supply System Summary:

##### 1. Useable Volume in Storage:

Reservoir	October 31 5 Year Ave		October 31/19		October 4/20		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	63,824	14,041	63,500	13,970	65,015	14,303	70.1%
Goldstream	5,344	1,176	3,565	784	6,553	1,442	66.1%
Total	69,168	15,217	67,065	14,754	71,569	15,745	69.8%

##### 2. Average Daily Demand:

For the month of October	124.7 MLD	27.44 MIGD
For week ending October 04, 2020	124.3 MLD	27.35 MIGD
Max. day October 2020, to date:	128.1 MLD	28.19 MIGD

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

Average (2015 - 2019)	108.2 MLD <sup>1</sup>	23.80 MIGD <sup>2</sup>
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<sup>1</sup>MLD = Million Litres Per Day      <sup>2</sup>MIGD = Million Imperial Gallons Per Day

##### 4. Rainfall October:

Average (1914 - 2019):	169.7 mm
Actual Rainfall to Date	0.3 mm (0% of monthly average)

##### 5. Rainfall: Sep 1- Oct 4

Average (1914 - 2019):	77.8 mm
2020	138.3 mm (178% of average)

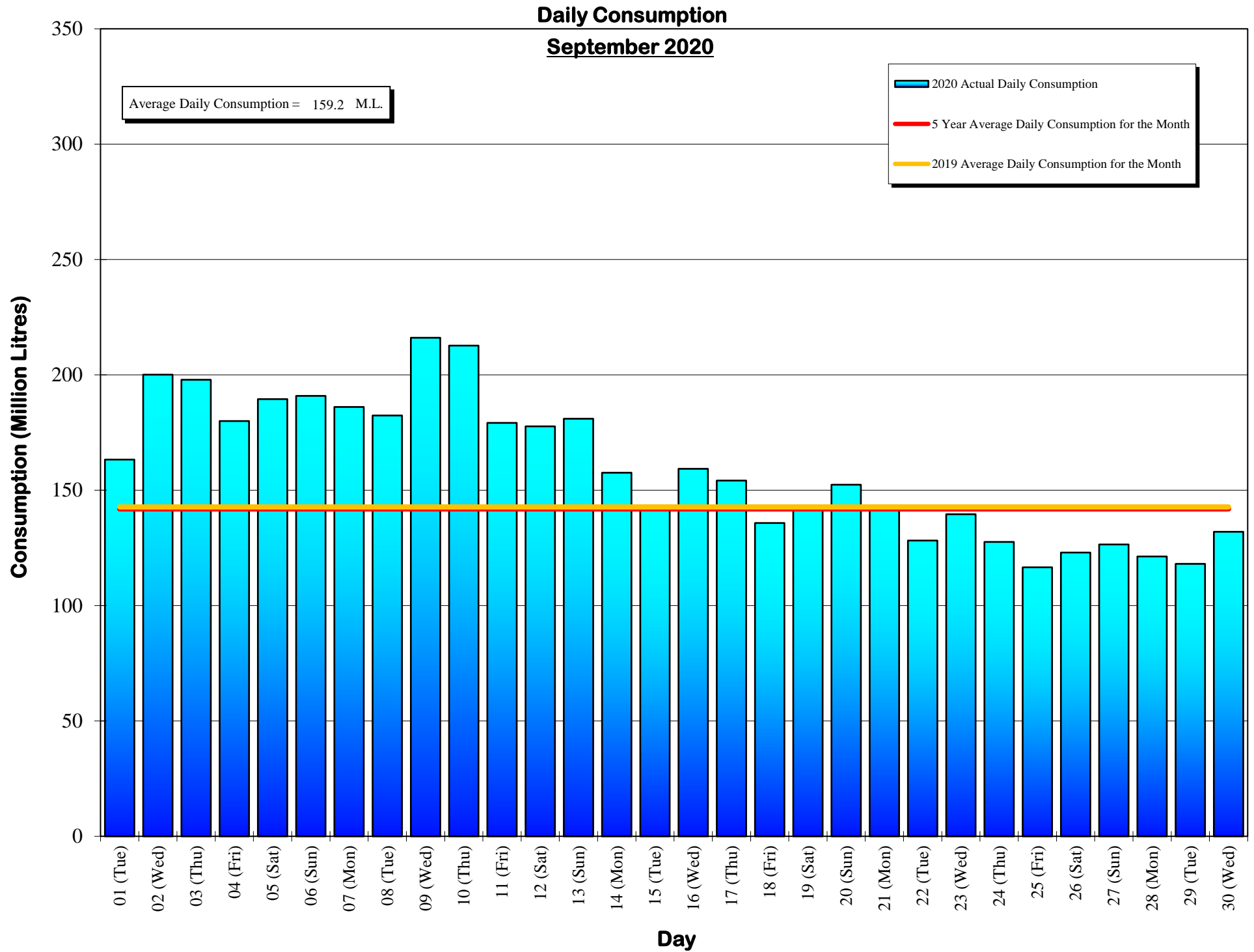
##### 6. Water Conservation Action Required:

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

If you require further information, please contact:

Ted Robbins, B.Sc., C.Tech  
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 Consumptions: - September 2020

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 (Tue)	163.3		35.9	24	11	Sunny	0.0	0.0	0.0
02 (Wed)	200.1		44.0	24	13	Sunny	0.0	0.0	0.0
03 (Thu)	197.9		43.5	25	13	Sunny	0.0	0.0	0.0
04 (Fri)	180.0		39.6	28	14	Sunny	0.0	0.0	0.0
05 (Sat)	189.5		41.7	22	14	Sunny	0.0	0.0	0.0
06 (Sun)	190.9		42.0	24	13	Sunny	0.0	0.0	0.0
07 (Mon)	186.1		40.9	26	14	Sunny	0.0	0.0	0.0
08 (Tue)	182.4		40.1	25	13	Sunny / Hazy skies	0.0	0.0	0.0
09 (Wed)	216.1	<=Max	47.5	29	13	Sunny	0.0	0.0	0.0
10 (Thu)	212.7		46.8	30	14	Sunny	0.0	0.0	0.0
11 (Fri)	179.2		39.4	25	14	Sunny	0.0	0.0	0.0
12 (Sat)	177.7		39.1	16	11	Wildfire smoke	0.0	0.0	0.0
13 (Sun)	181.0		39.8	17	10	Wildfire smoke	0.0	0.0	0.0
14 (Mon)	157.6		34.7	18	11	Smoke / P. Cloudy / Showers	3.1	0.0	3.1
15 (Tue)	142.6		31.4	22	14	Smoke / P. Cloudy / Showers	1.3	0.0	1.3
16 (Wed)	159.3		35.0	22	14	Smoke / P. Cloudy / Showers	0.3	0.0	0.3
17 (Thu)	154.2		33.9	22	14	Smoke / P. Cloudy	0.0	0.0	0.0
18 (Fri)	135.8		29.9	18	14	Sunny / P. Cloudy / Showers	0.5	0.0	0.5
19 (Sat)	142.3		31.3	21	13	Sunny / P. Cloudy / Showers	0.3	0.0	0.3
20 (Sun)	152.4		33.5	21	11	Sunny / P. Cloudy	0.0	0.0	0.0
21 (Mon)	141.7		31.2	19	11	Sunny / P. Cloudy	0.0	0.0	0.0
22 (Tue)	128.2		28.2	21	10	Sunny / P. Cloudy	0.0	0.0	0.0
23 (Wed)	139.6		30.7	16	12	Cloudy / Rain	60.2	0.0	60.2
24 (Thu)	127.6		28.1	18	12	Cloudy / Rain	19.3	0.0	19.3
25 (Fri)	116.6	<=Min	25.6	15	11	Cloudy / Rain	31.2	0.0	31.2
26 (Sat)	123.0		27.1	13	9	Cloudy / Rain	21.8	0.0	21.8
27 (Sun)	126.5		27.8	16	8	Sunny / P. Cloudy	0.0	0.0	0.0
28 (Mon)	121.3		26.7	19	9	Sunny	0.0	0.0	0.0
29 (Tue)	118.1		26.0	22	11	Sunny	0.0	0.0	0.0
30 (Wed)	132.0		29.0	23	12	Sunny / Hazy skies	0.0	0.0	0.0
TOTAL	4775.7 ML	1050.63 MIG					138.0	0	138.0
MAX	216.1	47.55	30	14			60.2	0	60.2
AVG	159.2	35.02	21.4	12.1			4.6	0	4.6
MIN	116.6	25.64	13	8			0.0	0	0.0

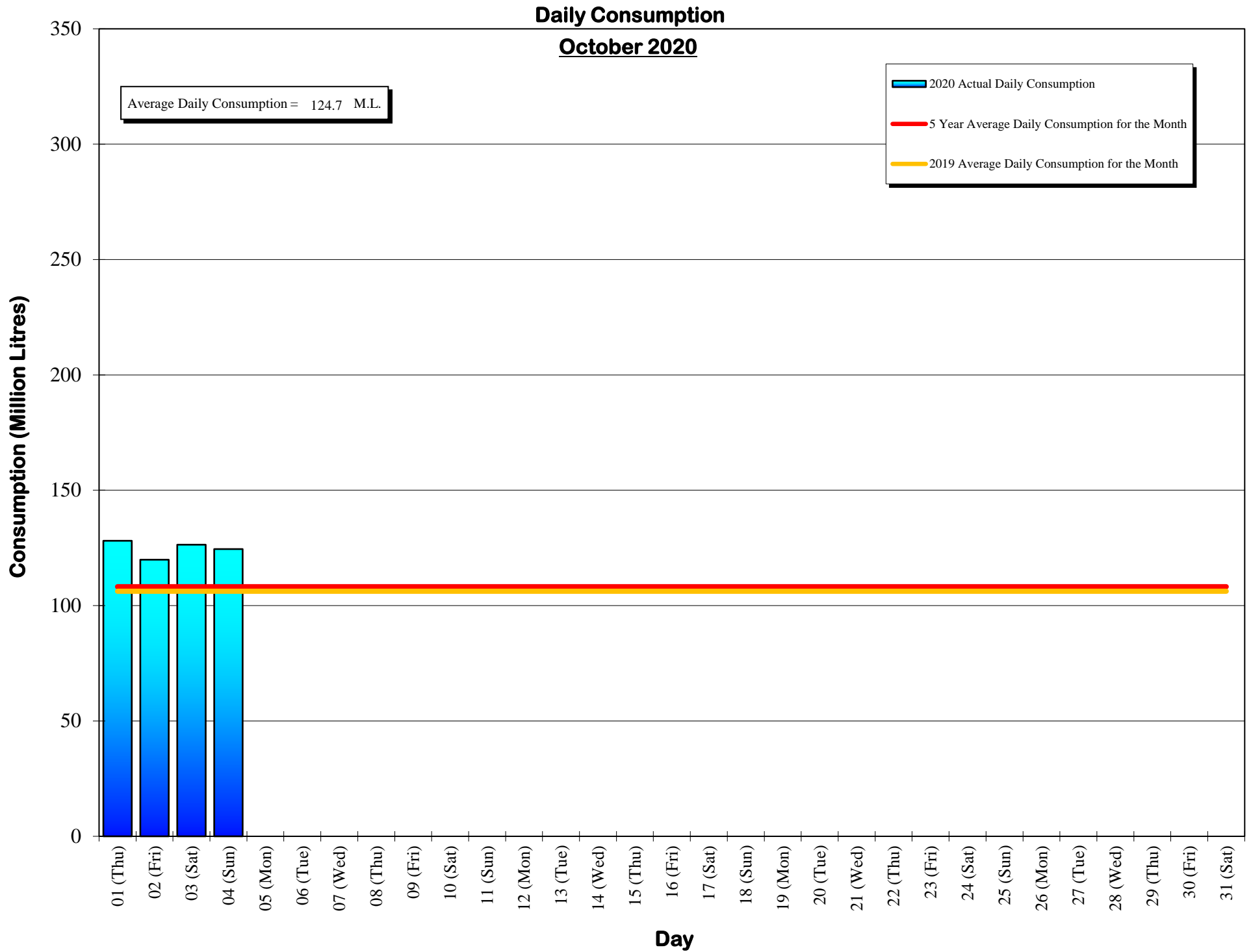
1. ML = Million Litres

2. MIG = Million Imperial Gallons

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

Average Rainfall for September (1914-2019)	64.7 mm
Actual Rainfall: September	138.0 mm
% of Average	213%
Average Rainfall (1914-2019): Sept 01 - Oct 04	77.8 mm
Actual Rainfall (2020): Sept 01 - Oct 04	138.3 mm
% of Average	178%

Number days with precip. 0.2 or more
9



Daily Consumptions: - October 2020

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>			Rainfall (mm)	Snowfall <sup>3</sup> (mm)	Total Precip.	
01 (Thu)	128.1	<=Max	28.2	21	12	Sunny / Hazy skies	0.0	0.0	0.0
02 (Fri)	119.9	<=Min	26.4	21	12	Sunny / P. Cloudy / Showers	0.3	0.0	0.3
03 (Sat)	126.4		27.8	19	11	Sunny / P. Cloudy	0.0	0.0	0.0
04 (Sun)	124.5		27.4	18	10	Sunny / P. Cloudy	0.0	0.0	0.0
05 (Mon)									
06 (Tue)									
07 (Wed)									
08 (Thu)									
09 (Fri)									
10 (Sat)									
11 (Sun)									
12 (Mon)									
13 (Tue)									
14 (Wed)									
15 (Thu)									
16 (Fri)									
17 (Sat)									
18 (Sun)									
19 (Mon)									
20 (Tue)									
21 (Wed)									
22 (Thu)									
23 (Fri)									
24 (Sat)									
25 (Sun)									
26 (Mon)									
27 (Tue)									
28 (Wed)									
29 (Thu)									
30 (Fri)									
31 (Sat)									
TOTAL	498.9 ML		109.76 MIG				0.3	0	0.3
MAX	128.1		28.19	21	12		0.3	0	0.3
AVG	124.7		27.44	19.8	11.3		0.1	0	0.1
MIN	119.9		26.37	18	10		0.0	0	0.0

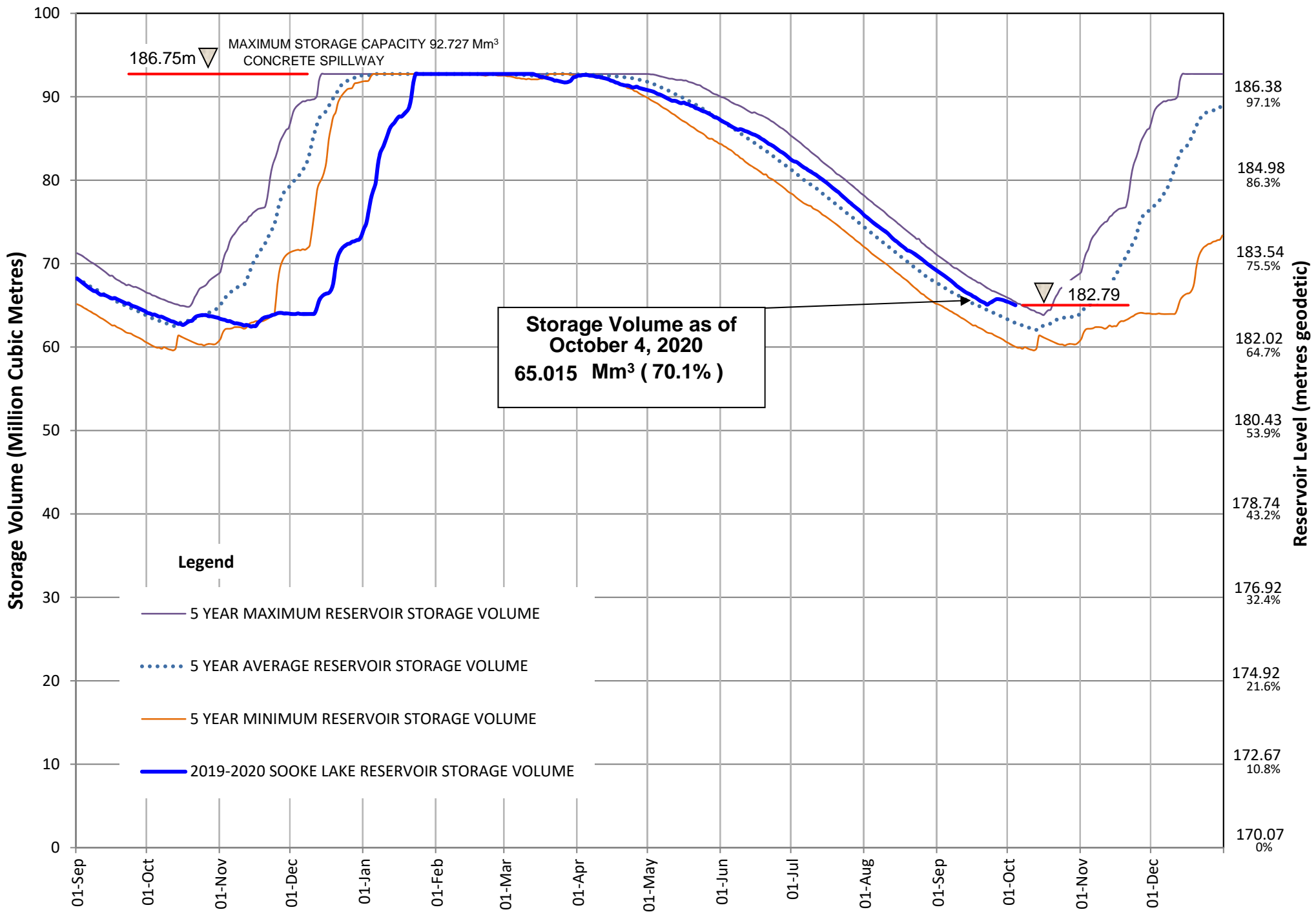
1. ML = Million Litres      2. MIG = Million Imperial Gallons      3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

Average Rainfall for October (1914-2019)	169.7 mm
Actual Rainfall: October	0.3 mm
% of Average	0%
Average Rainfall (1914-2019): Sept 01 - Oct 04	77.8 mm
Actual Rainfall (2020): Sept 01 - Oct 04	138.3 mm
% of Average	178%

Number days with precip. 0.2 or more
1

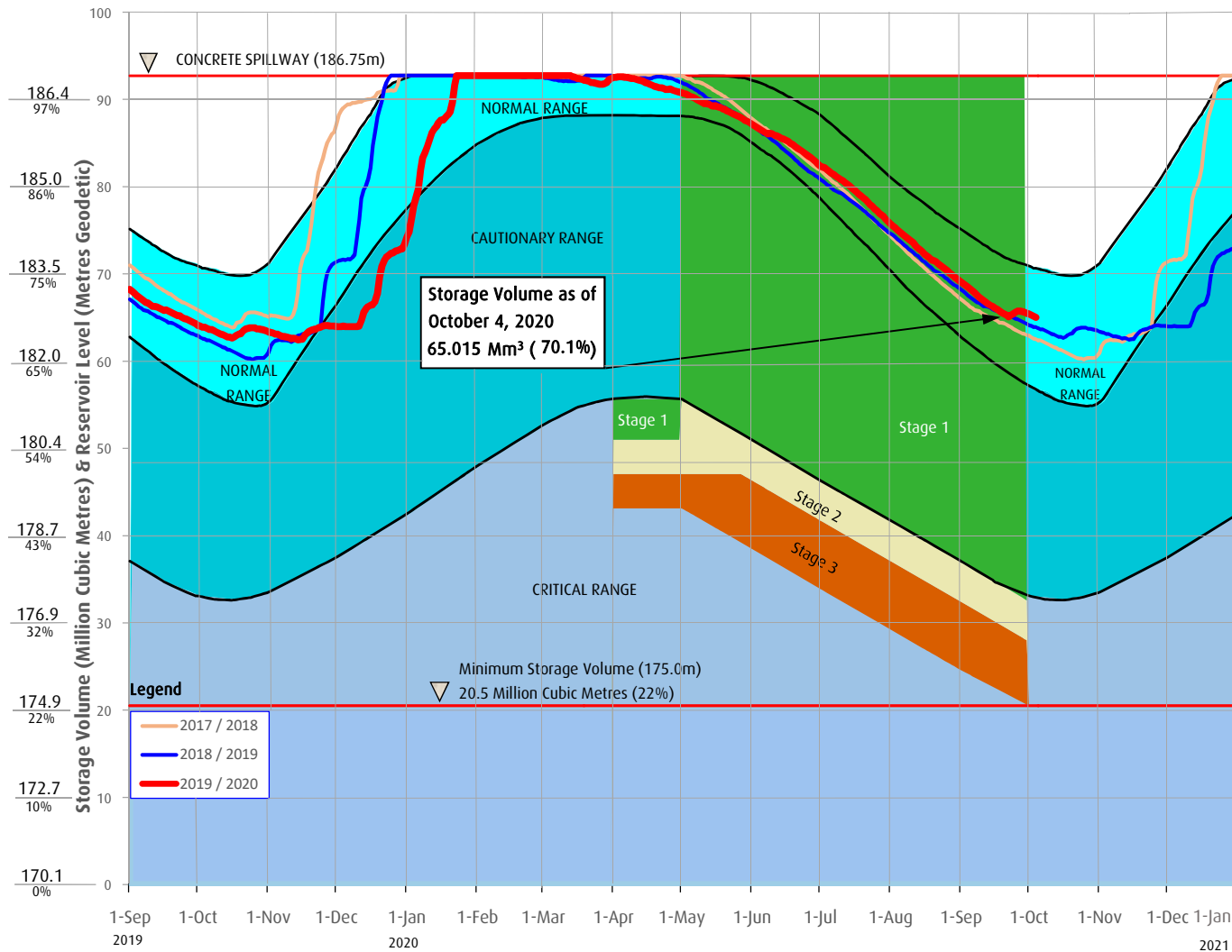
# SOOKE LAKE RESERVOIR STORAGE SUMMARY

## 2019 / 2020



# 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)

**CRD**  
Making a difference...together

## Useable Reservoir Volumes in Storage for October 04, 2020

