



## Notice of Meeting and Meeting Agenda Regional Water Supply Commission

Wednesday, February 18, 2026

1:30 PM

6th Floor Boardroom  
625 Fisgard St.  
Victoria, BC V8W 1R7

G. Baird (Chair), M. Wagner, (Vice Chair), J. Caradonna, N. Chambers, C. Coleman, Z. de Vries, S. Duncan, C. Graham, S. Gray, C. Green, K. Guiry, S. Hammond, K. Harper, K. Jordison, S. Kim, T. Morrison, K. Pearson, T. Phelps Bondaroff, J. Rogers, C. Stock, M. Westhaver, A. Wickheim

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

### 1. TERRITORIAL ACKNOWLEDGEMENT

### 2. APPROVAL OF THE AGENDA

### 3. ADOPTION OF MINUTES

- 3.1. [26-0183](#) Minutes of the Regional Water Supply Commission Meeting of January 21, 2026

**Recommendation:** That the minutes of the Regional Water Supply Commission meeting of January 21, 2026 be adopted as circulated.

**Attachments:** [Minutes - January 21, 2026](#)

### 4. CHAIR'S REMARKS

### 5. PRESENTATIONS/DELEGATIONS

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

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

*Alternatively, you may email your comments on an agenda item to the Commission at [LegServ@crd.bc.ca](mailto:LegServ@crd.bc.ca).*

### 6. CONSENT AGENDA

**6.1. [26-0182](#) Summary of Recommendations from Other Water Commissions**

**Recommendation:** There is no recommendation. This report is for information only.

**Attachments:** [Summary: JWDC - February 3, 2026](#)  
[Summary: SPWC - February 5, 2026](#)

**6.2. [26-0181](#) Water Watch Report**

**Recommendation:** There is no recommendation. This report is for information only.

**Attachments:** [Water Watch Report - February 9, 2026](#)

**6.3. [26-0171](#) Monthly Drinking Water Quality Dashboard**

**Recommendation:** There is no recommendation. This report is for information only.

**Attachments:** [Monthly Drinking WQ Dashboard - January 2026](#)

**7. COMMISSION BUSINESS****7.1. [26-0031](#) General Manager's Verbal Update - February**

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

**7.2. [26-0121](#) Summary of Peak Demands and High Water Users - Operational Implications and Action Plan**

**Recommendation:** There is no recommendation. This report is for information only.

**Attachments:** [Staff Report: Summary of Peak Demands](#)  
[Appendix A: Impact on Peak Demands Following BL Amd.](#)  
[Appendix B: Approach to ICI High-Water Users](#)

**8. NOTICE(S) OF MOTION****9. NEW BUSINESS****10. ADJOURNMENT**

The next meeting is March 18, 2026.

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

**Voting Key:**

**NWA - Non-weighted vote of all Directors**

**NWP - Non-weighted vote of participants (as listed)**

**WA - Weighted vote of all Directors**

**WP - Weighted vote of participants (as listed)**

## Meeting Minutes

### Regional Water Supply Commission

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Wednesday, January 21, 2026

1:30 PM

6th Floor Boardroom  
625 Fisgard St.  
Victoria, BC V8W 1R7

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**PRESENT:**

Commissioners: G. Baird, J. Caradonna, N. Chambers, C. Coleman, Z. de Vries, S. Duncan (EP), C. Graham (EP), S. Gray (EP), C. Green, K. Guiry, K. Harper, K. Jordison (EP), S. Kim, T. Morrison (EP), K. Pearson (EP), T. Phelps Bondaroff (EP), J. Rogers, C. Stock, M. Wagner, M. Westhaver (EP), A. Wickheim (EP)

STAFF: T. Robbins, Chief Administrative Officer; A. Fraser, General Manager, Infrastructure and Water Services; A. Constabel, Senior Manager, Watershed Protection; G. Harris, Senior Manager, Environmental Protection; S. Irg, Senior Manager, Water Infrastructure Operations; J. Marr, Senior Manager, Infrastructure Planning and Engineering; S. Mason, Manager, Water Supply Engineering and Planning; J. Patterson, Manager, Watershed Planning and Monitoring; P. Stephens, Project Engineer, Infrastructure and Water Services; M. Lagoa, Deputy Corporate Officer; T. Pillipow, Senior Committee Clerk; J. Ives, Committee Clerk; M. MacDonald, Legislative Services Coordinator (Recorder)

EP - Electronic Participation

Guests: S. Heffernan, Urban Systems

Regrets: Commissioner S. Hammond

The meeting was called to order at 1:30 pm.

#### 1. TERRITORIAL ACKNOWLEDGEMENT

A. Fraser provided a Territorial Acknowledgement.

#### 2. APPROVAL OF THE AGENDA

**MOVED** by Commissioner Kim, **SECONDED** by Commissioner Stock,  
That the agenda for the Regional Water Supply Commission meeting of January  
21, 2026 be approved.

**CARRIED**

### 3. ELECTION OF CHAIR

The General Manager of Infrastructure and Water Services called for nominations for the position of Chair of the Regional Water Supply Commission for 2026.

Commissioner Harper nominated Commissioner Baird. Commissioner Baird accepted the nomination.

The General Manager of Infrastructure and Water Services called for nominations a second time.

The General Manager of Infrastructure and Water Services called for nominations a third and final time.

Hearing no further nominations, the General Manager of Infrastructure and Water Services declared Commissioner Baird the Chair of the Regional Water Supply Commission for 2026 by acclamation.

### 4. ELECTION OF VICE CHAIR

Chair Baird called for nominations for the position of Vice Chair of the Regional Water Supply Commission for 2026.

Commissioner Stock nominated Commissioner Green. Commissioner Green accepted the nomination.

Chair Baird called for nominations a second time.

Commissioner Harper nominated Commissioner Wagner. Commissioner Wagner accepted the nomination

Chair Baird called for nominations a third and final time.

Hearing no further nominations, Chair Baird invited each nominee to address the Commission.

Ballots were distributed by T. Pillipow and J. Ives and collected by T. Pillipow.

The ballots were counted by M. Lagoa, T. Pillipow and J. Ives.

Chair Baird declared Commissioner Wagner Vice Chair of the Regional Water Supply Commission for 2026.

**MOVED by Commissioner Harper, SECONDED by Commissioner Kim,  
That the ballots used for the election of the Vice Chair be destroyed.  
CARRIED**

**5. ADOPTION OF MINUTES**

- 5.1. [26-0034](#) Minutes of the Regional Water Supply Commission Meetings of November 19 and December 17, 2025

**MOVED by Commissioner Coleman, SECONDED by Commissioner Stock,  
That the minutes of the Regional Water Supply Commission meetings of  
November 19 and December 17, 2025 be adopted as circulated.  
CARRIED**

**6. CHAIR'S REMARKS**

Chair Baird provided the following remarks:

- thanked past commissioners for strong support for the service
- recent Calgary Bearspaw feeder main failures and subsequent public report
- many recommendations for Calgary are already in place here
- opportunity to learn from failures of others and ask questions of staff

**7. PRESENTATIONS/DELEGATIONS**

There were no presentations or delegations.

**8. CONSENT AGENDA**

Item 8.4. was moved to be considered as agenda item 9.4, Item 8.3. was moved to be considered as agenda item 9.5.

**MOVED by Commissioner Harper, SECONDED by Commissioner Wagner,  
That consent agenda Items 8.1. and 8.2. be approved.  
CARRIED**

- 8.1. [26-0042](#) Summary of Recommendations from Other Water Commissions

This report was received for information.

- 8.2. [26-0037](#) Water Watch Report

This report was received for information.

**9. COMMISSION BUSINESS**

**9.1.**     [26-0030](#)     General Manager's Verbal Update - January

A. Fraser presented Item 9.1. for information and noted the following:

- the Sooke Reservoir filled on January 13 and is now spilling
- the Strategic Plan went to the Board and was published for the public
- many items identified in the recent Bearspaw Report are already underway via the Strategic Plan to ensure the water system remains reliable

Discussion ensued regarding:

- long term planning reduces risk for the system
- implementation of water restrictions and water management tools
- consultation on demand management and conservation planning

**9.2.**     [25-0038](#)     Bylaw No. 4658: Regional Water Supply Service Development Cost Charge Bylaw No. 1, 2026

A. Fraser presented Item 9.2.

Discussion ensued regarding:

- charges for self contained dwelling units are standard in the region
- timeline from idea to implementation of Development Cost Charges (DCC)
- options for DCC waivers and reductions will be brought forward in future
- summary of cost per square meter and how they are calculated
- DCC funds must be used to pay for initiatives outlined in the DCC program
- previous reports outline projects that would benefit future users

**MOVED by Commissioner Green, SECONDED by Commissioner Wagner,  
That the Regional Water Supply Commission recommend to the Capital Regional  
District Board that:**

**1. Bylaw No. 4658, "Regional Water Supply Service Development Cost Charge  
Bylaw No. 1, 2026" be introduced and read a first, second and third time; and  
CARRIED**

**Opposed: Pearson**

**MOVED by Commissioner Chambers, SECONDED by Commissioner Stock,  
2. Bylaw No. 4658, "Regional Water Supply Service Development Cost Charge  
Bylaw No. 1, 2026" be submitted to the British Columbia Inspector of  
Municipalities for Statutory Approval pursuant to the Local Government Act.  
CARRIED**

**Opposed: Pearson**

**9.3.**     [25-1350](#)     Leech Restoration Project Closeout Report

A. Constabel presented Item 9.3. for information.

Discussion ensued regarding:

- management of Scotch Broom and aquatic invasive species
- fire prevention study findings will be presented later this year
- water quality testing between Leech and Sooke reservoirs
- future planning for a filtration plant due to climate change and wild fire risks
- regulatory requirement for filtration plant due to potential impacts
- environmental regulations mandate parameters for water flow

**9.4.**     [25-1349](#)     2025 Regional Water Supply Watershed Tours and Classroom Education

Commissioner Coleman spoke to Item 9.4., formerly Item 8.4. on the consent agenda, and suggested contacting First Nations groups regarding the tours given the importance of water in the culture.

Discussion ensued regarding the capacity of the tours, locations and future management.

**9.5.**     [26-0060](#)     Monthly Drinking Water Quality Dashboard - December 2025

Commissioner Rogers spoke to Item 9.5., formerly Item 8.3. on the consent agenda, and expressed appreciation for staff efforts to fine tune the presentation of the report.

**10. NOTICE(S) OF MOTION**

There were no notice(s) of motion.

**11. NEW BUSINESS**

There was no new business.

**12. ADJOURNMENT**

**MOVED by Commissioner Coleman, SECONDED by Commissioner Stock,  
That the Regional Water Supply Commission meeting of January 21, 2026 be  
adjourned at 2:53 pm.  
CARRIED**

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Recorder



## HOTSHEET AND ACTION LIST

### Juan De Fuca Water Distribution Commission

Tuesday, February 3, 2026

1:30 PM

Goldstream Conference Room

479 Island Hwy

Victoria BC V9B 1H7

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

#### 6. Commission Business

6.1. 26-0031 General Manager's Verbal Update - February

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

A. Fraser

6.2. 26-0035 Juan de Fuca Water Distribution Commission Appointment to Water Advisory Committee

A. Fraser

Alternative 2: That Commissioner John Rogers of the Juan de Fuca Water Distribution Commission be appointed as the Commission's representative on the Water Advisory Committee for a one-year term ending December 31, 2026.

6.3. 26-0103 Juan de Fuca Water Distribution System Annual Operational Report

A. Fraser

Recommendation: There is no recommendation. This report is for information only.

6.4. 26-0033 Water Meter Replacement Strategy

A. Fraser

Recommendation: There is no recommendation. This report is for information only.

6.5. 26-0041 Summary of Recommendations from Other Water Commissions

Recommendation: There is no recommendation. This report is for information only.

6.6. 26-0038 Water Watch Report

A. Fraser

Recommendation: There is no recommendation. This report is for information only.



# **HOTSHEET AND ACTION LIST**

## **Saanich Peninsula Water Commission**

Thursday, February 5, 2026

9:30 AM

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

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

Election of Chair - **Commissioner Novek by acclamation**

Election of Vice Chair - **Commissioner Halldorson by acclamation**

### 8. Commission Business

8.1.     **26-0031**     General Manager's Verbal Update – February A. Fraser

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

8.2.     **26-0036**     Saanich Peninsula Water Commission Appointment to Water Advisory Committee A. Fraser

**Recommendation:** That the Vice Chair-Chair of the Saanich Peninsula Water Commission be appointed as the Commission's representative on the Water Advisory Committee for a one-year term ending December 31, 2026.

8.3.     **26-0040**     *Summary of Recommendations from Other Water Commissions* A. Fraser

**Recommendation:** There is no recommendation. This report is for information only.

8.4.     **26-0039**     *Water Watch Report* A. Fraser

**Recommendation:** There is no recommendation. This report is for information only.

## CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

### Water Watch

Issued February 09, 2026

#### Water Supply System Summary:

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

Reservoir	February 28 5 Year Ave		February 28/25		February 8/26		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	92,159	20,275	92,727	20,400	92,727	20,400	100.0%
Goldstream	9,691	2,132	9,825	2,161	9,906	2,179	99.9%
Total	101,850	22,407	102,552	22,561	102,633	22,579	100.0%

##### 2. Average Daily Demand:

For the month of February	104.9 MLD	23.1 MIGD
For week ending February 08, 2026	105.2 MLD	23.1 MIGD
Max. day February 2026, to date:	106.2 MLD	23.4 MIGD

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

Average (2021 - 2025)	103.5 MLD <sup>1</sup>	22.8 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 February:

Average (1914 - 2025):	187.6 mm
Actual Rainfall to Date	71.2 mm (38% of monthly average)

##### 5. Rainfall: Sep 1- Feb 8

Average (1914 - 2025):	1,114.0 mm
2025/2026	1,226.5 mm (110% of average)

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

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

If you require further information, please contact:

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

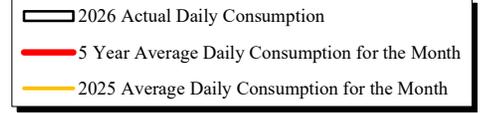
Capital Regional District Integrated Water Services  
479 Island Highway  
Victoria, BC V9B 1H7  
(250) 474-9600

# Daily Consumption

## February 2026

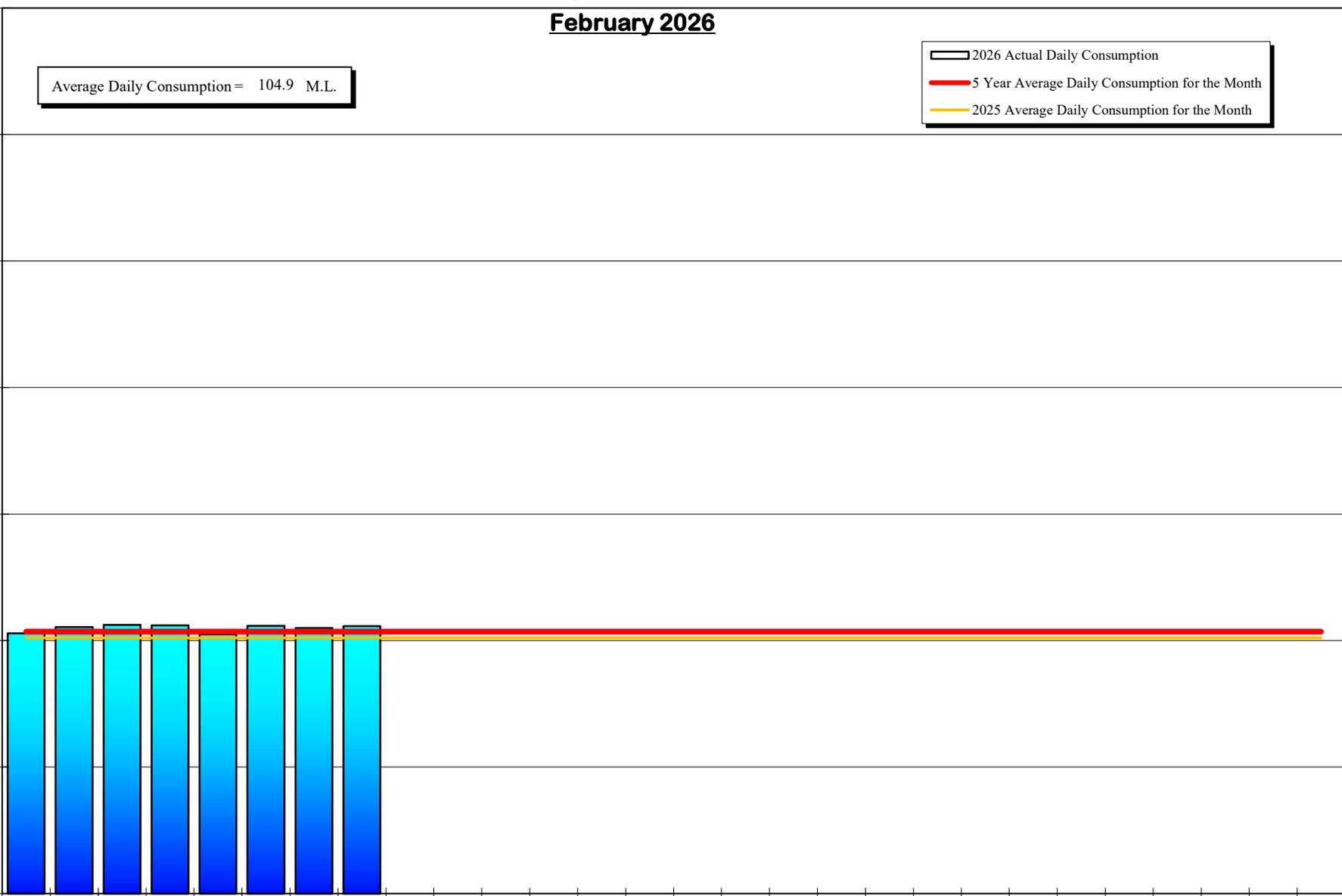
Consumption (Million Litres)

Average Daily Consumption = 104.9 M.L.



01 (Sun) 02 (Mon) 03 (Tue) 04 (Wed) 05 (Thu) 06 (Fri) 07 (Sat) 08 (Sun) 09 (Mon) 10 (Tue) 11 (Wed) 12 (Thu) 13 (Fri) 14 (Sat) 15 (Sun) 16 (Mon) 17 (Tue) 18 (Wed) 19 (Thu) 20 (Fri) 21 (Sat) 22 (Sun) 23 (Mon) 24 (Tue) 25 (Wed) 26 (Thu) 27 (Fri) 28 (Sat)

Day



## Daily Consumptions: - February 2026

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>7</sup> (mm)	Total Precip.
01 (Sun)	102.8	22.6	10	7	Cloudy / Rain	27.9	0.0	27.9
02 (Mon)	105.3	23.2	9	6	Cloudy / Rain	17.5	0.0	17.5
03 (Tue)	106.2 <span style="color: red;">&lt;=Max</span>	23.4	10	8	Cloudy / Fog / Showers	0.4	0.0	0.4
04 (Wed)	106.0	23.3	11	6	Cloudy / Showers	0.2	0.0	0.2
05 (Thu)	102.5 <span style="color: red;">&lt;=Min</span>	22.6	10	4	Cloudy / P. Sunny	0.0	0.0	0.0
06 (Fri)	105.8	23.3	10	3	Cloudy / P. Sunny / Showers	0.2	0.0	0.2
07 (Sat)	104.9	23.1	10	5	Cloudy / Fog / Rain	24.8	0.0	24.8
08 (Sun)	105.7	23.2	7	3	Cloudy / P. Sunny / Snow	0.0	2.0	0.2
09 (Mon)								
10 (Tue)								
11 (Wed)								
12 (Thu)								
13 (Fri)								
14 (Sat)								
15 (Sun)								
16 (Mon)								
17 (Tue)								
18 (Wed)								
19 (Thu)								
20 (Fri)								
21 (Sat)								
22 (Sun)								
23 (Mon)								
24 (Tue)								
25 (Wed)								
26 (Thu)								
27 (Fri)								
28 (Sat)								
<b>TOTAL</b>	839.2 ML	184.62 MIG				71.0	2	71.2
<b>MAX</b>	106.2	23.36	11	8		27.9	2	27.9
<b>AVG</b>	104.9	23.08	9.7	5.1		8.9	0	8.9
<b>MIN</b>	102.5	22.56	7	3		0.0	0	0.0

1. ML = Million Litres

2. 10% of snow depth applied to rainfall figures for snow to water equivalent.

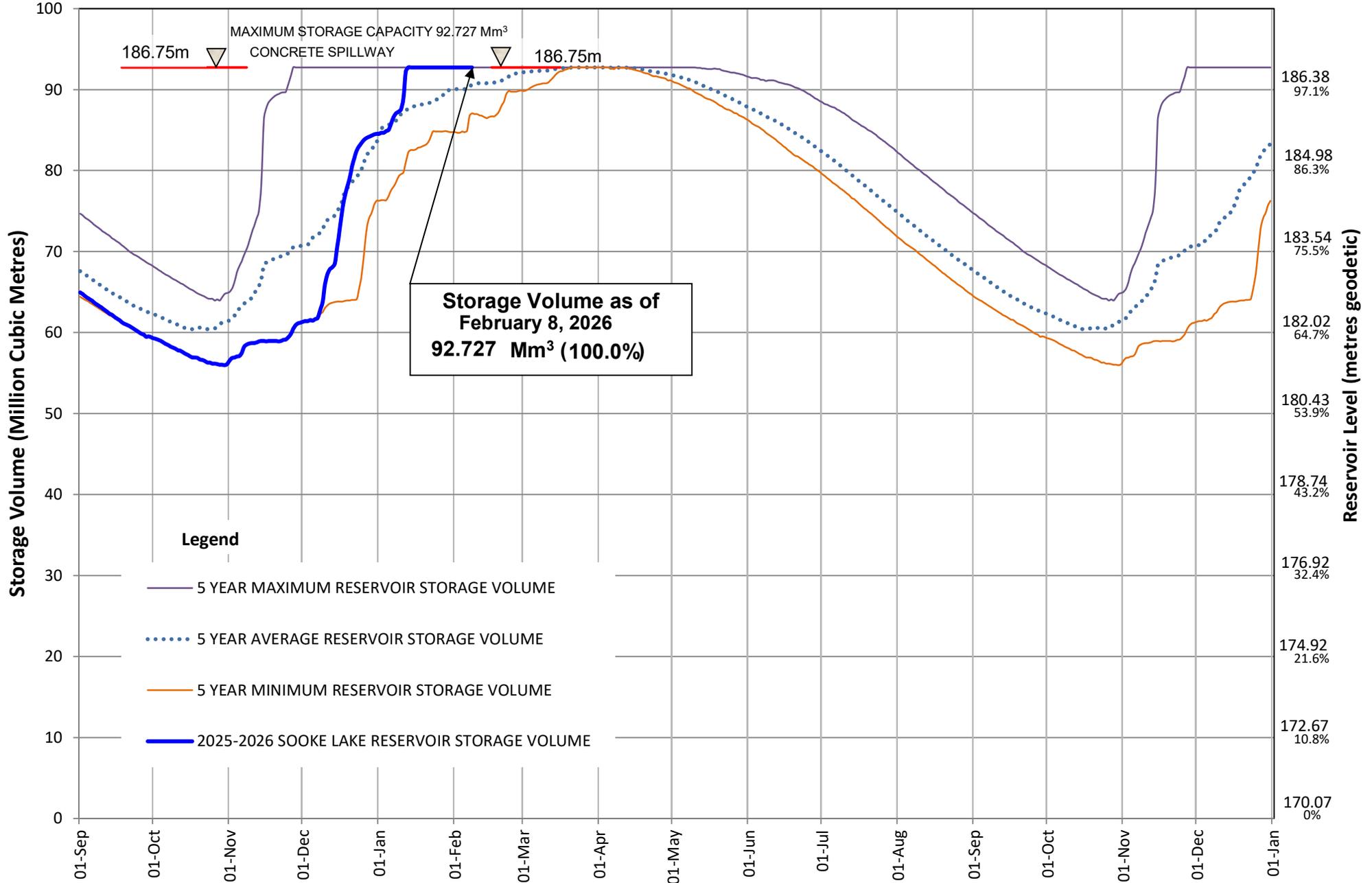
Average Rainfall for February (1914-2025)	187.6 mm
Actual Rainfall: February	71.2 mm
% of Average	38%
Average Rainfall (1914-2025): Sept 01 - Feb 08	1,114.0 mm
Actual Rainfall (2025/26): Sept 01 - Feb 08	1,226.5 mm
% of Average	110%

Number days with precip. 0.2 or more
7

Water spilled at Sooke Reservoir to date (since Sept. 1) = 1.63 Billion Imperial Gallons  
7.40 Billion Litres

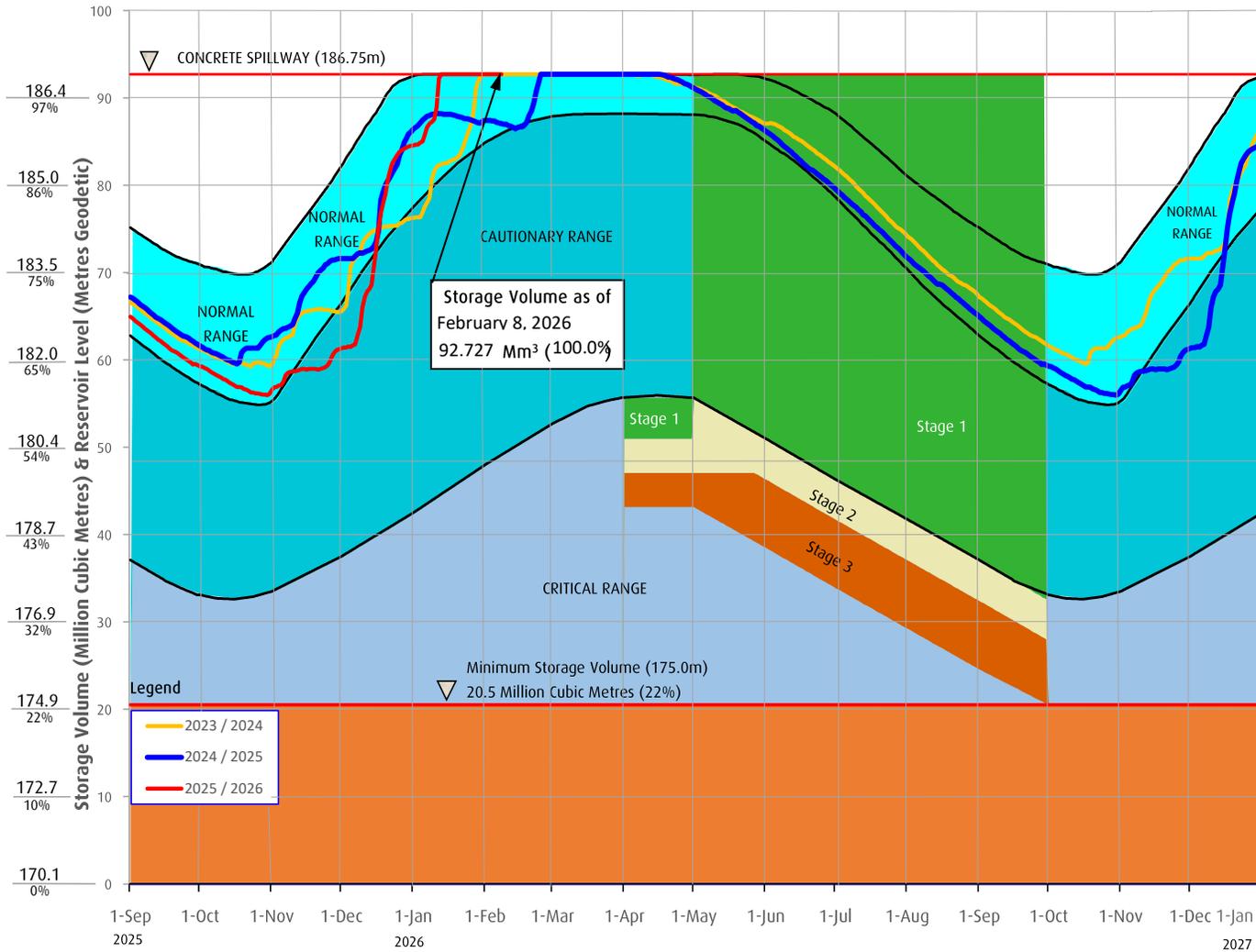
# SOOKE LAKE RESERVOIR STORAGE SUMMARY

## 2025 / 2026



# Sooke Lake Reservoir Storage Level

## Water Supply Management Plan



## FAQs

How are water restriction stages determined?

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

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

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

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

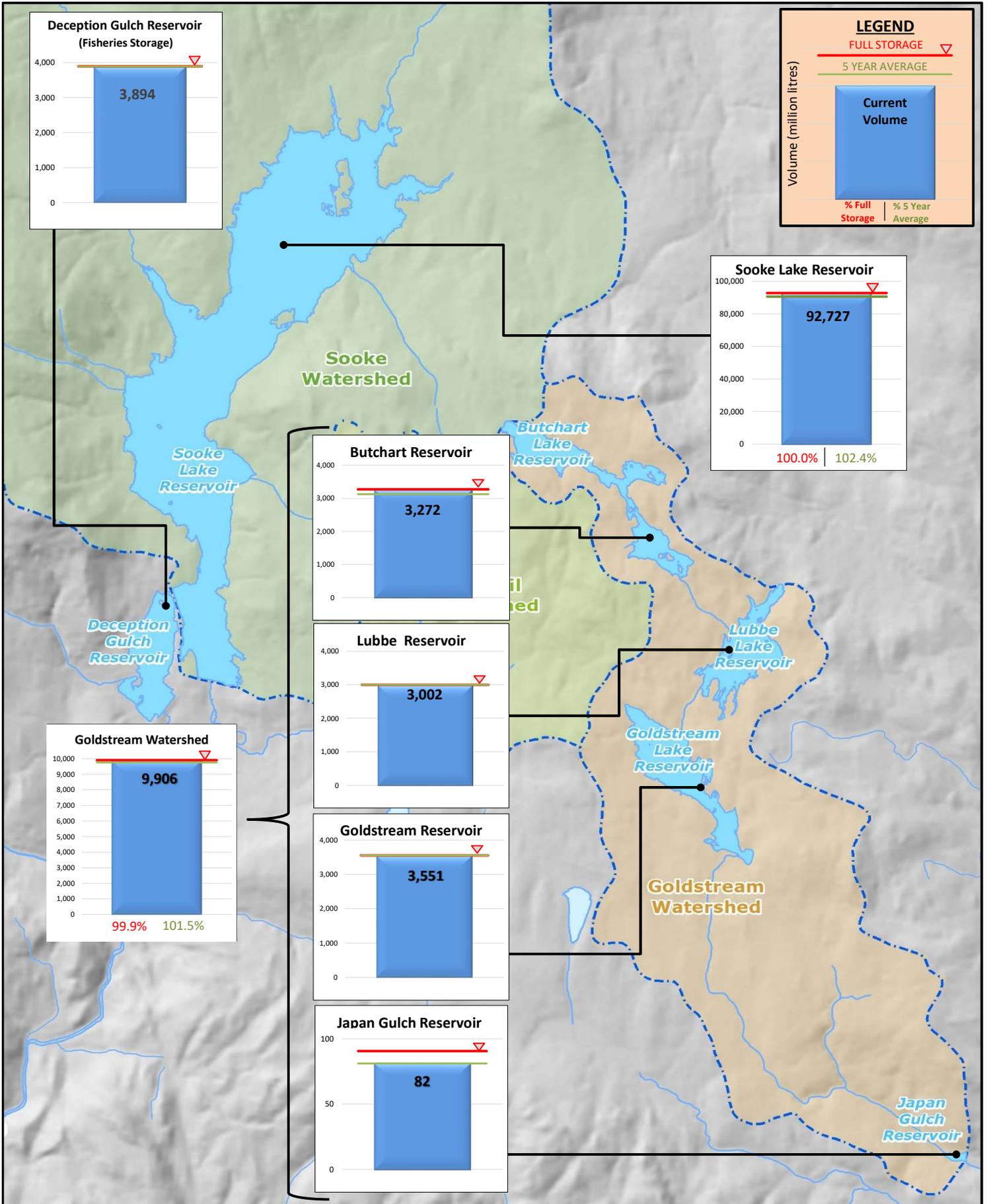
Stage 1 is normally initiated every year from May 1 to September 30 to manage outdoor use during the summer months. During this time, lawn watering is permitted twice a week at different times for even and odd numbered addresses.

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

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

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

# Useable Reservoir Volumes in Storage for February 08, 2026



# Monthly Drinking Water Quality Dashboard



## Water Quality Operations

Capital Regional District | January 2026

### 1. Treated Water | Monthly Compliance

The following table summarizes the main regulatory parameters across the various transmission and distribution systems in the Greater Victoria Drinking Water System (GVDWS). Drinking water systems in British Columbia are required to comply with the BC Drinking Water Protection Regulation and are expected to operate in accordance with recognized industry standards.

Monthly Water Quality Compliance Results by Municipality								
Municipality	Required Samples	Actual Samples Collected	Percent Total Coliform Samples >1 CFU/100 ml	Total Coliform Samples >10 CFU/100 ml	E.coli Samples >1 CFU/100 mL	Turbidity Samples >1 NTU	Chlorine Residual Median mg/L	Water Temp. Median °C
Central Saanich	17	22	0	0	0	0	1.63	8.4
Saanich	94	96	0	0	0	0	1.61	8.4
North Saanich	13	17	0	0	0	0	1.40	8.6
Victoria / Esquimalt	93	96	0	0	0	0	1.66	8.4
Oak Bay	20	22	0	0	0	0	1.62	8.3
Sidney	14	16	0	0	0	0	1.59	8.5
Sooke / East Sooke	17	39	0	0	0	0	1.15	7.9
Westshore	82	86	1.2	1	0	0	1.46	7.6
Transmission Mains	n/a	75	0	0	0	0	1.79	6.8
Transmission Reservoirs	n/a	18	0	0	0	0	1.54	7.5
<b>Total</b>	<b>350</b>	<b>487</b>	<b>1.2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1.6</b>	<b>8.35</b>

**GREEN** – Compliance with industry and/or health standards

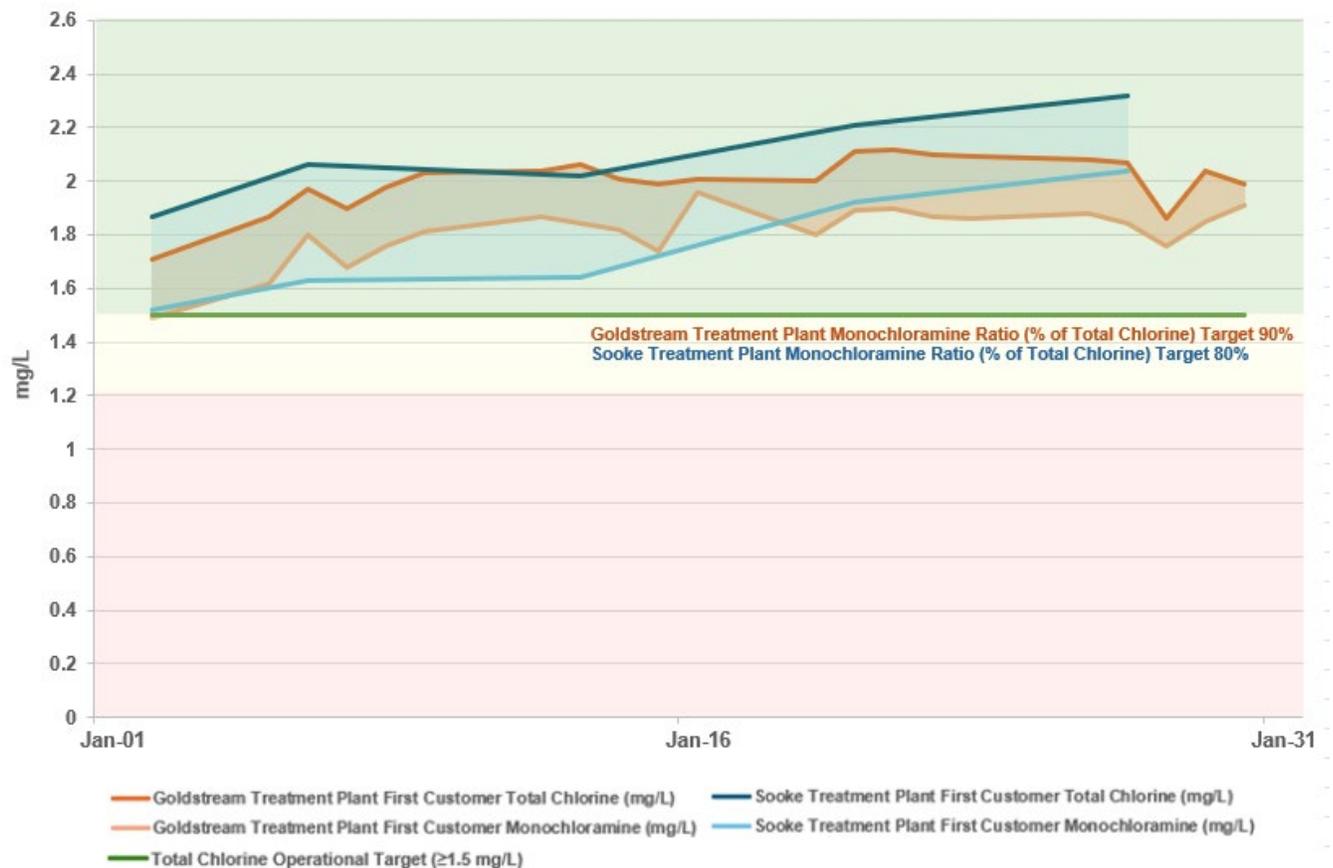
**YELLOW** – Exceedance of operational and/or aesthetic objectives

**RED** – Exceedance of industry and/or health standards

In January 2026, most GVDWS systems met provincial requirements and industry standards with overall excellent drinking water quality throughout. One sample from the CRD-Westshore distribution system exceeded the regulatory threshold of 10 CFU/100 mL for total coliform bacteria. Follow-up samples collected immediately afterward showed no total coliforms, confirming that the drinking water was not contaminated. The initial result was most likely due to contamination introduced during sampling.

## 2. Treated Water | Goldstream Treatment Plant First Customer and Sooke Treatment Plant First Customer, Total Chlorine and Monochloramine

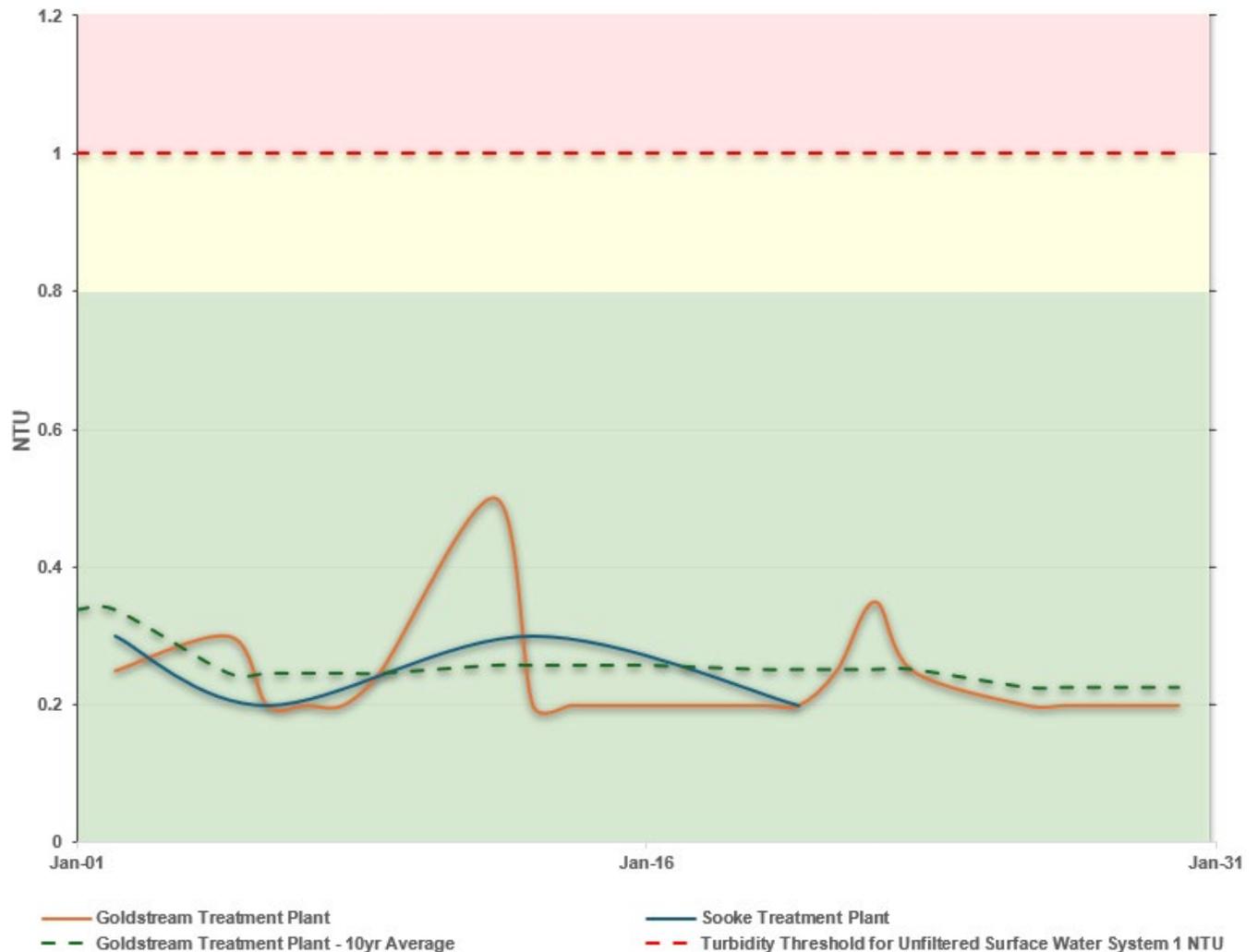
The following graph shows the daily measured total chlorine and monochloramine concentrations at the first treated water sampling stations downstream of the two CRD water treatment plants.



In January 2026, both plants met the target total chlorine concentration of 1.5 mg/L. However, the Sooke Treatment Plant fell slightly short of its monochloramine target (80%) during the first half of the month. The Goldstream Treatment Plant met its monochloramine target (90%) on most days in January, though only by a narrow margin. This slight improvement in the disinfectant chemistry compared to the previous month was achieved by adjusting the ammonia - chlorine mixture at the treatment plants. Lower monochloramine ratios affect the chemical stability and longevity of the chloramines providing the secondary disinfection in the distribution systems.

### 3. Raw Water Turbidity | Goldstream Treatment Plant and Sooke Treatment Plant

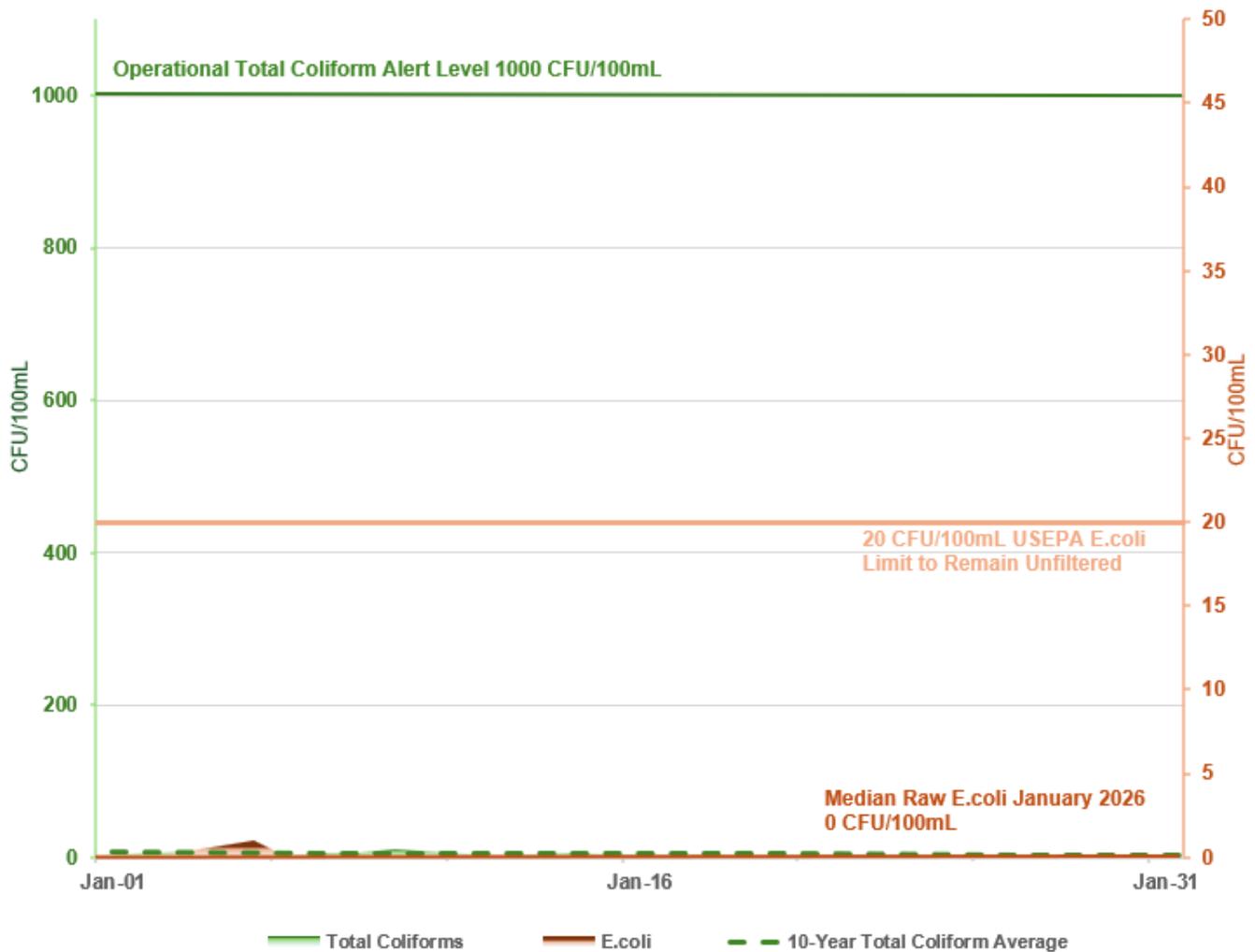
The following graph shows the raw water turbidity measured at both water treatment plants.



The GVDWS, an unfiltered surface water system, must consistently achieve turbidity levels under 1 NTU to meet regulatory standards. Some minor and short-lived turbidity increases were registered at the Goldstream Treatment Plant following heavy rainfall events in January. However, the turbidity levels at both plants were consistently low and well within compliance.

#### 4. Raw Water Biological Parameters | Total Coliforms and E. coli at Goldstream Treatment Plant

The following depicts the concentrations of key bacteria in the raw water.



As typical during the winter month, the concentrations of total coliform and E.coli bacteria in the raw water were extremely low and remained well below the USEPA limit for unfiltered surface water systems.

**REPORT TO REGIONAL WATER SUPPLY COMMISSION  
MEETING OF WEDNESDAY, FEBRUARY 18, 2026**

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**SUBJECT**     **Summary of Peak Demands and High Water Users – Operational Implications and Action Plan**

**ISSUE SUMMARY**

The regional drinking water service is managed to achieve several objectives, including operational stability. Peak demands are periods of the day when water demand achieve maximum levels. Excessive levels can present a challenge to water treatment and distribution infrastructure. This includes infrastructure damage (i.e., water hammer) compromised water treatment efficiency and/or reduced pressure for domestic and firefighting requirements. This information report highlights several strategies used to mitigate the risks from peak demand events.

**BACKGROUND**

The drivers of peak demands for the regional water system are primarily residential irrigation systems, public works irrigation systems, and high-water users across several industrial, commercial and institutional sectors. The regional system experiences elevated peak demands during the summer months, seen as periodic and short-lived events with incomplete disinfection, elevated turbidity, and pressure changes, that are impacting operations and introducing new, albeit minor, risk to water quality. Short duration peak demands put stress on both the treatment plant and the transmission system. Sudden changes in flow make it harder to manage chlorine and ammonia dosing. These same demand spikes create pressure swings in the transmission system, leading to unstable pressures and low pressure at the edges of the system. This limits operating flexibility and requires increased operator intervention to maintain service levels.

Water use data analysis indicates that residential irrigation use is the most significant cause of the peak demand across the region. A strong growing climate, civic pride, interest in gardening, and the advancement of automate sprinkler systems, all combine to increase water demand during our dry summer months. Data indicates 38% of residential properties in the capital region have sprinkler systems compared to a range of 5-20% of residences in comparable communities.

With this knowledge, staff have considered and adopted several steps to reduce peak demand (Appendix A). The first step included amendments to the Capital Regional District (CRD) Water Conservation Bylaw No. 4099. On March 20, 2024, the Commission amended the Water Conservation Bylaw to expand lawn watering times in an effort to reduce demand at the critical time of 4 am on Wednesdays. Research identified that many irrigation systems are programed to start at 4 am on the allowable watering days, which results in peak and instantaneous demands that occur in a very short time. For example, on June 16, 2025, which was the maximum peak day this year, demand increased from 233 MLD (million litres/day) to 314 MLD in 16 minutes.

The amendments also included changing the allowable day for public works irrigation from Wednesday to Tuesday during the bylaw period to again reduce pressure on the treatment and transmission systems, specifically on Wednesday mornings. Staff developed and implemented an outreach and education campaign to support the bylaw amendments. Extensive public education was implemented prior to and during the summer seasons in 2024 and 2025, an

overview of this outreach is included in Appendix B. As a result, there has been a slight shift in demand towards 2:00 am and away from 4:00 am, which is further detailed in Appendix A. This indicates that irrigation timers are being reprogrammed to move away from the critical 4:00 am start time. Instantaneous demand in 2025 was also slightly lower than in previous years as outlined in Appendix A. This reduction supports the conclusion that irrigation system start times are being spread out over the new bylaw period. However, the rate of change in demand around the top of the hour and the magnitude of peak demands are not sufficiently reduced to mitigate the risk to operations and water quality. Staff will continue to reevaluate the efficacy of the current approach in subsequent years and adjust as additional data is collected.

## **IMPLICATIONS**

### *Institutional, Commercial and Industrial Implications*

Staff have also investigated and developed strategies for high water users along with key sectors or businesses that have high water needs as part of their operations (Appendix B). For these users, staff developed targeted outreach and education for awareness around peak hour usage and the need to amend business practices. Further, approaches to encourage water conservation for users in the industrial, commercial, and institutional (ICI) sectors, including phasing out Once-Through Cooling, water use audits, and assessments, also complement efforts to modify when water is being consumed. These approaches have been voluntary to date given the current adequate quantity of water in the reservoirs, and the early stages of trying to modify behaviour changes. Initial results indicate modest results.

### *Environmental & Climate Implications*

Climate change will impact the regional water cycle with a general trend of warmer temperatures, along with shorter, wetter and more intense winters and hotter, drier and longer summers. There is a direct correlation between demand and weather conditions which does lead to some variability in daily and seasonal demand. However, a growing regional population, along with changes in development form through land use planning, will also impact the annual demand trend.

### *Service Delivery Implications*

The CRD continues to provide regional water of good quantity and quality. Staff are responding now to address risks that would likely increase with a growing demand for water; likely accelerated by climate change. Given the sufficient spread between current demand and supply, current water conservation efforts have been voluntary and are predominantly focused on education and outreach to address and promote water conservation efforts. The CRD implements staged restrictions (i.e., the annual Stage 1 water restrictions that define reasonable outdoor water use during the drier summer months) and is authorized to impose more severe restrictions, if necessary, through the regional Water Conservation Bylaw. Future results may alter strategies for water conservation tactics.

### *Financial Implications*

The current demand management budget for 2026 is \$859,872 with \$409,758 dedicated to the residential sector and \$156,506 dedicated to the ICI sector. The outreach program for peak demand management is included in these figures.

Staff will continue to deliver the existing programs through an expanded outreach and education strategy in 2026 but within the current budget. The effectiveness of strategies to modify the daily demand curve in the summer will be evaluated annually following an adaptive management framework and adjusted based on data, progress reviews, community feedback, and cost-benefit analyses. Any additional resources will be determined through service planning and budget processes in future years. This framework aims to ensure the program remains responsive, resilient, and effective in supporting the strategic plan goals.

*Alignment with Existing Plans & Strategies*

A strong water conservation and demand management program supports the commitments made in the 2025 Regional Water Supply Strategic Plan, specifically the peak demand management initiative supports our commitments to provide high quality, safe drinkable water and provide an adequate, reliable long-term supply.

**CONCLUSION**

Summertime daily peak demands within the regional drinking water system are resulting in operational challenges and minor water quality risks. Staff will continue to implement an action plan based on voluntary education and outreach to inform residents, business owners, and property owners around these operational challenges seeking behaviour changes consistent with service objectives. Based on a two-year data set, staff have observed a small shift in residential consumption, especially around residential irrigation use. However, these reductions are not yet sufficient to mitigate risks, especially with increasing regional demand enhanced by population growth and climate change. Staff will reevaluate the efficacy of this approach in subsequent years and adjust the approach as required to ensure a reliable supply of high quality water that also meet current treatment and operational objectives.

**RECOMMENDATION**

There is no recommendation. This report is for information only.

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**ATTACHMENTS**

- Appendix A: Impact on Peak Demands Following Bylaw Amendment
- Appendix B: Approach to Institutional, Commercial and Industrial High-Water Users

## IMPACT ON PEAK DEMANDS FOLLOWING BYLAW AMENDMENT

February 2026

This appendix outlines the changes in peak water demand resulting from the 2024 amendment to the Capital Regional District's (CRD) Water Conservation Bylaw No. 4099.

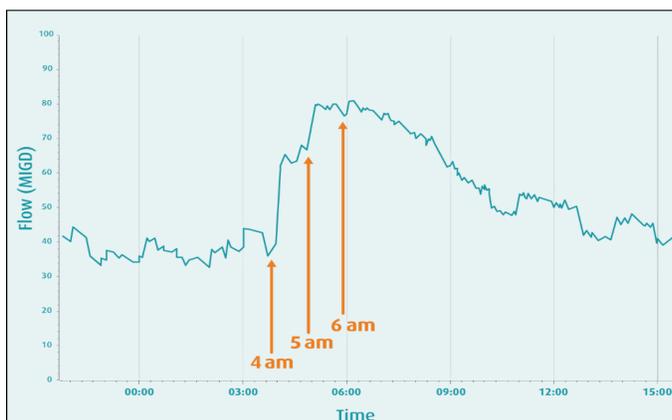
### Issue

In order to meet various objectives for sustainable water use, CRD Water Conservation Bylaw No. 4099 directs summertime irrigation of lawns during specific times and on specific days. Summer water use is increasing over time as a result of population growth in the region, and in some years due to exceptionally hot weather periods. The result of increasing demand and a strong civic adherence to the bylaw by residents, is that significantly high peak demands occurring primarily at 4 am (Figure 1). However, this is now leading to risks for operations, treatment and distribution components of the regional system.

The instantaneous rate of change in water flow can present challenges to the water treatment and distribution system. A high rate of change makes it difficult for the water treatment plant to achieve adequate disinfection. It can cause turbidity (high flows produce suspended solids in the water that can interfere with disinfection efficiency); reduce contact time for disinfection chemicals below operational requirements; or cause pressure disparities in the transmission system when demand from one geographic area impacts another area. Further, rapid changes in pressure leads to water hammer which can impact equipment and produce maintenance and operational issues. Finally, a reduction in available pressure across the system may impact domestic or public safety (e.g., firefighting) needs.

The data also indicate that, during the summer months, the change in demand is greatest at the top of the hour. This is likely correlated with the default settings of residential irrigation systems. The most significant peak demands have been shown to occur on Wednesdays the majority of the time, which is the first allowable irrigation day each week.

**Figure 1: Peak Demands at 4 am and On the Hour**



### **Bylaw Amendment**

In 2024, The Regional Water Supply Commission amended the Water Conservation Bylaw to expand the allowable watering period to reduce peak demands that occur at 4 am on Wednesdays. The amendments to the bylaw included:

- Expanding the overnight hours of allowable lawn irrigation time to begin anytime after midnight on watering days (formerly allowed to start irrigating lawns at 4 am) until 7 am
- Changing the allowable irrigation day for Public, Institution or Community Playing Fields to Tuesday only (formerly allowable on Wednesday only)

The intent was to open up more allowable times for lawn irrigation and to move the high water demands from public works irrigation in order to reduce the demand at 4 am on Wednesdays.

Intensive outreach was undertaken in late winter/early spring of 2024 and 2025 to the irrigation professionals and landscaping communities to provide education on the issue of peak demands, the new extended irrigation period and to strongly encourage these professionals to program irrigation systems to start at times that don't fall on the top of the hour. Mailouts directed to single family homes were also sent out.

### **Results – Impact on Peak Demands**

Figure 2 presents the monthly average flow by hour from 2021 to 2025. In 2025 the daily flow volume was greater than in previous years, but changes in flow patterns can be seen at the key hours of 2 am and 4 am.

The data indicate that at 2 am in 2025 flow was greater than in previous years, indicating that more irrigation is happening at this hour than in the past when irrigation was not previously allowed. Furthermore, the slope of the line between 3 am and 4 am is decreased in 2025 relative to in 2021-2023, indicating that the rate of change in water demand over this period is less in 2025. These patterns are more apparent in 2025 than in 2024.

The raw data from 2024 and 2025 (not included) indicates that the peak demands continue to occur close to the top of the hour, while some slight spread around the top of the hour is apparent in 2025. Another year or two of data is required to understand the impact of the outreach program and the subsequent trend in daily demand.

These patterns show that a modest change has occurred following the implementation of the new bylaw amendments. However, these changes to demand are small and unlikely to significantly reduce the impact to infrastructure and water quality from peak demands. In addition, peak demands continue to occur on Wednesdays despite the change of irrigation day for public works.

Instantaneous demand is the maximum amount of water required at a point in a single day, representing the maximum instantaneous flow that the treatment plant must treat. Table 1 shows the average of the weekly instantaneous demands in 2025 compared to historical values and Table 2 shows the maximum instantaneous demand by month in 2025 compared to historical values.

Both the average and maximum instantaneous demands in 2025 were lower than in previous years in the majority of months (only the May 2025 average was greater than the historical average). This indicates that there has been an overall reduction in instantaneous demand following the amendments to the bylaw.

Figure 2: Monthly Average Flow by Hour

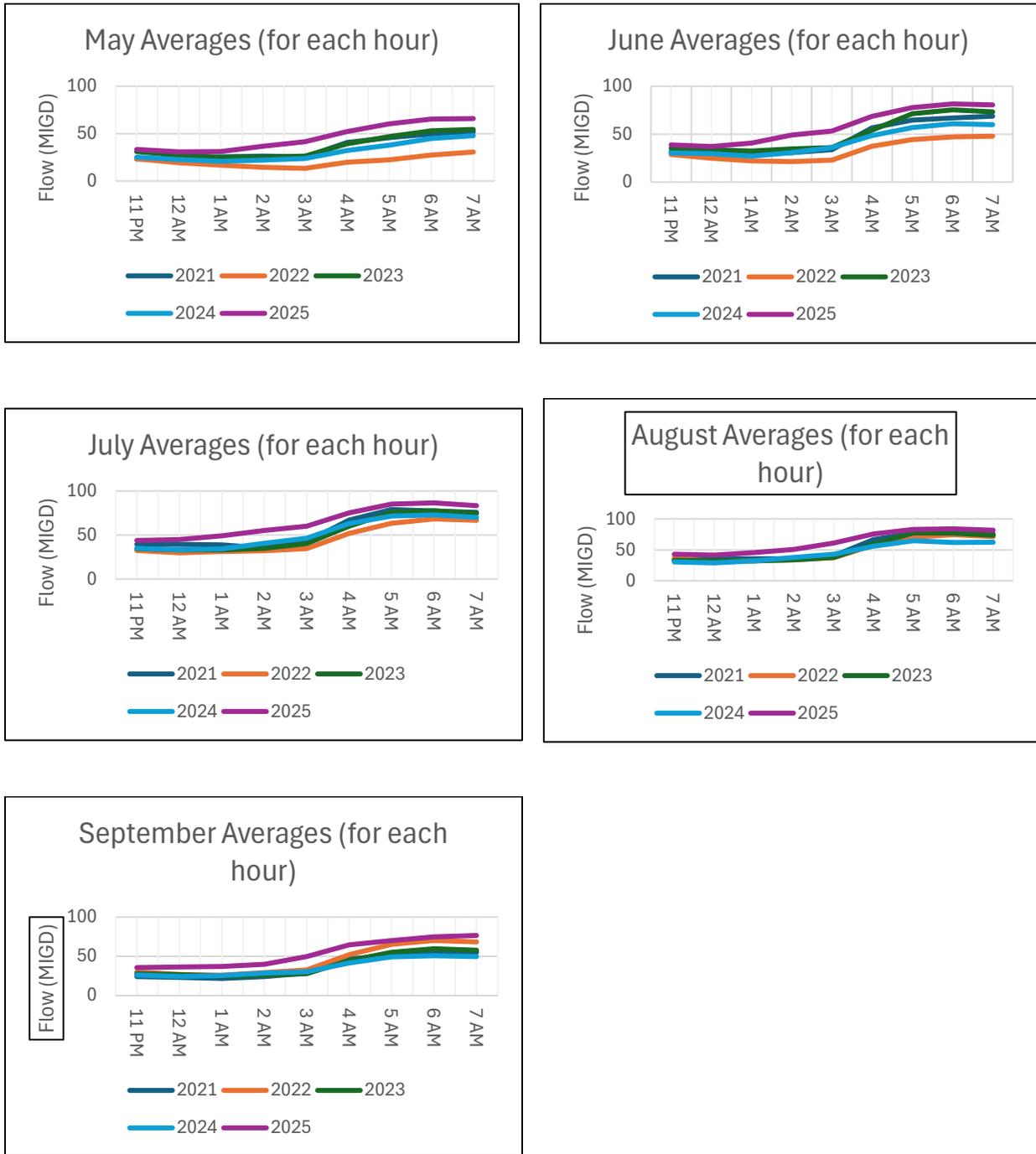


Table 1: Average Instantaneous Demand 2025 vs. Historical

Average Instantaneous Peak Demand (MLD)					
	May	June	July	August	September
Avg 2021-2024	236	300	344	331	277
2025	265	293	226	210	192

**Table 2: Maximum Monthly Instantaneous Demand 2025 vs. Historical**

Maximum Instantaneous Peak Demand (MLD)					
	May	June	July	August	September
2021-2024	327	361	376	388	338
2025	314	340	303	295	212

**Conclusion**

The amendments to the Water Conservation Bylaw that were implemented starting in 2024 and intended to reduce peak and instantaneous demands have a modest impact to date.

An increase in demands at 2 am coupled with a decrease in demand at 4 am indicate that residents have altered their irrigation timers to utilize the newly expanded allowable time for lawn irrigation after 2023. This change is also apparent in a slightly reduced rate of change of flow volume at 4 am.

Instantaneous peak demands in 2025 were lower than historical values in most months, which supports the conclusion that residents are using the expanded allowable time for lawn irrigation. Demand is highly weather dependant and more data is required to identify any trends. However, peak demands continue to cluster around the top of the hour and the magnitude of demand at the peak hour of 4 am still present challenges to the water treatment and distribution systems.

Continued outreach and education are set to be rolled out in 2026 to further encourage irrigation changes to reduce the impacts from peak demands. Staff have identified ways in which to further promote the bylaw and the peak demand issue in the summer of 2026 through active community engagement focused on the residential level. Summer patrols will be established to support homeowners to adjust automatic sprinkler settings in areas where data indicate highest morning demand. The CRD will continue its outreach and education approach in 2026 and evaluate results in the coming year.

## APPROACH TO INSTITUTIONAL COMMERCIAL AND INDUSTRIAL HIGH-WATER USERS

February 2026

This appendix provides additional information about the Capital Regional District's (CRD) approach to high water users in the industrial, commercial and institutional (ICI) sector.

### Peak Demands

Over the last two years, the ICI program reached out to 12 large consumers who are under Regional Source Control Waste Discharge Permits to share messaging around peak demand issues, and request that any non-essential operational use be shifted away from peak hours. The majority already conducted their water-using processes away from peak hours. However, the Hartland Residual Treatment Facility, using approximately 206,000 m<sup>3</sup>/year, agreed to reschedule their operational use in early 2025. Additionally, staff who work with irrigation systems in parks, playing fields and boulevards from all municipalities, ten golf courses, and all school districts were contacted, all of which have since committed to making the switch.

### Water Use Audits

The CRD has conducted over 40 water use audits over the past several years at various ICI facilities. These are significant undertakings and can take years to implement any findings. This program has included several large consumers including:

- Agropur (Island Farms)
- Public Services Procurement Canada (formerly Public Works Government Services Canada)
- The Bay Centre and Mayfair Mall
- The University of Victoria, and
- Camosun College (Lansdowne)

In more recent years, staff targeted water audits and assessments on a sector-by-sector approach, based on the retail water use data and starting with the top three largest ICI categories. Note that the hotel, motel, and campground category was targeted first due to the potential presence of Once-Through Cooling (OTC) at these businesses. The table below outlines the category, % consumed for the category, and estimated water and greenhouse gas (GHG) savings if all reported recommendations were implemented for all the facilities that participated.

Water-Use Category	% of Total Retail Use	Reporting Years	Potential Annual Water Savings (m <sup>3</sup> )	Potential GHG Savings (tCO <sub>2e</sub> )
Hotels, motels, campgrounds	2%	2017-2019	70,000	180
Retail sector: Grocery stores, Malls, shopping centres	6%	2021 - 2022	42,626	224
Schools and research facilities: High schools and middle schools	3.5%	2023 - 2024	20,000	8

The program is voluntary, and some highest users identified in the analysis declined to participate or failed to implement recommendations. High use itself is not enough to create the desire for change.

Staff are evaluating barriers to implement operational changes that could save business and organizations significant money. Staff are also investigating alternative strategies and messages (and audiences) in an effort to implement this voluntary program which has clear benefits for both the CRD but specifically water users.