



**WATER ADVISORY COMMITTEE**  
 Notice of Meeting on **Tuesday, September 26, 2023 at 12 pm**  
 Board Room, 6th Floor, 625 Fisgard Street, Victoria, 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.

**Katie Oppen (Chair)**  
(Scientific)

**Jennifer Todd (Vice Chair)**  
(Environmental)

**Celine Davis**  
(Resident / Ratepayer)

**Mike Doehnel**  
(Vice Chair, Saanich Peninsula Water Commission)

**Ashley Fernandes**  
(Environmental)

**Taylor Krawczyk**  
(Agriculture)

**Alex McArdle**  
(Agriculture)

**Craig Nowakowski**  
(Island Health)

**Adam Pakvis**  
(DND – Commercial / Industrial Water User)

**John Rogers**  
(Vice Chair, Juan de Fuca Water Dist. Commission)

**Wilf Scheuer**  
(Commercial / Industrial)

**Karen Harper**  
(Vice Chair, Regional Water Supply Commission)

**David Timothy**  
(Fish Habitat)

**Mike Turner**  
(Fish Habitat)

**Kathleen Zimmerman**  
(Agriculture)

**AGENDA**

- 1. TERRITORIAL ACKNOWLEDGEMENT**
- 2. APPROVAL OF AGENDA**
- 3. ADOPTION OF MINUTES .....3**
- 4. CHAIR’S REMARKS**
- 5. PRESENTATIONS/DELEGATIONS**

*Recommendation: That the minutes of the June 27, 2023 meeting be adopted.*

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

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

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

**6. GENERAL MANAGER’S REPORT**

- 6.1. General Managers Introduction [Verbal]
- 6.2. Update on Water Advisory Committee Recommendation to Regional Water Supply Commission [Verbal]

**7. COMMITTEE BUSINESS**

7.1. Presentation: Regional Planning: Foodlands Access Program - Status Update (Fall 2023).....7

7.2. Presentation: Application of Demand Management in the Region .....23

7.3. Summary of Recommendations from Regional Water Supply Commission.....42

*There is no recommendation, the summary is for information only.*

7.4. Water Watch Report .....44

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

7.5. Water Advisory Committee Membership Terms – Expiring December 31, 2023

- Ashley Fernandes
- Celine Davis
- Mike Turner
- Jennifer Todd

**8. NEW BUSINESS**

**9. ADJOURNMENT**

**Next Meeting:** To be confirmed.



Making a difference...together

**MINUTES OF A MEETING OF THE Water Advisory Committee, held Tuesday, June 27, 2023  
at 12 pm, 6<sup>th</sup> Floor Boardroom 625 Fisgard Street, Victoria, BC**

---

**PRESENT: Members:** K. Oppen (Chair); J. Todd (Vice Chair) (EP); M. Doehnel; A. Fernandes; T. Krawczyk; A. McArdle (EP); C. Nowakowski; J. Rogers; D. Timothy; K. Zimmerman

**Staff:** I. Jesney, Acting General Manager, Integrated Water Services; S Irg, Senior Manager, Infrastructure Water Operations; J Zimmerman (EP), Communications Coordinator, Integrated Water Services; D Dionne, Administrative Coordinator, Integrated Water Services; M Risvold, Committee & Administrative Clerk, Integrated Water Services (Recorder)

**REGRETS:** A. Pakvis; C. Davis; W. Scheuer; C. Stock; M. Turner

EP = Electronic Participation

The meeting was called to order at 12:11 pm.

**1. TERRITORIAL ACKNOWLEDGEMENT**

The Chair provided the Territorial Acknowledgement.

**2. APPROVAL OF AGENDA**

Groundwater discussion was added to the agenda under New Business.

**MOVED** by K. Zimmerman, **SECONDED** by D. Timothy,  
That the agenda be approved as amended.

**CARRIED**

**3. ADOPTION OF MINUTES**

**MOVED** by T. Krawczyk, **SECONDED** by A. McArdle,  
That the minutes of the March 28, 2023 meeting be adopted.

**CARRIED**

**4. CHAIR'S REMARKS**

The chair noted that some Water Advisory Committee members participated in some recent tours including a tour of the watershed and water treatment plant. She stated that she enjoyed the tours and the opportunity to learn more.

**5. PRESENTATIONS/DELEGATIONS**

There were no presentations or delegations.

**6. GENERAL MANAGER'S REPORT**

The Acting General Manager advised that this would be his last Water Advisory Committee meeting upon officially retiring. He advised that the new General Manager, Alicia Fraser, would begin on July 24 and will be at the next Water Advisory Committee meeting in September.

## 7. COMMITTEE BUSINESS

### 7.1. Agricultural Water Rate Review Update

S. Irg introduced the item.

Discussion ensued and staff responded to questions from the Committee regarding:

- The data contained in the Agriculture Rate Scenario Tool spreadsheet image on page 9 of the Consultant's report.
- The annual average household payment of \$9.60 for the agricultural subsidy shown in item 2.2.3.1 on page 10 of the Consultant's report.
- Getting detailed information directly from BC Assessment.
- Capital Regional District's Regional Food Strategy.
- Freedom of Information and Privacy requirements.

**MOVED** by M. Doehnel, **SECONDED** by D. Timothy,

That the Water Advisory Committee receive full access to the Agriculture Rate Scenario Tool spreadsheet, subject to Freedom of Information Act requirements, from the draft Consultants' report showing the full data related to the 682 accounts.

**CARRIED**

Agricultural Working Group members to prepare a recommendation to the Regional Water Supply Commission to recommend to the Planning and Protective Services Committee to consider looking at its Regional Food and Growth Strategy in a more holistic way:

- funding for water pipes and hookups to support local agricultural food growing operations.
- look at how the CRD can meet its agricultural goals for meeting food production, including groundwater, catchments.
- how does the agricultural water rate affect food production/security.
- Other ways the CRD could do to help support agriculture.

Staff to invite Emily Sinclair, Senior Manager, Regional and Strategic Planning, to present at the next meeting regarding food security.

### 7.2. Summary of Recommendations from Regional Water Supply Commission

I. Jesney noted that the Development Cost Charges report and recommendations were approved at the Regional Water Supply Commission and will be moving to Phase 2.

### 7.3. Water Watch Report

The item was received for information.

#### 7.4. Conservation Strategies for Water Demand Spikes [Discussion]

The Chair led the discussion, and the Committee considered several points on the topic:

- Past conservation efforts including low flow toilets and showers
- Water storage
- Increasing water rates for conservation reasons
- Storage for firefighting purposes
- Landscaping irrigation
- Evening out storage to even out demand spikes
- More education

**MOVED** by M. Doehnel, **SECONDED** by A. Fernandes,

The Water Advisory Committee recommends that the Regional Water Supply Commission consider:

1. Increasing water conservation efforts and messaging and creating a literacy program for sharing water conservation.
2. Storage discussions with member municipalities.
3. Increasing bulk water rates to encourage conservation and to fund increased storage in partnership with municipalities.

**CARRIED**

Staff to invite Dr. Glenn Harris, Senior Manager, Environmental Protection to present to the Water Advisory Committee on the Capital Regional District's (CRD) Demand Management and water conservation efforts.

#### 7.5. Non-Potable Water Reuse [Discussion]

There was a short discussion on the topic.

**MOVED** by J. Rogers, **SECONDED** by T. Krawczyk,

That, when the Vancouver guidelines on the use of grey water are available, staff provide copies for the Water Advisory Committee to review.

**CARRIED**

### 8. WORKING GROUPS

The Committee discussed working groups and what type of working groups might be needed, possibly one for conservation strategies. No formal decisions were made regarding working groups at this time.

The Chair will address the Regional Water Supply Commission at its next meeting to present the recommendations from this meeting.

### 9. NEW BUSINESS

Groundwater Discussion was deferred.

**10. ADJOURNMENT**

**MOVED** by T. Krawczyk, **SECONDED** by M. Doehnel,  
That the June 27, 2023 meeting be adjourned at 2:04 pm.

**CARRIED**

\_\_\_\_\_  
**CHAIR**

\_\_\_\_\_  
**SECRETARY**

DRAFT



# Foodlands Access Program (FLAP) 2023 Progress Report

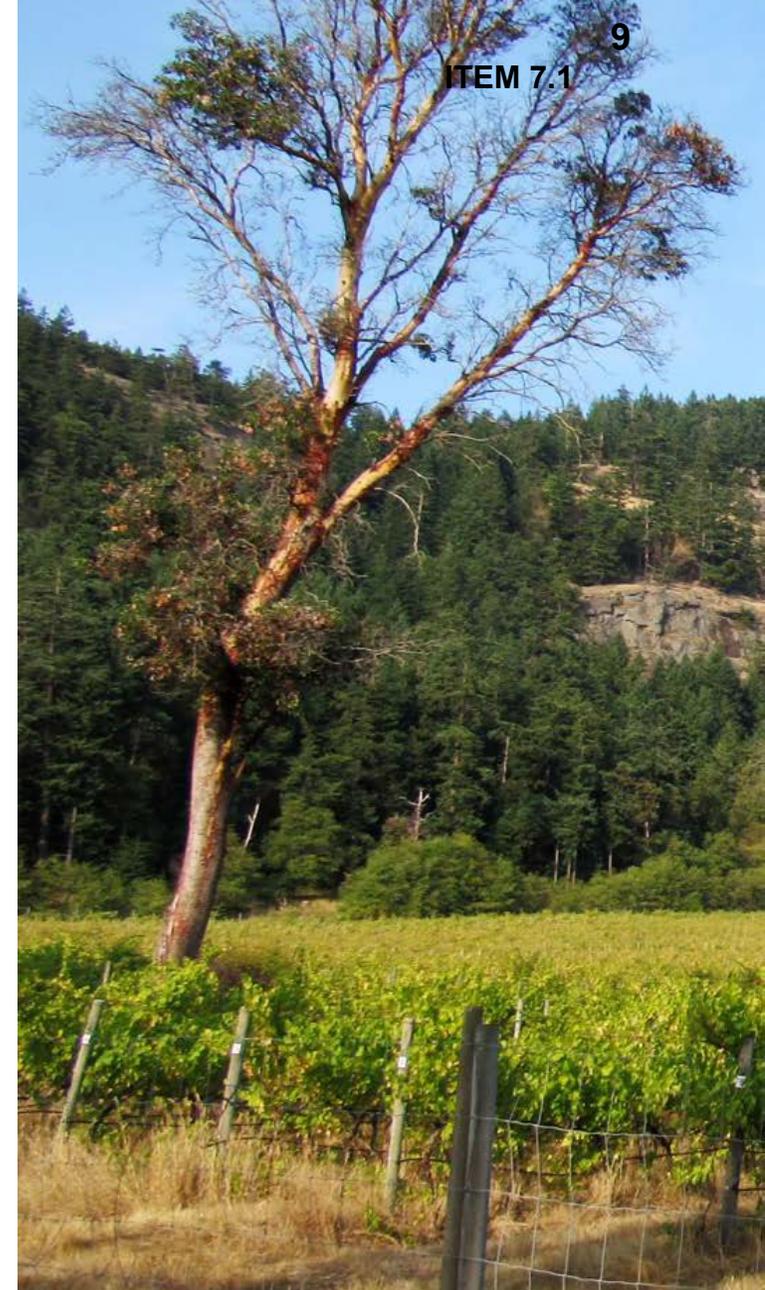
# Presentation Agenda

1. Background
2. Issue summary
3. Objectives / goals
4. Bear Hill Farm pilot project
5. Project status
6. Land Matching Initiative
7. Next steps



# Background

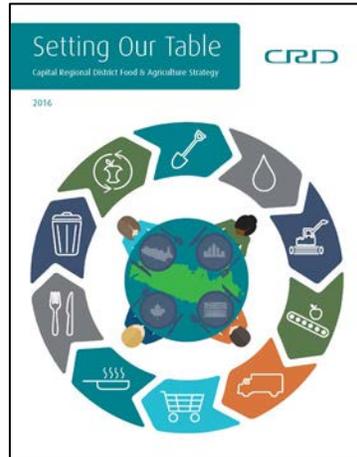
Over the last 10 years, the CRD has been increasingly concerned with food security and focused on developing policy to support local agriculture.



# Regional Food and Agriculture Strategy (2016)

The principal purpose of the Regional Food and Agriculture Strategy (RFAS) is to guide action and foster leadership. The RFAS identifies a continued role for the CRD in food and agriculture.

The RFAS recommendations are intended to support the development and future success of food and agriculture in a way that is collaborative, strategic, systemic, and economically viable.



## RECOMMENDATIONS

- 1 Support regional, cross-sector relationships, including a food and agriculture task force.
- 2 Improve the CRD's capacity to address regional food and agriculture issues
- 3 Support regional organic-matter recycling approaches that benefit food and agriculture
- 4 Address chronic drainage issues across the region
- 5 Continue to consider approaches to effectively address existing and emerging regional wildlife and invasive species issues
- 6 Maintain affordability and improve access to irrigation water for food and agricultural operations
- 7 Encourage a place-based regional food culture by building relationships between Aboriginal and non-aboriginal communities.
- 8 Support Aboriginal food and agriculture-related activities, projects and events.
- 9 Increase access to agricultural and food lands.
- 10 Support regional economic development strategies for food and agriculture

Setting Our Table: CRD Regional Food & Agriculture Strategy

# RFAS Recommendations Highlights

**1**  Support regional, cross-sector relationships, including a food and agriculture task force.

- Regional Food and Agriculture Task Force
- Participation in Peninsula Area Agriculture Committee

**3**  Support regional organic-matter recycling approaches that benefit food and agriculture

- Hartland Landfill organics program provided consolidation, transfer and processing services for 9,567 tonnes of kitchen scraps

**4**  Address chronic drainage issues across the region

- Agricultural Stormwater Management Outreach Program
- Managing Stormwater for Farms and Rural Properties Workshop

**5**  Continue to consider approaches to effectively address existing and emerging regional wildlife and invasive species issues

- Goose Management Service (2023)

**6**  Maintain affordability and improve access to irrigation water for food and agricultural operations

- Agricultural water rates introduced in 2002, updated in 2010.

**9**  Increase access to agricultural and food lands.

- Foodlands Access Program
- Bear Hill Farm Pilot Project
- Land Matching Initiative

# CRD Farmland - Issue Summary

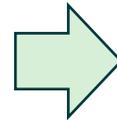
The farming community in the CRD faces a variety of challenges that are both general to Canadian agriculture and specific to the region.

## Total Farm Area (CRD)

Decline of local food production is a challenge for regional food security.

Total Farm Area (2001)

**38,322 ac** (974 farms)



Total Farm Area (2021)

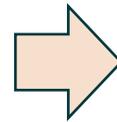
**27,018 ac** (753 farms)

## Farmland Costs (VI)

Agricultural land is not affordable for new and expanding farmers.

Farmland cost (2002)

**\$6,020 /acre**



Farmland cost (2022)

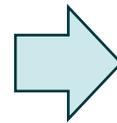
**\$63,800 /acre**

## Farmer Age (CRD)

Average age of farmers has increased steadily over the last 20 years.

Avg Farmer Age (2001)

**52.8**



Avg Farmer Age (2021)

**59.5**



# Foodlands Access Objectives and Goals

This would be the first CRD service to focus on agricultural issues.



Increase new and intermediate farmer access to productive agricultural lands.



Convert surplus CRD and municipal lands to productive food spaces.



Encourage farming on private lands through a Land Matching Initiative.



Demonstrate viability and build CRD internal capacity for long-term goal of a Foodlands Trust.

# Foodland Access Programs

The proposed plan for the Foodlands Access Service would initially have two main programs.

## Bear Hill Farm – Pilot Site

Convert surplus regional and municipal lands for agricultural use.



## Land Matching Initiative

Support BC Land Matching Program to convert privately owned lands to food producing farms.

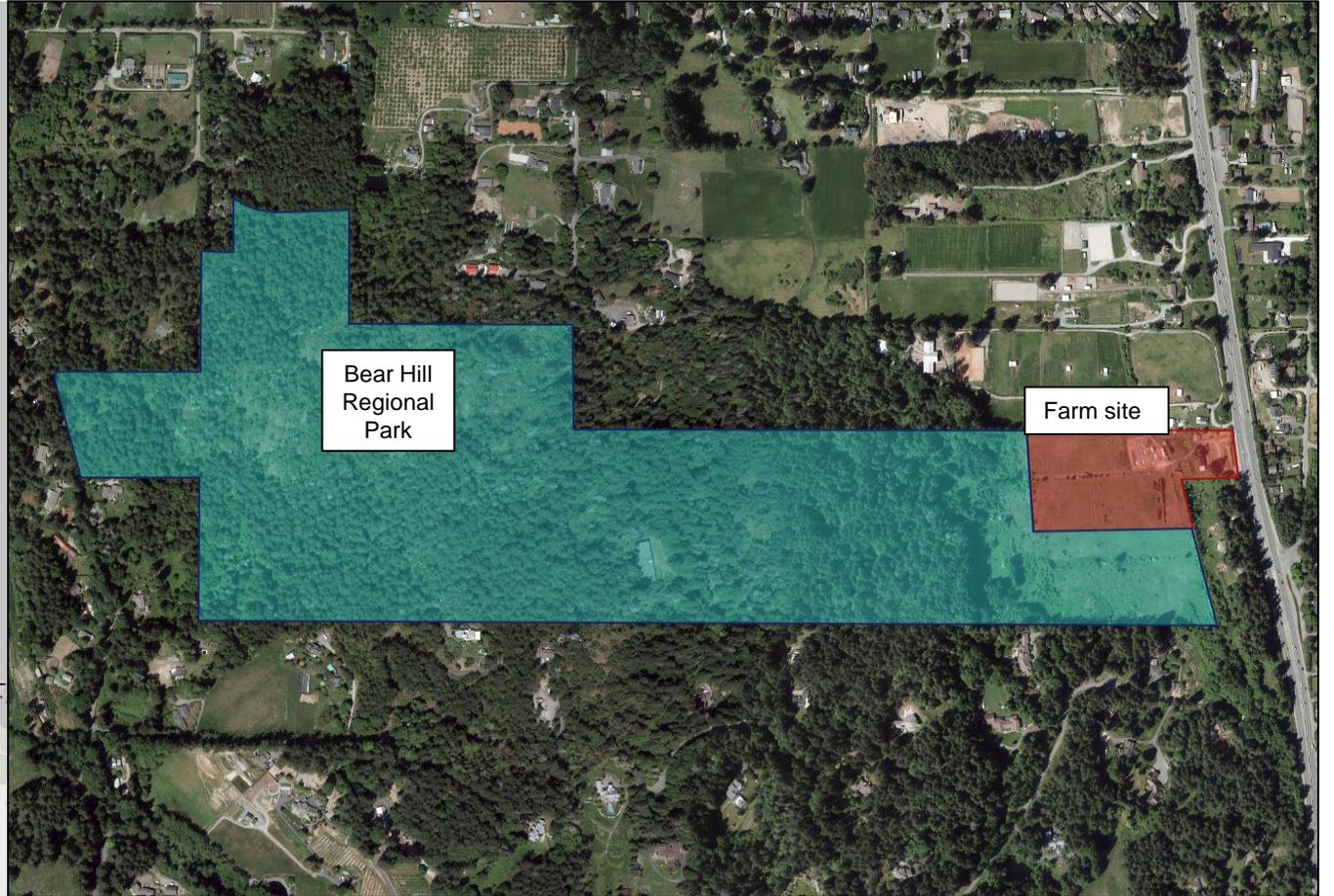
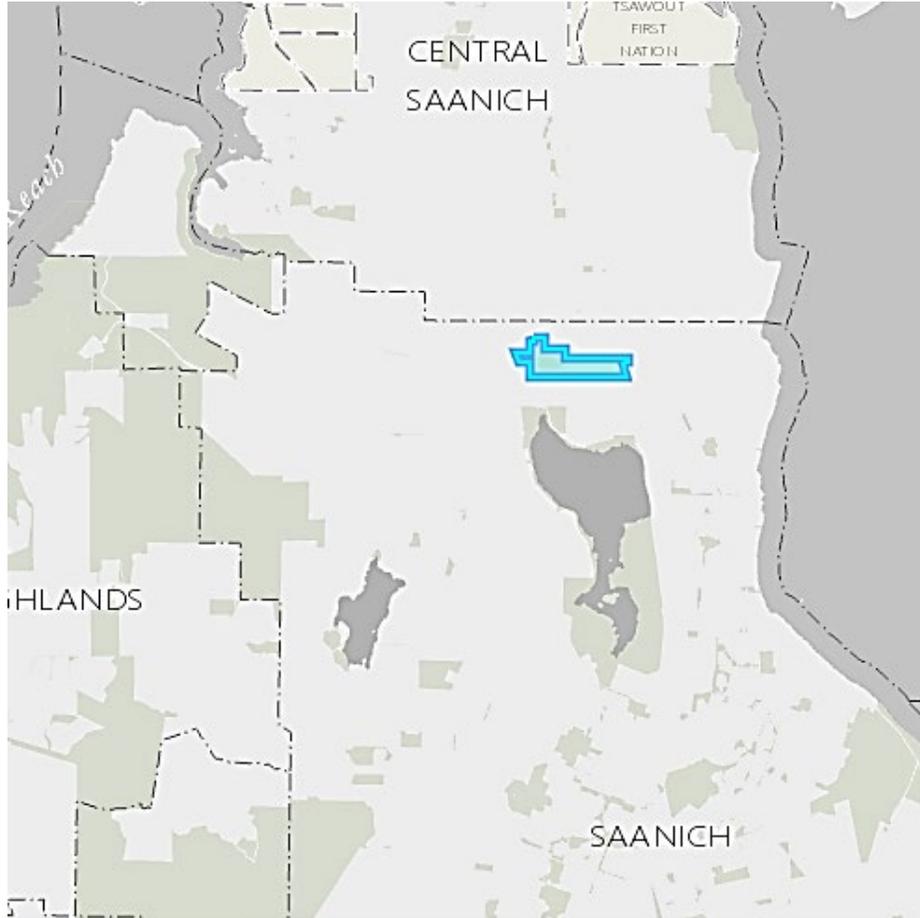


# Bear Hill Farm Pilot Project

- Five-year pilot project.
- CRD owned surplus land.
- Strong existing agricultural assets.
- Affordable land leases for new farmers and expanding farms.
- Partner with experienced farm site operator to manage site and provide support and education.



# Bear Hill Farm Location





17  
ITEM 7.1  
**Bear Hill Farm**

**Key Features:**

- 5 acre fenced area.
- Existing in ground irrigation.
- Farmhouse for office use.
- Centrally located with easy access to Pat Bay Hwy.
- Additional 6 acres outside of fence.

# Why Bear Hill?

In the Foodlands Trust Business Case (2022), three potential sites were explored for a pilot site:

1. Bear Hill
2. Panama Flats
3. Newmann Farms

Bear Hill emerged as the preferred site due to:

- Being owned by CRD Parks.
- Existing deer fencing and in-ground irrigation systems.
- Both Panama Flats and Newmann Farms would require significantly more initial capital investment to get started.
- Panama Flats has water drainage issues, potential impacts on neighbours, and conflict with community use of the park.



# Bear Hill Farm Current Status

- On June 28, 2023, the CRD Parks Committee provided tentative approval for use of Bear Hill farm for the pilot project.
- Soil and agricultural capacity study will be completed Dec 2023.
- Request for Qualifications (RFQ) active to identify potential farm site operator for partnership.
- Scope of service establishment will be refined with input from RFQ respondents.
- Information sharing and identifying municipal interest is expected to begin in Oct/Nov 2023.





## Land Matching Initiative

- Partner with BC Land Matching Program.
- Provide grants to successful land matches that pair private landowners with new and expanding farmers.
- Can support farmers anywhere in the CRD on land plots of varying sizes.
- Potential to convert more land to farm use.
- Benefits both current landowners through farm receipts and aspiring farmers through land access.

# Next Steps

Site conditions studies	Q3 2023 to Q3 2024
Foodlands Access Program service establishment	Q1 to Q2 2024
Request for Proposals (RFP)	Q2 2024
Selection of Farm Site Operator	Q2 to Q3 2024
Service agreement between CRD and Operator	Q4 2024
Capital investment projects	Q1 2025 to Q4 2025
Participant farmer selection	Q1 2025
Farm operations commence	Q2 2025





# Additional information

<https://www.crd.bc.ca/project/food-agriculture>

Noah Brotman, Research Planner  
[nbrotman@crd.bc.ca](mailto:nbrotman@crd.bc.ca)

# Application of Demand Management In the Region

Kristi Wilson – Demand Management Coordinator  
Danielle Buckle – Residential Outreach & Education  
Marie Irwin – ICI Outreach & Education

Presentation to the Water Advisory Committee  
September 26, 2023



## What is Demand Management?

- Manage the Regional drinking water service through adjustments to water demand.
- How much water is being used (daily, seasonally, annually)?
- Who is using the water – when, where, why?
- Can we measure and model the Demand Curve?
- How do we influence the Demand Curve?
- How do we apply our understanding of the Demand Curve?  
(operationally, infrastructure planning, strategic planning)

# Context of Demand Management

## Assumptions

- Stabilized per capita water consumption
- Increasing population
- Climate change
- Finite (current) water supply

## Toolkit

- Research & data analysis
- Education & outreach
- Regulatory framework
- Voluntary vs. Water Conservation Bylaw
- Financial levers

## Drivers

- 2017 Strategic Plan
- 2022 Water Master Plan
- Water Conservation Bylaw



# Approach to Water Conservation

ITEM 7.2



## 1. Research & Data Analysis

### 1. Residential Outreach & Education

### 2. ICI Outreach & Education

# Who Uses Our Water

## 2022 Proportional Regional Demand by Land Use

**Residences – 66%**

(single family, multi-family,  
condos, First Nations, mobile homes)

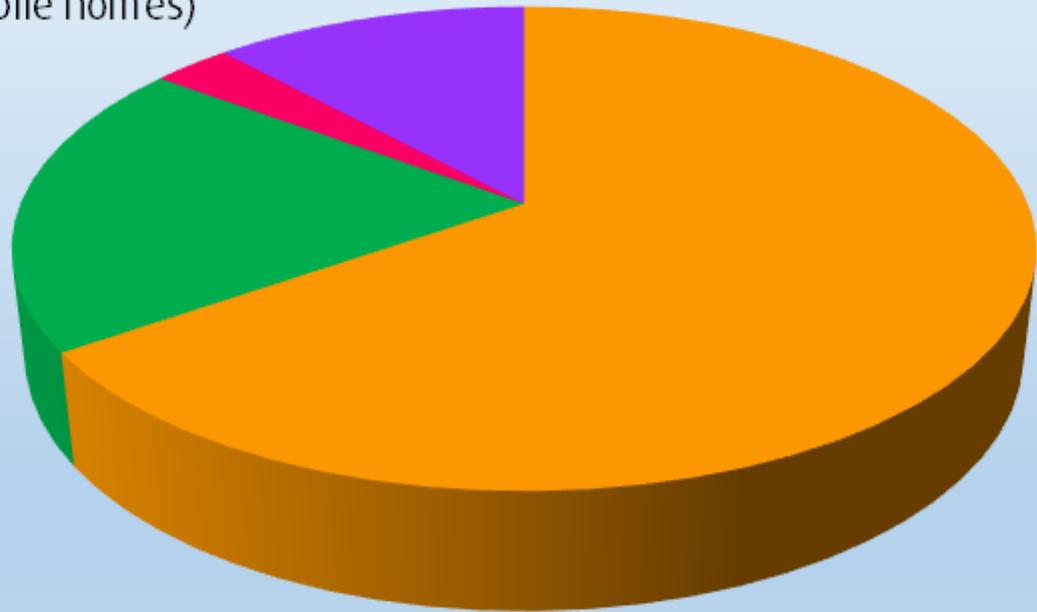
**ICI – 20%**

(industrial, commercial &  
institutional users)

**Agricultural – 3%**

**Non-revenue – 12%**

(non-revenue water)

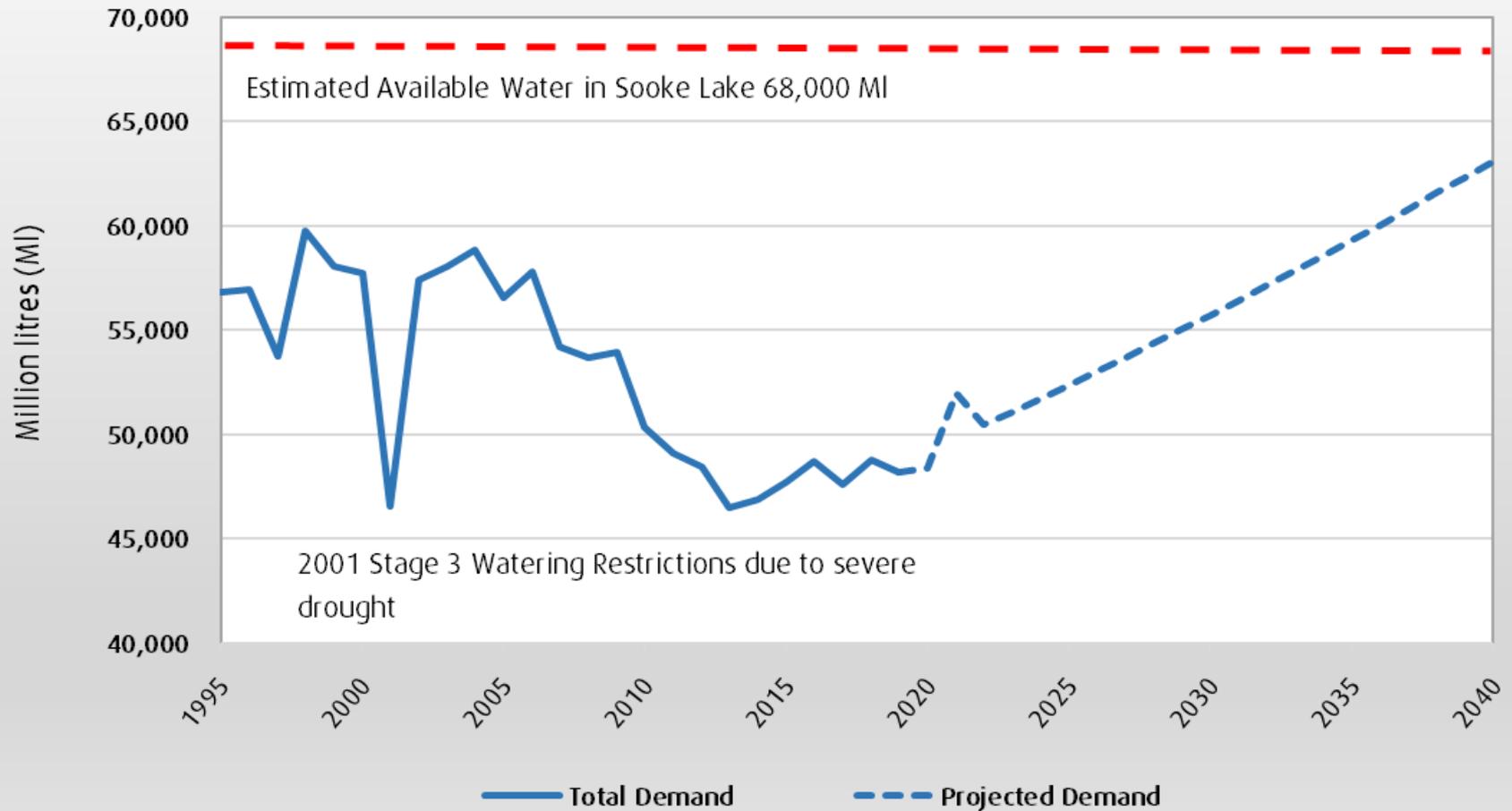


# Total Supply & Demand

ITEM 7.2



## Total Regional Supply and Demand

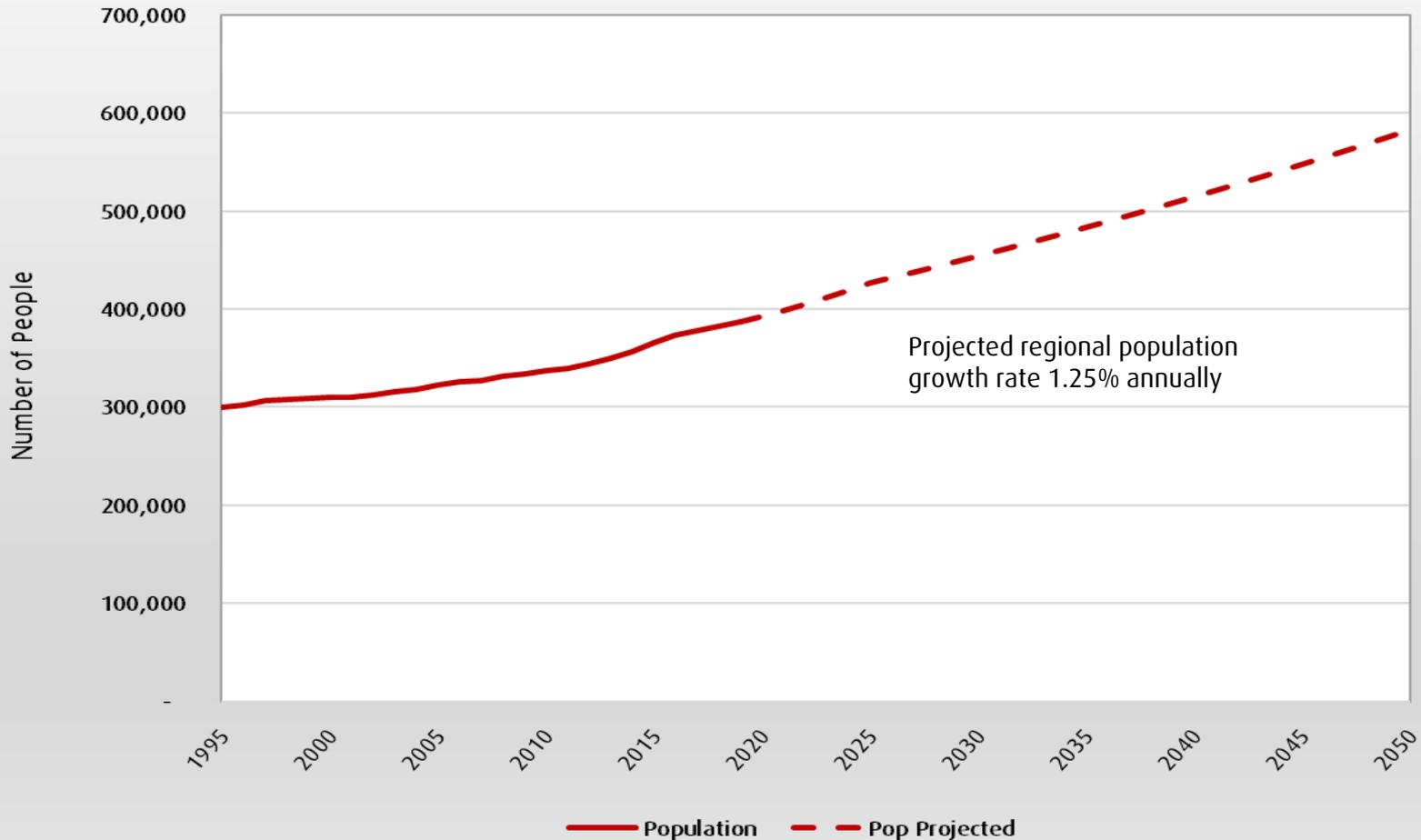


# Population Projections

ITEM 7.2



## Regional Population Actual & Forecasted to 2050

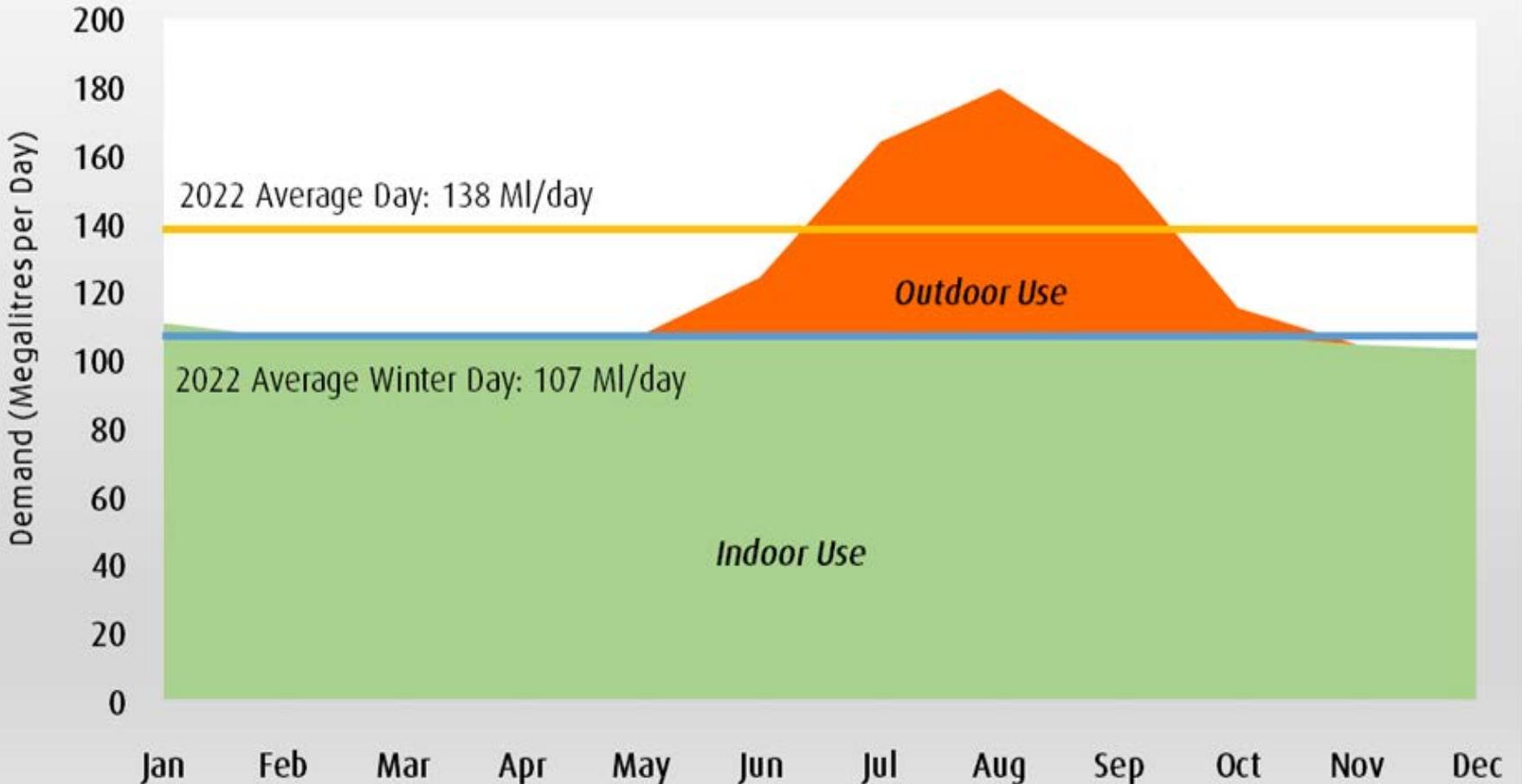


# Indoor vs. Outdoor Demand

ITEM 7.2



## 2022 Indoor Vs. Outdoor Demand (Megalitres per Day)

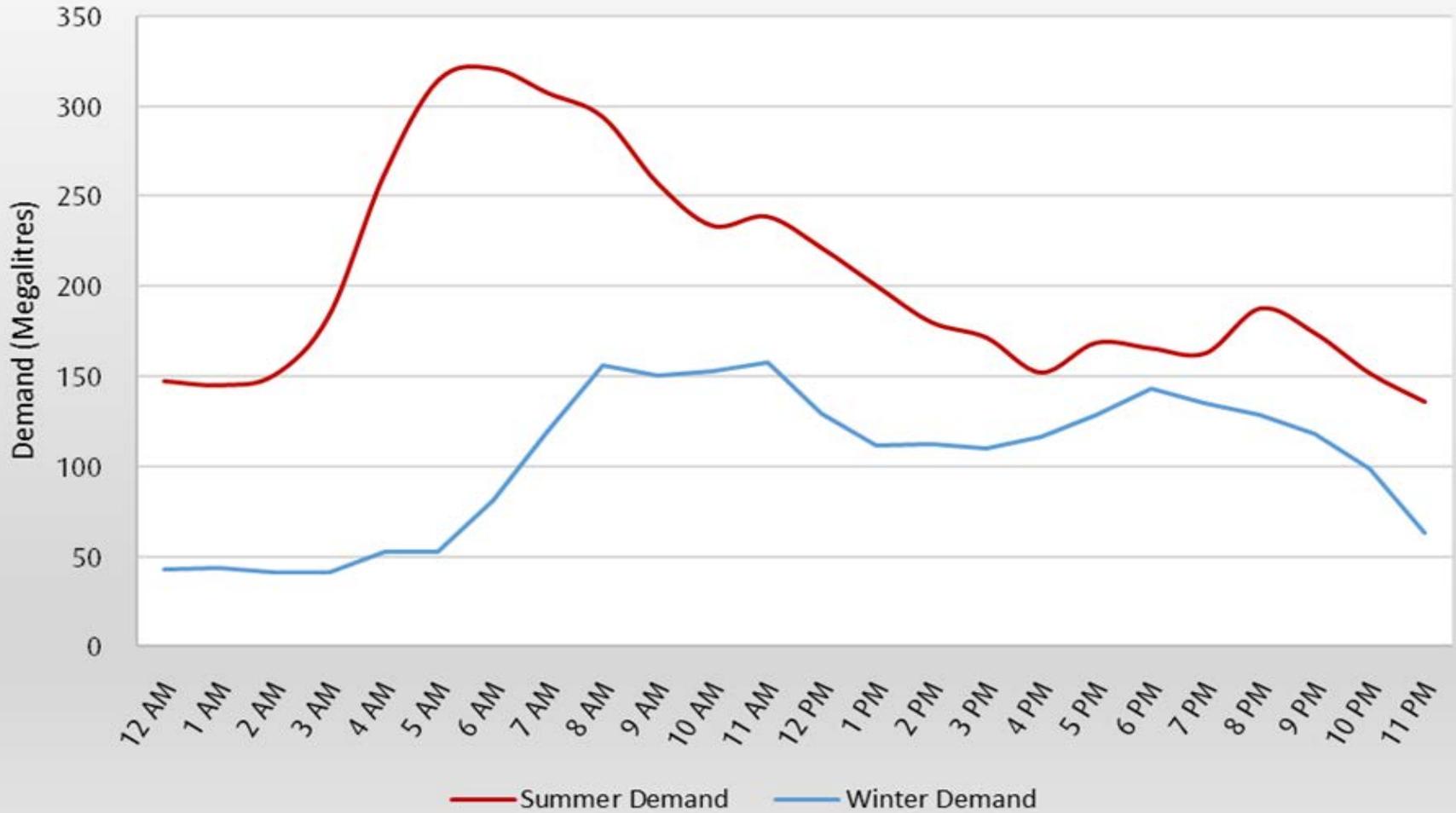


# Peak Seasonal Demand

ITEM 7.2



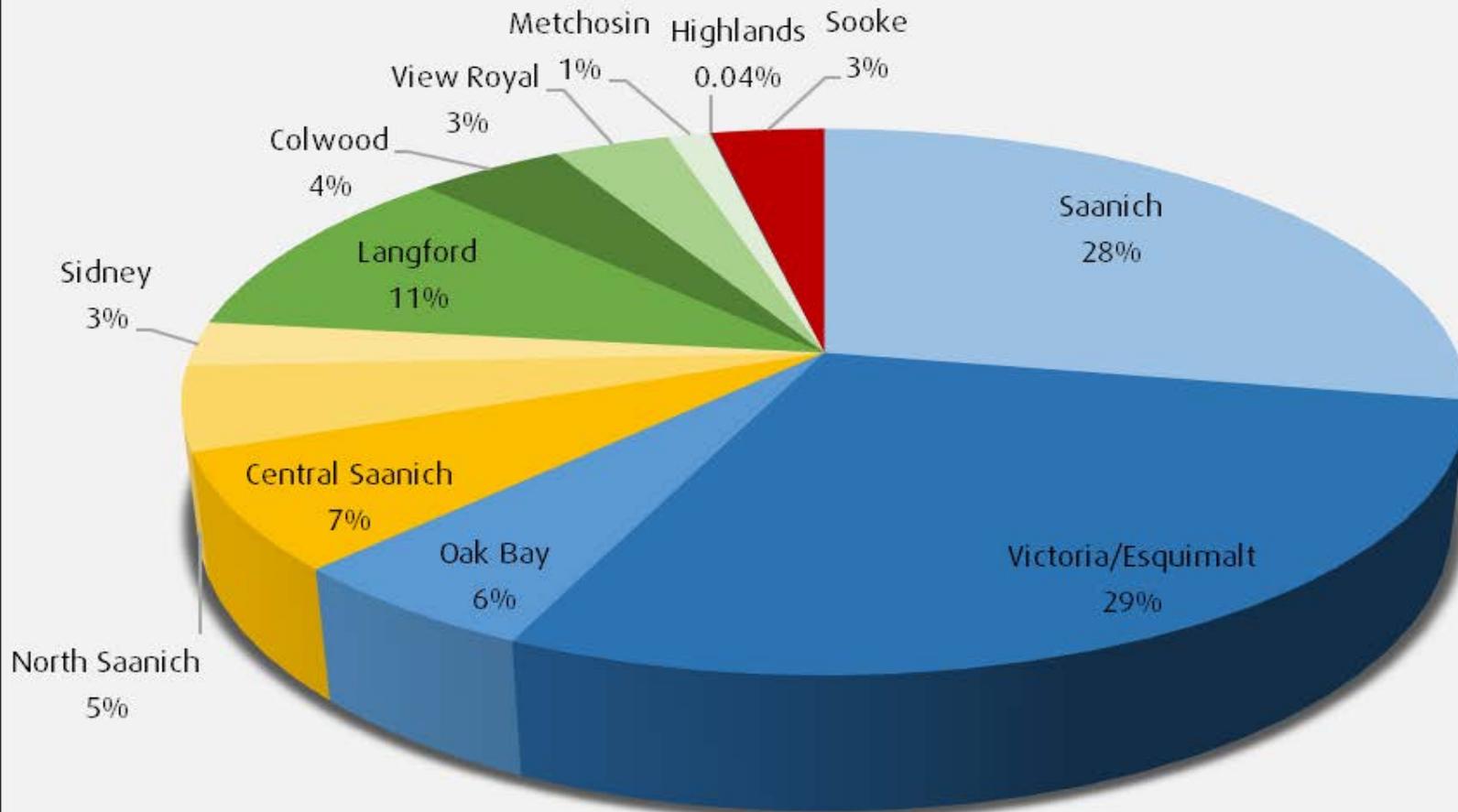
### Daily Demand Patterns - Summer & Winter



# Total Demand by Municipality



## Water Demand By Municipality - 2022



# ICI Water Use in our Region

Rank	Category	% of Total Demand
1	General Retail	5.77%
2	Schools & Research Facilities	3.24%
3	Hotel/Motel	2.10%
4	Nursing Home & Care Facilities	1.79%
5	Recreation Centres & Halls	1.66%
6	Parks	1.24%
7	Golf Course	0.86%



# Residential Outreach & Education

ITEM 7.2



Be a  
**Leak Detective**  
for



# Fix a Leak Week

# Residential Outreach & Education

ITEM 7.2



## Water Wise Lawn Care

### Information Sheet



#### Water Conservation

A healthy lawn needs less water.

Look inside this booklet to find tips on how you can create a resilient lawn that is beautiful, less costly and better for the environment.



#### Why use water wisely?

Climate change will cause longer summer droughts which puts pressure on our drinking water system. Being careful with our water use helps build resilience in our system, making sure there is enough water for all of us, including ecosystems and fish too.

#### DID YOU KNOW?

Residents are the largest water users in the region.\*

# 66%

RESIDENTS

21%  
INDUSTRY + COMMERCIAL  
+ INSTITUTIONS

3%  
AGRICULTURE



44% ↑  
Water use goes up in summer, when we have little rain to replenish our reservoir.

This increase is mostly from outdoor watering.



You can help by using water wisely.

\*10% remaining falls under "other". Learn more stats at [crd.bc.ca/water](http://crd.bc.ca/water)



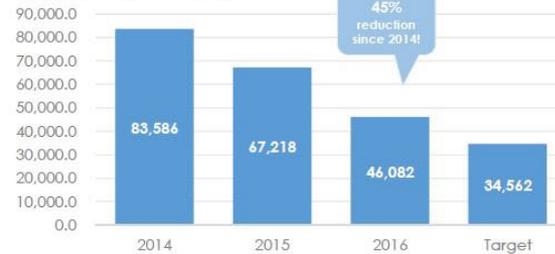
# ICI Outreach & Education

- Water Use Assessments for Businesses
- Sector by sector approach



## Water Use by Year

Water Use by Year (m³)



### Analysis

Water use at the Hotel XYZ has reduced significantly since 2014, reducing 20% in 2015 and 31% in 2016. These water savings are due to the removal of water-cooled equipment in the kitchens and restaurant. Continuing to replace fixtures with low-flow units and replace water cooled equipment with air-cooled models, will lead to further water and cost savings.

## Industry Comparison

Annual Water Use\* vs. Other Hotels



	Hotel Average	XYZ Av.
m³	5,389.1	65,628.8
m³/Room	158.7	215.9

Water consumption is above average compared to other hotels in Victoria. Calculation based on total water use, and water use per guest room.

## Water Savings Identified

Area	Potential Savings*			Upgrade Cost	ROI
	m3	\$	tCO2e		
Restaurant, Kitchen & Café	495	\$1,618	0.17	\$32,018	19.8
Guest Suites	8,820	\$28,830	3.03	\$97,054	3.4
Common Areas & Irrigation	2,979	\$11,131	1.16	\$47,345	4.3

**TOTALS** 12,295 41,580 4.36 \$176,417 4.2

\*Estimated savings include only actions with identifiable ROIs - see details below.

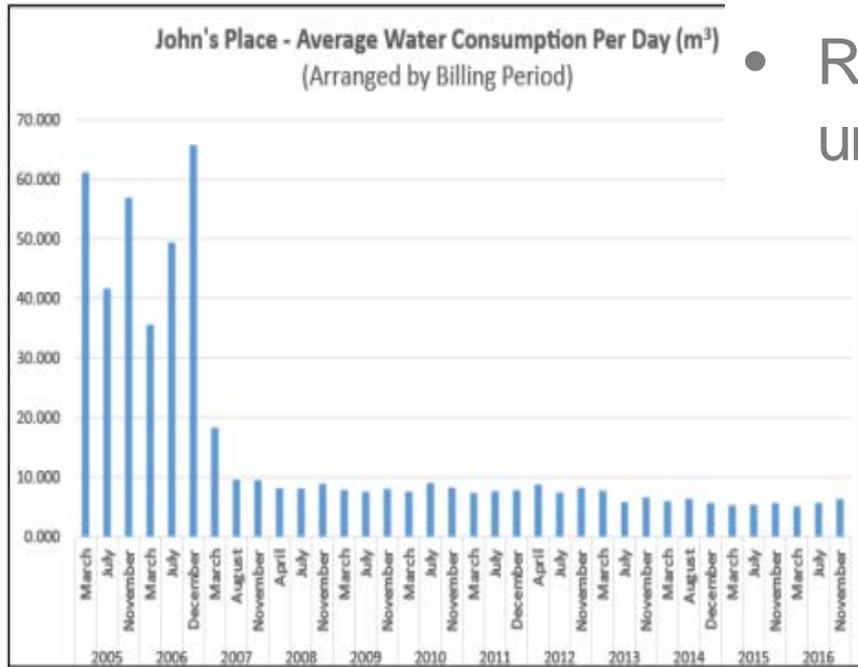
# Once Through Cooling

Switch now,  
save forever



To learn more and apply, visit:  
[www.crd.bc.ca/otc](http://www.crd.bc.ca/otc)

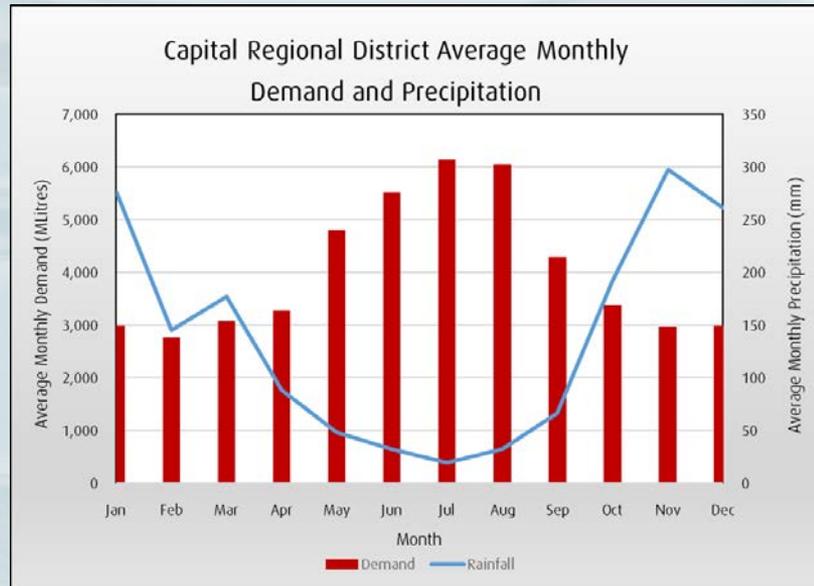
- Once-through cooling (OTC) systems, also known as single-pass cooling systems
- OTC rebate program 2021 – 2026
- Regulate the use of water in OTC units starting in 2028



# Rainwater Harvesting Rebate

## Rainwater Harvesting System Rebate Program

- Salt Spring Island and the Southern Gulf Islands (SGI) Electoral Areas



- Areas with current acute water availability stress
- Rebates of \$200 or \$500
- SGI goal is 230k litres of rainwater storage per year

## Next Steps

### Future Tasks for Demand Management

- Filling the data gaps with research and studies
  - influence of tourism on summer demands, specific residential water use patterns, influence of an aging population, details on agricultural water use (crops, irrigation patterns, seasons etc.), generally refining our understanding of sectorial/spatial/seasonal water use in the region
- Develop a Water Conservation Plan
- Performance measuring water conservation efforts
- Researching and monitoring new water conservation technologies and industry trends

Questions &  
Feedback





## Capital Regional District

### HOTSHEET AND ACTION LIST

### Regional Water Supply Commission

Wednesday, July 19, 2023

11:30 AM

CRD Board Room  
625 Fisgard Street  
Victoria, BC

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. A name has been identified beside each item for further action and follow-up.

#### 2. ELECTION OF VICE CHAIR

Commissioner Karen Harper was elected Vice Chair for the remainder of the one-year term ending December 31, 2023.

#### 4. ADOPTION OF MINUTES

That the minutes of the May 17, 2023 meeting be adopted.

**CARRIED**

#### 8. WATER ADVISORY COMMITTEE

##### 8.1 Water Advisory Committee Recommendation: Conservation Strategies

**Recommendation:** The Water Advisory Committee recommends that the Regional Water Supply Commission consider:

1. Increasing water conservation efforts and messaging and creating a literacy program for sharing water conservation.
2. Storage discussions with member municipalities.
3. Increasing bulk water rates to encourage conservation and to fund increased storage in partnership with municipalities.

**CARRIED**

**Motion Arising:**

That the Water Advisory Committee recommendations be referred to staff for consideration in the new strategic planning process.

**CARRIED**

## 9. COMMISSION BUSINESS

### 9.1 Watershed Security Officer Designation

**Recommendation:** That the Regional Water Supply Commission recommends that the Capital Regional District Board:  
 Appoint Jim Harradine and Derek Hall as Watershed Security Officers; and that Devon Barnes be removed from appointment; for the purpose of Section 233 of the Local Government Act and Section 28(3) of the Offence Act, and in accordance with Capital Regional District Bylaw No. 2681.

**CARRIED**

### 9.2 Regional Water Supply Commission - Disaster Mitigation and Adaptation Fund Grant Application

**Recommendation:** That the Regional Water Supply Commission recommends that the Capital Regional District Board:  
 That staff be instructed to apply for, negotiate, and if successful, enter into an agreement, and do all such things necessary for accepting Disaster Mitigation and Adaptation grant funds and overseeing grant management for the proposed projects.

**CARRIED**

### 9.3 Agricultural Water Rate Review Update

**Recommendation:** That staff be directed to proceed with the next phase of the Agricultural Water Rate Review.

**CARRIED**

**Opposed: Graham**

## 10. NOTICE(S) OF MOTION

### 10.1 Motion with Notice: Placement of Post Disaster Water Supply Drop Kits in Relevant Fire Halls (Commissioner Rogers)

**Recommendation:** That staff be directed to explore cost-sharing with municipalities to have Post Disaster Water Supply Drop Kits placed in relevant fire halls, for consideration in the next budget cycle.

**CARRIED**

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

Issued September 18, 2023

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

Reservoir	September 30 5 Year Ave		September 30/22		September 17/23		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	64,462	14,182	68,346	15,036	63,435	13,956	68.4%
Goldstream	6,039	1,329	8,284	1,822	7,697	1,693	77.6%
Total	70,500	15,510	76,630	16,859	71,132	15,649	69.3%

**2. Average Daily Demand:**

For the month of September	177.0 MLD	38.93 MIGD
For week ending September 17, 2023	176.0 MLD	38.72 MIGD
Max. day September 2023, to date:	190.2 MLD	41.85 MIGD

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

Average (2018 - 2022)	157.4 MLD <sup>1</sup>	34.63 MIGD <sup>2</sup>
-----------------------	------------------------	-------------------------

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

Average (1914 - 2022):	66.5 mm
Actual Rainfall to Date	1.3 mm (2% of monthly average)

**5. Rainfall: Sep 1- Sep 17**

Average (1914 - 2022):	27.8 mm
2022/2023	1.3 mm (5% of average)

**6. Water Conservation Action Required:**

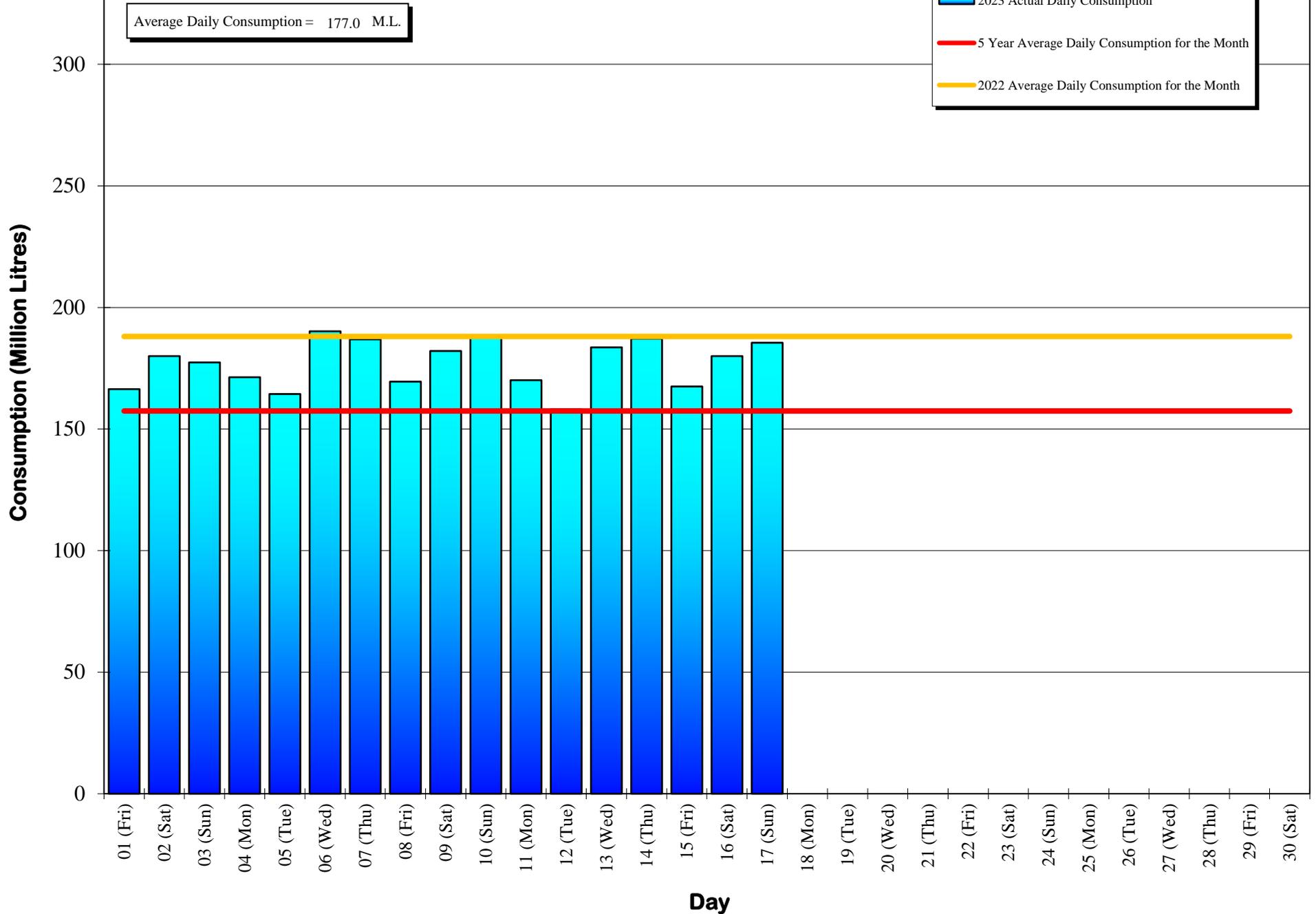
CRD's Stage 1 Water Conservation Bylaw is now in effect through September 30, 2023  
Visit our website at [www.crd.bc.ca/water](http://www.crd.bc.ca/water) for scheduling information.

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 September 2023



## Daily Consumptions: - September 2023

Date	Total Consumption		Air Temperature @ Japan Gulch		Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am			
	(ML) <sup>1</sup>	(MIG) <sup>2</sup>	High (°C)	Low (°C)		Rainfall (mm)	Snowfall <sup>3</sup> (mm)	Total Precip.	
01 (Fri)	166.4		36.6	26	12	Sunny	0.0	0.0	0.0
02 (Sat)	180.0		39.6	27	13	Sunny	0.0	0.0	0.0
03 (Sun)	177.4		39.0	22	12	Cloudy	0.0	0.0	0.0
04 (Mon)	171.3		37.7	18	12	Cloudy / P. Sunny	0.0	0.0	0.0
05 (Tue)	164.4		36.2	20	10	Sunny / P. Cloudy	0.0	0.0	0.0
06 (Wed)	190.2	<=Max	41.8	20	11	Cloudy / P. Sunny	0.0	0.0	0.0
07 (Thu)	186.9		41.1	20	12	Cloudy / P. Sunny	0.0	0.0	0.0
08 (Fri)	169.5		37.3	22	11	Sunny	0.0	0.0	0.0
09 (Sat)	182.1		40.1	24	10	Sunny	0.0	0.0	0.0
10 (Sun)	188.0		41.4	26	13	Cloudy / P. Sunny	0.0	0.0	0.0
11 (Mon)	170.1		37.4	22	14	Cloudy / P. Sunny / Showers	0.4	0.0	0.4
12 (Tue)	158.1	<=Min	34.8	18	12	P. Cloudy / P. Sunny / Showers	0.5	0.0	0.5
13 (Wed)	183.6		40.4	21	11	Sunny / P. Cloudy	0.0	0.0	0.0
14 (Thu)	187.2		41.2	23	11	Sunny	0.0	0.0	0.0
15 (Fri)	167.5		36.9	25	11	Sunny	0.0	0.0	0.0
16 (Sat)	180.0		39.6	25	11	Sunny	0.0	0.0	0.0
17 (Sun)	185.5		40.8	22	11	Cloudy / P. Sunny / Showers	0.4	0.0	0.4
18 (Mon)									
19 (Tue)									
20 (Wed)									
21 (Thu)									
22 (Fri)									
23 (Sat)									
24 (Sun)									
25 (Mon)									
26 (Tue)									
27 (Wed)									
28 (Thu)									
29 (Fri)									
30 (Sat)									
<b>TOTAL</b>	3008.2 ML	661.82 MIG					1.3	0	1.3
<b>MAX</b>	190.2	41.85	27	14			0.5	0	0.5
<b>AVG</b>	177.0	38.93	22.4	11.6			0.1	0	0.1
<b>MIN</b>	158.1	34.79	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.

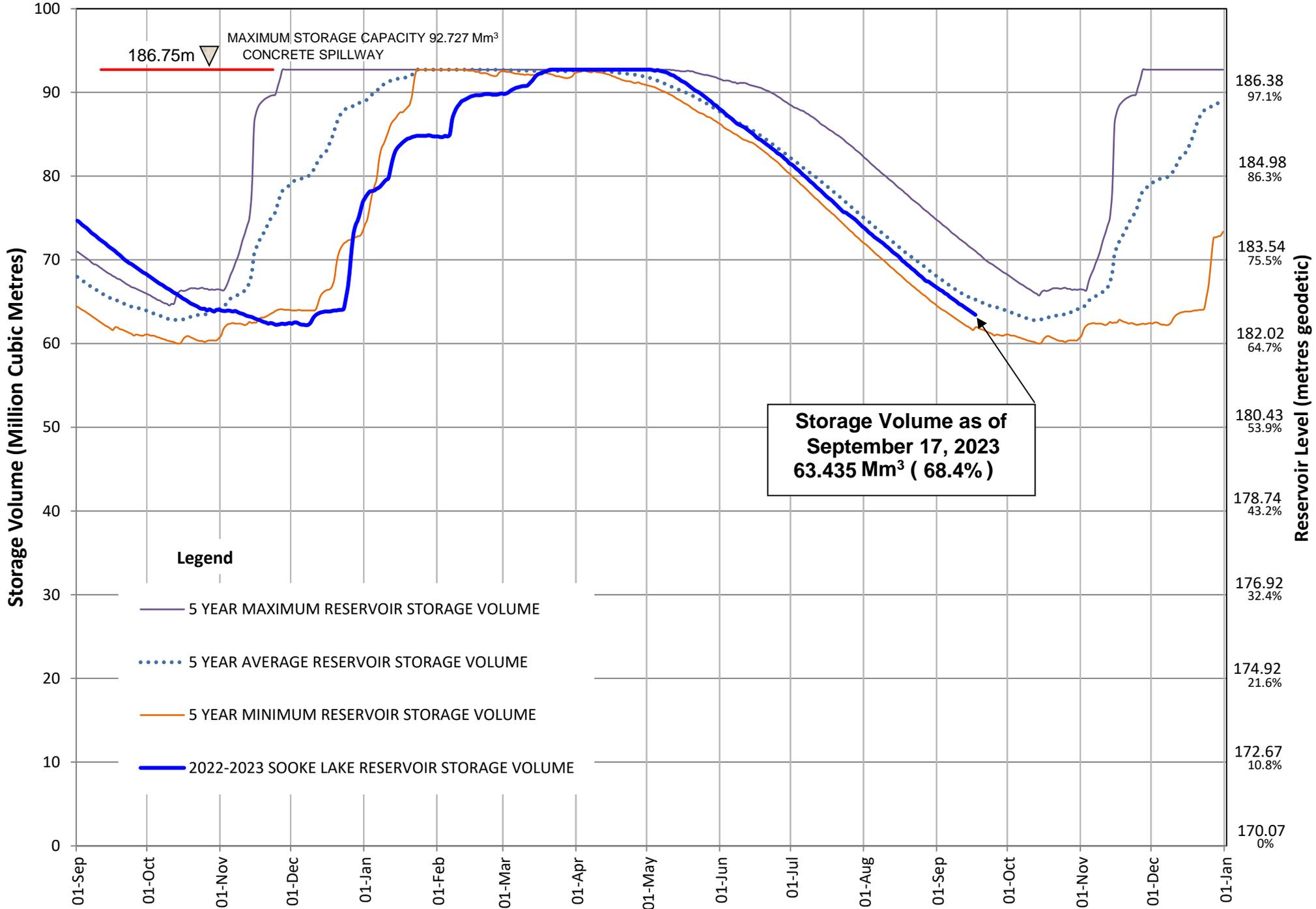
Average Rainfall for September (1914-2022)	66.5 mm
Actual Rainfall: September	1.3 mm
% of Average	2%
Average Rainfall (1914-2022): Sept 01 - Sep 17	27.8 mm
Actual Rainfall (2022/23): Sept 01 - Sep 17	1.3 mm
% of Average	5%

Number days with precip. 0.2 or more
3

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

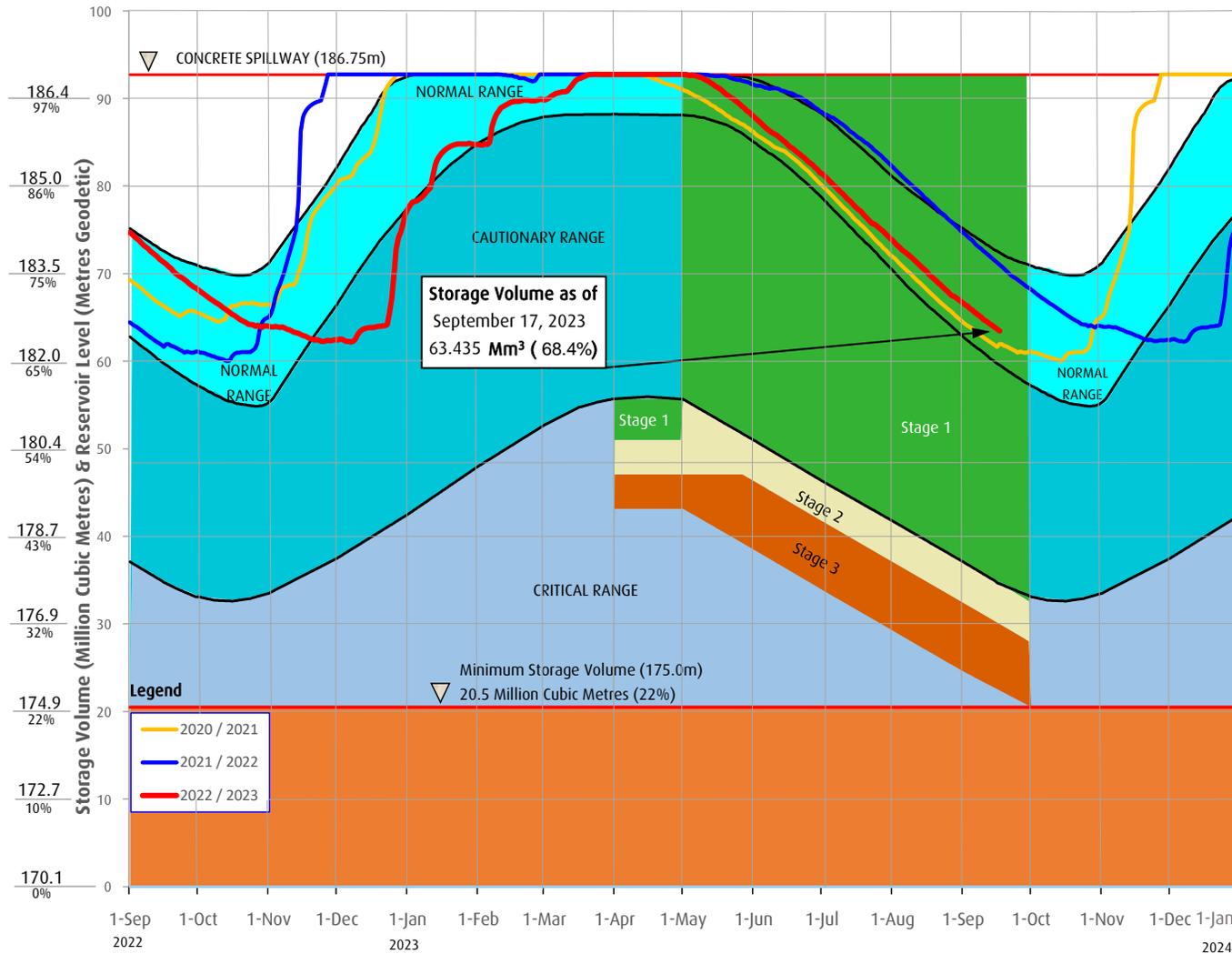
# SOOKE LAKE RESERVOIR STORAGE SUMMARY 2022 / 2023

ITEM 7.4



# 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 September 17, 2023

