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WATER ADVISORY COMMITTEE
Notice of Meeting on **Thursday, June 3, 2021 at 1:30 p.m.**
Goldstream Meeting Room, 479 Island Highway, 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.

Elise Cote (Chair)	Mike Doehnel	Wilf Scheuer
Jennifer Todd (Vice Chair)	Tayler Krawczyk	Heather Thompson
Gord Baird	Craig Nowakowski	David Timothy
Jeremy Caradonna	John Rogers	Mike Turner
Celine Davis	Karen Sander	Vacant (DND)

AGENDA

1. **TERRITORIAL ACKNOWLEDGEMENT**

2. **APPROVAL OF AGENDA**

3. **ADOPTION OF MINUTES** 3

   ***Recommendation**: That the minutes of the March 4, 2021 meeting be adopted.*

4. **CHAIR'S REMARKS**

5. **PRESENTATIONS/DELEGATIONS**

   In keeping with directives from the Province of BC, this meeting will be held without the public present. A phone in number is provided above that will allow the public to listen to the meeting.

   Presentation and Delegation requests can be made online or complete this printable form (PDF). Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

6. **UPDATES FROM WORKING GROUPS**
   - Long term water supply and demand management
   - Water Quality
   - Major Capital Projects
   - Water Rates

*To ensure quorum, advise **Denise Dionne: 250-360-3087** if you cannot attend.*

IWSS-297445977-7054

7. COMMITTEE BUSINESS

7.1. Options & Implications for Developing Reserve Fund for GVWSA Land Acquisition 8

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

Not pursue the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition at this time, and address any land purchase opportunities through adjustments to the existing capital program and utilize existing capital funding and/or debt financing to fund the acquisition.

7.2. Agriculture Water Rate Review – Discussion 16

Recommendation: *That the Agriculture Water Rate discussion documentation be received for information.*

7.3. Summary of Regional Water Supply Commission Recommendations 54

Recommendation: *That the Summary of Recommendations be received for information.*

7.4. Water Watch Report 58

Recommendation: *That the May 25, 2021 Water Watch report be received for information.*

8. NEW BUSINESS

9. ADJOURNMENT

Note: Next Meeting: Thursday, September 2, 2021

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MINUTES OF A MEETING OF THE WATER ADVISORY COMMITTEE
Held Thursday, March 4, 2021 at 1:30 p.m., Goldstream Meeting Room, 479 Island Highway. Victoria, BC

PRESENT: **Members:** G. Baird; M. Doehnel; K. Sander; D. Timothy
Electronic: J. Caradonna; E. Cote; C. Davis; J. Rogers; W. Scheuer; J. Todd; M. Turner
Staff: T. Robbins, General Manager; K. Wilson, Demand Management Coordinator, Environmental Protection; D. Dionne (Recorder)
Also Present: L. Szpak, Chair, Regional Water Supply Commission

REGRETS: T. Krawczyk; C. Nowakowski; H. Thompson

1. CALL TO ORDER

T. Robbins called the meeting order at 1:30 p.m.

2. TERRITORIAL ACKNOWLEDGEMENT

T. Robbins provided the Territorial Acknowledgement.

3. INTRODUCTIONS

T. Robbins welcomed new members and conducted a roundtable of introductions of Committee members and staff.

T. Robbins introduced Lillian Szpak, Chair of the Regional Water Supply Commission.

Chair Szpak addressed the Committee stating that she had sat on the Water Advisory Committee in the past and that she has been a City of Langford Councillor since 2002. She stated that the capacity that this Committee has is very valuable to the Regional Water Supply Commission, and thanked them for their work. She is looking forward to the Committee's feedback over the course of the year.

4. ELECTION OF CHAIR

T. Robbins called for nominations for the position of Chair of the Water Advisory Committee for a one-year term ending December 31, 2021.

J. Todd nominated E. Cote. E. Cote accepted the nomination.
T. Robbins called for nominations a second time.
T. Robbins called for nominations a third and final time.

Hearing no further nominations, T. Robbins declared E. Cote of the Water Advisory Committee for a one-year term ending December 31, 2021 by acclamation.

5. ELECTION OF VICE CHAIR

Chair Cote called for nominations for the position of Vice Chair of the Water Advisory Committee for a one-year term ending December 31, 2021.

G. Baird nominated J. Todd. J. Todd accepted the nomination.
Chair Cote called for nominations a second time.
Chair Cote called for nominations a third and final time.

Hearing no further nominations, Chair Cote declared J. Todd Vice Chair of the Water Advisory Committee for a one-year term ending December 31, 2021 by acclamation.

6. APPROVAL OF AGENDA

MOVED by K. Sander, and **SECONDED** by G. Baird,
That the March 4, 2021 Water Advisory Committee agenda be approved.

CARRIED

7. ADOPTION OF MINUTES

MOVED by M. Doehnel, and **SECONDED** by G. Baird,
That the minutes of the September 24, 2020 meeting be adopted.

CARRIED

8. CHAIR'S REMARKS

Chair Cote thanked the Committee for nominating her for the position of Chair, she stated that she is excited to work together with the Committee and advised that if anyone has any questions or concerns related to the Water Advisory Committee to contact her directly.

9. PRESENTATIONS / DELEGATIONS

There were no presentations or delegations.

10. WELCOME FROM REGIONAL WATER SUPPLY COMMISSION CHAIR

The Chair addressed the Committee under Item 3. Introductions.

11. COMMITTEE BUSINESS

11.1. Regional Water Supply Orientation and 2021 Priorities (Presentation)

T. Robbins provided a PowerPoint presentation outlining:

- Service and Governance
- Regional Water Supply Source and Infrastructure
- Service Delivery – CRD Departmental Programs
- Service Budgets

- Water Demand & Rates
- Budget Factors & Upcoming Initiatives
- Service Staff Support

He identified the following upcoming initiatives that the Water Advisory Committee could expect to be involved with:

- Water Supply Master Plan Update
- Managing risks associated with placer & mineral tenures
- Agricultural water rate review and options study
- pH and corrosion study – tap sampling & lead level determination
- Water supply area land acquisition strategy funding
- Water supply area dams - emergency response
- Regional Water Supply Service – Development Cost Charge Program

MOVED by J. Caradonna, and **SECONDED** by W. Scheuer,
That the Water Advisory Committee receive the presentation for information.

CARRIED

11.2. Demand Management Program Update

K. Wilson provided a PowerPoint presentation outlining:

- Total Regional Supply and Demand
- Water Use in the CRD
- Regional Total Per Capita Trend & Population Growth
- Total Demand by Municipality
- Projected Per Capita Demand by Municipality
- Indoor & Outdoor Residential Water Conservation Campaigns
- Annual Water Demand Profile
- Indoor Residential Use
- Top 10 ICI Uses
- Daily Demand Pattern

Discussion ensued and the Committee requested that staff provide an annual update on the ICI water demand.

The Committee asked how it could help support staff regarding long-term demand planning, whether there are areas of interest that the Committee could provide some research and input. Staff indicated that they will be looking at the following areas:

- Impact of tourism, what is the influx, how do tourists influence sector's per capita number, impact on overall demand.
- Cruise ship water use – noting the difference in trends between last year (the pandemic year) and the year before.

MOVED by G. Baird, and **SECONDED** by M. Turner,
That the Water Advisory Committee receive the report for information.

CARRIED

11.3. Summary of Regional Water Supply Commission Recommendations

MOVED by G. Baird, and **SECONDED** by K. Sander,
That the Summary of Recommendations be received for information.

CARRIED

11.4. Water Watch Report

MOVED by D. Timothy, and **SECONDED** by C. Davis,
That the February 22, 2021 Water Watch report be received for information.

CARRIED

12. UPDATES FROM WORKING GROUPS

T. Robbins provided some background on the working groups for the new members, noting how business flows to the Committee. The formal meetings are for the purpose of decision-making. Typically, this is where staff will bring reports for input or the Regional Water Supply Commission would refer items to the Committee for input.

The working groups were established for Committee members to have more informal discussions on areas of interest. Staff can provide support the working group meetings.

Chair Cote noted that, to be effective, it would be good to have 3 or 4 members per working group.

- Long term water supply and demand management
  - J. Todd noted that research in this area had just begun and there is no update to provide today.
- Water Quality
  - No update
- Major Capital Projects (including dam safety)
  - G. Baird advised that, due to COVID restrictions, the discussions on this topic have been limited. There is not update to provide today.
  - He and K. Sander are on this working group and he invited W. Scheuer to join this group if there is interest.
- Water Rates (including agriculture and First Nations)
  - J. Rogers referred to correspondence submitted by T. Krawczyk that provided updates from the discussions that have taken place in this area to date.
  - T. Robbins provided some detail related to the First Nations item, noting that discussions have occurred over the years about applying a different rate, or the wholesale rate, to First Nations communities that are currently served through the municipal distribution systems. The item is not actively being considered by the Regional Water Supply Commission at this time.

Staff noted that meeting rooms at Integrated Water Services could be made available to the working groups on the meeting dates noted in the proposed meeting schedule, agenda Item 13.

Chair Cote asked members to email her with which group they are interested in participating on and she will put them in touch with committee members working on that group.

MOVED by G. Baird, and **SECONDED** by J. Rogers,
That the Updates from the Working Groups be received for information.

CARRIED

13. PROPOSED MEETING SCHEDULE

The Committee discussed the length of this meeting and whether to schedule more meetings to break up the agenda items or to schedule fewer longer meetings to allow for fulsome discussions. T. Robbins advised that he can work with the Chair for future meetings to review the agenda and work through time allotments. The Committee also acknowledged that members have other commitments and obligations and that they can let the Chair know in advance of the meetings.

- First Thursday of the month with quarterly “business” meetings

Business Meetings	Working Group Meetings
June 3	April 1
	May 6
September 2	Aug 5
	Oct 7
December 3	Nov 4

14. NEW BUSINESS

There was no new business

15. ADJOURNMENT

MOVED by G. Baird, and **SECONDED** by J. Rogers,
That the March 4, 2021 meeting be adjourned at 4:10 p.m.

CARRIED

CHAIR **SECRETARY**

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WAC 21-01

REPORT TO WATER ADVISORY COMMITTEE
MEETING OF THURSDAY, JUNE 3, 2021

SUBJECT **Options & Implications of Developing a Reserve Fund for Greater Victoria Water Supply Area Land Acquisition**

ISSUE SUMMARY

To seek input from the Water Advisory Committee regarding the options and implications of developing a reserve fund to support future Greater Victoria Water Supply Area (GVWSA) land acquisitions.

BACKGROUND

The Regional Water Supply Commission (Commission) approved GVWSA land acquisition priorities in March 2020 and directed staff to take a more active approach in pursuing catchment land acquisition. The approved priorities were consistent with those set out in the February 2020 Water Advisory Committee report (Appendix A). Along with approval of the priorities, the Commission directed that staff "*prepare a report on options and implications of developing a reserve fund for land acquisition priorities for the Greater Victoria Water Supply Area*".

The approved land acquisition priorities total 2,753 hectares (ha), with disposition opportunity of 963 ha, yielding a net land acquisition goal of an additional 1,790 ha.

A recent acquisition of a small GVWSA land parcel settled at $4,500 per acre ($11,115 per ha). Using the same selling price as an estimate to achieve all of the land acquisition priorities would cost roughly $20 million.

Some Commission members expressed a desire to set aside reserve funds in order to pursue land acquisition goals and for the Commission to be agile in acquiring priority land parcels when opportunities arise.

A review of the priorities and rough estimates of possible timing and cost are shown in Table 1. Please refer to Appendix A to review the land priority details. The costs are based on the most recent selling price but should be considered at the low end of actual future costs.

Table 1. 20 Year Plan to Achieve All GVWSA Land Acquisition Priorities

Land Acquisition Time Frame	Approx. Area to Acquire	Land Priorities Acquired	Cost ($ million)	Number of land parcels involved*
0 - 5 year goal	700 ha	Priorities 1-3 (Sooke and Goldstream watersheds)	7.8	11
5 - 10 year goal	700 ha	Priority 4 (Buffer lands to main infrastructure/access)	7.8	3
10 – 15 year goal	200 ha	Priority 5 and 6 (Goldstream buffer, Leech catchment)	2.1	12
15 - 20 year goal	200 ha	Priority 7 (Leech buffer)	2.1	6
20 years	**1,800 ha**	**All Priorities**	**$ 20 million**	**32**

**Acquisition could only occur with a willing land seller, which may not be the case within the proposed acquisition time frames.*

Currently, any land acquisition outlined in the existing 5 year capital plan is planned to be funded by contributions through the wholesale water rate, which includes a mix of water capital fund contributions and debt financing. If an opportunity arises to acquire land that has not been budgeted for in the current capital plan, there may not be the capital funding in place to make the purchase. However, options for purchasing land parcels when opportunities arise can include:

- Amend the capital plan to defer other current year projects, to allow for the purchase of new parcels of land within the existing capital budget;
- Amend the existing capital plan to allow the purchase of new parcels of land, and borrow funds via the existing or new loan authorization (dependent on funding authorization specifications) to fund the acquisition; or,
- Establish a reserve for land acquisition, to enable future land purchases as and when they arise, without impacting funding for other capital priorities. A capital plan amendment would still be required.

ALTERNATIVES

Alternative 1

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

Not pursue the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition at this time, and address any land purchase opportunities through adjustments to the existing capital program and utilize existing capital funding and/or debt financing to fund the acquisition.

Alternative 2

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

Direct staff to pursue the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition, starting in the 2022 budget year, and contribute annually to the reserve through the wholesale water rate. The Commission will be able to review and approve the contribution amount each year.

Alternative 3

That this report be referred back to staff for additional information.

IMPLICATIONS

Financial Implications

The establishment and annual contribution of funds from the Regional Water Supply Service to a reserve fund for GVWSA land acquisition would impact the wholesale water rate (which distributes the annual cost of the contribution amongst participants based on water consumption, like all other costs of the service) as shown in Table 2. The annual contribution is not required to stay the same but could change from year to year depending on the pressures on the water rate and current land acquisition opportunities. Where land acquisition purchases cannot be fully funded from the reserve, the remainder could be funded from existing capital and/or debt financing.

Table 2. Wholesale Water Rate Impacts from Annual Contributions to a Reserve Fund

Annual Contribution	Number of Years Required to Achieve a $ 20 million Reserve	Wholesale Water Rate Increase ($/m^3)	Wholesale Water Rate Increase (%)
$0.5 million	40 years	$0.0104	1.5%
$1.0 million	20 years	$0.0208	3 %
$1.4 million	14 years	$0.0292	4%
$1.6 million	12.5 years	$0.0333	5%

To achieve all land acquisition priorities over 20 years to the schedule suggested in Table 1, a contribution schedule of $1.6 million annually for the first ten years followed by annual contributions of $0.5 million for the second decade would be needed. The timing and funds necessary should be considered conceptual given uncertainty regarding purchase opportunities, prices and feasibility of parcel subdivisions to limit acquisition of excess land.

To begin contributions in 2022, a reserve bylaw would first need to be enacted for the Regional Water Supply Service, for the specific purpose of establishing a reserve fund for (GVWSA) land acquisition.

Advantages of a Reserve Fund

The advantages of the establishment of a reserve fund for GVWSA land acquisition are:

- the slow accumulation of funds on hand so that larger land purchases do not have a sudden impact on the water rate, capital funding or debt servicing;
- the ability to respond quickly to land sale opportunities as they arise; and,
- demonstration of a commitment and ability to pursue and acquire priority lands as per the GVWSA Land Acquisition Priorities for the protection of the GVWSA and regional water supply.

Disadvantages of a Reserve Fund

The disadvantage of establishment of a GVWSA land acquisition reserve fund are:

- there would be an increase in the water rate specific to establishing an annual contribution to a land acquisition reserve fund;
- funds may be tied up for years without spending;
- funds are restricted from being used for any other capital spending priorities (other than land acquisition) that the Regional Water Supply Service may have or develop; and,
- today's water consumers pay into a fund that may not benefit them for many years.

Purchasing Land without a Reserve Fund

Under the existing water rate model the Regional Water Supply Service is funded by a mixture of water rate income and debt to fund capital projects. There is already the ability and flexibility to fund large capital projects under this model with opportunities to borrow funds under the existing loan authorization for long term debt with the Municipal Finance Authority (MFA).

In order to make an unanticipated land purchase, the capital plan would need to be amended. The decision would need to be made whether to reprioritize the existing capital plan (approximately $25 million each year) to accommodate the land acquisition within the existing budget (defer or cancel projects), or add the land acquisition to the capital plan and increase the capital budget to accommodate it, or a combination of both. If the capital budget is increased, the debt financing that supports the capital plan would be reviewed and further borrowing would be initiated as necessary. As an example, if debt financing were to be considered for a new land acquisition of $8 million, the current annual principal and interest payment would be approximately $580,000 per year for 15 years. The existing loan authorization with the MFA allows for borrowing twice annually.

Alignment with Existing Plans & Strategies

The 2017 Regional Water Supply Strategic Plan calls for the Capital Regional District to "seek ownership and control of the remaining catchment lands and critical adjacent lands to act as a buffer". The Commission adopted land acquisition priorities for the GVWSA to guide the acquisition of lands. In principle, establishment of a land acquisition reserve fund provides further

commitment to acquire GVWSA lands, but lack of a reserve fund is likely not a barrier given the ability to acquire financing relatively quickly and easily through existing processes. Current long term financing rates available to the Regional Water Supply Service through the MFA are 2.9 %.

CONCLUSION

The Regional Water Supply Commission (Commission) adopted Greater Victoria Water Supply Area (GVWSA) Land Acquisition Priorities in 2020 and directed staff to report on options and implications of developing a reserve fund to support the land acquisition goals.

There is a great deal of uncertainty and lack of control over when priority land parcels may become available for purchase, and the price of any land parcels. If established, reserve funds may be wholly insufficient or sit idle for many years, and may charge consumers for service they do not receive.

The current wholesale water rate model, with access to financing for capital projects, provides ability and flexibility to accommodate land purchases as they arise without significantly burdening the wholesale water rate and/or customers of today.

RECOMMENDATION

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

Not pursue the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition at this time, and address any land purchase opportunities through adjustments to the existing capital program and utilize existing capital funding and/or debt financing to fund the acquisition.

Submitted by:	Annette Constabel, MSc., RPF, Senior Manager, Watershed Protection
Concurrence:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services

ATTACHMENT:

Appendix A: February 27, 2020 Water Advisory Committee Staff Report – Greater Victoria Water Supply Area Land Acquisition Priorities.

APPENDIX A

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REPORT TO WATER ADVISORY COMMITTEE
MEETING OF THURSDAY, FEBRUARY 27, 2020

SUBJECT **Greater Victoria Water Supply Area Land Acquisition Priorities**

ISSUE SUMMARY

To establish priorities for land acquisition to protect the regional water supply for Greater Victoria.

BACKGROUND

From the earliest days of the development of the Goldstream and Sooke Lake reservoirs, ownership of the surrounding watershed lands has been the foremost method of ensuring the protection of drinking water quality. The same principle drove the decision to purchase the Leech Water Supply Area (WSA) in 2007 and 2010 for protection of future water supply.

A high percentage of the watershed lands that provide water catchment for the reservoirs and Leech River above the diversion tunnel are owned and managed by the Capital Regional District (CRD). The following table illustrates the catchment area of each of Sooke, Goldstream and Leech WSAs.

Water Supply Area	CRD Owned Catchment Area	Non-CRD Owned Catchment Area	Total Catchment Area
Sooke	7,968 ha 98 %	178 ha 2 %	8,146 ha 100 %
Goldstream	2,185 ha 98 %	54 ha 2 %	2,239 ha 100 %
Leech	8,553 ha 92 %	752 ha 8 %	9,305 ha 100 %
Total	**18,707 ha 95 %**	**985 ha 5 %**	**19,692 ha 100 %**

The Regional Water Supply 2017 Strategic Plan calls for the CRD to “seek ownership and control of the remaining catchment lands and critical adjacent lands to act as a buffer”. Opportunities to purchase, exchange or otherwise acquire lands to further protect the drinking water supply arise intermittently, and staff most recently reported on GVWSA land acquisition opportunities in 2016.

It is intended to establish WSA land acquisition priorities in order to provide guidance to staff and to assist the Regional Water Supply Commission (the Commission) in evaluating land acquisition opportunities that arise when landowners are identified as willing sellers.

The land acquisition priorities have been developed based on the following principles:

- Land and land use within the catchment of a water intake directly influence water quality.
- Sooke Lake Reservoir currently supplies all the drinking water needed for the Regional Water Supply Service. Goldstream Water Supply System provides backup and emergency water supply. The Leech River is planned to deliver additional water to Sooke Lake Reservoir in the future. Priority for water supply protection is therefore in order of Sooke, then Goldstream, then Leech WSA.
- Land use adjacent to catchment lands (referred to as buffer lands) plays an important role

in protection of catchment lands and critical water supply system infrastructure. Development, industrial use, recreation and other activities on buffer lands may lead to wildfire, sediment, contaminants, pathogens or invasive species moving into catchment lands.

- 24 hour, seven days a week access to water supply infrastructure and the GVWSA is important in maintaining an uninterrupted supply of high quality drinking water.

ALTERNATIVES

Alternative 1
That the Water Advisory Committee recommends that the Regional Water Supply Commission adopt the following land acquisition priorities for the Greater Victoria Water Supply Area:

Priority 1: Sooke Lake Reservoir catchment lands
Priority 2: Sooke Lake Reservoir buffer lands
Priority 3: Goldstream Water System catchment lands
Priority 4: Lands providing primary access to the Sooke WSA and the Kapoor Tunnel
Priority 5: Goldstream Water System buffer lands
Priority 6: Leech River catchment lands
Priority 7: Leech River buffer lands containing primary access

Alternative 2
That the Water Advisory Committee recommends that the Regional Water Supply Commission refer the strategy for land acquisition priorities for the Greater Victoria Water Supply Area back to staff with comments for consideration.

IMPLICATIONS

Environmental Implications
Adoption of GVWSA land acquisition priorities will encourage staff and the Commission to make progress in achieving full ownership and protection of the lands and infrastructure that protect and supply drinking water for Greater Victoria.

Financial Implications
Staff have determined the amount of area by land acquisition priority type, and whether there may be land exchange or disposition opportunities. To acquire the remaining catchment lands is a significant financial investment. There is currently no land acquisition reserve funding in place, however, the 2020 Capital Plan for Regional Water Supply includes a GVWSA Land Exchange/Acquisition Capital Project beginning in 2022, with a $300,000 budget, to fund land surveys and appraisals to support decisions to acquire or exchange lands.

Topographical catchment boundaries do not match land title parcel boundaries. Where the seller is willing and there are cost savings, legal surveys would be taken to limit the amount of land acquired that was over and above acquisition priorities. Nevertheless, to acquire all catchment lands would undoubtedly require purchase of some non-priority lands increasing overall cost.

Where possible, exchange of non-catchment lands for catchment lands with other landholders is preferred to reduce costs. Land purchase would require resolution of the Commission and CRD Board including amendment of the Regional Water Supply System capital plan to fund the purchase.

Intergovernmental Implications
There are Sooke and Leech WSA catchment lands that reside within the Cowichan Regional District rather than in the Capital Regional District. CRD Bylaws protecting the GVWSA do not apply in the Cowichan Regional District. As soon as possible, CRD would seek amendment of the Regional District boundaries to include those lands in the CRD. A similar boundary amendment was successful in 2017 (REPORT #RWSC 2017-06).

Given the status of the GVWSA lands held by CRD and most adjacent lands as fee simple, there are few expected regulatory or intergovernmental implications of the proposed land acquisition priorities. Any crown lands would require work with the provincial ministries responsible. As well, local First Nations may have an interest in the acquisition or disposition of specific fee simple lands and those would be discussed with the interested Nations.

Service Delivery Implications
Adopting land acquisition priorities for the GVWSA assists the CRD in pursuing and evaluating land acquisition opportunities that meet the Regional Water Supply Strategic Plan goals to provide high quality, safe drinking water by managing and protecting the GVWSA.

Social Implications
Adopting land acquisition priorities for the GVWSA provides transparency for the public by clearly communicating the goals for water supply area protection.

CONCLUSION

The principle of ownership and control of watershed lands that supply drinking water for Greater Victoria began in the early 1900's and remains an important drinking water protection today. Most of the GVWSA catchment lands are held by the CRD; for those portions that are not owned, adoption of a land acquisition priority is beneficial in order to guide staff and the Regional Water Supply Commission in pursuing and evaluating land acquisition opportunities.

RECOMMENDATION

That the Water Advisory Committee recommends that the Regional Water Supply Commission adopt the following land acquisition priorities for the Greater Victoria Water Supply Area:

Priority 1: Sooke Lake Reservoir catchment lands
Priority 2: Sooke Lake Reservoir buffer lands
Priority 3: Goldstream Water System catchment lands
Priority 4: Lands providing primary access to the Sooke WSA and the Kapoor Tunnel
Priority 5: Goldstream Water System buffer lands
Priority 6: Leech River catchment lands
Priority 7: Leech River buffer lands containing primary access

Submitted by:	Annette Constabel, M.Sc., R.P.F., P.M.P., Senior Manager, Watershed Protection
Concurrence:	Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services

IWSS-297445977-5778

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Water Advisory Committee – June 3, 2021

Discussion: Request for Proposals for Water Rate Review: Regional Water Supply Service - Agricultural Water Rate

Overview

The Capital Regional District (CRD) has provided an agricultural water rate through the Regional Water Supply Service since 2002. Properties that hold a BC Assessment farm classification are eligible to receive the rate subject to the provisions of CRD Bylaw No. 2570, which sets out how the rate applies to properties with or without a residence. Historically, the rate has been substantially lower than the municipal retail or distribution rates which was intended to promote and support local food production. The agricultural rate provides a benefit to farmers by lowering the cost of water for crop irrigation and livestock rearing. The rate 'subsidy' is funded through the annual Regional Water Supply Service operating budget which funds the difference between the municipal retail rate and the agricultural water rate, keeping the municipalities/distributors 'whole' financially.

The rate was implemented with the objective of supporting local food (fruits, vegetables and livestock) and feed production. The rate has not changed for ten years, while during that time, the Regional Water Supply bulk supply or 'wholesale' water rate and the municipal distribution or 'retail' water rates have steadily increased. The table below provides a summary of the rate history:

Year	Bulk Supply Rate (Regional Water)	Agriculture Rate	Sample Distribution Rate (CRD JDF Water)
2002	$0.2860 / cubic m	$0.2060 / cubic m	$0.9189 / cubic m
2010	$0.5443	$0.2105	$1.4985
2020	$0.6968	$0.2105	$2.2159
2021	$0.7148	$0.2105	$2.3081

CRD Bylaw No. 2570 sets out how the agricultural rate is applied. Properties that hold a BC Assessment farm classification are eligible to receive the rate. If all of the water consumption on a property is related to agriculture, the rate applies to the total volume of water consumed. If the property has a residence, the local municipal distribution water rate applies to the first 455 cubic metres consumed in a calendar year, then the agricultural water rate applies to the volume of water consumed during the remainder of the year. Appendix B summarizes the agricultural demand, eligible accounts, and Regional Water funding (2011 to 2019).

The current agricultural rate methodology and application provides the opportunity for farm-classified properties to receive the rate regardless of what type of agriculture they are supporting, and keeps the municipalities/distributors 'whole' financially as previously noted. In other words,

the municipalities/distributors receive their full retail rate revenue for the agricultural water consumed in their service area via the CRD reimbursement for the difference between the local municipal retail rate and the agricultural rate, funded from the Regional Water Supply agricultural rate budget – all customers across Greater Victoria contribute to subsidizing farmers that take advantage of the agricultural water rate with no contributions from individual municipalities.

In terms of the Regional Water Supply Service budget impact, the 2021 Regional Water Supply agricultural rate funding budget is $1.6 million which is approximately 4.6% of the total annual budget. The rate budget continues to be increased to keep pace with the reimbursement claims, which is primarily a result of the ever-increasing gap between the rates.

In 2018, the CRD partnered with the Ministry of Agriculture to develop an Agriculture Water Demand Model and Agricultural Land Use Inventory for the CRD. The purpose of the study was to identify the amount of actively farmed land in the region, provide a baseline for monitoring land use change, identify land use trends for areas with historic agricultural uses, identify crop production/type, and agricultural water demand and sources. The study was also intended to provide better information to support further consideration of the agriculture water rate application and methodology.

Current agricultural water demand represents 2 to 3% of annual Regional Water demand; 2019 Regional Water Supply agricultural water volume was 1,050,084 cubic metres confirming that there is some reliance on 'city' water to support agricultural water needs. In 2019 there were 524 Agricultural/Residential (AR) and 127 Agricultural (AG) accounts that received the agricultural water rate. The breakdown by municipality/water distribution service is as follows:

	No. of AR Accounts	No. of AG Accounts
Western Communities & Sooke (served by the CRD JDF Water System)	86	14
Central Saanich	276	47
North Saanich	94	15
Saanich	68	51

The CRD would like to undertake a review that considers the current agricultural water rate, the rate model and rate application, the implications of these elements, and presents rate/rate model options for consideration.

The process is expected to involve several steps, a high degree of stakeholder engagement, work with CRD Finance and Administration staff, and making presentations to CRD Commissions.

Budget

The CRD has budgeted $100,000 for the completion of this assignment.

Contract Term

The contract term is anticipated to begin July 2021 to February 2022, with a goal of having a new rate/rate structure in place or alternatively a decision to maintain the current rate/rate structure, in place for the 2023 budget.

Services Required (Scope of Work)

Objective

It is not uncommon to have agricultural water rates subsidized by domestic water rates. However, the continually increasing agricultural water rate subsidy funded through the Regional Water Supply budget and the inability to demonstrate a clear linkage and benefit to the Region with regards to objective of supporting local food (fruits, vegetables and livestock) and feed production has resulted in the need to review the CRD agricultural water rate and rate structure. The outcome needs to ensure a fair rate that supports farming operations that contribute to the regional objective while addressing the service budget implications and the additional cost burden to non-agricultural customers. The rate structure should also encourage water conservation.

The CRD would like to undertake a review that considers the current rate model and rate application and presents agricultural rate/rate model options guided by the following principles:

- The rate is effective in promoting food and feed production where the cost of water is not a barrier
- The rate avoids subsidizing rural properties that do not produce food or feed for the local economy
- The rate avoids water waste and promotes water conservation
- The rate and its application is transparent for all customers to understand
- The rate is considered fair and equitable across the different agricultural customer groups as well as the broader Greater Victoria water customer base
- The rate considers the municipal financial (water revenue) implications

Options that should be considered in the review include:

1. Use the current model, except decrease the difference between the agricultural rate and the distribution retail rates, thereby decreasing the annual subsidy and budget impact, by adjusting the agricultural rate annually. The agricultural rate could be indexed to the average of the distribution retail rates for example, where the agricultural rate would be a percentage below the average of the four retail rates (CRD Juan de Fuca Water, Central Saanich, North Saanich, Saanich) as the benchmark.

2. Use the annual wholesale water rate as the agricultural water rate also and determine if there is supportable rationale.

3. Use a rate model similar to those used in the Okanagan where a base fee is charged per acre of arable area that includes a base irrigation water allotment, then increasing rate blocks apply based on water used as a percentage over the base water allotment. In other words, if an agricultural customer uses more water annually than the base threshold allotted in the base fee, the customer pays both the base fee and consumption fees. There

would be considerably more annual administrative work required by the CRD and the municipalities to manage the information necessary to calculate the fees associated with this model such as arable land areas and water consumption thresholds. (Appendix C: District of Summerland Agricultural Water)

4. Other rate models that consider the suggestions put forward by the Peninsula and Area Agricultural Commission (Appendix D: Correspondence, Peninsula and Area Agriculture Committee – May 13, 2019).

5. Other proven agricultural rate models that promote food production, water conservation, and rate transparency and equity.

The successful respondent will be required to develop rate/rate model options, then ultimately recommend an agricultural rate model to the CRD along with an implementation plan that could include a phase in plan if necessary to accommodate any large changes.

Review and Familiarization with Existing Documents and Practices

The respondent is to familiarize themselves with the following documents relevant to this assignment:

- Regional Water Supply Strategic Plan (2017) – Appendix A
- Bylaw No. 2570 Local Service Fee and Charge Bylaw – Appendix E

Public Engagement

The respondent is to provide a list in their Proposal submission of which stakeholders they intend to meet with. It is anticipated that the engagement will include hosting public open houses (likely virtual or adjusted as needed for pandemic health restrictions), meeting with specific interest groups, and creation of public display and web based presentation materials.

APPENDICES:

Appendix A: Regional Water Supply 2017 Strategic Plan
Appendix B: 2011-2019 Agricultural Water Rate Funding Comparisons
Appendix C: District of Summerland Agricultural Water
Appendix D: Correspondence, Peninsula and Area Agriculture Committee – May 13, 2019
Appendix E: Bylaw No. 2570 (amendments and consolidated in accordance with Bylaw No. 3014) – Local Service Fee and Charge Bylaw

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Regional Water Supply
2017 Strategic Plan

Making a difference...together

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Introduction

The Capital Regional District (CRD) supplies drinking water for more than 370,000 people, supporting residential, commercial, institutional, light industrial, agricultural and public safety uses across the Greater Victoria area on Vancouver Island in British Columbia. Greater Victoria is growing and factors affecting water supply continue to change. A safe and adequate supply of drinking water is critical to the livability and sustainability of Greater Victoria. Recognizing this, the CRD is committed to:

Provide high quality, safe drinking water

Provide an adequate, long-term supply of drinking water

Provide a reliable and efficient drinking water transmission system

This Strategic Plan for Regional Water Supply sets Commitments and identifies Strategic Priorities and Actions, with a planning horizon to the year 2050, that will guide the future direction for the Regional Water Supply Service. The Strategic Plan will also support CRD Board priorities, provide context for water servicing policy, and align with other CRD strategies and plans.

Sooke Lake Dam

Context for the Strategic Plan

In 1997, the service authority for Regional Water Supply transferred from the Greater Victoria Water District to the CRD under the Capital Region Water Supply and Sooke Hills Protection Act and Regulation, provincial legislation enacted to establish a new model for the delivery of Regional Water Supply.

The Regulation required the CRD to establish a strategic plan for water supply. The first strategic plan was completed in 1999 and has been reviewed and updated in 2004 and 2012. The previous plans have resulted in the implementation of a number of initiatives in the areas of water conservation, management of the watershed lands, investment in treatment and transmission infrastructure, climate change adaptation, and addressing changing trends in water use.

Moving forward, there will be a periodic review of the Strategic Prioirities, and an update of the Actions set out in this plan every five years.

The CRD treats and delivers an average of

130 million

litres of water every day.

Service Governance & Stakeholders

The water supply system operates under a CRD regional service, known as the Regional Water Supply Service, which is administered by the Regional Water Supply Commission, a Commission of the CRD Board.

The Regional Water Supply Commission is a body of 22 elected officials who represent and provide political leadership and decision making on behalf of the local authorities that receive water supply service. The Water Advisory Committee is the public advisory committee that provides advice to the Commission on matters related to the service including water supply, water quality, water conservation and stewardship of the water supply area lands.

There are many stakeholders involved in the supply and delivery of safe drinking water, each with specific roles and responsibilities.

Some of the key stakeholders are:

Canada

The Guidelines for Canadian Drinking Water Quality, published by Health Canada, set out the basic microbiological, chemical and radiological parameters and the physical characteristics, such as taste and odour, that water systems such as the Regional Water Supply System strive to achieve in order to provide the cleanest, safest and most reliable drinking water possible.

Province of British Columbia

The provincial Public Health Act and Regulation sets out the role and powers of health

The Regional Water Supply service provides bulk water to the municipalities listed below and the CRD, who operate water distribution systems that deliver water directly to customers across Greater Victoria.

- District of Central Saanich
- District of North Saanich
- District of Oak Bay
- District of Saanich
- Town of Sidney
- City of Victoria/Township of Esquimalt
- CRD Juan de Fuca Water System
  (Serving Town of View Royal, City of Colwood, City of Langford, District of Metchosin, District of Highlands, District of Sooke, East Sooke in the Juan de Fuca Electoral Area, Beecher Bay First Nation, Esquimalt First Nation, Songhees First Nation, T'Souke First Nation)

officials and the requirements for planning, reporting and regulation of activities that may affect public health, including the provision of drinking water. The Public Health Act works in concert with the Drinking Water Protection Act and Regulation which pertains specifically to drinking water supply and protection requirements. The CRD also meets the requirements of the Water Sustainability Act which sets out requirements to ensure a sustainable supply of fresh, clean water that meets the needs of BC residents today and into the future.

Island Health

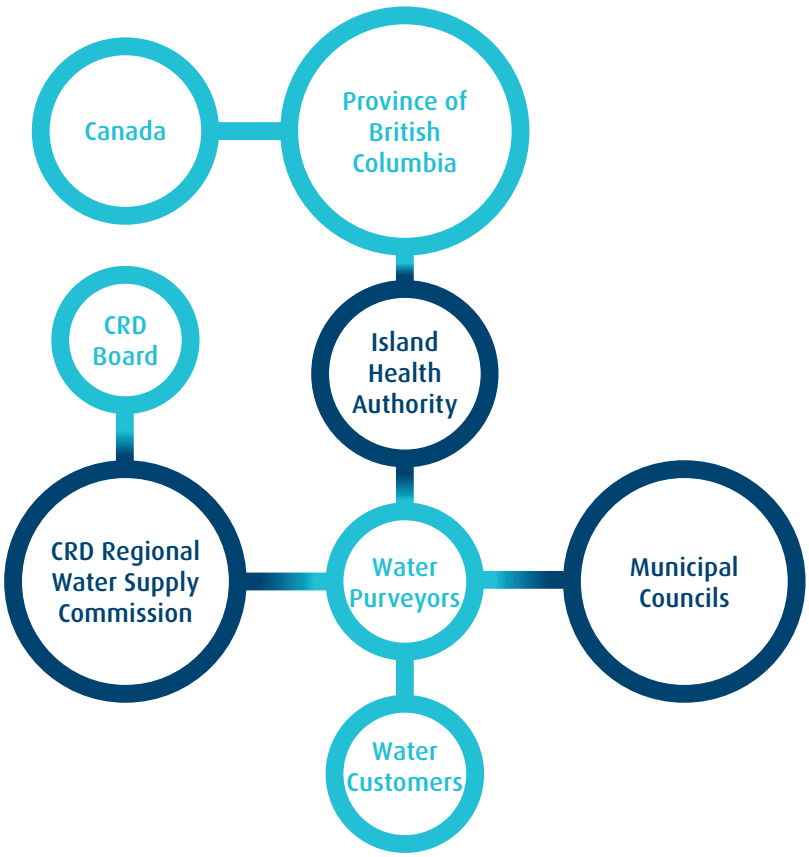
Island Health is the Vancouver Island Health Authority that administers and enforces the applicable provincial legislation through water system operating permits. The CRD holds operating permits with Island Health for the Regional Water Supply System and regularly reports drinking water quality information to Island Health.

Water Purveyors

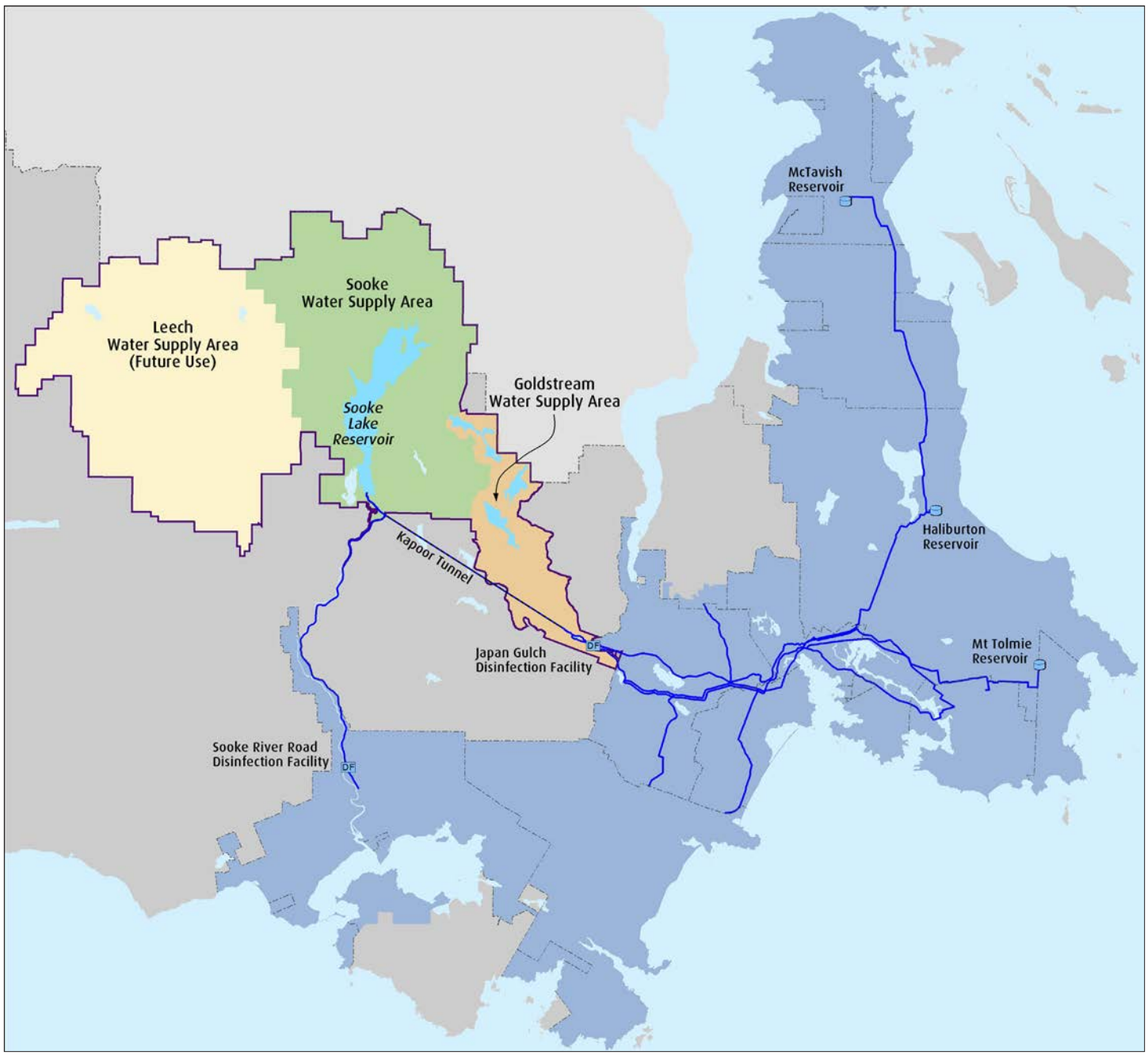
The CRD, municipalities and First Nations in the Region own and operate water systems that receive water from the Regional Water Supply Service, then distribute water directly to water customers. Water purveyors are responsible for the provision of safe drinking water as well as managing all other aspects of the distribution system.

Water Customers

All water customers connected to a public water system are responsible for ensuring that the public system is not exposed to any contamination that could be introduced through private water plumbing systems by cross connection or backflow, and for using water responsibly, particularly when using water for discretionary purposes, to assist with management of the Region's water supply.



Regional Water Supply System



Regional Water Supply System – Serving Greater Victoria

Regional Water Supply Area:

20,549 HECTARES OF PROTECTED DRINKING WATER CATCHMENT LANDS

- Primary Supply Source: Sooke Lake Watershed & Reservoir
- Secondary Supply Source: Goldstream Watershed & Reservoir System
- Future Water Supply Area: Leech Watershed

Water Treatment

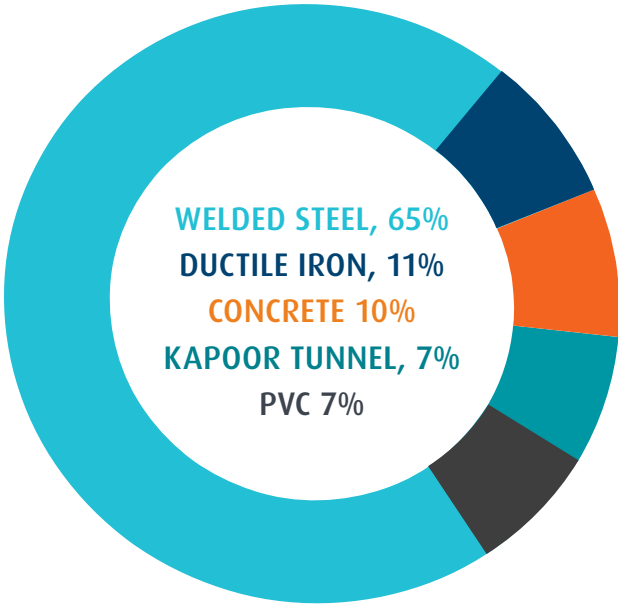
- Unfiltered Source Water
- Primary Disinfection:
  - Ultraviolet light – targets parasites
  - Free chlorine – targets bacteria and viruses
- Secondary Disinfection:
  - Ammonia to produce chloramine – long lasting disinfectant

Bulk Water Supply Points to water distribution systems

187 POINTS

Water Transmission Mains

- 130 km of pipe and tunnel, size range: 400mm – 2,134mm in diameter
- Pipe construction and materials:



The Regional Water Supply Strategic Plan Overview

This update of the Strategic Plan for Regional Water Supply sets out the Commitments, Strategic Priorities and Actions for the Regional Water Supply Service.

Commitments

There are three key water supply Commitments the CRD makes today and into the future. These long term Commitments are foundational to the plan and to achieving the service authority and mandate. The Commitments are expected to remain virtually unchanged for decades.

Strategic Priorities & Actions

Each Commitment has supporting Strategic Priorities and Actions which will guide shorter term initiatives as well as service planning and delivery. It is expected that Strategic Priorities would be reviewed and updated every 5-10 years and Actions would be planned, budgeted and implemented over the five-year cycle.

Planning Horizon

The planning horizon for the development of the plan is to the year 2050 based on the following considerations:

- 2050 is the projected earliest date that the Leech Water Supply Area may be required to supplement the Sooke Lake Reservoir to meet regional water supply demand based on higher population growth rate projections
- Water supply system components can have a useful life as short as 15 years and as long as 80 years or more
- Approximately 30 years from now strikes a balance with what can reasonably be planned considering the projected water supply needs of the Region and other factors such as climate change and advances in technology, while looking far enough ahead to allow informed decision making regarding key infrastructure and financial decisions

Areas of Focus

There are six areas of focus that emerge from the Strategic Priorities and Actions that will influence operational, capital and financial aspects of the Regional Water Supply Service over the next five years and beyond. The six areas of focus are:

CRD BOARD PRIORITIES – SUSTAINABLE AND LIVABLE REGION

The current CRD Board Strategic Priorities include 12 priority areas and 51 strategic priorities, which support a vision for a sustainable, livable, vibrant, collaborative and service oriented Region. In addition, the CRD has identified corporate and core service priorities - the Drinking Water and Regional Infrastructure priority areas directly relate to Regional Water Supply and the importance of the service in supporting a sustainable and livable region. The Regional Water Supply Commission supports these priority objectives.

CLIMATE CHANGE IMPACTS – MITIGATION AND ADAPTATION

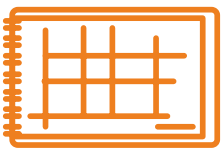
Preparing for and mitigating or adapting to climate change will be necessary in the Capital Region. In the years to come, it can be expected that there will be warmer winter temperatures, more extreme hot days and longer dry spells in the summer, more precipitation in fall, winter and spring and more intense, extreme weather events. All of these weather changes can have an impact on water supply, water quality and the health and resilience of forests in the watersheds. The CRD will respond to the climate change challenges by integrating climate change implications into risk register and infrastructure management decision making and plans.

PREPARING FOR EMERGENCY AND POST-DISASTER WATER SUPPLY

Planning and preparing for the potential impacts of a destructive earthquake and other natural disasters on regional and municipal infrastructure is a priority for the CRD and municipal partners. Water supply and distribution in a post-disaster situation is a key aspect of regional emergency planning. Furthering infrastructure resiliency, coordinating emergency planning with other local governments and senior governments, and preparing for emergency water supply and distribution are priorities.

SUPPLY SYSTEM INFRASTRUCTURE INVESTMENT – RENEWING EXISTING AND PREPARING FOR NEW INFRASTRUCTURE

Infrastructure renewal is an integral component of the management of the Regional Water Supply System. The goal is to ensure that water supply infrastructure is replaced or upgraded prior to the end of its projected service life to ensure the system performs reliably, while maximizing the service life of the assets. Planning for new infrastructure related to water treatment requirements, to meet water supply and demand capacity expectations, and to address redundancy and seismic resiliency will be a priority.



PLANNING FOR THE FUTURE USE OF THE LEECH WATER SUPPLY AREA

The Leech Water Supply Area (LWSA) was acquired by the CRD in 2007 as the future water supply area for the Regional Water Supply System. The LWSA will serve as an additional water catchment area that will provide more water runoff into the Sooke Lake Reservoir when it is brought into service. Although the actual year the LWSA will be required will be subject to changing water demand and climate change impacts, as well as actual population growth rates, it is estimated that the LWSA will not be required to supplement the Sooke Lake Reservoir storage volumes until around 2070 with a moderate population growth projection or as early as around 2050 with a higher population growth rate projection. To prepare for the eventual use of the LWSA, further work is required to plan for the water quality impacts of the different raw water sources, rehabilitation of the water supply area forests and drainage structures, and infrastructure necessary to convey the LWSA flows into Sooke Lake Reservoir.

DEMAND MANAGEMENT - ADDRESSING CHANGING TRENDS IN WATER DEMAND

It is expected that the trend of declining per capita water demand across the Capital Region will continue at a rate of approximately 1% per year over the next 10 years. The declining demand is largely related to declining indoor demand resulting from ongoing household conversions to low flow fixtures and high efficiency appliances, as well as declining outdoor demand as public attitudes and behavior towards discretionary outdoor water use change. However, it remains a priority to achieve a further reduction in per capita water use in order to defer the need to build water supply, treatment and transmission capacity in the supply system, until it is necessary to support population growth. Water conservation and understanding the value of water will continue to be key elements of demand management.

COMMITMENT:

Provide high quality, safe drinking water

1 Manage and protect the Greater Victoria Water Supply Area (GVWSA).

- Continue to actively protect the GVWSA and water supply infrastructure from unauthorized activities and seek opportunities to acquire ownership and control of the remaining catchment lands and critical adjacent lands to act as a buffer.
- Reduce risk to water supply and ecosystems from contaminants and invasive plants, animals and pathogens by completing a biosecurity risk assessment and implementing biosecurity mitigation measures.
- Implement the GVWSA climate change adaptation initiatives to reduce the impact of the potential types, magnitude and rate of climate change on GVWSA ecosystems, water quality and infrastructure.
- Assess the need for more active forest management to protect and enhance forest health and resilience.
- Reduce risk of landscape level wildfire by designing and implementing forest fuel management treatments.

47.6M m^3 of drinking water was delivered in 2016 through the regional water supply system

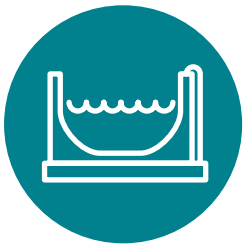
CRD Water Quality Laboratory

2 Maintain a multi-barrier approach to drinking water quality protection.

- Continually evaluate the effectiveness of the water treatment processes.
- Use the Regional Water Supply Service drinking water safety plan in operational and capital project decision making.
- Maintain multiple accreditiations to ensure highest quality drinking water testing.
- Continue to develop and refine the Utility Operator Training Program and ensure adherence to Environmental Operator Certification Program requirements.
- Identify and implement progressive and innovative training and development opportunities with respect to utility operations and management for departmental staff.

3 Maintain a risk register for the Regional Water Supply System that identifies potential risks to water quality, water supply and water transmission and provide mitigation and adaptation measures.

- Regularly review Regional Water System hazards, risks and vulnerabilities and update the risk register.
- Continue the emphasis on wildfire prevention, early detection and suppression capability, preparedness, forest fuel management and post-fire rehabilitation planning to reduce and mitigate the risk of a large-scale wildfire affecting the water supply area and source water quality.
- Continue to monitor and evaluate the implications of the reliance on unfiltered source water and the absence of a filtration step in the water treatment process.
- Conduct specific seismic risk evaluations of critical assets.



COMMITMENT:

Provide an adequate, long-term supply of drinking water

1 Plan and prepare for future water supply needs to meet demand considering impacts of climate change, population growth, and per-capita demand rates.

- Evaluate climate change impacts and risks on water supply and incorporate mitigation and adaptation recommendations in operating and capital plans.
- Update service population and service population growth rate forecasts with current census data, considering municipal Official Community Plan land use and population directions, to estimate growth related water demand.
- Establish long-term per capita demand rate projections and Demand Management Program objectives to achieve rates and determine annual water demand by sector.
- Undertake regular monitoring and assessment of the physical, chemical, and biological parameters of the Leech Water Supply Area (WSA) source water and determine a plan to address potential water quality, ecological and ecosystem implications at Sooke Lake Reservoir resulting from diversion of Leech WSA source water (Leech River water) to Sooke Lake Reservoir (ie. combining source waters).
- Develop a plan to undertake more 'intensive' monitoring of Leech River water quality to inform treatability recommendations and long term treatment strategy.
- Determine conceptual 'hard' capital infrastructure plan to design and construct the necessary infrastructure to divert Leech WSA flows to Sooke Lake Reservoir.
- Conduct a feasibility study to explore the design and construction of supply and transmission infrastructure at Sooke Lake Reservoir to provide increased resiliency, including consideration of a deep northern intake and a secondary transmission pipe between the reservoir and the treatment facilities.
- Undertake biannual Supply System hydraulic modelling to confirm system capacity.

Jarvis Lake in the Leech Water Supply Area

2 Develop a higher level of public understanding of the drinking water supply system and value of water through education and engagement.

- Continue to improve Regional Water Supply service and system information available to the public through a variety of media streams, to raise awareness around specific topics including water supply and conservation, and supply infrastructure investment.
- Continue to promote the value of the drinking water resource through Water Supply Area public and school tours and other outreach.
- Continue to have two-way dialogue with the Water Advisory Committee regarding water supply matters.
- Explore opportunities for mutually beneficial collaborative partnerships to carry out research and monitoring initiatives in the water supply area and across the system.

9,628 Hectares of protected catchment lands within the Leech Water Supply Area acquired in 2007 for future drinking water supply area.

COMMITMENT:

Provide a reliable and efficient drinking water transmission system

1 Maintain a capital planning process and appropriate investment in water supply infrastructure to ensure reliable system performance

- Complete a short term (annual and 5-year), medium term (5-10 year), long term (10-20 year) and long range (20-50 year) asset management plan – informed by asset condition and remaining service life assessment, water operation and maintenance history, water audit, changing regulatory requirements, Hazard, Risk and Vulnerability Assessment (HRVA) recommendations, and system capacity requirements.
- Explore Regional Water Development Cost Charges to fund future growth related supply system infrastructure improvements.
- In collaboration with municipal and First Nations water purveyors, establish water supply service agreements.

2 Continually review cost effectiveness of service respecting operations and maintenance and capital investment decisions.

- Continue to review reactive, preventive and predictive operations and maintenance history and confirm operation and maintenance service levels for the Regional Water Supply Service that consider best practices and reliability centered maintenance approach.
- Consider life cycle costs with new infrastructure design and asset replacement.
- In asset replacement decisions, balance maximizing infrastructure service life with infrastructure reliability.
- Optimize capital investment taking into consideration priority, annual and long term budget and water rate impacts and resource availability to deliver the projects.

Japan Gulch Ultraviolet Disinfection Plant

3 Develop and manage emergency bulk drinking water supply systems for Greater Victoria.

- Establish emergency and post-disaster water supply protocols and obtain necessary supplies, materials and equipment to implement protocols. Establish water purveyor support roles and responsibilities in emergency water supply and distribution.
- Outline how an emergency/post disaster drinking water supply can be supported by regional emergency management plans and available senior government supports under certain conditions.

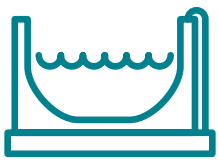
4 Continue to focus on retaining and recruiting experienced and professional employees responsible for the Regional Water Supply System engineering, system operation and maintenance, and management of the water supply area.

- Develop a succession plan to ensure key positions are backfilled by experienced and knowledgeable employees, and that system knowledge is preserved.
- In alignment with CRD organizational development initiatives, provide learning and development opportunities for employees.

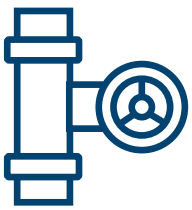
Over $130 million has been invested in supply system infrastructure renewal since 1995.

Commitments

Provide high quality, safe drinking water



Provide an adequate, long-term supply of drinking water



Provide a reliable and efficient drinking water transmission system

Advancing the Strategic Plan

A safe and adequate supply of drinking water is critical to the livability and sustainability of Greater Victoria and the Capital Region. The Greater Victoria area is fortunate to have a well established water supply system and a climate that has allowed for the replenishment of source water.

The Commitments outlined in the Plan will ensure that the CRD continues to provide clean, safe, reliable drinking water to the communities we serve. The Strategic Priorities and Actions will guide service planning and delivery over the coming years. The CRD will be responsive to factors affecting the uncertainty of water supply, such as climate change and future water demand, while ensuring the long term Commitments to our customers remain our priority.

Progress and outcomes will be tracked and reported annually to the Regional Water Supply Commission and the CRD Board to ensure the ongoing achievement of the Commitments, Strategic Priorities and Actions in the Strategic Plan.

APPENDIX A

The photos in this document were taken within the boundaries of the Capital Regional District, and we wish to acknowledge Helene Cyr whose work is featured here.

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APPENDIX B

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.

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City Services

District of Summerland Water Agricultural Water

City Services

Agricultural Water

With extensive consultation with agriculturalists, water utility experts and the community, the District of Summerland implemented a tiered rate model for irrigation to encourage responsible water use. It is based on the premise that those users who exceed the threshold will pay an inclining tiered rate.

It is important that you understand this rate model as it may affect *how* you water, how *much* you water, and how much you *pay* for water.

Who does this affect?

This rate model affects all agricultural water utility accounts that are on the Irrigation Roll.

Consumption Reports

Consumption Reports 2021
Consumption Reports 2020
Consumption Reports 2019
Consumption Reports 2018

Reports provide consumption in imperial gallons, cubic meters, depth in inches and depth in millimetres for agricultural water customers for the following:

- Monthly consumption
- Year-to-date cumulative consumption totals
- Annual consumption thresholds

Properties can be identified on the consumption reports by individual meter number. Please refer to the District's letter dated April 23, 2021, which provides each customer with their meter number.

When will this affect me?

Depending on how much water you use, it may affect your water utility bills. If you have concerns regarding the impact of this model, please contact us for further discussion.

How much will I pay for water?

How much you pay for water depends on how much water you use and how much arable area is on your property.

The rate model allots water based on arable area on an annual basis, as follows:

2021 Rates

CATEGORY	BASE FEE (PER ACRE OF ARABLE AREA)	THRESHOLD (DEPTH OF WATER ALLOTTED)
• Agricultural	$192.89	800 mm per arable acre
• Cemetery, Park, Playfield • Golf Course	$212.76	800 mm per arable acre
• Greenhouse	$437.28	1,727 mm per arable acre

A depth of 800 mm of water is roughly equal to 3,237 cubic meters, 712,040 imp. gallons, or 2.62 acre feet, per arable acre per year.

If you use more water than the threshold, you will pay an inclining tiered consumption fee for all water in excess:

CATEGORY	PERCENT OVER THRESHOLD	RATE (PER CUBIC METER)
• Agricultural • Cemetery, Park, Playfield • Golf Course • Greenhouse	1-20% 21-40% 41-60% 61-80% 81% and over	$0.24 $0.48 $0.96 $1.92 $3.84

What should I do?

If you remain under the threshold: You will pay only the Base Fee, which is calculated on the arable area of land on your property. There's nothing for you to do other than keep using water responsibly. Your bill for the season's water use will be mailed to you at the end of July.

If you go above the threshold: You will pay both the Base Fee *and* Consumption Fees. The Base Fee will be billed at the end of July, and your Consumption Fees will be billed at the end of the growing season. The more you use above the threshold, the higher the rate will go. Here are some ways you may be able to reduce how much you pay in Consumption Fees:

- Examine your watering practices and irrigation technologies and then modify where possible to improve efficiency and reduce waste.
- Confirm that your arable area is correct – if the actual arable area on your property is greater than what the District has on record, your threshold will be incorrectly calculated and you'll be paying too much in Consumption Fees.

The District will work with you to address each of these situations on an individual basis.

Arable Area

The District of Summerland accepts applications for increases in arable area (i.e. *new* arable land, independent of the review). The property owner will be responsible for all costs related to the installation of new water connections, or upgrades to existing connections including the cost to determine if sufficient water is available at the location if required.

There is also a water utility buy-in fee of $4,047 per arable acre. This fee funds Summerland's water utility infrastructure.

APPENDIX C

Where can I learn more about this rate model or correct the District's records?

You can find out more about this change or correct the District's records (e.g. update arable acreage) by contacting the Director of Finance, **David Svetlichny**, at **250-404-4045** or **dsvetlichny@summerland.ca**.

Accounts identified as likely to greatly exceed the water allotment threshold will be individually contacted by District staff to discuss possible causes and available options to correct or minimize your costs.

How do I read the water meter myself?

Discover Summerland
Attractions Map
Arts & Culture
Community Updates
Demographics
History
Library
Things to Do
Parks & Recreation
Schedules
Recreation Guide
Registration
Facilities
Peach Orchard Campground
Parks & Trails
Skatepark
Community Events & Races
Community Organizations & Volunteering Opportunities
Sport Organizations
Trails, Cycling and Sidewalks Master Plans
Parks and Recreation Master Plan
Recreation and Health Centre
Dog Park Project
City Services
Bylaw Services
Cemeteries
Dog Licencing & Control
Emergency Response
Fire Protection
Garbage & Recycling
Property Taxes
RCMP
Transit
Utility Billing
Wastewater

APPENDIX D

Peninsula & Area Agricultural Commission

c/o Saanich Municipal Hall
770 Vernon Avenue, Victoria, B.C. V8X 2W7
Telephone: (250) 475-1775 Fax: (250) 475-5440
Secretary: Isobel Hoffmann, isobel.hoffmann@saanich.ca
Co-Chairs: Jack Mar & Phil Christie

May 13, 2019

Mr. Ted Robbins, General Manager
Integrated Water Services
Capital Regional District
479 Island Highway
Victoria, BC V9B 1H7

Dear Mr. Robbins:

The Peninsula and Area Agricultural Commission has recently completed an evaluation of farm water charges and reconciliation from the three main agricultural water user municipalities (Saanich, Central Saanich, North Saanich). We found that there could be ways to simplify and reduce the administrative burden for all parties as it pertains to the CRD's accounting of payments. (See description of variables starting on page 2)

We anticipate the CRD and the municipalities would work together to provide a final cohesive plan for the planting season 2020.

Special notes to:

- **Saanich:** in the interest of fairness, PAAC recommends that Saanich, like the other municipalities, not charge and then rebate the AG farmer fixed per meter tri annual charges.

- **North Saanich:** In the interest of fairness that North Saanich get the rebate from the CRD from AG meters equivalent to the fixed meter charges charged by the other municipalities.

- **Extra Note using 2017 data:** Due to the difference of the bulk wholesale price of water $0.6375 per m3 for Saanich and $0.9111 per m3 for both Central and North Saanich, North Saanich pays an extra $56,176 and Central Saanich pays an extra $190,592 for wholesale water compared to Saanich. This should be addressed by reducing the wholesale bulk water rate for all Agricultural use through the Saanich Peninsula distribution system to match the rate paid by Saanich. This would be similar to the reduced bulk wholesale rate currently paid by the Center for Plant Health.

..../2

	Central Saanich Example				Saanich example		
municipality pays	0.9111	m3 wholesale from CRD		municipality pays	0.6375	m3 wholesale from CRD	
farmer rate	0.2015	m3 from municipality		farmer rate	0.2015	m3 from municipality	
retail rate	1.557	m3 from residential customers		retail rate	1.560	m3 from residential customers	
differential	1.356	CRD pays diff of farmer rate and retail rate to municipality		differential	1.359	CRD pays diff of farmer rate and retail rate to municipality	
farmer uses	1	m3		farmer uses	1	m3	
farmer pays	0.2015	m3		farmer pays	0.2015	m3	
muni pays	0.9111	m3		muni pays	0.6375	m3	
muni the hole for	-0.7096	m3		muni the hole for	-0.4360	m3	
CRD pays muni	1.356	m3		CRD pays muni	1.359	m3	
Final rebate less cost of bulk water	0.6459	m3 for farm water(345 connections)		Final rebate less cost of bulk water	0.9225	m3 for farm water(130 connections)	

PAAC supports farm water rates for food and feed-producing lands whereby the water use and farm production, especially for AR accounts, should be monitored and adjudicated by a professional agrologist/farmer. It is only at the pleasure of the CRD and its member municipalities, which have continued to support food and feed production in the region, that this financial support is available.

This regional only rebate does not fall under the same set of farming rules as applied by both the ALC and the BC Assessment Authority. It is also recommended that some of the money rebated to Municipalities be available for new and/or upgraded meters, back-flow preventers and a comprehensive review and implementation of water balancing and availability in the system to ensure current and expected future demand is available to accredited farmers. This will encourage more food production from both new and established farms.

Working with 2017 data:

Central Saanich: Troy Ziegler contact

- Residential retail rate is a fixed per meter and consumption tri-annual charge.
- AG accounts do not pay a fixed per meter charge. The fixed per meter charge is calculated by CS annually and is rebated to the district from the CRD annually.
- AG accounts pay the agricultural consumption rate of $.2105 per m3 . Central Saanich is rebated annually from the CRD the difference between the retail consumption rate and the ag consumption rate for their total consumption (on their bills it states the retail rate but the actual calculation does not reflect this).
- AR accounts pay the fixed per meter tri-annual charge and it is not rebated from the CRD to the district.
- AR accounts pay retail rates up to 455 m3 usage annually and the agricultural consumption rate thereafter. Central Saanich is rebated annually from the CRD the difference between the retail rate and the AG consumption rate for their total agricultural consumption only.
- Central Saanich has a discount of 10% if bill paid on or before due date.

.../3

Additional comments from Central Saanich

- The amount paid from CRD to Central Saanich (CS) for AG fixed charge and all AG consumption, I would call it a subsidy to CS through the CRD.
- As you know the CRD collects monies from all CRD municipalities/residents in order to subsidize agricultural water charges and rates. That way all CRD residents share the cost of agricultural water subsidy and not just residents in those agricultural communities.
- We refer to the bills as tri-annual billings (every 4 months).
- The 2018 retail water rate was $1.635 m3.
- All bills paid by the due date receive a 10% discount.

North Saanich: Meghan Mason contact

- Residential retail rate is a yearly fixed per parcel charge only and a consumption tri-annual charge.
- Both AG and AR accounts pay a yearly fixed per parcel charge only (no fixed per meter charges and no CRD rebates).
- AG accounts pay the agricultural consumption rate of $.2105 to North Saanich who in turn get rebated from the CRD the difference between this rate and the retail rate on a tri-annual basis.
- AR accounts pay residential retail rates up to 455 m3 annually (divided by 3) and the agricultural consumption rate thereafter on a tri-annual basis.
- The agricultural portion is rebated as above to North Saanich by the CRD on a tri-annual basis.

Additional Comments from North Saanich:

- The North Saanich section is correct, with the exception of the 455 m3 note. The threshold is actually 152 m3 per trimester.

Saanich: Ann Tetley contact

- Residential retail rate is a fixed per meter (varies depending on size of meter) and retail consumption tri-annual charge.
- AG accounts pay the fixed charge per meter (varies depending on size of meter) and the agricultural consumption charge of $.2105 per m3 tri-annually.
- The district rebates the account annually for fixed per meter charges.
- The CRD rebates the district the fixed per meter charges and the difference of the retail and agricultural consumption rate annually.
- AR accounts pay the fixed charge per meter (varies depending on size of meter) and the retail consumption charge tri-annually and the district rebates the account annually for consumption charges over 455 m3 as per above formula.
- The CRD rebates the district the difference of the retail and agricultural rate for agricultural consumption annually. The fixed charge is not rebated from CRD to the district nor from the District to the account

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APPENDIX D

- Additional comments from Saanich
  The residential rate is set as per category (residential, agricultural, farm) and the rate is applied to usage. In addition to this rate there is a monthly charge for each water connection that varies depending on the size of the meter.
- The District receives a credit from the CRD for the fixed meter charges and the difference between the retail and agricultural rate. The fixed charge amount is refunded to the customer, but the District retains the credit for the difference in consumption between the residential and the agricultural rate.
- The customer has not paid the retail rate to the District - they have been charged the CRD agricultural rate (our farm rate) of $.2105 throughout the year.

Respectfully submitted for your consideration. We look forward to receiving your response.

"Phil Christie & Jack Mar"

Jack Mar and Phil Christie
Co-Chairs, Peninsula & Area Agricultural Commission

cc: Mayor Haynes and Councillors, District of Saanich
Mayor Windsor and Councillors, District of Central Saanich
Mayor Orr and Councillors, District of North Saanich

APPENDIX E

CAPITAL REGIONAL DISTRICT
BYLAW NO. 2570

(As Amended By Bylaw Nos. 2605, 2662, 2745, 2850, 2932, 3118, 3234, 3391, 3482, 3569, 3656, 3748, 3811, 3866, 3989 & 4039)

Consolidated version authorized in accordance with Bylaw No. 3014,
CRD Consolidation Authorization Bylaw No. 1, 2002

WATER SUPPLY
LOCAL SERVICE AREA FEE AND CHARGE
BYLAW NO. 1, 1997

A bylaw to impose fees and other charges within the water supply local service area

For reference to original bylaws and amendments, or for further details, please contact CRD Integrated Water Services, 479 Island Highway, Victoria, BC, V9B 1H7

T.250.474.9600, F.250.474.4012
www.crd.bc.ca

APPENDIX E

CAPITAL REGIONAL DISTRICT

BYLAW NO. 2570

****

A BYLAW TO IMPOSE FEES AND OTHER CHARGES WITHIN THE WATER SUPPLY LOCAL SERVICE AREA

****

WHEREAS under Water Supply Local Service Area Establishment Bylaw No. 1, 1997, the Capital Regional District established a local service to supply water to participating areas in the local service area.

AND WHEREAS the bylaw authorized the annual costs for the water supply, net of grants and other revenues, shall be recovered by one or more of the following:

a) the requisition of money under Section 823(1) of the *Municipal Act* to be collected by a property value tax to be levied and collected under Section 825(1) of the *Municipal Act*; or

b) the imposition of a parcel tax under Section 825(2) of the *Municipal Act*; and

c) the imposition of fees and other charges that may be fixed by separate bylaw.

AND WHEREAS under Section 816 of the *Municipal Act*, the Board having established the local service, may recover the annual costs for that service by the requisition of money as a property value tax or by a frontage or parcel tax or by the imposition of fees and other charges fixed by a separate bylaw.

NOW THEREFORE the Board of the Capital Regional District in open meeting assembled ENACTS AS FOLLOWS:

1. Title:

This Bylaw may be cited for all purposes as the "Water Supply Local Service Area Fee and Charge Bylaw No. 1, 1997."

2. Interpretation:

In this Bylaw, unless the context otherwise requires:

"Agriculture Consumer" means a person to whom agriculture water is supplied.

(Bylaw 2605)

"Agriculture Property" means parcel which is within the local service area and classified as farm by the British Columbia Assessment Authority.

(Bylaw 2605)

"Agriculture Water" means annual water consumption in excess of 455 cubic metres where the water is provided to an Agriculture/Residential Connection and all water consumption where the water is provided to an Agriculture Only Connection.

(Bylaw 2605)

"Agriculture Only Connection" means a connection to an authorized Agriculture Premise which does not provide water to a residential dwelling unit.

(Bylaw 2605)

"Agriculture/Residential Connection" means a connection to an Authorized Agriculture Premise which provides water to a residential dwelling unit.

(Bylaw 2605)

"Authorized Agriculture Premise" means Agriculture Property which is capable of connection to the waterworks of a Participating Member Area.

(Bylaw 2605)

"Consumer" means a person to whom water is supplied by the Regional District.

"Local Service Area" means the Local Service Area established under Water Supply Local Service Area Establishment Bylaw No. 1, 1997.

"Parcel" has the same meaning as defined in the *Municipal Act.*

(Bylaw 2605)

"Participating Member Area Waterworks" means the physical plant of a member area owned and employed by the member area in distributing water.

(Bylaw 2605)

"Premise" or "Premises" means a Parcel and all buildings and other structures thereon.

(Bylaw 2605)

"Property" means a Parcel which may or may not contain one or more buildings or other structures.

(Bylaw 2605)

3. User Rates

(Bylaw 2605)

(a) Bulk Water:

(i) The Participating Member Areas shall pay to the CRD the bulk water rate prescribed in Schedule A for bulk water supplied to them by the CRD for distribution within their respective boundaries only, except with the consent of the Board.

(ii) Bulk water supplied to each participating member area shall be recorded by meters installed at each point of connection of the regional distribution system to the Participating Member Area Waterworks.

(iii) Billings for water supplied shall be made monthly and shall be payable without penalty within thirty days of the date of billing.

(iv) A ten per cent penalty shall be imposed on all billings remaining unpaid as of the due date.

(b) Agriculture Water

(i) All Agriculture Consumers shall pay to the CRD or authorized agent the Agriculture Water rate prescribed in Schedule A for Agriculture Water supplied.

(ii) All Agriculture Water supplied to an Agriculture Consumer shall be recorded by meters installed at the Authorized Agriculture Premise.

(iii) All Agriculture Water bills will be issued by the Capital Regional District or authorized agent at time intervals determined by the Treasurer.

(iv) A ten per cent penalty shall be imposed on all billings remaining unpaid as of the due date.

4. This Bylaw may be cited for all purposes as the "Water Supply Local Service Area Fee and Charge Bylaw No. 1, 1997."

READ A FIRST TIME THIS	17th	day of	December	1997
READ A SECOND TIME THIS	17th	day of	December	1997
READ A THIRD TIME THIS	17th	day of	December	1997
ADOPTED THIS	17th	day of	December	1997

J. Geoffrey Young, CHAIRPERSON Carmen I. Thiel, SECRETARY

This Bylaw is a copy of *Water Supply Local Service Area Fee and Charge Bylaw No. 1, 1997* consolidated under section 139 of the *Community Charter* and is printed on the authority of the Corporate Secretary of the CRD.

Sonia Santarossa, Corporate Officer

APPENDIX E

SCHEDULE "A"

(Bylaws 2605, 2662, 2745, 2850, 2932, 3118, 3234, 3391, 3482, 3569, 3656, 3748, 3811, 3866, 3989, 4039)

For each cubic meter of water supplied:

1. Bulk Water	$ 0.6375
2. Agriculture Water	$ 0.2105

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Making a difference...together

REGIONAL WATER SUPPLY COMMISSION
Wednesday, May 19, 2021 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.

Staff to seek clarification for future Territorial Acknowledgements, on the use of Ceded vs. Unceded territories as it relates to the Douglas Treaty.

3. ADOPTION OF MINUTES

That the minutes of the March 17, 2021 meeting be adopted.

CARRIED

8. COMMISSION BUSINESS

8.1. Greater Victoria Water Supply Area Mining Access Request

That the Regional Water Supply Commission authorize Greater Victoria Water Supply Area access and special use to Jesse Wylie and his agents (where agency is confirmed) and workers (that hold valid free mining certificates) that meet Capital Regional District insurance requirements, subject to the conditions of the Access Agreement.

CARRIED

8.2. Greater Victoria Drinking Water Quality – 2020 Annual Report

The Regional Water Supply Commission recommends to the Capital Regional District Board:

That the Greater Victoria Drinking Water Quality 2020 Annual Report be approved.

CARRIED

8.3. Greater Victoria Water Supply Area 2020 Wildfires Follow Up

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

CARRIED

8.4. Summary of Recommendations from Other Water Commissions

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

CARRIED

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8.5. Water Watch Report

That the May 10, 2021 Water Watch Report be received for information.

CARRIED

10. NOTICE OF MOTION

That staff be directed to report back on the jurisdictional questions and incentive funding considerations regarding the elimination of once through cooling equipment for the 2022 budget.

Making a difference...together

REGIONAL WATER SUPPLY COMMISSION
Wednesday, March 17, 2021 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.

3. ADOPTION OF MINUTES

That the minutes of the February 17, 2021 meeting be adopted.

CARRIED

7. WATER ADVISORY COMMITTEE REPORT

7.2. Draft Minutes of the March 4, 2021 Water Advisory Committee Meeting

That the draft minutes of the March 4, 2021 Water Advisory Committee meeting be received for information.

CARRIED

8. COMMISSION BUSINESS

8.1. Potential Impacts of Climate Change on Integrated Water Services Operations

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

CARRIED

Motion Arising:
That the Regional Water Supply Commission receive an updated climate impacts report every two years.

CARRIED

8.2. Mining Access Request – Leech Water Supply Area

That the Regional Water Supply Commission authorize Greater Victoria Water Supply Area access and special use to the mining tenure holders and their agents (where agency is confirmed) and workers (that hold valid free mining certificates) that meet Capital Regional District insurance requirements, as listed in Table 1 of Appendix A, subject to the conditions of their Access Agreement, for the valid mining tenures they hold.

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 March 8, 2021 Water Watch report be received for information.

CARRIED

File No. 902-03

CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

Water Watch

Issued May 25, 2021

Water Supply System Summary:

1. Useable Volume in Storage:

Reservoir	May 31 5 Year Ave		May 31/20		May 23/21		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	87,476	19,245	87,340	19,215	87,557	19,263	94.4%
Goldstream	7,340	1,615	7,970	1,753	8,855	1,948	89.3%
Total	94,816	20,859	95,310	20,968	96,413	21,211	94.0%

2. Average Daily Demand:

For the month of May	157.1 MLD	34.57 MIGD
For week ending May 23, 2021	167.8 MLD	36.92 MIGD
Max. day May 2021, to date:	181.5 MLD	39.92 MIGD

3. Average 5 Year Daily Demand for May

Average (2016 - 2020)	151.6 MLD [1]	33.36 MIGD [2]

[1]MLD = Million Litres Per Day [2]MIGD = Million Imperial Gallons Per Day

4. Rainfall May:

Average (1914 - 2020):	47.7 mm
Actual Rainfall to Date	8.7 mm (18% of monthly average)

5. Rainfall: Sep 1- May 23

Average (1914 - 2020):	1,535.7 mm
2020/2021	1,560.4 mm (102% of average)

6. Water Conservation Action Required:

CRD's Stage 1 Water Conservation Bylaw is now in effect through to September 30, 2021.
Visit our website at www.crd.bc.ca/water for scheduling 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

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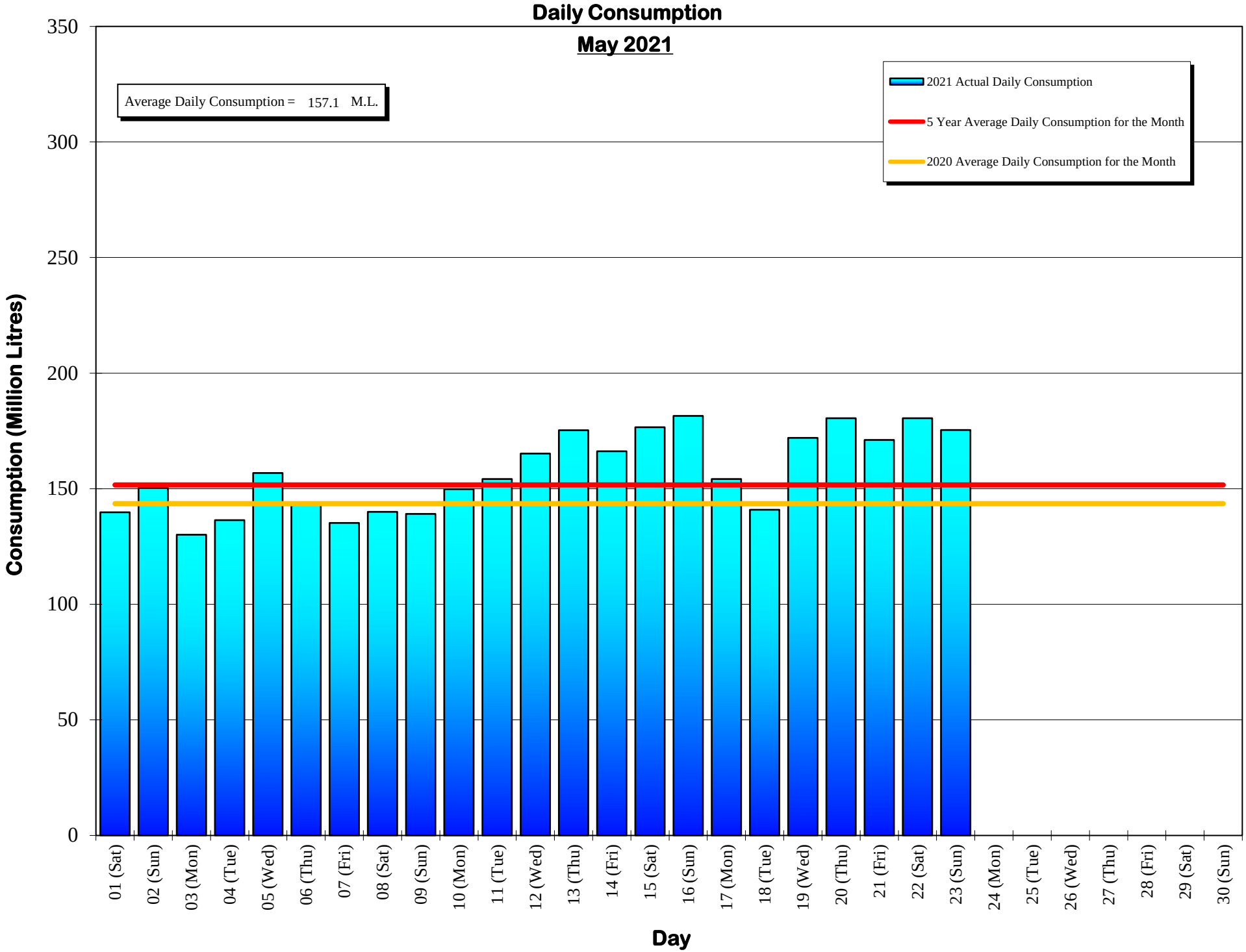

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J:\WATERENG\HYDROLGY\AMRIT\MONTHEND.21\H2o watch 2021Cons. Chart

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Daily Consumptions: - May 2021

Date	Total Consumption			Air Temperature @ Japan Gulch		Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am		
	(ML) [1.]		(MIG) [2.]	High (°C)	Low (°C)		Rainfall (mm)	Snowfall [3.] (mm)	Total Precip.
01 (Sat)	139.8		30.8	15	6	Sunny / P. Cloudy	0.0	0.0	0.0
02 (Sun)	150.3		33.1	16	6	Sunny / P. Cloudy	0.0	0.0	0.0
03 (Mon)	130.1	<=Min	28.6	13	7	Sunny / P. Cloudy / Showers	2.3	0.0	2.3
04 (Tue)	136.4		30.0	16	6	Sunny / P. Cloudy	0.0	0.0	0.0
05 (Wed)	156.8		34.5	18	5	Sunny / P. Cloudy	0.0	0.0	0.0
06 (Thu)	143.1		31.5	20	6	Sunny / P. Cloudy / Showers	0.5	0.0	0.5
07 (Fri)	135.2		29.7	13	5	Sunny / P. Cloudy / Showers	1.0	0.0	1.0
08 (Sat)	140.0		30.8	13	5	Cloudy / P. Sunny	0.0	0.0	0.0
09 (Sun)	139.1		30.6	15	7	Cloudy / Showers / P. Sunny	0.3	0.0	0.3
10 (Mon)	149.8		33.0	18	6	Sunny / P. Cloudy	0.0	0.0	0.0
11 (Tue)	154.2		33.9	20	6	Sunny / P. Cloudy	0.0	0.0	0.0
12 (Wed)	165.2		36.3	18	10	Sunny / P. Cloudy	0.0	0.0	0.0
13 (Thu)	175.3		38.6	21	8	Sunny	0.0	0.0	0.0
14 (Fri)	166.2		36.6	23	9	Sunny	0.0	0.0	0.0
15 (Sat)	176.6		38.8	23	9	Sunny	0.0	0.0	0.0
16 (Sun)	181.5	<=Max	39.9	23	10	Sunny / P. Cloudy	0.0	0.0	0.0
17 (Mon)	154.2		33.9	17	7	Sunny / P. Cloudy / Showers	3.3	0.0	3.3
18 (Tue)	140.9		31.0	14	5	Sunny / P. Cloudy / Showers	0.5	0.0	0.5
19 (Wed)	172.0		37.8	13	4	Sunny / P. Cloudy / Showers	0.3	0.0	0.3
20 (Thu)	180.5		39.7	19	4	Sunny	0.0	0.0	0.0
21 (Fri)	171.1		37.7	20	6	Sunny / P. Cloudy	0.0	0.0	0.0
22 (Sat)	180.5		39.7	22	7	Sunny / P. Cloudy	0.0	0.0	0.0
23 (Sun)	175.4		38.6	20	10	Sunny / P. Cloudy / Showers	0.5	0.0	0.5
24 (Mon)									
25 (Tue)									
26 (Wed)									
27 (Thu)									
28 (Fri)									
29 (Sat)									
30 (Sun)									
31 (Mon)									
TOTAL	3614.2 ML		795.07 MIG				8.7	0	8.7
MAX	181.5		39.92	23	10		3.3	0	3.3
AVG	**157.1**		34.57	17.8	6.7		0.4	0	0.4
MIN	130.1		28.62	13	4		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 May (1914-2020)	47.7	mm
Actual Rainfall: May	8.7	mm
% of Average	18%	
Average Rainfall (1914-2020): Sept 01 - May 23	1,535.7	mm
Actual Rainfall (2020/2021): Sept 01 - May 23	1,560.4	mm
% of Average	102%	

Number days with precip. 0.2 or more
8

Water spilled at Sooke Reservoir to date (since Sept. 1) = 8.02 Billion Imperial Gallons
= 36.50 Billion Litres

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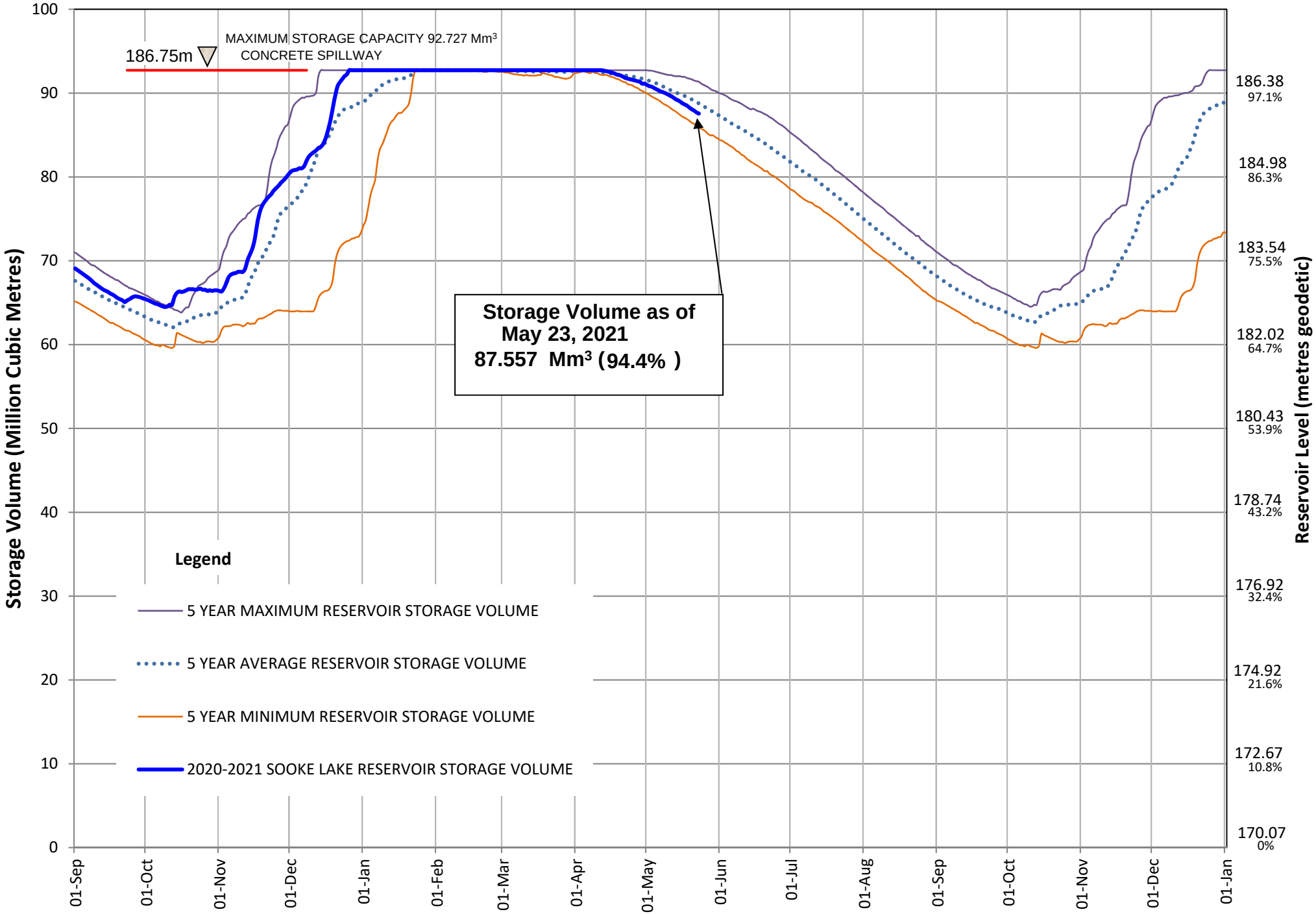
SOOKE LAKE RESERVOIR STORAGE SUMMARY
2020 / 2021



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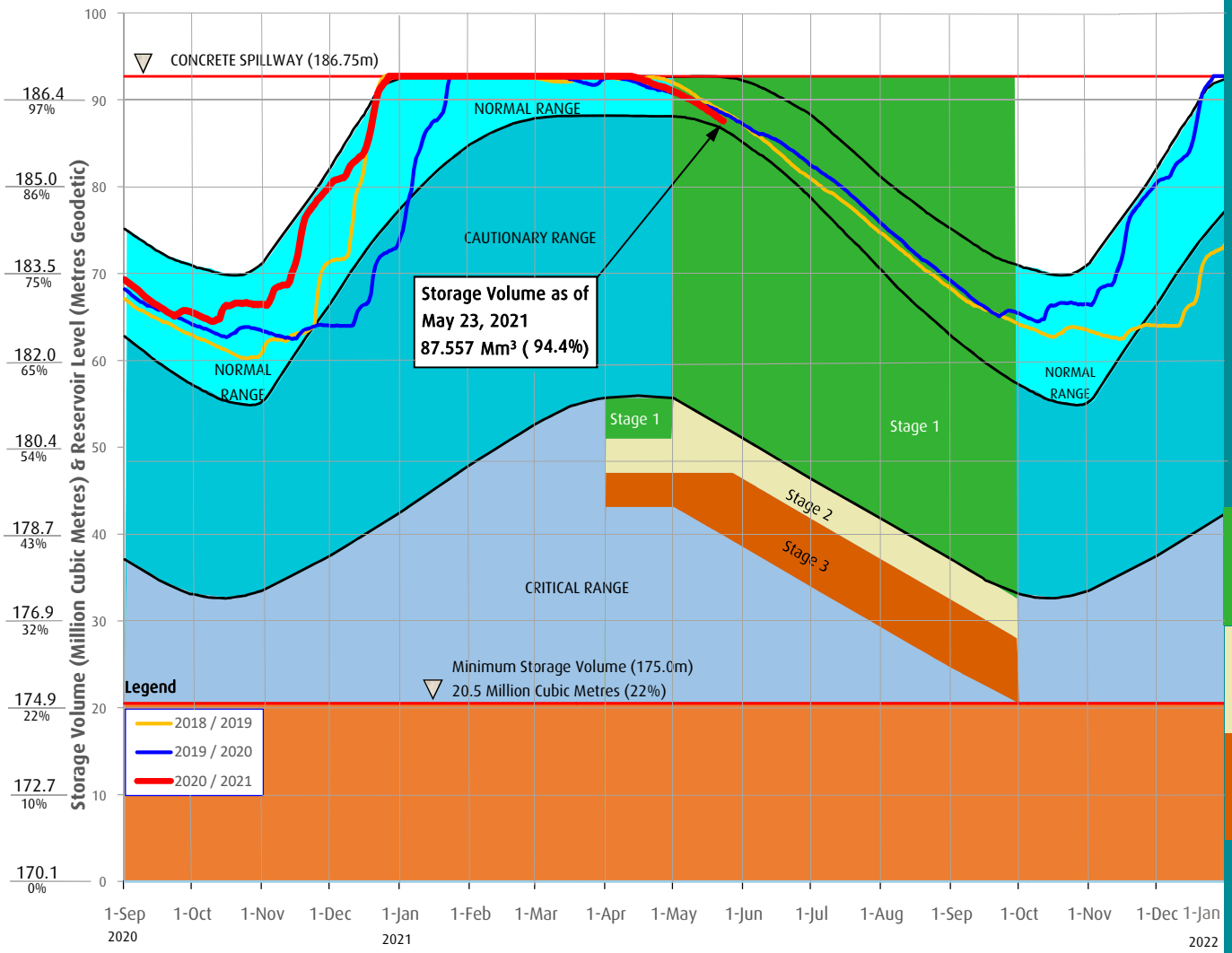
Sooke Lake Reservoir Storage Level

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

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Useable Reservoir Volumes in Storage for May 23, 2021