

Capital Regional District

625 Fisgard St., Victoria, BC V8W 1R7

Notice of Meeting and Meeting Agenda Regional Water Supply Commission

Wednesday, June 15, 2022

11:30 AM

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

MEMBERS:

- L. Szpak (Chair); G. Baird (V. Chair); C. Chambers; Z. De Vries; S. Dubow; S. Duncan;
- C. Graham; K. Harper; M. Hicks; B. Isitt; K. Kahakauwila; G. Logan; J. Loveday;
- R. Mersereau; T. Morrison; J. Rogers; C. Stock; T. St-Pierre; N. Taylor; R. Wade;
- G. Young; E. Wood Zhelka

1. TERRITORIAL ACKNOWLEDGEMENT

2. APPROVAL OF THE AGENDA

3. ADOPTION OF MINUTES

3.1. 22-374 Adoption of the May 18, 2022 Regional Water Supply Commission

minutes

Recommendation: That the May 18, 2022 Regional Water Supply Commission minutes be adopted.

<u>Attachments:</u> <u>Draft Minutes May 18, 2022</u>

4. CHAIR'S REMARKS

5. PRESENTATIONS/DELEGATIONS

The public are welcome to attend Commission meetings in-person.

Delegations will have the option to participate electronically. Please complete the online application for "Addressing the Board" on our website located here https://www.crd.bc.ca/about/board-committees/addressing-the-board and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the Regional Water Supply Commission at iwsadministration@crd.bc.ca.

6. GENERAL MANAGER'S REPORT

6.1. Water Supply Outlook

6.2. 22-403 2022 Master Plan Media Release and Engagement

Recommendation: There is no recommendation. The media release is for information only.

Attachments: Media Release: RWS Master Plan

7. COMMISSION BUSINESS

7.1. Cost Recovery Fee and Delegation of Permit Issuance for Greater

Victoria Water Supply Area Special Access Requests

Recommendation: That staff be directed to amend the Water Supply Area Access and Special Use

Request and Approval Procedure to include an additional prescribed situation

considered "routine" for which the General Manager has delegated authority to approve

access (Section 1, k):

"k. Mining access requests in the Leech Water Supply Area where the CRD is required to provide access under the BC Mineral Tenure Act, and the claim holder agrees to

CRD's terms and conditions of access."

Attachments: Staff Report: Cost Recovery Fee and Delegation of Permit Issuance for Special

Appendix A: Policy - GVWSA Access and Special Use Request and Approval

Appendix B: Procedure - GVWSA Access and Special Use Request and Approv

Appendix C: CRD Regional Parks Permit Fees

7.2. Greater Victoria Water Supply Area Land Acquisition Reserve Fund

Options

Recommendation: That the establishment of a reserve fund for Greater Victoria Water Supply Area Land

Acquisition not be pursued at this time, and that any immediate land purchase opportunities be addressed through adjustments to the existing capital program and existing capital funding and/or debt financing be utilized to fund the acquisition.

<u>Attachments:</u> <u>Staff Report: GVWSA Land Acquisition Reserve Fund Options</u>

Appendix A: June 16, 2021 GVWSA Land Acquisition Staff Report

7.3. 22-397 Grant Application for Regional Water Supply Main No.4 - Mt. Newton to

Highway 17 Section Replacement

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

Board:

That staff be directed to prepare and submit an application for a Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream grant for the replacement of the

Regional Water Supply Main No. 4 from Mt. Newton to Highway 17.

<u>Attachments:</u> Staff Report: Grant Application for RWS Main No. 4

Appendix A: Location Map

7.4. Post Disaster Emergency Planning Program Status Report

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

<u>Attachments:</u> Staff Report: Post Disaster Water Supply Program Status Report

Appendix A: Post Disaster Water Supply Photos

7.5. <u>22-377</u> Water Watch Report

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

<u>Attachments:</u> Water Watch Report

8. MOTION WITH NOTICE

8.1. Delegation of Mining Access Requests (April 20, 2022) - Commissioner

Graham

Recommendation: That staff investigate the implications of delegating the mining access requests to staff

and that a set of policies be put in place.

<u>Attachments:</u> Delegation of Mining Access Requests (April 20, 2022)

Item was postponed from May 18, 2022

9. NEW BUSINESS

10. MOTION TO CLOSE THE MEETING

10.1. <u>22-378</u> Motion to Close the Meeting

Recommendation: That the meeting be closed in accordance with the Community Charter, Part 4, Division

3 for Land Acquisition/Disposition under Section 90(1)(e).

11. RISE AND REPORT

12. ADJOURNMENT

Next Meeting: July 20, 2022

To ensure quorum, please contact Denise Dionne at ddionne@crd.bc.ca if you or your alternate cannot attend.



Capital Regional District

625 Fisgard St., Victoria, BC V8W 1R7

Meeting Minutes

Regional Water Supply Commission

Wednesday, May 18, 2022

11:30 AM

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

PRESENT:

- L. Szpak (Chair); G. Baird (V. Chair); N. Chambers; S. Dubow (EP); S. Duncan (EP);
- C. Graham (EP); K. Harper (EP); M. Hicks (EP); B. Isitt (EP); G. Logan (EP); J. Loveday (EP);
- R. Mersereau (EP); T. Morrison (EP); J. Rogers (EP); C. Stock; T. St-Pierre; N. Taylor; R. Wade (EP);
- G. Young; E. Wood Zhelka (EP)

STAFF:

T. Robbins, General Manager, Integrated Water Services; A. Constabel, Senior Manager, Watershed Protection; G. Harris, Senior Manager, Environmental Protection; I. Jesney, Senior Manager, Infrastructure Engineering; S. Irg, Senior Manager, Water Infrastructure Operations; S. Mason, Manager, Water Supply Engineering & Planning; M. Lagoa, Manager, Legislative Services, Deputy Corporate Officer; L. Westinghouse, Senior Financial Advisor (EP); T. Urquhart, Communications Coordinator; D. Dionne, Administrative Coordinator; M. Risvold, Committee Clerk (Recorder)

REGRETS: Z. De Vries, K. Kahakauwila

EP = Electronic Participation

The meeting was called to order at 11:32 am

1. TERRITORIAL ACKNOWLEDGEMENT

Commissioner Stock provided the territorial acknowledgement.

2. APPROVAL OF THE AGENDA

MOVED by Commissioner Stock and **SECONDED** by Commissioner St-Pierre.

That the agenda be approved as circulated.

CARRIED

3. ADOPTION OF MINUTES

3.1. Adoption of April 20, 2022 Minutes

Attachments: Draft Minutes - April 20, 2022

MOVED by Commissioner St-Pierre and **SECONDED** by Commissioner Baird, That the Minutes of the April 20, 2022 meeting be adopted.

CARRIED

4. CHAIR'S REMARKS

On April 13, 2022 the CRD Board approved a newly developed *Best Practices Guide for Meetings*. One new best practice is to no longer conduct a vote on recommendations to "receive for information". For example, for items on the Agenda such as the Water Watch Report, you will notice the recommendation has changed to read "*There is no recommendation. This report is for information only.*" Staff will respond to questions related to the item but no vote will be called. Following the 2022 General Local Election, the Best Practices Guide for Meetings will be incorporated into the new Board orientation on meeting procedures. Please connect with Staff if you would like a copy.

5. PRESENTATIONS/DELEGATIONS

There were no presentations or delegations.

6. GENERAL MANAGER'S REPORT

There was no report.

7. WATER ADVISORY COMMITTEE

7.1. Summary of Recommendations from Water Advisory Committee

Attachments: Summary Of Recommendations from the Water Advisory Committee

T. Robbins spoke to item 7.1.

The report was received for information.

8. COMMISSION BUSINESS

8.1. Water Quality Summary Report for Greater Victoria Drinking Water System

- January to March 2022

Attachments: Staff Report: Water Quality Summary Report - GVWD Water System

Appendix A: Water Quality Summary Report - Jan-Mar 2021

G. Harris spoke to Item 8.1.

Discussion ensued regarding: -Backup distribution system

-Contingency plan and risk assessment

The report was received for information.

8.2. Greater Victoria Drinking Water Quality - 2021 Annual Report

Attachments: Staff Report: Greater Victoria Drinking Water Quality - 2021 Report

Appendix A: Greater Victoria Drinking Water Quality - 2021 Annual

Report

G. Harris spoke to item 8.2.

MOVED by Commissioner Chambers and **SECONDED** by Commissioner St-Pierre.

That the Regional Water Supply Commission recommends to the Capital Regional District Board: That the Greater Victoria Drinking Water Quality 2021 Annual Report be approved.

CARRIED

8.3. 2022 Master Plan - Regional Water Supply Service

Attachments: Staff Report: 2022 Master Plan - Regional Water Supply Service

Appendix A: 1994 Long Term Water Supply Plan Executive Summary

Appendix B: 1994 Long Term Water Supply Plan Capital Works Rec.

Appendix C: RWS 2022 Master Plan Executive Summary

Appendix D: Conceptual Model of RWS Svc. Op. & Capital Forecast

Costs

Presentation: 2022 Long Term Water Supply Master Plan

T. Robbins spoke to item 8.3 and provided a PowerPoint presentation.

Commissioners Chambers, Hicks and Graham left the meeting.

Discussion ensued regarding:

- -Current demand
- -Confidence for future
- -DCC funding and potential grant application
- -Funds required for transmission infrastructure
- -Diversifying water supply
- -Backup plan in the event Sooke Lake is not usable
- -Post disaster water supply planning work
- -Public engagement
- -Growth rates and continuing trends
- -Agricultural sector
- -Potential of raising water rates in advance

Staff will report back regarding the status of the Post Disaster Water Supply Program.

MOVED by Commissioner St-Pierre and **SECONDED** by Commissioner Taylor, That the Regional Water Supply Commission:

- 1. That staff be directed to seek public feedback on the 2022 Master Plan through the CRD website public engagement portal and report back to the Commission with a summary of the public feedback as well as the Water Advisory Committee feedback resulting from the staff referral of the 2022 Master Plan, and that the Commission consider endorsing the 2022 Master Plan at that time.
- 2. That the 2022 Master Plan be forwarded to the CRD Board for information.

CARRIED

8.4. Water Watch Report

Attachments: Water Watch Report

T. Robbins spoke to Item 8.4.

The report was received for information.

9. MOTION WITH NOTICE

9.1 Delegation of Mining Access Requests (April 20, 2022) - Commissioner

Graham

Attachments: Delegation of Mining Access Requests (April 20, 2022)

That staff investigate the implications of delegating the mining access requests to staff and that a set of policies be put in place.

MOVED by Commissioner Stock and **SECONDED** by Commissioner Baird, That the Regional Water Supply Commission postpone discussing item 9.1 to the next meeting.

CARRIED

10. NOTICE(S) OF MOTION

There were no notices of motion.

11. NEW BUSINESS

There was no new business.

12. MOTION TO CLOSE THE MEETING

12.1 Motion to Close the Meeting

MOVED by Commissioner St-Pierre and **SECONDED** by Commissioner

Stock.

That the meeting be closed in accordance with the Community Charter, Part 4, Division 3: Land Acquisition/Disposition under Section 90 (1)(e).

Division 3. Land Acquisition/Disposition under 3

CARRIED

The Regional Water Supply Commission moved into closed session at 1:01 pm.

13. RISE AND REPORT

The Commission rose from its closed session at 1:14 pm without report.

14. ADJOURNMENT

MOVED by Commissioner St-Pierre and **SECONDED** by Commissioner

Meeting Minutes

That the meeting be adjourned at 1:14 pm.

CARRIED

| CHAIR | _ |
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| SECRETARY | |
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Media Release

For Immediate Release June 9, 2022

Regional Water Supply 2022 Master Plan Released

Victoria, BC- The Capital Regional District (CRD) Regional Water Supply Commission has released the 2022 Master Plan that includes a proposed infrastructure program to improve the water supply and transition system and add redundancy to critical components to address hazards and risks. The Plan recommends projects to be implemented over the next 30 years based on the projected population, the impacts of climate change, water treatment requirements resulting from changing raw water quality characteristics and regulatory requirements.

"The 2022 Master Plan builds on previous system infrastructure investments, which have been largely focused on securing supply, and takes a forward-looking approach to create a resilient water supply system that will serve Greater Victoria for the next 30 years," says Lillian Szpak, Chair of the Regional Water Supply Commission and City of Langford Councillor.

The plan advances the commitments, strategic priorities and actions adopted in the 2017 Regional Water Supply Strategic Plan, recommending 21 major projects to meet anticipated water supply and treatment needs based on projected population for the year 2050. The recommendations also consider climate change impacts on water supply and demand, anticipated changes in raw water characteristics and regulatory requirements. Modeling indicates that by 2045 additional water will need to be sourced from the deep northern basin of Sooke Lake Reservoir and the Leech River water supply catchment area. The recommended projects will require significant investment over a 30-year period, approximately \$2 billion, to be paid for through water rates with the potential for grant funding.

The plan is available for public review and comment until July 6, 2022 at <u>getinvolved.crd.bc.ca/2022-regional-water-supply-master-plan</u>.

Feedback collected will be presented to the Regional Water Supply Commission and will be used to guide how the plan is implemented over time, with further engagement carried out as each project is designed and implemented.

About the Regional Water Supply System

The CRD Regional Water Supply System delivers safe and sustainable drinking water to more than 400,000 people living in Greater Victoria. This work includes protecting the source, disinfecting the water

and monitoring water quality, operating and maintaining transmission and distribution systems and investing in infrastructure renewal. The Regional Water Supply Service delivers water to customers situated in 13 local municipalities, 8 First Nations and the Juan de Fuca Electoral Area through a mix of sub-regional and local distribution systems.

Learn more: Greater Victoria Water Supply System: An Overview (Video)

Proud to be recognized as one of <u>BC's Top Employers</u> and <u>Canada's Greenest Employers</u>, the CRD delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works collaboratively with First Nations and all levels of government to enable sustainable growth, foster community well-being, and develop cost-effective infrastructure while continuing to provide core services to residents throughout the region. Visit us online at www.crd.bc.ca.

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For media inquiries, please contact:

Ted Robbins, General Manager Integrated Water Services

Tel: 250.360.3061 Cell: 250.217.9084









REPORT TO REGIONAL WATER SUPPLY COMMISSION MEETING OF WEDNESDAY, JUNE 15, 2022

SUBJECT Cost Recovery Fee and Delegation of Permit Issuance for Special Access Requests

ISSUE SUMMARY

To provide response to the April 20, 2022 Regional Water Supply Commission motion:

That staff develop a cost recovery fee for access, bring forward a standardized process and check list that needs to be met by an applicant for access, and investigate delegating the issuance of access permits to staff as is done in other cases.

BACKGROUND

Greater Victoria Water Supply Area Access - Bylaw, Policy and Procedure

Under Section 40 of Capital Regional District (CRD) Bylaw No. 2804 *Greater Victoria Water Supply Area (GVWSA) Protection*, the General Manager is obligated to seek approval for all access and special use of the GVWSA from the Regional Water Supply Commission (Commission), except where conditions for access authorization (Sections 45 and 46) have been established and met.

Section 40:

No person shall conduct or carry on any special use or enter into or remain within the water supply area except where authorized by permit or written permission of the General Manager in accordance with this Bylaw, who will seek approval for access and special use from the Regional Water Supply Commission.

Section 45:

The General Manager or authorized designate may issue a permit for access and use (including special use) if all of the conditions established under Section 46 are met by the permit applicant.

Section 46:

The General Manager is hereby delegated the authority to establish the conditions respecting the issuance of permits.

The Water Supply Area Access and Special Use Request and Approval Policy and Procedure (Appendices A and B), approved by the Commission in 2016, establish and set the conditions under which the General Manager is delegated authority to issue "routine" access permits. The Procedure allows for many access requests (CRD staff, CRD contractors, public agencies carrying out their work, utility providers, researchers, escorted visitors, etc.) to be approved by the General Manager Integrated Water Service, but not mining access requests or recreational requests which are presented to the Commission for decision.

At a previous request of the Commission, a review of the GVWSA Access Policy and Procedures was brought to the Commission in February 2019, with a resulting decision to make no changes.

Policy regarding recreational access in the Leech WSA

In re-evaluating the need for Commission review and decision on recreational access requests, the history of development of the existing policy bears consideration. The following section is repeated from the 2019 staff report:

"The Leech WSA was brought under the GVWSA Protection Bylaw by the CRD Board in June 2016.

The "closing" of the Leech WSA to unrestricted public access, by amending the GVWSA Protection Bylaw, was first discussed by the Commission in November 2013. The initiative was debated during 2014 (particularly public and First Nations access) and in 2015 feedback on the issues was received from the Water Advisory Committee and from a series of public open houses.

In December 2015, the Commission decided to recommend that the CRD Board adopt bylaw amendments to incorporate the Leech WSA, accommodate First Nations cultural access under written agreement, but not to allow for public recreational use in the Leech WSA. The bylaw amendments and Commission recommendation went to the CRD Board in February 2016 where the bylaw amendments were defeated at first and second reading.

In April 2016, the CRD Board moved that the Commission forward the bylaw amendment to the Board again without recreational access. Since the bylaw without recreational access had been previously defeated, the Board position was effectively split.

In May 2016 staff proposed to the Commission that recreational and other special access and use of the Leech WSA could be considered and approved by the Commission on a case-by-case basis. This required a minor adjustment to the bylaw and to establish a *Water Supply Area Access and Special Use Request and Approval Policy and Procedure.* The Commission approved the draft Policy and Procedure and bylaw amendment changes. In June 2016, the CRD Board approved the bylaw amendments to incorporate the Leech WSA into the Greater Victoria Water Supply Area Protection Bylaw with the understanding that the Commission would consider all recreational access requests in the Leech WSA on a case-by-case basis."

Organized recreational groups can apply for access only to the Leech Water Supply Area. The group must have an acceptable level of liability insurance and wildfire suppression insurance if access is requested during wildfire season.

Policy regarding mining access:

During discussions regarding what activities to allow in the Leech WSA, mining access was not considered given that mining tenure holders have a legislated right to access the area. However, because mining activity is inconsistent with use of the area for future water supply, mining access was considered in the drafting of the Procedure as a special access requiring Commission approval. Bringing mining access requests before the Commission primarily serves to raise awareness of the number and frequency of such requests.

Cost Recovery Fee

Under the Bylaw and current policy and procedures, the only fee charged for access to the GVWSA is a \$500 refundable security deposit for keys and any other equipment that is loaned.

There are currently no fees to cover staff time for processing permits and liaison with those provided access to the GVWSA. There are also no fees charged for tours offered to schools and the general public.

<u>ALTERNATIVES</u>

Alternative 1

That staff be directed to amend the *Water Supply Area Access and Special Use Request and Approval Procedure* to include an additional prescribed situation considered "routine" for which the General Manager has delegated authority to approve access (Section 1, k):

"k. Mining access requests in the Leech Water Supply Area where the CRD is required to provide access under the *Mineral Tenure Act*, and the claim holder agrees to CRD's terms and conditions of access."

Alternative 2

That staff be directed to:

- 1. Amend the Water Supply Area Access and Special Use Request and Approval Procedure to include an additional prescribed situation considered "routine" for which the General Manager has delegated authority to approve access (Section 1, k):
 - "k. Mining access requests in the Leech Water Supply Area where the CRD is required to provide access under the *Mineral Tenure Act*, and the claim holder agrees to CRD's terms and conditions of access"; and,
- 2. Calculate costs and recommend a fee for recreational access requests received, to be considered by the Commission with the recreational access request on a case-by-case basis; based on the staff effort required to accommodate the request.

Alternative 3

That no changes be made to the current *Water Supply Area Access and Special Use Request and Approval Policy and Procedure;* and that the Commission continue to make decisions on recreational, mining and other discretionary access to the Greater Victoria Water Supply Area.

IMPLICATIONS

Social Implications

Given the GVWSA is closed to public access, and many water supply areas in the province are not; there is reason to make special effort to let the public view and enjoy this natural area by exception through tours or organized special events that are compatible with watershed and drinking water protection. These efforts along with education outreach, help to maintain public support for maintenance of the "closed watershed" that sustains Greater Victoria's source water quality.

The consideration of a fee for participation in public tours was considered to prevent "no shows" in the past, but not supported due to the administration involved.

There have been only three discretionary recreational/cultural access requests to the GVWSA brought forward in the last six years. Given only those few examples, it is not known if there is a broader social view that fees should be charged to accommodate recreation or cultural access.

Charging actual cost recovery is likely to be prohibitive and seen as excessive; while charging a standard permit fee may be considered appropriate and in keeping with other CRD services.

Financial Implications

The number of GVWSA access reports for decision brought to the Commission since 2016 is summarized in the following table. In terms of staff and Commission effort, mining access requests have dominated in the last six years with only a handful of recreational/cultural or other non-routine access requests.

| Year | Mining | Recreational/ Cultural/Other | Detail |
|-------------|--------|---------------------------------|---|
| 2022 so far | 2 | 1 | West Coast Flyfishers |
| 2021 | 3 | 0 | |
| 2020 | 2 | 0 | |
| 2019 | 4 | 0 | |
| 2018 | 3 | 1 | TimberWest road access/use request |
| 2017 | 5 | 1 | West Coast Flyfishers |
| 2016 | n/a | 2 | T'Souke First Nation Traditional Use Access Agreement Cowichan Ancestral Walk from T'Sou-ke to Cowichan |
| TOTAL | 19 | 5 | |

In terms of cost recovery, the example of the recent Westcoast Flyfisher's access shows the following approximate costs:

| Resources | Tasks | Time | Labour (loaded) | Vehicle incl. fuel | Deconta- minant |
|--|---|--------------------------------|--------------------|--------------------|--------------------|
| Patrol crew 1 7:00-9:30 am | Admit, orient, decontaminate | 2.5 hours x 2 | \$275 | \$0 | \$50 |
| Patrol crew 2 2:30-6:00 pm | Drive to and from site, check out group and lock up | 3.5 hours x 2 | \$300 | \$172 | |
| Administration Receive request, staff report, prepare permit, plan visit | | Not tracked, blanket amount | \$500 | | |
| Total Cost | | | \$1,300 | | |

Note:

- In this example, the drive to and from the Leech WSA location is only included for one of the patrols since the Leech is patrolled as part of regular weekend operations.
- 2. Administration costs to work with the group, prepare the detailed permit agreement, internal legal review, prepare the staff report for decision, and finalize details is substantial but not tracked. A \$500 administrative fee is suggested as more than reasonable given the effort of technical and managerial staff to process the request.

Cost recovery for recreational activities very much depend on the type of activity and staff oversight required. The cultural walk through the Sooke WSA was accompanied and therefore required a different level of staff support.

Given the lack of recreational access requests and the variety of staff effort that may be required, it is difficult to specify a standard cost recovery. If cost recovery is the goal, it would be best to estimate staff effort and cost on a case-by-case basis until standards or norms can be established.

Looking to CRD Regional Parks, a standard fee of \$40/permit is charged for special events. The fees for parks permits are attached in Appendix C. Recent CRD Board decisions related to Parks operations indicate a movement away from pursuing cost recovery via user fees.

Given the current very low number of special use access requests it is not seen as necessary or worthwhile to charge a standard permit fee; but this could be done.

CONCLUSION

The Commission requested staff to respond to a motion to consider a standardized process and delegated authority for Greater Victoria Water Supply Area access approvals, and cost recovery fees for special access requests. Policy and Procedures are already in place to guide processing access requests and delegating approvals to the General Manager, Integrated Water Services for "routine" access authorization.

Given the number of standard mining access requests in the Leech Water Supply Area in the last six years; and the Provincial legislation requiring this access to be accommodated, mining access decisions should be delegated to the General Manager for approval going forward. It seems most appropriate that special uses for recreation or cultural purposes should continue to be decided by the Regional Water Supply Commission, to address the full spectrum of social, environmental and financial considerations.

Pursuit of cost recovery to accommodate special use access requests may be inconsistent with recent Board direction; and with the comprise struck in 2016 to allow organized recreation groups access to the Leech Water Supply Area but otherwise close the area to unrestricted public access. A standard permit fee could be charged, but the current low number of requests do not seem to warrant it.

RECOMMENDATION

That staff be directed to amend the *Water Supply Area Access and Special Use Request and Approval Procedure* to include an additional prescribed situation considered "routine" for which the General Manager has delegated authority to approve access (Section 1, k):

"k. Mining access requests in the Leech Water Supply Area where the CRD is required to provide access under the BC *Mineral Tenure Act*, and the claim holder agrees to CRD's terms and conditions of access."

| Submitted by: | Annette Constabel, MSc, RPF, Senior Manager, Watershed Protection |
|---------------|---|
| Concurrence: | Ted Robbins, BSc, CTech, General Manager, Integrated Water Services |
| Concurrence: | Robert Lapham, MCIP, RPP, Chief Administrative Officer |

ATTACHMENTS

Appendix A: GVWSA Access and Special Use Request and Approval - Policy Appendix B: GVWSA Access and Special Use Request and Approval - Procedure

Appendix C: CRD Regional Parks Permit Fees



CAPITAL REGIONAL DISTRICT

DEPARTMENT POLICY

| Section | Regional Water Supply | |
|------------|---|--|
| Subsection | Integrated Water Services - Policies | |
| Title | WATER SUPPLY AREA ACCESS AND SPECIAL USE REQUEST AND APPROVAL | |

POLICY:

The Regional Water Supply Commission will consider requests for Water Supply Area access and special use. The Commission will be provided a CRD Integrated Water Services staff evaluation of each request and a recommendation for the Commission's consideration. The Commission will approve or not approve a request which will determine whether or not the General Manager can issue a permit for access and special use.

PURPOSE:

The purpose of this policy is to ensure the Regional Water Supply Commission is aware of the number and type of water supply area access and special use requests and sets out the roles of the Commission and CRD staff in the approval process.

RESPONSIBILITIES:

The CRD Board will amend the Greater Victoria Water Supply Area Protection Bylaw as required.

The Regional Water Supply Commission will review and amend this policy as required.

The CRD Integrated Water Services staff will adhere to this policy.

SCOPE:

This policy applies to all requests for water supply area access and special use, except under the prescribed situations set out in the CRD Integrated Water Services – Water Supply Area Access and Special Use Request and Approval Procedure.

DEFINITIONS:

'Water Supply Area' means any water catchment and non-catchment lands, including the water bodies within the boundaries, owned and managed by the CRD, including the Sooke, Goldstream and Leech Water Supply Areas.

'Special Use' means an activity not included in the operations of the CRD that is carried on in the water supply area by persons who are not employees or contractors of the CRD.

PROCEDURE:

Requests for water supply area access and special use, except under the prescribed situations set out in the *CRD Integrated Water Services – Water Supply Area Access and Special Use Request and Approval Procedure* will be evaluated by CRD Integrated Water Services staff. CRD Integrated Water Services staff will provide a staff report to the Regional Water Supply Commission outlining the nature of the request and special use, the implications of the request, and a staff recommendation for the Commission consideration. The Commission may approve or not approve the request and may set certain conditions with an approval. With the Commission's approval, the General Manager, Integrated Water Services, will issue an access and special use permit and set out the conditions and requirements of the permit and the responsibilities of the permit holder.

| Approval Date: | Approved By: | |
|--------------------|--------------|--|
| 1. Amendment Date: | Approved By: | |
| 2. Amendment Date: | Approved By: | |
| 3. Amendment Date: | Approved By: | |
| Next Review Date: | Reviewed By: | |
| Supersedes: | | |

Related Policy, Procedure or Guideline:

- 1. CRD Integrated Water Services Water Supply Area Access and Special Use Request and Approval Procedure
- 2. Greater Victoria Water Supply Area Protection Bylaw



CAPITAL REGIONAL DISTRICT

DEPARTMENT PROCEDURE

| Section | Regional Water Supply | |
|------------|--|--|
| Subsection | Integrated Water Services - Procedure | |
| Title | WATER SUPPLY AREA ACCESS AND SPECIAL USE REQUEST AND APPROVAL PROCEDURE | |

PURPOSE:

The purpose of this procedure is to set out the procedure for a group or individual to request access and undertake a special use in the Greater Victoria Water Supply Area. This procedure also sets out the general situations and considerations that CRD Integrated Water Services staff will use in evaluating a request for access and special use and in making a recommendation to the Regional Water Supply Commission respecting approval of a permit. The Regional Water Supply Commission will approve or not approve a request for access and special use unless under the prescribed situations set out below. A permit for access and special use will be issued by the General Manager once the Commission has approved a request. This procedure is to be used in conjunction with the Greater Victoria Water Supply Area Protection Bylaw and the CRD Integrated Water Services, Regional Water Supply Policy - Water Supply Area Access and Special Use Request and Approval.

- 1. The General Manager, Integrated Water Services, has the authority to approve routine access and special use requests based on the following prescribed situations:
 - a. CRD staff specifically required to conduct activities included in the operations of the CRD as part of their duties;
 - BC Hydro and Fortis Gas staff and contractors for utility work to be undertaken in the water supply areas;
 - c. Representatives of senior governments or regulatory agencies who, as part of their duties, are required to gain access to the water supply areas;
 - d. Staff and contractors of agencies or organizations who hold licences, leases or other agreements with the CRD who are required to gain access to the water supply areas to access, operate and maintain equipment such as communications equipment, occupying water supply area sites or who are required to transit CRD lands to access private lands:
 - e. Organizations or individuals touring the water supply areas with CRD staff escorts;
 - f. Organizations or individuals conducting research projects authorized by the CRD, and being supported by an accredited academic institution or government agency;
 - g. Contractors or tradespeople required to perform work as requested by CRD;
 - h. Directors of the CRD Board, members of the Regional Water Supply Commission and other CRD Commissions and Committees, municipal council members, and health authority officials;
 - i. Accredited media representatives with CRD staff escorts; and
 - j. Special purpose day/visitation access with CRD staff escorts.
- 2. All other requests for water supply area access and special use will be approved by the Regional Water Supply Commission in accordance with the Regional Water Supply Policy Water Supply Area Access and Special Use Request and Approval.

PROCEDURE:

- 1. Groups or individuals requesting water supply area access or special use permission are to complete the CRD Integrated Water Services form External Applicant Access and Special Use Request Greater Victoria Water Supply Area.
- 2. CRD Integrated Water Services staff will evaluate the request based on the information provided in the form and any other information provided by the applicant.

- 3. CRD Integrated Water Services Staff will provide a staff report to the Regional Water Supply Commission outlining the nature of the request and special use, the implications of the request, and a staff recommendation for the Commission's consideration.
- 4. The Commission will approve or not approve the request and may set certain conditions with an approval.
- 5. With the Commission's approval, the General Manager, Integrated Water Services will issue an access and special use permit and set out the conditions, requirements of the permit and the responsibilities of the permit holder.

| Approval Date: | Approved By: | |
|--------------------|--------------|--|
| 1. Amendment Date: | Approved By: | |
| 2. Amendment Date: | Approved By: | |
| 3. Amendment Date: | Approved By: | |
| Next Review Date: | Reviewed By: | |
| Supersedes: | · | |

Related Policy, Procedure or Guideline:

- 1. CRD Integrated Water Services, Water Supply Area Access and Special Use Request and Approval Policy
- 2. Greater Victoria Water Supply Area Protection Bylaw

CAPITAL REGIONAL DISTRICT BYLAW NO. 4324

A BYLAW TO AMEND BYLAW NO. 3675 WHICH PROVIDES FOR PARK USE PERMIT FEES AND CHARGES PAYABLE FOR REGIONAL PARKS SERVICES

AND FACILITIES WITHIN THE CAPITAL REGIONAL DISTRICT

WHEREAS:

- A. Under Bylaw No. 3675, "Capital Regional District Regional Parks Services and Facilities Fees and Charges Bylaw No.1, 2010", the Regional Board outlines the fees and charges for Regional Parks services and permits;
- B. As new services are introduced, or as fees are reviewed and revised, Schedule "A" of the Capital Regional District (CRD) Regional Parks Services and Facilities Fees and Charges Bylaw is amended to update fees and charges; and
- C. The Board wishes to amend Bylaw No. 3675 to confirm that it is a continuing fee schedule with no fixed end date and to remove transitional provisions for mid-year annual fee changes;

NOW THEREFORE, the Capital Regional District Board in open meeting assembled hereby enacts as follows:

- 1. Bylaw No. 3675, "Capital Regional District Regional Parks Services and Facilities Fees and Charges Bylaw No.1, 2010" is hereby amended by deleting Schedule "A" in its entirety and replacing it with the attached Schedule "A".
- 2. This bylaw may be cited for all purposes as "Capital Regional District Regional Parks Services and Facilities Fees and Charges Bylaw No. 1, 2010, Amendment Bylaw No. 9, 2019".

| READ A FIRST TIME THIS | 11 th | day of | September | 2019 |
|-------------------------|------------------|--------|-----------|------|
| READ A SECOND TIME THIS | 11 th | day of | September | 2019 |
| READ A THIRD TIME THIS | 11 th | day of | September | 2019 |
| ADOPTED/THIS | 11 th | day of | September | 2019 |

CHAIR CORPORATE OFF

SCHEDULE "A" PARK USE PERMIT FEES AND CHARGES

| CAMPING AND PARKING | PERMIT FEE (APPLICABLE TAXES NOT INCLUDED, UNLESS OTHERWISE NOTED) |
|--|---|
| Camping – In designated campsites at: | |
| Island View Beach Regional Park Campground Overnight Recreational Vehicle Camping Overnight Tenting Additional Vehicle Cancellation fee for on-line reservation | \$20.00/night \$15.00/night \$10.00/night One night rate |
| Jordan River Regional Park Campground Overnight Recreational Vehicle or Tent | \$15.00/night |
| Camping April 1 to October 31 Overnight Recreational Vehicle or Tent Camping November 1 to March 31 | \$10.00/night |
| Additional Vehicle | \$ 5.00/night |
| Sooke Potholes Regional Park Campground Overnight Recreational Vehicle Camping Overnight Tenting Tent Pad for Cyclists Additional Vehicle Firewood | \$25.00/night \$25.00/night \$15.00/night \$10.00/night \$7.00/bundle |
| Pay Parking – In designated areas at: | (includes applicable taxes) |
| Thetis Lake Regional Park (May 1 to September 30) Sooke Potholes Regional Park (May 1 to September 30) | \$2.25/daily rate \$20.00/seasonal pass (includes applicable taxes) |
| PARK USE PERMIT SPECIAL USE CATEGORIES | PERMIT FEE (APPLICABLE TAXES NOT INCLUDED, UNLESS OTHERWISE NOTED) |
| 3. Commercial Filming – Motion picture, television and photography. Short Term: Minimal set up, less than 5 days in park Long term: Elaborate set up, no more than 10 days in park | \$80.00/permit \$400.00/permit |
| Major commercial filming projects that are more than 10 days in a park are required to follow the Policy and Regulation for Filming in CRD Parks. | As per filming policy |

| 4. | Commercial Service or Activity* – Such as guided programs or recreational training. • Single trip: 1 day • Seasonal: 4 month period • Annual: Jan 1 – Dec 31 inclusive | \$40.00/permit \$200.00/permit \$320.00/permit |
|----|---|--|
| | PARK USE PERMIT SPECIAL USE CATEGORIES | PERMIT FEE (APPLICABLE TAXES NOT INCLUDED, UNLESS OTHERWISE NOTED) |
| 5. | Commercial Dog-Walking – Annual (Jan 1 – Dec 31 inclusive) | \$320.00/permit |
| 6. | Picnic Shelter – Use of group picnic shelters at Beaver Lake, Eagle Beach, Island View Beach or Aylard Farm. | \$40.00/permit |
| 7. | Research Activity* – Such as specimen collections, surveys, inventories and monitoring plots. | \$40.00/permit |
| 8. | Special Event or Activity* – Such as a festival, tournament, competition, show or outdoor ceremony that attracts participants and spectators. | \$40.00/permit |
| | Frequent Users: 10 or less events/year | \$160.00/permit |
| 9. | Temporary Service Access* – Access/ occupancy through a regional park or trail for such purposes as accessing a private property, utility or public works. | \$80.00/permit |

*Fee Exemptions:

Special Event or Activity: Fee exemption may be made when all participants are under 18 years of age.

Research Activity and Temporary Service Access: Fee exemption may be made when the activity provides a benefit or improvement to the park or Regional Parks and Trails system.

Commercial Service or Activity: No fees are applied to self-guided programs.

| ENVIRONMENTAL INTERPRETATION | FEE (APPLICABLE TAXES NOT INCLUDED, UNLESS OTHERWISE NOTED) |
|--|---|
| 10. School Programs | \$70.00/class (non-taxable) |
| Enhanced Naturalist Programs – specialty programs with limited registration, guided canoe programs or hikes with guest experts | \$7.00/person |



REPORT TO REGIONAL WATER SUPPLY COMMISSION MEETING OF WEDNESDAY, JUNE 15, 2022

SUBJECT Greater Victoria Water Supply Area Land Acquisition Reserve Fund Options

ISSUE SUMMARY

To bring forward the June 16, 2021 *Greater Victoria Water Supply Area Land Acquisition Reserve Fund Options* staff report for further consideration as directed by the Regional Water Supply Commission.

BACKGROUND

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

A report on the matter of establishing a reserve fund was brought to the Commission June 16, 2021. The Commission decided not to establish a land acquisition reserve fund at that time, but with the resolution below, directed staff to report any implications of the decision and consider the creation of a land acquisition reserve fund a year later.

"That the Regional Water Supply Commission direct staff to bring this report back in one year's time to consider the creation of a land acquisition reserve fund."

The 2021 report "Greater Victoria Water Supply Area Land Acquisition Reserve Fund Options" is included as Appendix A. The background, implications, basic alternatives and staff recommendation remain the same now, as they did in 2021.

Since the report was considered a year ago, there have been no implications from the decision, nor do staff anticipate future barriers to acquiring land as a result of not carrying a land acquisition reserve fund. The Grant Lake property acquisition (58.7 hectares) for the GVWSA closed as planned in February 2021 using funds (\$652,729) allocated in the Regional Water Supply Capital Plan, without the need for capital plan amendments or additional borrowing. During the last 12 months there have been no further land acquisition opportunities.

ALTERNATIVES

Alternative 1

That the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition not be pursued at this time, and that any immediate land purchase opportunities be addressed through adjustments to the existing capital program and existing capital funding and/or debt financing be utilized to fund the acquisition.

Alternative 2

That staff be directed to pursue the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition, starting in the 2023 budget year, and contribute annually to the reserve through the wholesale water rate. The Regional Water Supply Commission will be able to review and approve the contribution amount each year.

IMPLICATIONS

Please refer to the Implications section of the 2021 report on the matter attached as Appendix A, assuming references to 2022 now refer to 2023.

CONCLUSION

In June of 2021 the Regional Water Supply Commission decided not to establish a Greater Victoria Water Supply Area Land Acquisition reserve fund; but to re-visit the decision in one year's time. During the last 12 months one land acquisition opportunity was realized (58.7 hectares for \$652,729) using allocated Regional Water Supply Capital funds. The lack of a reserve fund did not hamper efforts to pursue priority lands during the period; however, there were no other willing sellers that tested the need for readily available funds in a reserve. Given no changes to the financial implications or outlook for land acquisition, the conclusion from 2021 remains the same.

RECOMMENDATION

That the establishment of a reserve fund for Greater Victoria Water Supply Area Land Acquisition not be pursued at this time, and that any immediate land purchase opportunities be addressed through adjustments to the existing capital program and existing capital funding and/or debt financing be utilized to fund the acquisition.

| Submitted by: | Annette Constabel, MSc., RPF, Senior Manager, Watershed Protection |
|---------------|---|
| Concurrence: | Ted Robbins, BSc., CTech., General Manager, Integrated Water Services |
| Concurrence: | Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer |
| Concurrence: | Robert Lapham, MCIP, RPP, Chief Administrative Officer |

ATTACHMENT

Appendix A: RWSC 21-08 Options & Implications of Developing a Reserve Fund for Greater Victoria Water Supply Area Land Acquisition



RWSC 21-08

REPORT TO REGIONAL WATER SUPPLY COMMISSION MEETING OF WEDNESDAY, JUNE 16, 2021

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

ISSUE SUMMARY

To report on 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 as follows:

Priority 1: Sooke Lake Reservoir catchment lands

Priority 2: Sooke Lake Reservoir buffer lands

Priority 3: Goldstream Water System catchment lands

Priority 4: Buffer 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: Buffer lands containing primary access to the Leech WSA

The Commission also directed staff to take a more active approach in pursuing land acquisition.

Along with approval of the priorities, the Commission passed a motion directing staff to: "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 below. The costs are based on the most recent selling price but should be considered at the low end of actual future costs.

| 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.

Examples of Past GVWSA Land Acquisitions

The larger portion (8,791 hectares) of the purchase of the Leech WSA lands from a private forest land holder occurred in 2007. Sixty million dollars were financed in April 2008 for a 15 year term at 4.65% interest for the first 10 years with a rate of 2.60% for the final 5 year term which ends April 2023. In the first 10 years, payments of \$5.8 million were made annually and in the last 5 years \$4.6 million per annum. An approximation of the impact on the wholesale water rate when the financing ends in 2023 is \$0.0956 per cubic metre of water.

The recent acquisition of a 58.7 ha land parcel for \$652,500 included sufficient time to allow for the purchase to be added to the capital plan as part of the regular capital budget planning, approval and financing process, and no amendments or extra financing was required.

Water Advisory Committee Input

A similar report on the options and implications of a reserve fund for GVWSA land acquisition was brought to the Water Advisory Committee on June 3, 2021. The Committee elected to receive the report for information and to provide the Commission with the Q&A and feedback on the report:

- Q: Was the Leech WSA purchase financed? Are there barriers to obtaining financing for \$20 million going forward?
 - A: Yes, the \$64 million Leech land acquisition was financed. No, financing of \$20 million is not expected to be a barrier now or in future.
- Q: Does Capital Regional District (CRD) have right of first refusal on any of the priority lands? A reserve fund could be established for any right of first refusal lands.
 - A: Only on one parcel owned by Kapoor Lumber Company. [The parcel is 155 ha and the right of first refusal was negotiated as part of the 1998 land exchange between the CRD/Province/Kapoor Lumber.]
- Q: Does the CRD invest reserve funds, or do the funds sit without earning any interest? Funds invested now would be subject to inflation.
 - A: Yes. [Collectively across the CRD, all positive balances receive a small amount of internal interest based on investments (typically GICs).]
- Q: Do the current low interest rates influence the decisions on whether to finance or not?
 - A: Yes, staff consider the interest rate in making recommendations and decision making.
- Q: There is a discrepancy if Regional Parks has a land acquisition reserve fund but the GVWSA does not. Shouldn't the need/strategy be the same?
 - A: Some differences include: Parks raises funds through requisitions; the GVWSA lands of interest are specific and fixed.
- Members of the public would support a reserve fund given the value and management of undeveloped private forest land in the region.
- The CRD could undertake multi criteria analysis or intangibles analysis, to try to bring together direct/tangible and indirect/intangible aspects to valuing land parcels to the CRD.
- The purchase of the Leech WSA should be included as a reference or example in the report to the Commission.

ALTERNATIVES

Alternative 1

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

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 (\$/m³) | 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 CRD 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. Long term financing rates available to the Regional Water Supply Service through the MFA are currently 2.9%.

CONCLUSION

The Regional Water Supply 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

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: | by: Annette Constabel, MSc., RPF, Senior Manager, Watershed Protection | |
|---------------|--|--|
| Concurrence: | Ted Robbins, B.Sc., CTech., General Manager, Integrated Water Services | |
| Concurrence: | Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer | |
| Concurrence: | Robert Lapham, MCIP, RPP, Chief Administrative Officer | |



REPORT TO REGIONAL WATER SUPPLY COMMISSION MEETING OF WEDNESDAY, JUNE 15, 2022

<u>SUBJECT</u> Grant Application for Regional Water Supply Main No.4 – Mt. Newton to Highway 17 Section Replacement

ISSUE SUMMARY

Regional Water Supply Commission (RWS) and Capital Regional District (CRD) Board support is required to submit a grant application for the "Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream". The grant application will support the replacement of the Regional Water Supply Main No. 4 from Mt. Newton to Highway 17.

BACKGROUND

The Regional Water Supply Main No. 4 (No. 4) services municipalities from the West Shore through to the Saanich Peninsula. There are numerous sections of No. 4 that are made of concrete pipe and susceptible to failure during a seismic event.

The particular section that has been identified consists of 1,950 metres of 760 millimeter (mm) diameter concrete pipe that is to be replaced with the same length of 900 mm diameter steel pipe which will preserve seismic resilience. The location of this section (Appendix A) runs from Mt. Newton Cross Road to Highway 17.

Some specifics of the proposed replacement are:

- The section identified for replacement has been chosen based on risk and prioritized consequence of failure.
- The section has also been identified in a current grant application under the Disaster Mitigation and Adaptation Fund and if successful would be removed from that application.
- The replacement would include a resilient water connection to Tsawout First Nation.

Alternative 1

The Regional Water Supply Commission recommends to the Capital Regional District Board: That staff be directed to prepare and submit an application for a *Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream* grant for the replacement of the Regional Water Supply Main No. 4 from Mt. Newton to Highway 17.

Alternative 2

The Regional Water Supply Commission directs staff not to proceed with a grant application to the Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream grant program.

IMPLICATIONS

Intergovernmental Implications

No. 4 services approximately 30,000 people providing water directly to the municipalities of Central Saanich, North Saanich and Sidney through the Saanich Peninsula Water Supply System and indirectly to the Pauquachin and Tseycum First Nations through the North Saanich water system and the Tsartlip and Tsawout First Nations through the Central Saanich water system.

Financial Implications

The estimated budget is \$8.8 million dollars of which \$6 million would be in the form of a grant and the remainder from the Regional Water Supply capital program. This section of pipe has been identified for replacement in the 2022 Regional Water Supply 5 Year Capital plan. The funding stream being applied for falls under the Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream is the Capital Infrastructure Stream of the program.

CONCLUSION

Regional Water Supply Commission (RWS) and CRD Board support is required to submit a grant application for the "Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream". The grant application will support the replacement of Regional Water Supply Main No. 4 from Mt. Newton Cross Rd. to Highway 17.

The project consists of the replacement of 1,950 metres of 760 millimeter (mm) diameter concrete pipe with the same length of 900 mm diameter steel pipe to increase seismic resilience. Budget is estimated at \$8.8 million with \$6 million being funded by the grant and the balance funded from the Regional Water Supply capital program.

RECOMMENDATION

The Regional Water Supply Commission recommends to the Capital Regional District Board: That staff be directed to prepare and submit an application for a *Canada Community-Building Fund in British Columbia, Strategic Priorities Fund Capital Infrastructure Stream and Capacity Building Stream* grant for the replacement of the Regional Water Supply Main No. 4 from Mt. Newton to Highway 17.

| Submitted by: | Ian Jesney, PEng., Senior Manager, Infrastructure Engineering |
|---------------|---|
| Concurrence: | Ted Robbins, BSc., CTech., General Manager, Integrated Water Services |
| Concurrence: | Robert Lapham, MCIP, RPP, Chief Administrative Officer |

ATTACHMENT

Appendix A: Location Map



REPORT TO REGIONAL WATER SUPPLY COMMISSION MEETING OF WEDNESDAY, JUNE 15, 2022

SUBJECT Post Disaster Water Supply Program Status Report

ISSUE SUMMARY

To provide an update on the Post Disaster Water Supply program.

BACKGROUND

The Post Disaster Water Supply program was initiated in 2016 to identify areas of the Regional Water Supply system that would be susceptible to failure due to a seismic event, identify areas of the system and critical infrastructure that lacked redundancy, establish a plan and acquire materials and equipment, and construct new infrastructure to enable the provision of water following a major disaster.

The ability to provide drinking water to citizens and communities following a natural disaster is critically important to support life, sanitation and personal hygiene, and eventual recovery. Earthquakes pose the largest threat to water infrastructure, particularly older, smaller diameter pipe infrastructure. An earthquake could cause hundreds of breaks in water pipes which would cause a loss of water system pressure, contamination, and drinking water service disruptions or even complete loss of service in some areas. The majority of the Regional Water Supply Transmission Mains that convey water to the distribution systems are considered to be more seismically resilient as they are either steel pipes with welded joints, or ductile iron or polyvinyl chloride (PVC) with fused or mechanically restrained joints.

To mitigate water system failures, staff have taken a near term and long term approach to seismic mitigation and planning for post disaster water supply.

In the near term a Post Disaster Water Supply program has been implemented which focuses on preparedness and the ability to provide a rapid response to a system failure.

To date, the program has been focused on the following main components detailed below:

- Emergency Repair Parts identifying, planning, and procuring critical repair parts for the repair of large diameter transmission mains.
- Seismic Resilient Hydrants identifying locations and installing hydrants directly to transmission mains that are seismically resilient to allow the ability to draw water from the transmission mains to supply portable distribution systems.
- Water Distribution Modules designing and constructing drinking water dispensing units to be connected to the hydrants identified in the Seismic Resilient Hydrant program.
- Transmission Main Upgrades planning for the replacement of the most vulnerable water transmission mains

To fund the program, the Regional Water Supply Commission committed \$100,000 in 2016 and \$200,000 in 2017 through 2026. The Saanich Peninsula Water Commission and the Juan de Fuca

Water Distribution Commission committed program funding in 2018 through 2026 of \$150,000 and \$50,000 respectively. All amounts are annual commitments. In addition, a number of capital projects have been identified in each service's 5 year capital plan to continue to address seismic resilience and system redundancy.

Emergency Repair Parts

A wide range of repair components and parts are warehoused to respond to failures in the Regional system. The transmission system is comprised of varying diameters of transmission mains and material types including welded steel (65%), ductile iron (11%), PVC (7%), and concrete cylinder pipe (10%). Emergency repair components are held by the CRD and include: couplings, butt-straps (for repair), valves, etc. Depending on the failure mode, welded steel can typically be repaired in the field by welding. Concrete cylinder pipe is generally the most vulnerable to a seismic event, and custom made repair couplings have been procured that can transition from concrete to either steel or ductile iron; the cost of these couplings was \$353,000. Typical repair of concrete cylinder pipe would involve removing a complete pipe section and transitioning to new steel or ductile iron sections. Four full length (40 feet) sections of large diameter steel pipe have been ordered, at a cost of \$230,000 to be stored for emergency repairs and are expected to be shipped in the coming months.

Seismic Resilient Hydrants

Seismic resilient hydrants have been designed to be served by large diameter welded steel transmission mains and have been hardened to resist seismic disturbances. These hydrants feature fully restrained joints including bolted tapping sleeves which provides the connections to the steel transmission mains. The hydrants have been coloured dark blue to distinguish them from municipal hydrants. They can also be used as a regular fire hydrant for local fire departments, however that is not the primary intent.

Status of the hydrant installation is summarized as follows:

- To date, 10 seismically resilient hydrants have been installed.
- There are an additional 15 proposed hydrants that will be reviewed during transmission main upgrades and installed as funding allows.

Water Distribution Modules

Should a seismic event affect local distribution systems' abilities to provide water to users, there will be a need to dispense and distribute water to the public. In order to meet this immediate need Water Distribution Modules have been developed. These modules are comprised of trailer mobile modules and a semi-permanent module contained within a sea-can. The trailer module can be deployed at a moment's notice and the sea-can module can be moved with a crane truck or can be situated in the proximity of a hardened hydrant for use when needed. Currently one of each type of module is available and a second trailer module has been ordered, at a cost of \$281,000 with delivery expected at the end of 2022. Training of Capital Regional District (CRD) staff is typically completed once per year. This year the training was offered to stakeholders on the Saanich Peninsula including Municipal and First Nations Governments.

<u>Transmission Main Upgrades</u>

Transmission main upgrades have been planned in both the Regional Water and Saanich Peninsula Water systems. These upgrades are part of each service's capital plan and are summarized as follows:

- Regional Water Transmission Main #4 (Goldstream Avenue/Station Avenue)
 Replacement replacing approximately 1.9 kilometers (km) of existing concrete pipe with
 1,400 millimetre (mm) diameter welded steel pipe from Leigh Road to Veterans Memorial
 Parkway; and, Transmission Main #1 upgrades (Humpback/Watkiss/Pressure Release
 Valve Stations). Estimated budget expenditure over the next 5 years is \$33.9 million.
- Saanich Peninsula Water Replacing 3.5 km of existing asbestos cement pipe with 500 mm diameter ductile iron pipe with mechanically restrained joints (Willingdon Road). This pipe is a Sidney and North Saanich supply pipe; and, installing approximately 3 km of new 600 mm diameter ductile iron transmission main with mechanically restrained joints along East Saanich Road (Bear Hill Interconnect) to build redundancy to the Saanich Peninsula water supply, as the current supply main is not seismically restrained and there is no redundant piping. Estimated budget expenditure over the next 5 years is \$14.7 million.

In the long term the Regional Water Supply Service 2022 Master Plan has identified critical assets for upgrade or replacement, and recommended redundancy in the system such as twinning critical transmission mains. This approach will build a more resilient and redundant system over time. Similarly, ongoing upgrades in the Saanich Peninsula Water system and Juan de Fuca Distribution system are continually reviewed to identify additional opportunities to improve system resilience. For example, when smaller diameter water mains are replaced based on age and condition, a review is completed to determine if the main should be upgraded to a seismic resilient standard to further extend the resiliency of the system.

Additional Initiatives and Next Steps

Staff are developing a simplified version of the water distribution module called a Drop Kit which utilizes a pillow tank for storage and a tap stand for the public to fill their own containers. These smaller units can be placed in the back of a pickup truck and dropped off as need at the desired locations. The drop kits will take under 30 minutes to setup and start delivering water. The connection to the hydrant should be completed by a Water Operator, after the initial connection, the unit can be operated by other staff or volunteers. Three complete standalone kits will be developed this year, at an estimated cost of \$90.000.

At the direction of the Saanich Peninsula Water Commission, staff engaged stakeholders on the Saanich Peninsula to initiate a post disaster water supply – technical working group. The general mandate of the group is to develop a plan for the Saanich Peninsula Post Disaster Water Supply. Regular meetings have been ongoing since 2021 and have been well received by the group, which is made up of members from: District of North Saanich, Town of Sidney, District of Central Saanich, Victoria Airport Authority, BC Ferries, Pauquachin, Tsawout, Tsartlip, and Tseycum First Nations.

Reservoir seismic valves are located at a number of reservoirs throughout the water systems. Additional seismic valves are planned for 2022/2023. In addition, as new reservoirs are constructed, seismic valves are included as part of the project. The intent is to have these valves located on one cell of each multiple cell reservoir. During a seismic event the valve automatically closes holding the water in the cell for emergency use.

Water Operations has one water truck that can be used as a bulk water hauler if and when needed. In addition four pillow tanks have been purchased that fit within a dump truck bed. This will essentially turn a standard dump truck into a bulk water hauler if needed following a seismic

event. It is anticipated that these would be used to shuttle water from a hardened hydrant to areas without a functioning distribution system. A vessel to unload the water into would be required such as a drop kit with pillow tanks.

CONCLUSION

The Post Disaster Water Supply program began in 2016 with the Regional Water Supply Commission and was joined in 2018 by the Saanich Peninsula Water Commission and the Juan de Fuca Water Distribution Commission. This report provides an update on the program and planned next steps.

RECOMMENDATION

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

| Submitted by: | Shayne Irg, PEng., Senior Manager, Water Infrastructure Operations |
|---------------|---|
| Concurrence: | Ted Robbins, BSc., CTech., General Manager, Integrated Water Services |
| Concurrence: | Robert Lapham, MCIP, RPP, Chief Administrative Officer |

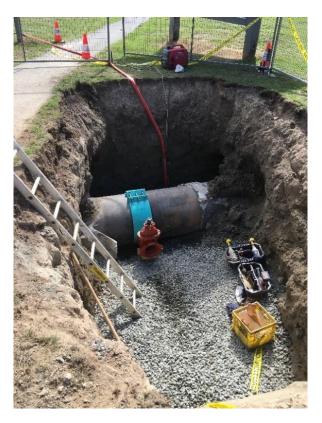
ATTACHMENT

Appendix A: Post Disaster Water Supply Photos



Post Disaster Water Supply - Photos

Photos of a seismic resilient hydrant installation:





Photos of the mobile distribution and semi-permanent modules:









CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES Water Watch

Issued June 06, 2022

Water Supply System Summary:

1. Useable Volume in Storage:

| Reservoir | May 31 5 Year Ave | | May 31/21 | | June | % Existing Full Storage | |
|------------|----------------------|--------|-----------|--------|---------|-------------------------|-------|
| | ML | MIG | ML | MIG | ML | MIG | |
| Sooke | 87,865 | 19,330 | 86,327 | 18,992 | 91,352 | 20,098 | 98.5% |
| Goldstream | 7,467 | 1,643 | 8,702 | 1,914 | 9,905 | 2,179 | 99.9% |
| Total | 95,332 | 20,973 | 95,029 | 20,906 | 101,257 | 22,277 | 98.7% |

2. Average Daily Demand:

 For the month of May
 121.5 MLD
 26.72 MIGD

 For week ending June 05, 2022
 134.0 MLD
 29.48 MIGD

 Max. day May 2022, to date:
 141.5 MLD
 31.13 MIGD

3. Average 5 Year Daily Demand for May

Average (2017 - 2021) 149.4 MLD ¹ 32.86 MIGD ²

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

4. Rainfall May:

Average (1914 - 2021): 47.4 mm

Actual Rainfall to Date 71.1 mm (150% of monthly average)

5. Rainfall: Sep 1- Jun 5

Average (1914 - 2021): 1,553.9 mm

2021 - 2022 1,980.3 mm (127% of average)

6. Water Conservation Action Required:

CRD's Stage 1 Water Conservation Bylaw is now in effect through September 30, 2022. 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

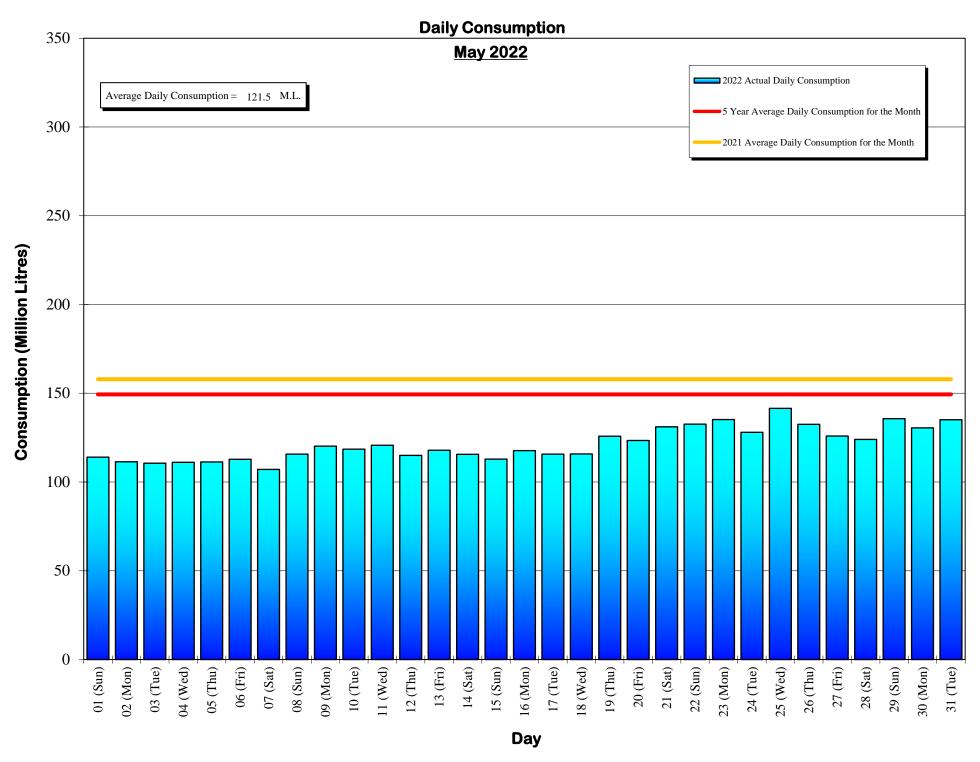
er, OND - integrated water Services

Glenn Harris, Ph D., RPBio

Senior Manager - Environmental Protection

Capital Regional District Integrated Water Services 479 Island Highway Victoria, BC V9B 1H7

(250) 474-9600



Daily Consumptions: - May 2022

| Date | | tal Consur | _ | Air Temp Japan | erature @ Gulch | Weather Conditions | Precipitati | ion @ Sooke Res | S.: 12:00am to |
|----------|--------|------------|---------------------|-------------------|--------------------|-----------------------------|---------------|------------------|-----------------------|
| | (ML) 1 | | (MIG) ^{2.} | High (°C) | Low (°C) | | Rainfall (mm) | Snowfall 3. (mm) | Total Precip. |
| 01 (Sun) | 114.0 | | 25.1 | 15 | 4 | Cloudy / P. Sunny | 0.0 | 0.0 | 0.0 |
| 02 (Mon) | 111.4 | | 24.5 | 14 | 7 | Cloudy / Showers | 2.3 | 0.0 | 2.3 |
| 03 (Tue) | 110.6 | | 24.3 | 12 | 7 | Cloudy / Showers | 0.3 | 0.0 | 0.3 |
| 04 (Wed) | 111.1 | | 24.4 | 13 | 6 | Cloudy / Showers | 1.3 | 0.0 | 1.3 |
| 05 (Thu) | 111.3 | | 24.5 | 9 | 7 | Cloudy / Showers | 13.7 | 0.0 | 13.7 |
| 06 (Fri) | 112.8 | | 24.8 | 11 | 5 | Sunny / P. Cloudy | 0.0 | 0.0 | 0.0 |
| 07 (Sat) | 107.1 | <=Min | 23.6 | 11 | 4 | Sunny / P. Cloudy / Showers | 0.3 | 0.0 | 0.3 |
| 08 (Sun) | 115.7 | | 25.4 | 11 | 3 | Sunny / P. Cloudy / Showers | 2.5 | 0.0 | 2.5 |
| 09 (Mon) | 120.2 | | 26.4 | 13 | 3 | Cloudy / P. Sunny | 0.0 | 0.0 | 0.0 |
| 10 (Tue) | 118.5 | | 26.1 | 15 | 4 | Sunny / P. Cloudy | 0.0 | 0.0 | 0.0 |
| 11 (Wed) | 120.7 | | 26.6 | 13 | 4 | Sunny / P. Cloudy / Showers | 0.5 | 0.0 | 0.5 |
| 12 (Thu) | 115.0 | | 25.3 | 11 | 4 | Cloudy / Showers / P. Sunny | 2.0 | 0.0 | 2.0 |
| 13 (Fri) | 117.9 | | 25.9 | 13 | 3 | Sunny / P. Cloudy / Showers | 0.8 | 0.0 | 0.8 |
| 14 (Sat) | 115.6 | | 25.4 | 15 | 7 | Sunny / P. Cloudy / Showers | 2.5 | 0.0 | 2.5 |
| 15 (Sun) | 112.9 | | 24.8 | 14 | 8 | Cloudy / Showers / P. Sunny | 10.6 | 0.0 | 10.6 |
| 16 (Mon) | 117.7 | | 25.9 | 14 | 5 | Sunny / P. Cloudy / Showers | 0.5 | 0.0 | 0.5 |
| 17 (Tue) | 115.7 | | 25.4 | 13 | 5 | Sunny / P. Cloudy | 0.0 | 0.0 | 0.0 |
| 18 (Wed) | 115.8 | | 25.5 | 11 | 6 | Cloudy / Rain | 18.3 | 0.0 | 18.3 |
| 19 (Thu) | 125.8 | | 27.7 | 14 | 5 | Cloudy /P. Sunny | 0.0 | 0.0 | 0.0 |
| 20 (Fri) | 123.4 | | 27.1 | 17 | 4 | Sunny / P. Cloudy | 0.0 | 0.0 | 0.0 |
| 21 (Sat) | 131.1 | | 28.8 | 20 | 5 | Sunny | 0.0 | 0.0 | 0.0 |
| 22 (Sun) | 132.6 | | 29.2 | 21 | 7 | Cloudy / P. Sunny | 0.0 | 0.0 | 0.0 |
| 23 (Mon) | 135.2 | | 29.7 | 18 | 10 | Cloudy / P. Sunny | 0.0 | 0.0 | 0.0 |
| 24 (Tue) | 128.0 | | 28.2 | 14 | 9 | Cloudy / Showers / P. Sunny | 0.3 | 0.0 | 0.3 |
| 25 (Wed) | 141.5 | <=Max | 31.1 | 18 | 9 | Cloudy / Showers / P. Sunny | 0.5 | 0.0 | 0.5 |
| 26 (Thu) | 132.5 | | 29.1 | 16 | 8 | Cloudy / Showers / P. Sunny | 12.4 | 0.0 | 12.4 |
| 27 (Fri) | 125.9 | | 27.7 | 16 | 8 | Cloudy / Showers / P. Sunny | 1.3 | 0.0 | 1.3 |
| 28 (Sat) | 124.0 | | 27.3 | 15 | 8 | Cloudy / Showers | 0.5 | 0.0 | 0.5 |
| 29 (Sun) | 135.7 | | 29.9 | 16 | 7 | Cloudy /P. Sunny | 0.0 | 0.0 | 0.0 |
| 30 (Mon) | 130.5 | | 28.7 | 15 | 7 | Cloudy / Showers / P. Sunny | 0.5 | 0.0 | 0.5 |
| 31 (Tue) | 135.1 | | 29.7 | 20 | 9 | Sunny / P. Cloudy | 0.0 | 0.0 | 0.0 |
| TOTAL | 3765.3 | ML | 828.41 MIG | | | | 71.1 | 0 | 71.1 |
| MAX | 141.5 | | 31.13 | 21 | 10 | | 18.3 | 0 | 18.3 |
| AVG | 121.5 | | 26.72 | 14.5 | 6.1 | | 2.3 | 0 | 2.3 |
| MIN | 107.1 | | 23.56 | 9 | 3 | | 0.0 | 0 | 0.0 |

1. ML = Million Litres

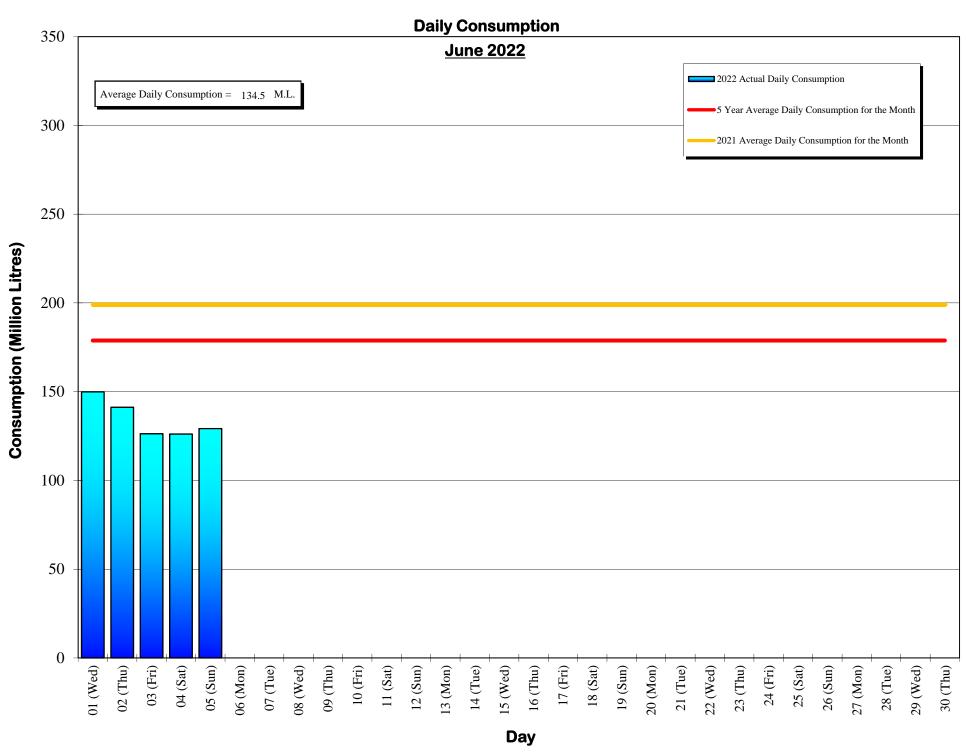
2. MIG = Million Imperial Gallons

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

| Average Rainfall for May (1914-2021) | 47.4 mm |
|--|------------|
| Actual Rainfall: May | 71.1 mm |
| % of Average | 150% |
| Average Rainfall (1914-2021): Sept 01 - Jun 05 | 1,553.9 mm |
| Actual Rainfall (2021): Sept 01 - Jun 05 | 1,980.3 mm |
| % of Average | 127% |

Number days with precip. 0.2 or more

Water spilled at Sooke Reservoir to date (since Sept. 1) = 12.54 Billion Imperial Gallons



Daily Consumptions: - June 2022

| Date | | otal Consur | | Japan | erature @ Gulch | Weather Conditions | Precipitati | ion @ Sooke Re 12:00am | |
|----------|-------|-------------|---------------------|-----------|--------------------|-----------------------------|---------------|---------------------------|---------------|
| | (ML) | | (MIG) ^{2.} | High (°C) | Low (°C) | | Rainfall (mm) | Snowfall 3. (mm) | Total Precip. |
| 01 (Wed) | 149.9 | <=Max | 33.0 | 21 | 10 | Cloudy /P. Sunny | 0.0 | 0.0 | 0.0 |
| 02 (Thu) | 141.2 | | 31.1 | 22 | 12 | Cloudy / Showers / P. Sunny | 0.5 | 0.0 | 0.5 |
| 03 (Fri) | 126.3 | | 27.8 | 19 | 11 | Cloudy / Showers | 14.2 | 0.0 | 14.2 |
| 04 (Sat) | 126.1 | <=Min | 27.7 | 17 | 10 | Cloudy / Showers | 6.1 | 0.0 | 6.1 |
| 05 (Sun) | 129.2 | | 28.4 | 18 | 10 | Cloudy / Showers / P. Sunny | 1.0 | 0.0 | 1.0 |
| 06 (Mon) | | | | | | | | | |
| 07 (Tue) | | | | | | | | | |
| 08 (Wed) | | | | | | | | | |
| 09 (Thu) | | | | | | | | | |
| 10 (Fri) | | | | | | | | | |
| 11 (Sat) | | | | | | | | | |
| 12 (Sun) | | | | | | | | | |
| 13 (Mon) | | | | | | | | | |
| 14 (Tue) | | | | | | | | | |
| 15 (Wed) | | | | | | | | | |
| 16 (Thu) | | | | | | | | | |
| 17 (Fri) | | | | | | | | | |
| 18 (Sat) | | | | | | | | | |
| 19 (Sun) | | | | | | | | | |
| 20 (Mon) | | | | | | | | | |
| 21 (Tue) | | | | | | | | | |
| 22 (Wed) | | | | | | | | | |
| 23 (Thu) | | | | | | | | | |
| 24 (Fri) | | | | | | | | | |
| 25 (Sat) | | | | | | | | | |
| 26 (Sun) | | | | | | | | | |
| 27 (Mon) | | | | | | | | | |
| 28 (Tue) | | | | | | | | | |
| 29 (Wed) | | | | | | | | | |
| 30 (Thu) | | | | | | | | | |
| TOTAL | 672.7 | ML | 147.98 MIG | | | | 21.8 | 0 | 21.8 |
| MAX | 149.9 | | 32.97 | 22 | 12 | | 14.2 | 0 | 14.2 |
| AVG | 134.5 | | 29.60 | 19.4 | 10.6 | | 4.4 | 0 | 4.4 |
| MIN | 126.1 | | 27.74 | 17 | 10 | | 0.0 | 0 | 0.0 |

1. ML = Million Litres

2. MIG = Million Imperial Gallons

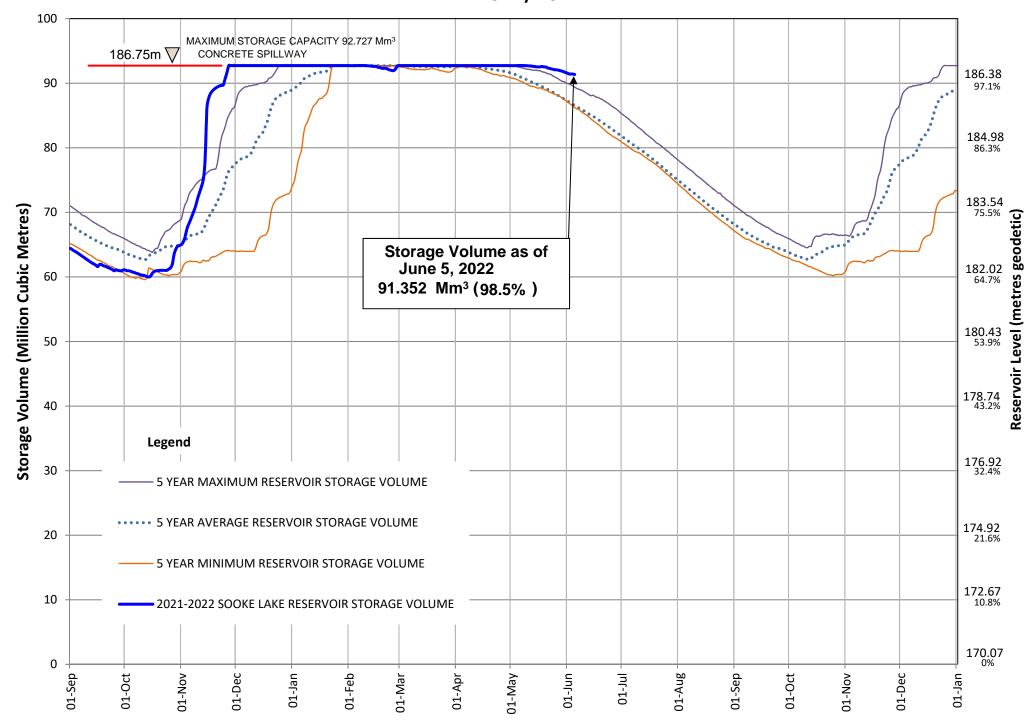
3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

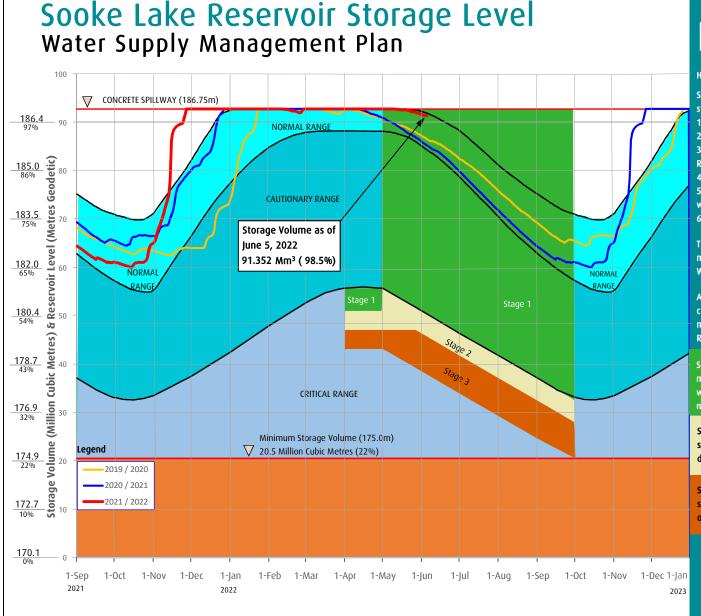
| Average Rainfall for June (1914-2021) | 35.4 mm |
|--|--------------------------|
| Actual Rainfall: June | 21.8 mm |
| % of Average | 62% |
| | |
| Average Rainfall (1914-2021): Sept 01 - Jun 05 | 1,553.9 mm |
| Average Rainfall (1914-2021): Sept 01 - Jun 05 Actual Rainfall (2021): Sept 01 - Jun 05 | 1,553.9 mm 1,980.3 mm |

Number days with precip. 0.2 or more

Water spilled at Sooke Reservoir to date (since Sept. 1) = 12.54 Billion Imperial Gallons = 57.00 Billion Litres

SOOKE LAKE RESERVOIR STORAGE SUMMARY 2021 / 2022





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.

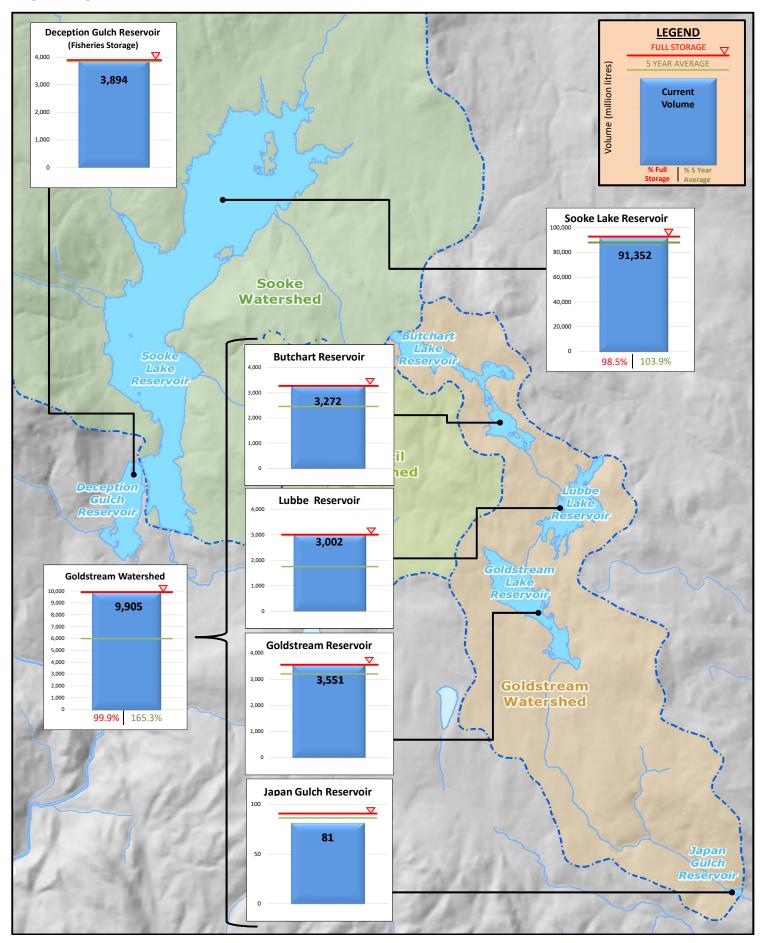
Stage 3 Is initiated when it is determined that there is a severe water supply shortage. During this time, lawn watering is not permitted. Other outdoor water use activities are restricted as well.

For more information, visit www.crd.bc.ca/drinkingwater





Useable Reservoir Volumes in Storage for June 05, 2022



Motion with Notice Regional Water Supply Commission Wednesday, May 18, 2022

SUBJECT Delegation of Mining Access Requests (April 20, 2022)

RECOMMENDATION

That staff investigate the implications of delegating the mining access requests to staff and that a set of policies be put in place.

SUBMITTED BY:

Commissioner Chris Graham