

**REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, MAY 18, 2022**

SUBJECT **Greater Victoria Drinking Water Quality – 2021 Annual Report**

ISSUE SUMMARY

To present the 2021 annual report to the Regional Water Supply Commission prior to submission to the provincial regulator.

BACKGROUND

The Capital Regional District (CRD) undertakes a comprehensive water quality monitoring program as part of its multi-barrier approach to provide a safe drinking water supply to the region. The Water Quality Monitoring program reports water trends on a regular basis to the Commission, along with a comprehensive annual report for each calendar year. The Greater Victoria Drinking Water Quality 2021 Annual Report is attached as Appendix A. Water suppliers in BC are responsible for monitoring and providing an annual report to the provincial regulator (i.e., Island Health Authority). To assist in meeting these responsibilities, the CRD has prepared this report, which will be distributed to Island Health and all municipal water purveyors, and posted on the CRD website.

ALTERNATIVES

Alternative 1

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

Alternative 2

That the Regional Water Supply Commission direct staff to provide further information.

IMPLICATIONS

Environmental & Climate Implications

The report indicates that our source water remains in good condition and there is excellent drinking water quality in all system components of the Greater Victoria Drinking Water System. The system is monitored for physical, chemical and biological water quality parameters. All trends are stable and indicate good conditions overall. During the beginning of January, the operation of the ammonia injection system had to be temporarily discontinued to facilitate the repair of a small leak in the feed line. However, the resulting switch from chloramines to free chlorine for secondary disinfection had no effect on the efficacy of the disinfection process and the safety of the drinking water was never compromised. The CRD did issue a taste and odour related public advisory for the duration of this event.

Monitoring results indicate the CRD continues to meet guidelines for maintaining an unfiltered source water supply. Further monitoring within the distribution systems also indicates a good balance between managing bacterial growth and ensuring good water quality with low concentrations of disinfection byproducts.

Extreme weather events in the region in 2021 had no adverse effect on the drinking water quality. The heatwave in early summer resulted in a sharper rise in water temperatures in Sooke Lake and may have caused higher bacteria concentrations during the summer in the reservoir. But these raw water conditions were well within the capacity of both treatment plants and therefore had no consequence for the drinking water quality. The extreme rainfall and runoff during the atmospheric river event on November 14-15 had no measurable effect on the raw water quality extracted from Sooke Lake Reservoir. This has demonstrated the resilience of a water source that is integrated in a healthy and stable ecosystem, such as the Sooke Lake watershed.

Financial and Regulatory Implications

The reporting function is included within the overall budget for the Water Quality Monitoring Program. This task is essential for ensuring there is adequate information to inform and work with Island Health officials, meet provincial regulatory requirements and federal guidelines, and ensure CRD staff have sufficient information to maintain proper oversight of the water supply system.

The CRD continues to provide compliance monitoring of the municipal systems within the region to deliver effective and efficient oversight for both monitoring and reporting of water quality within the overall distribution system. Responsibility for any issues that may arise remains the responsibility of the municipalities.

Social Implications

The full disclosure of water quality monitoring data maintains public confidence that the CRD is effectively managing the regional drinking water supply. The data and reports are available online through the CRD public website. Staff respond to direct customer concerns and questions, and work with CRD operational staff, municipal staff, small system operators and Island Health officials to ensure good communication and support for the overall system.

CONCLUSION

The water quality monitoring program remains an essential component in the delivery of a safe drinking water supply to the region. Monitoring results summarized in the Greater Victoria Drinking Water Quality – 2021 Annual Report indicate good water quality overall, with the low risks associated with the unfiltered source water being well managed by the CRD multi-barrier approach. Once the report is approved by the Board, it will be submitted to the Island Health Authority, as per the requirement under the BC Drinking Water Protection Act.

RECOMMENDATION

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

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENT

Appendix A: Greater Victoria Drinking Water Quality – 2021 Annual Report