



WATER SUPPLY ADVISORY COMMITTEE

Monday, June 7, 2021
Via Zoom, 1975 Field Road, Sechelt, B.C.

AGENDA

CALL TO ORDER 3:30 p.m.

AGENDA

1. Adoption of Agenda

PRESENTATIONS AND DELEGATIONS

BUSINESS ARISING FROM MINUTES AND UNFINISHED BUSINESS

MINUTES

2. Water Supply Advisory Committee Meeting Minutes of May 3, 2021 – *for receipt only* Annex A
pp 1 - 3

REPORTS

3. 2020 Leak and High Use Analysis Annex B
Manager, Strategic Initiatives pp 4 - 8
4. Update on Current Water Supply Projects Verbal
General Manager, Infrastructure Services
5. Water Meter Communications Verbal
Manager, Strategic Initiatives

COMMUNICATIONS

NEW BUSINESS

NEXT MEETING July 5, 2021 @ 3:30 p.m.

ADJOURNMENT

**SUNSHINE COAST REGIONAL DISTRICT
WATER SUPPLY ADVISORY COMMITTEE**

May 3, 2021

RECOMMENDATIONS FROM THE WATER SUPPLY ADVISORY COMMITTEE MEETING
HELD VIA ZOOM

PRESENT:	Chair Vice-Chair	S. Thurber D. McCreath D. Marteinson A. Skelley M. Hennessy T. Beck T. Adams
ALSO PRESENT:	Director, Area F Director Area D Sechelt Indian Government District Town of Gibsons	M. Hiltz A. Tize A. Paul (part) B. Beamish (part)
(Non-voting)	GM, Infrastructure Services Manager, Strategic Initiatives Water Sustainability Coordinator Administrative Assistant/Recorder	R. Rosenboom M. Edbrooke J. Callaghan T. Ohlson
	Public	2
REGRETS:		J. Bowen T. Silvey B. Fielding

Directors, staff, and other attendees present for the meeting participated by means of electronic or other communication facilities in accordance with Sunshine Coast Regional District Board Procedures Bylaw 717.

CALL TO ORDER 3:30 p.m.

AGENDA The agenda was adopted as presented.

MINUTES

Recommendation No. 1 *Water Supply Advisory Committee Meeting Minutes of
April 12, 2021*

The Water Supply Advisory Committee recommended that the Water Supply Advisory Committee meeting minutes of April 12, 2021 be received for information.

REPORTS

Recommendation No. 2 *WASAC's Water Supply Planning Questions - Update*

The Water Supply Advisory Committee recommended that the report titled WASAC's Water Supply Planning Questions - Update be received for information.

Discussion included the following:

- Total water demand of Chapman Creek Water System

The General Manager, Infrastructure Services provided the Committee with an update on Water Supply projects which included the Langdale Well Field development, Gray Creek treatment upgrades and Church Road Well Field.

Discussion included the following:

- Lease land for Langdale well field development
- Gray Creek water licence amendment for additional infrastructure

Water Metering

- Data that water meters provide is valuable
- What is the value of a million m³ saved through the water meter program per year? How much money is needed to replace that water with wells or additional sources?
- Meters are essential part of long-term water planning
- Importance of public education on water metering prior to Alternative Approval Process
- 9% of residential customers using 38% of metered water supply
- Focus on high users in an effort to reduce excessive water use and fix water leaks is biggest and cheapest water source solution
- Pay-per-use water rate structure

Recommendation No. 3 *Water Metering*

The Water Supply Advisory Committee recommended that staff prepare a report as soon as possible and in support of the Alternative Approval Process on Water Metering that provides a best estimate of the costs of anticipated excessive use and water leakage of the entire SCRD water system;

AND THAT the report include the additional costs for supply, treatment and distribution of increasing the water supply vs water management and water conservation through the water metering program;

AND FURTHER THAT the intent of the staff report is to support the Alternative Approval Process on Water Metering through public education.

Recommendation No. 4 *Water Meter Data*

The Water Supply Advisory Committee recommended that the SCRD Board initiate the discussion now on their approach to how to use water metering data to reduce water leakage and excessive water use.

The Manager, Strategic Initiatives discussed Water Public Participation Activities which included the April 26, 2021 Let's Talk Water event, the Let's Talk SCRD website and the format for the proposed May 26 Let's Talk Water event on the water metering program.

- Analysis report focus for May event
- Presentation with Q & A style
- 7:00 pm time
- Value of facilitated breakout rooms with themes discussed
- Advertising in Coast Reporter and online ads

The Manager, Strategic Initiatives discussed recording of WASAC meetings for members with the Committee.

Discussion included the following:

- Recordings would be public record and posted online
- Concerns raised about limiting open discussion if meetings are recorded
- Recording were initially requested for the use of Committee members, for example if they missed a meeting, not for the public record
- At this point, the Committee has decided not to request that meetings be recorded

Future Meeting Topics

- Analysis Report
- Leak Detection Program

NEXT MEETING June 7, 2021 @ 3:30 p.m.

ADJOURNMENT 5:28 p.m.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Water Supply Advisory Committee – June 7, 2021

AUTHOR: Mia Edbrooke, Manager, Strategic Initiatives

SUBJECT: 2020 LEAK AND HIGH WATER USE ANALYSIS

RECOMMENDATION

THAT the report titled 2020 Leak and High Water Use Analysis be received for information.

BACKGROUND

At the May 13, 2021 meeting, the Infrastructure Services Committee recommended that the Water Supply Advisory Committee meeting minutes of May 3, 2021 be received for information, and the following recommendation be adopted as amended:

Recommendation No. 3 *Water Metering*

The Water Supply Advisory Committee recommended that staff prepare a report as soon as possible and in support of the Alternative Approval Process on Water Metering that provides a best estimate of the costs of anticipated high use and water leakage of the entire SCRD water system;

AND THAT the report include the additional costs for supply, treatment and distribution of increasing the water supply vs water management and water conservation through the water metering program;

AND FURTHER THAT the intent of the staff report is to support the Alternative Approval Process on Water Metering through public education.

The purpose of this report is to provide an analysis of regional leak and high water use data, and summarize communication and public outreach activities.

DISCUSSION

Leak Notification Program

The SCRD launched the Leak Notification Program in 2017 to alert home and business owners of water leaks on their properties. Water leaks are common, from dripping taps or underground water lines, and the SCRD has found about one in every 10 metered properties will have a leak at any given time. Leaks can range in size, and when they are below the surface and not addressed, they can increase in volume over time.

Currently, SCRD staff read water meters monthly and send out leak notifications quarterly. Residents who are signed up for a monthly water use update by email receive their average daily use for that month, a leak notification if present, and a summary of average water use across the region. In addition, through the Leak Notification Program, staff have contacted over 2,500

residential properties about water leaks by direct mail, and in so doing, helped residents prevent property damage and avoid the unnecessary loss of treated drinking water. Residents are responsible for fixing leaks on their property and SCRDR staff support residents through this process.

More information about the Leak Notification Program was included in the November 2, 2020 staff report titled, “Universal Water Metering and Leak Resolution Watermains” (Appendix A).

Leak Analysis

Staff reviewed available data for metered properties, which includes properties in Areas A, B, D, E and F.

Two calculations were made:

1. The total water used by properties, with and without a leak; and
2. How much more water a property with a leak used, compared to a property without a leak.

Using these results, the amount of water lost only due to leaks was estimated.

The following assumptions were used for this analysis:

- Data included metered residential properties only, and excluded multi-unit properties like mobile home parks.
- Time period was January to December 2020.
- Properties had a leak a minimum of one month in 2020.
- For the ratio calculation to compare how much more water a property with a leak used, compared to a property without a leak, North and South Pender water systems use were excluded because the results were much higher, compared to other water systems. Further analysis is needed to understand the data variability, especially given high percentage of seasonal residents on those water systems.
- For the purpose of this analyses high water use is defined as residential usage of more than 500 m³. The SCRDR has not defined or set thresholds for high water use. Note that in 2020, the average residential water usage was approximately 220 m³ per year.

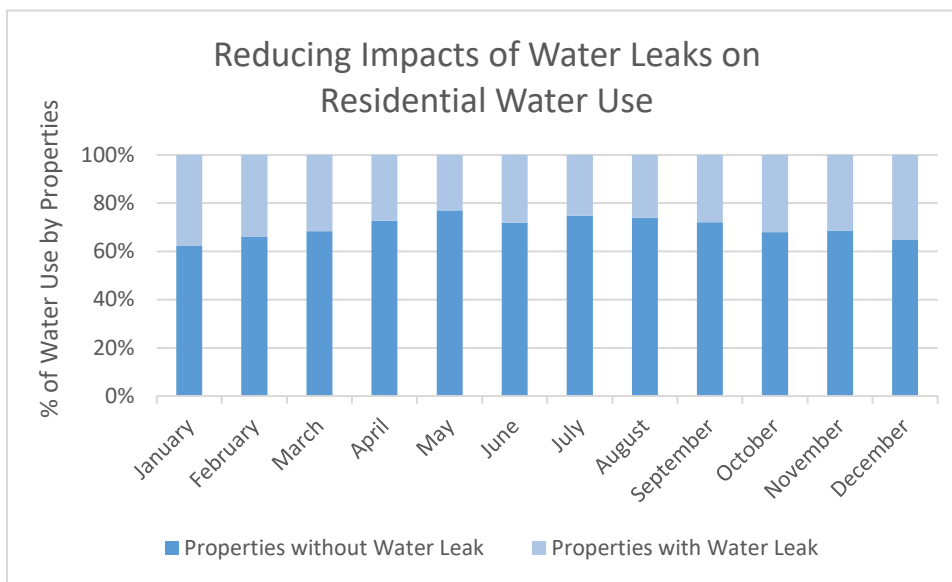
It was calculated that 2,048 out of 5,762 properties had a leak during at least one monthly read, and these properties with a leak accounted for approximately 29% of metered water use. On average, the SCRDR has found homes with water leaks use about four times more water than those without.

It was estimated that all SCRDR properties, with a leak and without a leak, use an additional 630,000 m³ per year, and calculations are presented in Table 1. This is an estimate for all water systems within the Regional Water Service based on the available metered data, as there is currently no residential metered water use data for properties in the Sechelt area.

Table 1: Total Leak Estimates for the SCRD region for 2020*

Total residential metered water use (about half of all SCRD water users)	1,525,000 m ³
Total metered water use for properties with a leak (regular use plus leaked water)	440,000 m ³
% residential metered water use by properties with a leak	29%
Ratio of water used by average properties and properties with a leak**	4 times higher
Estimated total water lost to leaks (actual minus average use, assuming actual use is 4x higher)	440,000 – (440,000/4) = 330,000 m ³
Estimated total leak potential per year (extrapolate to 11,000 properties, all SCRD users)	About 630,000 m ³

Note: * data are still under review and analyses will be updated and refined
 ** North and South Pender water systems excluded



It is important to note that there are different factors that could influence water use trends across different water systems. For example, water restrictions are specific to and can vary for each water system throughout the summer, depending on factors like available water supply or weather forecasts. Water use can vary if the property is the principal residence or not. There is variability across the region and further analysis is needed to better understand these differences.

High Use Analysis

Staff reviewed the 2020 data for all the properties using over 500 m³ per year and of those, 403 had leaks and 78 had no leaks. Many of these leaks were resolved over the year. Properties with a leak account for the majority of high use properties, and staff will continue to focus on leak notification and resolution.

Cost Analysis

The SCRD's budgeting and financials are not currently set up to accurately estimate operating costs per volume of treated water. While all operational expenditures are tracked as per the current accounting standards, they are not recorded in our budgeting and accounting systems in such a way that fixed and variable operational costs can be separated. Therefore, it is not possible to accurately determine the monetary value of the water leaked or saved by addressing leaks. Staff have taken this request into consideration and will seek ways to change our processes.

Communications

The information outlined in this report was the subject of the "Let's Talk Water" forum on May 26. These events provide an opportunity for the public to ask questions about the SCRD's water supply projects and initiatives, including the water meter program. Staff continue to provide information through the SCRD website and the new engagement platform, Let's Talk SCRD. Responses to all new questions asked through Let's Talk SCRD have been posted publicly. In addition, staff have used print advertisements to share information about the water meter program and Let's Talk Water events.

Timeline for Next Steps

As requested by WASAC and the Board, staff are planning more focused communication out to residents who have been using more than 500 m³ per year, with or without leaks, to increase awareness of their water use and water conservation programs in the region.

Staff are improving how water use data and leak notifications are shared with SCRD water users. Currently, only 200 SCRD residential water users receive their monthly water use data by email, a service that was initiated in summer of 2020. In the coming months, staff are working towards improving access to this information through the SCRD's website and email notifications. A review of the Bylaw is scheduled for 2021, which could include options for strengthening approaches to water conservation.

STRATEGIC PLAN AND RELATED POLICES

A fully implemented water meter program supports the following strategies identified in the SCRD 2019-2023 Strategic Plan:

- The Engagement and Communications goal "to proactively engage with our residents, partners and staff in order to share information and obtain their input on issues and decisions that affect them."
- The Asset Stewardship goal, specifically the strategy to have a "plan for and ensure year-round water availability now and in the future".

CONCLUSION

WASAC asked staff to estimate the costs of anticipated water leakage and high use of the SCRD water systems, a cost analysis of expanding supply against water conservation programs, and to use this information to inform the public through the Alternative Approval Process.

Based on the available data for 2020, staff have presented calculations, assumptions, and results to estimate the total water lost through property leaks and high use.

SCRD staff will continue to notify residents with a leak, and will develop more focused communications for residential properties using much more than average, to make them more aware of their consumption and the SCR D’s conservation programs. Staff will continue to share this information with the public through venues like the “Let’s Talk Water” Forum that was presented in May 2021, and through the SCR D website and social media channels, and print advertisements.

APPENDICES:

Appendix A – [November 2, 2020 staff report Universal Water Metering and Leak Resolution Watermains](#)

Appendix B - [Sunshine Coast Regional District Water Rates and Regulations Bylaw No. 422](#)

Reviewed by:			
Manager		Finance	
GM	X – R. Rosenboom	Legislative	
CAO		Water Sustainability Coordinator	X – Jen Callaghan