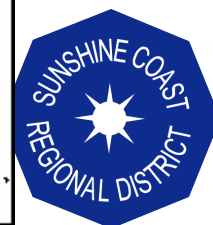
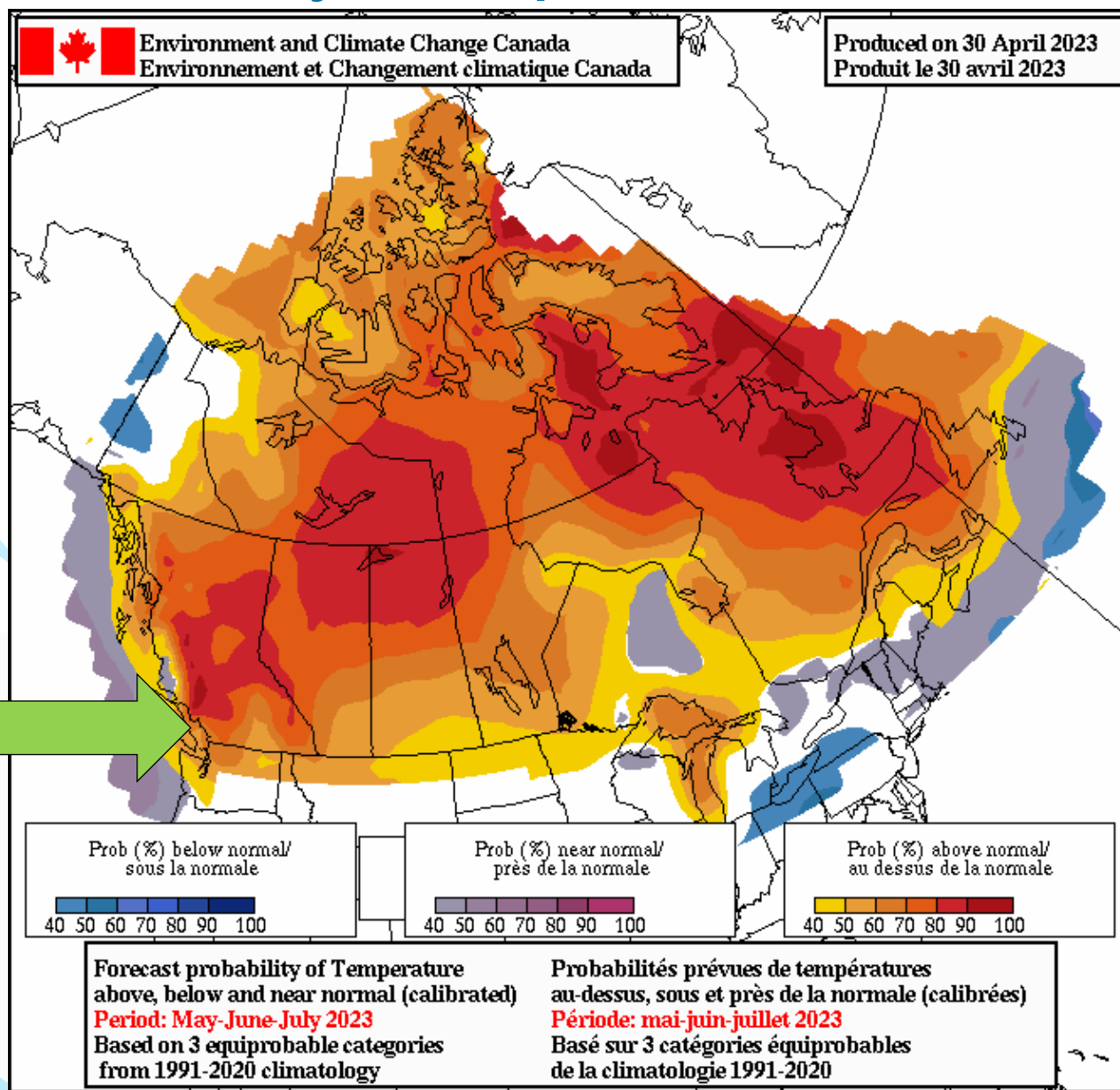


Water Supply Update

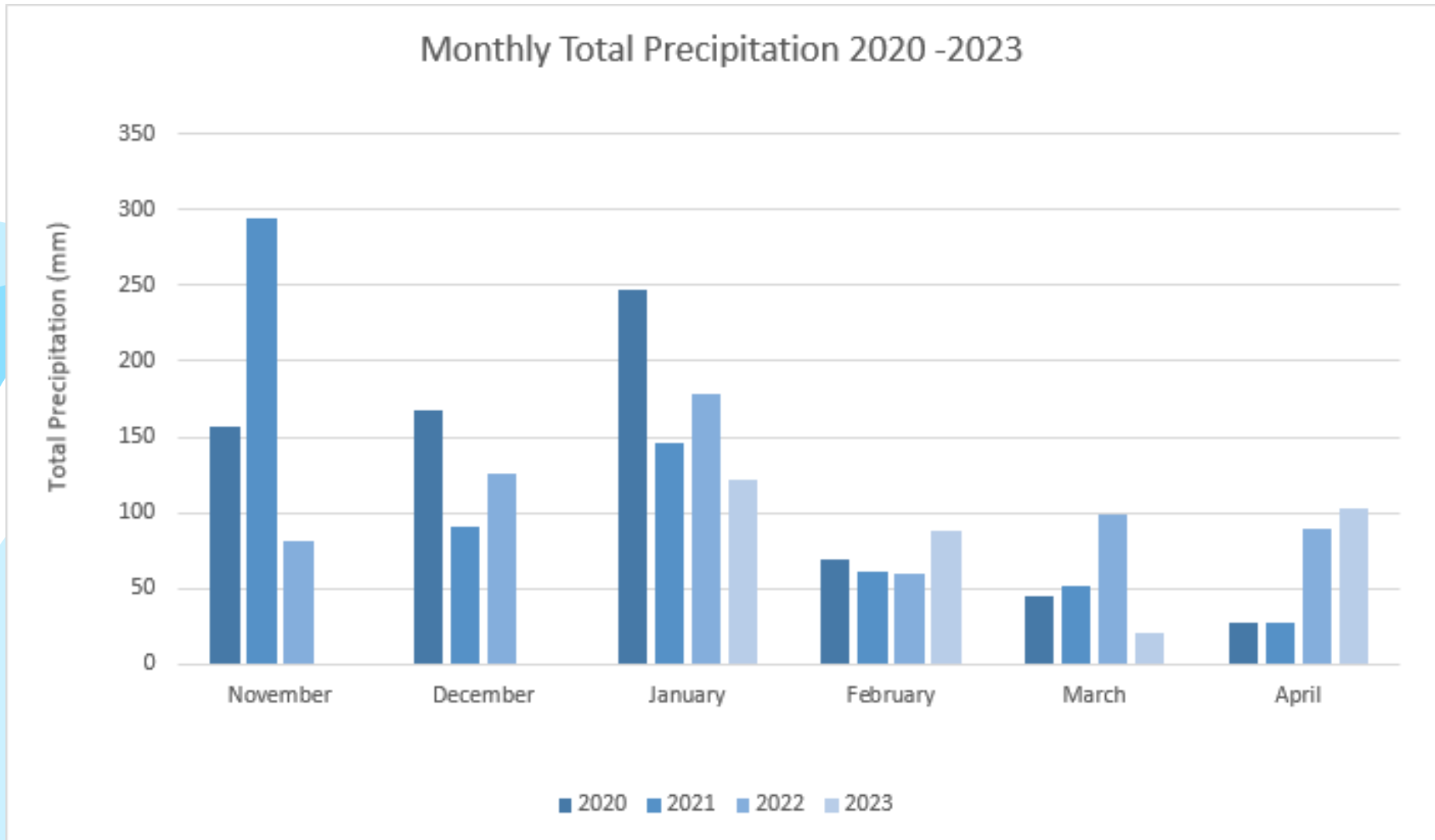
Committee of the Whole
May 11, 2023



May-June-July Temperature Forecast

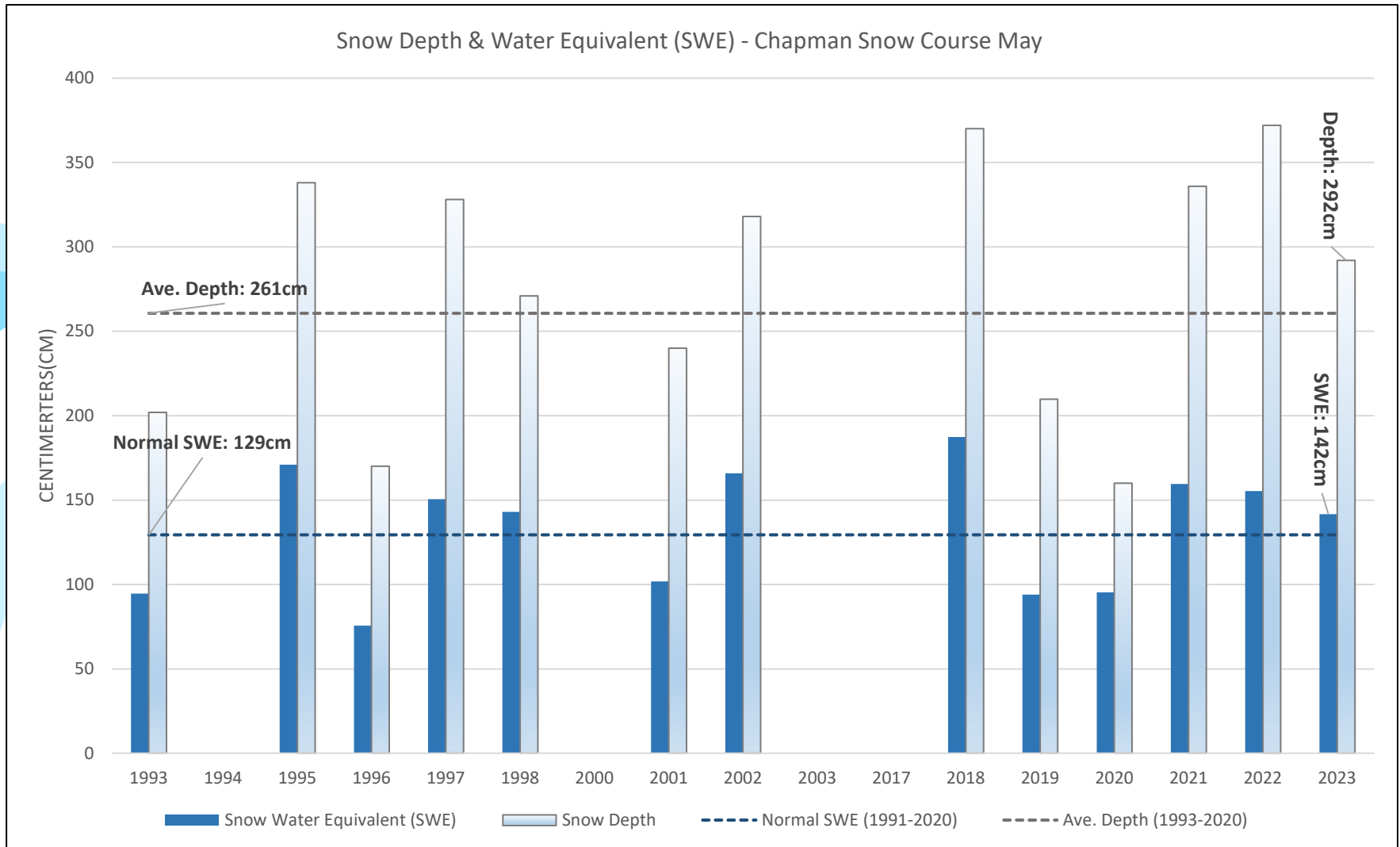


Rainfall Data – Sechelt Airport



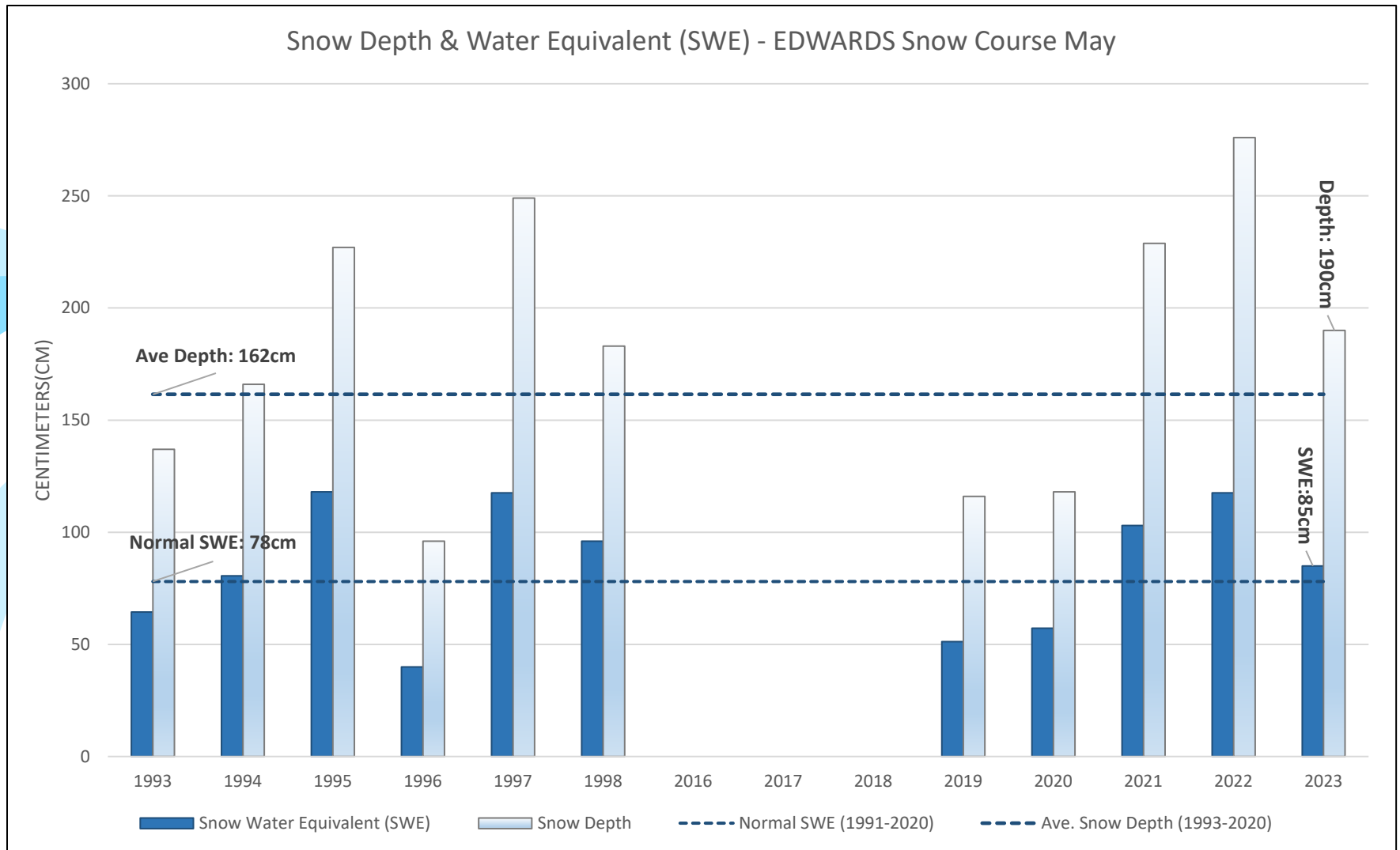
Snow Surveys – May 8, 2023

- Chapman Snow Water Equivalent: 110% of Normal



Snow Surveys – May 8, 2023

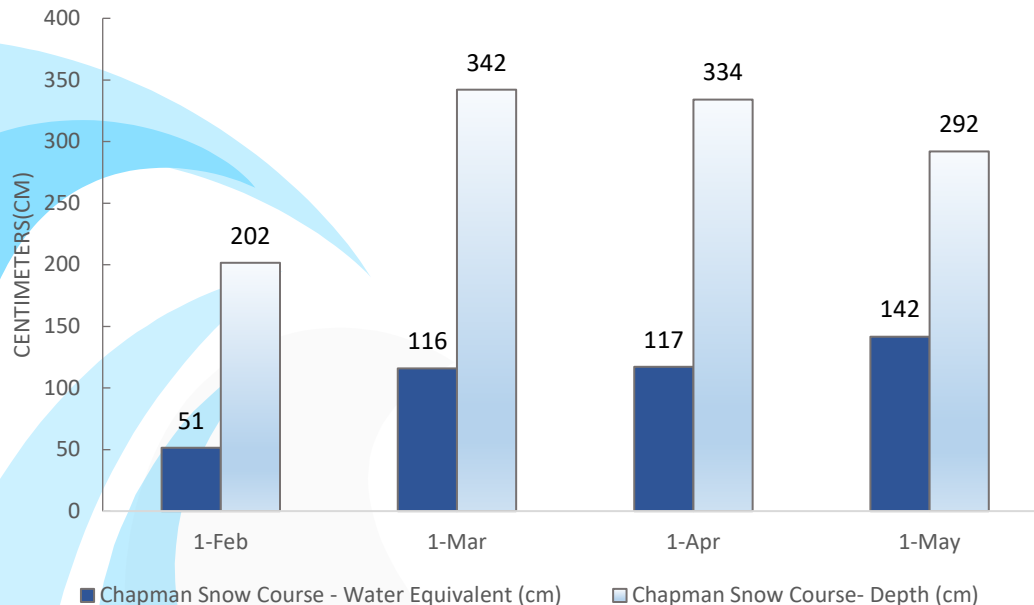
- Edwards Snow Water Equivalent: 109% of Normal



2023 Snowpack Comparison Chapman

- Snow Water Equivalent: Increased by 9% since April

2023 Snow Depth & Water Equivalent (SWE)
Chapman Snow Course

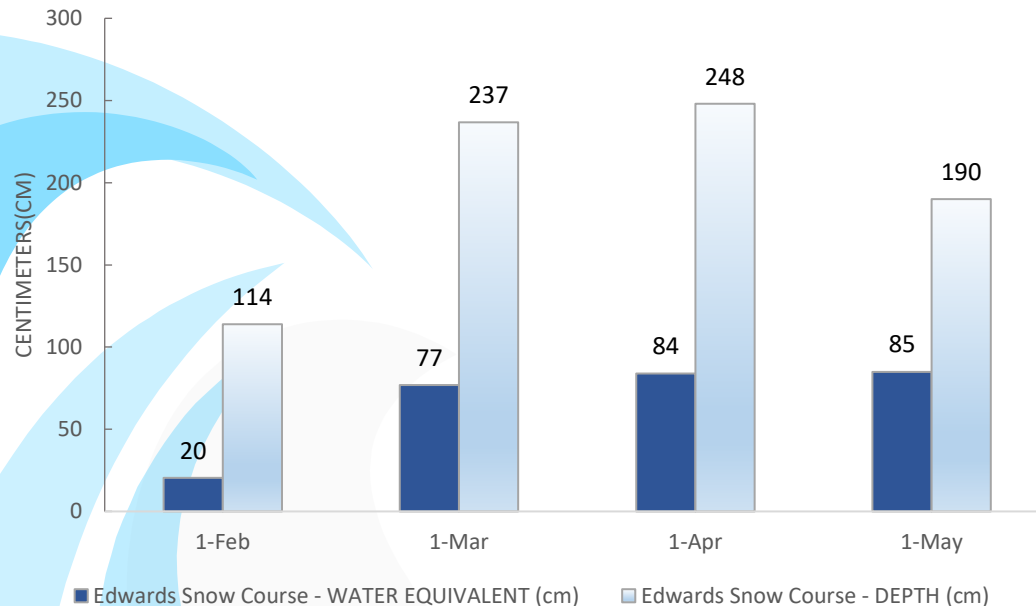


Chapman Dam, May 08, 2023

2023 Snowpack Comparison Chapman

- Snow Water Equivalent: Increased by 1% since April

2023 Snow Depth & Water Equivalent(SWE)
Edwards Snow Course
















Edwards Dam, May 08, 2023

Snowpack - May 2023

- May snow levels are slightly above normal.
- Historically, May surveys show snowpack right before the end of the season when melt rates will start to increase.
- Weather conditions from May-June will determine timing, magnitude and rate of snow melt.



Environment Canada - 7 Day Forecast

▼ Forecast						Hourly Forecast	Alerts	Jet Stream
Wed 10 May	Thu 11 May	Fri 12 May	Sat 13 May	Sun 14 May	Mon 15 May	Tue 16 May		
 20°C Sunny	 21°C Mainly sunny	 23°C Sunny	 25°C Sunny	 28°C Sunny	 28°C Sunny	 26°C Sunny		
Tonight	Night	Night	Night	Night	Night			
 10°C Partly cloudy	 9°C Clear	 10°C Clear	 12°C Clear	 13°C Clear	 13°C Clear			



Drought Response Plan

- Stage 1 Water Conservation Regulations are now in effect.
- Stage changes are not scheduled and are not based on a single factor.
- When each Stage will occur is not possible to predict!
- Decisions about which stage to implement are based on a set of criteria outlined in the Drought Response Plan:
 - Time of year and typical seasonal trends.
 - Snowpack assessments and snowmelt forecasts.
 - How much water is left in the lakes.
 - How fast the lake level is going down.
 - Stream flows and monitoring data.
 - Quantity of water available from well sources.
 - Weather and forecasts.
 - Water usage, recent consumption and trends.
 - Water supply system performance.



Water Conservation Communications

In preparation for summer











- Water Conservation Regulations chart sent to all households. Water conservation tips provided on the reverse side for in and out of the home.

Upcoming communications in May

- Celebrate drinking water week.
- Share “Get Ready for Summer” info.
- Work with recipients of the high use letters to help them understand their water use.
- Continue to address major ongoing leaks that may be issued shut off notices.
- Work with communications to develop a graphical representation of current water scenarios.

Water Conservation Regulations

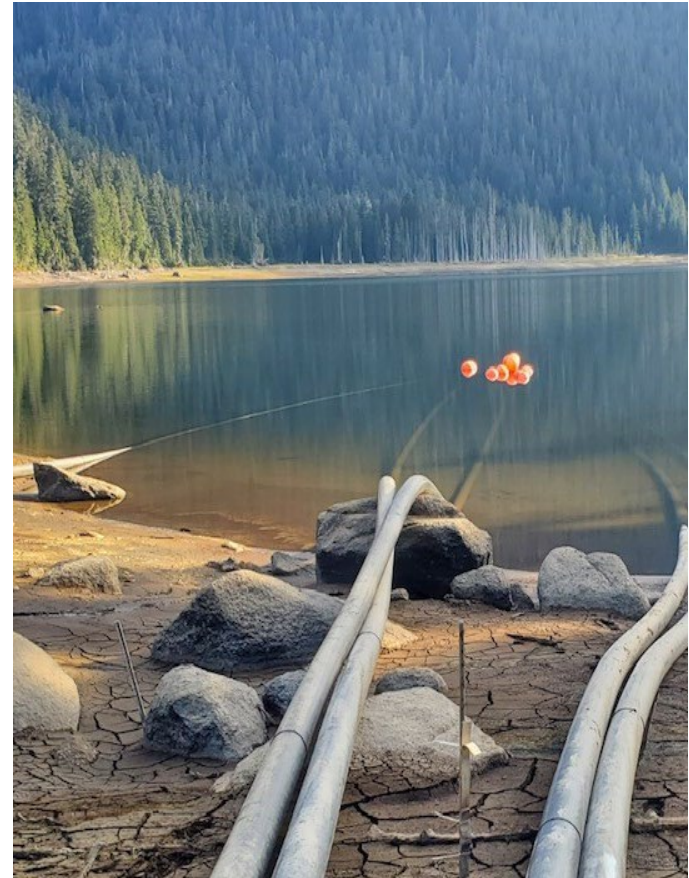
scred.ca/sprinkling-regulations

		STAGE 1	STAGE 2	STAGE 3	
WATERING		MAY 1 TO SEP. 30	BASED ON DEMAND AND ENVIRONMENT		
  	Trees, flowers and shrubs	PERMITTED	4 hours/day max. 7am - 8am and 7pm - 9pm	1 hour/day max. 7am - 8am or 7pm - 8pm	
	Food producing trees and plants	PERMITTED	PERMITTED	2 hours/day max. 7am - 8am and 7pm - 8pm	
  	Lawns	Two days per week 7am - 8am Even numbered address: Thu/Sun Odd numbered address: Wed/Sat <i>(Hand watering is permitted at any time)</i>	NOT PERMITTED	NOT PERMITTED	
	Trees, flowers and shrubs	Three days per week 7am - 9am and 7pm - 9pm Even numbered address: Tue/Thu/Sun Odd numbered address: Mon/Wed/Sat	Two days per week 7am - 8am Even numbered address: Thu/Sun Odd numbered address: Wed/Sat	NOT PERMITTED	
	Food producing trees and plants	Three days per week 7am - 9am and 7pm - 9pm Even numbered address: Tue/Thu/Sun Odd numbered address: Mon/Wed/Sat	Two days per week 7am - 9am and 7pm - 9pm Even numbered address: Thu/Sun Odd numbered address: Wed/Sat	NOT PERMITTED	
WASHING					
 	Sidewalks, driveways, windows, fences and exterior building surfaces	PERMITTED	NOT PERMITTED except for preparing surfaces for painting or paving and for health and safety regulations.	NOT PERMITTED except for health and safety regulations.	
	Vehicles and boats	PERMITTED	PERMITTED	PERMITTED only to wash off sea water.	
FILLING					
 	Swimming pools and hot tubs	PERMITTED	PERMITTED	NOT PERMITTED	
	Garden ponds and fountains	PERMITTED	PERMITTED	NOT PERMITTED	
STAGE 4 BAN ON ALL OUTDOOR WATER USE					
FINES		STAGE 1 \$200	STAGE 2 \$300	STAGE 3 \$400	STAGE 4 \$500
Questions or report a violation: 604-885-6806 infrastructure@scred.ca					



Chapman Water System Siphon System Update

- Staff submitted applications to use emergency siphons in Chapman and Edwards Lakes for 2023/2024.
- Need approval from both the Ministry of Environment and Ministry of Forests.
- SCRD received a letter from shíshálh Nation to include in the applications.
- Board Chair sent a letter to the Province in April requesting these applications be expedited.



Church Road Well Field Project

Water Supply

- Soames Creek flow and fish habitat survey data is being collected for Provincial Government review.
- SCRD has secured larger pumps that are currently being installed which have the potential to provide 4.6 million litres per day.
- This well field is anticipated to be online in June, pending approval.



Environmental Flow Needs (EFN)

- Environmental Flow Needs is a provincial requirement under the Water Sustainability Act to ensure stream flows for aquatic ecosystems and fish.
- In April, the SCRD received guidance from the Province on applying to amend Chapman Creek EFN with DFO/MoF.
- SCRD shared information with shíshálh Nation for discussion about this proposed amendment to EFN.
- Recommendations developed by consultant (RPBio) are 160l/s in Jun/Jul and 180l/s in Aug/Sep, that would be supported by a robust monitoring program.



More Water Supply Projects

- **Water Meter Installations in Sechelt**
 - Request for Proposal awarded to Neptune.
 - SCRD received a six-million-dollar UBCM grant.
 - Installation work scheduled to start in October 2023.
- **Gray Creek water treatment upgrade**
 - In second year of the three-year creek flow monitoring required for feasibility study. Flow sensor is installed and receiving real time creek flow data for monitoring.



More Water Supply Projects

- **Langdale Well Field**

- Finalize report outlining potential impacts to Langdale Creek.
- Preliminary conceptual drawings are complete.
- Submit initial groundwater licence application.
- Complete reporting related to water quantity/quality.
- Issue RFP for final design drawings and specifications.

- **Maryanne West Park Well**

- Staff are developing an RFP to better understand Aquifer connectivity that could support potential future development.

- **Raw Water Reservoir**

- Geotechnical drilling completed and consultant is finalizing analysis to determine the maximum and most economical footprint for a potential reservoir.



What else are we doing?

- Rainwater harvesting rebates: >85% of funding available has been pre-approved.
- Monthly water use update: 761 residents signed up.
- Water Rate Structure Review to be completed Q2.
- Annual residential Utility Bills sent at end of April.
- Continuing EOC debrief, working with a consultant provided through Provincial support, to develop water scarcity plans. These are emergency plans for prolonged Stage 4.



What are we hearing...

Are current water levels normal?

- Rainfall was below average in Jan, Mar, but above average in Feb and Apr compared to recent years.
- Snowpack is slightly above average for May.
- Chapman and Edwards Lakes are full.



What are we hearing...

How many days until Stage 4?

- We can't predict this! Every year is different.
- Water use is heavily influenced by weather (including temperature, cloud cover), watershed dynamics, water conservation regulations, and other factors.
- Our goal is to preserve stored water in the Chapman Watershed for as long as possible.
- SCRD will continue to message the importance of conserving water every day.



Questions?

