

BC Drought Preparedness 2026

RDN Drinking Water and Watershed Protection Technical Advisory Committee

May 27, 2026



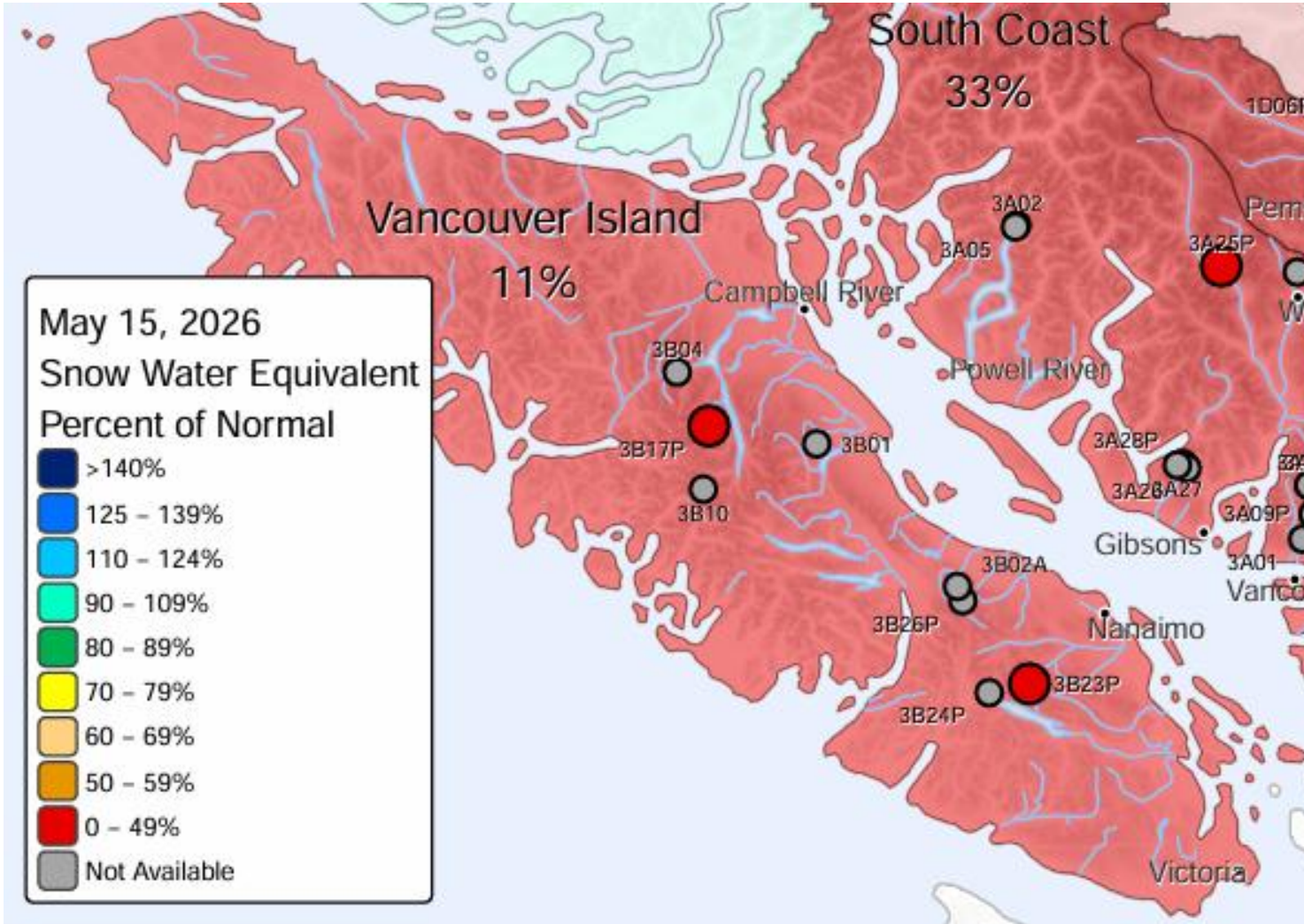
Jaroslav Szczot
West Coast RSD

2026 Vancouver Island Drought Outlook

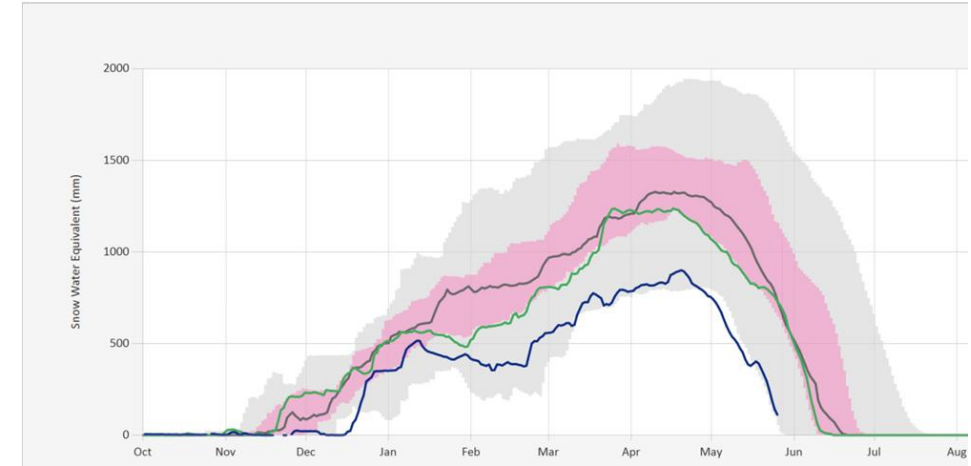
- **We cannot accurately predict the severity of drought this summer; much depends on precipitation through May and June**
- **Early indicators suggest drought conditions may be severe in 2026:**
 - Very low snowpack last Winter
 - Lack of precipitation
 - Low streamflow conditions
 - Below normal aquifer levels
- **We are preparing for an elevated risk of severe drought (like 2015 and 2023)**



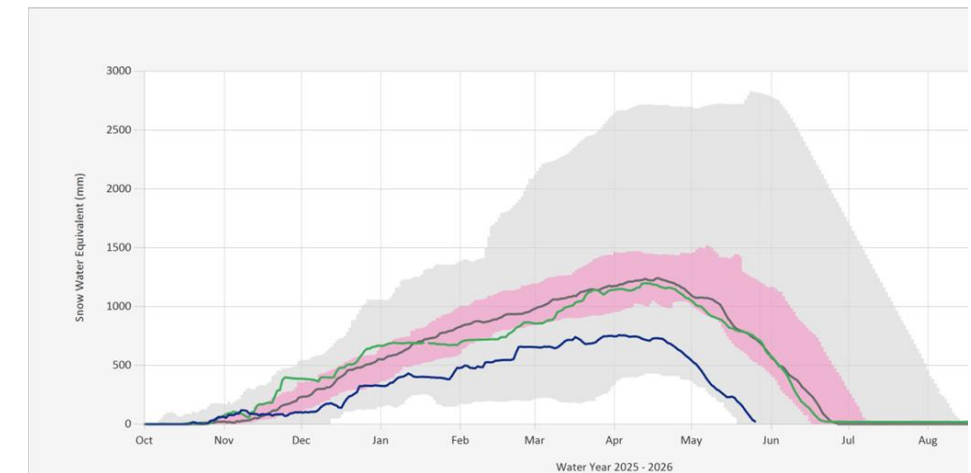
Basin Snow Water Index – May 15, 2026



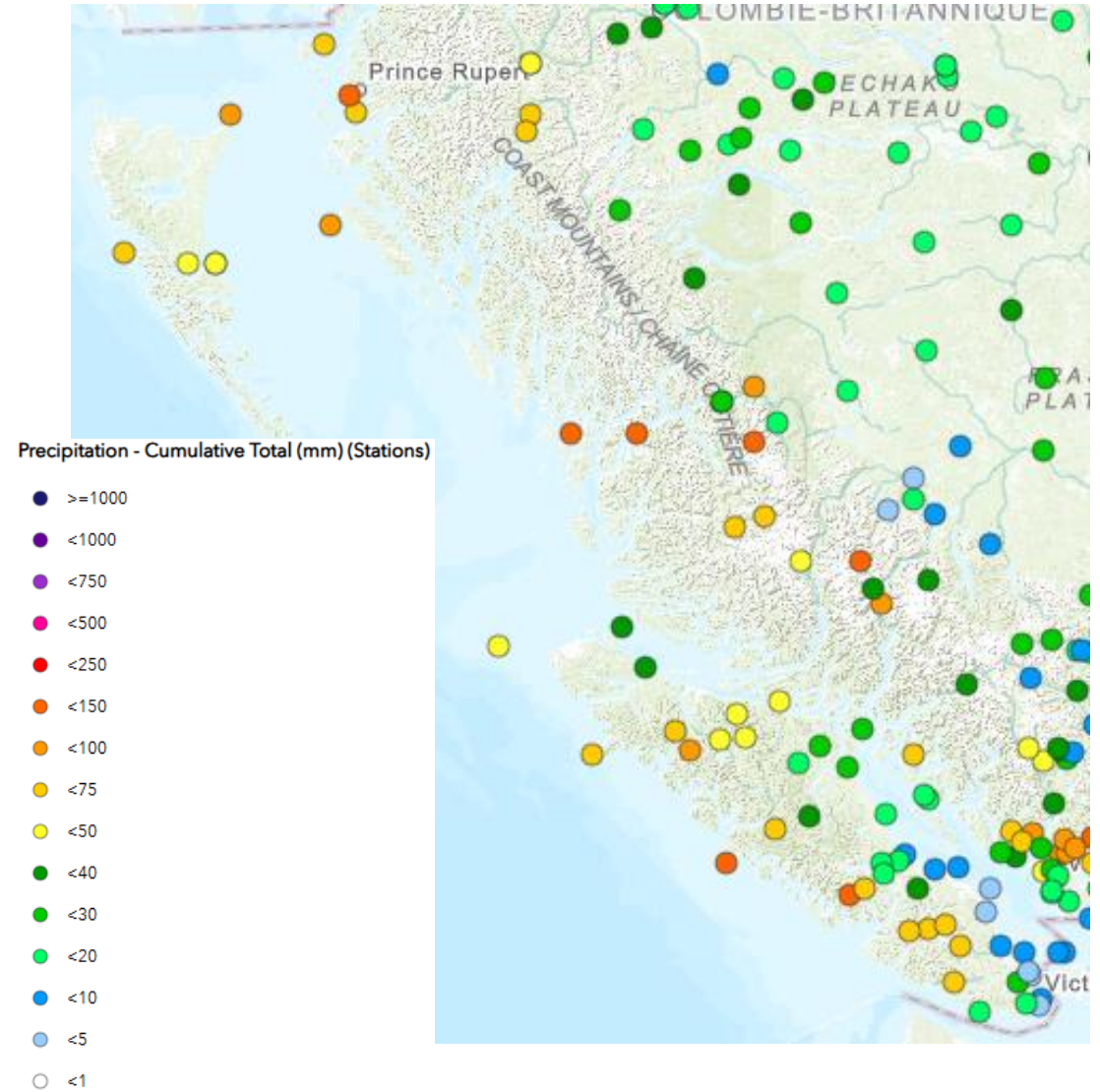
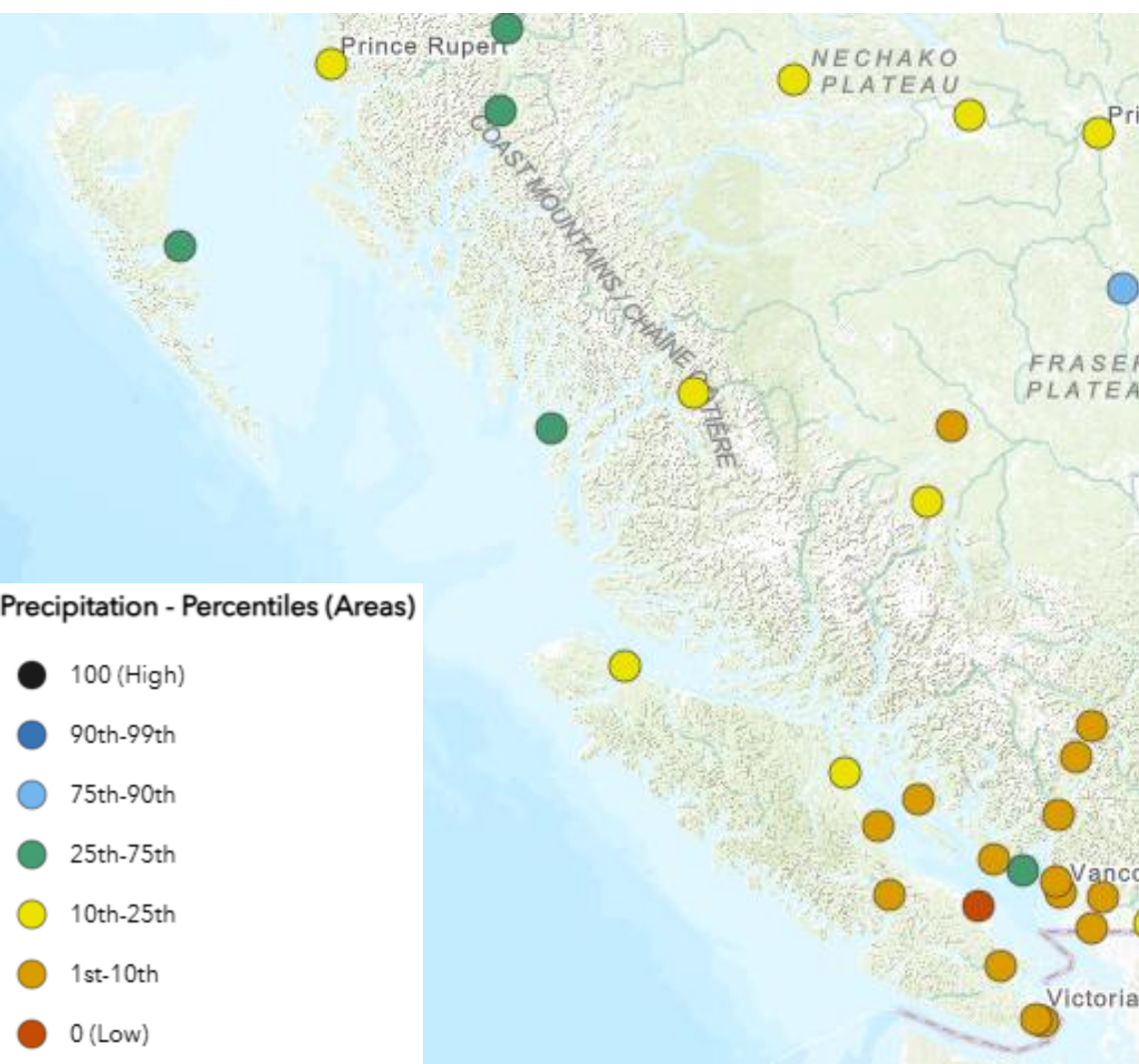
Source Data: SW.Daily@3B24P
Location: Heather Mountain Upper, Latitude: 48.943875, Longitude: -124.452113, Elevation: : 1190 m



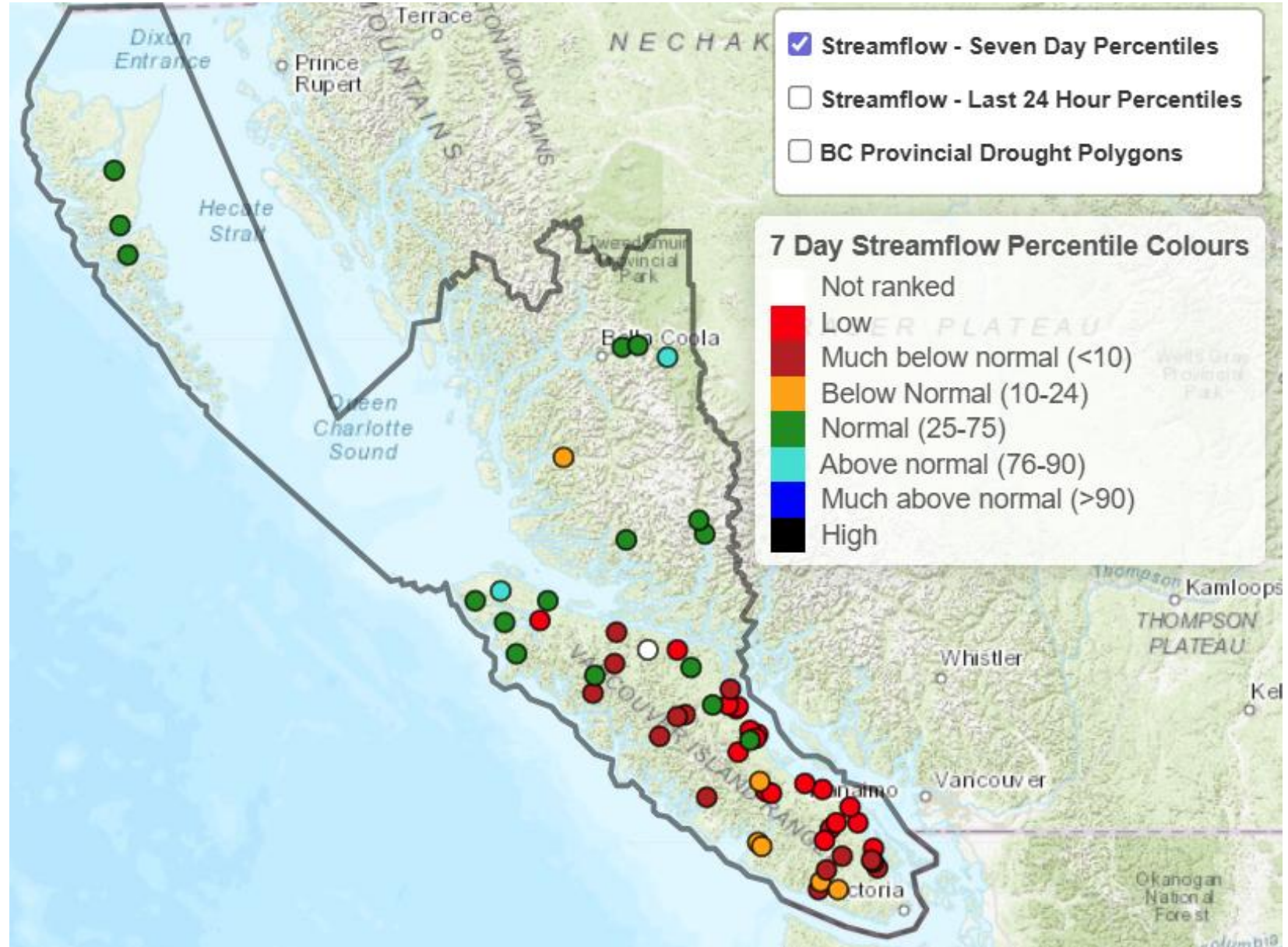
Source Data: SW.Daily@3B17P
Location: Wolf River Upper, Latitude: 49.7041389, Longitude: -125.67925, Elevation: : 1490 m



Current Conditions - Precipitation

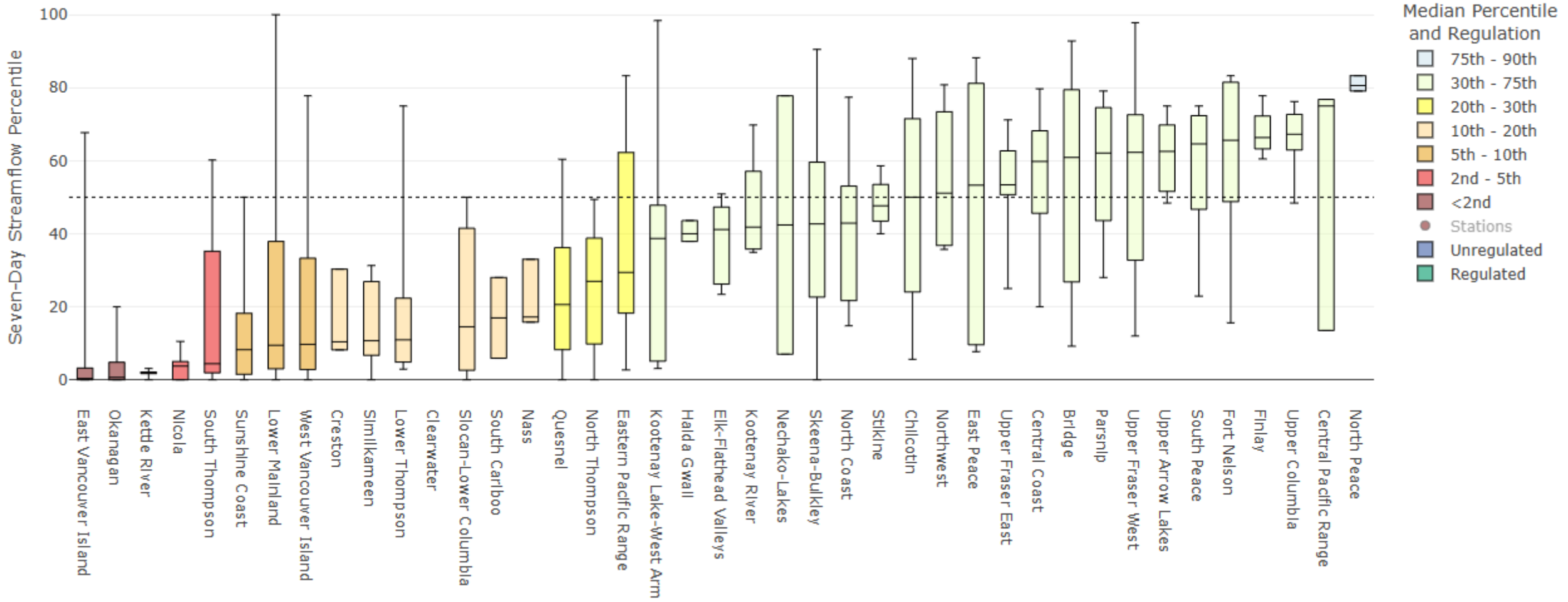


Current Conditions – 7 Day Streamflow

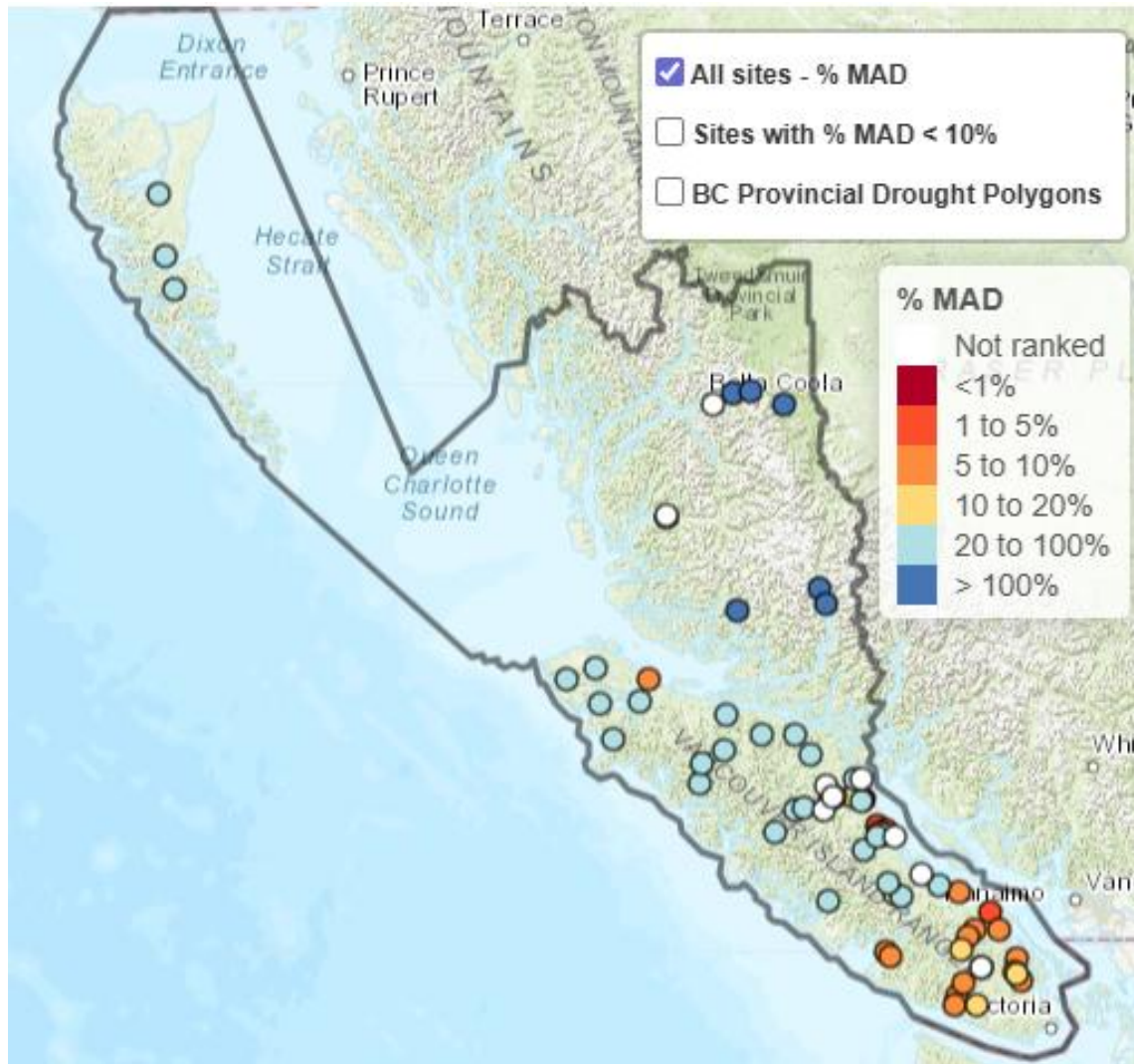


Current Conditions – 7 Day Streamflow

Distribution of Seven-Day Streamflow Percentiles for B.C. as of May 26, 2026

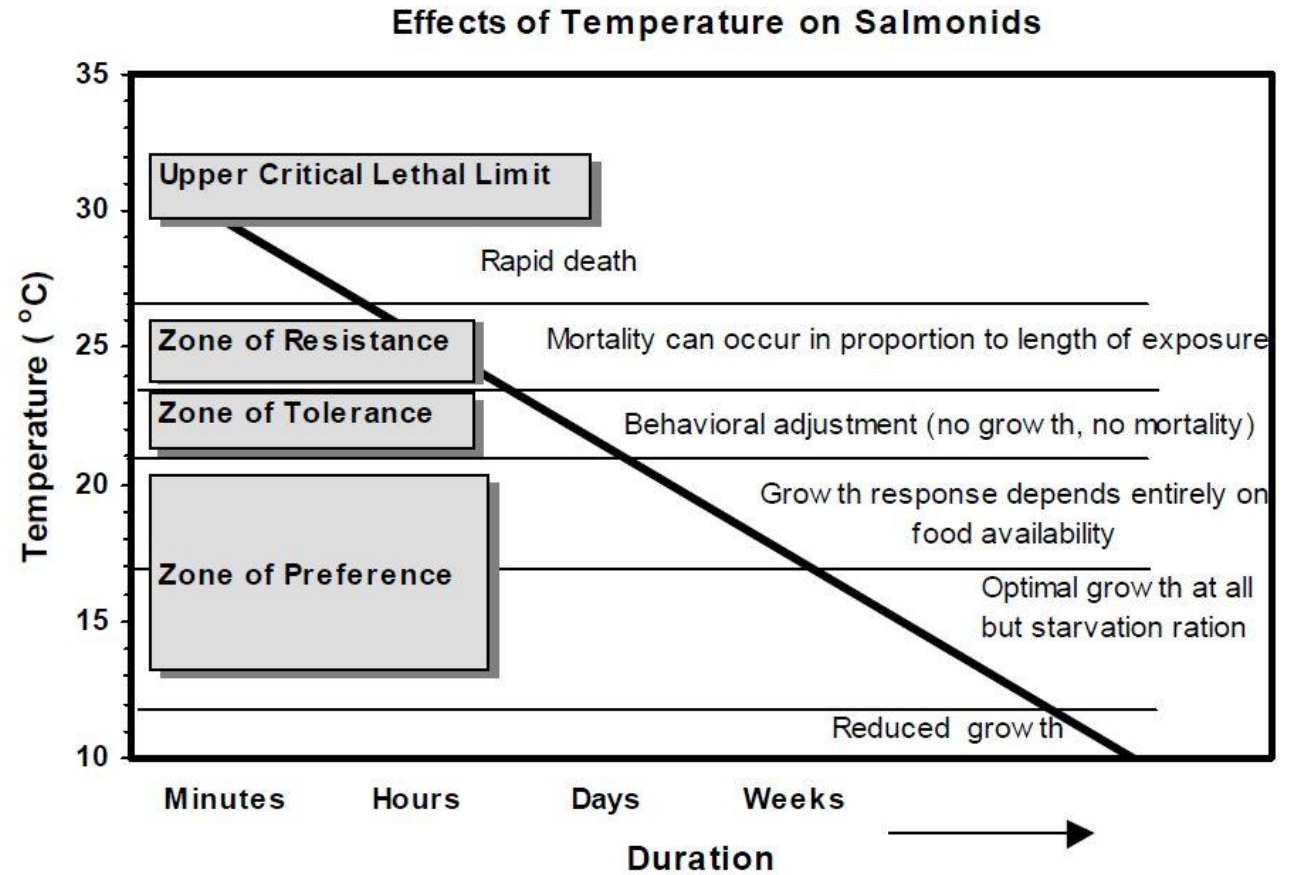
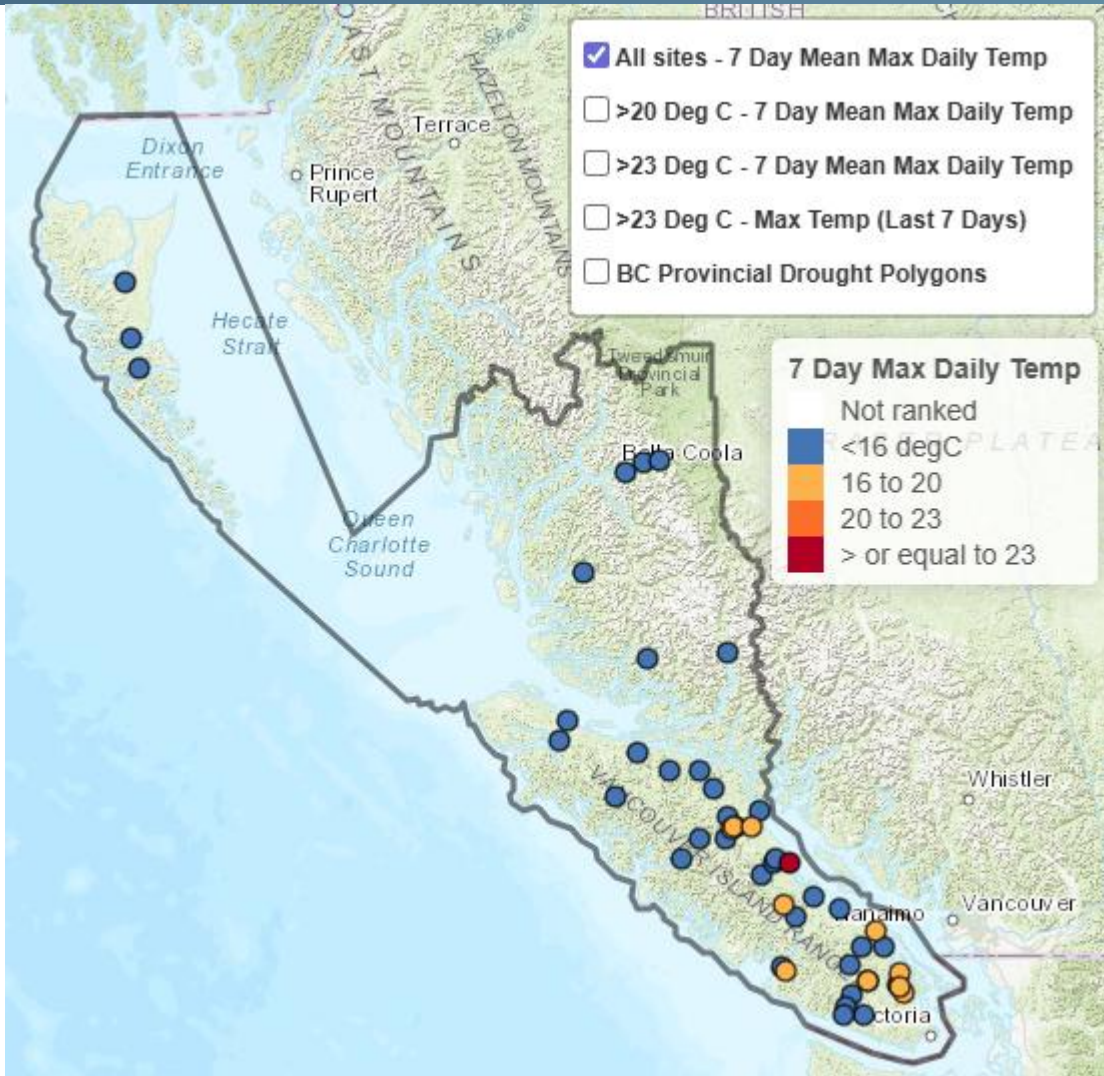


Ecological flows (% of Mean Annual Discharge)

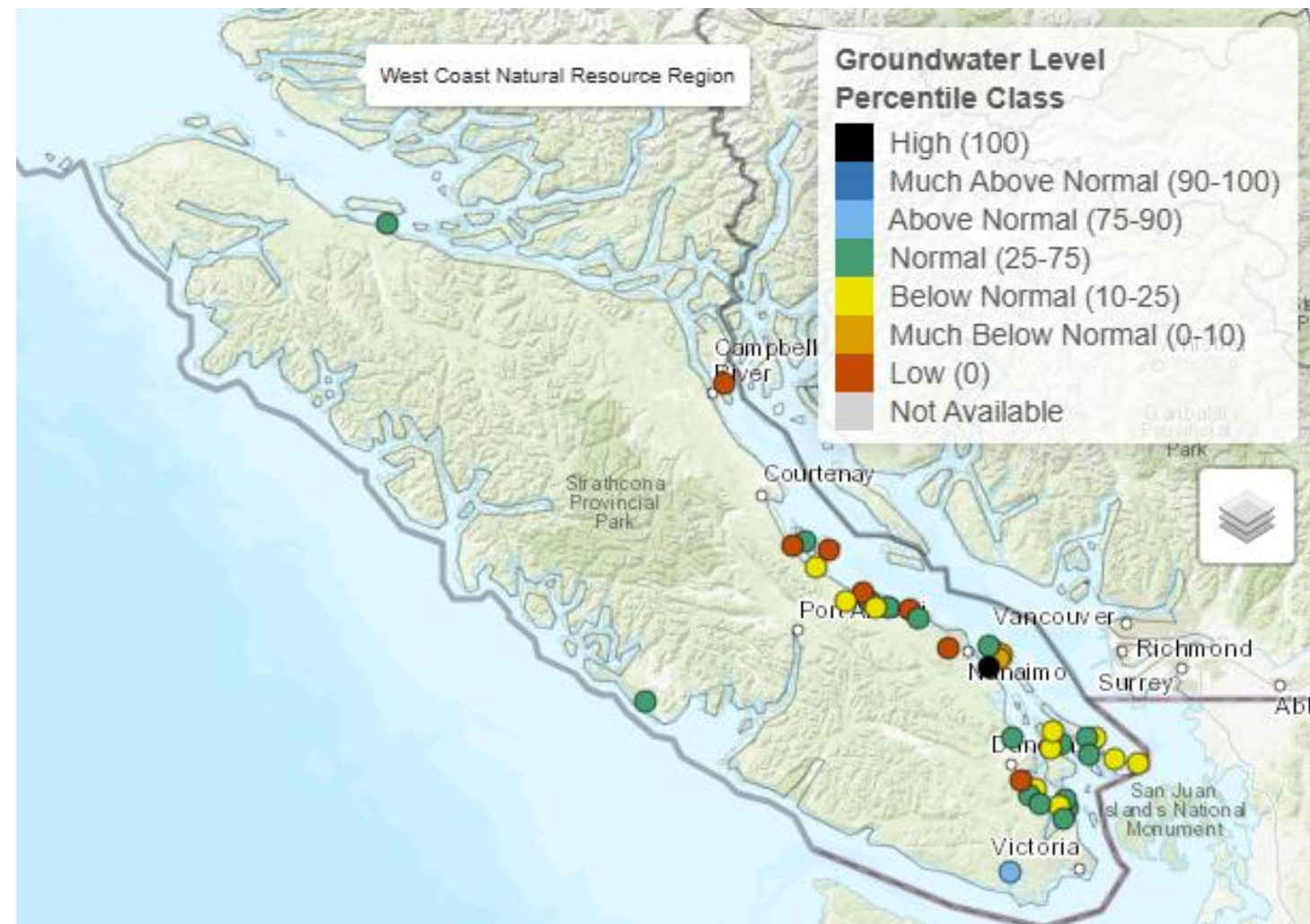


Station Name	ID	Regulation Status	Basin Area (km ²)	MAD (m ³ /s)	Latest 7 Day Discharge (m ³ /s)	% MAD	Last 24 hour Discharge (m ³ /s)
LITTLE OYSTER RIVER AT YORKE ROAD	08HD023	Natural	38.00	1.02	0.00	0.13	0.00
DOVE CREEK NEAR THE MOUTH	08HB075	Natural	41.10	2.01	0.04	2.08	0.05
MILLSTONE RIVER AT NANAIMO	08HB032	Regulated	86.20	2.56	0.09	3.4	0.09
TSOLUM RIVER NEAR COURTENAY	08HB011	Regulated	251.00	10.69	0.45	4.2	0.45
SOUTH NANAIMO RIVER NEAR JUNCTION	08HB092	Regulated	211.00	13.46	0.70	5.17	0.79
CARNATION CREEK AT THE MOUTH	08HB048	Natural	10.30	0.80	0.04	5.52	0.07
RENFREW CREEK NEAR PORT RENFREW	08HA069	Natural	8.12	1.54	0.09	5.91	0.14
CHEMAINUS RIVER NEAR WESTHOLME	08HA001	Natural	355.00	18.75	1.38	7.38	1.28
KEOGH RIVER NEAR PORT HARDY	08HF014	Regulated	122.32	5.36	0.43	8.01	0.48

Current Conditions – Water Temperatures



Current Conditions - Groundwater Levels



Wells by Percentile Class

	Current Year	Last Year
	2026-05-25	2025-05-25
High (100)	1 (1.2%)	4 (5%)
Much Above Normal (90-100)	0	4 (5%)
Above Normal (75-90)	1 (1.2%)	14 (17.5%)
Normal (25-75)	16 (19.8%)	41 (51.2%)
Below Normal (10-25)	11 (13.6%)	5 (6.2%)
Much Below Normal (0-10)	2 (2.5%)	5 (6.2%)
Low (0)	7 (8.6%)	5 (6.2%)
Across All Classes	38	78

Wells Below Normal

Aquifer Type	Current Year	Last Year
	2026-05-25	2025-05-25
Confined sand and gravel	46.2% (6/13)	20.1% (7/35)
Crystalline bedrock	50% (2/4)	25% (2/8)
Sedimentary	60% (9/15)	16% (4/25)
Unconfined sand and gravel	50% (3/6)	18.2% (2/11)

Working Together



Key Regional Risks

- Impacts to Fish, Aquatic Ecosystems and Wetlands
- Reduction in water availability for agricultural and industrial uses
- Insufficient quantity and reduced quality of drinking water
- Wells running dry
- Limited water sources for fighting wildfires



Provincial Actions

- Monitoring drought conditions & setting water scarcity levels
- Working with partners to reduce risks to fish.
 - Habitat monitoring
 - Fish salvage
 - Flow augmentation
 - Angling closures
- Encouraging water conservation and pre-season planning



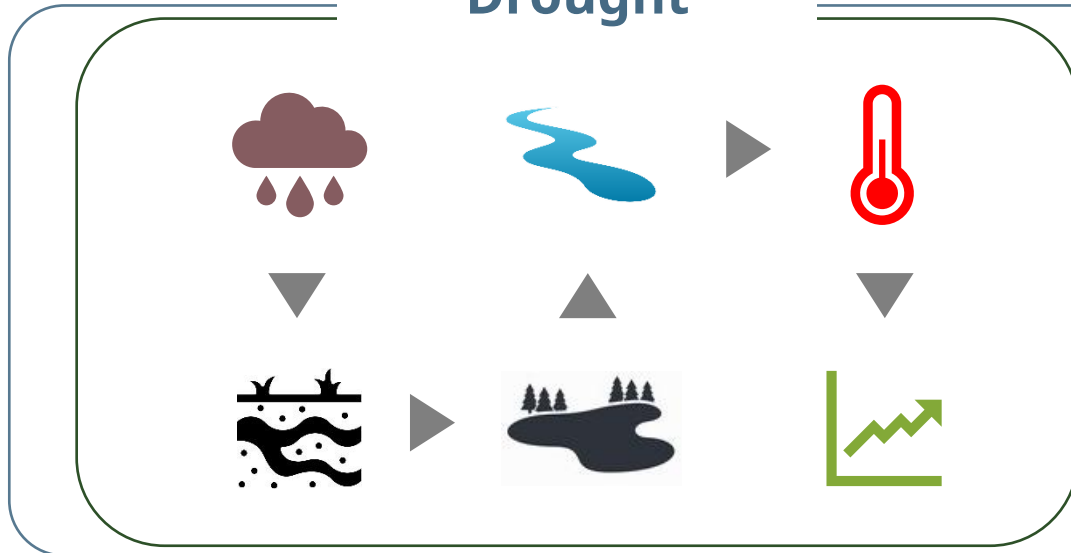
Local Risk Management

- Water supply and demand analysis.
- Infrastructure maintenance.
- Understand your water source.
- Know when to implement water conservation measures.
- Develop a water scarcity response plan that includes contingencies



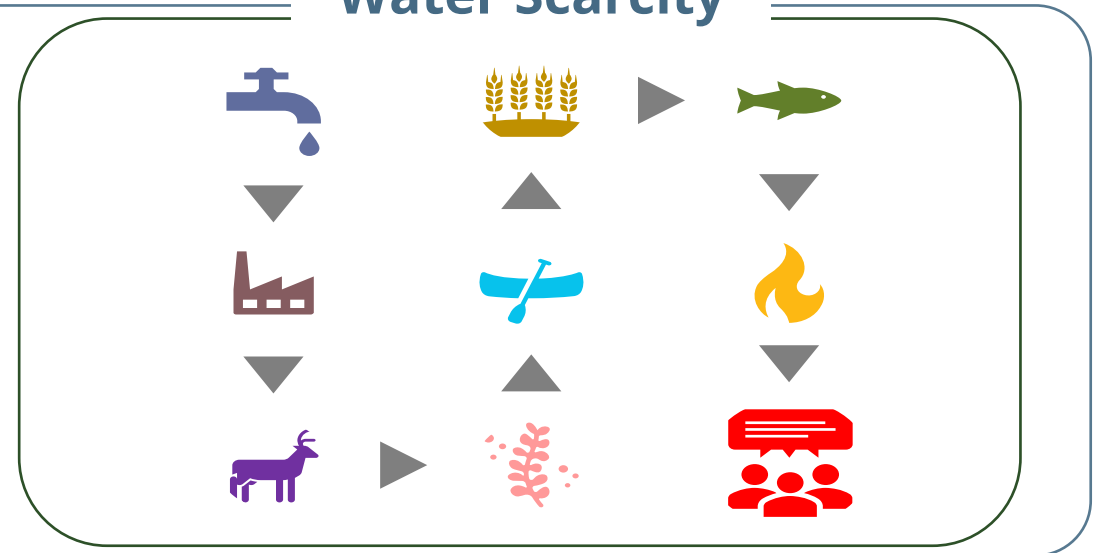
Drought vs. Water Scarcity

Drought



- **Drought** is a **climate** condition measured relative to the long-term past.
- Important **frame of reference** for measuring water scarcity (normal vs. abnormal state).
- **May or may not** lead to water scarcity.

Water Scarcity

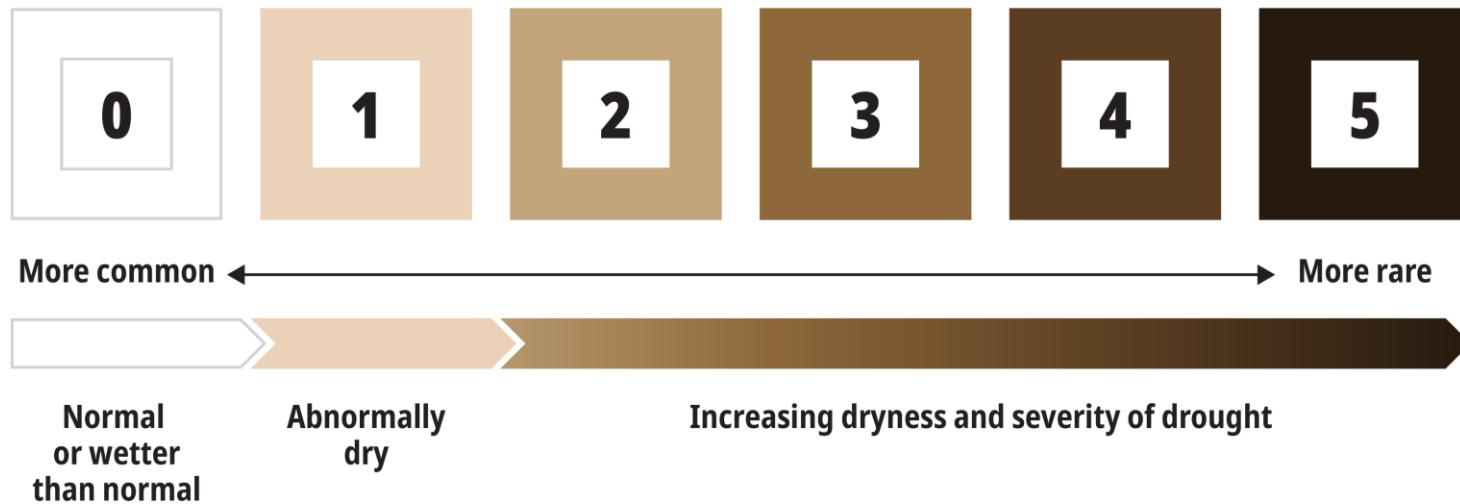


- **Water scarcity** is a lack of available water to meet human or ecological needs.
- Defined and triggered by **local conditions, values, interests** and **risks**.
- May occur in the **presence or absence** of drought.

Drought happens.

We **can't control** or manage whether drought occurs.

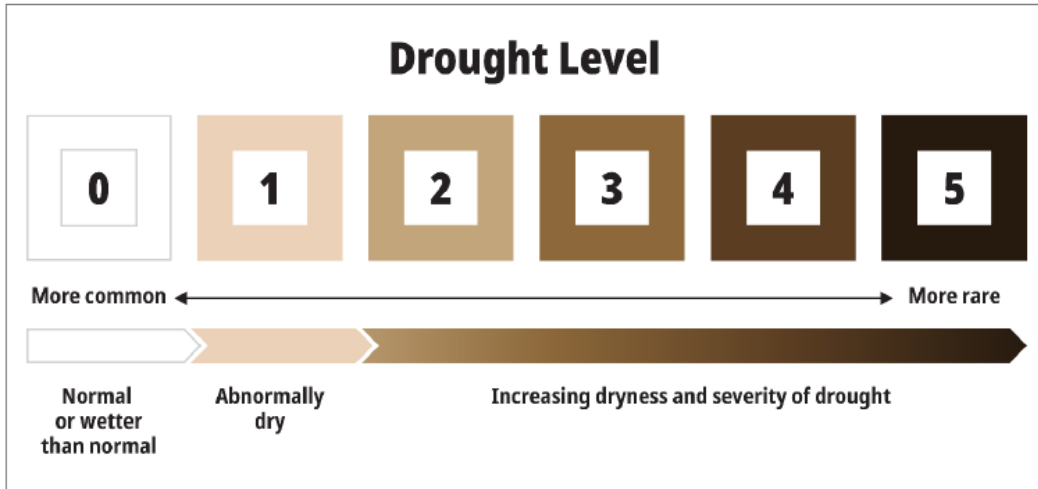
Drought Level



Drought levels describe **climate conditions.**

They don't tell you what to do in response.

BC Provincial Drought Level Criteria

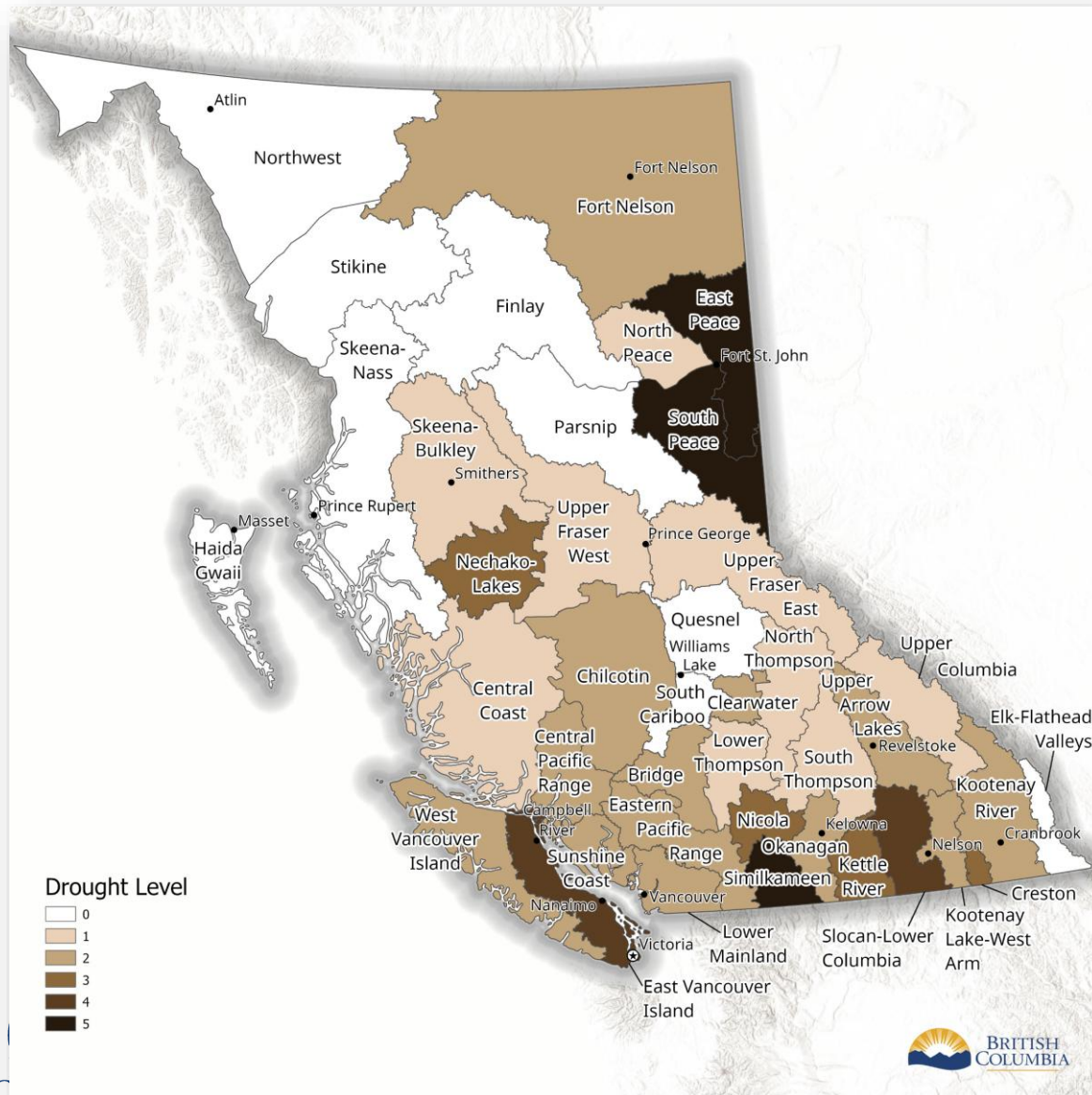


Indicator Type	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Percentile	>30 th	21 st - 30 th	11 th - 20 th	6 th - 10 th	2 nd - 5 th	< 2 nd
Standardized Index	≥ -0.49	-0.5 to -0.79	-0.8 to -1.29	-1.3 to -1.59	-1.66 to -1.99	≤ -2.0

The **primary drought indicators** currently used in B.C. to monitor drought levels are:

- Precipitation percentiles (various timescales)
- Standardized Precipitation Index (SPI) (various timescales)
- Standardized Precipitation Evapotranspiration Index (SPEI) (various timescales)
- 7-day average streamflow percentiles
- 7-day average lake level percentiles
- Daily groundwater level percentiles
- Weights of indicators:
 - Hydrology: **50%** (was 40%)
 - 30-day Precipitation: **10%** (was 20%)
 - 90-day SPEI: **20%**
 - 365-day SPEI: **20%**

Situational awareness on drought



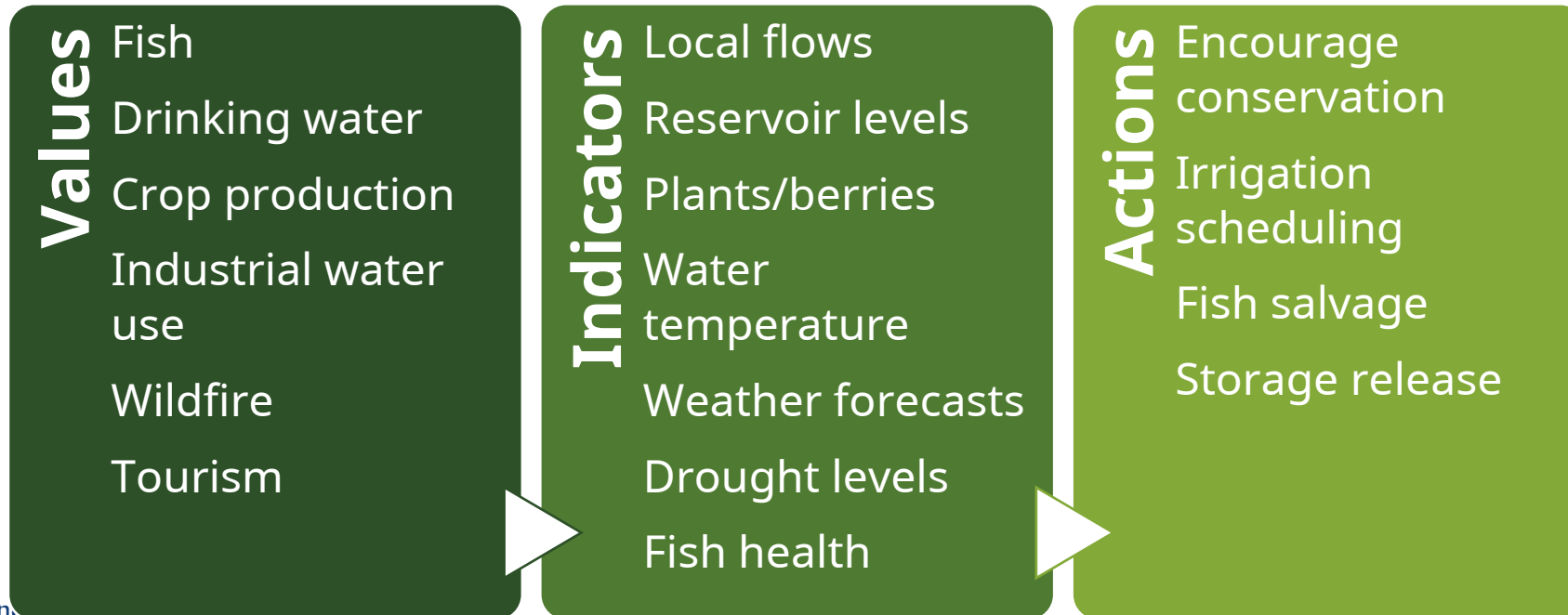
- Provincial accountability for monitoring **natural hazards**.
- Consistent analysis that evolves with available **long-term data**.
- Presents a **statistical narrative** for the public.

Water scarcity doesn't have to happen.

Water scarcity depends on many factors that **we can control** or manage.

Water scarcity is **highly local**. One person. A community. A sector. A watershed.

WATER SCARCITY LEVEL FRAMEWORK *In development*



Shifting our focus to water scarcity



- Provincial framework for monitoring **local risks, impacts and actions.**
- Based on **collective** values, interests and knowledge.
- Presents a **management narrative** for the public.

West Coast – Water Scarcity Levels

Watersheds

Water scarcity levels will be determined at 4 East Vancouver Island Watersheds

Chemainus River

French Creek

Koksilah River

Tsolum River

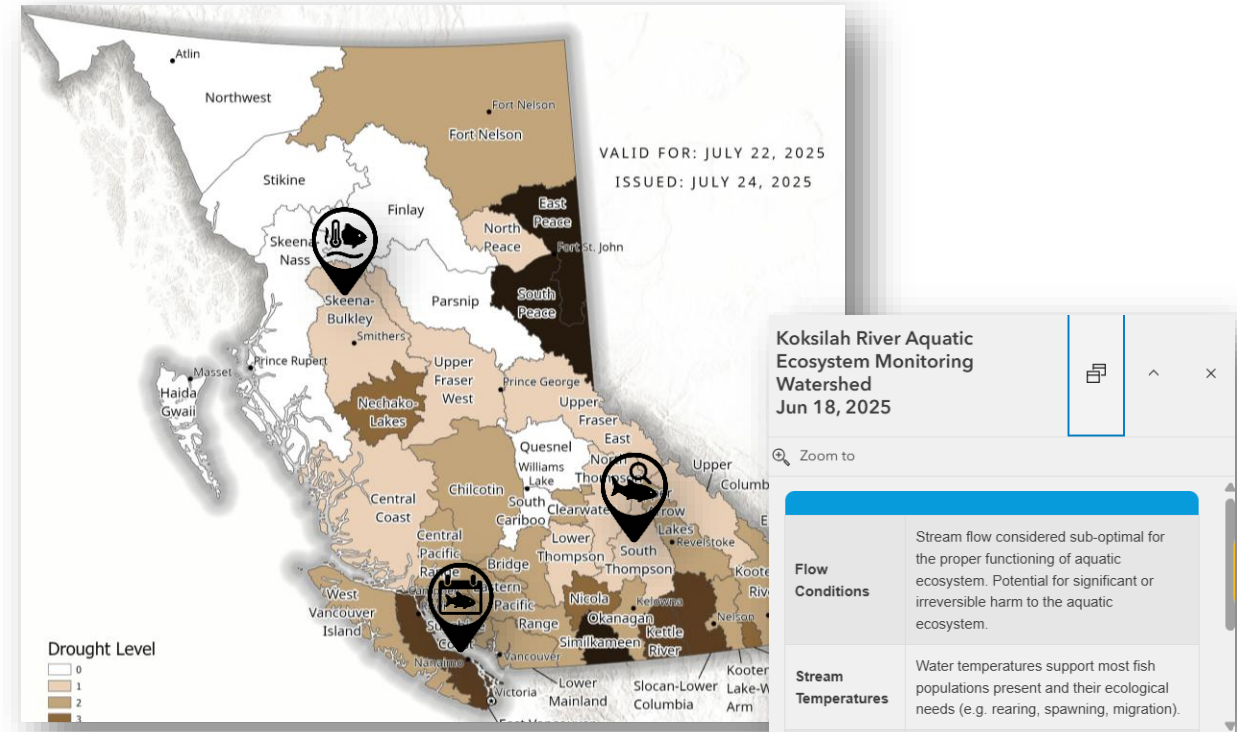
French Creek Water Scarcity Level Framework

Information to be published on B.C. Drought Information Portal:

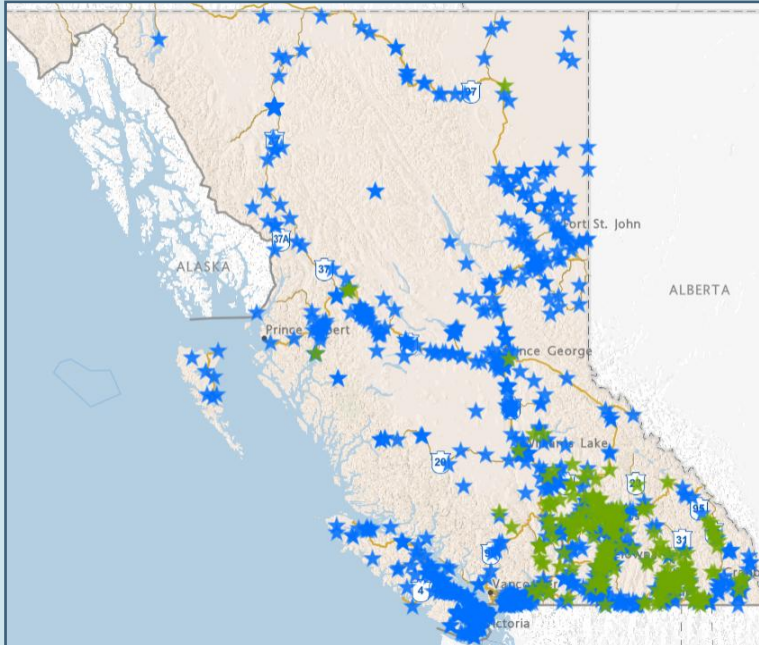
Recommended Actions	High	Ensure licence terms and conditions are met
		Fish salvage or relocation
		Emergency habitat restoration activities
		Prepare contingencies for the loss of water supply
	Moderate	Maximize water conservation measures
		Schedule water use (if applicable)
		Storage release (if available)
	Low	Identify and address unauthorized use
		Conserve water where possible
		Stream and fish habitat monitoring
		Check status of drinking water supplies
Indicators Assessed	7-day streamflow percentiles	
	30-day precipitation percentiles	
	7-day percent mean annual discharge	
	7-day <u>mean</u> maximum water temperature	
	Groundwater levels	
	Fish habitat condition	
Values Considered	Fish habitat availability	
	Agricultural water use	
	Drinking water supplies	
	Wildfire danger	

Mapping & monitoring: Aquatic ecosystem risks

- Single source for drought and water scarcity information
- Focus on drought-sensitive watersheds with high ecological / fisheries values
- Aquatic ecosystem monitoring:
 - Flow, temperature, habitat
 - Automated remote gauge fish risk assessments
 - External partner survey reports



Mapping & monitoring: Drinking water risks



Mapped: 1,351 systems

Goal: 5,000+ systems

Mapping Source Water

2026 Water Supply System Survey

1. Name*

2. Phone Number*

3. Email*

3.1. Confirm email*

Re-enter the email above to confirm (case-sensitive)

Gathering real-time drinking water supply data

Voluntary participation

Water Supply Status Survey

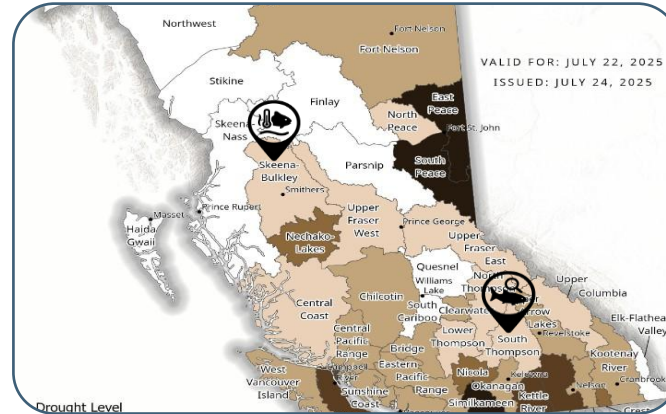
To learn more, visit the
Source Water Webpage:



To learn more or get an invite, contact:
waterstatussupply@gov.bc.ca

Core provincial operations

**Drought happens.
Water scarcity doesn't have to.**



Communicating Risk

- Shifting public focus to water scarcity risks.
- Drought preparedness letters to all water suppliers.
- Drought information flyers to all water licensees.
- Encouraging water conservation.

Drought Monitoring

+

Water Scarcity Monitoring

- Setting drought levels.
- Piloting water scarcity levels.
- Sharing data, information & tools for independent risk assessment.
- Gathering information on water supply risks.

Water Scarcity Management

- Local actions informed by monitoring.
- Partnering on mitigation efforts.
- Championing voluntary collaborative efforts.
- Last resort regulatory measures.

B.C. Drought and Water Scarcity Operations Plan

- Focuses on provincial operational activities during the drought season
- Guides actions of provincial staff
- Describes provincial approach to monitoring drought conditions and water scarcity risks
- Does not prescribe the roles of other government, agencies or water suppliers
- Updated for Spring 2026



Provincial Sources of Drought Information

- British Columbia Drought and Water Scarcity Operations Plan:
[2026 British Columbia Drought and Water Scarcity Operations Plan](#)
- British Columbia Drought Information Website (Cross-Ministry)
[Drought information - Province of British Columbia \(gov.bc.ca\)](#)
- British Columbia Drought Information Portal:
[BC Drought Information Portal \(gov.bc.ca\)](#)
- British Columbia Emergency Management
[Be prepared for extreme heat and drought - Province of British Columbia \(gov.bc.ca\)](#)

Provincial Sources of Drought Information

- BC Drought and Agriculture

[Drought in agriculture - Province of British Columbia](#)

- Best Practices when your well goes dry and Drought Preparation

[bc_gov_drywellbrochure.pdf](#)

Regional Sources of Drought Information

- West Coast Natural Resource Region Low Streamflow Report

[West Coast Natural Resource Region Low Streamflow Report](#)

- West Coast Region Groundwater Level Conditions

[West Coast Region Groundwater Level Conditions](#)

Drought and Health

[Drought | Island Health](#)

Drought happens. Water scarcity doesn't have to.

- ✓ Risk assessment is best done at the local level
- ✓ Access and share data and information on risks
- ✓ Understand your water sources and how they are shared
 - ✓ Develop a plan for water scarcity and drought

Thank You!

gov.bc.ca/Drought

droughtportal.gov.bc.ca

Contact: DroughtOps@gov.bc.ca