REGIONAL DISTRICT OF NANAIMO

DRINKING WATER & WATERSHED PROTECTION

September 17, 2025 | Technical Advisory Committee Meeting

REGIONAL DISTRICT OF NANAIMO

ROUNDTABLE UPDATES

All Committee Members

REGIONAL DISTRICT OF NANAIMO

INVITED PRESENTATION

CITY OF NANAIMO WATER QUALITY TREND REPORTING

Lisa Brinkman
Manager of City Planning, City of Nanaimo
&
Luke Crevier
Ecoscape Environmental

REGIONAL DISTRICT OF NANAIMO

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REGIONAL DISTRICT OF NANAIMO

STAFF PRESENTATIONS

PROOF OF WATER FOR SUBDIVISION POLICY

Greg Keller
Senior Planner, Current Planning RDN

RURAL ONSITE SUBDIVISION SERVICING STUDY – SCOPING

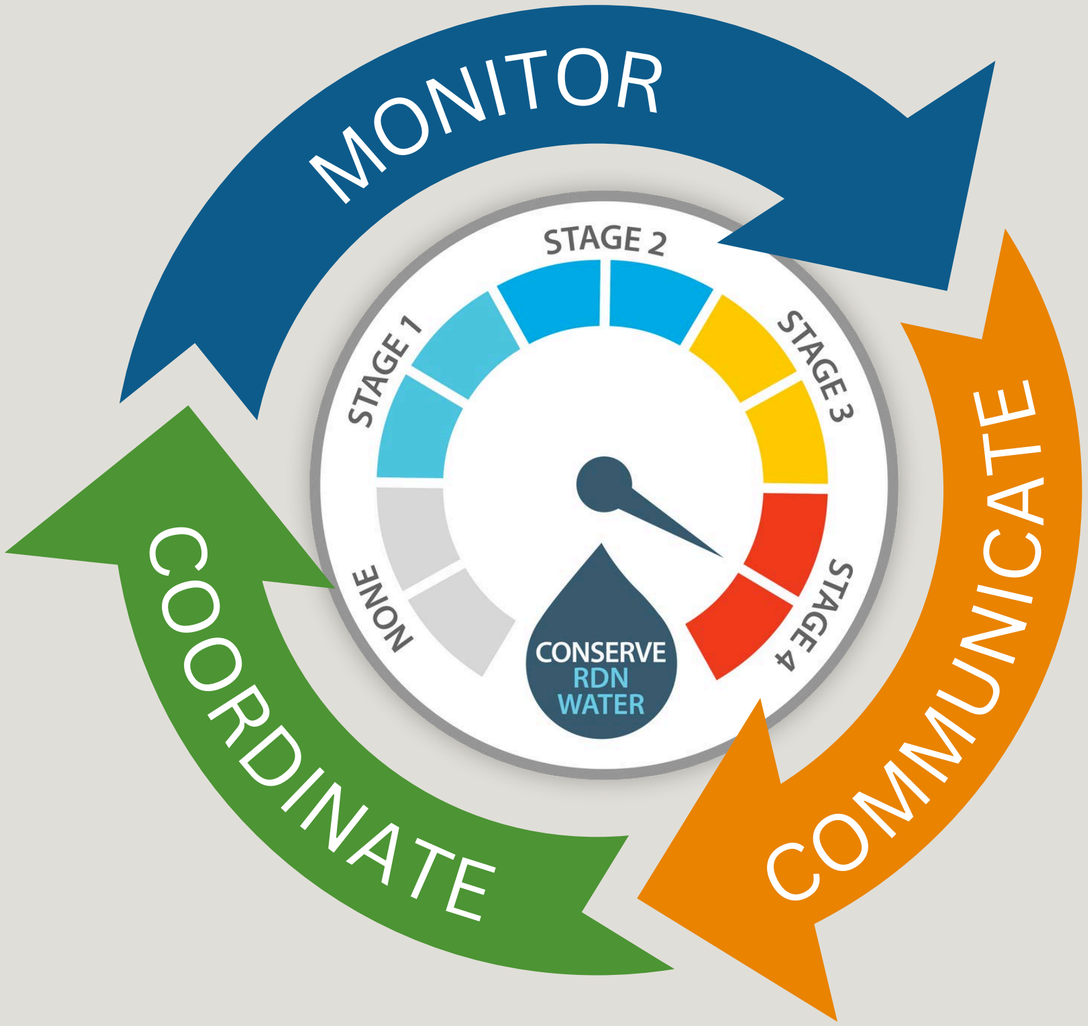
Stephen Boogaards
Senior Planner, Long Range Planning, RDN

REGIONAL DISTRICT OF NANAIMO

DWWP PROJECT UPDATES

- Summer 2025 Regional Drought Response Summary
- Summer Irrigation Outreach and Initiatives
- Team Watersmart - Summer Review & Upcoming Outreach
- Community Watershed Monitoring Network Strategic Planning
- Nanoose Flow Monitoring
- Cedar-Yellowpoint-Cassidy Phase 3 Water Budget
- Climate-Informed Water Supply Planning Public Report

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY



Coordinating and responding to seasonal drought is a core activity of the DWWP program during summer months.

Information Hub:

- Acts as a conduit for updates from Provincial and regional monitoring programs.
- Shares timely data and insights with stakeholders.

Communication & Outreach:

- Produces and distributes drought-related communications materials.
- Ensures consistent messaging across the region.

Coordinate / Convening Role:

- DWWP serves as a regional convener for water service providers.
- Facilitates coordinated drought response across jurisdictions.

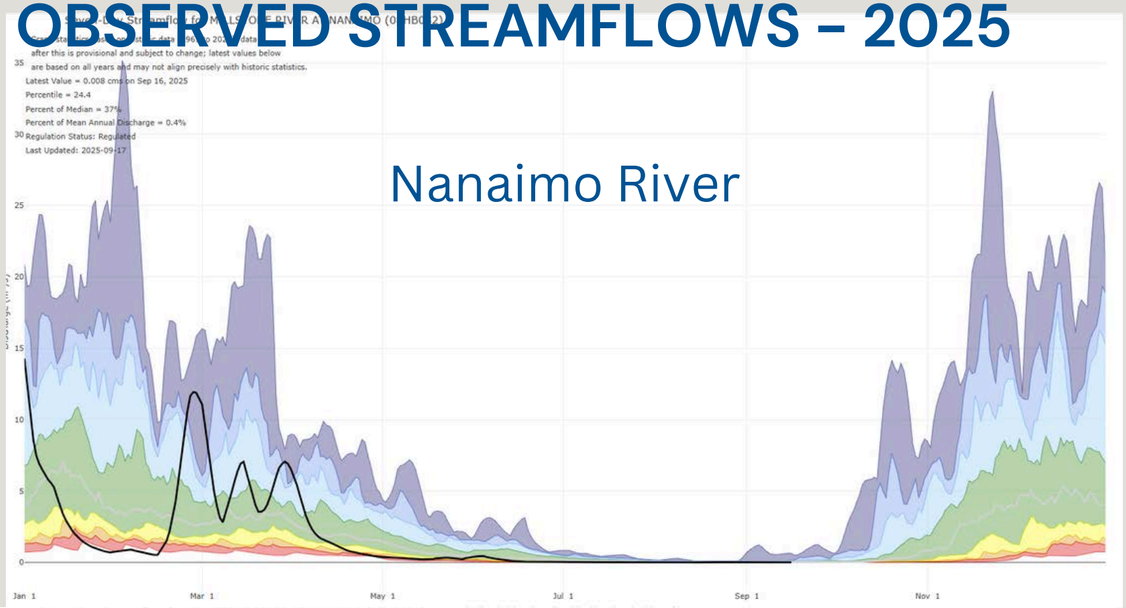
SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

Monitor

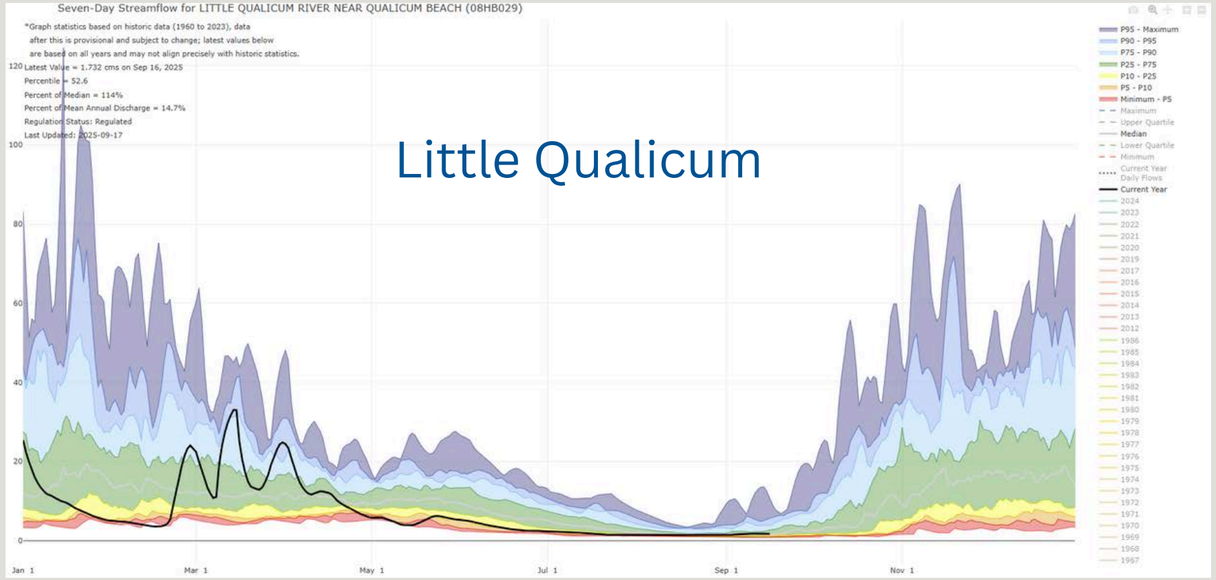
- Monitoring groundwater levels through the Volunteer Observation Well Network and reporting seasonal trends via the **Pre-Summer Groundwater Level Analysis**, highlighting early season conditions and multi-year aquifer trends.
- Supporting **operational snow survey data** and associated reports for water and land managers to improve understanding of both regional and watershed specific snow distribution
- Receiving and sharing regular updates from the **Provincial hydrometric networks and groundwater observation well networks** to inform regional water management

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

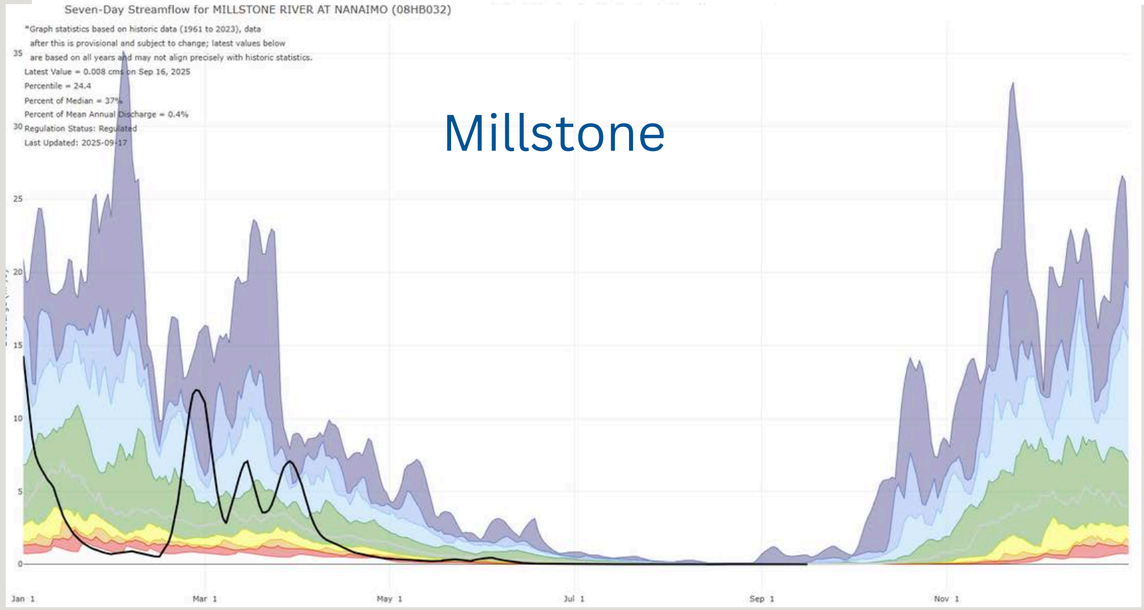
OBSERVED STREAMFLOWS – 2025



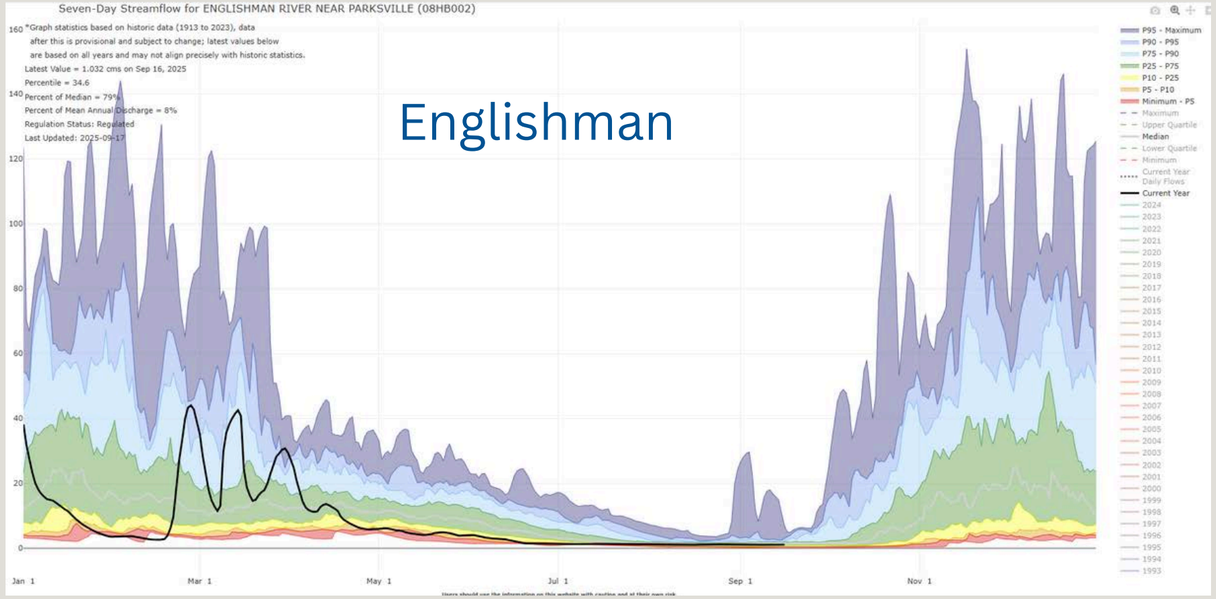
Nanaimo River



Little Qualicum



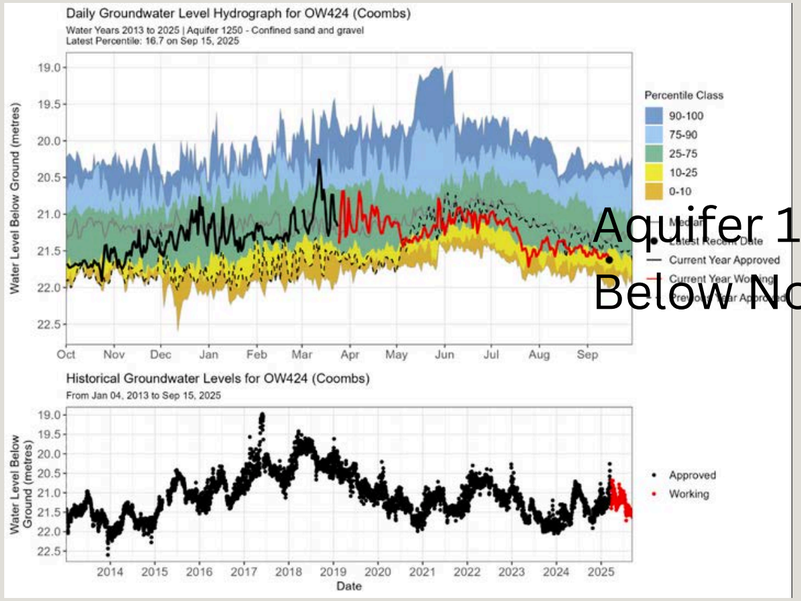
Millstone



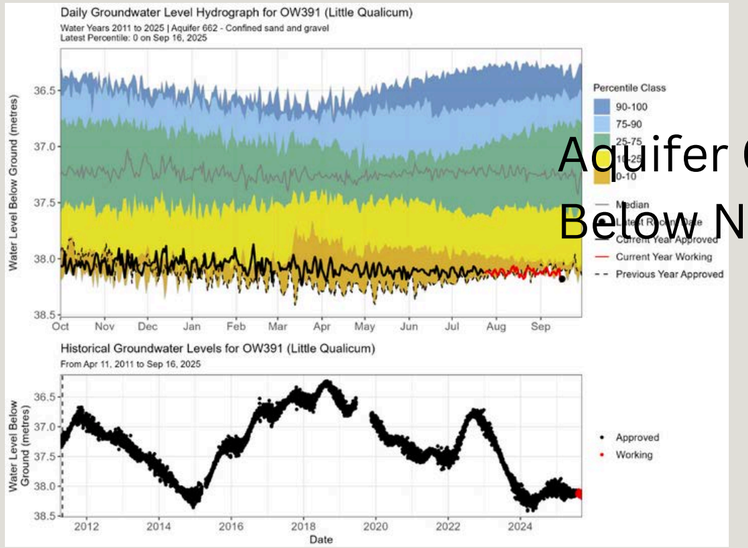
Englishman

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

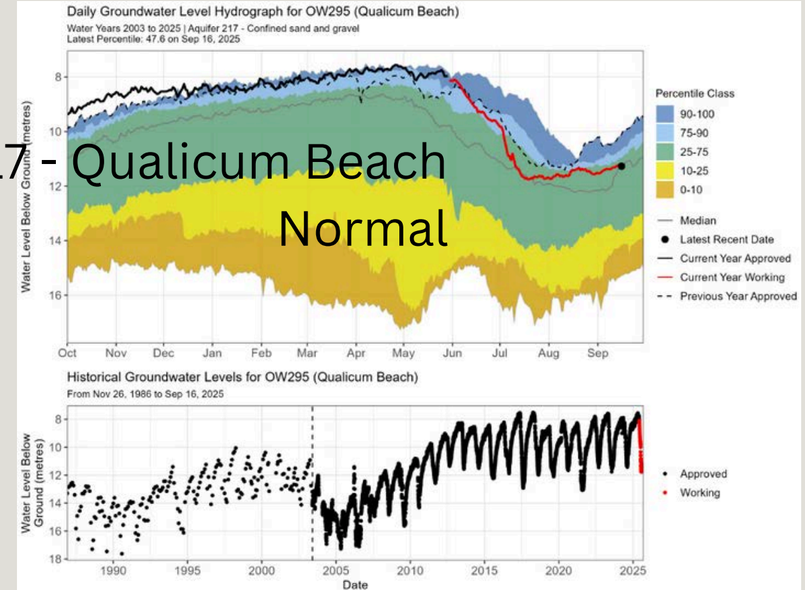
OBSERVATION WELLS IN REGIONAL AQUIFERS



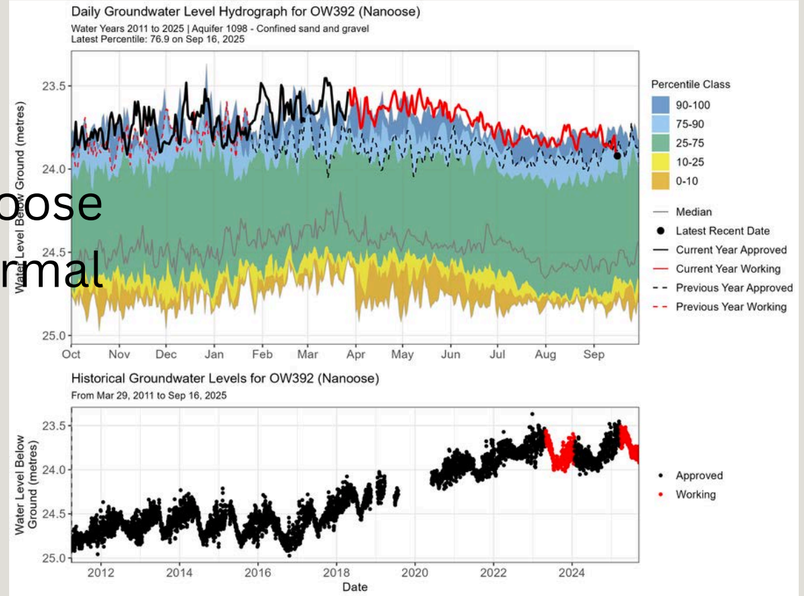
Aquifer 1250 - Coombs
Below Normal



Aquifer 662 - Little Qualicum
Below Normal



Aquifer 217 - Qualicum Beach
Normal



Aquifer 1098- Nanoose
Above Normal

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

Communicate

- **Educating residents through diverse outreach** such as: social media, print materials, community event Team Watersmart booths, roadside signage, and additional approaches as needed
- Promoting water conservation as **essential for ecological health and wildfire preparedness**.

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

- Outreach on social media, in person, and on the Team Watersmart Get Involved page
- Print material
  - Monthly ads included in the Nanaimo News Bulletin and PQB News
- Regular social media updates and education materials shared at events through the Team WaterSmart booth
- News Releases – prepared when water conservation levels change

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

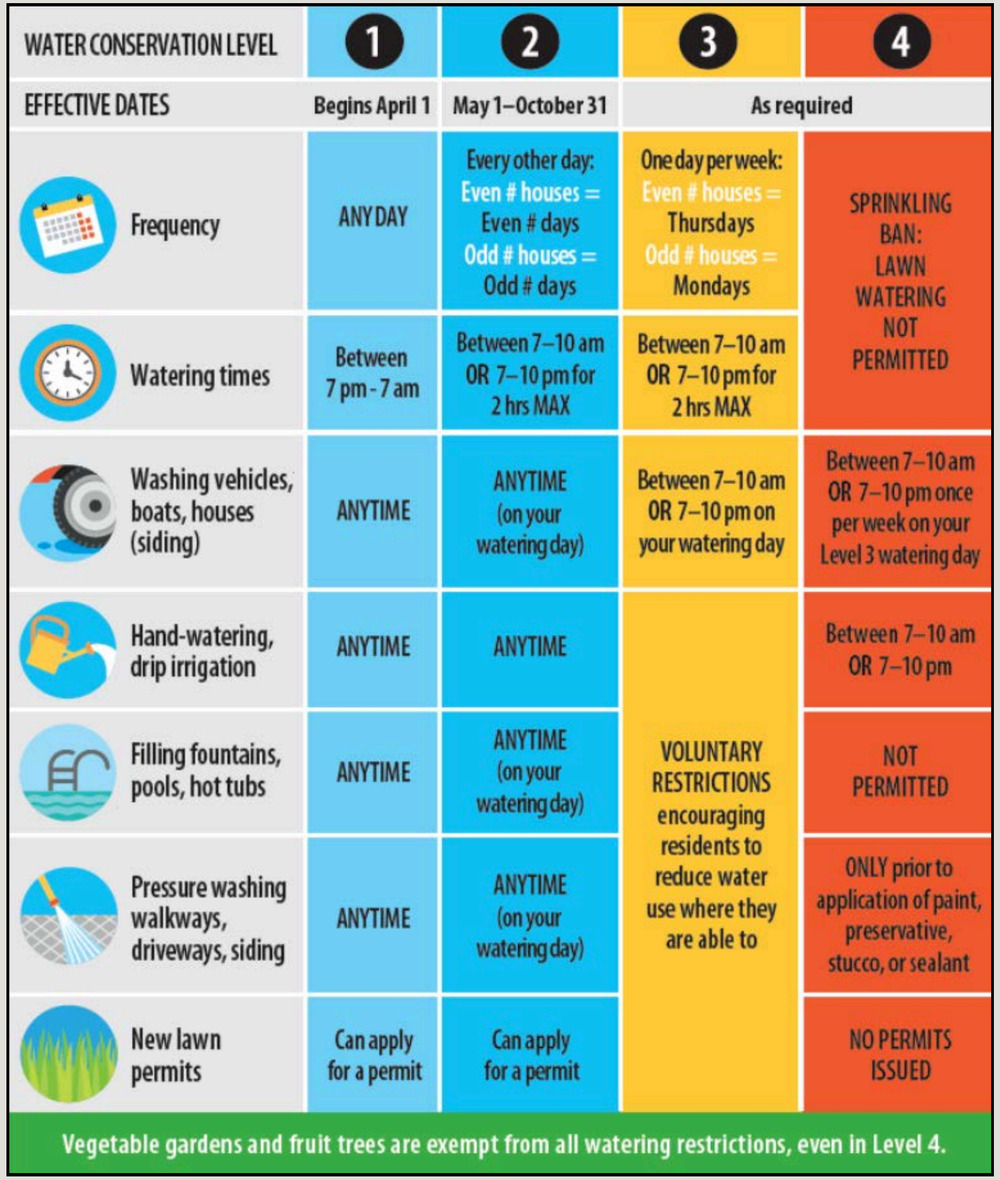
Coordinate

- **Regular coordination with regional water purveyors** to align conservation levels and share system updates.
- **Maintaining a centralized interactive map** showing watering restrictions by purveyor area.
- Bringing updates to the **DWWP Technical Advisory Committee** pre-drought season to review and gather feedback on regional drought strategies.

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

Water Conservation Framework

- Most major water service providers across the region align communications with this recognizable tool
- Developed in 2016, updated in 2024
  - RDN Bylaw 1564 (.05) was amended in 2024
  - Several major water service providers adjusted policies / bylaws to align with this update
- Intended to harmonize communication across the region
- Acknowledgement of operational differences between the water systems across the RDN



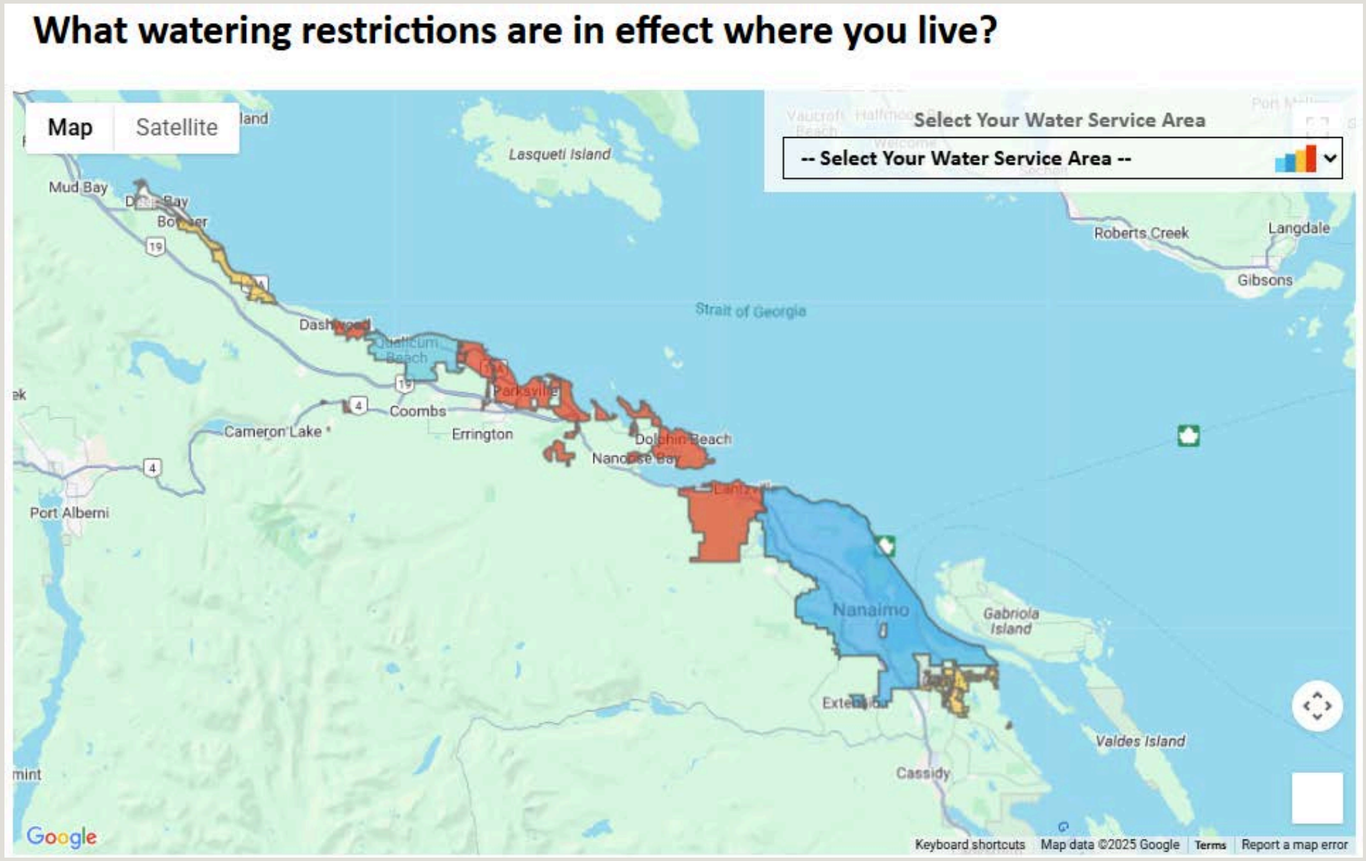
WATER CONSERVATION LEVEL	1	2	3	4
EFFECTIVE DATES	Begins April 1	May 1–October 31	As required	
Frequency	ANY DAY	Every other day: Even # houses = Even # days Odd # houses = Odd # days	One day per week: Even # houses = Thursdays Odd # houses = Mondays	SPRINKLING BAN: LAWN WATERING NOT PERMITTED
Watering times	Between 7 pm - 7 am	Between 7–10 am OR 7–10 pm for 2 hrs MAX	Between 7–10 am OR 7–10 pm for 2 hrs MAX	
Washing vehicles, boats, houses (siding)	ANYTIME	ANYTIME (on your watering day)	Between 7–10 am OR 7–10 pm on your watering day	Between 7–10 am OR 7–10 pm once per week on your Level 3 watering day
Hand-watering, drip irrigation	ANYTIME	ANYTIME	VOLUNTARY RESTRICTIONS encouraging residents to reduce water use where they are able to	Between 7–10 am OR 7–10 pm
Filling fountains, pools, hot tubs	ANYTIME	ANYTIME (on your watering day)		NOT PERMITTED
Pressure washing walkways, driveways, siding	ANYTIME	ANYTIME (on your watering day)		ONLY prior to application of paint, preservative, stucco, or sealant
New lawn permits	Can apply for a permit	Can apply for a permit		NO PERMITS ISSUED

Vegetable gardens and fruit trees are exempt from all watering restrictions, even in Level 4.

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

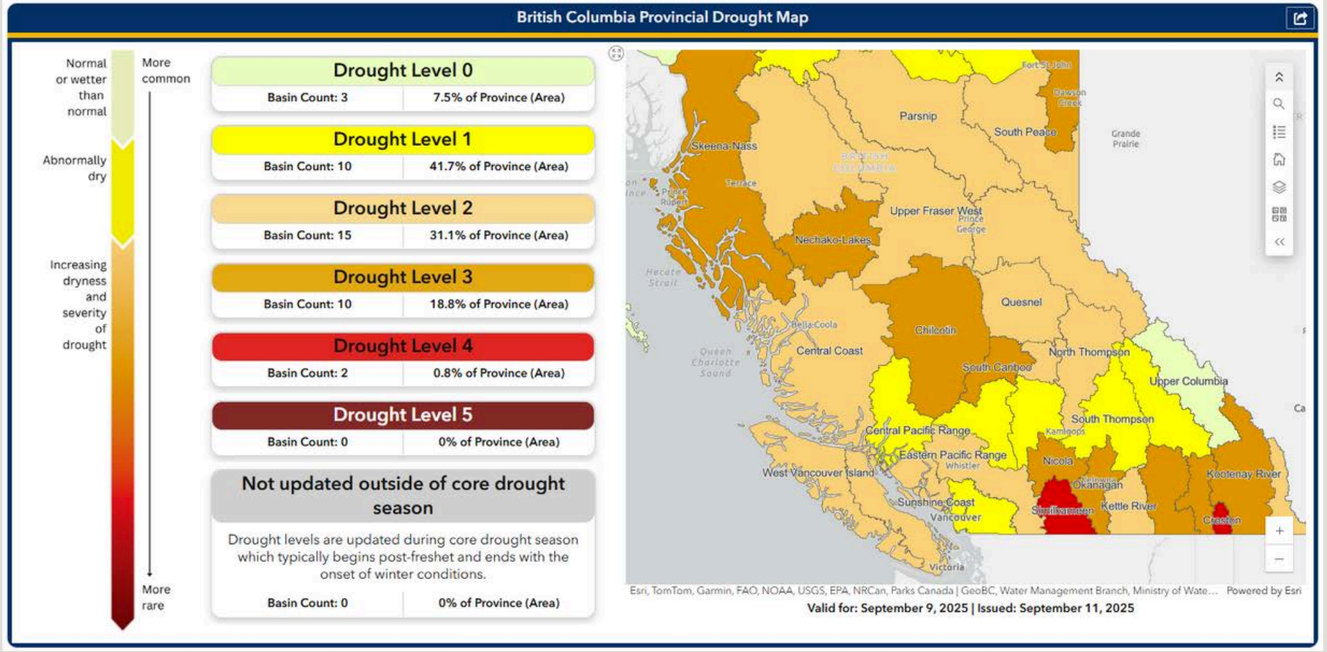
RDN WATER SERVICE AREA RESPONSES

Year	Stage 1	Stage 2	Stage 3	Stage 4	Downgraded	Lifted
2016	April 1	May 1	N/A	N/A	Oct 1 – Stage 1	Nov 1
2017	April 1	May 1	July 1	N/A	Sept 14 – Stage 2	Nov 1
2018	April 1	May 1	Aug 10	N/A	Sept 12 – Stage 2 Oct 1 – Stage 1	Nov 1
2019	April 1	May 1	June 14	N/A	Sept 13 – Stage 2 Oct 1 – Stage 1	Nov 1
2020	April 1	May 1	N/A	N/A	Oct 1 – Stage 1	Nov 1
2021	April 1	May 1	June 29	Aug 20	Sept 23 – Stage 2 Oct 1 – Stage 1	Nov 1
2022	April 1	May 1	N/A	Oct 4	N/A	Nov 1
2023	April 1	May 1	June 15	July 3	Oct 5 – Stage 3 Oct 19 – Stage 1	Nov 1
2024	April 1	May 1	July 16	July 23	N/A	Nov 1
2025	April 1	May 1	June 27	Aug 1		



SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

PROVINCIAL DROUGHT REPORTING



Drought Levels determined by the Province based on hydrological drought conditions. The main drought indicators now used to monitor drought levels in B.C. are:

- Precipitation percentiles
- Standardized Precipitation Index
- Standardized Precipitation Evapotranspiration Index (SPEI) (various timescales);
- 7-Day average streamflow percentiles;
- 7-Day average lake level percentiles; and
- Groundwater level percentiles (daily).

May 15	May 22	May 29	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24	July 31	Aug 7	Aug 14	Aug 21	Aug 28	Sept 4	Sept 11
Level 3	Level 2	Level 1	Level 1	Level 1	Level 1	Level 1	Level 2	Level 2	Level 2	Level 2	Level 3	Level 3	Level 3	Level 0	Level 1	Level 2	Level 2

May 16
Rain event
12mm

June/July
3 minor rain events

July 31
Wesley Ridge Fire

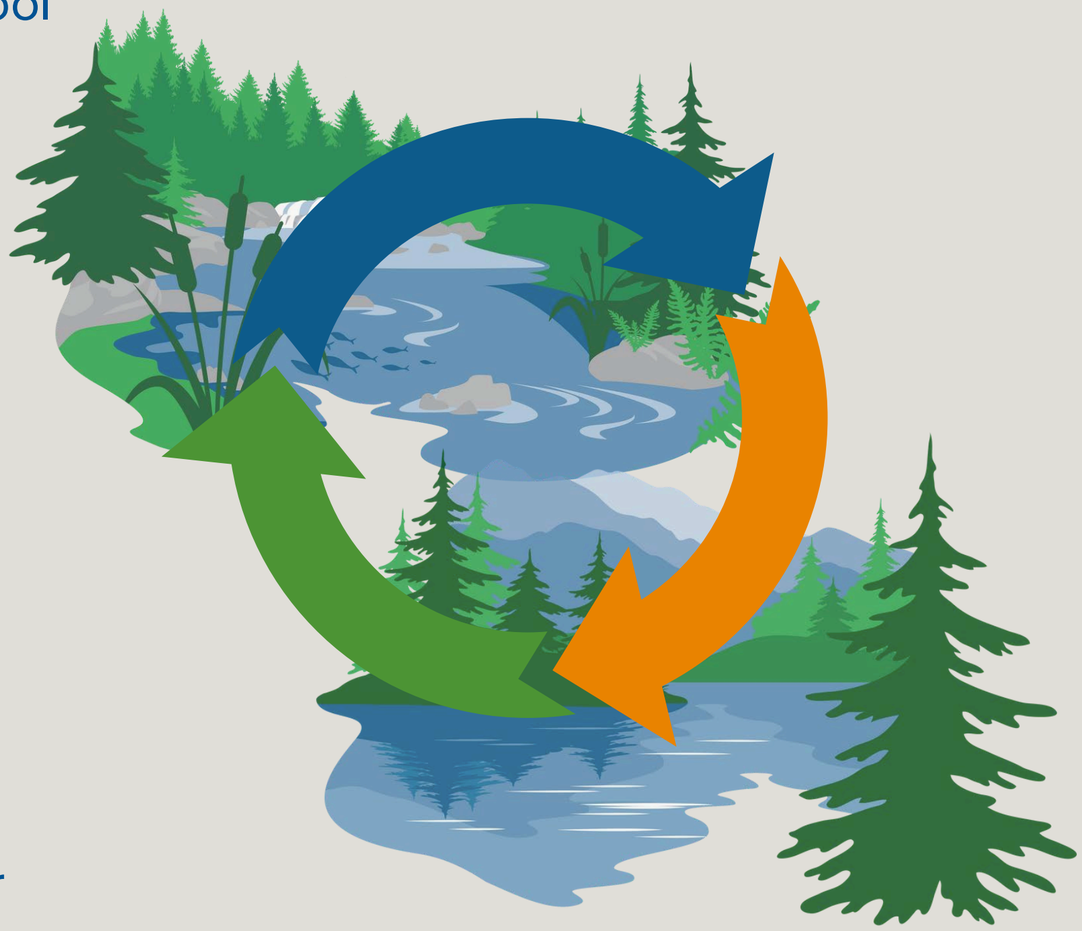
August 11
Mt. Underwood Fire

August 14
Rain event
15mm

SUMMER 2025 REGIONAL DROUGHT RESPONSE SUMMARY

KEY TAKEAWAYS / LEARNING FOR NEXT SEASON

- Provincial drought messaging no longer a key guiding tool to setting local water conservation levels
- Inter-regional support and coordination supports clear messaging for residents
- Approach with conservation education and communication first; tools for enforcement are secondary - “educate before regulate”
- Diversity in water systems across the region is an opportunity for education on water sources
- Essential to highlight that reducing consumption supports ecological health
- Climate change means normalizing a reduction in water use every summer



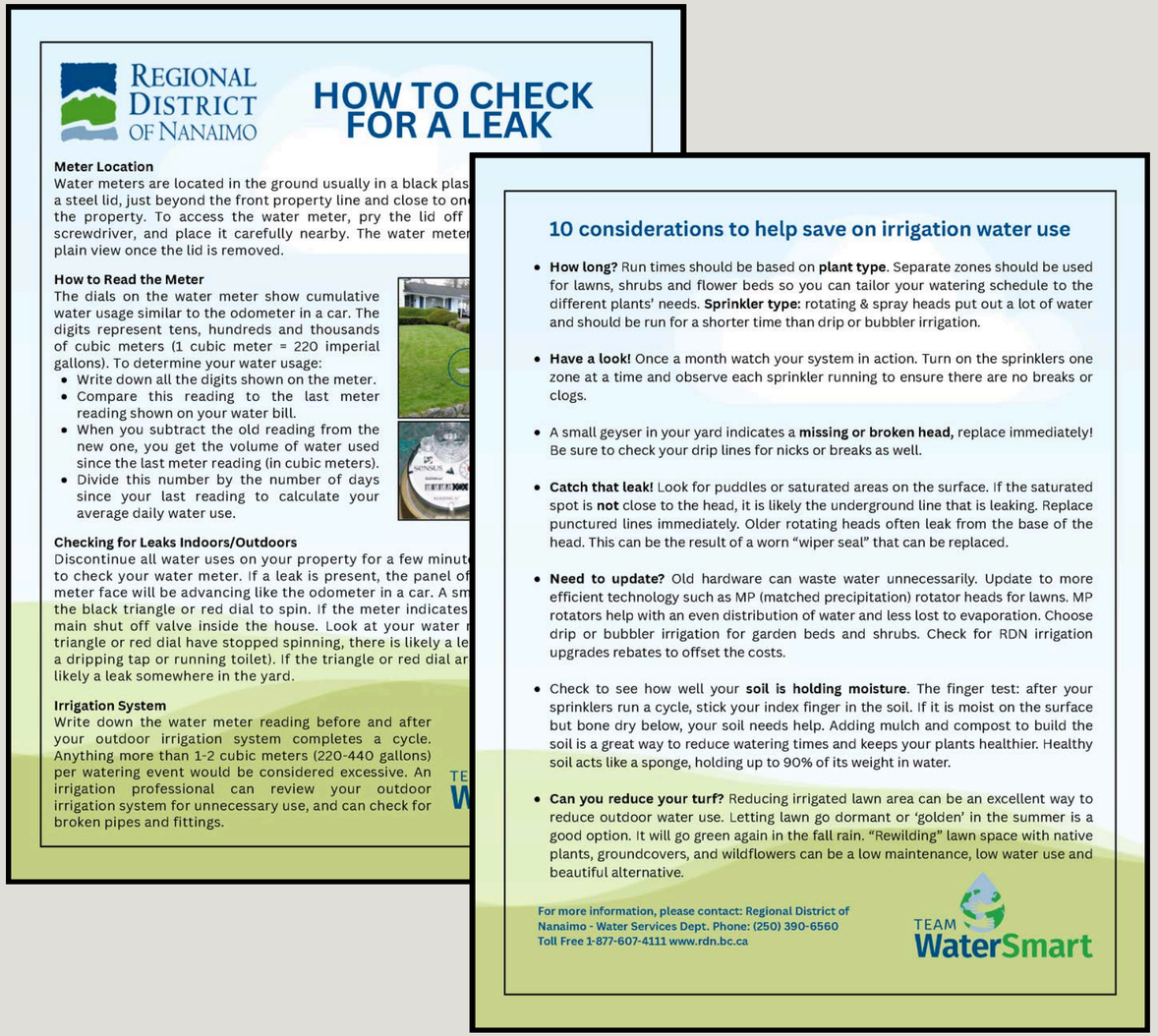
TEAM WATERSMART EVENTS

RESIDENTIAL IRRIGATION CHECKS

Information package included:

- Introductory letter explaining why they are receiving the package and steps to follow
- ‘How to Check for Leaks’ and ‘Top 10 Irrigation Tips”
- Irrigation programming guidelines
- Irrigation rebate information
- Landscape Irrigation Calculator

We experienced mixed community feedback, but did positively engage with numerous recipients, discussing important water-related information and water saving techniques.



REGIONAL DISTRICT OF NANAIMO

HOW TO CHECK FOR A LEAK

Meter Location
Water meters are located in the ground usually in a black plas
a steel lid, just beyond the front property line and close to on
the property. To access the water meter, pry the lid off
screwdriver, and place it carefully nearby. The water meter
plain view once the lid is removed.

How to Read the Meter
The dials on the water meter show cumulative water usage similar to the odometer in a car. The digits represent tens, hundreds and thousands of cubic meters (1 cubic meter = 220 imperial gallons). To determine your water usage:

- Write down all the digits shown on the meter.
- Compare this reading to the last meter reading shown on your water bill.
- When you subtract the old reading from the new one, you get the volume of water used since the last meter reading (in cubic meters).
- Divide this number by the number of days since your last reading to calculate your average daily water use.

Checking for Leaks Indoors/Outdoors
Discontinue all water uses on your property for a few minut
to check your water meter. If a leak is present, the panel of
meter face will be advancing like the odometer in a car. A sm
the black triangle or red dial to spin. If the meter indicates
main shut off valve inside the house. Look at your water
triangle or red dial have stopped spinning, there is likely a le
a dripping tap or running toilet). If the triangle or red dial ar
likely a leak somewhere in the yard.

Irrigation System
Write down the water meter reading before and after your outdoor irrigation system completes a cycle. Anything more than 1-2 cubic meters (220-440 gallons) per watering event would be considered excessive. An irrigation professional can review your outdoor irrigation system for unnecessary use, and can check for broken pipes and fittings.

10 considerations to help save on irrigation water use

- **How long?** Run times should be based on **plant type**. Separate zones should be used for lawns, shrubs and flower beds so you can tailor your watering schedule to the different plants’ needs. **Sprinkler type:** rotating & spray heads put out a lot of water and should be run for a shorter time than drip or bubbler irrigation.
- **Have a look!** Once a month watch your system in action. Turn on the sprinklers one zone at a time and observe each sprinkler running to ensure there are no breaks or clogs.
- A small geyser in your yard indicates a **missing or broken head,** replace immediately! Be sure to check your drip lines for nicks or breaks as well.
- **Catch that leak!** Look for puddles or saturated areas on the surface. If the saturated spot is **not** close to the head, it is likely the underground line that is leaking. Replace punctured lines immediately. Older rotating heads often leak from the base of the head. This can be the result of a worn “wiper seal” that can be replaced.
- **Need to update?** Old hardware can waste water unnecessarily. Update to more efficient technology such as MP (matched precipitation) rotator heads for lawns. MP rotators help with an even distribution of water and less lost to evaporation. Choose drip or bubbler irrigation for garden beds and shrubs. Check for RDN irrigation upgrades rebates to offset the costs.
- Check to see how well your **soil is holding moisture**. The finger test: after your sprinklers run a cycle, stick your index finger in the soil. If it is moist on the surface but bone dry below, your soil needs help. Adding mulch and compost to build the soil is a great way to reduce watering times and keeps your plants healthier. Healthy soil acts like a sponge, holding up to 90% of its weight in water.
- **Can you reduce your turf?** Reducing irrigated lawn area can be an excellent way to reduce outdoor water use. Letting lawn go dormant or ‘golden’ in the summer is a good option. It will go green again in the fall rain. “Rewilding” lawn space with native plants, groundcovers, and wildflowers can be a low maintenance, low water use and beautiful alternative.

For more information, please contact: Regional District of Nanaimo - Water Services Dept. Phone: (250) 390-6560
Toll Free 1-877-607-4111 www.rdn.bc.ca

TEAM WaterSmart

TEAM WATERSMART EVENTS
2025 WATER SAVER CONTEST

- The Water Saver Contest is held annually, with the winner receiving a rain barrel and native plant prize pack.
- Low uptake this year
- RDN residents can enter in person at our booths or online.
- Closes November 1st in alignment with lifting watering restrictions

TEAM WATERSMART EVENTS

IIABC FUNDING – SUBSIDIES FOR CERTIFICATIONS

Reintroducing DWWP rebate program offering funds to RDN residents to take IIABC course

- $100 and $150 subsidies eligible for 6 different IIABC courses
- Courses in question focus on drip irrigation and water saving practices
- Intended to create a network of irrigation professionals we can recommend for the irrigation rebate program
- Partnership will continue into 2026 and beyond

TEAM WATERSMART EVENTS

WATER EFFICIENT LANDSCAPING BROCHURE

Development of a new WaterSmart brochure to teach readers about various backyard water efficient landscaping practices.

Contains information about:

- How to design and operate a water-efficient irrigation system.
- How to grow and manage a sustainable small lawn area.
- Water conscious plant choices.
- The importance of high-quality soil

Our overarching goal is to combine older brochures into new ones with same graphic style.

TEAM WATERSMART EVENTS
SUMMER OUTREACH

- Each year, the team aims to attend at least one event in each municipality/area.
- The team has also visited 6 RDN summer camps in July and August
- Prioritizing events that reach a broad range of community members
- Our new “Where Does Your Water Come From?” banner shows community members where their water source is located

TEAM WATERSMART EVENTS
RECENT EVENTS

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- The team has also visited 6 RDN summer camps in July and August
- Prioritizing events that reach a broad range of community members
- Our new “Where Does Your Water Come From?” banner shows community members where their water source is located

Qualicum Beach Family Day	May 25, 2025
Qualicum Beach Day	Jul 27, 2025
Errington Hi Neighbour Day	Aug 16, 2025
Cedar Farmers Market	Sep 7, 2025
Lantzville Minetown Day	Sep 13, 2025
Nanoose Community Day	Sep 13, 2025

TEAM WATERSMART EVENTS
UPCOMING EVENTS

Oceanside Volunteer Fair	Sep 24, 2025
BC National Forest Celebration	Sep 27, 2025
World Rivers Day	Sep 28, 2025
Sparking Inspirations Early Years Conference	Oct 24, 2025
WellSmart Workshop	Oct 30, 2025
Nanaimo Rhododendron Society Presentation	Nov 13, 2025

TEAM WATERSMART EVENTS
WATERSHED FIELD TRIPS

Performed 8 Watershed field trips in the Spring.

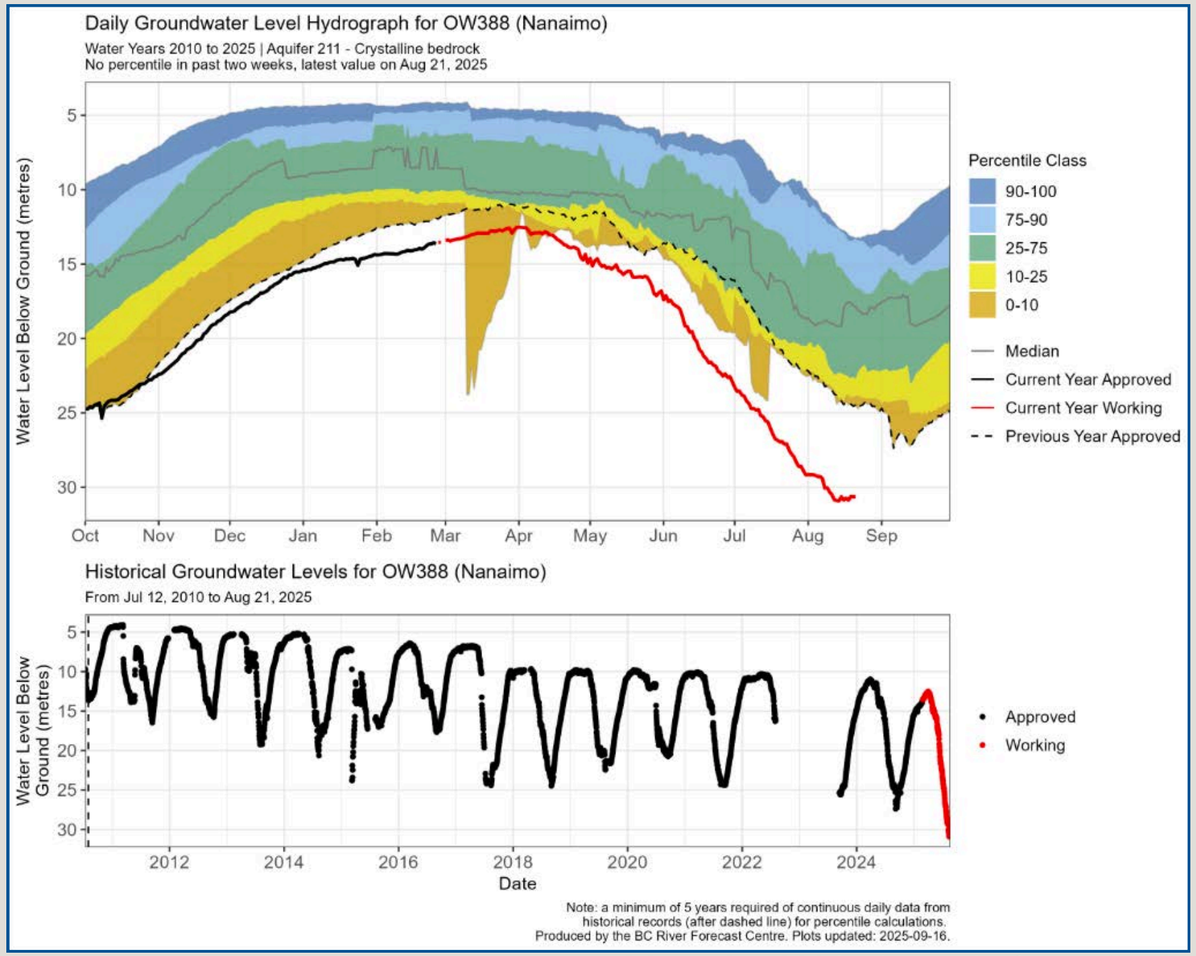
Offering 5 grade 4/5 field trips for Fall 2025:

- 2 field trips to the Nanaimo River
  - Partnership with MOSAIC, City of Nanaimo
  - Field trips are filled for 2025

- 3 field trips to the Englishman River
  - Partnership with RDN Parks
  - Unable to tour water treatment facility
  - Hoping to contact teachers by end of September 2025

Also working with RDN Climate and Parks to launch 2025/26 Youth Ambassadors program

TEAM WATERSMART EVENTS
OUTREACH RESPONSE TO DECLINING LEVELS IN AQUIFER 211



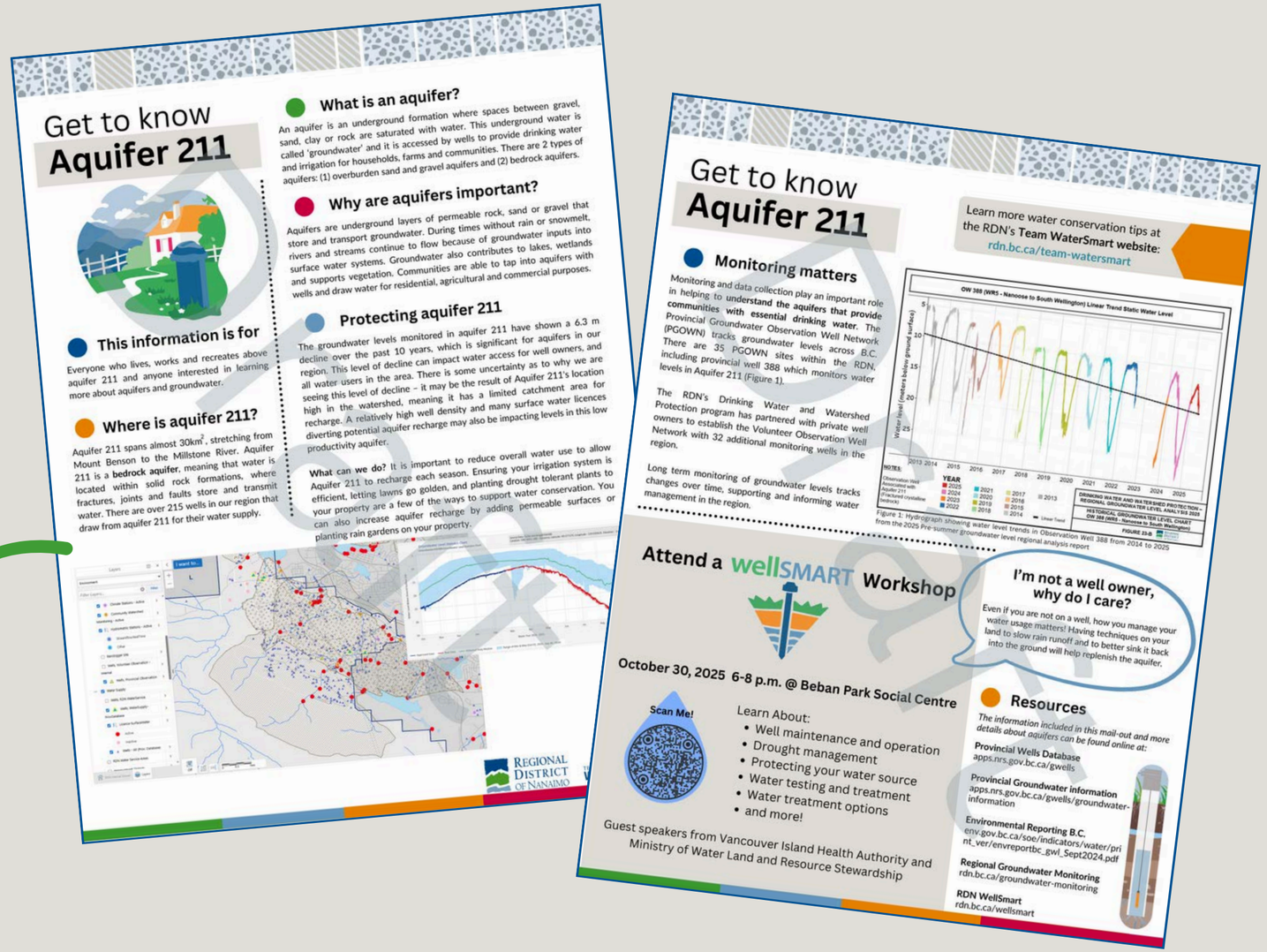
PGOWN OW 388 hydrographs for aquifer 211

- PGOWN OW 388 located in aquifer 211 (under EA C and City of Nanaimo - Benson foothills) has seen a decline of 0.63 m/yr
- Ad hoc working group formed between provincial groundwater monitoring team, RDN Planning, City of Nanaimo Planning, and DWWP to discuss strategy to address declines
- Initial approach = **educate**
  - Developing mail-out to residents
  - Includes information about the aquifer and a call to action on water conservation
  - WellSmart Workshop targeting residents that live above aquifer 211

TEAM WATERSMART EVENTS
OUTREACH RESPONSE TO DECLINING LEVELS IN AQUIFER 211

Mail-out to be distributed mid-October ahead of **WellSmart Workshop on Oct. 30 at Beban Plaza**

Please leave your comments



Get to know
Aquifer 211

This information is for

Everyone who lives, works and recreates above aquifer 211 and anyone interested in learning more about aquifers and groundwater.

Where is aquifer 211?

Aquifer 211 spans almost 30km^2, stretching from Mount Benson to the Millstone River. Aquifer 211 is a **bedrock aquifer**, meaning that water is located within solid rock formations, where fractures, joints and faults store and transmit water. There are over 215 wells in our region that draw from aquifer 211 for their water supply.

What is an aquifer?

An aquifer is an underground formation where spaces between gravel, sand, clay or rock are saturated with water. This underground water is called 'groundwater' and it is accessed by wells to provide drinking water and irrigation for households, farms and communities. There are 2 types of aquifers: (1) overburden sand and gravel aquifers and (2) bedrock aquifers.

Why are aquifers important?

Aquifers are underground layers of permeable rock, sand or gravel that store and transport groundwater. During times without rain or snowmelt, rivers and streams continue to flow because of groundwater inputs into surface water systems. Groundwater also contributes to lakes, wetlands and supports vegetation. Communities are able to tap into aquifers with wells and draw water for residential, agricultural and commercial purposes.

Protecting aquifer 211

The groundwater levels monitored in aquifer 211 have shown a 6.3 m decline over the past 10 years, which is significant for aquifers in our region. This level of decline can impact water access for well owners, and all water users in the area. There is some uncertainty as to why we are seeing this level of decline – it may be the result of Aquifer 211's location high in the watershed, meaning it has a limited catchment area for recharge. A relatively high well density and many surface water licences diverting potential aquifer recharge may also be impacting levels in this low productivity aquifer.

What can we do? It is important to reduce overall water use to allow Aquifer 211 to recharge each season. Ensuring your irrigation system is efficient, letting lawns go golden, and planting drought tolerant plants to your property are a few of the ways to support water conservation. You can also increase aquifer recharge by adding permeable surfaces or planting rain gardens on your property.

Regional District of Nanaimo

Get to know
Aquifer 211

Learn more water conservation tips at the RDN's **Team WaterSmart website:**
rdn.bc.ca/team-watersmart

Monitoring matters

Monitoring and data collection play an important role in helping to **understand the aquifers that provide communities with essential drinking water.** The Provincial Groundwater Observation Well Network (PGOWN) tracks groundwater levels across B.C. There are 35 PGOWN sites within the RDN, including provincial well 388 which monitors water levels in Aquifer 211 (Figure 1).

The RDN's Drinking Water and Watershed Protection program has partnered with private well owners to establish the Volunteer Observation Well Network with 32 additional monitoring wells in the region.

Long term monitoring of groundwater levels tracks changes over time, supporting and informing water management in the region.

Figure 1: Hydrograph showing water level trends in Observation Well 388 from 2014 to 2025 from the 2025 Pre-summer groundwater level regional analysis report

Attend a wellSMART Workshop

October 30, 2025 6-8 p.m. @ Beban Park Social Centre

Scan Me!

Learn About:
- Well maintenance and operation
- Drought management
- Protecting your water source
- Water testing and treatment
- Water treatment options
- and more!

Guest speakers from Vancouver Island Health Authority and Ministry of Water Land and Resource Stewardship

I'm not a well owner, why do I care?

Even if you are not on a well, how you manage your water usage matters! Having techniques on your land to slow rain runoff and to better sink it back into the ground will help replenish the aquifer.

Resources

The information included in this mail-out and more details about aquifers can be found online at:

Provincial Wells Database
apps.nrs.gov.bc.ca/gwells

Provincial Groundwater information
apps.nrs.gov.bc.ca/gwells/groundwater-information

Environmental Reporting B.C.
env.gov.bc.ca/soe/indicators/water/print_ver/envreportbc_gwl_Sept2024.pdf

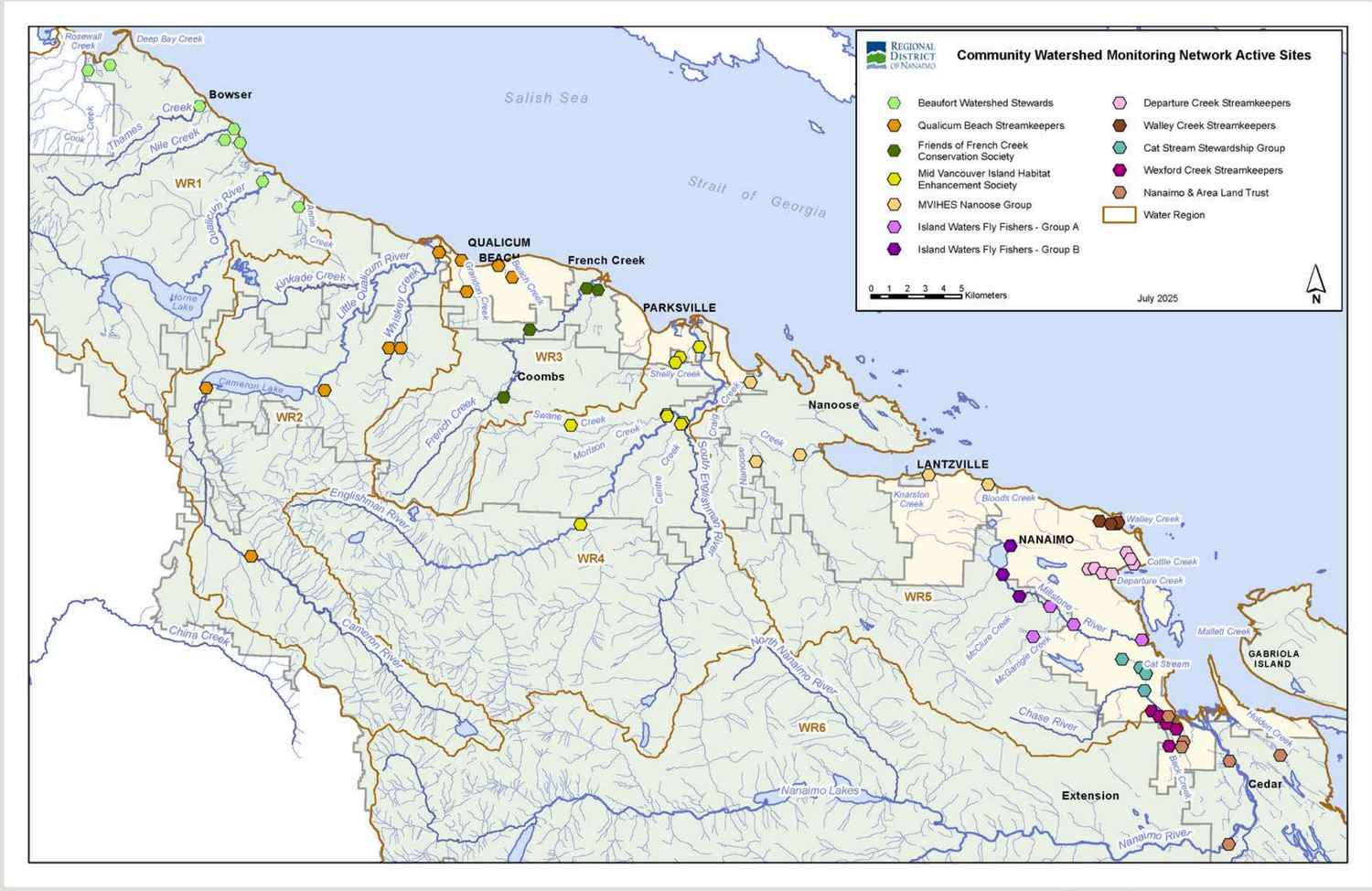
Regional Groundwater Monitoring
rdn.bc.ca/groundwater-monitoring

RDN WellSmart
rdn.bc.ca/wellsmart

COMMUNITY WATERSHED MONITORING NETWORK
BACKGROUND

Surface water quality sampling

- Collecting water temperature, turbidity, dissolved oxygen, and specific conductance since 2011
- Consistent presence within watersheds
- Collected by trained community stewards
- Two 5-in-30 sample periods
  - Summer low flow (Aug/Sept)
  - Fall flush (Oct/Nov)
- Data publicly available



2025 CWMN monitoring sites

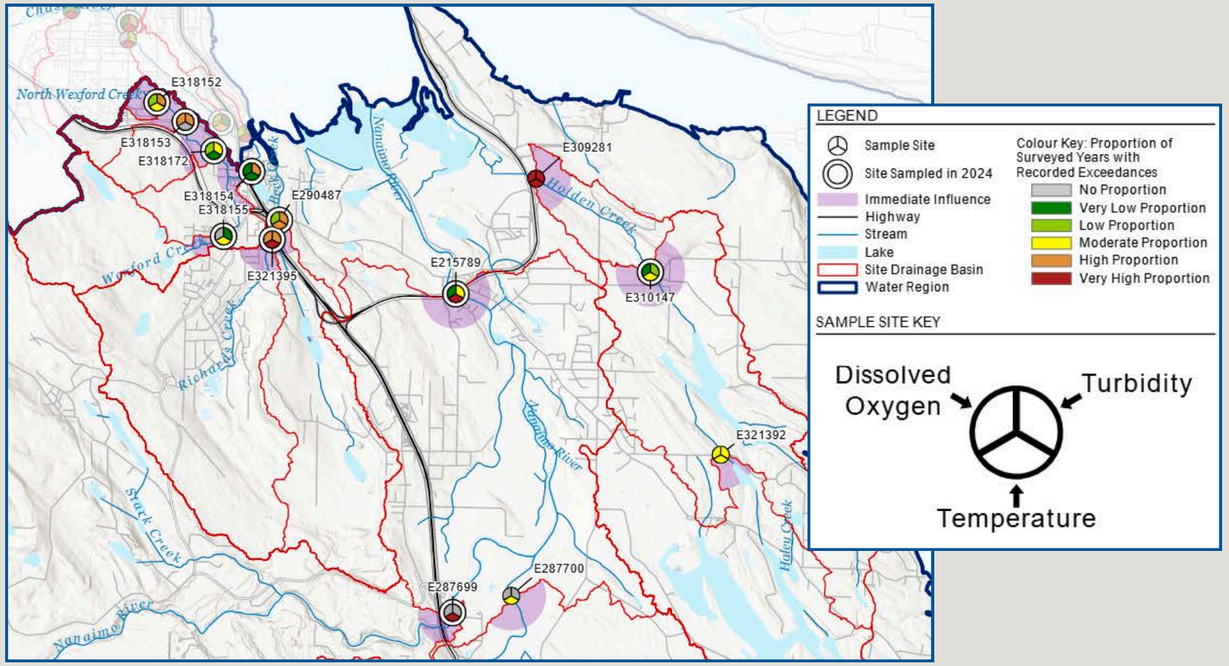
- Provincial methodology used supports comparison to Ambient Water Quality Objectives/Guidelines - *all data is compared to these guidelines in annual data analysis*

COMMUNITY WATERSHED MONITORING NETWORK
STRATEGIC PLANNING

- The CWMN has produced a large discrete dataset that has supported educational opportunities, additional monitoring, restoration activities, and environmental advocacy

- There are many organizations completing stewardship work; a way to bring it all together and address watersheds with a current and holistic approach is needed

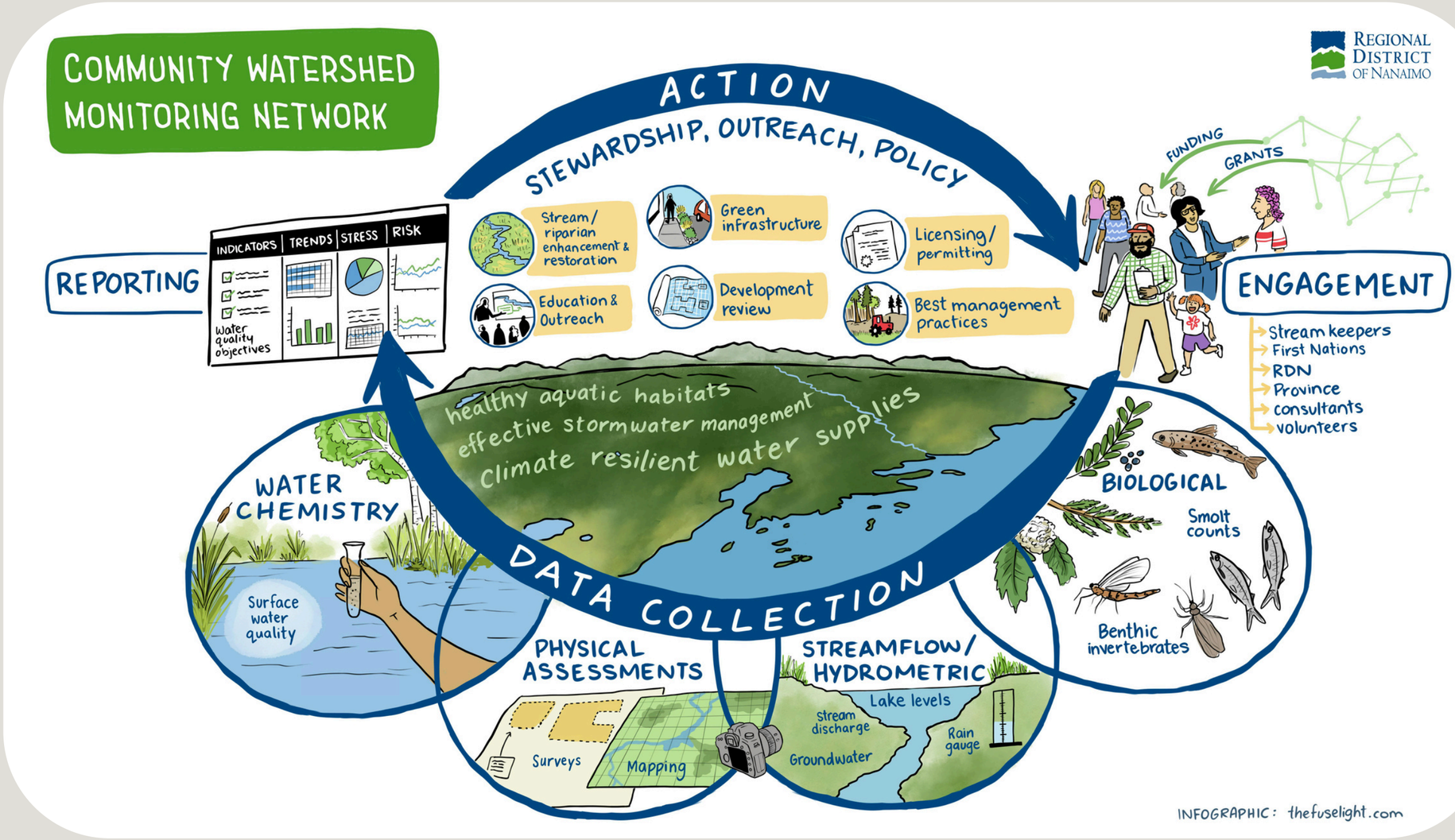
2024 CWMN Results Session



2025 water region 6 summer exceedance map

COMMUNITY WATERSHED MONITORING NETWORK
STRATEGIC PLANNING

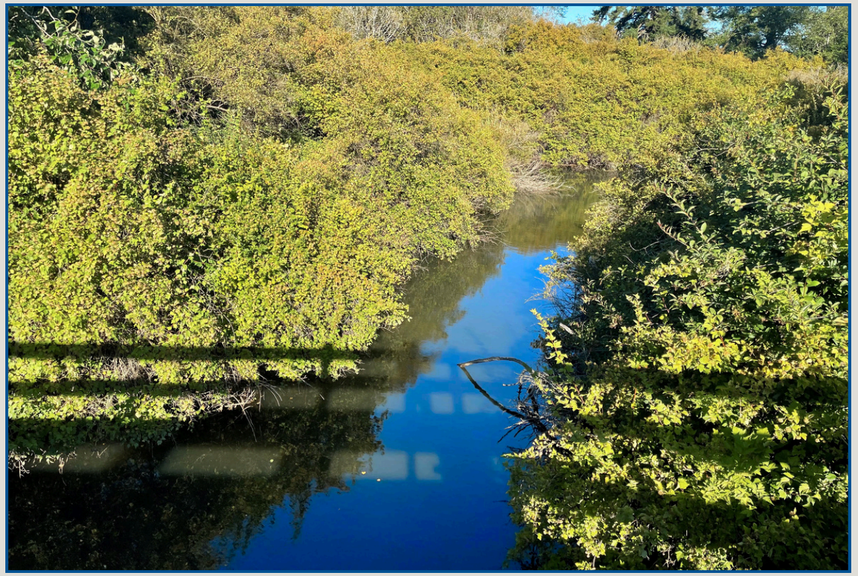
Purpose:
To review the RDN Community Watershed Monitoring Network and refresh its strategic direction for the next 5 years and beyond, based on past learnings, concurrent efforts, and related priorities



COMMUNITY WATERSHED MONITORING NETWORK
STRATEGIC PLANNING

Feedback from community stewards

- Monitoring priorities
- Key goals for the plan
- Resource allocations and partnerships
- Co-creating a plan
- Making room for the program evaluation and strategic planning process



Millstone River upstream Newfield Rd bridge

Benson Creek downstream Camp Caillet bridge

- Support to continue monitoring
- Adjustments to make space for the process
  - CWMN reduction in support
    - One training day with two sessions
    - Training optional for experienced volunteers
    - Online how-to videos
  - Volunteer Observation Well Network consultant support

COMMUNITY WATERSHED MONITORING NETWORK
STRATEGIC PLANNING

Streamside Dialogues

- *Meet with stewardship partners* to discuss watersheds and sites monitored as part of the CWMN
- Meetings will *support the strategic planning process and creation of a framework* for the next evolution of the CWMN
- *Dialogues are specific to each group and area of interest*
- *Agenda* for the dialogues
  - intro and objectives to strategic plan
  - feedback on monitoring and the CWMN
  - projects on the go and planned for
  - known data gaps
  - mapping tools
  - site visits
  - capacity discussion
  - current and needed partners/collaborators

Beck Creek downstream Cedar Rd bridge

COMMUNITY WATERSHED MONITORING NETWORK
STRATEGIC PLANNING

Streamside Dialogues

- Pilot completed
- Dialogue took place during monitoring
- Visited each site with community stewardship group - Nanaimo and Area Land Trust (NALT)
- Supports connections between site characteristics and collected data

"The Stormwater layer on the City of Nanaimo map is very useful"

"City of Living Streams by Charles Thirkrill is a great resource for streams in and around Nanaimo"

"Type of landownership and zoning on a map would be beneficial"

"Construction of parkway had major impacts on streams"

Beck Creek

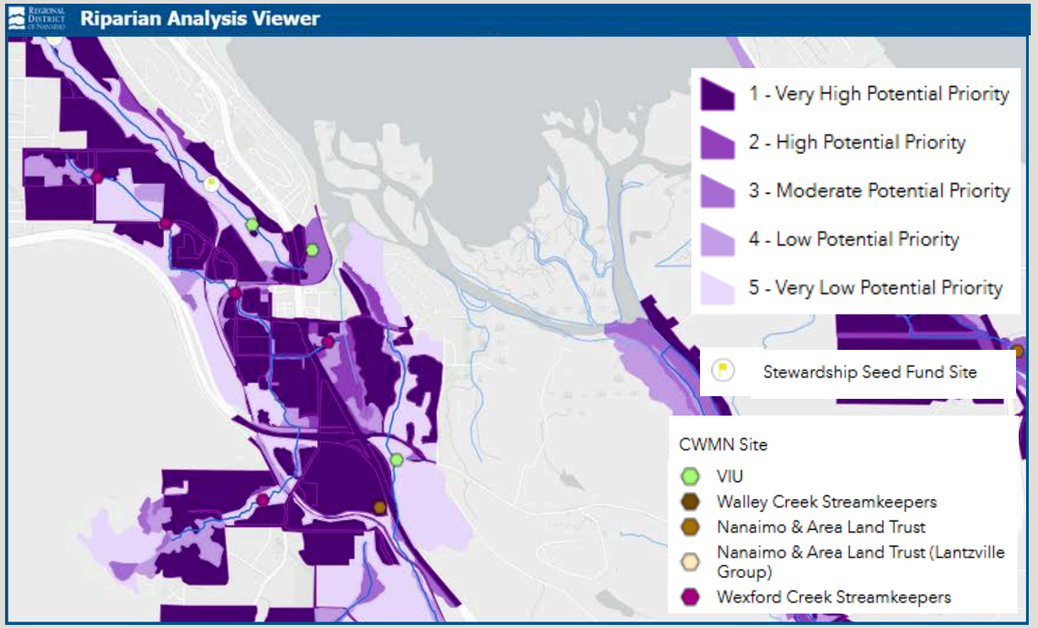
Nanaimo River

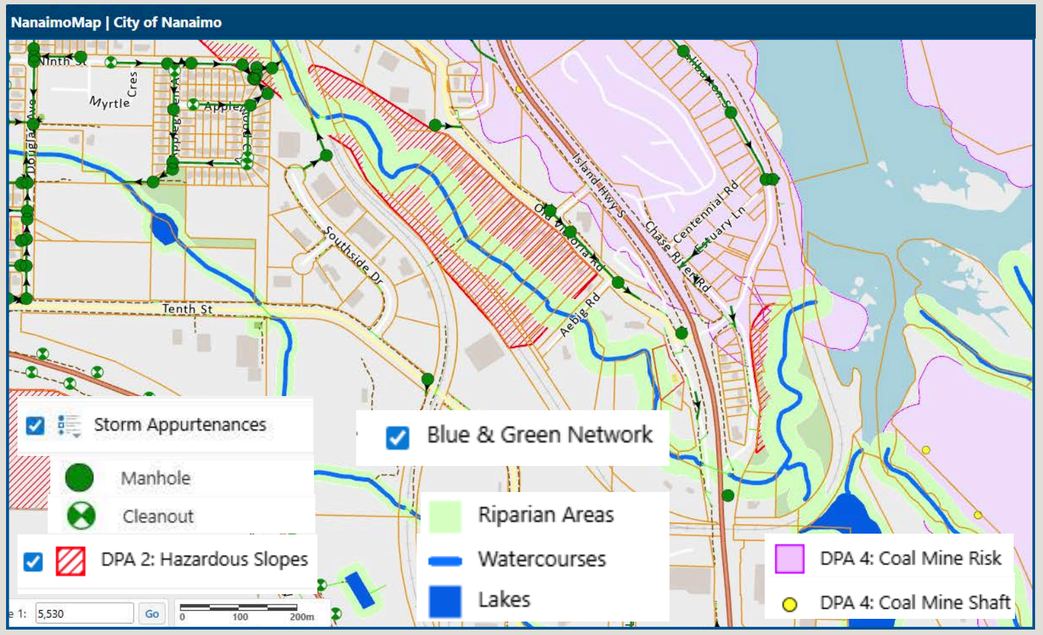
COMMUNITY WATERSHED MONITORING NETWORK
STRATEGIC PLANNING

Streamside Dialogues Next Steps

- Compile and summarize what we heard
- Follow-up meetings with community stewards after dialogues
- Complete process with more stewardship groups during fall monitoring
- Capacity analysis – internal and external
- Draft framework and recommendations based on consolidation of dialogues
- Mapping tools – riparian analysis map update to improve usability for stewardship groups

(RDN riparian map top right and City of Nanaimo map bottom right)



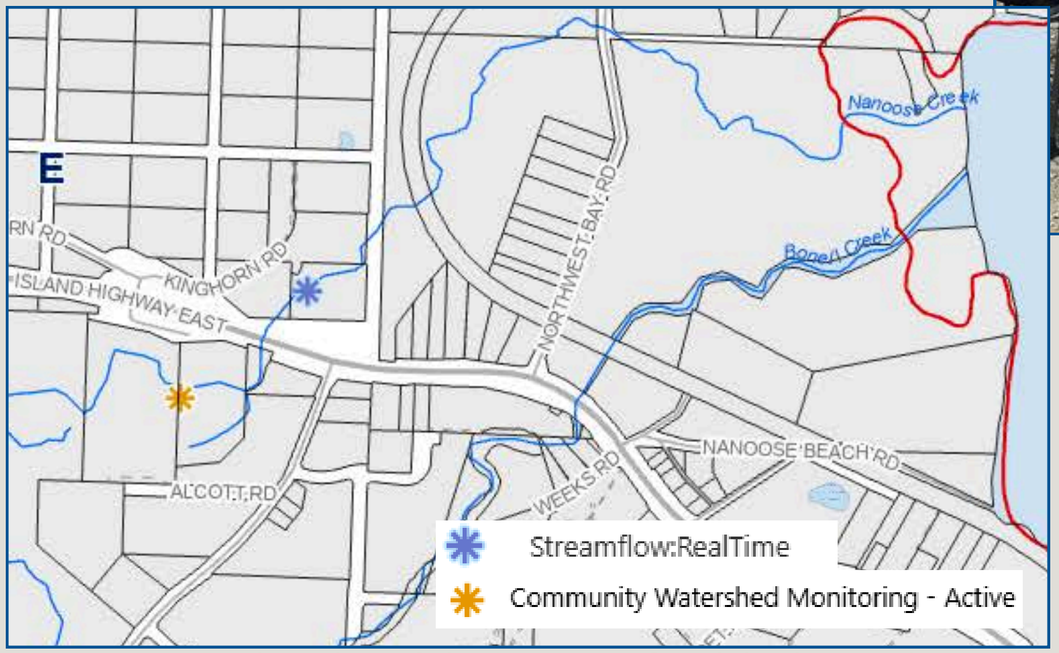


HYDROMETRIC MONITORING

Nanoose Creek flow station

- Historic site no longer viable location
- Provincial priorities revised; no longer can lead monitoring
- BCCF Community Flow Monitoring Network able to support in partnership with Mid Vancouver Island Habitat Enhancement Society (MVIHES) volunteers
- Installation Oct. 1, 2025
- Future opportunities with flow monitoring and collaboration with BCCF and community stewards

Rosewall Creek BCCF Flow Regatta



Re-location of the Nanoose Creek hydrometric station

CEDAR-YELLOWPOINT WATER BUDGET – UPDATE

- A Water Budget is an analysis that can track and better understand inflow and outflow of water in a specific area, such has a watershed or group of aquifers. When more water is taken out than is replenished, the system may experience stress.

- The Water Budget project aims to assist land and water managers in balancing competing water needs and land practices with finite water supplies

> *A tool to assess stress on aquifers and watersheds by comparing water availability with water use*

CEDAR-YELLOWPOINT WATER BUDGET – UPDATE

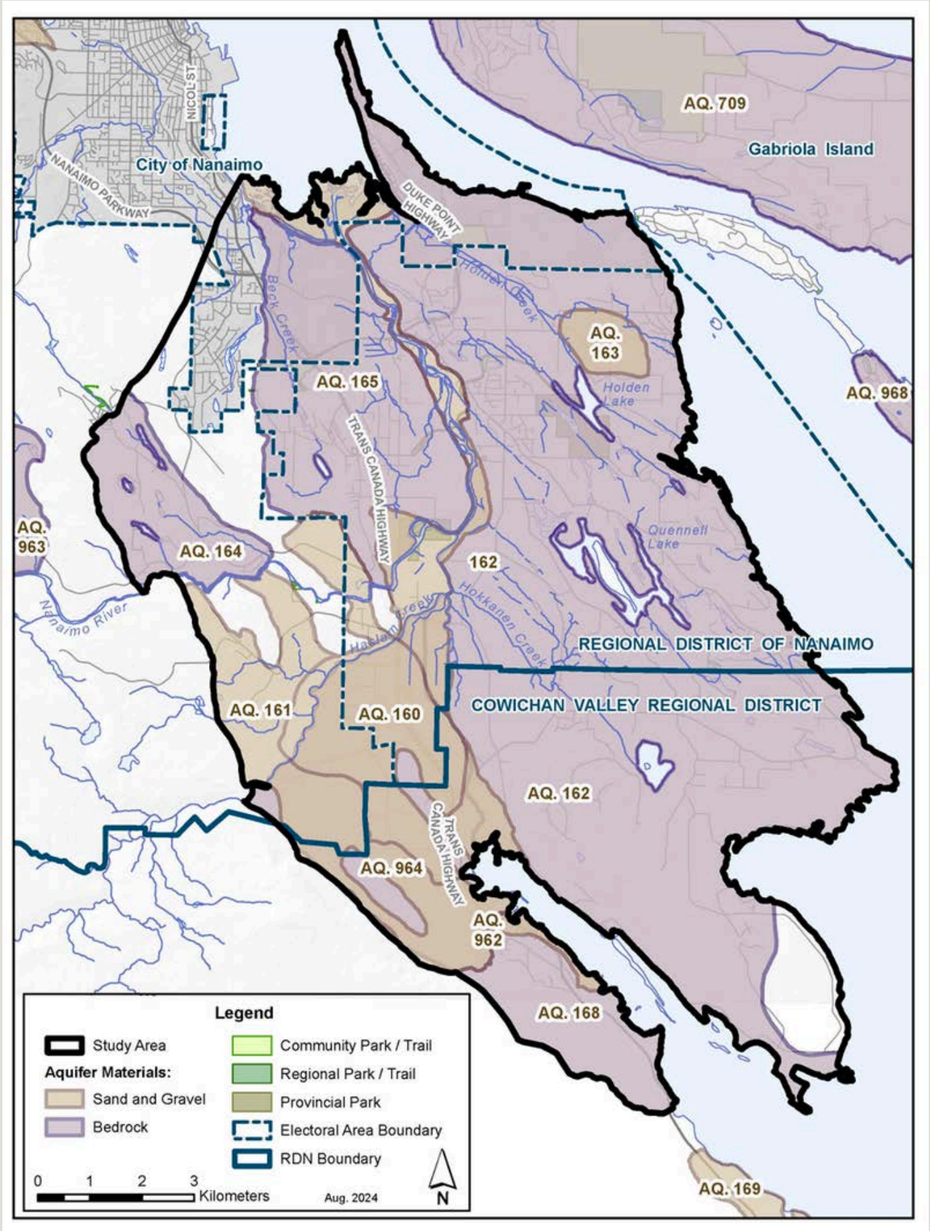
The project will:

- Focus on water quantity (both surface water and groundwater)
- Provide an understanding of boundary and availability conditions
  - scenarios include climate change, pumping (water use), and land cover change
- Develop a tool to support sustainable land and water use decisions
  - opportunity to develop common understanding with other governments including First Nations, City of Nanaimo, and Cowichan Valley Regional District as well as a number of water users and providers

CEDAR-YELLOWPOINT WATER BUDGET – UPDATE

PROGRESS UPDATE

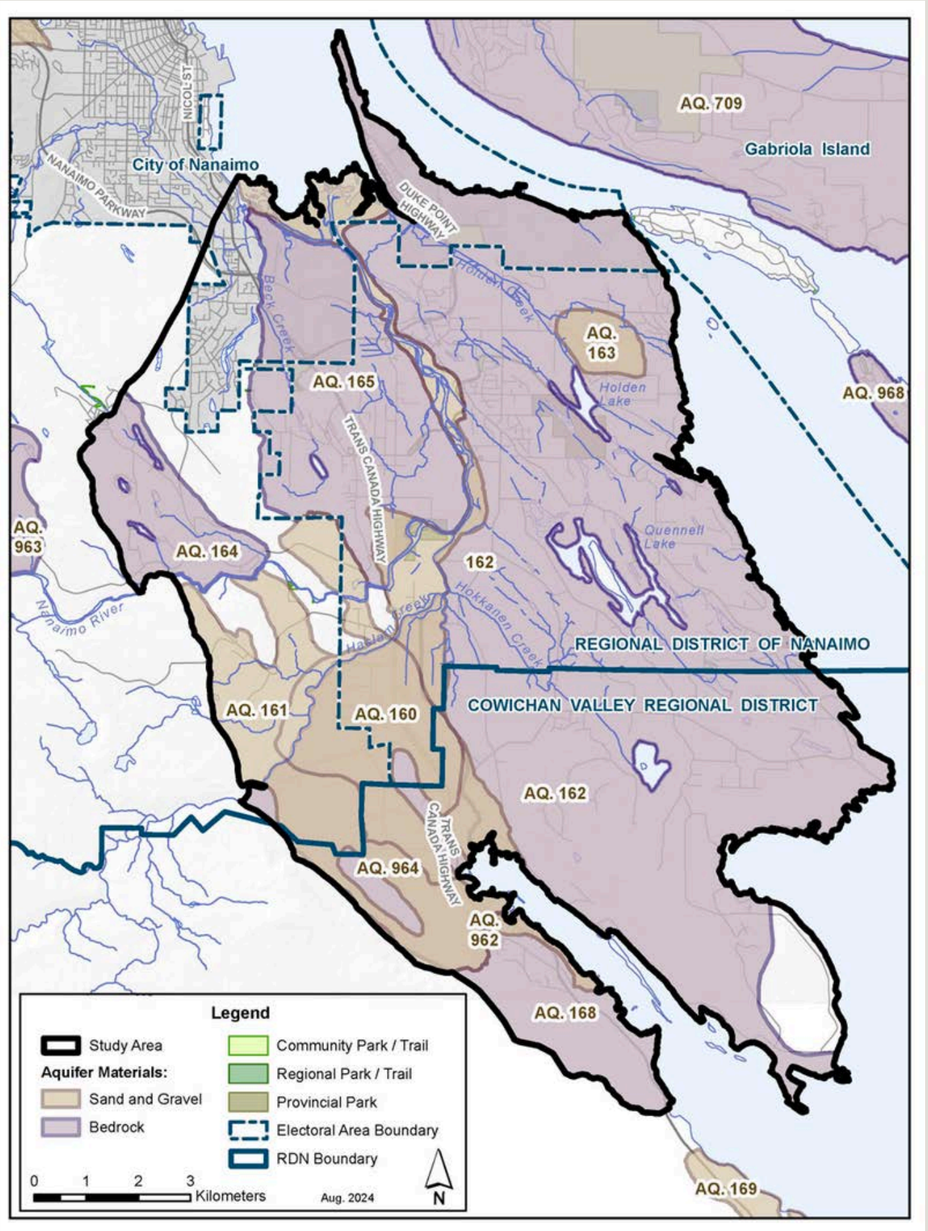
- Consultant provided update memo on data input details in June
- Project Partner engagement in June - sharing data inputs, assumptions, and application of the outputs
- Additional data provided after engagement meeting currently being integrated:
  - Water License Review & Supply Estimates
  - Hydrological Analysis
  - Review of Nanaimo River hydrological data using information from Harmac and City of Nanaimo
- Groundwater Numerical Model Preparation - in progress
- Request for support and formalized partnership went to the CVRD (via CVRD DWWP program)
  - CVRD Committee of the Whole approved the request, will go to Board in early October



CEDAR-YELLOWPOINT WATER BUDGET – UPDATE

NEXT STEPS

- Complete and calibrate groundwater and hydrological model development
- Water budget analysis and stress assessments
  - evaluation of groundwater-surface water interaction
  - Water budget model analysis with scenarios (anticipated climate, landcover, water use changes)
  - aquifer stress assessments
- Continued participation from partners as needed
- Reporting, recommendations, and presentation to the DWWP TAC (early 2026)



CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

Climate Action Technical Advisory Committee Recommendation: 2022-2024

Ensure ongoing Water Supply Resiliency supported by Natural Asset Management

- Ensure water supply resilience under expected future climate scenarios
- Encourage climate-focused supply planning across the region
- Support public understanding of climate-related supply planning

CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

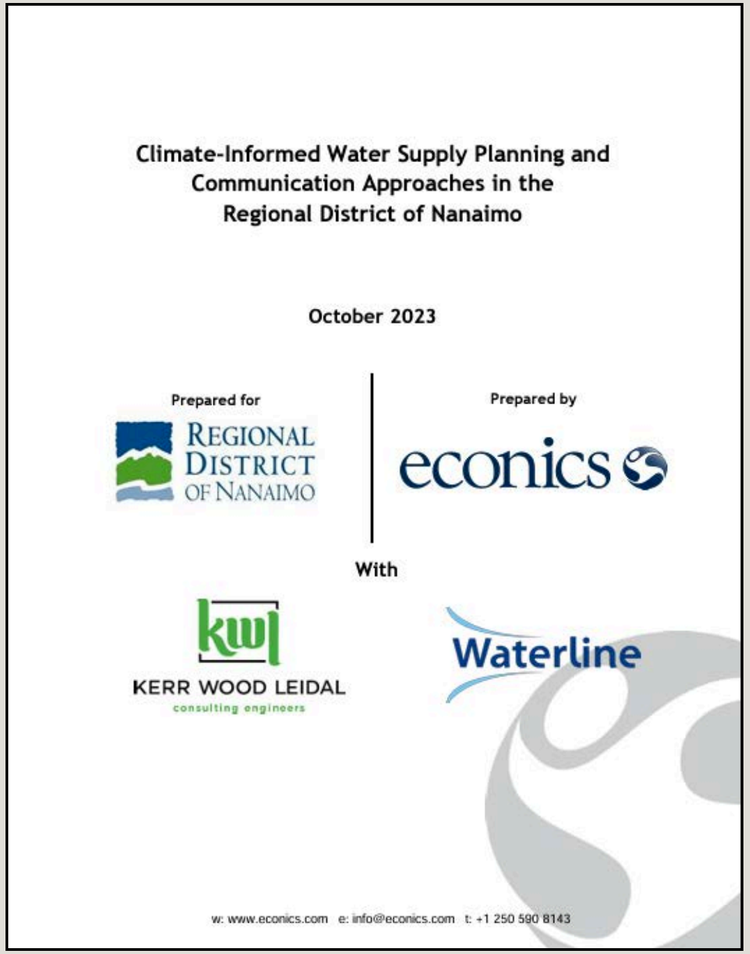
To advance this priority, the CATAC identified immediate implementation tasks:

1. Document state of existing, climate-informed supply planning across water purveyors in the RDN (where purveyors are willing), including contingency/emergency supplies.
2. Make RDN information easily accessible and understandable by the public and encourage other water purveyors to do the same.
3. Identify areas where additional supply planning work is needed.

CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

Implementing CATAC's Recommendation:

- Delivered by both RDN DWWP and Energy & Sustainability depts.
- Worked with Econics and KWL – consultant team familiar with the RDN context as it relates to provision of water services
- Developed a Best Practices guide for Climate-Informed Water Supply Planning
- Interviews with regional water service providers to understand current practices
- Final report provided observations and recommendations of collaboration, coordination, and communication opportunities



CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

Outcomes from the Report

Leading Practices for Water Service Providers:

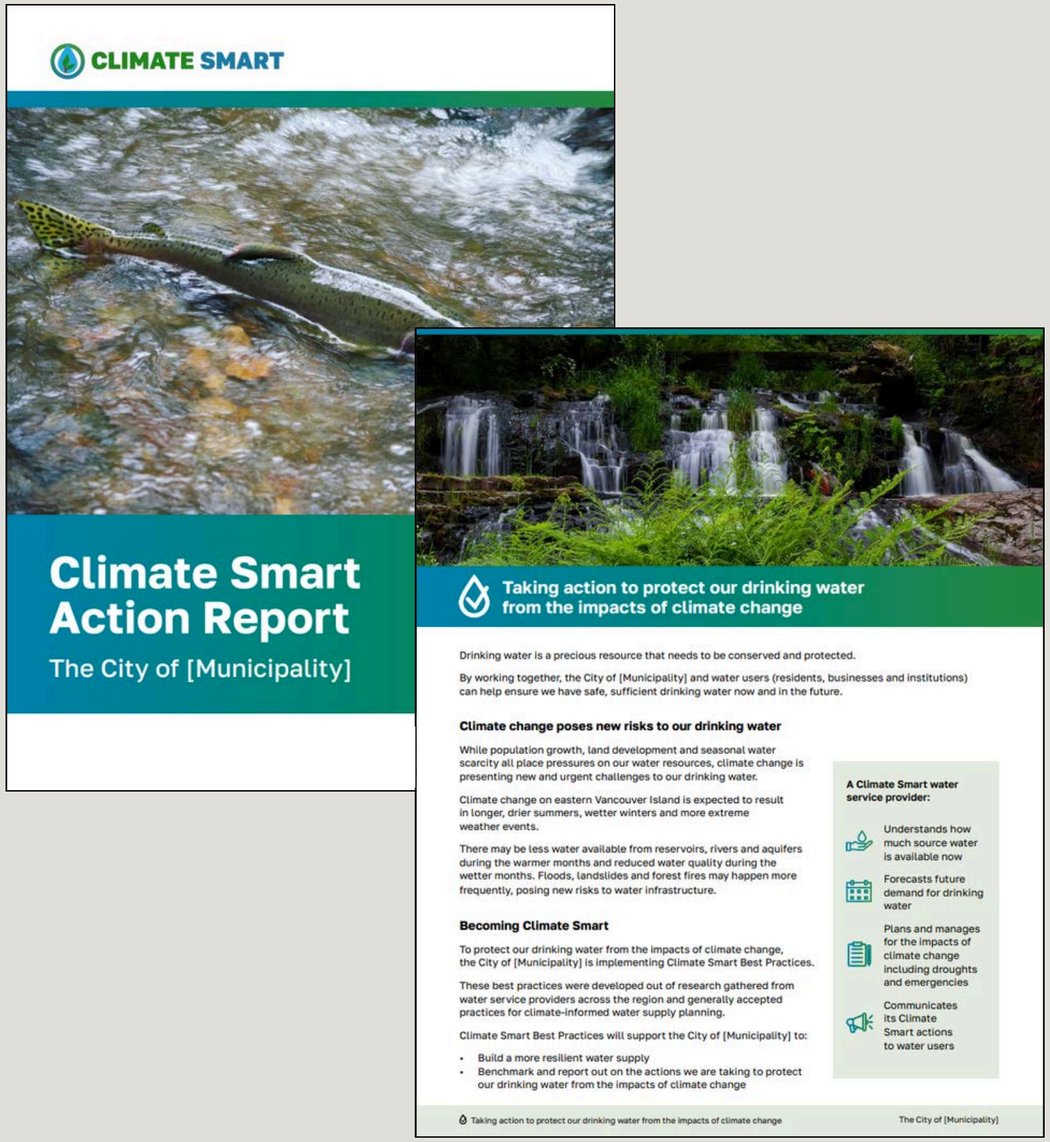
- Understand how much source water is available now
- Forecast future demand for drinking water
- Plan and manage for the impacts of climate change including droughts and emergencies
- Communicate the actions water service providers are taking (to water users/the broader public)

CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

Communications Objectives:

Work with water service providers to provide water users/customers with easily accessible and understandable communications materials that will:

- Communicate actions that service providers are taking to prepare for climate impacts on water supplies
- Increase residents understanding in their local water source



CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

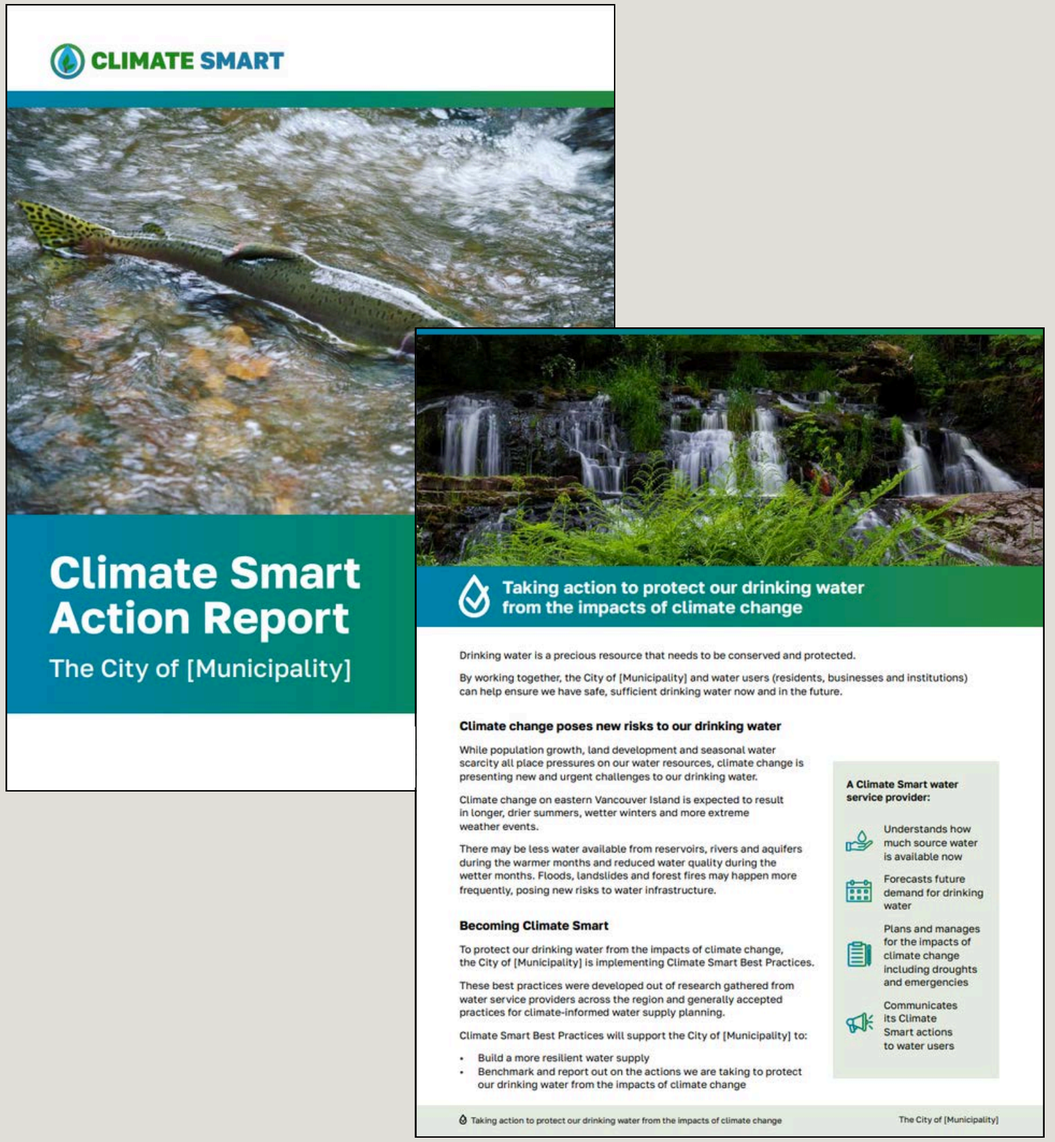
Communications Materials include:

- Fact sheet for posting to websites (for all service providers to use/modify for use)

- A “Climate Smart Drinking Water” mini toolkit that includes:
  - A Climate Smart Leading Practices one-page hand-out

  - A Climate Smart Action Report template for posting to websites (*easy-to-complete for water service providers, unified look-and-feel*)

  - Newsletter / postcard / social media template to encourage visitation to pages



CLIMATE-INFORMED WATER SUPPLY PLANNING
PUBLIC REPORT

Finalized communication material:

- RDN Water Services staff created a “twin document” to detail answers and connecting reports to each item recommended for best practices
- We aim to revisit every 3-5 years for updates
- Encouraging other major water purveyors in the RDN to complete

rdn.bc.ca/climate-smart-water-planning

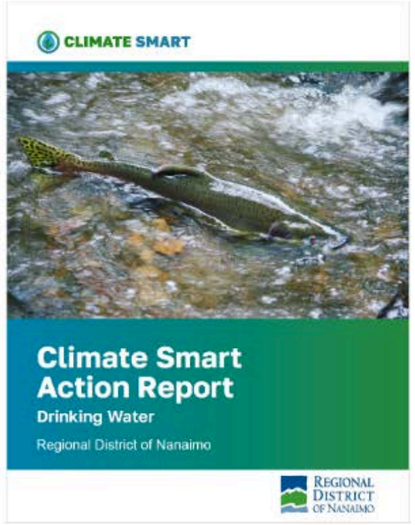
Climate Smart Water Planning

The RDN has launched a Climate Smart Action Report to keep you informed about the actions we are taking to protect our drinking water from the impacts of climate change.

While population growth, land development, and seasonal water scarcity all place pressures on our water resources, climate change is presenting new and urgent challenges to our drinking water supplies.

The Climate Smart Action Report will keep you up to date on the best practices we are following to:

- Understand how much source water is available now
- Forecast future demand for drinking water
- Plan and manage for the impacts of climate change including drought and emergencies
- Communicate our Climate Smart actions to water users



Continuing to reduce water use and staying informed helps us all work together to protect our drinking water from the impacts of climate change.

To learn more, check out the RDN's Climate Smart Action Report for Drinking Water:

READ THE REPORT

Related projects and information:

RDN Water Service Areas

Regional District of Nanaimo Water Service Areas - Water Conservation Plan 2020-2030

Where does your water come from? (downloadable poster)

RDN Climate Change Plans and Data

Climate Action Seed Funding

Team WaterSmart

THANK YOU!

Next Meeting:
December 3, 2025