

# Update on groundwater



This report is prepared for you by the water management teams within the Ministry of Water, Land and Resource Stewardship (WLRS) and the Ministry of Environment and Parks (ENV).

## In the June 2026 issue:

- WLRS updates
- Provincial Government Groundwater Program regional update
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- Registering as a Groundwater Wells and Aquifer Application (GWELLS) user to submit well records online
- Groundwater staff contact list

## Report non-compliance:

- Have you noticed a well that does not meet the construction standards of the Groundwater Protection Regulation?
- Know of someone who is drilling a well or installing a well pump without being registered?

**RAPP**  
Report All  
Poachers and  
Polluters

24 Hr Hotline:  
**1-877-952-RAPP**  
Cellular Dial #7277  
(On Telus Network)

## Contact us

The contact information for various groundwater staff across the province is available in every newsletter. We look forward to industry reaching out to us directly with questions.

## WLRS updates

### Drought

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

Drought and water scarcity are related but different, and the distinction is particularly important for groundwater.

Drought is a climate condition measured against long-term averages using indicators such as precipitation, streamflow, lake levels, evapotranspiration and groundwater levels. Provincial drought levels reflect average conditions across large basin areas where data is available. As a result, they do not describe local conditions, such as whether there is enough water in a specific stream or aquifer to meet all needs.

Water scarcity occurs when there is not enough water to meet human or ecological needs. For groundwater users, water scarcity can emerge during drought if recharge is reduced or demand increases, and it can persist if aquifers are slow to recover.

While we cannot control when or where drought occurs, we can reduce water scarcity risks. This includes applying [best practices \(PDF, 421KB\)](#) for water conservation and efficiency measures, developing water storage and protecting natural systems such as wetlands that support groundwater recharge. When

water users across a watershed work together, drawing on local knowledge and locally appropriate solutions, they can better manage water supply and demand across all needs.

On the [B.C. Drought Information Portal](#) this year, the drought level colours have been updated to a neutral brown palette. The change does not affect how drought conditions are assessed or what the drought levels mean. It is intended to emphasize that drought levels are a statistically based measure of climate conditions, not an alert or trigger for local response.

Alongside drought levels, the B.C. government is developing a new water scarcity level framework to describe locally defined values, indicators and recommended response actions at smaller watershed scales. Look for this pilot project on the B.C. Drought Information Portal this summer.

The [B.C. Drought Information Portal](#) also supports local water scarcity risk assessments by bringing key information together in one place. In addition to drought levels, it includes maps of provincial observation well conditions, licensed water diversion points, aquatic ecosystem risks and other data. This information can help water users, communities and decision-makers assess local water scarcity risks and plan appropriate responses.

## Supporting water suppliers with drought and water scarcity preparedness 2026

This spring, the B.C. government, in collaboration with regional health authorities and Indigenous Services Canada, is distributing a series of drought and water scarcity preparation letters to community water suppliers across British Columbia. In alignment with provincial drought communications, the letter explains the distinction between drought and water scarcity. Community water suppliers are encouraged to prepare for potential drought and water scarcity by monitoring their water supply, developing or updating an emergency response and contingency plans, and implementing water conservation measures.

The letter also highlights key government resources and tools to support water suppliers during drought conditions, including the [drought preparation and response webpage](#), the [Drought Portal](#), and the new Drinking Water Source Dataset. It includes information and applicability of funding opportunities and resources from external organizations. Finally, the letter invites water suppliers to participate in the annual Water Supply Status Survey, administered by WLRS from June to October, to improve the government's understanding of how water supply conditions change throughout the drought season. The survey goes live June 1, 2026.

### Groundwater and drought

Check out the "[Groundwater, Well and Aquifer story map](#)" for a more in-depth understanding of the relationship between drought and groundwater.

### New drinking water web pages available

The B.C. government recently published several new drinking water webpages, that both updated and re-organized existing content, and provide new information:

- The [Drinking water webpage](#) was created and features key topics for drinking water, such as how to keep drinking water safe, how it is protected, what the legislation and water quality guidelines are for drinking water, how drinking water gets delivered, and other useful links
- The [Source water webpage](#) highlights a new resource with the [Drinking Water Source Dataset Map](#). The map provides a province-wide view of drinking water systems and their source water across B.C. including the locations of intakes and wellheads for drinking water systems and the source water areas supplying those systems

- This webpage also features information about how to care for and maintain your groundwater well and surface water sources, as well as information about certain source water hazards
- The [Source water protection webpage](#) is also new and provides information about why it's important to protect source water, some of the specific actions that the provincial government takes in protecting source water, and the importance of working together to protect source water, as well as actions everyone can take to help protect our source waters

### New requirements for construction dewatering

The Water Sustainability Act (WSA) requires that anyone who diverts or uses water from a stream or aquifer hold an authorization unless otherwise exempt. The Water Sustainability Regulation (WSR) sets out several exemptions from this requirement for drainage and dewatering activities, but until recently, these exemptions did not apply to construction dewatering. Construction dewatering is a common activity wherein groundwater is temporarily diverted from an excavation to allow construction work to proceed safely and effectively. Construction dewatering varies widely, encompassing everything from large multi-story excavations for parkades, to small holes dug to anchor hydro poles. Until recently, diverting water from these excavations required an authorization, typically a use approval issued under Section 10 of the WSA.

On February 27, 2026, WLRS enacted changes to WSR establishing a tiered system of authorization requirements for construction dewatering, with some activities no longer requiring a WSA authorization if regulatory conditions are met. This change is a part of the province's ongoing work to streamline permitting.

Under the changes, low-volume and mid-volume construction dewatering activities no longer require an authorization if all regulatory conditions for exemption are met (see resources linked below). An authorization is still required for construction dewatering exceeding 1,000 cubic metres per day or in cases where the proponent is unable to meet all the exemption conditions. Of note, the conditions for mid-volume construction dewatering introduce reliance on regulated professionals; specifically, those with competence in the field of hydrogeology or geotechnical engineering, and applied biology.

To learn more about the new exemption conditions, consult the following resources:

- [Construction Dewatering Policy Bulletin](#)
- [Construction Dewatering Operational Policy](#)
- [News release: Improving B.C.'s permitting processes through regulatory changes](#)
- [Water Sustainability Regulation Sections 32.1 – 32.3](#)
- [govTogetherBC – Natural Resource Permitting Improvements](#)

## B.C. Groundwater Association (BCGWA) Convention in April 2026

WLRS staff attended the BCGWA Convention in Kamloops on April 10, where we staffed an exhibitor booth and were invited to present on the [WSA](#), [GWELLS](#) and [Source Water Protection](#). We were pleased to reconnect with longstanding colleagues and to meet new attendees, many of whom stopped by the booth to pick up [materials](#) and review [last year's groundwater science projects](#).

Attendance at the ministry presentation was also strong, with several questions focused on the source water protection rollout, including the incorporation of First Nations wells, the anticipated timeline for completing all source protection steps (source identification, hazard identification, hazard assessment, and hazard response), the process for adding missing drinking water supplier wells, and the purpose and utility of the [drinking water source spatial layer](#).

## Provincial Groundwater Program regional update – West Coast Region - Coast Area

WLRS West Coast Region (WCR) is pleased to provide an update of groundwater-related activities that have been carried out over the past year and some updates for future operations.

### Job action, expenditure control measures, efficiency review and ministry reorganization

The past year has been a tumultuous one. Regular operations were impacted by a historic 8-week long job action beginning in September 2025, as well as government wide expenditure control measures aimed at reducing spending.

At the same time, government has been undergoing an efficiency review which led to a reorganization of WLRS in fall 2025. The Regional Groundwater Program remains in the Permitting Transformation Division, however, West Coast Region is now combined with the South Coast



Region to become Coast Area. In the long-term, these changes will bring about improved efficiency and coordination; however, the transition to the new structure and teams had a short-term impact on operations.

### Groundwater science

From July to September 2025, the second year of a two-year pilot on the Tsolum River evaluated the use of fiber-optic distributed temperature sensing (FO-DTS) to generate high-resolution stream temperature data in support of water management decisions. Led by WLRS in partnership with K'ómoks First Nation, the project builds on 2024 monitoring to assess the value of FO-DTS for characterizing groundwater-surface water interactions in the Tsolum River and its broader application across B.C.

In 2025, approximately 1,650 m of fiber-optic cable were deployed along the riverbed, extending the 2024 FO-DTS transect to approximately 3,400 m and enabling high-resolution temperature profiling across a larger section of the Tsolum River. Temperatures were recorded every 0.25 m at five-minute intervals during the late-summer low-flow period through the onset of fall rains. Results from both years identified discrete zones of cold groundwater discharge that were approximately 2-5 °C cooler than average river temperatures in September. The pilot aims to characterize these features and support co-management decisions related to river restoration, habitat enhancement and drought response on the Tsolum River.

### B.C. Groundwater Protection Regulation compliance

#### West Coast Region - Coast Area Groundwater Protection Regulation compliance

WCR continues to work closely with Natural Resource Officers to address compliance concerns arising from direct inquiries and reports submitted through the [Report Natural Resource Violations](#) system (1-877-952-7277).

Over the past year, the most common groundwater-related concerns included:

- Dug well construction issues
- Seawater intrusion
- Drought impacts and wells going dry
- Flowing artesian wells
- Neighbouring groundwater use
- Unauthorized groundwater use
- General well maintenance issues

### Seawater intrusion

Seawater intrusion remains a significant concern in coastal areas throughout the WCR - Coast Area. The province continues to support education and outreach on this issue and, where appropriate, is implementing additional license requirements.

Registered well drillers and pump installers are reminded of their responsibility to:

- Be prepared to encounter saline or seawater conditions during drilling or well servicing
- Understand appropriate response measures if saline water is encountered
- Monitor groundwater conditions during drilling and related activities in at-risk areas

The [Best Practices for Prevention of Saltwater Intrusion \(PDF, 438KB\)](#) and [Seawater Intrusion Advisories](#) provide guidance on mitigation measures and identify at-risk areas. The province is currently working on the addition of advisories for Denman and Hornby Islands.

Seawater intrusion is often costly and difficult to reverse. Proactive prevention and mitigation are critical to protecting freshwater groundwater resources and supporting long-term, sustainable aquifer management.

### Flowing artesian wells

Flowing artesian wells continue to be a complex and recurring compliance issue within the WCR - Coast Area. Given increasing drought conditions and water scarcity pressures, it is especially important that these wells are properly controlled and compliant.

A flowing artesian well is considered **under control** when:

- Flow is conveyed entirely through the well's production casing
- Flow can be stopped indefinitely without leakage outside the casing
- The well does not pose a threat to public safety, property, or the environment

If flowing artesian conditions are encountered or suspected during well construction, the well driller must immediately stop the flow or bring the well under control. If artesian flow begins after construction and was not anticipated, the well owner is responsible for retaining a registered well driller or qualified professional to bring the well under control. Uncontrolled flowing artesian wells can present serious risks to safety, property, and the environment, and may negatively affect groundwater levels within an aquifer.

Currently, there is one flowing artesian advisory within the WCR - Coast Area, covering [Quadra Island \(PDF, 1,2MB\)](#). Artesian conditions are known to occur in other parts of the WCR - Coast Area, and appropriate due diligence and preparation are essential during all stages of well construction and operation. Wells identified as having encountered artesian conditions during drilling are flagged within the [GWELLS](#) provincial database.

### Authorizations

A provincial initiative began in February 2024, where a centralized existing use groundwater (EUGW) licensing team was established with the primary goal of processing EUGW license applications quickly and efficiently. As of May 2026, approximately 4500 EUGW license applications were processed by the centralized team, resulting in many licenses being issued. Regionally, approximately 225 of these processed applications were within the WCR - Coast Area. This team is targeting completion of all EUGW applications in the province by summer 2027.

New use groundwater license applications continue to be processed by the WCR - Coast Area Water Authorizations Team and are prioritized based on ties to provincial priorities identified by the government, including public safety and housing, as well as time in the water license application queue. For information on groundwater licensing requirements consult [Front Counter BC](#).

### Regional drought response

Drought response efforts in British Columbia are a shared responsibility that are guided by the [British Columbia Drought and Water Scarcity Operations Plan \(PDF, 997KB\)](#), updated in April 2026. Updates for this year include clarifying the difference between drought and

water scarcity and introducing a new framework to set levels for both. Drought levels, set by the River Forecast Center, provide a snapshot of drought conditions at a point in time and measure the severity of dryness relative to the historical record based on established drought basins across the province. Water Scarcity levels are based on availability of water to meet needs like drinking supply, ecosystems, agriculture, or industry. They are driven by both climate factors and human activities, can occur with or without drought, and vary in severity depending on local conditions, infrastructure, management, and competing demands. Water Scarcity levels are established in select watersheds only.

In the West Coast Region - Coast Area, Water Scarcity levels will be established in the Koksilah River, Tsolum River, Chemainus River and French Creek. Local drought monitoring led by regional teams will be in these watersheds and used to guide the Water Scarcity levels set during the Regional Technical Drought Working Group meetings. Water Scarcity level updates will be provided at the Provincial Technical Drought Working Group.

More information and current conditions can be found on the [B.C. Drought Information Portal](#). All readers and other members of the public are encouraged to stay abreast of changing conditions and updated provincial drought levels via the Drought Information Portal link above.

## PGOWN

With seawater intrusion becoming more of a focus on the coast, the two WCR - Coast Area technicians have been gathering and creating conductivity profiles of all observation wells located on Cormorant, Quadra, Denman, Hornby, Gabriola, Salt Spring, Saturna, Galiano, Mayne and Pender Islands. Along with the profiles, three conductivity loggers have been purchased for the network. They have already been deployed on Denman (OW#268), (Hornby (OW#288), and Mayne (OW#125). These sensors will provide valuable information on seasonal water quality trends in these wells.

A new observation well was drilled and completed in the Comox Valley to monitor aquifer #408 in February 2025, although the resulting lithology did not show the expected quadra sands formation. This well is currently being monitored as OW#521.

The WCR - Coast Area team has gathered exciting momentum for the year ahead and are optimistic to tackle upcoming goals.

## Provincial Groundwater Observation Well Network update

The latest observation well in the PGOWN was drilled in Alert Bay on Cormorant Island (near the north end of Vancouver Island) in March. This project was completed by WLRS and ENV.

Observation Well 522 (OW522) was installed in order to target Aquifer #858, a confined glacio-fluvial sand and gravel aquifer that is the primary source of the island's water supply. Additionally, this new well will likely replace existing OW201 on the island which is ageing and may not be properly targeting the intended aquifer.

The well record, first batch of groundwater level and chemistry data, and the project report on OW522 will be released in the year ahead.



Drilling of OW522 in Alert Bay (March 2026, WLRS).

Upcoming network projects will include the adoption of existing observation wells into the network (for example, Savary Island and Bowen Island) but also the closure of ageing stations or those producing lower quality groundwater level data. The net result will likely be no net change in the total number of stations across the province as this program focuses more on the maintenance, closure and replacement of older sites, as well as contending with a new period of fiscal restrictions.

Do you have questions about the PGOWN?

Contact [groundwater@gov.bc.ca](mailto:groundwater@gov.bc.ca).

## Registering as a GWELLS user to submit well records online

### Get access in three easy steps:

1. Visit the GWELLS [BCeID registration page](#) to obtain either a Basic BCeID account or Business BCeID account. (Note, if you already have a Basic or Business BCeID account, you do not need to create a new one to access GWELLS)
2. After obtaining your BCeID, go to GWELLS and select the login button (top right of the application screen).
3. Once you have logged in, email [gwells@gov.bc.ca](mailto:gwells@gov.bc.ca) to request access for your BCeID user account.

**Once access has been granted, you will be able to enter and submit groundwater well reports through GWELLS.**

### Contact information of groundwater staff with statutory authority

Office		Name	Statutory Designation	Phone	Email
Coast Area	Nanaimo	Jessica Doyle, P. Geo.	Assistant Water Manager	778-693-3035	<a href="mailto:Jessica.Doyle@gov.bc.ca">Jessica.Doyle@gov.bc.ca</a>
		Nicole Fulcher	Officer	250-739-8339	<a href="mailto:Nicole.Fulcher@gov.bc.ca">Nicole.Fulcher@gov.bc.ca</a>
		Colin McKenzie, P. Geo.	Officer	250-331-4455	<a href="mailto:Colin.McKenzie@gov.bc.ca">Colin.McKenzie@gov.bc.ca</a>
	Surrey	Michele Lepitre, P. Geo.	Assistant Water Manager	778-572-2168	<a href="mailto:Michele.Lepitre@gov.bc.ca">Michele.Lepitre@gov.bc.ca</a>
		Elyse Sandl, P. Geo.	Assistant Water Manager	236-468-3876	<a href="mailto:Elyse.Sandl@gov.bc.ca">Elyse.Sandl@gov.bc.ca</a>
		Jeanette Klassen, P. Geo.	Assistant Water Manager	604-660-7369	<a href="mailto:Jeanette.Klassen@gov.bc.ca">Jeanette.Klassen@gov.bc.ca</a>
		Kumar K C	Officer	778-572-2162	<a href="mailto:Kumar.K.C@gov.bc.ca">Kumar.K.C@gov.bc.ca</a>
South Area	Penticton	John Pogson, P. Geo.	Assistant Water Manager	778-622-6876	<a href="mailto:John.Pogson@gov.bc.ca">John.Pogson@gov.bc.ca</a>
		Jeff Corrie	Officer	778-622-6973	<a href="mailto:Jeff.Corrie@gov.bc.ca">Jeff.Corrie@gov.bc.ca</a>
		Laura Maclaren	Officer	778-476-9008	<a href="mailto:Laura.Maclaren@gov.bc.ca">Laura.Maclaren@gov.bc.ca</a>
	Vernon	David Thomson, P. Geo.	Assistant Water Manager	778-943-6924	<a href="mailto:David.Thomson@gov.bc.ca">David.Thomson@gov.bc.ca</a>
	Kamloops	Laurie Lyons	Officer	250-312-7262	<a href="mailto:Laurie.Lyons@gov.bc.ca">Laurie.Lyons@gov.bc.ca</a>
		Stephanie Drake, P. Eng.	Assistant Water Manager	236-425-9263	<a href="mailto:Stephanie.Drake@gov.bc.ca">Stephanie.Drake@gov.bc.ca</a>
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	Smithers	Johanna Wick, P. Geo.	Assistant Water Manager	778-693-2671	<a href="mailto:Johanna.Wick@gov.bc.ca">Johanna.Wick@gov.bc.ca</a>
Victoria		Amy Sloma, P. Eng.	Deputy Comptroller	778-698-4866	<a href="mailto:Amy.Sloma@gov.bc.ca">Amy.Sloma@gov.bc.ca</a>
		Qihong Su	Officer (Sr. Groundwater Data Specialist)	778-693-2768	<a href="mailto:Qihong.Su@gov.bc.ca">Qihong.Su@gov.bc.ca</a>
		Alexander Roudenko	Officer (Groundwater Data Specialist)	250-387-3944	<a href="mailto:Alexander.Roudenko@gov.bc.ca">Alexander.Roudenko@gov.bc.ca</a>

For general enquiries, contact [groundwater@gov.bc.ca](mailto:groundwater@gov.bc.ca).



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