



# **British Columbia Drought and Water Scarcity Operations Plan**



Updated April 2026

Prepared by the Ministry of Water, Land and Resource Stewardship

## Revisions and Editions

This plan is considered a living document and may be updated and revised based on experience and learning. The plan was originally authored in 2010 and is typically revised annually. It has been developed, in part, by drawing from experience with previous significant droughts in B.C., including the summers of 2009, 2015, 2021, 2023 and 2024.

Key updates in this version include:

1. **Updated Plan Title:** The plan name has been changed from Response to Operations to better reflect the scope of drought-related activities across all four pillars of emergency management.
2. **Clarified Scope of Responsibilities:** Content has been streamlined to focus on provincial operational activities. Responsibilities of external partners are referenced solely to illustrate how they interact with provincial operations, without prescribing their roles.
3. **Reorganized Content Structure:** The plan has been restructured to highlight the core provincial operational functions of communications, monitoring and management. This structure is intended to support clearer understanding and execution during drought events.
4. **Overview of New Reporting Framework:** This version provides an overview of a new and evolving provincial framework for assessing and reporting water scarcity levels.

## Disclaimer

This plan outlines provincial operational activities related to drought and water scarcity and is intended to guide the actions of provincial staff. It does not direct or prescribe the operations of other agencies, governments, water suppliers or water users. References to the roles of external partners are included only to illustrate how they interact with provincial processes.

The information provided is general in nature and is not intended as specific operational, technical or legal advice. Readers should assess the relevance and applicability of this information in the context of their own circumstances. Where appropriate—such as for local planning, regulatory development or bylaw creation—users should seek professional or legal advice.

While best effort is made to provide accurate information in this plan at the time of publication, the government of B.C. cannot guarantee its currency, accuracy or completeness as processes evolve.

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## List of Acronyms

<b>ADM</b>	Assistant Deputy Minister
<b>ADM-EC</b>	Assistant Deputy Ministers' Emergency Committee
<b>ADMCDREM</b>	Assistant Deputy Ministers' Committee on Disaster Risk and Emergency Management
<b>B.C.</b>	British Columbia
<b>CEFT</b>	Critical Environmental Flow Threshold
<b>DFO</b>	Fisheries and Oceans Canada
<b>DM</b>	Deputy Minister
<b>DMCDREM</b>	Deputy Ministers' Committee on Disaster Risk and Emergency Management
<b>DM-EC</b>	Deputy Ministers' Emergency Council
<b>DWPA</b>	Drinking Water Protection Act
<b>ECCC</b>	Environment and Climate Change Canada
<b>EDMA</b>	Emergency and Disaster Management Act
<b>EMCR</b>	Ministry of Emergency Management and Climate Readiness
<b>FITFIR</b>	First-in-time, first-in-right
<b>PECC</b>	Provincial Emergency Coordination Centre
<b>PREOC</b>	Provincial Regional Emergency Operations Centre
<b>PTDWG</b>	Provincial Technical Drought Working Group
<b>RTDWG</b>	Regional Technical Drought Working Groups
<b>WHSC</b>	Water Hazards Sub-Committee
<b>WLRS</b>	Ministry of Water, Land and Resource Stewardship
<b>WSA</b>	Water Sustainability Act

# 1 Background and Context

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## 1.1 Definitions of Drought and Water Scarcity

Drought is a complex concept with many existing definitions. Some definitions focus on different components of the water cycle (e.g. meteorological or hydrological drought), while others on the effects of dry conditions (e.g. ecological, agricultural or socio-economic drought)<sup>1</sup>. The provincial definitions below are intended to clarify the distinction between drought and water scarcity, while recognizing how closely the two are related.

**Drought** is defined as a climate condition measured relative to long-term historical patterns. It describes a naturally occurring, temporary period of abnormally dry conditions for a specific area. Understanding whether conditions are within or outside the expected climate range provides an important frame of reference for assessing future conditions and potential risks.

**Water scarcity** refers to a lack of available water to meet specific needs, such as drinking water supply, aquatic ecosystem health, crop production or industrial operations. Water scarcity is influenced by both climate conditions and human activities, and it can occur even in the absence of drought or be made worse by drought. Its severity is shaped by local conditions, values, infrastructure, management practices and competing demands.

Although drought and water scarcity are distinct, they are often interconnected. Monitoring both helps determine whether water scarcity is driven primarily by climatic factors, by other underlying causes, or by a combination of both. For example:

- Drought may reduce reservoir levels or create low-flow conditions that impede fish migration.
- However, drought is not always the main driver of scarcity. Leaks in water systems may reduce community water supply, and high levels of surface or groundwater extraction may dewater streams and affect fish habitat—even when climatic conditions are near normal.

Local water scarcity is shaped by multiple factors, including precipitation, geography, topography, microclimate, storage capacity, water utility systems and population demand. Understanding these factors helps communities and water suppliers assess their own vulnerabilities and plan for appropriate management actions.

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<sup>1</sup> See additional definitions such as those developed by the [National Drought Mitigation Center](#) (University of Nebraska) or the [Canadian Drought Monitor](#).

## 1.2 Provincial Role and Scope

The government of B.C. is responsible for managing natural resources, including monitoring natural hazards such as drought that can affect water availability and contribute to water scarcity. Provincial drought monitoring focuses on hydrological conditions—such as streamflow, groundwater levels, snowpack and precipitation—because these factors directly influence water supply and provincial regulation of water use.

During periods of drought, the B.C. government also monitors water scarcity and its potential socio-economic and environmental impacts, which may include:

- Reduced water availability for households, communities and businesses
- Increased wildfire vulnerability
- Declining aquatic ecosystem health
- Reduced access for Indigenous communities to traditional foods and medicines
- Decreased crop production
- Interruptions to hydropower generation
- Reduced recreational and tourism opportunities

While provincial monitoring supports situational awareness, water scarcity risks vary widely by watershed. Local governments, water suppliers, First Nations and community organizations are best positioned to assess risks in their own contexts, drawing on local knowledge, values and management decisions.

Provincial monitoring, reporting and communications are intended to support local water scarcity risk assessment and readiness. This information helps guide decisions on the scope and scale of provincial and local management actions needed to mitigate impacts and prepare to respond. By planning and acting early, communities and water suppliers are better able to protect water resources for drinking water, sanitation, fire protection, agriculture, industry, fish and aquatic ecosystems, and a broad range of economic and cultural activities.

## 1.3 Legal Framework

Drought and water scarcity operations in B.C. are grounded in existing provincial legislation and regulations. The **Water Sustainability Act (WSA)**, together with its associated regulations, forms the core legal framework governing provincial responsibilities for water allocation, water use regulation, and protection of stream, aquifer and aquatic ecosystem health. Provincial drought and water scarcity monitoring activities support management and regulatory actions under the WSA, along with related

mitigation, preparedness, response and recovery activities—including communication with water users and the public.

Other legal authorities also support activities described in this plan. These include the Drinking Water Protection Act (DWPA), the Environmental Management Act, the Local Government Act, and the Emergency and Disaster Management Act (EDMA), and their supporting regulations. Many authorities and actions available under these enactments operate independently of this plan. Appendix 1 provides an inventory of key legislation and provincial programs relevant to drought and water scarcity management.

The Declaration on the Rights of Indigenous Peoples Act commits the B.C. government to a distinctions-based approach to reconciliation and to implementing the United Nations Declaration on the Rights of Indigenous Peoples. Under this approach, the B.C. government works with First Nations, modern treaty nations, Métis and Inuit peoples in ways that recognize their unique rights, interests, priorities and laws. In managing water scarcity during drought, the B.C. government aims to take culturally relevant approaches and incorporate Indigenous local and intergenerational knowledge wherever possible through consultation and cooperation with Indigenous Peoples.

## 2 Coordination Structure

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### 2.1 Seasonal Timeline

Individual drought events vary widely in their magnitude, duration and rate of onset. While most droughts develop gradually and lack a clear start or end point, rapid-onset “flash droughts” can also occur under conditions of sudden heat and high evapotranspiration.

Although drought conditions may emerge at any time of year, the **provincial core drought season** is generally defined as the period following spring freshet and before the onset of winter conditions. For many regions, this typically spans July through October, but drought conditions may begin as early as May and continue into November, depending on local weather patterns and hydrological conditions. Increasing climate variability is shifting these timelines, with earlier onset, longer duration and more frequent occurrence of drought conditions.

Provincial drought operations are aligned with hydrological cycles and seasonal weather patterns (Figure 1). During the core drought season, provincial efforts focus on **response** measures, including monitoring, communication and decision-making in support of local and regional risk management.

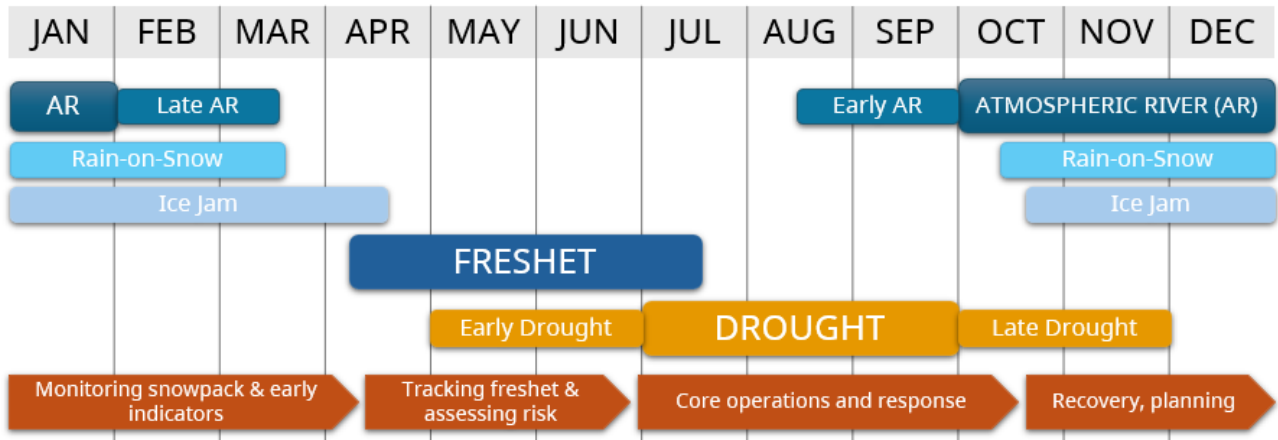


Figure 1. Annual cycle of flood and drought hazards, with orange block arrows showing the operational rhythm for provincial drought actions.

Outside the core drought season, provincial activities shift toward **recovery, mitigation, and preparedness**. As water demands decrease and immediate risks to aquatic ecosystems diminish, the B.C. government conducts after-action reviews with internal and external partners. These reviews identify lessons learned and make recommendations to strengthen future hazard operations.

## 2.2 Provincial Governance

The provincial governance structure for drought operations is designed to support coordinated and effective **drought monitoring, water scarcity management** and **communications** across ministries, regions and partners.

Figure 2 outlines the key provincial drought-related working groups and committees, and how they interact. Changes to the governance structure during a declared state of emergency are described in Section 5.4. Governance structures may evolve over time as provincial programs and priorities shift.

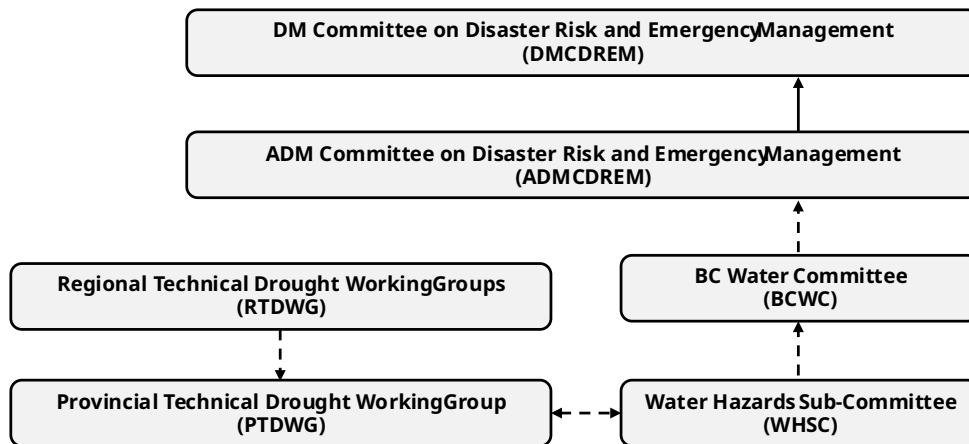


Figure 2: Key provincial-led coordinating bodies and committees involved in drought operations. Dashed arrows indicate a communication / issues management relationship. Solid arrow indicates a formal reporting relationship.

Operational activities during the core drought season are primarily coordinated through two technical working groups:

- The **Provincial Technical Drought Working Group (PTDWG)** brings together provincial and federal subject-matter experts to share and discuss technical knowledge, hydrological data, monitoring tools and regulatory considerations that support coordinated provincial decisions on drought monitoring and water scarcity management
- **Regional Technical Drought Working Groups (RTDWGs)** convene regional subject matter experts from across sectors and interests to share and discuss technical knowledge on local conditions, emerging risks and impacts specific to their region

Additional provincial, federal, Indigenous and local partners may participate in drought monitoring and water scarcity management through other committees and collaborative forums. Engagement across these groups enhances situational awareness, supports alignment of management actions and ensures that local expertise and Indigenous knowledge inform provincial understanding of regional conditions.

While the PTDWG and RTDWGs provide essential technical input, they do not make regulatory or statutory decisions. **Statutory decision-making authority** remains with:

- Statutory decision-makers exercising authorities under the WSA, including Engineers, Water Managers, the Comptroller of Water Rights, and the Minister, who may issue orders and authorizations in accordance with the Act and regulations
- Relevant decision-makers under other provincial statutes (e.g., EDMA, DWPA)

Clear delineation of authority ensures that decisions are consistent with provincial law and policy and that technical advice is appropriately considered in regulatory and operational actions.

Information moves through the provincial governance structure in the following manner:

- Local and regional observations feed into RTDWGs which synthesize the information and provide updates to PTDWG
- PTDWG integrates regional information to support consistent provincial situational awareness and identify where further action is needed to reduce risks and impacts
- Information and recommendations flow to executive-level committees, which provide strategic direction and confirm provincial messaging and operational priorities
- Provincial communications teams coordinate public updates, advisories and technical reporting to ensure consistent and timely information sharing with partners and the public

This structure supports alignment between regional realities, provincial operations, and public-facing communications. See Appendix 2 for additional information about the roles and responsibilities of the executive-level committees and Appendix 3 for a summary of responsibilities by provincial ministries and agencies who support operational activities.

## 2.3 Shared Responsibilities

Drought impacts are complex and can affect many sectors across B.C.'s diverse climatic and geographic regions. In any given year, some watersheds may experience severe drought while others see near normal conditions or even face flooding. As a result, responsibility for monitoring, preparing for, and responding to drought is shared among **local authorities, First Nations, provincial and federal agencies, water suppliers, and locally affected groups and individuals**. Shared responsibilities may also shift during drought events that trigger emergency response measures (see Section 5.4).

Indigenous governments may participate in RTDWGs or other committees where appropriate, and local and intergenerational Indigenous knowledge is an important source of insight on regional water conditions, risks and ecosystem vulnerabilities. While provincial technical working groups help coordinate information sharing, they do not direct or prescribe Indigenous-led stewardship, governance or decision-making. In some watersheds, **government-to-government working groups** or agreements may exist to address priority drought and water scarcity risks, holding specific accountabilities for local management. One example of this is the Nicola Watershed Governance Partnership's nk'e?xép Management Committee. Engagement with Indigenous governments is guided by principles of collaboration, respect for Indigenous jurisdiction and recognition of shared interests in sustaining water resources.

Federal and provincial agencies contribute through communication and coordination, science and monitoring, forecasting and emergency support services. At the local level, water suppliers, local governments, Indigenous governments and other authorities undertake responsibilities such as data collection, water conservation promotion and enforcement, and emergency response.

Many local governments are **water suppliers**, but not all water suppliers are local governments. This distinction matters because local government water suppliers possess authorities—such as enforcing water use restrictions through fines—that most other water suppliers do not have. However, all water suppliers are required under section 10 of the DWPA to maintain an emergency response and contingency plan.

Other local authorities involved in water scarcity management include municipal governments, regional districts, regional health authorities and the First Nations Health Authority. In some regions, First Nations, local authorities and water suppliers have established **formal partnerships or governance bodies** to collaboratively steward watersheds and manage local water sources. Notable examples include the Okanagan Basin Water Board and the Cowichan Watershed Board.

Because governance arrangements, community dependence on groundwater versus surface water, and cultural values vary from place to place, local authorities and Indigenous governments may assume a lead role in coordinating drought response measures. Their responsibilities may include:

- Gathering drought-related information from the community
- Identifying data gaps
- Identifying vulnerable aquatic ecosystems
- Determining local water management needs
- Implementing water conservation strategies (e.g., seasonal or staged watering restrictions)
- Managing community water supplies and local water infrastructure
- Communicating drought and water scarcity risks to the community

Local drought and water scarcity management plans—developed by local authorities, First Nations and water suppliers—help guide these actions.

**Agricultural organizations**, including producer associations, play an important role in supporting drought preparedness and response within the agricultural sector. They assist producers by providing technical advice on crop and livestock water needs, promoting best management practices for water conservation, coordinating sector-specific impact reporting and communicating provincial and regional drought information to farmers and ranchers. These organizations also contribute local knowledge and sector expertise to

regional drought discussions, supporting informed decision-making at the farm, community and watershed levels.

### 3 Communication Actions

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#### 3.1 Objectives and Audience

Communicating with water users about drought and water scarcity risks is essential to fostering cooperation on water conservation and supporting informed decision-making. Timely, clear and appropriate information helps communities and water users understand environmental conditions, take shared responsibility, implement conservation measures and prepare for potential regulatory actions.

Provincial communications provide overarching situational awareness, provincial-level guidance and updates on regulatory and operational actions. **They do not direct or prescribe local communication strategies.** Local governments, First Nations, water suppliers and other authorities retain responsibility for designing and delivering their own outreach, advisories and public education efforts to reflect local conditions, governance, and community priorities. The B.C. government will coordinate messaging where appropriate to support alignment and avoid conflicting information.

Provincial communications on drought and water scarcity support the four phases of emergency management (see Table 1).

Table 1. Provincial communication objectives across the four phases of emergency management.

Phase	Communication Objectives
<b>Mitigation</b>	<ul style="list-style-type: none"> <li>• Share information on programs or funding that reduce long-term drought and water scarcity risks.</li> <li>• Build awareness and promote long-term behaviour changes that improve water sustainability.</li> </ul>
<b>Preparedness</b>	<ul style="list-style-type: none"> <li>• Enhance readiness for drought and support proactive planning.</li> <li>• Provide training, education and tools to support early action.</li> </ul>
<b>Response</b>	<ul style="list-style-type: none"> <li>• Maintain situational awareness of drought conditions and water scarcity risks.</li> <li>• Encourage voluntary water conservation.</li> <li>• Communicate government actions to address water scarcity.</li> </ul>
<b>Recovery</b>	<ul style="list-style-type: none"> <li>• Share information on programs or funding to restore community, business or ecosystem functions.</li> <li>• Support review and evaluation of lessons learned.</li> </ul>

Provincial communications target four primary audience groups (see Table 2), recognizing there is overlap and that communications should be tailored to reflect regional conditions, local vulnerabilities and seasonal timing.

Table 2: Audience groups for provincial communications on drought and water scarcity and associated communication approaches.

<b>Audience</b>	<b>Description</b>	<b>Communication Approach</b>
<b>Water rights holders</b>	Authorized users under the WSA, including water licence holders and domestic users.	<ul style="list-style-type: none"> <li>• Share monitoring and water scarcity information</li> <li>• Communicate rights and responsibilities under the WSA</li> <li>• Encourage voluntary water conservation</li> <li>• Provide notice of regulatory measures affecting water use</li> </ul>
<b>Water suppliers</b>	Entities supplying potable water that are subject to requirements under the WSA and/or the Drinking Water Protection Act (e.g., municipalities, First Nations).	<ul style="list-style-type: none"> <li>• Clarify obligations under the WSA and DWPA</li> <li>• Share resources for planning, vulnerability assessment and response</li> </ul>
<b>External partners</b>	Government, Indigenous, sector and industry partners (e.g., Fisheries and Oceans Canada (DFO), health authorities, BC Agriculture Council)	<ul style="list-style-type: none"> <li>• Coordinate and share cross-sector information and actions</li> </ul>
<b>Public</b>	Broader provincial audience (e.g., residents, tourists)	<ul style="list-style-type: none"> <li>• Provide access to drought and water scarcity information, updates and resources</li> <li>• Promote general water conservation and preparedness</li> </ul>

### 3.2 Channels and Products

Provincial ministries communicate drought and water scarcity information through a range of coordinated channels. Internal alignment across branches, divisions and ministries is essential to ensure accuracy, consistency and clarity of provincial messaging.

Provincial drought communications follow clear principles to ensure messages are effective and coordinated. They are:

- **Timely:** issued early and updated as conditions evolve
- **Accurate and science-based:** grounded in the best available monitoring and analysis
- **Transparent:** clear about what is known, what is uncertain and what actions are underway
- **Targeted:** tailored to the intended audience and regionally focused, where appropriate, to reflect local hydrology, risks and community context
- **Accessible and inclusive:** plain language, multiple channels and uses translated/alternate formats where feasible
- **Coordinated:** aligned across ministries and with partners to avoid conflicting information

These principles guide the selection and use of communication channels and products throughout the season.

A public information campaign may be deployed to promote water conservation and increase awareness, using tools such as print, radio, digital video, social media and targeted online advertising. The scale of campaigns may depend on available resources and the severity of drought conditions.

Ministries may use a variety of **communication channels**, including:

- News releases or information bulletins
- Ministry web page content
- Media interviews and briefings
- Addressed mail or email advisories
- Informational flyers
- Social media posts
- Community workshops or town halls

The **B.C. Drought Information Portal** is the primary provincial platform for timely information on drought and water scarcity. It provides technical data to support local and watershed-scale assessments, including drought levels and information on aquatic ecosystem and other water scarcity risks.

### 3.3 Seasonal Timing and Escalation

The timing of provincial communications and outreach depends on antecedent conditions such as snowpack, winter drought carryover and seasonal climate forecasts.

**Early-season** communications may include public awareness campaigns encouraging water conservation and preparedness. Provincial targeted outreach—such as letters or flyers—may be directed to licence holders, water suppliers, agricultural producers and other water users in regions at heightened risk. Local authorities and First Nations may use a combination of communication tools, water supply data, regulatory instruments and direct engagement with residents or major water users to promote conservation and raise awareness of local water supply conditions, forecasts and management needs.

**As drought develops**, provincial communications through information bulletins, media briefings and social channels focus on raising awareness of drought conditions, encouraging voluntary reductions in water use and sharing information on water scarcity risks.

**As drought persists or worsens**, provincial communications may intensify and individual water users may be asked to reduce non-essential water use to support community and ecosystem needs. Local governments, First Nations and water suppliers play a key role in communicating local water supply conditions and implementing water use restrictions.

## 4 Monitoring Actions

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Provincial monitoring of drought and water scarcity draws on data and expertise from multiple provincial, federal, Indigenous and sector partners. Monitoring activities support a consistent understanding of current conditions, emerging risks and anticipated trends, and provide the evidence base for decision-making throughout the season.

### 4.1 Drought Monitoring

Drought in B.C. can emerge from a combination of hydrological and climatic factors, including insufficient winter snow accumulation, early or rapid snowmelt, prolonged hot and dry weather, and delayed seasonal rainfall. Historical analysis shows that drought occurrence in B.C. is commonly associated with three primary factors:

1. **Low winter snowpack**
2. **Low spring precipitation** (May–June)
3. **Low summer precipitation** (July–August)

Significant droughts typically occur when at least two of these conditions are present, while severe droughts<sup>2</sup> often involve all three, compounded by consecutive years of reduced precipitation. Additional drivers, such as low groundwater recharge and high temperatures, can further intensify drought severity.

Low flows occur naturally in many B.C. watersheds as part of seasonal hydrological patterns. **Not all seasonal low-flow events constitute drought**<sup>3</sup>. Drought is characterized by flows that fall well below seasonal norms for an extended period, reflecting a sustained deficit in available water. Drought can also affect groundwater systems; shallow aquifers may experience lowered water tables during or following drought years when recharge is insufficient. Because groundwater often contributes substantial baseflow to streams, reduced aquifer levels can lead to further declines in streamflow and increase ecosystem vulnerability.

During winter and spring, the B.C. River Forecast Centre produces Snow Survey and Water Supply Bulletins, summarizing mountain snowpack conditions and providing seasonal volume forecasts. These bulletins offer an early indication of potential drought risk, supporting initial planning for the upcoming season, although provincial drought levels are not set during this period.

As core drought season approaches, a suite of **early-warning indicators** is monitored to identify regions with elevated risk:

- Below-normal snowpack
- Early or rapid snowmelt
- Persistently low spring rainfall
- Extended periods of above-normal temperatures
- Depressed groundwater levels or low antecedent streamflow

These indicators help identify where drought may develop earlier, persist longer or intensify more rapidly.

Province-wide drought monitoring typically begins following spring freshet. During this period, the B.C. government regularly updates drought levels and publishes maps and summaries of drought conditions and outlook. This information is shared publicly through the B.C. Drought Information Portal.

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<sup>2</sup> Severe drought in B.C. was observed in 1929, 1931, 1955, 2003, 2009, 2015 and 2023.

<sup>3</sup> United States Environmental Protection Agency. Definitions and Characteristics of Low Flows. Accessed at <https://www.epa.gov/ceam/definition-and-characteristics-low-flows#drought>.

### 4.1.1 Drought Indicators

Measuring drought severity in B.C. is challenging due to the government of B.C.'s geographic diversity and complex microclimates. Indicators suitable for one region may be less applicable in another, and setting drought levels based on physical conditions requires robust historical records. Physical indicators include causative factors (e.g., precipitation, evapotranspiration) and resultant factors (e.g., streamflow, groundwater, lake levels). Each indicator has unique spatial and temporal characteristics, so professional judgment is needed to interpret results and set drought levels.

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

These indicators are used because data are broadly available across B.C., methods are statistically based and communicable, and results allow consistent watershed-scale assessments and meaningful cross-region comparisons. They are either percentile-based or standardized indices that can be aligned to quantitative thresholds for drought level classification (Table 3). These thresholds are intended to guide, but do not replace, expert interpretation, especially in data-sparse regions, mixed surface/groundwater systems and areas with strong microclimatic effects.

**Blended (composite) indicators** may be developed and used, combining multiple metrics statistically and adjusting weights or timescales as new data and knowledge emerge. Indicator selections and timescales (short- vs. long-term) are reviewed annually and refined as best practices evolve. Additional indicators may supplement monitoring where regionally appropriate and supported by expert judgment.

#### **Brief descriptions of primary indicators:**

- **Precipitation percentiles** compare accumulated precipitation over a given period to the historical record (expressed as a percentile). Values near the 50th percentile are near normal; values below the 10th percentile indicate much drier than normal conditions
- **SPI / SPEI** are standardized indices that describe how wet or dry conditions are relative to the long-term average. SPI uses precipitation alone; SPEI incorporates evapotranspiration, capturing temperature-driven drying. Increasingly negative values indicate greater deficits

- **7-day average streamflow percentiles** compare recent mean flows (unregulated systems<sup>4</sup>) to historic norms for the same period
- **7-day average lake level percentiles** compare recent mean lake levels (natural lakes) to historic norms for the same period
- **Daily groundwater level percentiles** compare current water levels in observation wells to historical levels for the same date

Table 3: Quantitative thresholds for percentile-based indicators and standardized indices.

Indicator Type	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Percentile	>30 <sup>th</sup>	21 <sup>st</sup> - 30 <sup>th</sup>	11 <sup>th</sup> - 20 <sup>th</sup>	6 <sup>th</sup> - 10 <sup>th</sup>	2 <sup>nd</sup> - 5 <sup>th</sup>	< 2 <sup>nd</sup>
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

#### 4.1.2 Drought Basins

Given B.C.'s extreme biogeoclimatic diversity, drought conditions are monitored and drought levels are assigned to individual drought basins (see Figure 3). Basin boundaries are drawn broadly along watershed, hydrological or biogeoclimatic units that tend to experience similar drought signals.

Drought basin boundaries are influenced by indicator data availability and coverage. In data-sparse areas, adjacent watersheds may be grouped; conversely, larger areas may be subdivided into smaller basins where conditions consistently diverge and sufficient data support finer delineation. Basin boundaries and assessment methods are reviewed after each monitoring season to ensure they continue to reflect regional hydrology and observed conditions.

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<sup>4</sup> Unregulated refers to systems without a structure (e.g., a dam or reservoir) that modifies flows in such a way that they are no longer reflective of natural conditions. Flows in unregulated systems may still be modified through water withdrawals.

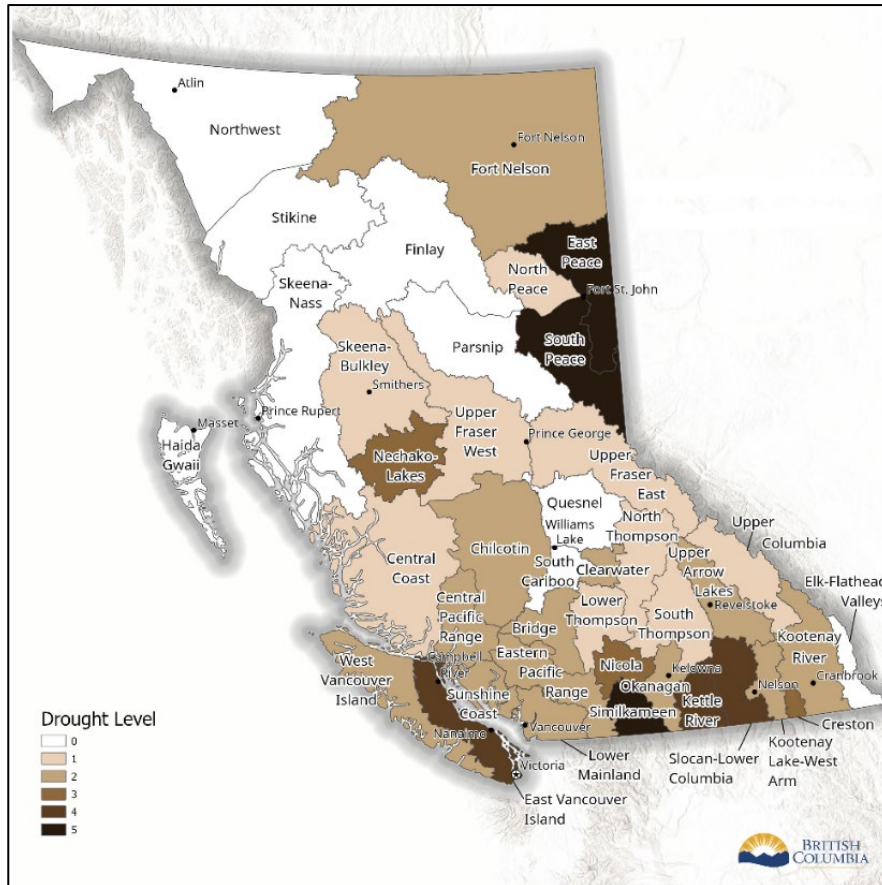


Figure 3: Drought levels assigned to individual basins across the province (for illustrative purposes only).

### 4.1.3 Setting Drought Levels

Provincial drought levels provide a standardized, province-wide snapshot of drought hazard—the severity and prevalence of climate-driven dryness relative to historical conditions. They support risk assessment and planning by offering a common reference point, but they do not fully represent local conditions in smaller watersheds, tributaries or specific water systems.

B.C. uses a **six-level scale** (Level 0–Level 5) to classify drought conditions (Figure 4). The scale was established in 2021 to align with North American drought classification practices and was refined in 2025 to ensure levels are data-driven measures of natural drought hazard (i.e., climate- and hydrology-based, not impact- or response-based). In 2026, the drought level **colour palette has been updated** to better emphasize its purpose as a source of statistical information, rather than an alert for action. This update also ensures the colour palette meets accessibility standards.

Drought levels reflect how dry current conditions are compared with the historical record. At Level 0, no drought is present. As levels rise from 1 to 5, they indicate both greater

severity and lower expected frequency of occurrence (rarer events), based on observed records. Drought levels are point-in-time assessments grounded in indicators such as precipitation and natural (unregulated) streamflow; they do not incorporate forecasts.

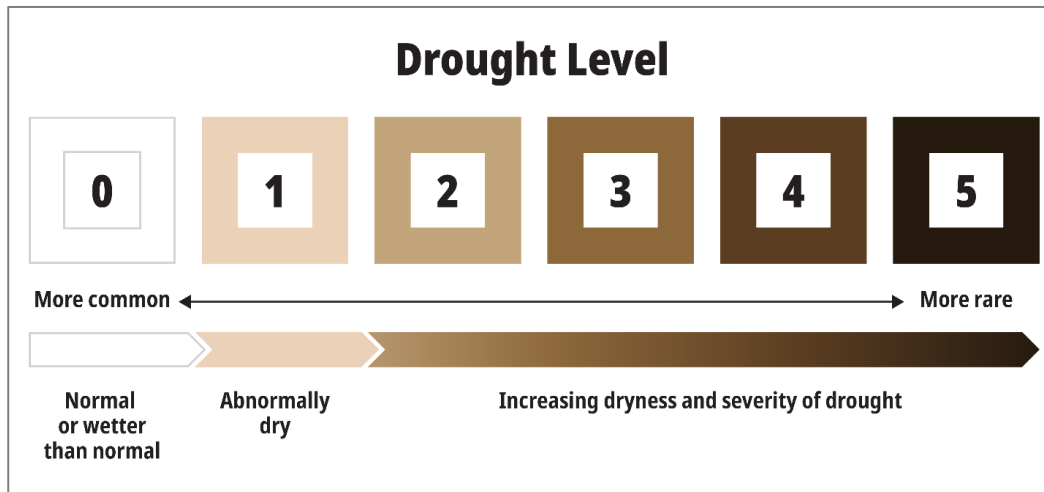


Figure 4: B.C.’s drought level scale. Severity increases from Level 0 (no drought) to Level 5 (highest severity and most rare).

**Drought levels measure a natural hazard;** they are not direct measures of water scarcity, impacts, or response triggers. They help inform (but do not determine) water scarcity risk and response decisions. See Section 4.2 for more on water scarcity monitoring and risk assessment. A summary of what drought levels do and do not describe is provided in Table 4 to clarify the scope and limitations of the drought-level framework.

Table 4: At-a-glance scope of drought levels.

They describe	They do not describe
Meteorological/hydrological dryness	Ecosystem, social or economic impacts
Relative frequency (rarity) of dryness	Whether specific response actions should be taken
Current conditions on the assessment date	Outlooks or forecasts
Broad conditions and trends at the drought basin scale	Localized conditions on small tributaries or specific systems

Drought levels are typically assessed following spring freshet and continuing until the onset of winter conditions (timing may vary by region and year). During active monitoring, levels are updated as often as weekly.

Setting drought levels is guided by a convergence-of-evidence approach using quantitative indicators (e.g., percentile-based and standardized indices) and professional judgment. **Expert review is essential where:**

- Data is sparse or uneven across a drought basin
- Indicators diverge temporally (e.g., delayed downstream response to rainfall)
- Surface water and groundwater systems interact in ways not fully captured by single indicators

Provincial drought levels are not the same as local watering restriction stages or other community measures. Local governments, First Nations and water suppliers set local stages and bylaws based on their specific supply, storage, demand, infrastructure and risk context. Provincial drought levels do not automatically trigger municipal or provincial response actions, nor imply compensation for economic loss.

## **4.2 Water Scarcity Monitoring**

Effective water scarcity monitoring in B.C. relies on a combination of sound science, local knowledge, and ongoing collaboration. During drought, this means working together with the best available information to understand current conditions, anticipate near-term changes and support timely decisions that can reduce impacts to people, communities and ecosystems.

As drought deepens, monitoring efforts intensify. This may include comparing streamflow against ecological flow thresholds in drought-sensitive systems, tracking aquatic ecosystem health and assessing vulnerabilities in community and regional water supplies. Field observations may be collected in partnership with water suppliers, First Nations and federal partners to validate local conditions and assess emerging impacts. Enhanced monitoring supports earlier and better-informed actions by local authorities, First Nations, provincial agencies and all water users. Assessing water scarcity risks at the watershed scale helps guide adaptive management and supports collaborative watershed governance.

### **4.2.1 Types of Water Scarcity**

Water scarcity can develop quickly—sometimes within days or weeks—depending on weather conditions, water demand, storage capacity and watershed characteristics. Scarcity can affect both human and ecological systems, especially where water use is high and natural or built storage is limited. Impacts may occur directly (e.g., insufficient flow for fish) or indirectly (e.g., increased wildfire risk), and can arise across a wide range of sectors and values, including:

- Ecosystem function, wildlife and fish populations

- Water quality (e.g., increased temperatures or contaminant concentration)
- Essential services such as fire suppression and wastewater treatment
- Drinking water and sanitation needs
- Vegetation growth, forest health and soil stability
- Crop production and agricultural viability
- Livestock water supply, health and feed availability
- Cultural needs and practices for First Nations
- Hydropower generation and industrial operations
- Food processing, manufacturing and commercial activities
- Tourism and recreation
- Financial and operational stability for businesses and communities

Each watershed has a unique combination of environmental conditions, values and water demands that shape if, how and when water scarcity will be experienced. Evaluating these risks requires local knowledge, lived experience and an understanding of watershed-specific vulnerabilities.

#### **4.2.2 Setting Water Scarcity Levels**

**A provincial water scarcity level framework is being developed and piloted in 2026. The information in this section is subject to change as the pilot project evolves.**

Water scarcity monitoring begins with identifying the key values within a watershed and the indicators that best describe the vulnerability to water shortage. These values and indicators may be developed collaboratively with water users and watershed partners. In some regions, this may occur through government-to-government processes between the B.C. government and First Nations; in others, through technical working groups representing local governments, First Nations, water suppliers, industry and other local partners.

Examples of **watershed values** vulnerable to water scarcity include:

- Drinking water supply
- Fish and fish habitat
- Agricultural water needs
- Wildfire risk
- Tourism and recreation opportunities

Examples of **watershed indicators** include:

- Local streamflow or lake levels
- Stream temperature
- Vegetation condition or soil moisture
- Reservoir or storage levels
- Aquatic ecosystem health
- Provincial or national drought levels

**Both Western science and Indigenous knowledge systems** may be used to evaluate these indicators and interpret their implications. Water scarcity levels are determined by considering how local values and indicators interact and may be set using a combination of quantitative thresholds and qualitative judgement. This decision-making process is tailored to a particular region or watershed, depending on the parties involved.

The pilot water scarcity level framework describes water scarcity using **three levels—low, moderate, and high** (Figure 5). Each watershed defines its levels differently, according to local characteristics, water demands, storage capacity, environmental sensitivities and management priorities.



Figure 5: Colour scheme for the three water scarcity levels (subject to change as the pilot project evolves).

Water scarcity levels are associated with **recommended management actions**. These actions may include information sharing, targeted requests for voluntary conservation or recommendations to relevant authorities for additional mitigation measures. Water scarcity levels **do not trigger regulatory actions**. Their intent is to raise awareness early and encourage voluntary action to prevent conditions from worsening.

Values and indicators may evolve over time as knowledge develops or shared decision-making processes mature within a watershed. For transparency, information about the values and indicators considered, and the groups responsible for setting water scarcity levels, is made publicly available.

#### **4.2.3 Assessing Water Scarcity Risk**

Water scarcity levels provide a watershed-scale synthesis that blends different indicators and perspectives. They are not a substitute for **individual or sector-specific**

**assessments.** Water users and sectors should consider the factors most relevant to their situation and use water scarcity levels as context alongside local conditions, system information and their own planning and risk tools.

Three primary factors influence the risk of experiencing water scarcity (Figure 6):

- **Physical conditions:** Whether water demand is likely to exceed supply; whether drought is present; and whether upcoming weather may alleviate or worsen dryness
- **Values at risk:** The significance, exposure and sensitivity of assets such as human health, ecosystems, infrastructure, food security and cultural practices
- **Actions taken:** The effectiveness of mitigation, preparedness, response and recovery measures to reduce exposure and vulnerability, and build resilience

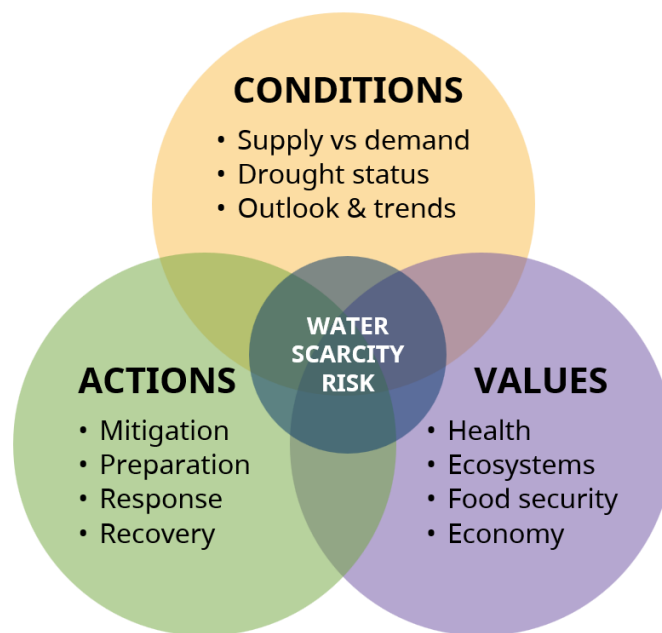


Figure 6: Water scarcity risk reflects a combination of natural conditions, values and management actions that influence exposure and vulnerability.

In risk assessment, drought levels provide an objective measure of the severity and rarity of drought hazard, which can help contextualize what kinds of impacts would be expected at different levels. Observing when and where water scarcity emerges at different drought levels also reveals how resilient a watershed is to drought (Figure 7) and can help identify where investments or management actions are needed to strengthen resilience.



Figure 7. Resilience is higher (green arrow) when severe drought does not lead to severe water scarcity; lower (red arrow) when even modest drought creates significant shortages.

The B.C. government is working with partners to build tools and methods to help evaluate water scarcity risks and document the impacts of drought on communities, ecosystems and industries. Regional information on drought impacts and water scarcity risks is collected throughout the season and shared through reports and mapping tools.

The following are examples of ongoing risk monitoring efforts:

- **Fish and aquatic ecosystem health:** Monitoring focuses on drought-sensitive watersheds with high ecological or fisheries values. Partners—including First Nations, DFO, and water suppliers—monitor flows, temperatures, habitat conditions and fish movement. Drought can cause lethal temperatures, disrupt spawning migration, dewater side channels and permanently reduce habitat
- **Wildfire:** Drought increases wildfire risk by drying vegetation and soil. The BC Wildfire Service monitors indicators such as the Drought Code and Duff Moisture Code to assess how readily fires may ignite and spread
- **Drinking water supply:** Water suppliers—including local governments, First Nations, private utilities and improvement districts—monitor their systems for supply stress and take mitigation actions as needed. The B.C. government and health authorities regularly contact suppliers during the core drought season to assess supply status and identify communities at risk of shortages, ensuring support can be mobilized promptly
- **Agriculture and food production:** Drought can reduce crop yields, degrade crop quality, increase pest and disease pressure, and limit livestock water supply. Because impacts vary across farms and regions, agrologists, producer associations and the Ministry of Agriculture and Food gather intelligence through regional networks. Tools such as the B.C. Crop and Livestock Reporter program help improve impact reporting

## 5 Management Actions

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Water scarcity management involves coordinated actions by First Nations, local governments, provincial and federal agencies, health authorities, water suppliers, industry and individuals. Actions should scale with risk—beginning with **risk reduction and voluntary measures**, progressing to **targeted operational and regulatory actions** when necessary, and moving to **emergency measures** if public health and safety are at risk. These actions must also reflect watershed-specific conditions, including available storage and local demand.

While some provincial management actions are enabled under the WSA and its regulations, these regulatory tools are measures of last resort. The B.C. government prioritizes voluntary and collaborative actions first to protect environmental flow needs, essential human needs and water rights. Effective water scarcity management requires joint effort and clear communication among all parties.

Drought levels themselves do not prescribe actions. Water scarcity levels can guide targeted voluntary measures, while statutory tools are applied based on evidence and legal authority for a given situation, independent of reported levels.

### 5.1 Water Conservation

Conservation is the fastest, most cost-effective way to reduce pressure on supplies and ecosystems during escalating drought. The B.C. government encourages all water users to conserve water and issues formal requests to licence holders to voluntarily reduce water use when water scarcity risks increase in a watershed. These requests are also used to signal the potential for regulatory measures if required to protect fish and aquatic ecosystem health.

Local authorities and water suppliers lead public outreach and local watering restrictions suited to their systems, seasonal demand and bylaws, and engage major water users directly (e.g., agriculture, industry) on site-specific reduction plans.

Collaborative watershed-based practices that have been demonstrated to work include the scheduling of water withdrawals and coordinated releases from storage to support critical ecological flows timed for fish needs. These community-based efforts can prevent the need for regulation and help maintain watershed health, especially during drought.

### 5.2 Habitat and Watershed Mitigation

Targeted habitat protection measures can reduce ecological risk and build resilience before, during and after drought. Examples of actions taken with partners such as First Nations and federal agencies include cold-water refuge creation, local shading and barrier

management to improve access to spawning grounds. Post-season reviews of mitigation effectiveness (e.g. impacts on spawning access, smolt production) guide next-season improvements.

Mitigation efforts should also focus on long-term strategies that protect stream systems that are sensitive or vulnerable to climate change, as well as those experiencing increasing pressure from high-volume seasonal water use.

## 5.3 Regulating Water Use

When voluntary and operational measures are insufficient, regulatory tools under the WSA may be required to prevent significant or irreversible harm and to uphold statutory priorities. Regulatory actions are independent of provincial drought or water scarcity levels; statutory decision-makers may act where facts warrant (e.g. single source, localized crisis). The B.C. government strives to find the best balance between restoring flows to protect critical ecosystems and fish populations and minimizing impacts to water users.

### 5.3.1 Enforcing Rights under the WSA

Water rights under the WSA operate under the principle of “first-in-time, first-in-right” (FITFIR), such that older rights have priority over newer rights, regardless of the purpose of the water use. Some water authorizations include special terms and conditions (e.g. ceasing diversion below a flow threshold).

During scarcity, statutory officials may issue orders under section 93 of the WSA (Powers of Engineers and Officers) to enforce FITFIR, enforce water licence terms and conditions, or curtail unauthorized water use as early regulatory steps. Essential household use of up to 250 litres per day per private dwelling must still be allowed.

Appendix 4 describes statutory roles and powers under the WSA that may be exercised during drought and water scarcity.

### 5.3.2 Temporary Protection Orders

A temporary protection order is considered when voluntary measures and early enforcement (e.g. curtailment of unauthorized use) prove insufficient and where the curtailment of water use is expected to effectively restore streamflow. The following temporary protection orders may be exercised:

- **WSA Section 86 (Declarations of significant water shortage)** and **WSA Section 87 (Critical environmental flow protection orders)** are applied together. The Minister or Lieutenant Governor in Council declares a significant shortage in areas where streams have fallen, or risk falling, below a critical environmental flow threshold (CEFT). The Comptroller of Water Rights then determines the CEFT for each affected stream, which takes precedence over other rights on that stream

- **WSA Section 88 (Fish population protection orders)** is used where a fish population's survival may be threatened. The Minister (after considering agricultural needs) may order the curtailment of water use, regardless of the precedence of water rights, to achieve immediate, direct benefits to that fish population

## 5.4 Emergency Activations

If drought causes loss, near loss, or failure of potable water supplies or firefighting capacity, emergency response actions are taken to protect **public health and safety**.

During emergencies, Indigenous and local governments lead local response. If the emergency is beyond their capacity, the Ministry of Emergency Management and Climate Readiness (EMCR) Regional Duty Managers and Provincial Regional Emergency Operations Centres (PREOCs) provide support (planning, coordination, logistics). There are three PREOCs across the province (the North PREOC in Prince George, the Southern Interior PREOC in Kamloops and the South Coast PREOC in Surrey). Appendix 2 describes the roles of key provincial coordinating bodies, including during a state of emergency. EMCR Provincial Duty Managers and the Provincial Emergency Coordination Centre (PECC) can coordinate resources, request provincial or federal assistance, and liaise with other jurisdictions.

If drinking water supply is at risk, water suppliers must contact the local Drinking Water Officer (regional health authority) and implement the supplier's emergency response and contingency plan (as required by the DWPA). Depending on circumstances, suppliers may impose and monitor strict water restrictions, allocate water per capita or secure alternate water supplies. All public health and safety emergencies related to drought and water scarcity should be reported to EMCR's Emergency Coordination Center at 1-800-663-3456.

A declaration of a provincial **state of emergency** under EDMA enables additional powers and shifts the provincial response structure (see Appendix 2 for details). A state of local emergency (SOLE) empowers local authorities to apply EDMA powers (e.g., restricting non-essential use, evacuations, travel prohibitions, entry on private property) when lives, property or heritage assets are threatened.

## 6 Additional Resources

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While this plan focuses on operational responsibilities for drought and water scarcity under the WSA, effective communication, monitoring and management extend well beyond these authorities. Many cross-ministry roles and responsibilities intersect with this work and are essential to protecting individual, community and sector-specific interests during periods of water scarcity.

The resources below provide further information and guidance on the broad range of provincial activities that support and complement the actions outlined in this plan.

- [Central provincial drought webpage](#): Primary access point for provincial drought preparedness and response information, including links to cross-agency resources for communities, water licensees and farmers
- [B.C. Drought Information Portal](#): A single source for geographic drought and water scarcity data, offering interactive maps on provincial drought and water scarcity levels, watershed conditions, historical drought time-lapse information and other monitoring resources
- [Drought under the WSA](#): Provides provincial guidance on drought, including water conservation practices and water management considerations during periods of scarcity
- [B.C. River Forecast Centre](#): Offers snowpack, meteorological and streamflow data and analysis used to monitor flood and drought conditions across the province
- [Drought in agriculture](#): Information and guidance on managing drought in agricultural settings, including irrigation, crops, soil, livestock and range management. Includes links to feed and pasture resources, financial supports and the [Quick Guide to Drought Resources](#) for producers
- [Emergency management in BC](#): Overview of emergency management systems in the province, with links to training and resources for preparedness, response and recovery
- [EmergencyInfoBC](#): Provides real-time emergency alerts and public information during active incidents
- [Create and maintain an emergency plan](#): Tools and guides for communities to create or update their emergency management plans, including for drought and water scarcity
- [Resources for water system operators](#): Tools and resources to help water suppliers fulfill their responsibilities under the DWPA and Drinking Water Protection Regulation.
- [Water laws and rules in B.C.](#): Information on provincial statutes and regulations related to water
- [Provincial fisheries management: Drought response plan](#): Provincial plan for fisheries management, guiding regional implementation of measures to support aquatic ecosystem health
- [Guide to emergency response and contingency plans for water supply systems](#): A step-by-step framework to help drinking water suppliers prepare for, respond to, and recover from emergencies affecting water systems

## Appendix 1: Legislation Relevant to Drought and Water Scarcity

Legislation	Lead Authorities	General Scope
Water Sustainability Act (WSA)	Ministry of Water, Land and Resource Stewardship (WLRS)	<ul style="list-style-type: none"> <li>• Governs the allocation and management of both surface water and groundwater</li> <li>• Establishes protections for stream health, wells and groundwater, including offences and penalties for non-compliance</li> <li>• Enables regulatory tools to address water scarcity, including declarations of significant water shortage, critical environmental flow protection orders and fish population protection orders to safeguard aquatic ecosystems</li> </ul>
Drinking Water Protection Act (DWPA)	Ministry of Health; Provincial Health Officer; Regional Health Authorities	<ul style="list-style-type: none"> <li>• Requires water supply systems to provide potable water and obtain appropriate construction and operating permits</li> <li>• Establishes operator qualification standards, emergency response and contingency planning requirements, and mandates source and system assessments to protect drinking water safety</li> </ul>
Water Utility Act	WLRS	<ul style="list-style-type: none"> <li>• Regulates privately operated water utilities serving five or more people or a corporation</li> <li>• Requires private operators to meet the same duties and responsibilities as public utilities under the Utilities Commission Act</li> </ul>
Emergency and Disaster Management Act	Ministry of Emergency Management and Climate Readiness (EMCR)	<ul style="list-style-type: none"> <li>• Provides legal authority for the minister to declare a provincial state of emergency, enabling access to emergency powers</li> <li>• Authorizes local authorities and First Nations (e.g., mayor and council, chief and council) to declare a state of local emergency, granting emergency powers to support response and recovery</li> </ul>
Environmental Management Act	Ministry of Environment and Parks	<ul style="list-style-type: none"> <li>• Regulates municipal and industrial waste discharges to protect water quality</li> <li>• Low streamflow can reduce dilution capacity and increase water quality risks from effluent discharge</li> </ul>

<b>Legislation</b>	<b>Lead Authorities</b>	<b>General Scope</b>
Forest and Range Practices Act (FRPA)	Ministry of Forests	<ul style="list-style-type: none"> <li>Regulates forest and range activities on Crown land to protect environmental values, including water.</li> <li>Government-authorized activities, as defined under the Government Actions Regulation, may influence watershed conditions and water values during periods of drought or water scarcity</li> </ul>
Local Government Act and Community Charter	Ministry of Housing and Municipal Affairs	<ul style="list-style-type: none"> <li>Defines the powers and responsibilities of local governments (municipalities, regional districts, improvement districts, etc.)</li> <li>Provides key authorities including land-use planning, growth management, infrastructure and works (e.g., stormwater management), and other governance functions that influence watershed conditions</li> </ul>
Farm Practices Protection Act	Ministry of Agriculture and Food	<ul style="list-style-type: none"> <li>Protects farmers following “normal farm practices” from nuisance complaints</li> <li>Applies during drought if reduced water availability requires changes to typical practices (e.g., adjusting irrigation or dust control methods)</li> </ul>
Milk Industry Act	Ministry of Agriculture and Food	<ul style="list-style-type: none"> <li>Establishes general requirements for dairy farm operations</li> <li>When water scarcity prevents producers from maintaining essential water supply for dairy operations, the industry and marketing board may work with producers to relocate animals to ensure animal welfare and business continuity</li> </ul>
Fisheries Act	Fisheries and Oceans Canada (DFO); Environment and Climate Change Canada (ECCC); WLRS	<ul style="list-style-type: none"> <li>Provides the federal framework for managing fisheries and protecting fish and fish habitat, including through pollution prevention</li> <li>WLRS holds delegated authority to issue variation orders, such as recreational angling closures, for freshwater species other than salmon</li> <li>ECCC administers the Act’s pollution prevention provisions, including harmful alteration or destruction of fish habitat</li> </ul>
Species at Risk Act	DFO; ECCC; Parks Canada	<ul style="list-style-type: none"> <li>Aims to prevent wildlife species in Canada from becoming extirpated or extinct, recover species listed as endangered or threatened, and manage species of special concern to prevent further decline</li> </ul>

## Appendix 2: Provincial Coordinating Bodies During Drought and Water Scarcity

Coordinating Body	Responsibilities
Deputy Ministers' Committee on Disaster Risk and Emergency Management (DMCDREM)	<ul style="list-style-type: none"> <li>• Resolves high-complexity and cross-government issues</li> <li>• Provides strategic guidance and approvals for regulatory, policy and financial decisions related to drought preparedness and response</li> <li>• Becomes the Deputy Ministers' Emergency Council (DM-EC) during a state of provincial emergency</li> </ul>
Assistant Deputy Ministers' Committee on Disaster Risk and Emergency Management (ADMCDREM)	<ul style="list-style-type: none"> <li>• Acts as the senior decision-making committee for strategic drought actions</li> <li>• Ensures broad government emergency management objectives are met</li> <li>• Elevates significant emergency management issues and recommendations to DMCDREM.</li> <li>• Becomes the Assistant Deputy Ministers' Emergency Committee (ADM-EC) during a state of provincial emergency</li> </ul>
Ministers'—Deputies' Emergency Council; Deputy Ministers' Emergency Council (DM-EC)	<ul style="list-style-type: none"> <li>• Activates during a state of provincial emergency</li> <li>• Provides executive-level policy decisions and strategic direction for emergency response</li> <li>• Validates the need for a state of provincial emergency and authorizes extraordinary funding</li> <li>• Ensures coordinated support across ministries, Crown corporations and agencies</li> <li>• Approves government-wide communications strategies for emergency preparedness, response and recovery</li> <li>• Directs ADM-EC to coordinate response and recovery operations</li> </ul>
Assistant Deputy Ministers' Emergency Committee (ADM-EC)	<ul style="list-style-type: none"> <li>• Activates during a state of provincial emergency</li> <li>• Oversees coordination of provincial emergency response across ministries and agencies</li> <li>• Develops and implements cross-government emergency communication strategies</li> <li>• Directs operational response to significant emergency events</li> <li>• Reports directly to DM-EC</li> </ul>

Coordinating Body	Responsibilities
Assistant Deputy Ministers' Water Forum	<ul style="list-style-type: none"> <li>• Provides corporate leadership on freshwater management</li> <li>• Ensures programs, policies and decisions related to freshwater are aligned with provincial priorities</li> </ul>
B.C. Water Committee	<ul style="list-style-type: none"> <li>• Executive Director-level committee</li> <li>• Ensures provincial water management programs are delivered effectively and consistently across government</li> </ul>
Water Hazards Sub-Committee (WHSC)	<ul style="list-style-type: none"> <li>• Sub-committee of the B.C. Water Committee</li> <li>• Provides year-round operational direction and coordination for drought and other water hazard response</li> <li>• Clarifies and communicates cross-government roles and responsibilities on drought and water scarcity</li> <li>• Supports operational activities by addressing issues that cannot be resolved at staff level and escalates recommendations to executive leadership as required</li> <li>• During a state of provincial emergency, communicates directly with ADM-EC</li> </ul>
Provincial Technical Drought Working Group (PTDWG)	<ul style="list-style-type: none"> <li>• Coordinates and communicates information on drought status and water scarcity risks to enhance situational awareness across government, external partners and the public</li> <li>• Coordinates cross-agency projects to enhance data collection, develop technical tools and support the implementation of regulatory measures</li> <li>• Elevates issues to the WHSC when executive direction is needed</li> <li>• During a state of provincial emergency, communicates with WHSC and RTDWGs on regional conditions</li> </ul>

Coordinating Body	Responsibilities
Regional Technical Drought Working Group (RTDWG)	<ul style="list-style-type: none"> <li>• Coordinates regional and watershed-level drought and water scarcity response among technical experts from First Nations and provincial, federal and local governments</li> <li>• Supports regional preparedness and communication efforts, including voluntary conservation measures</li> <li>• Identifies vulnerable streams, aquifers and species and supports regional monitoring, data collection and risk assessment projects</li> <li>• During a state of provincial emergency, reports local conditions to the PTDWG and coordinates with the PREOC</li> </ul>
Provincial Emergency Coordination Centre (PECC)	<ul style="list-style-type: none"> <li>• Activates during a state of provincial emergency</li> <li>• Provides provincial leadership, management and decision-making for emergency response.</li> <li>• Serves as the primary coordination and communication hub for EMCR and partner ministries, agencies and organizations</li> <li>• Produces provincial situational reporting</li> <li>• Escalates decisions to executive committees when required based on event complexity.</li> <li>• May request provincial, interprovincial or federal support</li> <li>• Reports directly to ADM-EC</li> </ul>
Provincial Regional Emergency Operations Centre (PREOC)	<ul style="list-style-type: none"> <li>• Activates during a state of provincial emergency</li> <li>• Coordinates and manages provincial resources and information to support regional and local response</li> <li>• Supports Indigenous and local governments with planning, coordination and logistics</li> <li>• Reports directly to PECC</li> </ul>
Emergency Program Coordinator	<ul style="list-style-type: none"> <li>• Activates during a state of provincial emergency</li> <li>• Appointed by local government to coordinate response efforts with EMCR</li> <li>• Reports directly to PREOC during emergency operations</li> </ul>

## Appendix 3: Ministries and Agencies During Drought and Water Scarcity

Ministry/Agency	Responsibilities
Ministry of Water, Land and Resource Stewardship (WLRS)	<ul style="list-style-type: none"> <li>• Leads provincial drought coordination, planning and response</li> <li>• Develops legislation and policy related to drought and water scarcity</li> <li>• Administers the Water Sustainability Act (WSA) and associated regulations               <ul style="list-style-type: none"> <li>◦ Exercises regulatory authorities under WSA including ss. 22, 86, 87, 88 and 93.</li> </ul> </li> <li>• Operates the River Forecast Centre and sets drought levels</li> <li>• Operates the Provincial Groundwater Observation Well Network</li> <li>• Protects and restores fish habitat and aquatic ecosystems</li> <li>• Oversees science and monitoring to assess impacts before, during and after drought</li> </ul>
Ministry of Agriculture and Food	<ul style="list-style-type: none"> <li>• Supports agricultural water requirements for food and farm production</li> <li>• Provides information on irrigation, crop, soil and livestock management during drought</li> <li>• Shares timely updates on drought conditions, WLRS actions and supports available to producers</li> <li>• Supports industry water requirements for the production of food and other agricultural products</li> <li>• Collects intelligence and reports on agricultural water scarcity and needs</li> <li>• Informs regulatory decisions affecting agricultural water use</li> </ul>
Ministry of Emergency Management and Climate Readiness (EMCR)	<ul style="list-style-type: none"> <li>• Coordinates drought-related emergency support to local authorities and First Nations</li> <li>• Operates the Provincial Regional Emergency Operations Centres (PREOCs) and Provincial Emergency Coordination Centre (PECC)</li> <li>• Provides mitigation, preparedness and planning services for emergency management</li> </ul>
BC Energy Regulator	<ul style="list-style-type: none"> <li>• Monitors streamflow conditions where the regulator issues water authorizations</li> <li>• Communicates with industry regarding low flow conditions and potential suspensions</li> <li>• Issues suspensions of WSA s. 10 diversions as needed</li> </ul>

Ministry/Agency	Responsibilities
	<ul style="list-style-type: none"> <li>Ensures compliance with WSA ss. 9 and 10 streamflow thresholds and associated suspensions</li> </ul>
Ministry of Health	<ul style="list-style-type: none"> <li>Provides policy guidance related to the Public Health Act and Drinking Water Protection Act (DWPA)</li> </ul>
Office of the Provincial Health Officer	<ul style="list-style-type: none"> <li>Provides oversight and reporting on drinking water safety under the DWPA</li> <li>Monitors population health and offers independent advice to ministers and officials</li> <li>Exercises authorities under the Public Health Act and DWPA</li> </ul>
Regional Health Authorities	<ul style="list-style-type: none"> <li>Through Drinking Water Officers, advise water suppliers and local governments on emergency preparedness and response related to drinking water supply</li> </ul>
First Nations Health Authority	<ul style="list-style-type: none"> <li>Plans, funds and delivers First Nations health programs, including the Drinking Water Safety Program</li> <li>Coordinates with the Ministry of Health and regional health authorities on drinking water and public health matters</li> </ul>
Ministry of Housing and Municipal Affairs	<ul style="list-style-type: none"> <li>Oversees local government functions under the Local Government Act</li> <li>Provides water conservation guidance to local water suppliers</li> <li>Communicates provincial drought actions to local governments</li> </ul>
Ministry of Transportation and Transit	<ul style="list-style-type: none"> <li>Administers WSA s. 10 use approvals for ministry-related infrastructure and maintenance activities</li> </ul>
Ministry of Environment and Parks	<ul style="list-style-type: none"> <li>Manages provincial groundwater, water quality, hydrometric and climate-related monitoring programs</li> <li>Administers pollution management authorities under the Environmental Management Act that may become relevant where low flow conditions increase water quality risks</li> </ul>
Ministry of Forests	<ul style="list-style-type: none"> <li>Leads provincial wildfire management</li> <li>Supports forest and range stewardship activities that influence watershed conditions and drought-related risks across forested landscapes</li> </ul>

## Appendix 4: WSA Statutory Powers During Drought and Water Scarcity

Role	Powers
Minister; Lieutenant Governor in Council	<ul style="list-style-type: none"> <li>• May make regulations to manage water scarcity</li> <li>• May declare a Significant Water Shortage under WSA s. 86</li> <li>• Minister may issue Fish Population Protection Orders under WSA s. 88 to prevent or mitigate risks to fish populations</li> </ul>
Engineer; Water Manager; Comptroller of Water Rights	<ul style="list-style-type: none"> <li>• Holds inspection authority and may take direct action regarding diversion works, use of water, or works in and about a stream</li> <li>• May restrict water use by lower-priority licensees under WSA s. 22 or under terms and conditions in a licence</li> <li>• Regulates non-licensed water use (e.g., domestic groundwater users, transitioning groundwater users, unauthorized use)</li> <li>• Comptroller may issue Critical Environmental Flow Protection Orders under WSA s. 87 when a Significant Water Shortage has been declared</li> <li>• Has authority to enter onto private land for inspections or enforcement</li> </ul>
Water Officer; Natural Resource Officer	<ul style="list-style-type: none"> <li>• Inspects works, water use or activities in and about streams</li> <li>• Conducts compliance inspections and investigations, educates water users, and undertakes enforcement actions</li> <li>• Has authority to enter onto private land for inspections or enforcement</li> </ul>
Water Bailiff	<ul style="list-style-type: none"> <li>• Appointed under WSA s.38 by the Comptroller or a Water Manager to manage local conflicts in a stream</li> <li>• May be directed to regulate and control the diversion and use of water by all users—licensed and unlicensed</li> <li>• May control or modify diversion works to ensure lawful use of water based on priority</li> <li>• Has authority to enter onto private land for the purpose of carrying out bailiff duties</li> </ul>