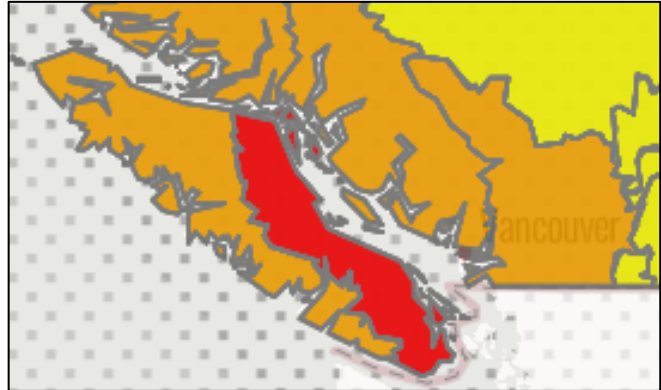


Proposal to Update British Columbia's Drought Levels

British Columbia (B.C.) uses “drought levels” to determine and communicate the severity of drought across the Province. Drought levels are assessed regionally and informed by a system of indicators. Drought levels are then assigned through discussions with hydrologists and meteorologists, and through input from regional and local drought forums. Generally, a region receives a higher drought level as conditions become drier compared to normal.



The Province is proposing to change its existing drought levels to better align with [North American best practices](#). The revised levels would more accurately describe drought and water scarcity conditions and allow experts to better protect local aquatic ecology and make useful comparisons between B.C. and other jurisdictions across the continent.

We want to know what you think about the proposed changes. Once you've had an opportunity to review this proposal, please share your feedback using the contact information provided on page 3. Your feedback is important to us. Thank you for your time and effort.

What are the existing drought levels and how are they used?

Objectives of Proposed Changes

1. To improve clarity and focus on drought levels in B.C.
2. To better align B.C.'s drought levels with the federal and North American drought monitoring frameworks.
3. To more accurately describe the severity of water scarcity in an area.

B.C. currently uses four drought levels: the lowest level indicates that there is no drought present, and the following three levels reflect increasing levels of water scarcity (see Figure 1). These levels provide critical communication regarding the severity of drought and water scarcity and assist drought managers and water users in determining conservation objectives to pursue. The levels are based on several core and supplemental indicators of drought, as outlined in the [British Columbia Drought Response Plan](#)¹.

¹ The Province is not currently contemplating changes to core indicators in [B.C. Drought Response Plan](#), but will consider adding to the list of supplemental drought indicators to allow for tailoring to local contexts and situations.

Level	Conditions	Significance	Objective
1 (Green)	Normal Conditions	There is sufficient water to meet human and ecosystem needs	Preparedness
2 (Yellow)	Dry Conditions	First indications of a potential water supply problem	Voluntary conservation
3 (Orange)	Very Dry Conditions	Potentially serious ecosystem or socio-economic impacts are possible	Voluntary conservation and restrictions
4 (Red)	Extremely Dry Conditions	Water supply insufficient to meet socio-economic and ecosystem needs	Voluntary conservation, restrictions and regulatory action as necessary

Figure 1: Current Drought Levels – B.C. Drought Response Plan

Why is Government proposing new drought levels?

We have received feedback over the years that the existing four-level scale is not specific enough to effectively communicate changing drought conditions across the province. The current scale contains four stages, with three referring to some level of drought (levels 2-4). Public officials apply these classifications broadly across a wide range of conditions in their regions.

We heard that the broad categories make it difficult to communicate moderate levels of drought, worsening drought conditions over time, or when regions are experiencing abnormal water scarcity. Other systems that categorize drought conditions across large areas (including the widely used [North American Drought Monitor](#)) use a six-level scale, which provides more information regarding water scarcity conditions.

What are the new proposed drought levels?

To provide more information and transparency on water scarcity conditions across the province, the B.C. government is proposing to update the provincial drought level rating scale to generally correspond to the [North American Drought Monitor](#)’s six-level framework. The first B.C. level would indicate that no drought conditions are present, and the subsequent five levels would represent increasingly severe drought and water scarcity issues (see Figure 2).

A new ‘severely dry’ level would signify a severe state of drought, and a new ‘exceptionally dry’ level would be used to identify drought conditions that are at or near historical lows. Making these proposed changes should provide better understanding of current conditions, advance warning of extreme drought, and better alignment with other jurisdictions in North America.

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Level	Conditions	Impacts	General Response Measures
0	Non-Drought	There is sufficient water to meet socio-economic and ecosystem needs	Preparedness
1	Dry	Adverse impacts to socio-economic or ecosystem values are rare	Conservation
2	Very Dry	Adverse impacts to socio-economic or ecosystem values are unlikely	Conservation Local water restrictions where appropriate
3	Severely Dry	Adverse impacts to socio-economic or ecosystem values are possible	Conservation Local water restrictions likely
4	Extremely Dry	Adverse impacts to socio-economic or ecosystem values are likely	Conservation and local water restrictions Regulatory action possible
5	Exceptionally Dry	Adverse impacts to socio-economic or ecosystem values are almost certain	Conservation and local water restrictions Regulatory action likely Possible emergency response

Figure 2: Proposed updated drought levels

What impact might this have on me?

The drought levels are used primarily to inform government (Provincial, Indigenous, and local) decision-making and communicate information about water scarcity to water users, including the public. If drought levels do not already inform your decisions, the impacts of these changes on you are negligible.

Governments and other organizations (e.g., watershed boards, irrigation districts) that have linked parts of their drought response strategies to the current provincial drought levels will likely need to update their plans to align with the new proposal once implemented.

What's next?

This proposal was informed by a cross-jurisdictional review of drought management best practices conducted by the Province of British Columbia and engagement with technical experts and Indigenous representatives. The contents of this proposal may change following further engagement with the public, local governments and Indigenous Nations.

The current plan is to trial the proposed drought levels over summer 2021 and, if found beneficial, to fully implement the changes. The [British Columbia Drought Response Plan](#)—and other Provincial guidance—will be updated accordingly.

How can I provide feedback?

You can ask questions and/or provide feedback by:

- **Web:** visit the *Water Sustainability Act* Engagement blog site at: <http://engage.gov.bc.ca/watersustainabilityact/>
- **Email:** livingwatersmart@gov.bc.ca

Thank you for your interest! We look forward to hearing from you.