

OKANAGAN DROUGHT BULLETIN #2023-2

July 11, 2023



OKANAGAN MOVED TO DROUGHT LEVEL 3

Lack of precipitation, declining streamflows, rising water temperatures, and forecasts for above normal temperatures this summer have prompted the Government of B.C. to move the Okanagan to Drought Level 3.

Okanagan water purveyors should closely monitor supplies and demand and ramp up communication with customers in preparation for potentially worsening drought conditions.

Provincial drought level map on July 6, 2023

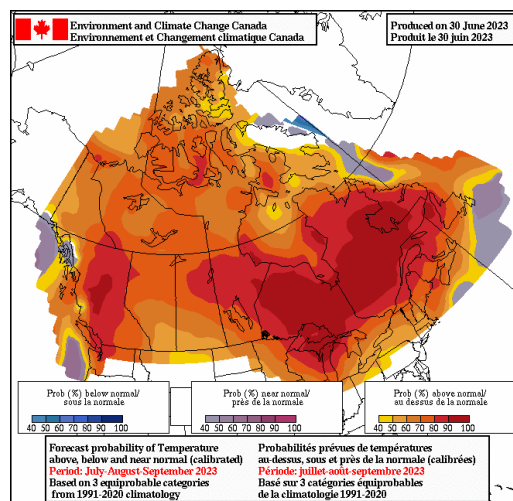
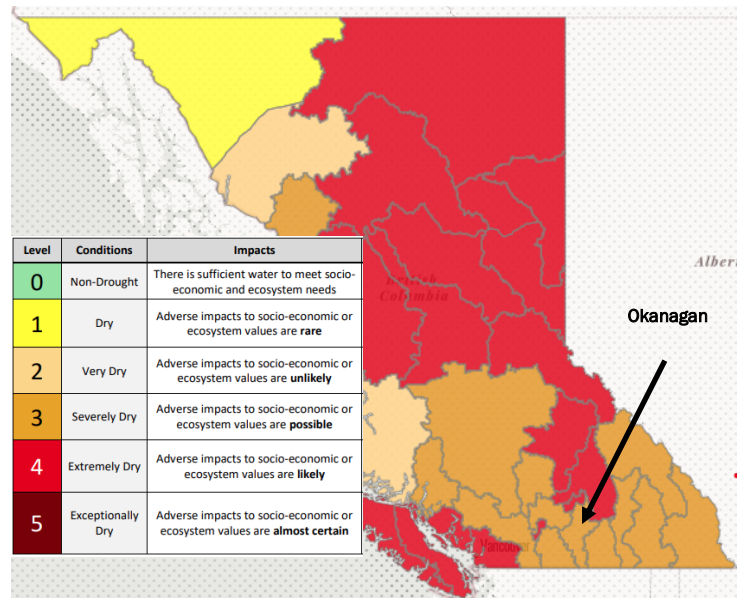
Source: [BC Drought Information Portal](https://www2.gov.bc.ca/gov2/serv/bc/drought/)

British Columbia ranks drought levels from 0 to 5, with Drought Level 5 rated as the most severe with adverse impacts to socio-economic or ecosystem values being almost certain. Currently, drought levels have been elevated to “Severely Dry” (Level 3) or “Extremely Dry” (Level 4) for most of B.C. In the Okanagan, record-setting warm temperatures this spring resulted in an early freshet. Precipitation has also been lower than average in many areas this year. While the scattered showers and cooler temperatures in June gave some reprieve, it was not enough to overcome the precipitation deficit from previous months.

Many streamflows are at the lower end of the historical range for this time period. Water temperatures are also increasing, which can be lethal for fish. Water purveyors with upstream storage should closely follow their release schedule requirements to avoid low flows downstream. Flows in some streams can change rapidly during hot, dry conditions.

Everyone is responsible to do their part to conserve water and reduce the risk of negatively affecting the environment and other water users. People and businesses in affected areas should reduce water use wherever possible and observe all watering restrictions from their water purveyor. Please note, local water restrictions (**stages**) are set using different indicators than provincial drought **levels** and federal drought **ratings**, and water supply conditions can vary across the region. (Learn more at <https://www.obwb.ca/drought-classification-systems-used-in-b.c./>.) Whether a community moves to a higher restriction stage depends on several factors, including customer demand, infrastructure capacity, and local water supply conditions (e.g. reservoir storage).

Water licensees who are not customers of local water purveyors should adhere to conservation measures communicated by the Government of B.C.



The long-term forecast is for [above normal temperatures](#). Precipitation is more difficult to forecast and no clear trends are showing up for the Okanagan at this time.

REGULATORY TOOLS TO PROTECT FISH

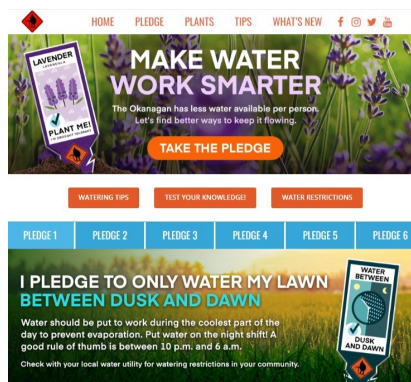
The Province continues to work with communities to encourage voluntary conservation. If conservation measures do not achieve sufficient results and drought conditions worsen, temporary protection orders under the *Water Sustainability Act* may be issued to water licensees to support drinking water for communities and avoid significant or irreversible harm to aquatic ecosystems. The protection orders give the province the ability to restrict water withdrawals if streamflow drops below environmental flow needs or to completely stop withdrawals if flows drop below critical flow thresholds.

An environmental flow need (EFN), or in-stream flow need, is the volume and timing of streamflow required for proper functioning of an aquatic ecosystem. A critical environmental flow threshold (CEFT) is a short-term flow threshold, below which significant or irreversible harm to the stream's aquatic ecosystem is likely to occur. Low water levels can impede fish passage to spawning and feeding areas, increase susceptibility to disease and predation, cause stranding, or result in fish kills due to low oxygen and high water temperatures.

The Okanagan basin is an extremely important region for fish. It is the most northern extent accessible by anadromous (returning from the sea to spawn in rivers and streams) salmon in the Columbia River system. Sockeye, Chinook, Steelhead and Coho (in small numbers) use Okanagan tributaries for spawning and rearing. Okanagan streams and lakes are also home to resident Kokanee, Rainbow Trout and Whitefish. These fish species are culturally important to the syilx nation, support a vibrant fishery, and are critical for healthy freshwater systems.



RESIDENTIAL WATER CONSERVATION



The OBWB's outreach and education program Okanagan WaterWise has now fully launched its annual outdoor water conservation campaign "Make Water Work." This campaign is delivered in partnership with local governments and utilities throughout the Okanagan. It includes an updated

interactive website at www.MakeWaterWork.ca. The website includes a quiz to learn more about the water of the Okanagan, as well as reasons and ways to conserve. The website encourages pledging to conserve and a friendly pledge competition between communities, as well as a contest to win WaterWise yard upgrades. Visitors to the site can also find up-to-date water restrictions for their neighbourhood and information about the *Make Water Work Plant Collection*.



This year's campaign is supported by advertising on social media, billboards, radio, TV, and wrapped vehicles. Handouts, social media graphics and more are provided to Make Water Work utility and business partners for use to help extend the reach of the

messaging. In addition, a partnership has been developed with the Okanagan Xeriscape Association to conduct outreach at Make Water Work garden centre partners to promote the plant collection and WaterWise gardening.

The plant collection includes 105 plants, grasses, trees and shrubs that will do well in the Okanagan's climate and this year is focusing on native plants, recognizing the numerous benefits that they provide. The collection was updated this year to include the syilx name for local plants on the list. The plant collection list is available for download from the Make Water Work website at www.MakeWaterWork.ca/plants. Gardeners are encouraged to visit partner garden centres, or to visit a favourite garden centre of their choice and ask for the plants listed.

Interested in becoming a Make Water Work partner? Email corinne.jackson@obwb.ca or call 250-469-6271.