

OKANAGAN DROUGHT BULLETIN #2023-1

June 23, 2023



OKANAGAN MOVED TO DROUGHT LEVEL 2

Lingering effects from a late 2022 drought, an early freshet, warm and dry spring conditions, and declining streamflows have prompted the Government of B.C. to move the Okanagan to a Level 2 drought. While the recent cooler conditions and localized rain have brought some reprieve, drought conditions will persist unless we have prolonged rain.

Okanagan water purveyors should closely monitor supplies and customer demand and consider ramping up communication with customers in preparation for potentially worsening drought conditions this summer.

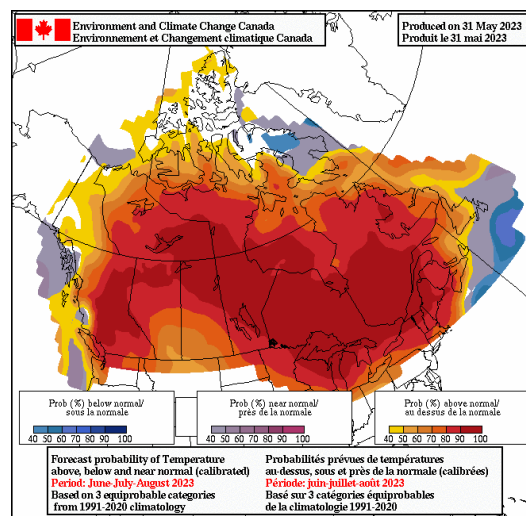
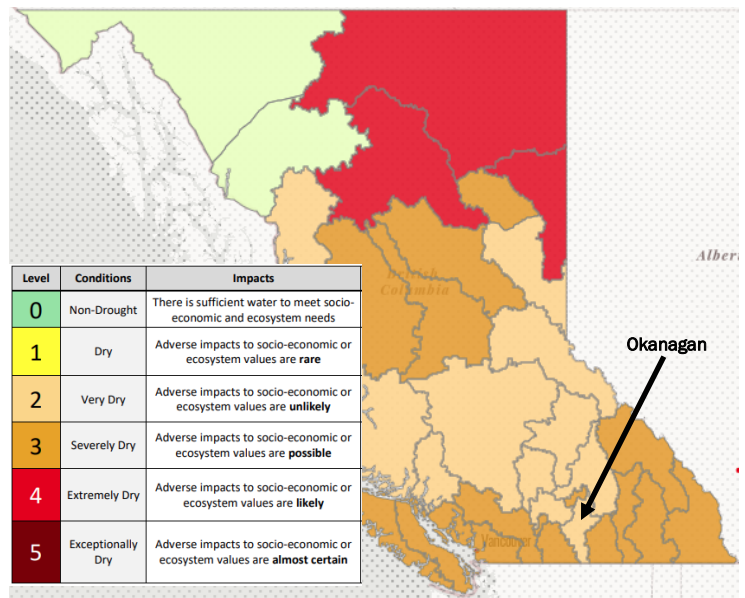
Drought levels have been elevated to “Very Dry” (Level 2) or “Severely Dry” (Level 3) for most of British Columbia. In the Okanagan, record-setting warm temperatures in May resulted in an early freshet. The snowpack in the Okanagan region is completely melted and precipitation has been lower than average in some areas this spring.

Streamflows have declined significantly over the last few weeks, with many flows reaching 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.

Local water regulations (stages) are set using different indicators than provincial drought levels and water supply conditions vary across the region. Whether a community moves to a higher restriction stage depends on several factors, including customer demand, infrastructure capacity, and local water supply conditions. That said, everyone should be using water wisely.

Customers of water utilities should comply with all watering restrictions and advice from their supplier. Water licence holders on streams and wells who are not customers of local water utilities should adhere to conservation measures communicated by the Government of B.C.

Provincial drought level map on June 22, 2023
Source: [BC Drought Information Portal](#)



The long-term forecast is for [above normal temperatures](#) this summer.

WATER FOR FISH

By using water efficiently on our farms and in our yards now, we can help keep enough water in the streams and aquifers to support fish spawning later in the year.

The Okanagan basin 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.

The early freshet, warm temperatures, and lack of rain this spring are leading to an earlier than normal onset of low streamflows. Low streamflows 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. Fisheries biologists are very concerned, reporting similar conditions to 2015 when more than 90 percent of Okanagan Sockeye that entered the Columbia River died before reaching their spawning grounds.

Having sufficient groundwater is also important for fish. When high air temperatures warm surface flows, groundwater upwelling in streambeds creates cool areas where fish can survive. Provincial staff are closely monitoring groundwater levels and will be asking groundwater users to curb their use if needed.



WATER FOR FOOD PRODUCTION

While agriculture is the number one use of water in the Okanagan, it is important because it feeds our community and our economy. Prolonged periods of dry weather can cause crop damage and shortages in water supply for livestock. When it's hot and dry, both need more water to survive. Good water management by farmers is essential to making sure our limited and stressed water supply lasts throughout the growing season. Visit www.obwb.ca/ag for resources for agricultural water users.

RESIDENTIAL WATER CONSERVATION



OBWB's Okanagan WaterWise program launched its annual "Make Water Work" campaign on May 18 with Okanagan chiefs, mayors and others, at Kelowna's UnH2O Xeriscape Garden, speaking on the

importance of water conservation. The gathering came as the Okanagan continued to smash temperature records and smoke, from an earlier-than normal fire season in B.C. and Alberta, blanketed the valley.

Make Water Work (MWW) is aimed at tackling the second largest use of water in the valley – household lawns and gardens. The campaign begins in May when residents begin to turn on their taps, and runs until early October as water supplies drop and water is still needed for fall harvest crops, fish returning to local creeks to spawn, and increasingly, for firefighting.



The campaign is developed and delivered in partnership with local government and utility partners throughout the region. This year, business partnerships have blossomed to include one irrigation and nine garden centres promoting conservation and the *Make Water Work Plant Collection*.

This year's campaign includes:

- an interactive MakeWaterWork.ca website where residents can find watering restrictions for their community, tips to make water work better, the *Make Water Work Plant Collection*, a contest to encourage pledges to conserve with the chance to win WaterWise yard prizes, and more;
- advertising on billboards, TV and radio, vehicle wraps, digital and social media;
- business partners promoting MWW;
- materials for partners to distribute that include MWW tips, plant collection and contest info;
- MWW gardening gloves; and
- a friendly challenge, encouraging residents to pledge to help their community win the title of "Make Water Work Champions."

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