

OKANAGAN DROUGHT BULLETIN #2019-2

JUNE 20, 2019



OKANAGAN MOVED TO DROUGHT LEVEL 3

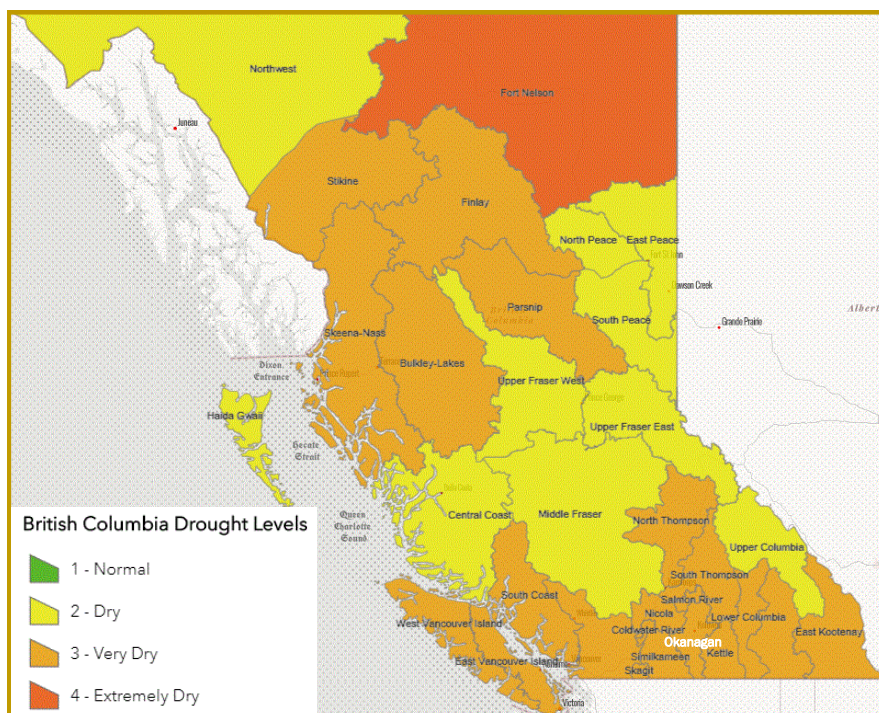
Warm and dry conditions have prompted the Province of B.C. to announce a Level 3 drought for much of B.C., including the Okanagan region.

Water suppliers should continue to monitor weather, reservoir and groundwater levels, and customer demand to assess whether higher water restrictions are necessary for your community.

Low snowpack over the winter months combined with a warm spring has led to a rapid and early shift from the spring melt season to low flow conditions. With warmer than normal weather forecasted for the summer, we should prepare for what could be a very dry season. Drought Level 3 indicates that serious ecosystem or socioeconomic impacts are possible and calls for voluntary water use reductions from all water users, including residents, industry, farmers and municipalities. The suggested target is a 30% reduction in water use.

Across the Okanagan, a low snowpack and a dry spring reduced the inflow of water into storage reservoirs. We had the driest May on record in Kelowna, with just 43 mm of rain when we usually get 86. Some upland reservoirs did not fill and Okanagan Lake did not reach 'full pool.' And while some reservoirs "filled and spilled," in many cases storage is being accessed earlier than usual to supplement downstream flows and meet demand, which may cause challenges later in the season.

Local water regulations (stages) and conservation targets differ from provincial drought levels. Many Okanagan water suppliers have drought management plans and operate with year-round watering restrictions for their domestic customers. Water supply conditions are different across the valley, and whether a community moves to a higher restriction stage depends on several factors, including customer demand, infrastructure capacity, and local water supply levels.



Provincial drought level map as of June 17, 2019.

Source: [BC Drought Information Portal](#)

Contact Kellie Garcia at kellie.garcia@obwb.ca or 250-469-6321 for information about local drought planning and response efforts.

ENVIRONMENTAL FLOW NEEDS

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 Okanagan Nation, support a vibrant fishery, and are critical for healthy freshwater systems.

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.

Maintaining environmental flow needs (EFNs), or the volume and timing of streamflow required for proper functioning of an aquatic ecosystem, is imperative. B.C.'s Water Sustainability Act gives the province the ability to restrict water withdrawals if streamflow drops below EFNs, or to completely stop withdrawals if flows drop below critical flow thresholds.

The OBWB, Okanagan Nation Alliance fisheries department, and federal and provincial fisheries departments are working together to derive credible, transparent and defensible EFN and critical flow values for Okanagan streams. Previously recommended EFNs have often been higher than what could be considered possible naturally, particularly in drier years. This project aims to determine EFNs that are attainable for water managers, and to study the relationship between flows and habitat function more closely. See www.obwb.ca/efn/ for more information.



Photo: Okanagan Nation Alliance fisheries staff taking measurements to help determine recommended EFN values.

RESIDENTIAL WATER CONSERVATION

Make Water Work (MWW) is a valley-wide water conservation campaign aimed at tackling outdoor residential use, the second largest use (24%) of water in our region. MWW is managed by the OBWB's Okanagan WaterWise program and delivered in partnership with local governments and water utilities throughout the Okanagan.



Photo: Peachland Mayor Cindy Fortin urges residents to conserve and collects pledges to Make Water Work, hoping to claim the title of MWW Champion Community from 2018 winner, Armstrong.

MWW begins in May when residents begin to turn on their taps, and runs until early October as water supplies dwindle and farmers still need water for crops, and fish are beginning to return to local creeks to spawn. The campaign includes:

- the MakeWaterWork.ca website where residents can find tips to make water work more effectively and efficiently in their yards, watering restrictions for their community, the *Make Water Work Plant Collection* featuring plants best-suited to the Okanagan, and more;
- advertising on billboards, buses, bus shelters, radio, Facebook and Instagram;
- posters with MWW tips for partners to post in their community;
- bookmarks for partners to hand out that include the MWW tips, info on the *Make Water Work Plant Collection*, and invitation to pledge to conserve for a chance to win WaterWise yard prizes;
- MWW garden centre partners promoting the plant collection and outdoor water conservation;
- MWW Frisbees for partners to give out that act as a water-saving device, encouraging people to place them upside down under their sprinkler and once full to turn off the water;
- in-person outreach at events throughout the valley during the campaign, and
- a friendly community challenge, encouraging residents to pledge to win the title of "Make Water Work Community Champions."

Contact Corinne Jackson at corinne.jackson@obwb.ca or 250-469-6271 for more information.