

Surface and Groundwater levels

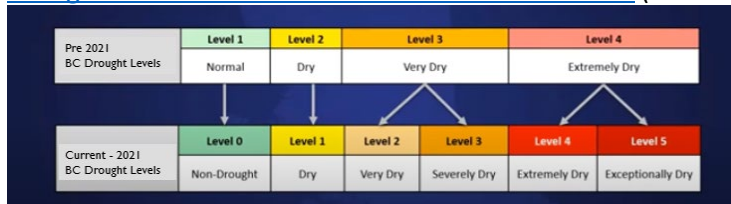
- Even with the cooler temperatures, the Boundary Region is very dry. River levels are low for this time of year throughout the region
- Surface water levels are between the 25th percentile (lower quartile) and minimum recorded level for this time of year. Most monitored system ([Water Survey of Canada](#)) are getting very close to the minimum recorded level. (see below for July 8th levels)
- [Groundwater levels](#) are below 25th percentile. Starting to look similar to 2015 groundwater levels. Minimum ever for Beaverdell Observation level. Note that Midway only has 3 years worth of data, so the average is over a shorter period of time, the Grand Forks and Beaverdell wells show an average over the last 10 years.
- Overall goal for ecosystem protection is for the Boundary rivers is to stay above 10% Mean Annual Discharge (MAD), that below 5% MAD can result in critical stress on aquatic systems.
- During hot and dry conditions, the Boundary region has been known to drop from 10% MAD to 5% MAD in under 2 weeks.

Fisheries

Temperatures from 19°C and above are sub-lethal to lethal for fish. There have been records of the Kettle River reaching up to 24°C during this past heat wave, which is assumed to have contributed to the many observations of fish kills throughout the region. [Provincial Fisheries Drought Management Plan](#) (2019) speaks about drought impacts for different fish species, the document can be found on the [RDKB Watershed JTC page](#) (documents section).

Provincial Information

- Concerned about dry and low water conditions in the Boundary region. Currently, showing similar conditions in the Thompson Okanagan Region.
- [Drought Classification has been elevated to a Level 3](#) (severely dry)



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

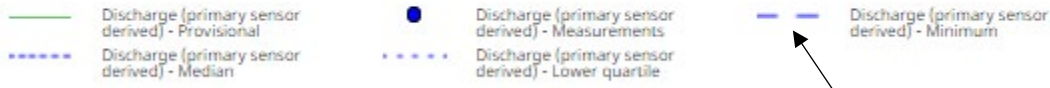
- Will be providing direction to water users requesting voluntary water reduction based on Drought Level Classification.
- BC Drought and Water Scarcity Response Plan (2021) can be found on the [RDKB Watershed JTC page](#) (links section).
- Wanting to be kept aware of environmental and economic impacts associated with the low water conditions, and water use in the Boundary region.
- Aware that should water use curtailment be required in some regions, curtailment has the potential to include both surface water users and hydraulically connected groundwater users.
 - o Reach out to me if you want information whether your groundwater well is hydraulically connected.

RDKB recommendations for households

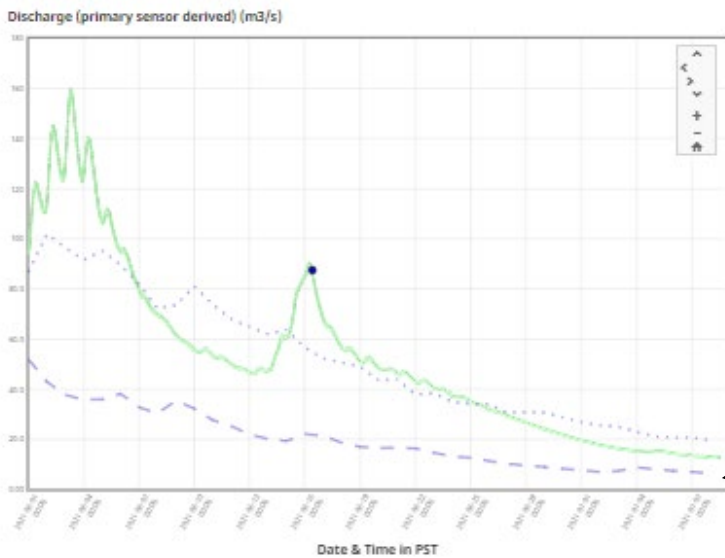
- Be Water Smart. Use water wisely and consciously. Repair water leaks, fix dripping taps, using a soil water meter, water deeply and only when needed. Water in the evenings and early mornings to reduce evaporation.
- Reduce non-essential outdoor water use: avoid outdoor vehicle washing, or using water to clean pavement.
- Think before you turn on the tap, does it need to happen, if so can you do something to reduce the evaporation potential and increase absorption into the ground?
- Some great water conservation ideas: <https://sutherlandcreekwater.ca/conservation-tips>

Water Levels for the Boundary Region

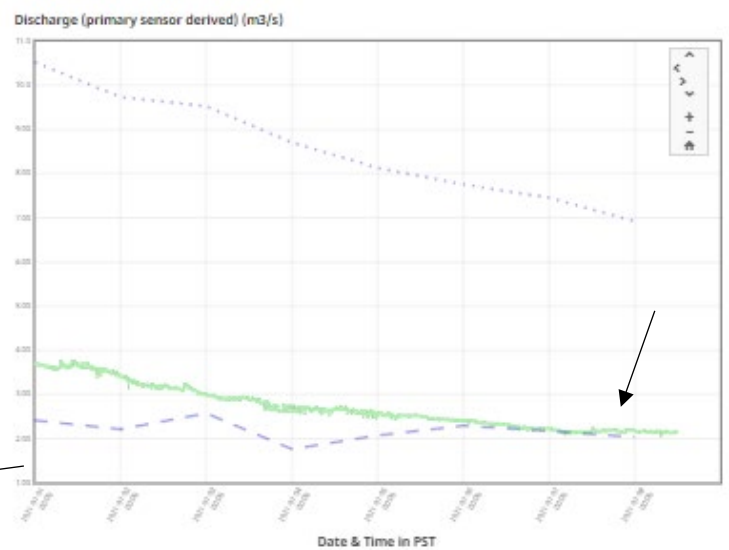
▼ Legend



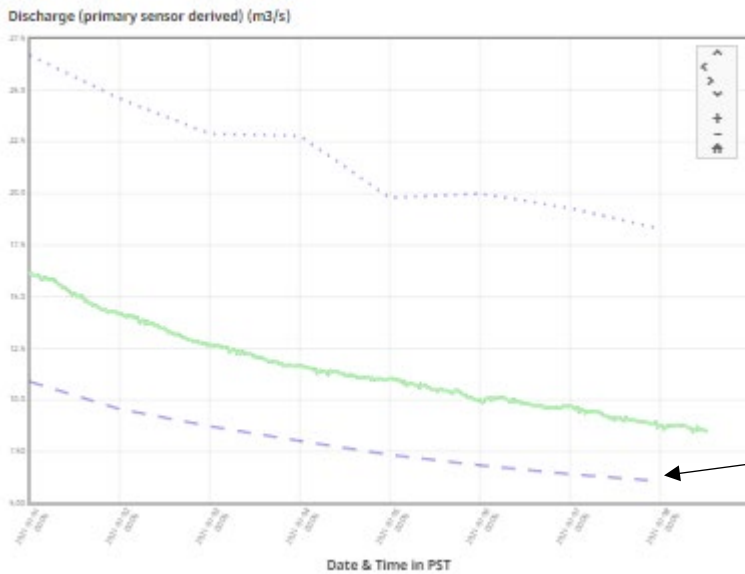
Kettle River at Westbridge (08NN026)



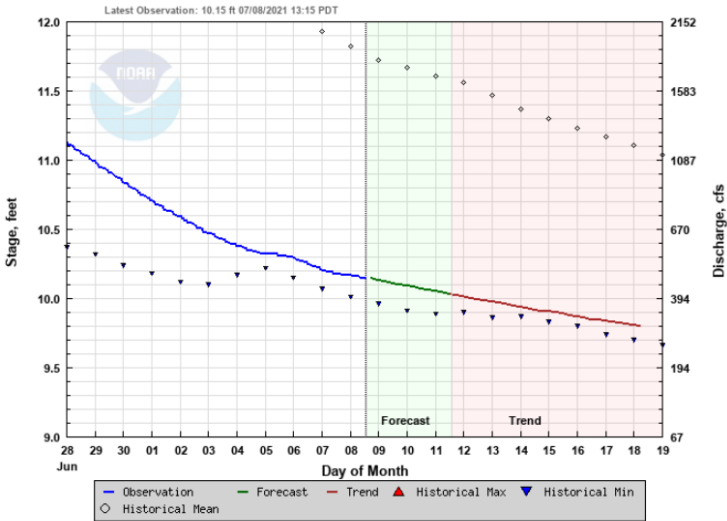
West Kettle River at Westbridge (08NN003)



Granby River at Grand Forks (08NN002)

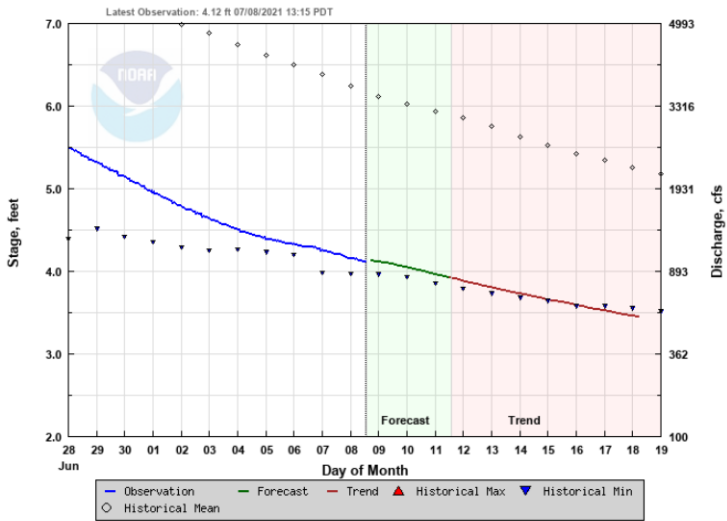


Kettle River Near Ferry (FRYW1) – USA site
KETTLE - NEAR FERRY (FRYW1)



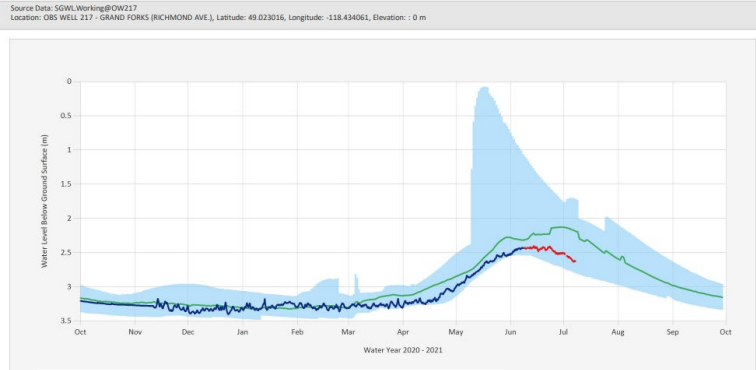
Forecast Created: 07/08/2021 10:25 PDT
Plot Created: 07/08/2021 14:12 PDT
Observations Provided by USGS

Kettle River Near Laurier (LAUW1) – USA site
KETTLE - AT LAURIER (LAUW1)



Forecast Created: 07/08/2021 10:25 PDT
Plot Created: 07/08/2021 14:11 PDT

Grand Forks Observation well No. 217



Beaverdell Observation Well No 306

