



City of West Kelowna

Flood Response Plan



Flood Response Plan Summary

Background

Since 2017, the City of West Kelowna has had an active flood preparedness and response committee with action plans for each type of event. Members of the committee train through the Emergency Management Program annually. The committee is comprised of staff from many different departments as flood preparedness, response and recovery is, or can be, a momentous project as was the case in 2017 and 2018. The committee has representation from Parks, Public Works, Communications, Fire Rescue, Planning and Finance. For larger regional events, West Kelowna is supported by the Regional Emergency Operations Centre. West Kelowna has been recognized for its outstanding flood response abilities and has been called out to other regions for emergency assistance most recently to Merritt BC in 2021.

How it Works

The program commences in late winter annually. Members on the Operations side of the committee meet to review regional snowpack, short- and long-term weather forecast, inventories of sandbags and key trigger dates anticipated in the upcoming weeks prior to a flood event. Soil conditions in the previous fall are also considered for the soils ability to hold the expected melt and rain moisture. The committee meets each month moving into spring and the frequency increase if threats are determined. For example, the committee will have met four times by this reports date in 2023. If flood conditions worsen additional departments and staff are brought into the committee.

There are two distinctly different planning and response areas for flooding. Those being creek flooding associated with spring freshet and then later the eventual crest of Okanagan Lake.

Staff are mindful of large spring rainstorms particularly 'rain on snow' events in the surrounding hills, as this can produce very heavy rapid stream flows. Key staff have access to what's called the water level 'Dash Board' which shows stream and lake level real time flow and levels.



The communications group works with operations to issue advisories that assist the community with flood preparation and response through its regular communication channels (ads, news releases and PSA’s, issuing e-news, social media and website updates, use of street readers boards and more). They also work in collaboration with regional communications for consistent messaging focused on preparedness, safety and the status of water levels and action plans.

How are current 2023 Conditions?

Staff had some creek challenges in 2023, but the experience staff have acquired alleviated damages. The snowpack on the west side of Lake Okanagan is mostly gone now and creek flooding concerns are over.

Okanagan lake remains over one metre below what is considered “full pool.” Full Pool is the recognized 342.48 meters above sea level that considers Okanagan Lake as full. Okanagan lake is lowered through the Penticton dam to accommodate the coming snow melt accumulations. In 2017, crews held back nearly one full metre above full pool with hundreds of thousands of sandbags.

Currently staff can report we are in good shape for 2023.



Example of pumping ground water out of the Green Bay neighbourhood.