

UPDATED SUMMARY OF RESULTS – MARCH 2023

Evaluation of Waterways – Similkameen and Tulameen Rivers

Following the November 2021 flooding that occurred from heavy rains, concerns were raised regarding the potential for the flood to have spread contamination from industrial activities in the area into waterways, including the Similkameen and Tulameen rivers.

To assess whether the flooding caused long-term impacts to water quality in these river systems, sediment and surface water samples were collected in October 2022 from 9 locations between Tulameen and Princeton on the Tulameen River, 9 locations between Eastgate and Princeton on the Similkameen River and 10 locations between Princeton and the international boundary on the Similkameen River. The samples were taken from areas that are used often by people (e.g., campgrounds) or areas that are used by salmon, or other important species.



STUDIES RESULTS

The samples were sent to a laboratory and analysed for contaminants that might have been spread by the flood. The results were compared to safe levels set by the federal and provincial governments. The surface water results were also compared to limited data that were collected before the flood from stations on the Similkameen River to see if concentrations were higher after the flood. There were no surface water data from before the flood for the Tulameen River, and there were no sediment data from either river from before the flood.

The concentrations of the substances in surface water in October 2022 were not different than those measured in the Similkameen River before the flood. Therefore, it was concluded that the November 2021 flood did not increase concentrations of potential contaminants in the areas sampled along the Tulameen and Similkameen Rivers. Elevated metals were observed in some sediment samples, but they were considered unlikely to cause adverse effects to aquatic life.



The concentrations of all substances in sediment and surface water were generally found to be safe for fish and other organisms that live in the river. While the concentration of copper was slightly higher than guidelines protective of aquatic life, the copper is likely naturally occurring, and is unlikely to impact aquatic life. Surface water and sediment are also safe for people that use the river for recreational or traditional purposes, but people should practice good hand hygiene after these activities. This is because bacteria, which are always found in the environment, were found in the rivers both before and after the flood. Further, because these bacteria are present, it is important that water from the rivers be treated before use as drinking water.