

BACKGROUND

Do you care about protecting our clean drinking water? The RDKB is completing a Source Water Protection Plan for the Christina Lake Water Utility, and wants your input!

The RDKB is responsible for providing safe drinking water to the southern part of the community of Christina Lake, which is serviced by the Christina Lake Water Utility. The Water Utility obtains its water from an intake in the southern portion of the lake. The RDKB operates and manages the Christina Lake Water Utility according to the conditions in the permit issued by the Interior Health Authority.

What is a Source Protection Plan?

A Source Protection Plan is one important part of a multibarrier approach to provide safe drinking water. Figure 1 illustrates the five main components of a plan. The objective of a Source Protection Plan is to identify threats to drinking water safety, and to develop recommendations to reduce risks and improve the resiliency of the water supply.



Figure 1: Components of the multi-barrier approach to delivering safe drinking water

Development of a Source Protection Plan is guided by a **Technical Advisory Committee**, which is made up of a Drinking Water Officer, Water Operators, Managers, Technical Experts, and other stakeholders. The process follows the [BC Ministry of Health's Comprehensive Drinking Water Source-to-Tap Assessment Guideline](#) Steps 1, 2, 7, and 8. The four main steps of a Source Protection Plan are shown in Figure 2:



Figure 2: Four main steps of a Source Protection Plan

Hazard Identification

Step 2 of the Source Protection Plan is identifying hazards that may contaminate the water supply. Some examples of hazards and their potential contaminants include:

- Naturally occurring: pathogens from wildlife, such as *E. coli* and protozoa such as *Giardia*
- Agriculture: fertilizers (e.g., nitrates and phosphates) and pesticides
- Residential: pathogens from septic tanks, solvents, pesticides, fertilizers
- Municipal: storm water runoff from roads
- Recreational: boat use, ATVs in the watershed

The contaminants can enter the water supply through runoff and surface water inflows, groundwater inflows, and direct inputs. A Source Protection Plan is meant to identify these hazards and develop actions that can help prevent contamination or refine response plans to reduce the impact if not preventable.

Do you know of any hazards?

We are looking for your input on hazards around Christina Lake that could potentially contaminate the water supply. **If you know of any, please take the following survey and help us protect your drinking water.**



Next Steps

Once hazards are identified, the Technical Advisory Committee will work together to rank the level of risk presented by each hazard and develop recommendations to mitigate those risks and improve the safety of the water supply system.

Climate Change

In recent years, we have experienced extreme weather and weather-related events across Canada, including storms, flooding, drought, wind, and wildfires. Source water and water system infrastructure is vulnerable to a changing climate. The changing climate increases the vulnerability of source water and the water system infrastructure, and will be considered throughout the Source Protection Planning process.

Read the [Christina Lake Water Utility 2017 Annual Report](#)

