

## LAKEVIEW IRRIGATION DISTRICT (\$20,000)

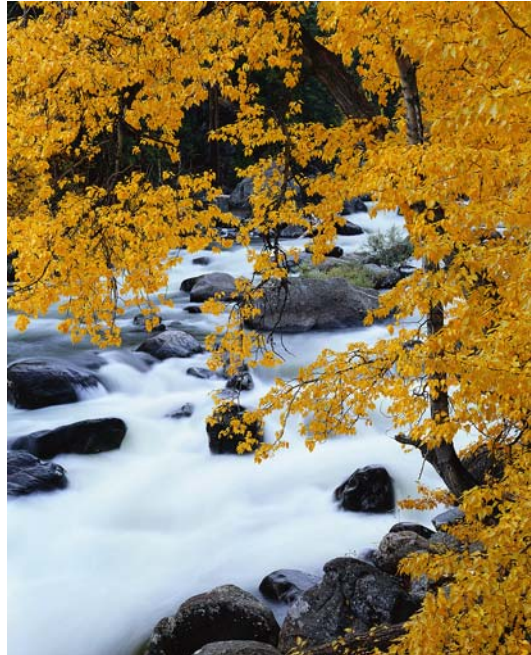
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### PROJECT TITLE: LAMBLY CREEK SOURCE WATER PROTECTION PLAN

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The Lakeview Heights Irrigation District was created in 1951 to operate water works for domestic and irrigation purposes, acquire land for such purposes in the Westbank area, now the District Municipality of Westbank. As of 2003 there are an estimated 3,300 service connections providing potable water to around 10,000 users. The service area within the District boundaries covers about 930 hectares, of which 226 hectares are irrigated orchard. Increased recreational activity in the Lambly Creek watershed and around the Rose Valley Reservoir has increased the risk to drinking water quality (primarily from surface erosion and sediment deposition). An inventory of potential hazards to drinking water quality will assist the district in protecting its source water.



The Lambly Creek Source Protection Plan project for the Lakeview Irrigation District (LID) addresses Modules 1, 2, 7 and 8 of the Comprehensive Drinking Water Source to Tap Assessment. The intent of this project is to gain a greater understanding of the risk factors to the Lambly Creek and Rose Valley water sources that may exist as a result of the variety of land uses in the watershed with consideration of the potential risks associated with the effects of the Mountain Pine Beetle. The final plan is also intended to address the Interior Health Authority condition on the LID Operating Permit that requires a Source Protection Plan for its source area.

Module 1 involves the delineation and characterisation of the drinking water source(s) and is primarily an office-based exercise. Watershed reports and GIS data are compiled and summarized to confirm the water source area. In some cases fieldwork is required to confirm watershed boundaries and diversions that may exist.

Module 2 is the contaminant source inventory. The information summarized in Module 1 is used to identify locations in the watershed that may be affected by a variety of hazards that could contaminate the water supply e.g. steam crossings, roads adjacent to streams, recreational areas, active industrial areas, intensive range use areas etc). Ground based assessments of these locations are completed to rate the degree of contamination or potential contamination to the surface water. The primary contaminant is typically soil/sediment from industrial roads, recreation and range use and wildlife. Fecal material from cattle and wildlife may also be introduced to the streams and illegal dumping may also introduce contaminants to the source water.

Module 7 - Characterizes the risks from source to tap. This Module evaluates the drinking water protection barriers and assesses the risks identified in Modules 1 and 2. This will identify and prioritize problem/potential problem locations.

Module 8 – Recommend actions to improve drinking water protection. This module summarizes the risks identified in Module 7 and suggests actions that will reduce the risks to drinking water quality.

Module 1 was completed late August 2008 and identified 326 stream road crossings as well as road sections adjacent to streams.

Module 2 was completed in late September, and of the 326 crossings (and any others identified in the field) 172 were assessed in detail. Some locations identified in Module 1 were not assessed due to access/time constraints. In addition, many stream crossings that were assessed in detail during the 2007 SHIM project were not re-assessed for this project. Recreational and industrial areas were also assessed, as was the majority of the road system travelled between stream crossing locations.

Modules 1 and 2 are complete, with Modules 7 and 8 in progress. It is anticipated that Modules 7 and 8 will be complete by the end of 2008 and the final report summarizing the four modules will be complete by the end of March 2009.

