## Kelowna Joint Water Committee (\$10,000)

Project Title: Groundwater Protection Planning

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Project Start date: March 2007



The Kelowna Joint Water Committee received a grant for \$10,000 to have an independent consultant (Golder and Associates) to determine well capture zones and aquifer characteristics including vulnerability of the aquifer to contamination from land use practices. The primary goal of the program is to eventually develop a hydrogeological model for management of groundwater in the area. In addition the Kelowna Joint Water Committee is completing an aquifer and well head protection planning initiative to complement the knowledge of aquifer vulnerability. The Kelowna Joint Water Committee is comprised of the 5 major water purveyors contained within the City of Kelowna to work cooperatively on matters relating to demand management and water supply. The partners are: South East Kelowna Irrigation District, Black Mountain Irrigation District, Glenmore Ellison Irrigation District, Rutland Waterworks and the City of Kelowna.

The Groundwater Protection Project with the Kelowna Joint Water Committee has delineated well capture zones, completed an inventory of contaminant chemicals and locations of concern for the wells in consideration and provided preliminary recommendations for going ahead with more in depth groundwater protection planning and risk management of the water supply these purveyors rely on. By the very nature of the Kelowna Joint Water Committee it is a collaborative organization, so collaboration on this project and others piloted by this group is implicit.

This project is considered complete at this point in time. The report from Golder and Assoc has been finalized and presented to the Board of the Kelowna Joint Water Committee. It includes maps and graphics on well capture zones, aquifer delineation and associated characteristics, and contaminant sites of concern.

An obstacle discovered in completing the report is the erratic reporting of geothermal activity and private wells to the provincial agencies responsible for maintaining the well database. This increases the threat of potential contamination to the aquifer if wells are not drilled properly or maintained as they should be and they are not tracked. This factor will be an obstacle in completing the groundwater protection planning as well as it can leave the list of potential contamination points unfinished.

The images contained in this report were created using the Google Earth mapping program with the GIS well locations and capture zone data overlain to give a visual image of the aquifer mapping.