

REGIONAL DISTRICT CENTRAL OKANAGAN (\$25,000)

SEISMIC REFLECTION OF BURIED VALLEY AQUIFERS CONTACT PERSON: RON FRALICK, DEVELOPMENT SERVICES RDCO

The Regional District Central Okanagan is ranked as the third largest urban area in the Province, with more than 160,000 people calling the Central Okanagan home. RDCO places a priority on maintaining the balance between growth and development, while protecting the natural environment and the unique Okanagan lifestyle. It is made up of two unincorporated electoral areas and the four member municipalities of Kelowna, Westside, Peachland and Lake Country.



The seismic reflection project involves state of the art research and application of new methodologies for aquifer definition. Results will greatly improve the ability to provide long term management of key aquifers in the Kelowna region, while also developing new methodologies that can be extrapolated to other similar aquifers within the Okanagan Basin. This work originates directly from the strong inter-government and university research partnership established through the Groundwater Assessment of the Okanagan Basin (GAOB) project. The seismic collection and processing was conducted by the Geological Survey of Canada (GSC), through a significant cash and in-kind contribution, and is supported by the B.C. Ministry of Environment, in addition to key researchers at UBC-Okanagan and Simon Fraser University. The well developed partnerships ensure maximum benefit of the research as well as wide distribution and uptake of the results.

The WCQI Grant funds were used to support the transport of a research team from the Near-Surface Geophysics section of the GSC, including specialized vehicles for data collection, from Ottawa to Kelowna as well as their costs while on site.

The team spent a few weeks in the area collecting seismic data, and are currently completing the data processing. The seismic results will provide a 3-D image of buried aquifers.

These results will be used in conjunction with surficial geological mapping to develop a 3-D stratigraphic model of the region. This model will be used by university partners to develop a hydrogeological model of the key aquifers. This end product will enable water managers to assess groundwater vulnerability and aid in resource management.

During the project media attention was garnered due to the unique look of the “mini-vibe” machine and its trailing sensors that completed the data collection. For more information on newspaper articles please contact Bruce Smith at the Regional District Central Okanagan, or the Okanagan Basin Water Board.



