Kaleden Irrigation District – Assessing Impact of Cyanobacterial Blooms on Skaha Lake

The Kaleden Irrigation District was incorporated in 1922. The current letters patent lists the objects of the District to the supply of domestic and irrigation water and the operation of a cemetery. The service area of the District encompasses an area known as Kaleden but is only the portion east of Highway 97 to Skaha Lake and is located almost directly between the city of Penticton and the community of Okanagan Falls. The District serves a population of approximately 1300.

In the fall of 2008 the residents began experiencing a taste and odor in the water that was organic and described as musty and swampy. The District enlisted the services of Larratt Aquatic to determine the cause of this objectionable taste and odor. It was determined through water testing that the cause was a blue-green algae bloom in Skaha lake and was being experienced by the other water purveyors that were using Skaha Lake. The District had not experienced a situation like this before and decided that it was important to further study the bloom and look at possible solutions for the future.



The study will be over a twelve-month period, which is necessary to evaluate any changes, which may be occurring in the lake throughout the different seasons. We began the project in May 2009, which was later than originally anticipated but should still give a representative conclusive study.

The project has progressed very smoothly to date and we don't anticipate any problems throughout the rest of the time required to complete the project. The current work being done consists of submitting monthly water samples from the three major water purveyors on Skaha Lake, which includes Kaleden. These samples are analyzed by Larratt Aquatic services for different algae types and concentrations. Larartt Aquatic also installed a thermistor chain at the location of our intake to log the water temperature at varying depths. The complete algae study will form a part our source water assessment, which is a requirement of the Interior Health Authority.