

## BCLSS Newsletter February 2024



### Konni Lake

#### In This Newsletter

- Introduction to the BC Small Water Systems Community Network
- New Lake Report: White Lake
- BCLSS Lake Ecology and Monitoring Course
- The Latest Freshwater News



**BC SMALL WATER SYSTEMS**  
**COMMUNITY NETWORK**

## **BC Small Water Systems - Finding Support through the Community Network**



By Claire Ross, BC Water & Waste Association – Community Engagement Specialist

In 2020, the BC Water & Waste Association and the Government of British Columbia partnered to build a mechanism that supports small water systems across BC. Small water systems are defined as serving more than one household up to 500 individuals in 24 hours. The project was created in response to conversations with small water purveyors and their teams expressing the need for connection and knowledge sharing through regional peer networks. Feedback as well as continued communication with small water systems led to the creation of the BC Small Water Systems Community Network.

The Community Network is a free, online platform for small water systems to find and connect with their peers as well as the vast array of supporters who have resources, expertise, programs, or services to share with the small water systems community. A key foundation of the Community Network is the recognition that all members of the community, water systems teams and supporters alike, contribute to the overall success of the platform.

Areas of the Community Network are designed to meet the needs of small water systems while allowing for connection opportunities and knowledge to be sourced from within the community itself. The member and organization Directory allows individuals to find each other. The Technical Discussions forums and Articles provide opportunities to discuss relevant issues and questions, as well as for members to share and demonstrate expertise in their subject areas. The Owners Lounge is designed for small water purveyors and their teams to meet their peers and hold private discussions. The Community News area highlights upcoming events, classified ads, and opportunities.

With over eighty unique resources on the Community Network, there are opportunities for both small water systems and supporters to deepen their knowledge and understanding on many topics. For individuals who are new to small systems, a great resource to begin with is the So Apparently I Have a Small Water System ... Now What? free online course, which provides a 75-minute overview of the responsibilities of a small water system owner. This

course is a great primer and a good jumping off point to have deeper, more meaningful conversations about running a sustainable system.

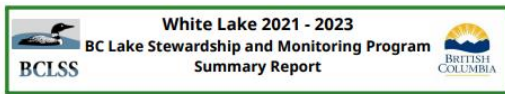
When knowledge gaps are identified, the Community Network can be leveraged to build awareness and promote activities across the platform and on a Weekly Digest email that is distributed to Community Network members on Fridays.

We are excited about the potential of the Community Network towards realizing the vision of all communities having safe water and a healthy water environment. If you would like to explore the platform, you can create a free profile at [www.smallwaternetwork.org](http://www.smallwaternetwork.org). For any questions on this project, please reach out to [smallwaternetwork@bcwwa.org](mailto:smallwaternetwork@bcwwa.org)

Clean, safe drinking water for all of our BC communities is the goal. Working together is how we'll get there.

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## **New Lake Report: White Lake**



The BC Lake Stewardship Society (BCLSS) and the Ministry of Environment and Climate Change Strategy (ENNV) partner with local volunteers and stewardship groups to characterize lake water quality through the *BC Lake Stewardship and Monitoring Program* (BCLSMP). The BCLSMP's focus is on understanding water clarity, temperature, oxygen, and nutrients because these factors contribute to the basic understanding of lake processes which influence biological productivity. Concerns about productivity are common, specifically because high productivity can negatively impact recreation, drinking water and aquatic health due to harmful algal blooms. For more information about the BCLSMP please visit [www.gov.bc.ca/lakestewardshipmonitoring](http://www.gov.bc.ca/lakestewardshipmonitoring).



Photo 1. Photo of White Lake by volunteer and lake resident Terry Clarke.

#### Background

White Lake is located east of Sorrento between the two southern arms of Shuswap Lake. The lake sits at an elevation of 462 meters, is approximately 570 hectares in size with a perimeter of 13.2 km. It has a maximum depth of 40 meters and a mean depth of 23.5 meters (Webb, 2000; FIDO, 2023). There are two inflow creeks; Cedar Creek, located at the east end of the lake, and Parri Creek, located halfway between the east and west ends of the lake on the north side. White Creek drains out of White Lake through marshy habitats into Little White Lake (**Figure 1**). White Lake is a marl lake (Webb, 2000). The sediments of marl lakes consist of marl, which is a soft-textured mixture of clay, sand, and limestone (Coulak & Wetzel, 1972). Marl lakes have waters with higher-than-normal amounts of calcium and carbonate ions allowing them to remove nutrients (i.e. phosphorus) from the water column and store them in sediments where they are less available for algal growth (Wilk et al., 2014). This makes marl lakes more resilient to impacts from external nutrient loading.

White Lake is a popular rainbow trout fishing destination (BC Parks, 2014) as it is stocked annually, but also contains many other native fish species as well as an invasive goldfish population. To enhance sport fish production, the lake

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We recently published the White Lake Report on our website which summarizes level 3 BCLMSP data collected from 2021-2023. Read the report by clicking the button below!

[Read the White Lake Report Here](#)



# 3 Day Lake Ecology & Monitoring Course

**NEW!**

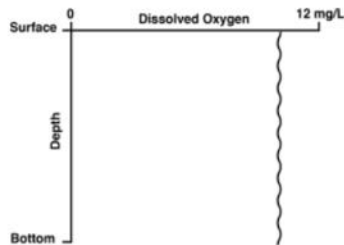


Figure 1.11 Spring & fall dissolved oxygen profile

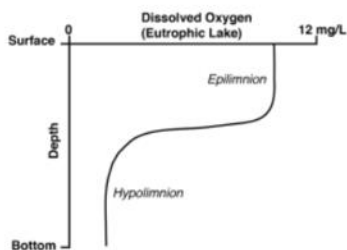


Figure 1.12 Summer dissolved oxygen profile – eutrophic lake

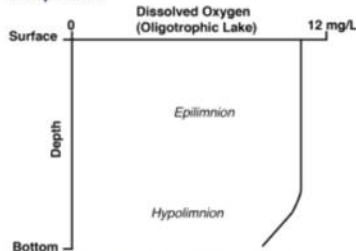


Figure 1.13 Summer & winter dissolved oxygen profile – oligotrophic lake

The BCLSS Lake Ecology and Monitoring Course is a 3 day course designed to give professionals in environment related fields a thorough grounding in the fundamentals of lake ecology and monitoring to prepare them for work in consulting firms, government agencies, and other organizations engaged in the monitoring and assessment of lakes. BCLSS has developed this course through the expertise in limnology of our staff and Board of Directors. Students will gain proficiency in a variety of lake related field monitoring techniques through field sessions at a lake comprising approximately 30% of the course.

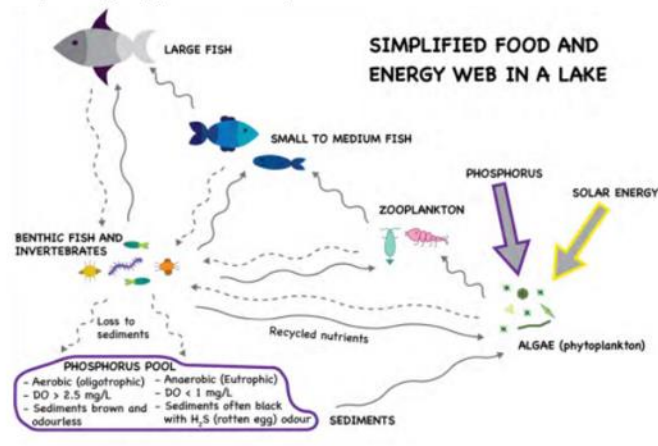


Figure 1.15 Lake food web example

The BCLSS is holding a 3-Day Lake Ecology and Monitoring Course from May 28-30th near Williams Lake BC!

The cost of the course is \$750 per person. Learning outcomes of the course include:

- Understanding of the fundamentals of limnology
- Understanding of the basics of lake water quality monitoring design
- Proficiency in the use of lake water quality monitoring equipment
- Understanding of assessment of, and reporting on lake water quality monitoring data

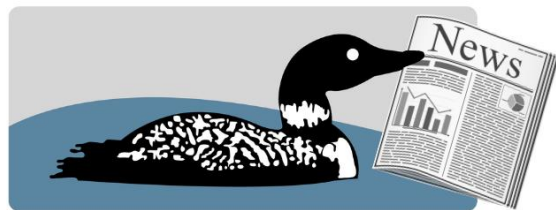
Learn more about the course on our website at

<https://www.bclss.org/programs#lakekeepers> or contact the instructor for further details

- [norm@environmentalquality.ca](mailto:norm@environmentalquality.ca) - 250-243-2201

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## The Latest Freshwater News



- [Better water management practices coming to B.C.](#)
  - [Sparse snowpack levels across B.C. raise drought fears](#)
  - [Tips for lake-friendly snow storage and removal](#)
  - [Columbia Shuswap Invasive Species Society \(CISIS\) raises alarm over whirling disease detection at Emerald Lake, Yoho National Park](#)
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Not a member of the BCLSS yet? Please consider joining our network of lake stewards! For more information on the benefits of membership, visit our website.

Were you forwarded this newsletter? Subscribe today to get monthly updates on stewardship activities, lake science, and much more delivered to your inbox!



The BCLSS acknowledges that the lake stewardship activities of our staff, directors, and volunteers take place on the traditional, ancestral, and unceded lands of First Nations Peoples throughout British Columbia. We recognize that Indigenous Peoples have stewarded these lands and waters for generations and we are grateful to the Elders, Traditional Knowledge Keepers, and youth that implement their knowledge and traditional laws to preserve water and life for the benefit of all.



We gratefully acknowledge the financial support of the Province of British Columbia through the Ministry of Municipal Affairs and the Ministry of Environment and Climate Change Strategy.



[Donate to the BCLSS](#)