



The Monitor

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The newsletter of Wisconsin's Citizen Lake Monitoring Network

Collecting Quality Data

Katie Hein, WDNR Lake Monitoring Lead

Every time I fasten my seatbelt and wait for an airplane to take off, a little bit of fear creeps into my head. What if there is a defect in the plane or the pilot is drowsy? I feel better knowing that there are many checks in place to ensure a safe flight. Quality assurance is important for many aspects of our lives, including the data collected as part of the Citizen Lake Monitoring Network!

Unlike some states who solely use volunteer data for educational purposes, the Wisconsin Department of Natural Resources uses volunteer data for management and science. Thus, it is critical to show that we collect and procure quality data and that volunteers adhere to the same standards as WDNR staff. Quality assurance includes checks through every step of the process, from equipment to training, sample collection, laboratory analysis, data entry, and data review. CLMN adheres to all these quality assurance measures.

This year, you may have been asked to collect extra water samples for quality assurance. We randomly select 10% of volunteers enrolled in chemistry monitoring to collect two extra samples. The “blank” sample uses deionized water (clean water from the State Laboratory of Hygiene) run through the integrated sampler and collected in the sample bottle. This ensures that our equipment is clean. The “duplicate” sample is just that: a second sample collected at the same time as the normal sample. This is a way to measure how consistent sample collection is.

Thanks to the volunteers who participated in quality assurance in 2018, we were able to prove that CLMN collects high quality data. Most CLMN samples are not contaminated. Only six of 33 samples were above the limit of detection for phosphorus (5 ug/L). Most of these samples were only slightly above the limit of detection and are not a cause of concern, but one sample was exceptionally high at 61.2 ug/L. We will collect a blank sample on that lake again and replace equipment if necessary. The duplicate samples for phosphorus and chlorophyll turned out great. The differences between repeat samples were very small. One area that needs improvement is sample collection. Only about half the volunteers randomly selected collected quality assurance samples.

Let's try to increase the level of participation in 2019! Thank you so much for all your hard work! Your combined efforts amaze me every year!

Announcements

Join us at the 2019 CLMN Lake Learning Day

There is still time for CLMN volunteers to register for the free CLMN Lake Learning Day in Woodruff, WI on August 15th. We will learn all about frogs, turtles, and loons at this year's event. Register here:

<https://www.surveymonkey.com/r/SCWPHL6>

New Dissolved Oxygen Data Field in SWIMS

Do you collect dissolved oxygen data with a multiparameter meter? It is very important to calibrate your meter each day that you take measurements. We now include a box for you to confirm whether or not you calibrated your DO meter the same day as your measurements. Please choose YES if you calibrated our dissolved oxygen meter before taking measurements, and NO if not. Please do not fill in this box at all if you do not monitor dissolved oxygen with a multiparameter meter.

Parameter	Result
SECCHI DEPTH	6.5
SECCHI DEPTH HIT BOTTOM	NO ▼
WATER LEVEL (VISUAL)	NORMAL ▼
WATER LEVEL (STAFF GAUGE)	
WATER COLUMN APPEARANCE	CLEAR ▼
WATER COLOR (VISUAL)	BROWN ▼
USER PERCEPTION OF WATER QUALITY	1-Beautiful, could not be nicer
equipment If you collected dissolved oxygen data, was the meter calibrated?	YES ▼

..

Next Station Done Save Enter Temp. D.O. Profile

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www.uwsp.edu/uwexplakes | uwexplakes@uwsp.edu | 715-346-2116

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Editor/Designer: Paul Skawinski, CLMN Statewide Coordinator -- Paul.Skawinski@uwsp.edu

Author/photographer: Paul Skawinski, unless otherwise noted



College of Natural Resources
University of Wisconsin - Stevens Point

UW
Extension
University of Wisconsin-Extension