• **TENMILE LAKES' BASIN PARTNERSHIP**
P.O. BOX L*LAKESIDE, OR 97449 * 541.759.2414 * FAX 541.759.3711
tlbp@presys.com

September 2, 2016

FOR IMMEDIATE RELEASE

Tenmile Lakes water monitoring – August-Sept 2016 Update

Tenmile Lakes Basin Partnership is monitoring the Tenmile Lakes waters on a regular basis over the summer with help from a contribution of up to $5,000 from Coos County through its Coos Health & Wellness Public Health Division.

Because Blue Green Algae have been present in the lakes for many years, it is important that the toxicity levels of the lakes be monitored to ensure toxin levels remain within safe levels, especially when the lakes are used by the public and their pets for recreational activities such as swimming, boating, and fishing.

The water sampling occurred on August 29th and the results came in on September 2, 2016 for seven different sites:

1. Wulfy Beach swimming area and immediate surroundings (C1)
2. Coos Bay Yacht Club swimming area (C2)
3. Tenmile Lakes Canal near North Lake RV Resort and Marina swimming area (C3)
4. At the end of Templeton Arm South Tenmile Lake (S3)
5. At south entrance to North Lake Canal (S8)
6. At the end of Big Creek Arm, North Tenmile Lake (N11)
7. Just east of Windy Point, North Tenmile Lake (N16)

See below sampling results:

Toxin levels are below OHA recreational advisory standards; however, it is not recommended for people or pets to drink the Tenmile Lakes waters unless properly treated prior to consumption.

Sample Site	Collection Date	Anatoxin-A (ug/L)	Cylindrospermopsin (ug/L)	MYC-RR (µg/L)	MYC-YR (µg/L)	MYC-LR (µg/L)	MYC-LA (µg/L)	MYC-LF (µg/L)	MYC-LW (µg/L)	**Total MYC (ug/L)**
C1	8/2916	<0.20	<0.20	**0.20**	<0.20	**0.30**	<0.20	<0.20	<0.20	**0.5**
C2	8/2916	<0.20	<0.20	<0.20	<0.20	**0.75**	<0.20	<0.20	<0.20	**0.75**
C3	8/2916	<0.20	<0.20	<0.20	<0.20	**1.75**	<0.20	<0.20	<0.20	**1.75**
S3	8/2916	<0.20	<0.20	<0.20	<0.20	**0.36**	<0.20	<0.20	<0.20	**0.36**
S8	8/2916	<0.20	<0.20	<0.20	<0.20	**0.48**	<0.20	<0.20	<0.20	**0.48**
N11	8/2916	<0.20	<0.20	**0.32**	<0.20	**0.60**	<0.20	<0.20	<0.20	**0.92**
N16	8/2916	<0.20	<0.20	**0.28**	<0.20	**0.56**	<0.20	<0.20	<0.20	**0.84**

Summary of Blue Green Algae toxin safety levels for health advisory from the Oregon Health Authority (2015)

Guideline	**Microcystin (ug/L) MYC**	**Anatoxin –a (ug/L)**	**Cylindrospermopsin (ug/L)**
Pets	0.2	0.4	0.1
Drinking water	1.0	3.0	1.0
Recreational	10	20	6

Some additional information about the attached results:

- Microcystin has various congeners (slightly different forms of the same molecule). The HPLC toxin test we are using tests for the most common congeners. That's the -RR, -YR, -LR, -LA, -LF, -LW that you see on the test results.
- To get the TOTAL Microcystin at a particular site, you need to add all the congeners together. So in the above results, one would calculate the total microcystin at site C1 by adding (MYC-RR) + (MYC-YR) + (MYC-LR) +(MYC-LA) + (MYC-LF) + (MYC-LW) = total Microcystin ug/L

Disclaimer:
Due to the patchy nature of blue-green algal blooms it is possible for higher *Microcystis* and *Anabaena* densities (and therefore higher microcystin or anatoxin concentrations) to be present in areas not sampled in this survey, particularly along shorelines or during calm conditions of little to no wind. Given the lakes' demonstrated history of toxic *Microcystis* and *Anabaena* blooms, and the fact that all areas of the lake cannot be tested at all times, those utilizing the lake for drinking water should always follow Oregon Health Division recommendations for purification. In addition, recreational users should always avoid contact with water whenever noticeable surface concentrations of algae are evident or when the lake has an obvious green to blue-green appearance. Moreover, because pets or other domestic animals are the most likely to ingest contaminated water, these animals should not be allowed access to the lakeshore whenever either noticeable surface concentrations of algae or an obvious green to blue-green appearance is evident.

The next water sampling is scheduled for September 19th. We would like to thank North Lake Resort and the Coos Bay Yacht club for their cooperation.

LAKE SUPERIOR STATE UNIVERSITY

Environmental Analysis Laboratory

Date: September 1, 2016

To: Mike Mader
Tenmile Lakes Basin Partnership

From: Mr. Benjamin Southwell, Environmental Laboratory Manager and Chemist, LSSU

Subject: Data Report for Cyanotoxin Samples Supplied 8/30/2016

Summary: Listed below are the results for the analysis of the supplied sample. HPLC-PDA was utilized for the analysis of Anatoxin-a, Cylindrospermopsin and Microcystin.

Sample Identification:	Collection Date	Anatoxin-a (µg/L)	Cylindrospermopsin (µg/L)	MYC-RR (µg/L)	MYC-YR (µg/L)	MYC-LR (µg/L)	MYC-LA (µg/L)	MYC-LF (µg/L)	MYC-LW (µg/L)
C1	8/29/2016	<0.20	<0.20	**0.20**	<0.20	**0.30**	<0.20	<0.20	<0.20
C2	8/29/2016	<0.20	<0.20	<0.20	<0.20	**0.75**	<0.20	<0.20	<0.20
C3	8/29/2016	<0.20	<0.20	<0.20	<0.20	**1.75**	<0.20	<0.20	<0.20
53	8/29/2016	<0.20	<0.20	<0.20	<0.20	**0.36**	<0.20	<0.20	<0.20
58	8/29/2016	<0.20	<0.20	<0.20	<0.20	**0.48**	<0.20	<0.20	<0.20
N11	8/29/2016	<0.20	<0.20	**0.32**	<0.20	**0.60**	<0.20	<0.20	<0.20
N16	8/29/2016	<0.20	<0.20	**0.28**	<0.20	**0.56**	<0.20	<0.20	<0.20
Assay Limit of Detection		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

650 W. Easterday Ave., Sault Ste. Marie, MI 49783
Telephone: 906-635-2076 • Fax: 906-635-2266
www.lssu.edu