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Citizen Lake Monitoring Network
 A part of the Wisconsin Lakes Partnership
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June 11, 2013

Chemistry Volunteer:

Subject: Can you assist us with calibrating the new Satellite images?

We have a new satellite, Landsat 8, collecting water color and clarity data this year. We need to “calibrate” the data the satellite collects. We are looking for volunteers to collect one additional water sample per chlorophyll sample period (see table below) and send the extra samples to the SLOH along with your normal chemistry samples. DNR research will analyze the water color; look at your secchi results; and link/mesh these to the satellite imagery. We then know what the satellite imagery colors “mean”. Enclosed are 3 amber bottles for the water color sample (one per sample period). Collect your water sample as in the past; fill and preserve your Total Phosphorus bottle sample, save out your chlorophyll water and then fill the amber bottle with some of the remaining water in your water collection bottle (juice jug). Fill the amber bottle to the shoulder of the bottle. No acid preservation is needed for the amber bottle sample. Complete one of the white labels and attach the label to the amber bottle and keep the sample cool and out of the sun (in a dark place). Please attach one of the yellow stickers in a blank spot on the lab slip. Chill and ship the sample the same day it is collected or the next day. Place the amber bottle in a Ziploc bag and then place this bag into the gallon Ziploc bag of ice (same as your phosphorus sample). Use the same amount of ice as in the past.

Parameters	April or May	June	July	August	September	October
Secchi	X	X	X	X	X	X
Secchi Dip-In		June 29-July 21	June 29-July 21			
Satellite Fly-Over		*check satellite dates	*check satellite dates	*check satellite dates	*check satellite dates	
Phosphorus	X – 2 weeks after ice off	X – last 2 weeks of June	X – last 2 weeks of July	X – last 2 weeks of August		
<u>Chlorophyll and water color</u>	<u>-NO-</u>	<u>X – last 2 weeks of June</u>	<u>X – last 2 weeks of July</u>	<u>X – last 2 weeks of August</u>		

Your path for your lake is the same as in the past. For your reference, it can be found at <http://dnr.wi.gov/lakes/CLMN/remotesensing/paths.aspx>

The schedule on the DNR web site <http://dnr.wi.gov/lakes/CLMN/remotesensing/13schedule.pdf> includes both Landsat 7 & 8 days. **We would like you to try to collect your chemistry samples (and secchi that meshes with the chemistry sample) on the Landsat 8 schedule. This will help us calibrate Landsat 8. As with the past chemistry monitoring, the exact satellite date is best, but you can sample one to two days before or after the satellite date to accommodate your schedule, weather conditions and sample shipping.**

Landsat 8 Schedule for 2013

Path 26	Path 25	Path 24	Path 23
06/05/2013	05/29/2013	05/22/2013	05/31/2013
06/21/2013	06/14/2013	06/07/2013	06/16/2013
07/07/2013	06/30/2013	06/23/2013	07/02/2013
07/23/2013	07/16/2013	07/09/2013	07/18/2013
08/08/2013	08/01/2013	07/25/2013	08/03/2013
08/24/2013	08/17/2013	08/10/2013	08/19/2013
09/09/2013	09/02/2013	08/26/2013	09/04/2013
09/25/2013	09/18/2013	09/11/2013	09/20/2013

The samples should be collected on sunny days. If it is not sunny when you do your chemistry run, please skip taking the water color sample that month and save the amber bottle for your next chemistry sample period. If you cannot collect the water color samples, the bottles can be returned to Sandy Wickman when you pick up future supplies. No need to return them right away.

There is the potential that additional samples may be needed in 2014. Research staff will have to analyze this year's efforts and then determine if additional monitoring is needed. We will send you a copy of their results once the analysis is completed.

Please contact me if you have any questions. Thanks for your assistance.

Sincerely,

Laura Herman
Citizen Lake Monitoring Network Coordinator
laura.herman@uwsp.edu
715-365-8998

Enclosed: 3 amber bottles, 3 white labels to attach to the amber bottles and 3 yellow labels which are attached to your existing lab slips.

Cc: Steve Greb
Sandy Wickman