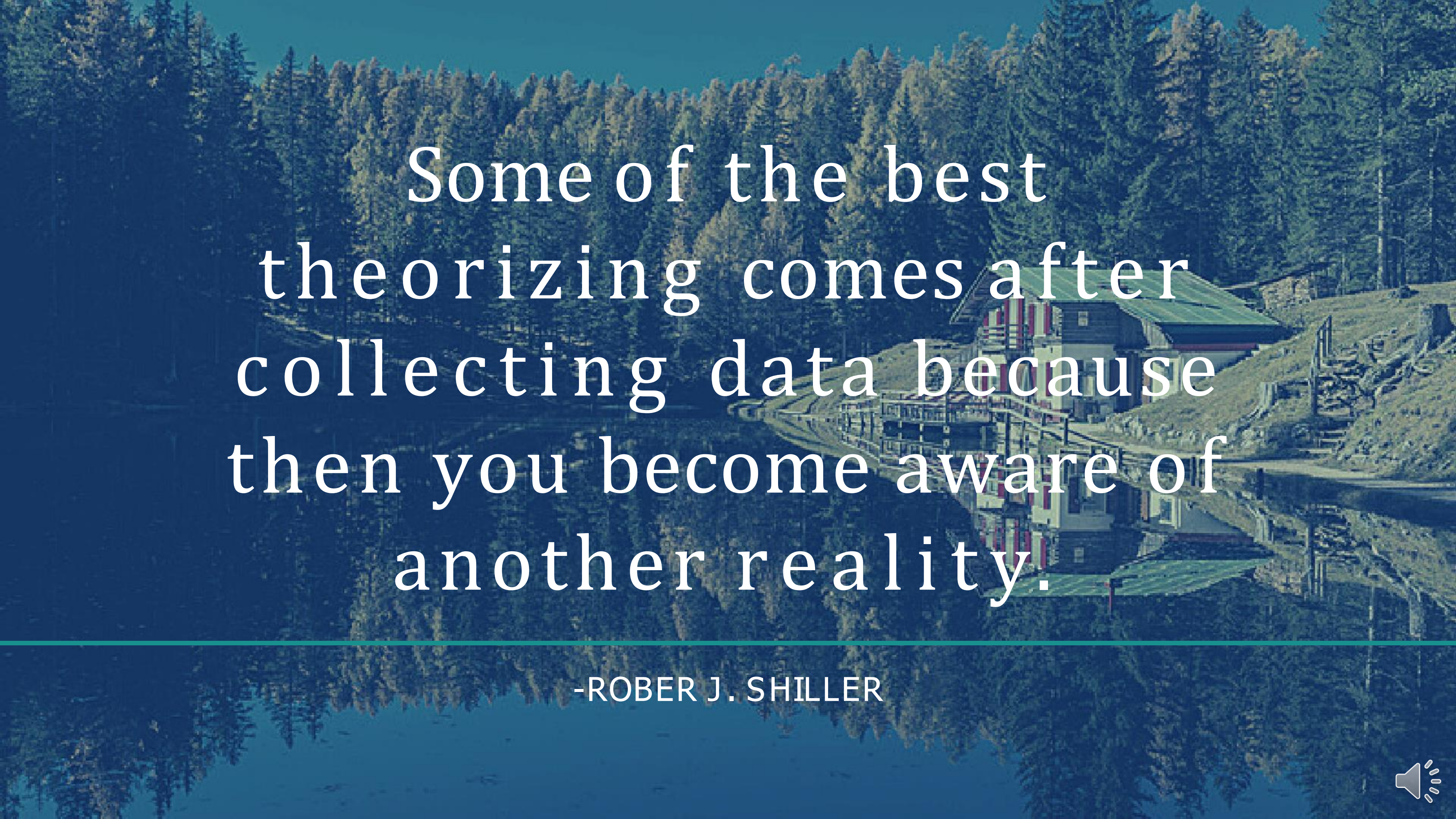


RMB ENVIRONMENTAL LABS

2021 Lakes Monitoring Program



ila Hoppe Photography

A scenic view of a mountain village with a lake and forest. The image shows a small town with several buildings, including a prominent one with a red roof, nestled in a valley. A calm lake in the foreground reflects the surrounding dense forest of evergreen trees. The sky is clear and blue.

Some of the best
theorizing comes after
collecting data because
then you become aware of
another reality.

-ROBER J. SHILLER



Sampling Reminders

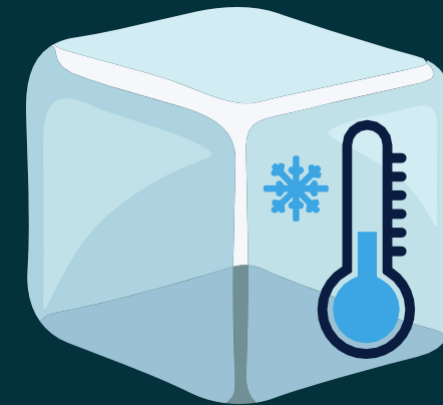
BEFORE YOU HEADOUT

- Watch the tutorial videos •



- Clean out your integrated sampler •

- Freeze your ice packs •



- Check and read all sampling instructions •



- Check the weather •



Sampling Reminders

WHILE OUT SAMPLING

Rise sampler 3-4 times

Lower sampler all the way into the water

Invert tube 3-4 times to mix the water

Rinse amber bottle with first draw

Fill bottles completely



Sampling Reminders

SAMPLE DELIVERY


Samples need
to arrive to the
lab within 48
hours of sample
collection

Sample
should
arrive on
ice


Put
C of C
in the
plastic bag

Place
bottles
right side
up and
SECURE lid





22796 County Hwy 6
Detroit Lakes, MN 56501
Phone/fax: 218-846-1465
Email: lakes@rmbel.info



Organization


Lake Name

Lake ID

Lakes Monitoring Program

Sample Data / Chain of Custody Record

The Lakes Program includes total phosphorus and a water temperature measurement. Two extra bottles. If you want additional tests, contact the lab to discuss pricing and sample collection.



Sampler Information			
Primary Sampler (Print)		Phone Number	Email Address
First Name	Last Name		
Additional Sampler (Print)		Phone Number	Email Address
First Name	Last Name		

Sample Details			
Date	Time	Sample Collection Type	Field Replicate Time **
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> 2 Meter Integrated Sample (LKSURF2M)	<input type="checkbox"/> AM <input type="checkbox"/> PM
Secchi Disk Depth (feet)	<input type="checkbox"/> Mark if secchi hit bottom <input type="checkbox"/> & record bottom depth	<input type="checkbox"/> 1 Meter Integrated Sample (LKSURF1M) <input type="checkbox"/> Grab (bottle filled directly at water surface)	QC-FR Lab Code


**Field replicate time only applies if you have agreed to collect an extra sample for quality control purposes. Please write "replicate" on the second set of sample bottles and record a slightly later time than the regular sample.

Chain of Custody	
Relinquished By: (signature)	In the event samples are received by the lab at a temperature greater than 6 degrees C: _____ (initials) I authorize RMB Environmental Laboratories to process the samples as received.
Date	Time
-OR-	
I will contact client at phone # _____ before processing samples.	

Resources	
~ Are you new to lake monitoring or want a refresher? Watch our videos online! www.rmbel.info/monitoring ~ Want to learn about lake biology and what you are testing for? Visit our Limnology Primer! www.rmbel.info/resources ~ Lake results are posted online to our Lakes Database within 7-10 days of sample collection at www.rmbel.info/data	

Laboratory Use Only			
Sample Logged By: (signature)	Sample Received Received By: (signature) _____ Date: _____ Time: _____		
Date	<input type="checkbox"/> Meets proper sample storage and transportation guidelines <input type="checkbox"/> Preserved at receipt <input type="checkbox"/> Does NOT meet proper sample storage and transportation guidelines Explain: _____		
Shipping		Field Entry	
<input type="checkbox"/> Courier _____ <input type="checkbox"/> SPEEDEE _____ <input type="checkbox"/> Client Shipping _____ <input type="checkbox"/> Hand Delivery _____		<input type="checkbox"/> Received on ice <input type="checkbox"/> Received at room temp Temperature blank: _____ (°C) <input type="checkbox"/> Samples received same day as collection Therm ID: _____	
Quality Check		Electronic Data Deliverable	
<input type="checkbox"/> Sample <input type="checkbox"/> Field		<input type="checkbox"/> This sample was received with other surface water parameters. The lab EDD will be sent with the standard chain of custody. <input type="checkbox"/> EDD Sent to MPCA	

2021EAK

Observations On Back 



USING THE LAKES DATABASE

A guide to understanding the RMB Lakes database

The RMB lakes database is a feature that really sets our Lakes Program apart from any other monitoring organization in the state. This database not only gives you the ability to access your data at any time, but also provides helpful tools to help you understand what your data means!

One Page Lake Summary

Check out this page by selecting your county and lake name in our search query. This report will give you access to a one page lake report, summarizing information about your lake morphology, data, trends, and ecoregion comparisons.

Sample Date Results

This search engine will provide all of the information about a specific date that was sampled on. In the search query you will need to know the county, lake name, sampling site ID, and specific sampling date you would like to view. This is a great option to use when you would like to view all of the meta data such as weather and recreational suitability.

Individual Lake Summary

For this search you have two options to select, you can either view your data in a graph or table format. You will need to enter the county, lake name, sampling site, and range of dates you would like to look at in the search engine. This is a great tool when you are wanting to pull historical averages for the chlorophyll a, total phosphorus, or secchi disk readings.

Multi-Lake Summary

This is a great tool if you are wanting to look at averages of water quality parameters in lakes throughout one county. The only information you need to have is the county that you would like to see the data for and the date range you would like to view.

Trend Analysis Report

This report will allow you to pull a trend analysis for individual parameters (Chlorophyll a, Total Phosphorus, and Transparency). It provides a graph as well as the trend based on the Mann Kendal statistical test. For this test you will need to know the county, lake name, site ID, and date range you would like to view. It is important when running trends to have at least 8 to 10 years of consecutive data.



Your Results

- "How to" tab
- Results in 7-10 Business Days
- Reminder: Trends run on any data database

www.rmbel/lakes/data

Check out the website!

www.rmbel/lakes



Lakes Monitoring Program

Lab Home

Lakes Program

Lakes Database

Training

Schedule

Resources

Associated Programs

Contact

Learn more
about the
lakes
program,
resources,
costs, and
packages

Access
your data
here

Watch
videos to
learn how
to collect
samples

Part of a
lake group?
Check out
your
sampling
schedule

Articles to
help
understand
your lake
data better

Additional
programs
to get
involved
with

My contact
info! Feel
free to
contact me
with any
questions
you have



We Challenge you...

TO BRING A CHILD, GRANDCHILD, FRIEND,
OR NEIGHBOR OUT SAMPLING WITH YOU!



Each month complete activities
learn more about your lake! Some
of the activities include:

- Lake Bingo
- Coloring Contest
- Word Scrambles
- Cryptograms

Pick up an activity book at your cooler pick up day or download it from the link below!

<https://www.rmbel.info/associated-programs/education-programs/summer-program-life-as-a-lake/>



"You can't go back
and change the
beginning, but you
can start where you
are and change the
ending."

-C.S. LEWIS

