

Monitoring Muskoka's Water

Lake System Health
Monitoring Program



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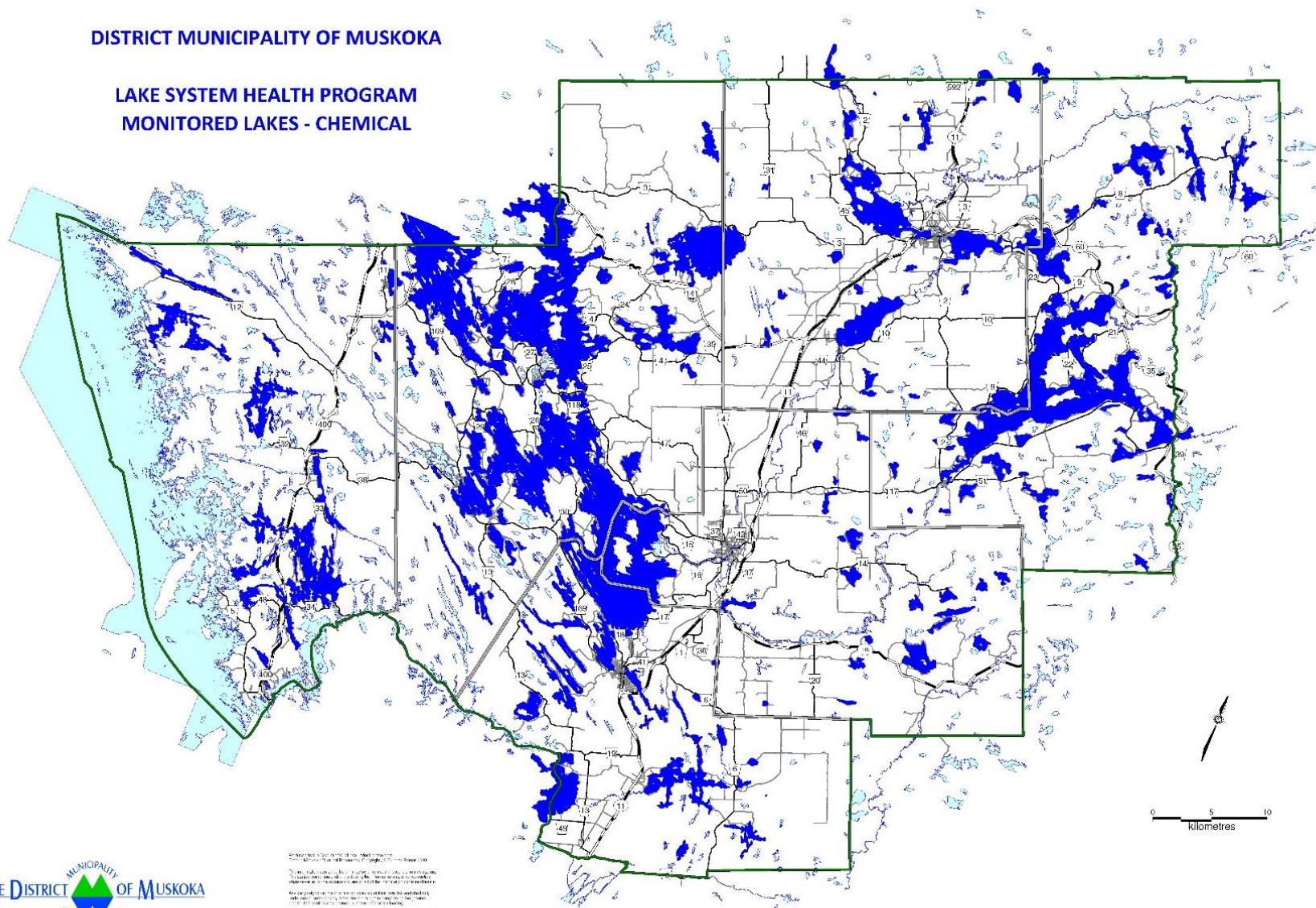
Muskoka Stewardship Conference
April 30, 2011

Research Question

- **What is the long-term impact of human activity on trophic status?**
- Data is used to guide development on Muskoka's lakes
- Data is also used to support stewardship programs and efforts

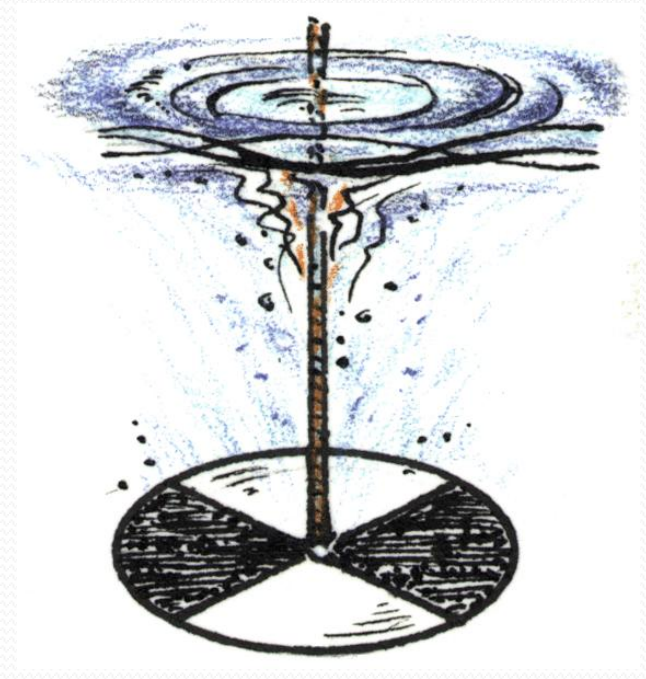
DISTRICT MUNICIPALITY OF MUSKOKA

LAKE SYSTEM HEALTH PROGRAM MONITORED LAKES - CHEMICAL



Monitoring Activities

1. Total Phosphorus & Other Parameters
2. Water Clarity
3. Dissolved Oxygen
4. Temperature
5. Shoreline Land Use Surveys
6. Benthic Macroinvertebrates
7. Forest Health



Study Design

1. Total Phosphorus **Spring turnover sample taken at the deepest part of the lake**
2. Water Clarity
3. Dissolved Oxygen
4. Temperature
5. Shoreline Land Use Surveys
6. Benthic Macroinvertebrates
7. Forest Health

Study Design

1. Total Phosphorus
2. Water Clarity
3. Dissolved Oxygen
4. Temperature
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**Readings taken during
spring turnover and late
summer at the deepest
part of the lake**

Study Design

1. Total Phosphorus
2. Water Clarity
3. Dissolved Oxygen
4. Temperature
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Data collected through visual inspection & mapped

Study Design

1. Total Phosphorus
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**Data collected from
beginning of May to
end of August**

Access to Data

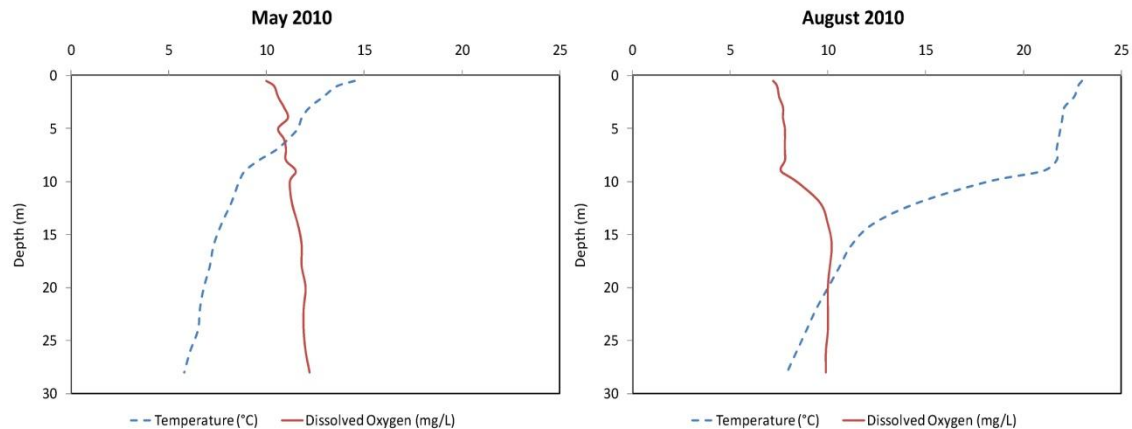
- Annual Water Quality Monitoring Report
- Muskoka Water Web
 - Lake Data Sheets
 - Shoreline Land Use Survey Maps
 - Benthic Monitoring Data Sheets
 - MNR Fisheries Fact Sheets
 - Stewardship Resources & Information



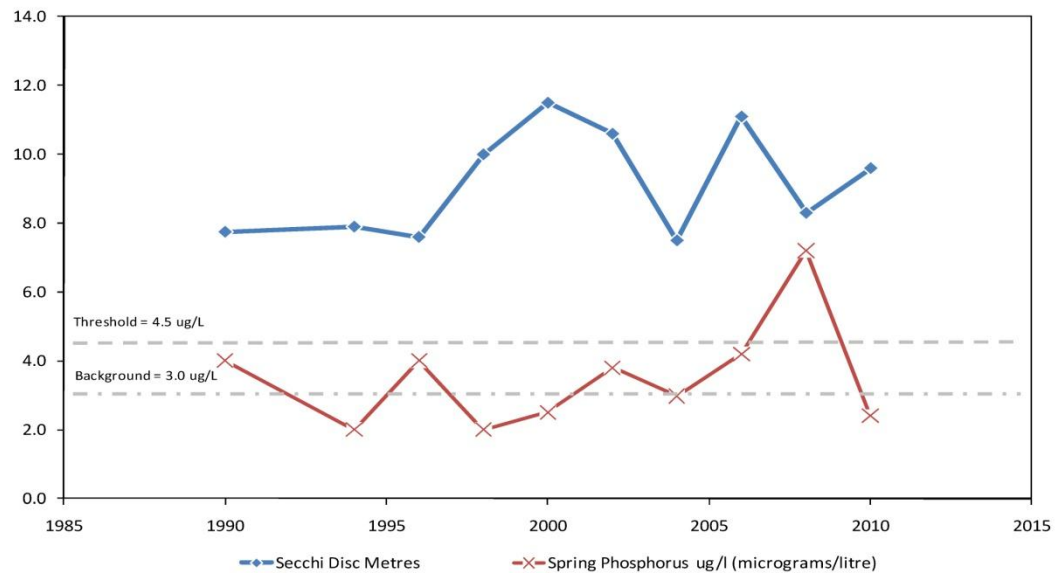
www.muskokawaterweb.ca

Skeleton Lake

Municipality:	Muskoka Lakes	Watershed:	Lake Rosseau
Surface Area:	21 km ²	Watershed Area (excluding lake):	44.5 km ²
Maximum Depth:	60 m	Lake Trout Lake?	Yes
Wetland Area:	10 %	Secchi Depth (10-year average):	9.4 m
Phosphorus (10-year average):	4.1 µg/L	Sensitivity:	Moderate



Skeleton Lake Long Term Monitoring Data





THE DISTRICT OF MUSKOKA
Learning Our Legacy Forward

