



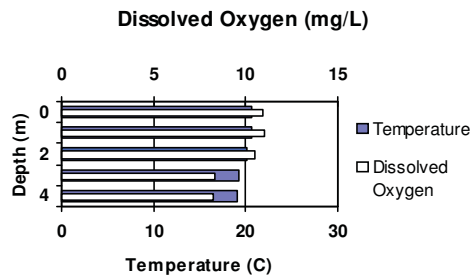
Water Quality Monitoring Report

2022229

Customer	Waterbody	Sample Information
Thornapple River Cascade	Thornapple River Cascade	Date: 9/15/2022
		Site: #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	20.6	10.9	115
1	20.6	11.0	116
2	20.1	10.5	107
3	19.3	8.3	86
4	19.1	8.2	84



Secchi Disk Depth	0.8 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	522	uS/cm	
Total Dissolved Solids	371	mg/L	Moderate concentration of dissolved salts
pH	8.6	S.U.	Water is slightly alkaline
Alkalinity	232	mg CaCO3/L	Water is very hard
Total Phosphorus	42	ug/L	Phosphorus enriched
Nitrates	970	ug/L	Moderately nitrogen enriched
Chlorophyll	N/A		

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	64	hypereutrophic
Based on Total Phosphorus	54	moderately eutrophic
Based on Chlorophyll	N/A	

Conclusions

- Conditions are good for fish growth.
- Minimum dissolved oxygen is adequate for good fish production.
- pH is within acceptable limits.
- Sample is somewhat phosphorus enriched. Create natural buffer between lawn & lakeshore.
- Sample is nitrogen enriched. Consider nutrient abatement measures.
- REPEAT LakeCheck NEXT YEAR!

-
- WARNING, condition requires immediate attention.
 - CAUTION, condition requires further evaluation.
 - OK, condition within acceptable limits.
 - NEUTRAL, condition neither good nor bad.

Notes

Report describes conditions at the time the sample was collected.

Approved by Jaimee Desjardins Date 10/31/2022
Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WQ PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294



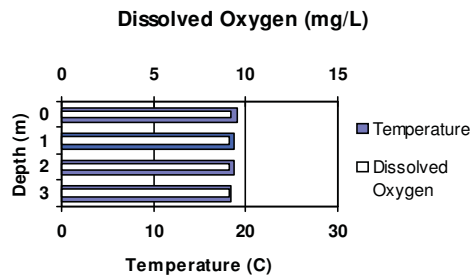
Water Quality Monitoring Report

2022230

Customer	Waterbody	Sample Information
Thornapple River Cascade	Thornapple River Cascade	Date: 9/15/2022
		Site: #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	19.0	9.2	100
1	18.8	9.1	98
2	18.7	9.1	98
3	18.4	9.1	97



Secchi Disk Depth	1.3 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	515	uS/cm	
Total Dissolved Solids	377	mg/L	Moderate concentration of dissolved salts
pH	8.5	S.U.	Water is slightly alkaline
Alkalinity	236	mg CaCO3/L	Water is very hard
Total Phosphorus	24	ug/L	Moderately phosphorus enriched
Nitrates	1180	ug/L	Moderately nitrogen enriched
Chlorophyll	N/A		

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	57	eutrophic
Based on Total Phosphorus	46	mesotrophic
Based on Chlorophyll	N/A	

Conclusions

- Conditions are good for fish growth.
- Minimum dissolved oxygen is adequate for good fish production.
- pH is within acceptable limits.
- Sample is somewhat phosphorus enriched. Create natural buffer between lawn & lakeshore.
- Sample is nitrogen enriched. Consider nutrient abatement measures.
- REPEAT LakeCheck NEXT YEAR!

-
- WARNING, condition requires immediate attention.
 - CAUTION, condition requires further evaluation.
 - OK, condition within acceptable limits.
 - NEUTRAL, condition neither good nor bad.

Notes

Report describes conditions at the time the sample was collected.

Approved by Jaimee Desjardins Date 10/31/2022
Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WQ
PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294