

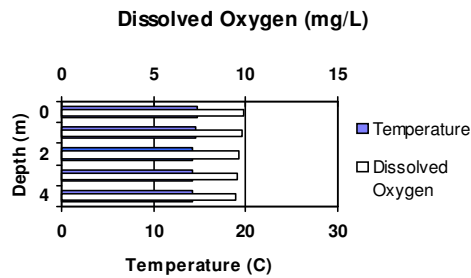
LAKE CHECK Water Quality Monitoring Report

2024003

Customer	Waterbody	Sample Information
Thornapple River Cascade	Thornapple River Cascade	Date: 4/16/2024
		Site: #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	14.7	9.9	98
1	14.5	9.8	96
2	14.3	9.6	94
3	14.3	9.5	93
4	14.3	9.5	93



Secchi Disk Depth	1.5 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	456	uS/cm	
Total Dissolved Solids	371	mg/L	Moderate concentration of dissolved salts
pH	8.4	S.U.	Water is slightly alkaline
Alkalinity	237	mg CaCO3/L	Water is very hard
Total Phosphorus	26	ug/L	Moderately phosphorus enriched
Nitrates	1820	ug/L	Nitrogen enriched
Chlorophyll	N/A		

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	54	moderately eutrophic
Based on Total Phosphorus	47	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 in Fall.

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- 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 6/10/2024
Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WQ
PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
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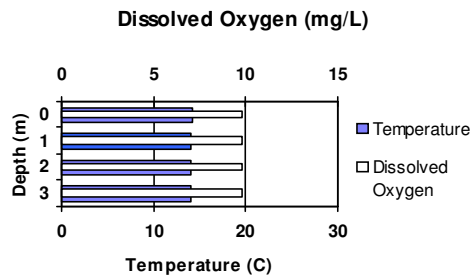
Water Quality Monitoring Report

2024004

Customer	Waterbody	Sample Information
Thornapple River Cascade	Thornapple River Cascade	Date: 4/16/2024
		Site: #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	14.2	9.8	96
1	14.0	9.8	96
2	14.0	9.8	96
3	14.0	9.8	95



Secchi Disk Depth 1.8 meters
Thermocline Depth meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	536	uS/cm	
Total Dissolved Solids	374	mg/L	Moderate concentration of dissolved salts
pH	8.4	S.U.	Water is slightly alkaline
Alkalinity	242	mg CaCO3/L	Water is very hard
Total Phosphorus	20	ug/L	Moderately phosphorus enriched
Nitrates	1870	ug/L	Nitrogen enriched
Chlorophyll	N/A		

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	52	moderately eutrophic
Based on Total Phosphorus	43	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 in Fall.

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