

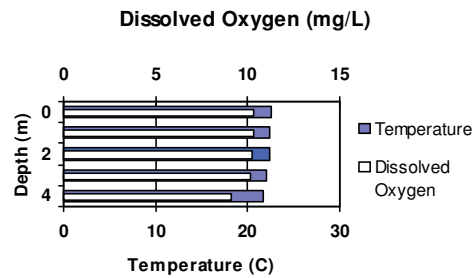
# LAKE CHECK Water Quality Monitoring Report

2022227

Customer	Waterbody	Sample Information
Thornapple River Cascade	Thornapple River Cascade	Date: 5/19/2022
		Site: #1

## On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	22.5	10.3	105
1	22.4	10.3	105
2	22.4	10.3	105
3	22.1	10.1	102
4	21.6	9.1	95



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	530	uS/cm	
Total Dissolved Solids	375	mg/L	Moderate concentration of dissolved salts
pH	8.6	S.U.	Water is slightly alkaline
Alkalinity	240	mg CaCO3/L	Water is very hard
Total Phosphorus	36	ug/L	Phosphorus enriched
Nitrates	1200	ug/L	Moderately nitrogen enriched
Chlorophyll	N/A		

## Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	54	moderately eutrophic
Based on Total Phosphorus	51	moderately eutrophic
Based on Chlorophyll	N/A	

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## 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 10/31/2022

Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WQ  
PRO** DEALER



PLM Lake & Land Management Corp  
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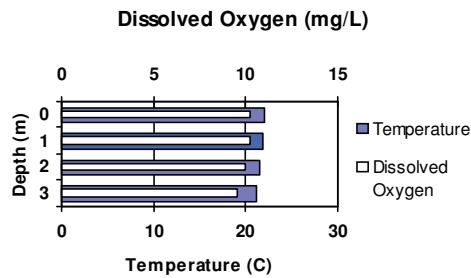


# Water Quality Monitoring Report

Customer	Waterbody	Sample Information
Thornapple River Cascade	Thornapple River Cascade	Date: 5/19/2022
		Site: #2

## On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	22.0	10.3	101
1	21.9	10.2	99
2	21.5	10.0	98
3	21.1	9.6	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	533	uS/cm	
Total Dissolved Solids	378	mg/L	Moderate concentration of dissolved salts
pH	8.6	S.U.	Water is slightly alkaline
Alkalinity	242	mg CaCO3/L	Water is very hard
Total Phosphorus	40	ug/L	Phosphorus enriched
Nitrates	1250	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	53	moderately eutrophic
Based on Chlorophyll	N/A	

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## 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.

- 
- 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

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