



**WEST HANTS REGIONAL MUNICIPALITY
Mills Lake Watershed Committee
Minutes
April 24th, 10:00am 2025
Sanford Council Chambers**

Call to Order: Meeting was called to order at 10:00 am.

Attendees:

John Smith, Councillor District 9
Greg O'Leary, Watershed Landowner Representative
Patrick Schofield, Watershed Landowner Representative
Martin Croney, Water Treatment Manager
Alex Dunphy, Senior Planning Representative
Kaleigh McCarthy, Environmental Technologist
Karrie Ritchie, West Hants Regional Public Works Admin

Regrets: Bruce Atwell, Watershed Landowner Representative

Approval of the Agenda

Moved by M. Croney and G. O'Leary to approve the agenda of April 24th, 2025.

Approval of the Minutes

Moved by M. Croney and P. Schofield to approve the minutes of April 16,2024.

New Business

Watershed Update: (See attached report).

Landowners Concerns:

- A lengthy discussion took place with P. Schofield and G. O'Leary regarding the lock on the gate not being there, the abuse of the lock with one landowner who copied keys and gave them to many family members plus the trucks/side by sides that are getting up into the watershed. Pat requested that M. Croney have the lock fix as soon as possible. M. Croney will contact welder to come look at the gate for modification/repairs. P. Schofield also questioned water capacity given the growth we have been experiencing, M. Croney indicated that we are fine with our capacity at this time.
- M. Croney also discussed that the garbage isn't bad in the area lots of tissue and some cans but overall looks good.

Next Meeting Date: October 30th, 2025, 10:00am

Adjournment: Moved by M. Croney and P. Scofield to adjourn.

Mill Lakes Watershed Report

April 2025



General

The Watershed has shown limited signs of activity through the winter. While the roads appeared to be traveled, there has been no observance or reports of any serious illegal dumping or illegal cutting other than the normal littering. Our biggest challenges continue to be vandalism on locks. Operators along with the aid of some landowners do our best to collect any litter we see during our travels through the watershed. The Panuke Rd. bridge is in great shape.

Watershed Access and Gating

Re-coring the locks and issuing new keys was planned for last spring however with the continuous vandalism and shortage of supplies, this was not completed as planned. Signage will be erected this coming week as soon as keys are in hand, but the plan is to issue different keys for the bottom gate and the upper gate on the new road to eliminate lake access as much as possible.

Bridge to Panuke Rd.

No issues were seen at the bridge



Control Structure Issues

Over last summer and into the fall we saw continuous blockage issues with the control structure at the dam. After several attempts with divers to dislodge obstructing material, it was suggested that the issues may be structural. During a dryer part of the fall water had to be pumped over the dam to help maintain the downstream demands including the supply to the water treatment plant. An engineering firm has been hired to provide short term solutions until a long term permanent solution can be incorporated with the pending dam upgrades within the near future.







Water Levels

Water levels, April 2025



Water levels are seasonably high with no immediate concerns. The control structure is closed as much as possible as large amounts continue to exit through the overflow at the east end of the dam (pictures below).



Water Quality

In house samples are collected monthly and tested for turbidity, color, and pH. Semi annual samples are collected in March and September and sent to an external lab for a full metal analysis.

Below is a summary of results submitted in the Windsor WTP annual report.

Mill Lake Samples			
Date	pH	NTU	Color
Jan	6.62	0.672	87
Feb	6.18	0.572	61
Mar	5.69	0.566	49
Apr	6	0.655	44
May	6.6	0.06	38
Jun	6.54	0.54	85
Jul	6.64	0.54	48
Aug	5.98	0.652	32
Sep	6.07	0.512	36
Oct	6.33	0.569	34
Nov	6.41	0.612	42
Dec	6.27	0.549	47
Min	5.69	0.06	32
Max	6.64	0.67	87
Ave	6.28	0.54	50

Standard Water Analysis + Metals (Total) 2024 - Windsor				
Sample Description			Raw Water	Raw Water
Date Sampled			March	September
Parameter	Unit	G / S		
pH		6.5-8.5 AO	5.81	6.29
Reactive Silica as SiO ₂	mg/L		2.4	0.9
Chloride	mg/L	250 AO	3	3
Fluoride	mg/L	1.5	<0.12	<0.12
Sulphate	mg/L	500 AO	<2	<2
Alkalinity	mg/L		<5	<5
True Color	TCU	15 AO	33.80	25
Turbidity	NTU	0.1-1	0.7	<0.50
Electrical Conductivity	umho/cm		18	20
Nitrate + Nitrite as N	mg/L		<0.05	<0.05
Nitrate as N	mg/L	10	<0.05	<0.05
Nitrite as N	mg/L	1.0	<0.05	<0.05
Ammonia as N	mg/L		<0.03	<0.03
Total Organic Carbon	mg/L		4.5	5.0
Ortho-Phosphate as P	mg/L		<0.01	0.01

Total Sodium	mg/L	200 AO	2.0	2.1
Total Potassium	mg/L		0.3	0.3
Total Calcium	mg/L		0.7	0.7
Total Magnesium	mg/L		0.3	0.3
Bicarb. Alkalinity (as CaCO3)	mg/L		<5	<5
Carb. Alkalinity (as CaCO3)	mg/L		<10	<10
Hydroxide	mg/L		<5	<5
Calculated TDS	mg/L		7	7
Hardness	mg/L	500 AO	3.0	3.0
Langelier Index (@20C)	mg/L		-5.1	-4.66
Langelier Index (@ 4C)	NA		-5.46	-4.98
Saturation pH (@ 20C)	NA		11.00	11.00
Saturation pH (@ 4C)	NA		11.3	11.30
Anion Sum	NA		0.1	0.08
Cation sum	me/L		0.17	0.17
% Difference/ Ion Balance	me/L		34.60	33.9
Total Aluminum	%		117	65
Total Antimony	ug/L	100 OG AO	<2	<2
Total Arsenic	ug/L	6	<2	<2
Total Barium	ug/L	10	6	5
Total Beryllium	ug/L	1000	<2	<2
Total Bismuth	ug/L		<2	<2
Total Boron	ug/L		<5	<5
Total Cadmium	ug/L	5000	<0.09	<0.09
Total Chromium	ug/L	5	<2	<1
Total Cobalt	ug/L	50	<1	<1
Total Copper	ug/L		<2	<1
Total Iron	ug/L	1000 AO	127	132
Total Lead	ug/L	300 AO	<0.5	<0.5
Total Manganese	ug/L	10	26	11
Total Molybdenum	ug/L	50 AO	<2	<2
Total Nickel	ug/L		<2	<2
Total Phosphorous	ug/L		0.71	0.28
Total Selenium	ug/L	10	<1	<1
Total Silver	ug/L		<0.1	<0.1
Total Strontium	ug/L		<5	<5
Total Thallium	ug/L		<0.1	<0.1
Total Tin	ug/L		<2	<2
Total Titanium	ug/L		<3	<2
Total Uranium	ug/L	20	<0.2	<0.2
Total Vanadium	ug/L		<2	<2
Total Zinc	ug/L	5000 AO	<5	<5