



**WEST HANTS REGIONAL MUNICIPALITY
French Mill Brook & Davidson Lake Watershed
Committee
Meeting Minutes
April 24th 9:00am 2025
Sanford Council Chambers**

Call to Order: Meeting was called to order at 9.00 am.

Attendees:

John Smith, Councillor District 9
Stephen Marsters, Watershed Landowner Representative
Jamie Widden, Watershed Landowner Representative
Lonny Curry, 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

Approval of the Agenda

Moved by S. Marsters and M. Croney to approve the agenda of April 25th, 2025.
Motion Carried

Approval of the Minutes

Moved by M. Croney and J. Widden to approve the Minutes of April 16, 2024.
Motion Carried

Approval of the Revised Terms of Reference: Moved by S. Marsters and M. Croney to approve the newly revised terms of reference for the joint Davidson Lake & French Mill Watershed Committee.

New Business

Watershed Update: (See attached reports on each Watershed)

Landowners Concerns:

J. Widden expressed his concerns with the access to his back hay field, requesting if he can use WHRM'S roadway to access it for harvesting the hay. Permission was granted for Jamie to have access to hay his field off Eldridge Road just past the Falmouth Water Treatment Plant. Martin also looked at the Source Water Protection Plan Appendix H which sights the regulations in the watershed to ensure compliance. Jamie also expressed the good job that was done on ditching in the watershed.

L. Curry Commented on the road work that WHRM had done to the ditching/culverts in the watershed asking if more was going to be done. M. Croney indicated some work will be done based on priority. Lonny also mentioned the work the snow dusters have done in the area and mentioned a Biking event to take place in the watershed supported by Bike NS.

S. Marsters mentioned the existing old road that comes into Davidson Lake seems to be getting to be of a lot of use. Stephen indicated that they will be going in sometime soon and can place a couple of boulders in the way to stop the traffic. M. Croney told Stephen to proceed to limit the traffic there.

Next Meeting Date: October 30th 9:00am

Adjournment: Moved by M. Croney and to adjourn.

French Mill Brook Watershed

April 2025 Report



General

The Watershed has shown its usual 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, illegal cutting, or

vandalism other than the normal littering. Operators along with the aid of some landowners do our best to collect any litter we see during our travels through the watershed.

Watershed Work

18 culverts were replaced and approximately 2km of ditching was completed on the Eldridge and Coach Rd.











Water Levels

Water levels remained seasonal throughout the winter. The rain and periodic snow throughout the winter has kept levels quite however recent beaver activity has depleted levels in the Eldridge Dam Reservoir. A drone is scheduled to investigate the dam to see if water may be leaving the watershed. Pictures below were taken April 23, 2024.

Eldridge Dam Reservoir







Falmouth WTP Reservoir



Water Quality

In house samples are collected monthly and tested for turbidity, color, and pH. As part of the Source Water Protection Plan, section 5.0 requires sampling from the Old Post Road (PWA1), Old Eldridge Settlement Dam (PWA2). Testing includes total and E.Coli bacteria (MPN), standard water analysis and a metal scan. Watershed samples are conducted annually.

Annual Source Water Sampling			
Sample Description		PWA1	PWA2
Date Sampled		June	June
Parameter	Unit		
pH		6.19	7.03
Reactive Silica as SiO ₂	mg/L	5.7	5.6
Chloride	mg/L	3	5
Fluoride	mg/L	<0.12	<0.12
Sulphate	mg/L	4.00	<2
Alkalinity	mg/L	24.00	35.00
True Color	TCU	10.00	31.00
Turbidity	NTU	15.1	7.5
Electrical Conductivity	umho/cm	66	94
Nitrate + Nitrite as N	mg/L	0.08	<0.05
Nitrate as N	mg/L	0.08	<0.05
Nitrite as N	mg/L	<0.05	<0.05
Ammonia as N	mg/L	0.82	<0.03
Total Organic Carbon	mg/L	<0.01	3.0
Ortho-Phosphate as P	mg/L	3.50	5.6
Total Sodium	mg/L	0.8	3.2
Total Potassium	mg/L	5.7	7.6
Total Calcium	mg/L	2.8	1.8
Total Magnesium	mg/L	24.0	35.0
Bicarb. Alkalinity (as CaCO ₃)	mg/L	<10	<10
Carb. Alkalinity (as CaCO ₃)	mg/L	<5	<5
Hydroxide	mg/L	37	46
Calculated TDS	mg/L	25.8	26.4
Hardness	mg/L	-3.2	-2.1
Langelier Index (@20C)	mg/L	-3.5	-2.4
Langelier Index (@ 4C)	NA	9.41	9.13
Saturation pH (@ 20C)	NA	9.73	9.45
Saturation pH (@ 4C)	NA	0.65	0.8
Anion Sum	NA	0.8	0.9
Cation sum	me/L	11.70	4.80

% Difference/ Ion Balance	me/L	512.00	206.00
Total Aluminum	ug/L	<2	<2
Total Antimony	ug/L	<2	<2
Total Arsenic	ug/L	78	185
Total Barium	ug/L	<2	<2
Total Beryllium	ug/L	<2	<2
Total Bismuth	ug/L	12	8
Total Boron	ug/L	<0.09	<0.09
Total Cadmium	ug/L	<2	<2
Total Chromium	ug/L	<1	<1
Total Cobalt	ug/L	<2	<2
Total Copper	ug/L	602	936
Total Iron	ug/L	<0.5	0.6
Total Lead	ug/L	58	433
Total Manganese	ug/L	<2	<2
Total Molybdenum	ug/L	<2	<2
Total Nickel	ug/L	2.23	2.48
Total Phosphorous	ug/L	<1	<1
Total Selenium	ug/L	<0.1	<0.1
Total Silver	ug/L	19	20
Total Strontium	ug/L	<0.1	<0.1
Total Thallium	ug/L	<2	<2
Total Tin	ug/L	14	2
Total Titanium	ug/L	<0.2	<0.2
Total Uranium	ug/L	<2	<2
Total Vanadium	ug/L	6	7
Total Zinc	ug/L	<5	<5
Total Coliforms (MF)	CFU/100 mL	>200	>200
E. Coli (MF)	CFU/100 mL	25	24

Davidson Lake Watershed

April 2025 Report

- In our source protection area, no issues have been identified in our water sampling results. Water sampling results have been included and attached to this report.
- There have been no recent applications for forestry in the watershed.



Water Levels

Water levels are quite high with water at times going over the screens in the screenbox.







Road Conditions

A few slight washouts and areas of standing water on the road but overall it held up well through the winter and spring.



Beaver activity has been observed once again.



- Litter is always an issue however no large amounts have been collected

- The Emergency Response Plan was not activated during the reporting time period.

Source Protection Awareness:

- Staff will continue to monitor the Watershed monthly visiting more frequently when dryer weather approaches.
- Small signage has been installed with larger signs scheduled to be erected this spring.

Source Water Monitoring Sampling Results

Standard Water Analysis + Metals (Total) Davidson Lake				
Sample Description			H6	H6
Date Sampled			March	September
Parameter	Unit	G / S		
pH		6.5-8.5 AO	6.10	6.01
Reactive Silica as SiO ₂	mg/L		3.4	12.6
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		18	6
True Color	TCU	15 AO	10.40	<5.00
Turbidity	NTU	0.1-1	0.7	<0.50
Electrical Conductivity	umho/cm		27	24
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		3.0	4.1
Ortho-Phosphate as P	mg/L		0.01	0.01
Total Sodium	mg/L	200 AO	2.9	2.1
Total Potassium	mg/L		0.4	<0.1
Total Calcium	mg/L		1.0	0.7
Total Magnesium	mg/L		0.8	0.7
Bicarb. Alkalinity (as CaCO ₃)	mg/L		18.00	6.00
Carb. Alkalinity (as CaCO ₃)	mg/L		<10	<10
Hydroxide	mg/L		<5	<5

Calculated TDS	mg/L		19	10
Hardness	mg/L	500 AO	5.8	4.6
Langelier Index (@20C)	mg/L		-4.2	-4.9
Langelier Index (@ 4C)	NA		-4.48	-5.18
Saturation pH (@ 20C)	NA		10.30	10.90
Saturation pH (@ 4C)	NA		10.6	11.2
Anion Sum	NA		0.4	0.2
Cation sum	me/L		0.26	0.20
% Difference/ Ion Balance	me/L		25.90	2.00
Total Aluminum	%		57	35
Total Antimony	ug/L	100 OG AO	<2	<2
Total Arsenic	ug/L	6	<2	<2
Total Barium	ug/L	10	117	109
Total Beryllium	ug/L	1000	<2	<2
Total Bismuth	ug/L		<2	<2
Total Boron	ug/L		9	8
Total Cadmium	ug/L	5000	<0.09	<0.09
Total Chromium	ug/L	5	<2	<2
Total Cobalt	ug/L	50	<1	<1
Total Copper	ug/L		8	7
Total Iron	ug/L	1000 AO	58	214
Total Lead	ug/L	300 AO	<0.5	<0.5
Total Manganese	ug/L	10	9	8
Total Molybdenum	ug/L	50 AO	<2	<2
Total Nickel	ug/L		<2	<2
Total Phosphorous	ug/L		0.66	0.65
Total Selenium	ug/L	10	<1	<1
Total Silver	ug/L		<0.1	<0.1
Total Strontium	ug/L		10	9
Total Thallium	ug/L		<0.1	<0.1
Total Tin	ug/L		<2	<2
Total Titanium	ug/L		<3	<3
Total Uranium	ug/L	20	<0.2	<0.2
Total Vanadium	ug/L		<2	<2
Total Zinc	ug/L	5000 AO	8	<5

Lake Levels

Davidson Lake Screenbox Measurements			
Date	Measurement (inches)	Date	Measurement (inches)
January 10, 2024	3	August 1, 2024	19
February 13, 2024	2	August 8, 2024	14
March 27, 2024	5	August 14, 2024	12
April 18, 2024	6	September 3, 2024	26
May 8, 2024	7	September 12, 2024	25.5
May 22, 2024	12	September 20, 2024	25
June 5, 2024	19	October 3, 2024	31
June 11, 2024	21	October 7, 2024	29
June 21, 2024	25	November 5, 2024	36
July 3, 2024	28.5	November 18, 2024	37
July 12, 2024	16.5	November 22, 2024	39
July 18, 2024	14	December 13, 2024	29

