



Board of Directors - Notice of Meeting

October 23, 2025 Time: 10:00 am

SCRCA Administration Office (remote available)
205 Millpond Cres., ON N7G 3P9

Tentative Agenda

1. Land Acknowledgement
2. Chair's Remarks
3. Adoption of the Agenda
4. Declaration of Pecuniary Interests
5. Minutes
 - 5.1 Board of Directors September 18, 2025 Meeting Minutes Pg. 5-10
6. Presentations and Related Reports
 - 6.1 Presentation/Delegations (none)
7. Reports
 - 7.1 GM's Report (verbal)
 - 7.2 2026 Nominating Committee (motion only)
 - 7.3 2026 Tentative Schedule of Meetings Pg. 11
 - 7.4 2026 Draft Budget Pg. 12 -24
 - 7.5 Notice of Hearing Committee Training Pg. 25
 - 7.6 A.W. Campbell CA Septic System Pg. 26-44
 - 7.7 Coldstream CA Master Plan Pg. 45-116
8. Consent Items
 - 8.1 (a) Business Arising Pg. 117
 - 8.1 (b) Current Watershed Conditions Pg. 118-120
 - 8.1 (c) Regulations Activity Summary Pg. 121-127
 - 8.1 (d) Planning Activity Summary Pg. 128-131
 - 8.1 (e) Revenue and Expense Summary Pg. 132
 - 8.1 (f) Disbursements Pg. 133
 - 8.1 (g) General Levy Receipts Pg. 134
 - 8.1 (h) Communications Update Pg. 135-139
 - 8.1 (i) St. Clair River AOC Pg. 140-142
9. Board Correspondence
 - 9.1 Letter from Plympton-Wyoming re: 2026 Budget 9.2 Pg. 143
 - Letter of support from Jessica Jessome Pg. 144-145
10. New Business
11. Adjournment

For the purpose of lunch arrangements and quorum, please RSVP *in advance* if you are unable to attend in person or via Zoom*.

**Please be advised that electronic participation is dependent upon the use of compatible equipment and consistent internet connection, which is outside of the control of SCRCA staff members. Meeting locations and available technology may hinder full participation of those joining remotely; therefore, it is strongly recommended that you attend meetings in person, where possible. Every effort will be made to accommodate those who cannot.*

11.1

Moved by:

That the meeting be adjourned.

Seconded by:



Board of Directors Meeting Minutes

Date: September 18, 2025 Time: 10:02 a.m.
 SCRCA Administration Office
 205 Millpond Cres., Strathroy

Directors Present: John Brennan, Terry Burrell, Sue Cates, Greg Grimes, Chair; Frank Kennes, Brad Loosley, Betty Ann MacKinnon, Don McCabe, Steve Miller, Kristen Rodrigues, Vice-Chair; Ian Veen, Jerry Westgate, Brian White (arrived at 10:14 a.m.)

Directors Remote: Al Broad, Adam Kilner, Don McCallum, Rhonda Jubenville

Directors Regrets: Pat Brown, Aaron Hall, Lorie Scott

Staff Present: Donna Blue, Manager of Communications; Melissa Deisley, Director of Planning and Regulations; Chris Durand, Manager of IT and GIS; Emily Febrey, Communication and Outreach Specialist; Ashley Fletcher, Administrative Assistant and Board Coordinator; Chunng Li, Director of Corporate Services; Tim Payne, Manager of Forestry; Ken Phillips, General Manager

1. Land Acknowledgement

A land acknowledgment was read by Vice-Chair, Kristen Rodrigues, which recognized the St. Clair Region Conservation Authority watershed as part of the traditional territories of the Anishinaabeg, Haudenosaunee, Lūnaapéewak and Chonnonton Nations, who have a sacred responsibility to preserve the land and water of southwestern Ontario. Also acknowledged are the Treaties that allow the SCRCA to work alongside the First Nation Communities of Kettle and Stony Point, Aamjiwnaang and Bkejwanong to ensure we share the responsibility of preserving the land and water.

2. Call to Order and Chair's Remarks

The meeting was called to order by the Chair, Greg Grimes, who, welcomed everyone to the meeting and gave thanks to the St. Clair Region Conservation Foundation (SCRFCF) for their contributions to the scholarship presentations. Directors were reminded that the Chair and General Manager will be attending the Conservation Ontario Council meeting on Monday, September 22nd in Toronto and of the upcoming SCRFCF Memorial Tree Dedication Ceremony on Sunday, September 28th at the Lorne C. Henderson Conservation Area.

3. Declaration of Pecuniary Interests

The Chair requested that each director declare a conflict of interest at the appropriate time, on any item within this agenda in that a director may have pecuniary interest.

4. Approval of the Agenda

BD-25-54

MacKinnon – Kennes

“That the agenda for the Annual General Meeting be adopted.”

CARRIED

5. Presentations (none)

6. Minutes

6.1 Board of Directors June 26, 2025 Minutes

BD-25-55

Burrell – Miller

“That the minutes of the Board of Directors meeting, held June 26, 2025, be approved as distributed.”

CARRIED

6.2 Executive Committee July 31, 2025 Minutes

BD-25-56

Kennes – Westgate

“That the minutes of the Executive Committee meeting, held July 31, 2025, be approved as distributed.”

CARRIED

7. Reports

7.1 General Manager’s Report

BD-25-57

Cates – Loosley

“That the Board of Directors acknowledges the General Manager’s report, dated September 10, 2025.”

CARRIED

7.2 2026 Draft Fee Schedule

BD-25-58

Brennan – Kennes

“That the Board of Directors acknowledge the report, dated August 11, 2025 regarding the 2026 draft fee schedule further accept the recommended changes, approving the draft fee schedule as presented.”

CARRIED

7.3 2026 Preliminary General Levy Estimate

Comments:

Directors request that SCRCA staff prepare a 1-page information sheet justifying the increase in levy which can be provided to municipal council. The General Manager, Ken Phillips reminded Directors of his availability to attend any upcoming council meetings to discuss the 2026 budget.

BD-25-59

Veen – Burrell

“That the Board of Directors receive for information and discussion the report, dated September 5, 2025 on the preliminary levy estimate for the 2026 Budget.”

CARRIED

7.4 Hearing Guidelines

An amendment to the motion under item 7.1 was proposed by Director Terry Burrell, requesting that the Hearing Guidelines be amended to remove the following wording under clause 3.1:

Therefore, no Board member shall participate as a member of the Hearing Committee in a matter that involves their municipality’s interest or an application by a proponent in their municipality

The amendment was defeated.

BD-25-60

Veen – Cates

“That the Board of Directors acknowledge the report, dated September 18, 2025 regarding draft hearing guidelines and approve the draft SCRCA Hearing Guidelines, drafted in accordance with the recommended model guidelines provided by Conservation Ontario and further, adopt the guidelines, as presented.”

CARRIED

7.5 2026-2030 Agricultural Lease Tender

BD-25-61

MacKinnon – Kennes

“That the Board of Directors acknowledge and receive for information the report dated September 3, 2025 regarding the results of 2026-2030 agricultural lease tender.”

CARRIED

7.6 Disposal of Assets

BD-25-62

Kennes – Burrell

“That the Board of Directors acknowledge the report dated September 9, 2025 regarding the disposal of assets and further approves the disposal of 2012 GMC Sierra (fleet vehicle #9), 2018 aluminum utility trailer (fleet trailer G), 2010 covered trailer (fleet trailer C), and 2010 dump trailer (fleet trailer D) from the SCRCA fleet inventory.”

CARRIED

8. Informational Items

- 8.1 (a) Business Arising**
- (b) Current Watershed Conditions**
- (c) Dam Decommissioning Update**
- (d) Regulations Activity Summary**
- (e) Planning Activity Summary**
- (f) Revenue and Expenditures**
- (g) Disbursements**
- (h) General Levy Update**
- (i) Investments**
- (j) Communications Update**
- (k) AOC Report**

BD-25-62

Kilner – MacKinnon

“That the Board of Directors approves the consent agenda and receives the accompanying items 8.1 (a) through 8.1 (k) as information.

CARRIED

9. Correspondence

9.1 Letter from Plympton-Wyoming Re: Maples Woodlot

BD-25-63

Burrell – Miller

“That the Board of Directors receive for information the correspondence dated August 26, 2025 from the Town of Plympton-Wyoming regarding the management of the Maples Woodlot.”

CARRIED

9.2 Letter from Chatham-Kent Re: 2026 Budget

BD-25-64

Veen – Burrell

“That the Board of Directors receive for information the correspondence dated September 11, 2025 from the Municipality of Chatham-Kent regarding the 2026 budget.”

CARRIED

10. In-Camera

BD-25-64

White – Kilner

“That the Board of Directors go in-camera at 11:13 a.m. to discuss legal matters relating to SCRCA-owned land with only the General Manager and Board Coordinator remaining present.”

CARRIED

BD-25-65

Loosley – Veen

“That the Board of Directors rise and return to regular business at 11:25 a.m.”

CARRIED

11. New Business (none)

12. Adjournment

BD-25-66

Cates – Kilner

“That the meeting be adjourned.”

CARRIED



Greg Grimes
Chair

Ken Phillips
General Manager

DRAFT

Meeting Date: October 23, 2025 **Item 7.3**
Report Date: September 24, 2025
Submitted by: Ashley Fletcher, Board Coordinator

Subject: 2026 Tentative Meeting Dates

Board of Director and Executive Committee meetings are held at the Administration Office (remote available) at 10:00 a.m., with the exception of the February and June meeting (rotating around the watershed), unless stated otherwise. This is a tentative schedule and circumstances may necessitate changes.

Board of Directors Meetings:

- February 26 (4th Thursday) - Annual General Meeting (Newbury, ON)
- April 16 (3rd Thursday)
- June 25 (4th Thursday)
- September 17 (3rd Thursday)
- October 22 (4th Thursday)
- December 10 (2nd Thursday)

Committees:

Executive Committee (Audit Review & Recommendation)

- February 12 (2nd Thursday) and/or at the call of the Chair

Flood Action Committee

- January 8 (2nd Thursday) and/or at the call of the Chair

Low Water Response

- May 14 (3rd Thursday) and at the call of the Chair

Nominating Committee

- At the call of the chair.
- Prior to the February 12 Executive Committee Meeting

Hearing Committee (dates booked tentatively each quarter):

- March 12 (2nd Thursday)
- June 11 (2nd Thursday)
- Sept 10 (2nd Thursday)
- December 3 (1st Thursday)

Meeting Date: October 23, 2025
Report Date: October 7, 2025
Submitted by: Chunning Li

Item 7.4

Subject: 2026 Draft Budget

Recommendation:

That the Board of Directors acknowledges the 2026 Draft Budget of \$9,034,753 with a proposed municipal general operating levy of \$1,743,739 and general capital levy of \$16,691, and further that the Board of Directors direct staff to circulate the draft budget booklet to member municipalities for information and input, and to post on the Governance section of the SCRCA's website in accordance with Ontario Regulation.

Background:

The SCRCA management team has completed a draft of the 2026 Budget and plans to circulate 2026 Draft Budget Booklet to member municipalities for review. The booklet includes the following supporting reports and charts:

- **2026 Budget (Draft) Highlights** –General Operating Levy in 2026 Draft Budget is \$1,743,739 (4% increase) and General Capital Levy is \$16,691 (1% increase) shared by the 17-member municipalities, resulting in a total increase of \$84,480 or 5% from 2025 General Levy.

The primary financial pressures and cost drivers in the General Operating Levy include:

- \$83,650 – Compensation and benefits increase for category 1 program staff. SCRCA completed a joint compensation review with Lower Thames Valley Conservation Authority (LTVCA), and the Executive Committee approved to use the 50th percentile in the 2026 budget.
- \$54,966 – Reduction on land lease revenue from the new tender cycle, direct award, pasture, and land retirement.
- \$23,000 – Reduction on planning and regulation fees from the fee freeze, CA Act change, and reduction of large projects like fibre line network or pipeline installation.

Mitigation measures to reduce the Operating Levy increase include:

- \$37,146 – Staffing savings from category 1 program.
- Suspend the 2% increase to fund General Operating Expenses and Category 1 mandatory programs and services that have previously been funded through self-generated revenue or internal charges approved in 2023.

- \$56,681 – Grant funding and self-generating revenue to fund some cost increases.

The net impact on 2026 General Operating Levy is \$67,789 or 4.0%

General Capital levy for mandatory and general capital programs and services except for water control structures is \$16,691 (Approved December 12, 2024).

- **Overall Revenues and Expenditures** – Total operating expenditure from all programs is estimated to be \$8,619,760. Total capital expenditure is \$414,993.
- **Revenue By Source** – 35% of total revenue is from Federal & Provincial Funding and Grants, 5% from Municipal Agreements, 24% from User Fees, 17% from Other Income, and 19% from General Levy.
- **General and Category 1 Programs Revenues and Expenditures** – Total operating expenditure from general and category 1 programs is estimated to be \$2,775,832, and total capital expenditure is \$25,990.
- **Category 2 Programs Revenues and Expenditures** – Total operating expenditure from category 2 programs is estimated to be \$137,075, and total capital expenditure is \$155,580.
- **Category 3 Programs Revenues and Expenditures** – Total operating expenditure from category 3 programs is estimated to be \$5,706,853, and total capital expenditure is \$233,423.
- **2026 Total Municipal Funding (Draft)** – This summarizes total municipal funding from each member municipality, including special infrastructure projects and category 2 & 3 programs.
- **2026 General Levy Assessment (Draft)** – This summarizes General Levy apportionment to each member municipality and changes from prior year General Levy.



2026 Draft Budget

1. About Us (pg. 2)
2. Budget Highlights (pg. 3)
3. Overall Revenues and Expenditures (pg. 4)
4. Budget Funding Breakdown (pg. 5)
5. General and Category 1 Programs Revenues and Expenditures (pg. 6)
6. Category 2 Programs Revenues and Expenditures (pg. 7)
7. Category 3 Programs Revenues and Expenditures (pg. 8)
8. Total Municipal Funding (pg.9)
9. General Levy Assessment (pg.10)

St. Clair Region Conservation Authority

About Us

The St. Clair Region Conservation Authority (SCRCA) is one of Ontario's 36 Conservation Authorities (CA) responsible for the conservation, restoration, and management of natural resources within its watershed. The St. Clair Region includes the Sydenham River watershed and smaller watersheds that drain directly into southern Lake Huron, the St. Clair River, and northeastern Lake St. Clair.

Our programs aim to 1) reduce the risk of life and property from flooding and erosion; 2) improve water quality; 3) promote habitat creation and stewardship; 4) provide outdoor recreation opportunities; 5) increase environmental awareness and literacy; and 6) monitor and protect our most vulnerable species. We achieve this in cooperation and partnership with our member municipalities, government agencies, Indigenous communities, community groups, local landowners, and businesses.

Vision Statement

The vision of the St. Clair Region Conservation Authority reflects the future desired state of our region. "A healthy and sustainable natural environment in the St. Clair region."

Mission Statement

The St. Clair Region Conservation Authority has as its mission, to provide leadership through coordination of watershed planning, implementation of resource management programs and promotion of conservation awareness, in cooperation with others.

2026 Budget Highlights

The St. Clair Region Conservation Authority (SCRCA) has operated with a single operating budget that included both operating and capital expenditures. However, recent legislative changes and strategic planning initiatives have prompted a shift in our budgeting approach. Beginning in 2026, SCRCA will reclass capital expenditures from operating budget and implement a separate capital budget.

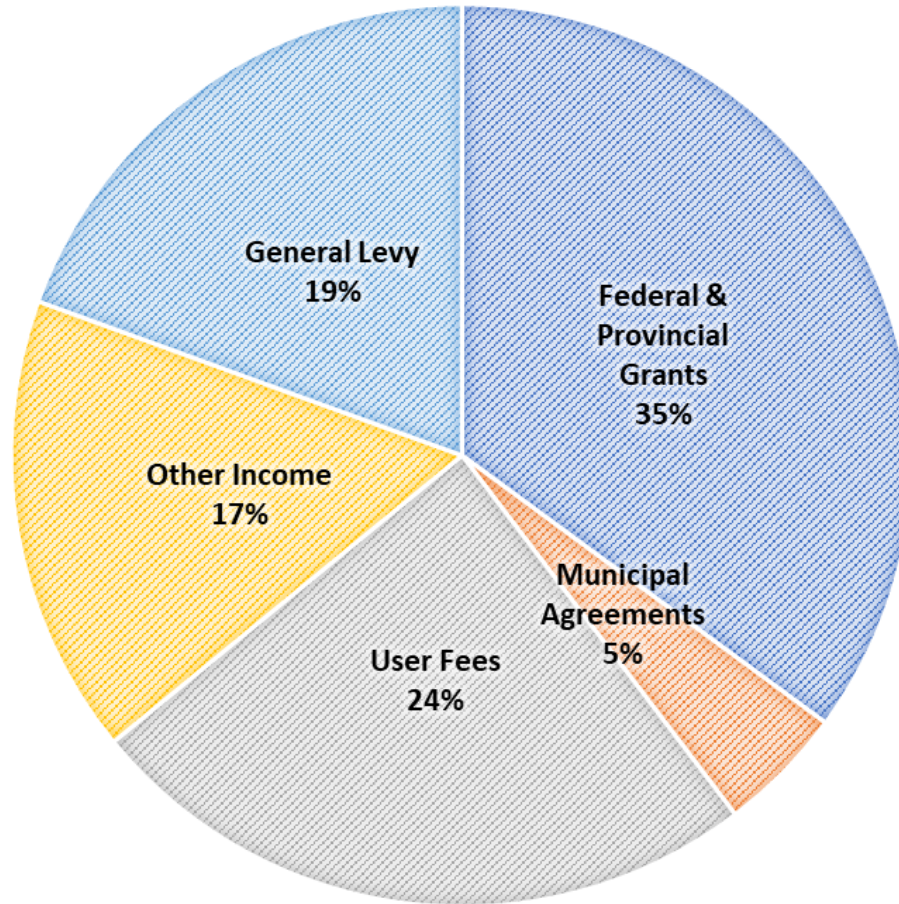
We offer the following highlights for your information:

- General Operating Levy for 2026 is \$1,743,739 and General Capital Levy is \$16,691 shared by the 17-member municipalities, resulting in a total increase of \$84,480 or 5.0% from 2025 (see General Levy Assessment).
- The primary financial pressures and cost drivers in the General Operating Levy include:
 - \$83,650 – Compensation and benefits increase for category 1 program staff. SCRCA completed a joint compensation review with Lower Thames Valley Conservation Authority (LTVCA), and the Executive Committee approved to use the 50th percentile in the 2026 budget.
 - \$54,966 – Reduction on land lease revenue from the new tender cycle, direct award, pasture, and land retirement.
 - \$23,000 – Reduction on planning and regulation fees from the fee freeze, CA Act change, and reduction of large projects like fibre line network or pipeline installation.
- Mitigation measures to reduce the operating levy increase include:
 - \$37,146 – Staffing savings from category 1 program.
 - Suspend the 2% increase to fund General Operating Expenses and Category 1 mandatory programs and services that have previously been funded through self-generated revenue or internal charges approved in 2023.
 - \$56,681 – Grant funding and self-generating revenue to fund some cost increases.
- The net impact on 2026 General Operating Levy is \$67,789 or 4.0%
- General Capital levy for mandatory and general capital programs and services except for water control structures is \$16,691 (Approved December 12, 2024).
- Total Municipal Funding summarizes total funding from each municipality, including special infrastructure projects and category 2 & 3 programs.

2026 Operating Budget		
Operating Expenditures	2025 Budget	2026 Budget
Flood Control Operations and Maintenance	\$ 430,380	\$ 422,450
Natural Hazard Technical Study	\$ 66,000	\$ 30,000
Planning & Regulations	\$ 915,377	\$ 945,870
Land Management	\$ 324,546	\$ 280,680
Conservation Area	\$ 1,827,180	\$ 1,871,765
Conservation Services	\$ 437,110	\$ 396,098
Source Water Protection & Risk Mgmt	\$ 217,685	\$ 223,582
Watershed monitoring and Stewardship Program	\$ 2,522,550	\$ 2,946,438
Area of Concern Mgmt	\$ 120,050	\$ 131,166
Education	\$ 146,727	\$ 156,410
Foundation	\$ 37,605	\$ 38,209
Corporate Services	\$ 1,112,497	\$ 1,177,093
Total Operating Expenditures	\$ 8,157,707	\$ 8,619,760
Operating Revenues	2025 Budget	2026 Budget
General Levy	\$ 1,675,950	\$ 1,743,739
Federal & Provincial Grants	\$ 2,669,618	\$ 3,098,242
Municipal Agreements (formerly Special Levy)	\$ 328,995	\$ 334,250
User Fees	\$ 2,118,161	\$ 2,210,221
Other Income	\$ 1,264,983	\$ 1,233,309
Total Operating Revenues	\$ 8,057,707	\$ 8,619,760
Total Operating Surplus/(Deficit)	-\$ 100,000	\$ -

2026 Capital Budget						
Capital Projects	Costs	2026 General Levy	2026 Special Levy	Other Funding	Reserve	Net
Water and Erosion Control Infrastructure	\$ 155,580		\$ 77,790	\$ 77,790		\$ -
Conservation Area	\$ 142,000				\$ 142,000	\$ -
IT, Equipment, and Vehicle	\$ 117,413	\$ 8,906		\$ 117,413		\$ 8,906
Buildings, Furniture & Fixtures		\$ 7,785				\$ 7,785
Total	\$ 414,993	\$ 16,691	\$ 77,790	\$ 195,203	\$ 142,000	\$ 16,691

TOTAL REVENUE BY SOURCE



General and Category 1 Programs Operating Budget		
	2025 Budget	2026 Budget
Expenditures		
Flood Control Operations and Maintenance	\$ 430,380	\$ 422,450
Natural Hazard Technical Study	\$ 66,000	\$ 30,000
Planning & Regulations	\$ 915,377	\$ 945,870
Land Management	\$ 211,160	\$ 166,419
Conservation Area		
Conservation Services		
Source Water Protection & Risk Mgmt		
Watershed monitoring and Stewardship Program	\$ 34,000	\$ 34,000
Area of Concern Mgmt		
Education		
Foundation		
Corporate Services	\$ 1,112,497	\$ 1,177,093
Total Expenditures	\$ 2,769,414	\$ 2,775,832
Revenues		
General Levy	\$ 1,675,950	\$ 1,743,739
Federal & Provincial Grants	\$ 160,038	\$ 160,038
Municipal Agreements (formerly Special Levy)	\$ 77,450	\$ 77,450
User Fees	\$ 313,000	\$ 290,000
Other Income	\$ 442,976	\$ 504,605
Total Revenues	\$ 2,669,414	\$ 2,775,832
Total Surplus/(Deficit)	-\$ 100,000	\$ -

General and Category 1 Programs 2026 Capital Budget					
Capital Projects	Costs	2026 General Levy	Other Funding	Reserve	Net
Water and Erosion Control Infrastructure					\$ -
Conservation Area					\$ -
IT, Equipment, and Vehicle	\$ 25,990	\$ 8,906	\$ 25,990		\$ 8,906
Buildings, Furniture & Fixtures		\$ 7,785			\$ 7,785
Total	\$ 25,990	\$ 16,691	\$ 25,990	\$ -	\$ 16,691

Category 2 Programs Operating Budget		
	2025 Budget	2026 Budget
Expenditures		
Flood Control Operations and Maintenance		
Water Erosion Control Infrastructure		
Natural Hazard Technical Study		
Planning & Regulations		
Land Management		
Conservation Area	\$ 131,820	\$ 137,075
Conservation Services		
Source Water Protection & Risk Mgmt		
Watershed monitoring and Stewardship Program		
Area of Concern Mgmt		
Education		
Foundation		
Corporate Services		
IT, Equipment, and Vehicle Capital Spending		
Total Expenditures	\$ 131,820	\$ 137,075
Revenues		
General Levy		
Federal & Provincial Grants		
Municipal Agreements (formerly Special Levy)	\$ 131,820	\$ 137,075
User Fees		
Other Income		
Total Revenues	\$ 131,820	\$ 137,075
Total Surplus/(Deficit)	\$ -	\$ -

Category 2 Programs 2026 Capital Budget					
Capital Projects	Costs	2026 Special Levy	Other Funding	Reserve	Net
Water and Erosion Control Infrastructure	\$ 155,580	\$ 77,790	\$ 77,790		\$ -
Conservation Area					\$ -
IT, Equipment, and Vehicle					\$ -
Buildings, Furniture & Fixtures					\$ -
Total	\$ 155,580	\$ 77,790	\$ 77,790	\$ -	\$ -

Category 3 Programs Operating Budget		
	2025 Budget	2026 Budget
Expenditures		
Flood Control Operations and Maintenance		
Water Erosion Control Infrastructure		
Natural Hazard Technical Study		
Planning & Regulations		
Land Management	\$ 113,386	\$ 114,261
Conservation Area	\$ 1,695,360	\$ 1,734,690
Conservation Services	\$ 437,110	\$ 396,098
Source Water Protection & Risk Mgmt	\$ 217,685	\$ 223,582
Watershed monitoring and Stewardship Program	\$ 2,488,550	\$ 2,912,438
Area of Concern Mgmt	\$ 120,050	\$ 131,166
Education	\$ 146,727	\$ 156,410
Foundation	\$ 37,605	\$ 38,209
Corporate Services		
IT, Equipment, and Vehicle Capital Spending		
Total Expenditures	\$ 5,256,473	\$ 5,706,853
Revenues		
General Levy	\$ -	\$ -
Federal & Provincial Grants	\$ 2,509,580	\$ 2,938,204
Municipal Agreements (formerly Special Levy)	\$ 119,725	\$ 119,725
User Fees	\$ 1,805,161	\$ 1,920,221
Other Income	\$ 822,007	\$ 728,704
Total Revenues	\$ 5,256,473	\$ 5,706,853
Total Surplus/(Deficit)	\$ -	\$ -

Category 3 Programs 2026 Capital Budget					
Capital Projects	Costs	2026 Special Levy	Other Funding	Reserve	Net
Water and Erosion Control Infrastructure					\$ -
Conservation Area	\$ 142,000			\$ 142,000	\$ -
IT, Equipment, and Vehicle	\$ 91,423		\$ 91,423		\$ -
Buildings, Furniture & Fixtures					\$ -
Total	\$ 233,423	\$ -	\$ 91,423	\$ 142,000	\$ -

2026 Total Municipal Funding

Total Municipal Funding Including Special Infrastructure Projects and Category 2&3 Programs

Municipality	2026 General Levy		2026 Special Benefitting Levy and MOU					2026	2025
	General Operating Levy	General Capital Levy	Head St. Dam Decommissioning Study (WECI)	Coldstream Dam Decommissioning Study (WECI)	Water Control Structure Maintenance (McKeough & ARDA)	Conservation Areas	Tree Planting, Stewardship & Education Programs	Total Municipal Funding	Total Municipal Funding
Adelaide Metcalfe Tp	\$ 33,526	\$ 321						\$33,846	\$32,761
Brooke-Alvinston Tp	\$ 29,827	\$ 286					\$2,000	\$32,113	\$31,048
Chatham-Kent M	\$ 227,573	\$ 2,178			\$73,630	\$31,050	\$37,154	\$371,585	\$360,981
Dawn-Euphemia Tp	\$ 45,134	\$ 432				\$1,225	\$500	\$47,291	\$45,242
Enniskillen Tp	\$ 32,846	\$ 314						\$33,161	\$31,468
Lambton Shores M	\$ 89,566	\$ 857				\$1,200	\$9,288	\$100,911	\$96,840
Middlesex Centre M	\$ 42,019	\$ 402		\$38,895		\$30,850	\$2,000	\$114,166	\$72,176
Newbury V	\$ 2,743	\$ 26					\$285	\$3,054	\$2,924
Oil Springs V	\$ 3,611	\$ 35					\$360	\$4,005	\$3,857
Petrolia T	\$ 45,169	\$ 432				\$2,350	\$2,500	\$50,451	\$48,115
Plympton-Wyoming T	\$ 100,665	\$ 964						\$101,629	\$96,664
Point Edward V	\$ 35,926	\$ 344					\$3,819	\$40,089	\$38,881
Sarnia C	\$ 636,481	\$ 6,092				\$26,250		\$668,824	\$1,639,223
Southwest Middlesex M	\$ 20,176	\$ 193					\$1,334	\$21,704	\$20,779
St. Clair Tp	\$ 200,339	\$ 1,918			\$3,820		\$31,694	\$237,770	\$620,265
Strathroy - Caradoc Tp	\$ 158,987	\$ 1,522	\$38,895			\$44,150	\$26,291	\$269,845	\$223,382
Warwick Tp	\$ 39,150	\$ 375					\$2,500	\$42,024	\$40,340
	\$ 1,743,739	\$ 16,691	\$38,895	\$38,895	\$77,450	\$137,075	\$119,725	\$2,172,470	\$3,404,945

Note :

WECI (Water & Erosion Control Infrastructure) Projects are considered if there is matching funds from both the Province and the benefitting Municipality and vary from year to year based on granting approval process, and Municipal matching funds.

DMAF - Diaster Mitigation and Adaption Fund - Government of Canada investment in large-scale infrastructure projects.

NDMP - National Disaster Mitigation Program - Government of Canada funding to mitigate, prepare for, respond to and recover from flood-related events.

2026 General Levy Assessment (Draft)								
	2024	2025	2025		2026		2025/2026	
Municipality	Weighted CVA Apportionment %	Weighted CVA Apportionment %	General Operating Levy	General Capital Levy	General Operating Levy	General Capital Levy	General Operating Levy Increase	General Capital Levy Increase
Township of Adelaide Metcalfe	1.9548%	1.9226%	\$ 32,761		\$ 33,526	\$ 321	\$ 765	\$ 321
Township Brooke-Alvinston	1.7332%	1.7105%	\$ 29,048		\$ 29,827	\$ 286	\$ 779	\$ 286
Municipality Chatham-Kent	13.0760%	13.0509%	\$ 219,147		\$ 227,573	\$ 2,178	\$ 8,426	\$ 2,178
Township Dawn-Euphemia	2.6130%	2.5884%	\$ 43,792		\$ 45,134	\$ 432	\$ 1,343	\$ 432
Township Enniskillen	1.8776%	1.8837%	\$ 31,468		\$ 32,846	\$ 314	\$ 1,378	\$ 314
Municipality Lambton Shores	5.1465%	5.1364%	\$ 86,252		\$ 89,566	\$ 857	\$ 3,314	\$ 857
Municipality Middlesex Centre	2.3972%	2.4097%	\$ 40,176		\$ 42,019	\$ 402	\$ 1,843	\$ 402
Village Newbury	0.1575%	0.1573%	\$ 2,639		\$ 2,743	\$ 26	\$ 104	\$ 26
Village Oil Springs	0.2086%	0.2071%	\$ 3,497		\$ 3,611	\$ 35	\$ 114	\$ 35
Town Petrolia	2.6114%	2.5903%	\$ 43,765		\$ 45,169	\$ 432	\$ 1,404	\$ 432
Town Plympton-Wyoming	5.7677%	5.7730%	\$ 96,664		\$ 100,665	\$ 964	\$ 4,002	\$ 964
Village Point Edward	2.0921%	2.0603%	\$ 35,062		\$ 35,926	\$ 344	\$ 864	\$ 344
City Sarnia	36.7715%	36.5009%	\$ 616,273		\$ 636,481	\$ 6,092	\$ 20,209	\$ 6,092
Municipality Southwest Middlesex	1.1602%	1.1571%	\$ 19,445		\$ 20,176	\$ 193	\$ 732	\$ 193
Township St. Clair	11.0237%	11.4890%	\$ 184,751		\$ 200,339	\$ 1,918	\$ 15,588	\$ 1,918
Township Strathroy - Caradoc	9.1513%	9.1176%	\$ 153,371		\$ 158,987	\$ 1,522	\$ 5,616	\$ 1,522
Township Warwick	2.2578%	2.2452%	\$ 37,840		\$ 39,150	\$ 375	\$ 1,310	\$ 375
	100%	100%	\$ 1,675,950	\$ -	\$ 1,743,739	\$ 16,691	\$ 67,789	\$ 16,691
\$16,760 equals approx. 1% change in levy								
CVA Apportionment is based on information provided from the Ministry of Natural Resources (2025 CVA)								



St. Clair Region Conservation
Authority 205 Mill Pond Crescent,
Strathroy, Ontario, N7G 3P9

Tel (519) 245-3710

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member of



Conservation
ONTARIO
Natural Champions

Conservation Ontario

Website:

www.conservationontario.ca

SCRCA is currently working with SBM Ltd. (consultant) to design a new septic system for A.W. Campbell Conservation Area that meets MECP design guidelines and acquire an Environmental Compliance Approval for the site. Alternatives explored during the design process are outlined below. The Consultant's Feasibility Study is attached.

Alternatives:

Option 1 (Raised Bed Absorption Trench Septic System with Gravity Sewers)

- 19,000 L Septic Tank with pump chamber installed, raised absorption trench septic bed with 486m total run (north washroom)
- 71,800 L Septic Tank with pump chamber installed, raised absorption trench septic bed with 1,795m total run (south washroom)
- Install sewer network for all seasonal campsites including 15 – 1200mm manholes, 997m of 200mm PVC sanitary sewer, 1215m of 100mm PVC sanitary sewer, and 18 – 100mm sanitary cleanouts
- Seasonal site grey and black water delivered to septic system by gravity sewers
- Consultant Cost Estimate - \$1,989,339 plus contingency

Option 2

(Raised Bed Absorption Trench Septic System with Greywater Pits and Treatment Unit)

- Greywater pit installed on each seasonal campsite for treatment of greywater only
- 14,600 L Septic Tank with pump chamber installed, raised absorption trench septic bed with 365m total run (north washroom)
- Installation of Waterloo Biofilter Treatment Unit, Installation of Control Building, raised absorption trench septic bed with 1,140m total run (south washroom)
- Require a certified wastewater operator (contracted) to operate the treatment unit
- Seasonal site grey water treated at each site in greywater pit
- Seasonal site black water transported to septic dump station by staff (for a fee) or by camper
- Consultant Cost Estimate - \$1,557,523 plus contingency

Option 3

(Raised Bed Absorption Trench Septic System, No Sewers, No Treatment Unit)

- 14,600 L Septic Tank with pump chamber installed, raised absorption trench septic bed with 324m total run (north washroom)
- 76,200 L Septic Tank with pump chamber installed, raised absorption trench septic bed with 1,920m total run (south washroom)
- Seasonal site grey and black water transported to septic dump station by staff (for a fee) or be camper
- Significant increase in sewage pumping/hauling over current operations due to the addition of grey water
- Consultant Cost Estimate - \$1,457,801 plus contingency

Comparison of Options:

	Option 1	Option 2	Option 3
Cost	<ul style="list-style-type: none"> • Most expensive at \$1,989,339 consultant estimate 	<ul style="list-style-type: none"> • 2nd most expensive at \$1,557,523 consultant estimate 	<ul style="list-style-type: none"> • Least expensive at \$1,457,801 consultant estimate
Design Considerations	<ul style="list-style-type: none"> • Sewered campsites have a larger design flow (bigger septic tank and bed) • South septic bed will be located in ag field, small reduction in ag revenue • Sewer install will require seasonal trailers to be moved 	<ul style="list-style-type: none"> • Grey water pits will allow for smaller septic tank and bed • South septic bed will be located in ag field, small reduction in ag revenue • Grey water pits will require seasonal trailers and site contents to be moved during installation • Grey water pits must be raised above grade, may cause drainage issues • Reliant on 3rd party for operation of treatment unit • Highest ongoing costs to operate 	<ul style="list-style-type: none"> • Non-sewered sites have lower design flow (smaller septic tank and bed) • No work to be completed on campsites, trailers would not need to be moved for install • Grey water all treated by septic tank/bed • Increased staff time to haul black and grey water • Campers who haul their own wastewater would also have to haul grey water (not currently) • Campers may need to restrict water use from current (use holding tank)
Operations	<ul style="list-style-type: none"> • Staff no longer required to pump seasonal camper sewage and haul to dump station • Best option for operations 	<ul style="list-style-type: none"> • Staff required to pump and haul black water to dump station as currently done • SCRCA will need to contract a 3rd party 	<ul style="list-style-type: none"> • Staff to pump and haul all grey and black water • Significant increase in staff expense as grey water hauling will increase workload

		wastewater operator for Waterloo Biofilter system <ul style="list-style-type: none"> • System requires a certified operator 	
MECP Permit	<ul style="list-style-type: none"> • Preferred method as all wastewater (grey and black) will be treated by septic bed and sewers will transport waste 	<ul style="list-style-type: none"> • MECP concerned that black water concentration is too high without grey water, require treatment system • Prefer grey water treated at septic but would consider if only affordable option 	<ul style="list-style-type: none"> • MECP prefer sewers over pumping and hauling sewage • Would consider if we can't afford sewers
Environmental	<ul style="list-style-type: none"> • All sewage being treated (grey and black) • New septic bed appropriately sized • No pumping or hauling by staff, eliminates risk of spill 	<ul style="list-style-type: none"> • Grey water treatment improved over current system • New septic bed appropriately sized • Continue to pump and haul black water, risk of spillage 	<ul style="list-style-type: none"> • All sewage being treated (grey and black) • New septic bed appropriately sized • Increased pumping and hauling of grey and black water, risk of spillage
Camping Revenue	<ul style="list-style-type: none"> • Sewered campsites can demand higher fees, increased revenue 	<ul style="list-style-type: none"> • No increased revenue 	<ul style="list-style-type: none"> • No increased revenue • May require additional staff
Camper Experience	<ul style="list-style-type: none"> • Best experience • Water use not restricted by holding tank 	<ul style="list-style-type: none"> • Improved grey water capacity will improve visitor experience 	<ul style="list-style-type: none"> • Grey water use will be more restrictive based on holding tank capacity

	<ul style="list-style-type: none"> No disruption during sewage pumping No odours from sewage pumping/hauling Some campers may be upset about removing their trailer for construction 	<ul style="list-style-type: none"> Campers may not want to remove their trailer and other site contents for construction Hauling black water to dump station will remain the same 	<ul style="list-style-type: none"> Increased disruption from sewage pumping Campers who haul their own black water will now haul black and grey
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Financial Impact:

Currently, staff are only looking for approval to proceed with application to the MECP for an environmental compliance approval (ECA) for the preferred option. This is estimated to cost up to \$10,000. This will be funded from the Conservation Areas operating budget. Below is additional preliminary financial information on option 1, should SCRCA proceed to construction.

Staff have had a local contractor provide budget pricing for option 1. The budgeted cost for constructing both raised bed septic fields, installing septic tanks, and installing sewers to all seasonal campsites is \$1,275,000. Staff are estimating up to \$100,000 for pumps/electrical and \$50,000 for contingency. The total preliminary estimate is \$1,425,000 to complete option 1.

The table below shows the anticipated impact on the Conservation Areas Reserve from 2025 to 2029. This reserve supports upgrades at A.W. Campbell CA, L.C. Henderson CA, and Warwick CA. This project would significantly reduce the Conservation Areas reserve and limit SCRCA's ability to complete other large capital works until reserve levels have recovered. Over the past 5 seasons the conservation areas have contributed to the reserve at an approximate ratio of 65% Warwick, 20% A.W. Campbell, and 15% L.C. Henderson.

AWC Septic and Sewer Installation Plan (Option 1) - Total Anticipated Project Cost (Based on Contractor Estimate)							\$1,425,000
Phase	Description	Year	Percent of Project	Anticipated Cost	Estimated Surplus from Operating	Funds from Reserve Interest (Estimated 2% Return)	Year End Anticipated Reserve
		2025					1750000
Permitting	Environmental Compliance Approval (ECA) from MECP, includes final design drawings	2026	Not in Cost	10,000	50,000	35,000	1,825,000
1	Pool Washroom Septic and Sewers for 8 sites	2027	25	356,250	50,000	36,500	1,555,250
2	Main Washroom Septic/Dump Station and Sewers for 32 Sites	2028	53	755,250	50,000	31,105	881,105
3	Sewers for 68 sites	2029	22	313,500	50,000	17,622	635,227

Installation of sewers to all seasonal campsites at A.W. Campbell CA will generate additional revenue as sewerred campsites typically produce a higher camping fee. It is anticipated that fees could increase by \$640 after tax (2026 fee for weekly pump outs). This could generate additional revenue of approximately \$45,000 annually. Installation of sewers will improve customer experience, benefit the environment, ease pressure on staffing, and generate additional revenue to rebuild reserves.

Additional Fee per Sewered Seasonal Site (based on weekly pump out fee for 2026)	\$566.37 (pre-tax)
Additional \$566.37 per seasonal x 112 sites	\$63,433
Loss of pump out revenue (2025)	<u>\$17,500</u>
Total Estimated Revenue Increase	\$45,933



LONDON LOCATION
1599 Adelaide St. N., Units 301 & 203
London, ON N5X 4E8
P: 519-471-6667

KITCHENER LOCATION
132 Queen St. S, Unit 4
Kitchener, ON N2G 1V9
P: 519-725-8093

www.sbmltd.ca

sbm@sbmltd.ca

June 5, 2025

SBM-23-2061

St. Clair Region Conservation Authority

205 Mill Pond Crescent
Strathroy, ON N7G 3P9

Attn: Greg Wilcox
Manager of Conservation Authority

Re: Servicing Feasibility Study
AW Campbell Conservation Area – Proposed Septic System Expansion
8477 Shiloh Line, Alvinston, ON

1. INTRODUCTION

This Sanitary Servicing Brief (Brief) has been prepared by Strik, Baldinelli, Moniz Ltd. (SBM) for the St. Clair Region Conservation Authority (SCRC) to address the replacement of the existing sanitary/septic system at the existing conservation area located at 8477 Shiloh Line, Alvinston, ON.

The approximately 125.0 ha subject site is comprised of 146 seasonal campsites located on the AW Campbell Conservation Authority Region at 8477 Shiloh Line. The site is currently bordered by open space lands to the south, agricultural lands to north and east, and the Shiloh Line Right-of-Way (ROW) to the east. The existing site is comprised of mostly open-space and contains an existing gravel access from Shiloh Line with two washroom facilities, (the north and south washroom), a communal pool, water reservoir, two existing septic beds, and an open field approximately 6.84 ha in size with 112 seasonal campsites and 34 transient campsites. The site is operated and maintained by the St. Clair Region Conservation Authority. Please refer to Site Servicing Plan prepared by SBM, attached to this Brief.

Design requirements have been based on the Municipality of Lambton Shores Municipal Development and Servicing Standards, December 2023, the current Ministry of the Environment, Conservation, and Parks (MECP) design guidelines, and the current edition of the Ontario Building Code (OBC).

2. SANITARY SERVICING

Based on Proposed Septic Desktop Assessment, prepared by EXP, and the site visit completed by SBM and Exact Septic Inc. (ESI) on November 15, 2023, there are two existing septic beds located on the subject site. The first bed is located north of the campsite area servicing the north washroom, while the second bed is located south of the campsite and services the south washroom. It is proposed to replace the two existing septic systems entirely with a new Raised Fill-Based Absorption Trenches with capacity for the washroom facilities, and to direct sanitary discharge from the seasonal trailers to a new proposed Raised Fill-Based Absorption Trench. A percolation time of 50 min/cm was used, as per the Grain Size Analysis Report by ESI dated November 11, 2023, provided separately.

2.1. SEPTIC DESIGN OPTION 1 – GRAVITY SEWERS

The estimated sanitary demand of the north washroom was based on Table 8.2.1.3.B of the OBC, using 50 L/day/person, for an expected population of 146 people/campsites, a proposed daily flow was calculated to be 7,300 litres per day for the north washroom facility. In addition to just the north washroom facility, the northern septic bed will accept domestic flows from 8 seasonal trailer sites, a total proposed daily flow was calculated to be 9,500 litres per day. The proposed septic tank for the northern septic bed will be required to have a minimum total capacity 19,000 litres (two times the daily flow, per OBC 8.2.2.3), and will require a maintenance access at grade.

A Class 4 Sewage system, raised fill-based absorption trench, is proposed for the subject site to handle the domestic flows from the seasonal trailers and the north washroom facility. The required length of distribution pipe was found to be 475 m, for a total of 18 rows at a length of 27.0 m. The required mantle area was determined to be 2,375 m². Please refer to the Septic System calculations provided separately.

The estimated sanitary demand of the south washroom was based on Table 8.2.1.3.B of the OBC, using 50 L/day/person, for an expected population of 146 people/campsites, a total proposed daily flow was calculated to be 7,300 litres per day for the south washroom facility. In addition to just the south washroom facility, the southern septic bed will accept domestic flows from 104 seasonal trailer sites, via a gravity sewer system. A total proposed daily flow was calculated to be 35,900 litres per day. The proposed septic tank for the south washroom facility and associated seasonal trailers will be required to have a minimum total capacity 71,800 litres (two times the daily flow, per OBC 8.2.2.3), and will require a maintenance access at grade. A Class 4 Sewage system, raised fill-based absorption trench, is proposed for the subject site to handle the domestic flows from the seasonal trailers and the south washroom facility. The required length of distribution pipe was found to be 1,795 m, for a total of 60 rows at a length of 29.0 m. The minimum required mantle area was determined to be 8,975 m². Please refer to the Septic System calculations provided separately.

2.2. SEPTIC DESIGN OPTION 2 – GREYWATER PITS

To reduce the size of the required septic bed for the seasonal trailers, it is proposed that the wastewater discharged from site trailers which have separate greywater and blackwater components built in, to remain separate with a local greywater treatment facility with the blackwater waste collected by SCRCA staff and disposed at the proposed south septic system. Blackwater discharge will be treated by a raised fill-based absorption trench, as a Class 4 Sewage System, located south of the campsite, and greywater discharge, a Class 2 Sewage System, will be treated by a proposed greywater pits. Refer to the Site Servicing Plan and Septic Calculations, attached to this Brief for further clarification.

The estimated sanitary demand of the north and south washrooms was based on Table 8.2.1.3.B of the OBC, using 50 L/day/person, for an expected population of 146 people/campsites, a total proposed daily flow was calculated to be 7,300 litres per washroom facility per day. The proposed septic tank for the north and south washroom facilities will be required to have a minimum total capacity 14,600 litres (two times the daily flow, per OBC 8.2.2.3), and will require a maintenance access at grade. The south washroom estimated daily flow will be combined with the seasonal trailers estimated daily flow.

A Class 4 Sewage system, raised fill-based absorption trench, is proposed for the subject site to handle the blackwater discharge from the seasonal trailers and the south washroom. The estimated sanitary demand for the seasonal trailers was based on Table 8.2.1.3.B of the OBC, using 275 L/day/person, for an expected seasonal trailer count of 112 trailers, a total proposed daily flow was calculated and then reduced by 50.0%, assuming greywater is 50.0% of the total daily flow, for a proposed daily flow of 15,400 litres (conservatively greywater typically represents approximately 75.0% of total daily flows). With combining the daily flows from the south

washroom and seasonal trailers for a total proposed daily flow of 22,700 litres. The proposed septic tank will be required to have a minimum total capacity of 45,400 litres (two times the daily flow, per OBC 8.2.2.3), and will require a maintenance access at grade. The required length of distribution pipe was found to be 1,135 m, for a total of 38 rows at a length of 29.0 m. The minimum required mantle area was determined to be 5,675m². Please refer to the Septic System calculations provided separately.

A Class 2 Sewage system, greywater pit, is proposed for the subject site to handle the greywater discharge from the seasonal trailers. Greywater pits have been sized for the expected discharge determined by the number of fixture units located in each trailer type. A 'smaller' sized seasonal trailer with a discharge of 600 L/day will be 9.0 m long, 4.0 m wide, and 1.5 m deep for loading rate of 8.0 L/day/m², a sidewall area of 75.0 m², safety factor of 1.5, and a draw-down time of 36.0 hours. A 'larger' sized seasonal trailer with a discharge of 1000 L/day will be 15.0 m long, 4.5 m wide, and 1.5 m deep for loading rate of 8.0 L/day/m², a sidewall area of 125.0 m², safety factor of 1.5, and a draw-down time of 40.2 hours. The proposed Class 2 sewage system has sufficient capacity for the seasonal trailers located at the subject site as presented in the Septic Calculations, attached to this Memo.

2.3. SEPTIC DESIGN OPTION 3 – TRADITIONAL SYSTEM

The estimated sanitary demand of the north and south washrooms was based on Table 8.2.1.3.B of the OBC, using 50 L/day/person, for an expected population of 146 people/campsites, a total proposed daily flow was calculated to be 7,300 litres per washroom facility per day. The proposed septic tank for the north and south washroom facilities will be required to have a minimum total capacity 14,600 litres (two times the daily flow, per OBC 8.2.2.3), and will require a maintenance access at grade. The south washroom estimated daily flow will be combined with the seasonal trailers estimated daily flow.

A Class 4 Sewage system, raised fill-based absorption trench, is proposed for the subject site to handle the domestic flows from the seasonal trailers and the south washroom. The estimated sanitary demand for the seasonal trailers was based on Table 8.2.1.3.B of the OBC, using 275 L/day/person, for an expected seasonal trailer count of 112 trailers, a total proposed daily flow of 30,800 litres. With combining the daily flows from the south washroom and seasonal trailers for a total proposed daily flow of 38,100 litres. The proposed septic tank will be required to have a minimum total capacity of 76,200 litres (two times the daily flow, per OBC 8.2.2.3), and will require a maintenance access at grade. The required length of distribution pipe was found to be 1,905 m, for a total of 64 rows at a length of 29.0 m. The minimum required mantle area was determined to be 9,525 m². Please refer to the Septic System calculations provided separately.

3. LIMITATIONS

This Brief was prepared by SBM for St. Clair Region Conservation Authority and the Ministry of the Environment, Conservation and Parks (MECP) Municipality of Brooke-Alvinston. Use of this Brief by any third party, or any reliance upon its findings, is solely the responsibility of that party. SBM accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions undertaken as a result of this Brief. Third party use of this Brief, without the express written consent of the Consultant, denies any claims, whether in contract, tort, and/or any other cause of action in law, against the Consultant.

All findings and conclusions presented in this Brief are based on site conditions as they appeared in the information presented to SBM and related to in this document. This Brief is not intended to be exhaustive in scope, or to imply a risk-free development. It should be recognized that the passage of time may alter the opinions, conclusions, and recommendations provided herein, as well as any changes in the layout of the development.

The design was limited to the documents referenced herein and SBM accepts no responsibility for the accuracy of the information provided by others. All designs and recommendations presented in this Brief are based on the information available at the time of the review.

This document is deemed to be the intellectual property of SBM in accordance with Canadian copyright law.

4. CLOSURE

We trust this Brief meets your satisfaction. Should you have any questions or require further information, please do not hesitate to contact us.

Respectfully submitted,

Strik, Baldinelli, Moniz Ltd.

Planning • Civil • Structural • Mechanical • Electrical



Ryan Frouws, P.Eng.
Civil Team Lead, Eng IV



Matthew Galopoulos
Civil Engineering Trainee I

Encl: Site Servicing Plan Sheet C3.1 prepared by SBM, dated June 5, 2025
Septic Notes, and Details Sheet C3.2 prepared by SBM, dated June 5, 2025
Septic System Sizing Calculations (OBC 2024) prepared by SBM

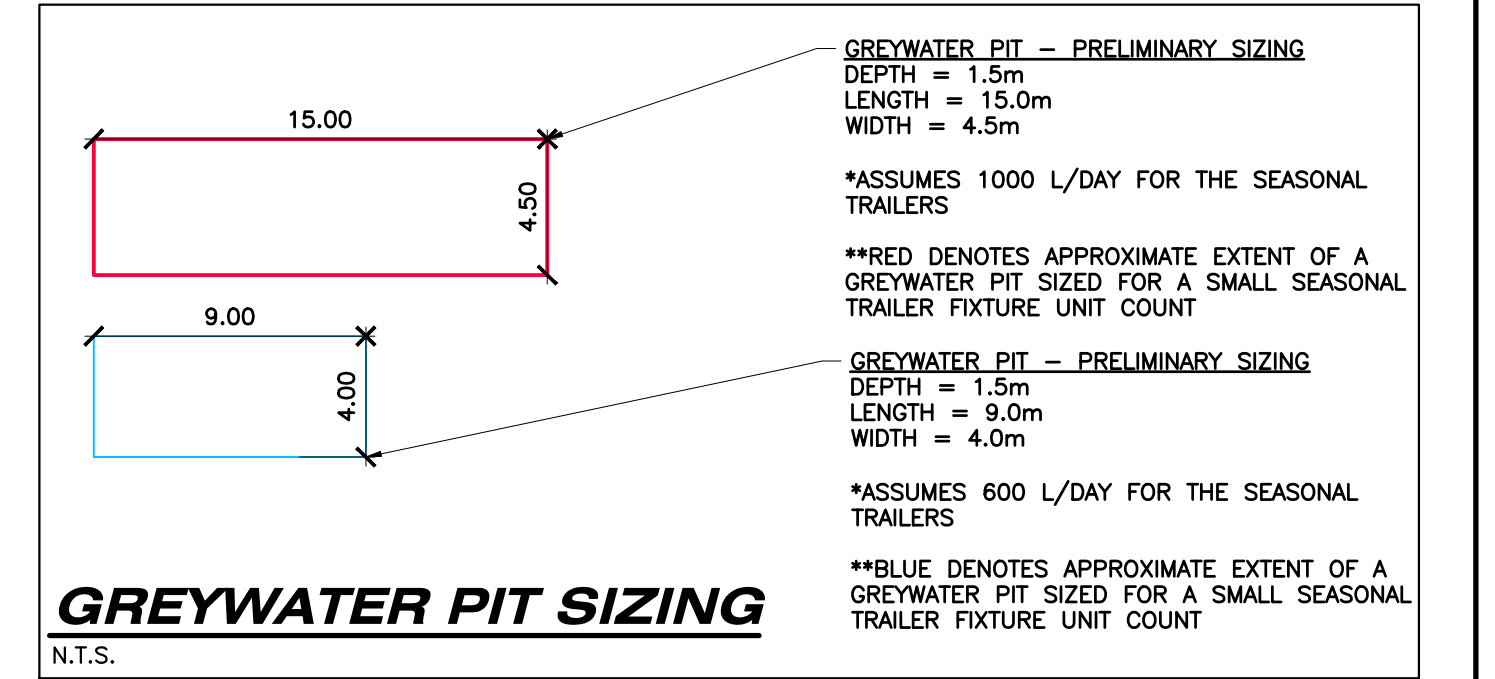
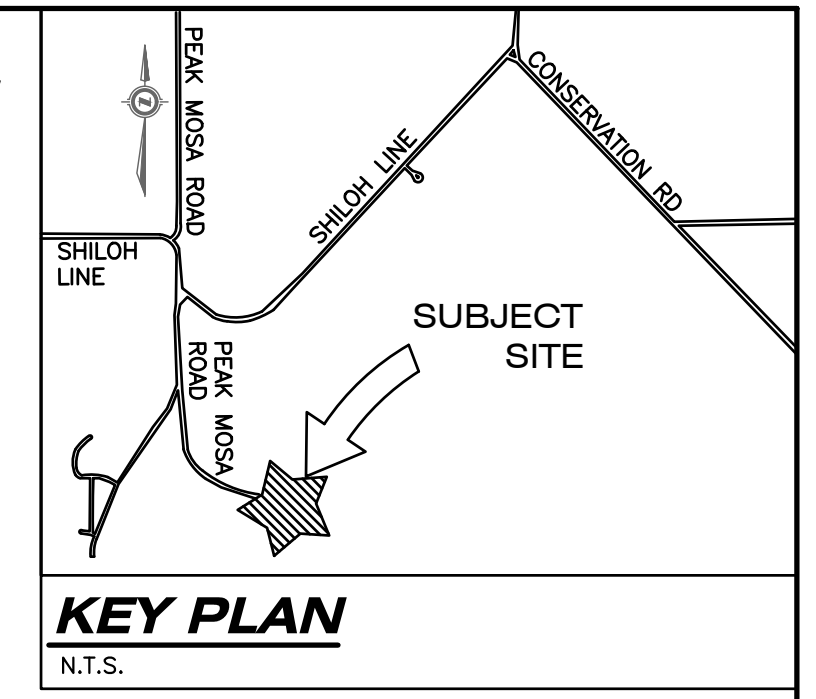
LEGAL INFORMATION

PART OF

IN THE
CITY OF ALVISTON
COUNTY OF LAMBTON

SITE BENCHMARK:

MONUMENT TYPE:
LOCATION:
GEODETIC ELEVATION:
(CONTRACTOR TO CONFIRM BENCHMARK ELEVATIONS)



GREYWATER PIT SIZING

N.T.S.

SAN SEWER STRUCTURES TABLE

STRUCTURE I.D.	TOP OF LID	INVERTS	DIAMETER	MATERIAL
NORTH-TANK MIN. = 26,100.0 L (1200#) OPSD 401.010 OPSD 701.010	216.34	215.28SE	200#	PVC DR35
SAMH1 (1200#) OPSD 401.010 OPSD 701.010	217.66	216.44NE	200#	PVC DR35
SAMH2 (1200#) OPSD 401.010 OPSD 701.010	216.94	216.28SW 215.72NE	200# 200#	PVC DR35 PVC DR35
SAMH3 (1200#) OPSD 401.010 OPSD 701.010	216.31	215.47SW 215.44NW	200# 200#	PVC DR35 PVC DR35
SAMH4 (1200#) OPSD 401.010 OPSD 701.010	218.57	217.16SE	200#	PVC DR35
SAMH5 (1200#) OPSD 401.010 OPSD 701.010	218.67	218.85NW 216.82NE	200# 200#	PVC DR35 PVC DR35
SAMH6 (1200#) OPSD 401.010 OPSD 701.010	219.03	216.62SW 216.82NE 216.65NW 216.59S	200# 200# 200# 200#	PVC DR35 PVC DR35 PVC DR35 PVC DR35
SAMH7 (1200#) OPSD 401.010 OPSD 701.010	217.62	217.02SE	200#	PVC DR35
SAMH8 (1200#) OPSD 401.010 OPSD 701.010	219.00	217.04NE 217.04NW 217.01SW	200# 200# 200#	PVC DR35 PVC DR35 PVC DR35
SAMH9 (1200#) OPSD 401.010 OPSD 701.010	218.20	217.52SE	200#	PVC DR35
SAMH10 (1200#) OPSD 401.010 OPSD 701.010	219.33	217.25NE 217.25NW 217.22SW	200# 200# 200#	PVC DR35 PVC DR35 PVC DR35
SAMH11 (1200#) OPSD 401.010 OPSD 701.010	219.17	217.76NW 217.73SE	200# 200#	PVC DR35 PVC DR35
SAMH12 (1200#) OPSD 401.010 OPSD 701.010	219.12	217.87SE	200#	PVC DR35
SAMH13 (1200#) OPSD 401.010 OPSD 701.010	219.56	217.45NE 217.45NW 217.42SW	200# 200# 200#	PVC DR35 PVC DR35 PVC DR35
SAMH14 (1200#) OPSD 401.010 OPSD 701.010	218.32	217.87SE	200#	PVC DR35
SAMH15 (1200#) OPSD 401.010 OPSD 701.010	219.38	217.65SW	200#	PVC DR35

REFER TO NOTES, LEGEND, AND DETAILS ON SHEET C1 & C4

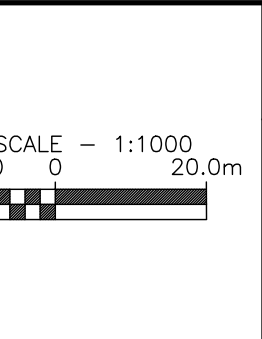


AS CONSTRUCTED SERVICES	COMPLETION	No.	REVISIONS	D/M/Y	BY	CONSULTANT
DESIGN	LA/MGo	1	FOR CLIENT APPROVAL	13/10/23	FR	
DRAWN	FR/MGo	2	FOR CLIENT APPROVAL	10/10/24	MGo	
CHECKED	RF	3	FOR CLIENT APPROVAL	05/06/25	MGo	
APPROVED	RF/KAM					
DATE	04/06/2025					
CAD	23-2061					

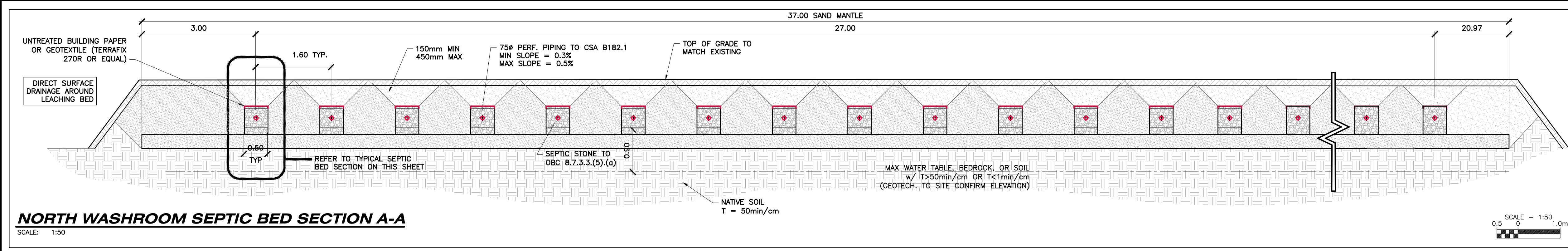
STRIK BALDINELLI MONIZ
PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL
1599 Adelaide St. N, Unit 301, London, Ontario, N5X 4E8
Tel: (519) 471-6667 Fax: (519) 471-0034
Email: sbm@sbmlltd.ca

PRELIMINARY NOT FOR CONSTRUCTION

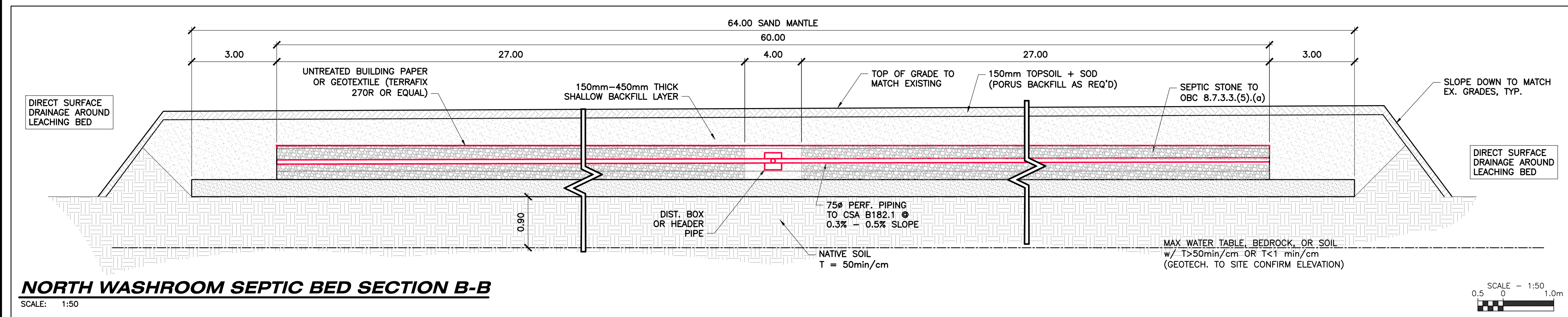
ENGINEER'S STAMP
CLIENT
St. Clair Conservation



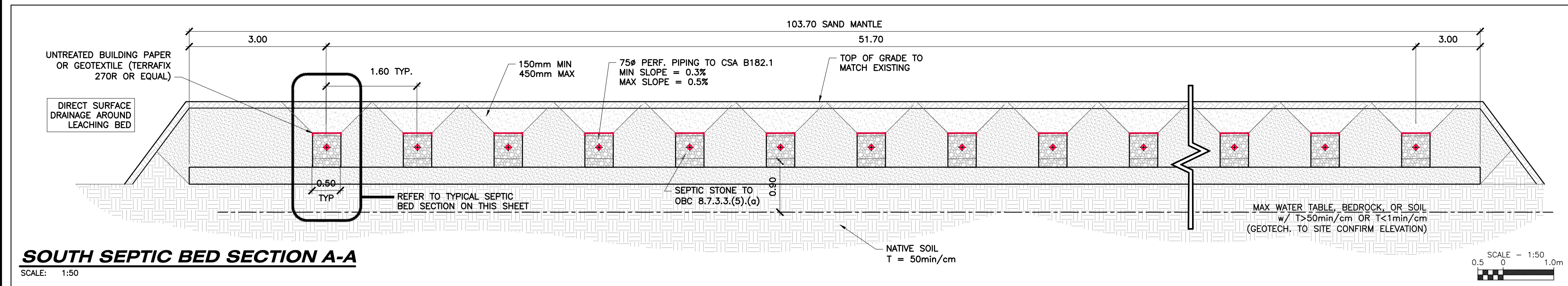
SITE SERVICING PLAN
SEPTIC SYSTEM REPLACEMENT
8477 SHILOH LINE
ALVISTON, ON.
PROJECT No. **SBM-23-2061**
SHEET No. **C3.1**
PLAN FILE No.



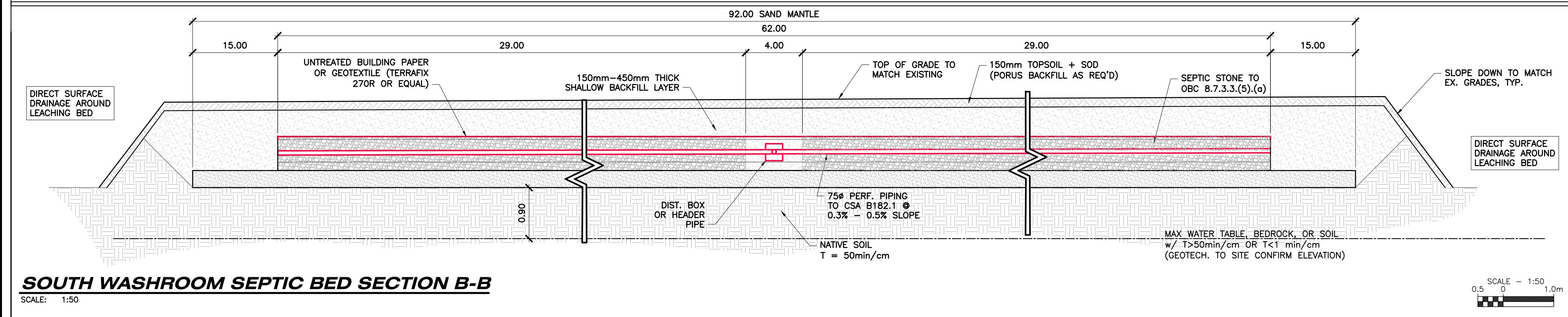
NORTH WASHROOM SEPTIC BED SECTION A-A
SCALE: 1:50



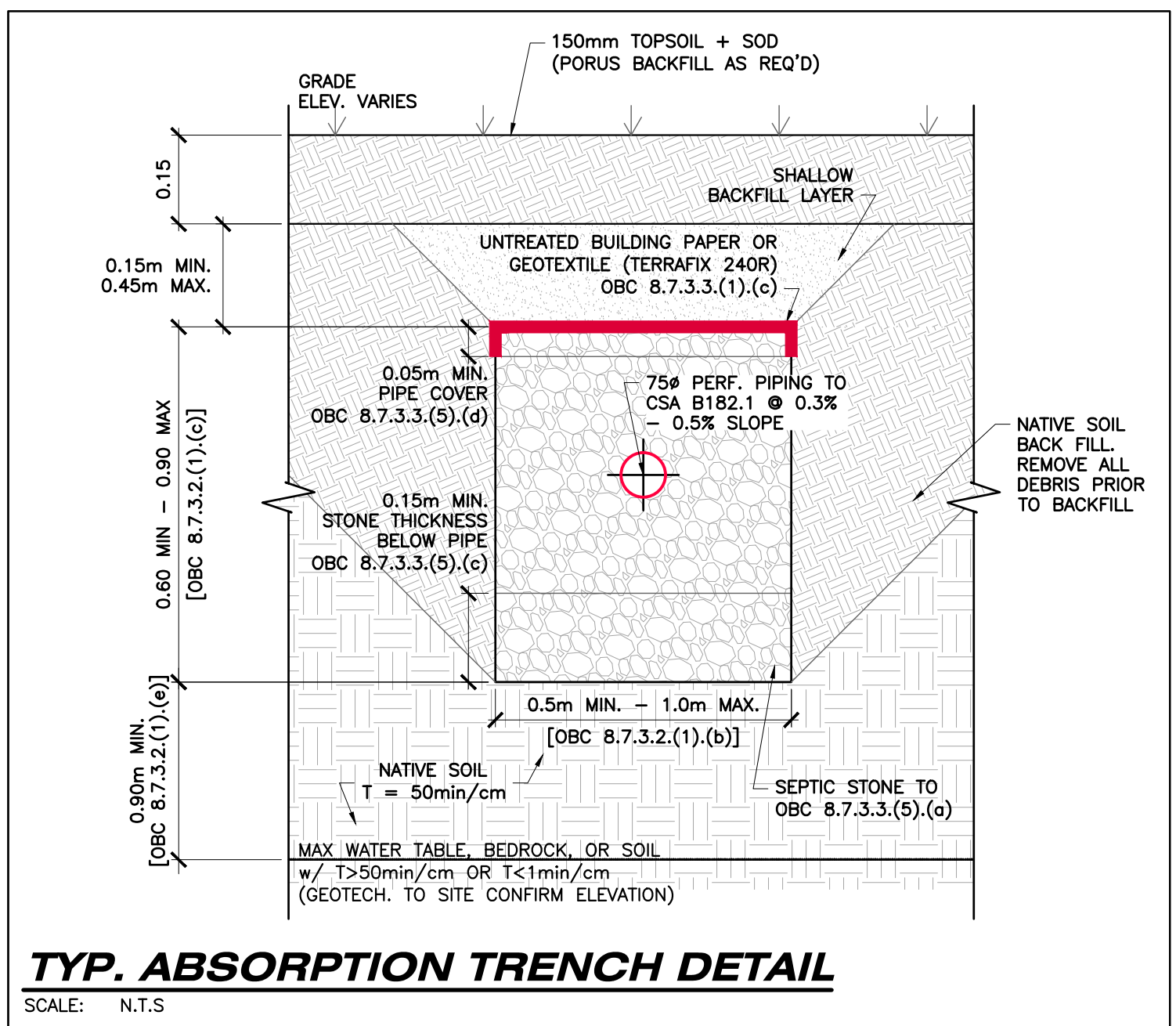
NORTH WASHROOM SEPTIC BED SECTION B-B
SCALE: 1:50



SOUTH SEPTIC BED SECTION A-A
SCALE: 1:50



SOUTH WASHROOM SEPTIC BED SECTION B-B
SCALE: 1:50



TYP. ABSORPTION TRENCH DETAIL
SCALE: N.T.S.

SEPTIC SYSTEM NOTES:

- DURING CONSTRUCTION, THE AREA OF THE PROPOSED BEDS SHALL BE THOROUGHLY INVESTIGATED FOR THE PRESENCE OF ANY EXISTING SUBSURFACE DRAINAGE TILES AND ANY SUCH SYSTEM SHOULD BE EFFECTIVELY SEALED FROM THE SEWAGE SYSTEM BED. SLOPE OF BASE FOR PLACING SAND LAYER DIRECTION OF FLOW IS TO BE 0.3% TO 0.5%.
- DISTRIBUTION PIPE IS TO BE PERFORATED 75mm TO 100mm DIA. TO CSA 182.1 OR 182.6. THE SLOPE OF THE PIPE FROM INLET TO END IS TO BE UNIFORM @ 0.3% TO 0.8%.
- THE LOWER END OF THE DISTRIBUTION PIPE MAY BE EITHER CAPPED OR INTERCONNECTED BY SOLID-WALLED PIPE. INLET AND HEADER END CONNECTIONS TO BE 75mm TO 100mm DIA. PVC (NON-PERFORATED) TO CSA 182.1, 182.2 OR 182.6.
- THE STONE AROUND THE DISTRIBUTION PIPE SHALL CONFORM TO OBC 8.7.3.3.(5) AND 8.7.7.1.(6).
- THE STONE LAYER IS TO BE COMPLETELY COVERED WITH UNTREATED BUILDING PAPER OR GEOTEXTILE (TERRAFIX 270R OR EQUAL), TO PREVENT SOIL FROM ENTERING THE STONE.
- THE FILTER MEDIUM SAND, WHERE SHOWN, SHALL CONFORM TO OBC 8.7.7.1.(4) AND (5).
- THE FINAL SURFACE IS TO BE SODDED OR SEEDED AND GRADED SUCH THAT WATER WILL DRAIN AWAY FROM THE TILE BED SURFACE.
- CERTAIN SPECIES OF TREES SUCH AS WILLOW AND POPLAR WITHIN 50m (MIN) OF THE LEACHING OR FILTER BED SHOULD BE REMOVED TO PREVENT CLOGGING OF PIPE BY TREE ROOTS.
- UNLESS OTHERWISE SPECIFIED, SANITARY SEWER TO BE 75mm OR 100mm DIA. PVC SDR28, LAID AT 2.0% MIN. GRADE. INSULATION MAY BE PROVIDED THROUGH AIRSPACE VIA A LARGER DIAMETER PIPE SLEEVE OR AS PER THE SEWER INSULATION DETAIL ON SHEET C1 IF 1.2m DEPTH OF COVER IS NOT PROVIDED.
- DISTRIBUTION BOXES, IF ANY, AND SEPTIC TANKS ARE TO BE AS DETAILED IN PLAN AND ARE TO BE CSA APPROVED. DISTRIBUTION BOX TO BE INSTALLED ON 200mm LEVEL COMPACTED GRANULAR 'A' OR 19mm (3/4") CLEAR STONE. BACKFILL TO BE COMPACTED GRANULAR MATERIAL. DISTRIBUTION BOXES ARE TO BE WRAPPED WITH 76mm (MIN.) WATERPROOF INSULATION.
- ALL GRASSED AREAS TO BE RESTORED WITH 100mm (4") TOPSOIL AND SEED OF SOD UNLESS OTHERWISE NOTED.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE MUNICIPAL AFFAIRS AND HOUSING AND THE ONTARIO BUILDING CODE, ONTARIO REGULATION 350/06 AS AMENDED.
- LOT LINES MUST BE CLEARLY MARKED ON THE SITE ADJACENT TO THE TILE BED.
- FINAL AND FINISHED GRADES MUST BE MARKED ON THE FOUNDATION PRIOR TO INSTALLATION.
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN FOR A FINAL INSPECTION.
- THE SUBSURFACE, DRAINAGE PIPES, SEPTIC TANK, AND TILE TRENCH SYSTEM MUST NOT BE BACKFILLED UNTIL AUTHORIZED BY THE INSPECTOR.
- ROOF RAINWATER DOWN SPOUTS AND SLUMP PUMP DISCHARGE TO BE DIRECTED AWAY FROM TILE BED AREA.
- ADDITIONAL LEACHING BED FILL SHALL HAVE A PERCOLATION TIME NOT LESS THAN 75% OF ORIGINAL SOIL [OBC 8.7.4.2.(2)] UNLESS ON TOP OF THE STONE LAYER [OBC 8.7.4.2.(4)].
- THE HEADER LINE AND DISTRIBUTION TILES SHALL BE DESIGNED AND CONSTRUCTED TO BE DETECTED BY MEANS OF 14 GAUGE TW SOLID COPPER LIGHT COLOURED PLASTIC COATED TRACER WIRE.
- AN EFFLUENT FILTER SHALL BE INSTALLED AT THE OUTLET OF EVERY SEPTIC TANK THAT DISCHARGES EFFLUENT TO A LEACHING BED [OBC 8.6.2.1.(1)].
- NO PART OF THE FILTER BED SHALL BE SLOPED STEEPER THAN 1 UNIT VERTICALLY TO 4 UNITS HORIZONTALLY.
- SEWAGE SYSTEM SETBACKS SHALL BE:

FROM EDGE OF STONE LAYER	FROM SEPTIC TANKS:
CASED WELL = 15.0m	CASED WELL = 15.0m
UNCASED WELL = 30.0m	UNCASED WELL = 15.0m
STRUCTURES = 5.0m	STRUCTURES = 1.5m
PROPERTY LINE = 3.0m	PROPERTY LINE = 3.0m
OPEN WATER = 15.0m	OPEN WATER = 15.0m

REFER TO NOTES, LEGEND, AND DETAILS ON SHEET C1 & C4

AS CONSTRUCTED SERVICES	COMPLETION	No.	REVISIONS	D/M/Y	BY	CONSULTANT
DESIGN	LA/MGo	1	FOR CLIENT APPROVAL	13/10/23	FR	
DRAWN	FR/MGo	2	FOR CLIENT APPROVAL	10/10/24	MGo	
CHECKED	RF	3	FOR CLIENT APPROVAL	05/06/25	MGo	
APPROVED	RF/KAM					
DATE	04/06/2025					
CAD	23-2061					

STRIK BALDINELLI MONIZ
sbm
PLANNING - CIVIL - STRUCTURAL - MECHANICAL - ELECTRICAL
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Email: sbm@sbmltd.ca

ENGINEER'S STAMP
PRELIMINARY NOT FOR CONSTRUCTION

CLIENT
St. Clair Conservation

SCALE
10.0 0 20.0m

TITLE
SEPTIC NOTES AND DETAILS
SEPTIC SYSTEM REPLACEMENT
8477 SHILOH LINE
ALVISTON, ON.

PROJECT No.
SBM-23-2061
SHEET No.
C3.2
PLAN FILE No.

Septic System Sizing Calculations (OBC 2024)

For data entry
 Calculated, not for data entry

DATE: June 5, 2025
 JOB NO.: SBM-23-2061

Client: St. Clair Region Conservation Authority
 Project: AW Conservation Authority
 Location: 8477 Shiloh Line, Alvinston ON

LOCATION #1 - North Washroom Facility
DAILY SEWAGE FLOW (Based on Hydraulic Loads for Fixtures, Floor Area, and Bedrooms)

Hydraulic Loads for Fixtures - NORTH WASHROOM FACILITY

Plumbing Fixture Description	Existing Number of Fixtures	Additional Proposed Number of Fixtures	Hydraulic Load	Existing Fixture Units	Additional Proposed Fixture Units
Bathroom group (toilet, sink, bathtub)	0	0	6.0		
Toilet	6	0	4.0	24.0	0.0
Washbasin	4	0	1.5	6.0	0.0
Bathtub or Shower	4	0	1.5	6.0	0.0
Sink	4	0	1.5	6.0	0.0
Urinal	1	0	2.0	2.0	0.0
TOTAL FIXTURE UNITS				44.0	0.0

Category 16 - Public Parks

16. Public Parks	
a) With toilets only per person, or	20
b) With bathhouse, showers, and toilets per person	50

Daily Flow Rate (Washrooms): 146 p X 50L/p*d

7300 L/d

Hydraulic Loads for Fixtures - SOUTH WASHROOM FACILITY

Plumbing Fixture Description	Existing Number of Fixtures	Additional Proposed Number of Fixtures	Hydraulic Load	Existing Fixture Units	Additional Proposed Fixture Units
Bathroom group (toilet, sink, bathtub)	0	0	6.0		
Toilet	4	0	4.0	16.0	0.0
Washbasin	4	0	1.5	6.0	0.0
Bathtub or Shower	2	0	1.5	3.0	0.0
Kitchen Sink(s)	0	0	1.5		
Sink	4	0	1.5	6.0	0.0
Urinal	1	0	2.0	2.0	0.0
Dishwasher	0	0	1.5		
Washing Machine	0	0	1.5		
Bidet	0	0	1.0		
Laundry Tub	0	0	1.5		
Lav. (Domestic)	0	0	1.5		
Floor Drain	0	0	2.0		
TOTAL FIXTURE UNITS				33.0	0.0

Daily Flow Rate (Washrooms): 146 p X 50L/p*d

7300 L/d

	# of Sites	Population (1 person/trailer (estimated))
campsites (seasonal)	112	112
campsites (transient)	34	34
Total		146

Category 17(b) - Recreational Vehicle or Campground

17. Recreational Vehicle or Campground Park	
a) Per site without water or sewer hook-up, or	275
b) Per site with water and sewer hook-up	425

Daily Flow Rate (Campsites-seasonal): 112 p X 275L/p*d

30800 L/d

Existing		Proposed - North Washroom Facility	
Soil Characteristics		Q (L/day) =	7300.00
Soil Type:	Clay	Total Proposed Tank Volume	14600.00 Litres (2*Daily Flow: Trailer = Residential)
T-Time:	min/cm (Per Exact Septic 50 Lab Test)		
North Washroom		Absorption Trench Design - (Option considered, but not proposed)	
Existing Tank (gallons)	1000	Fill Based:	Yes
Length of Distribution Trench (6 individual distribution trenches (m))	384.84	T-Time: Imported Sand (Assumed)	10 min/cm
		Length of Distribution Trench = $QT/200 = (7300)(10)/(200) = 365$ m	
South Washroom		Mantle Area = $Q/4 = (7300)/(4) = 1825$ sq.m	
Existing Tank (gallons)	1000	Number of Rows R'qd	14
Length of Distribution Trench (10 individual distribution trenches (m))	310	Separation between Rows (m)	1.6
		Length (m)	27
		Approximate Area (including mantle)	40.6m x 45m
Therefore, use 14 runs at 27m each (324 m total) and mantle 64 x 28.6 (1,831 m2)			
		Absorption Trench Design - From Treatment Unit (Level II, III or IV) - (Option considered, but not proposed)	
		Length of Distribution Trench = $QT/300 = (7300)(10)/(300) = 243.33$ m	
		Mantle Area = $Q/4 = (7300)/(4) = 1825$ sq.m	
		Number of Rows R'qd	10
		Separation between Rows (m)	1.6
		Length (m)	27
		Approximate Area (including mantle)	40.6m x 45m
		Holding Tank Design	
		Total Proposed Tank Volume	51100.00 Litres
		Type A Dispersal Bed Design	
		Stone Area = $Q/B = 7300/50 = 146$ sq.m	
		Sand Area = $QT/400 = (7300)(50)/(400) = 912.5$ sq.m	
		Shallow Buried Trench	
		Length of SBT Distribution Pipe (Table 8.7.3.1) = $Q/30 = 243.33$ m	
Proposed - North Washroom Facility and Trailer Lots - Onsite Sewer System - (Preferred Option)			
		Daily Flow Rate (Washrooms) =	7300.00
		Number of Sites (275 L/p*d) =	8
		Daily Flow Rate (Trailer Sites) =	2200
		Combined Daily Flow Rate: Q (L/day) =	9500.00
		Total Proposed Tank Volume	19000.00 Litres (2*Daily Flow: Trailer = Residential)
		Absorption Trench Design	
		Fill Based:	Yes
		T-Time: Imported Sand (Assumed)	10 min/cm
		Length of Distribution Trench = $QT/200 = (9500)(10)/(200) = 475$ m	
		Mantle Area = $Q/4 = (9500)/(4) = 2375$ sq.m	
		Number of Rows R'qd	17
		Separation between Rows (m)	1.6
		Length (m)	27
		Approximate Area (including mantle)	52.8m x 45m
Therefore, use 18 runs at 27m each (486 m total) and mantle 64 x 37.2 (2,381 m2)			
DEFICIENCY REPORT RECOMMENDATIONS:	ITEM 1. North Washroom and Dump Station: Services all site trailers 112 sites, and the washroom provides services for the 112 seasonal trailer sites and the 34 transient sites. It is recommended that new septic system be provided for these existing systems as the age of the existing system is nearing replacement. Current septic system is not sized per current population with seasonal trailers.	PROPOSED DESIGN: Replace Septic at the Washroom Facilities sized per population only. Seasonal trailer options noted below.	Remove existing septic system and provide new septic tank and septic beds per SBM details.

Existing		Proposed Seasonal Trailer Only Option - Not Shown on Schematic - (Option considered, but not proposed)	
Soil Characteristics		Q (L/day) =	30800.00 (112 Trailer Sites)
Soil Type:	Clay	Total Proposed Tank Volume	61600.00 Litres (2*Daily Flow: Trailer = Residential)
T-Time:	min/cm (Per Exact Septic 50 Lab Test)		
North Washroom		Absorption Trench Design - (Option considered, but not proposed)	
Existing Tank (gallons)	1000	Fill Based:	Yes
		T-Time: Imported Sand (Assumed)	10 min/cm
Length of Distribution Trench (6 individual distribution trenches (m))	384.84	Length of Distribution Trench = $QT/200 = (30800)(10)/(200) = 1540$ m	
South Washroom		Mantle Area = $Q/4 = (30800)/(4) = 7700$ sq.m	
Existing Tank (gallons)	1000	Number of Rows R'qd	54
Length of Distribution Trench (10 individual distribution trenches (m))	310	Separation between Rows (m)	1.6
		Length (m)	29
		Approximate Area (including mantle)	83.7m x 92m
Therefore, use 54 runs at 29m each (1,566 m total) and mantle 83.7 x 92 (7,700 m2)			
South Washroom and Seasonal Trailers Combination (Most Conservative) - (Option considered, but not proposed)			
		Combined Daily Flow - Q(L/day) =	38100.00
		Flow Breakdown:	
		Trailer Daily Flow (L/day):	30800.00 (112 Trailer Sites)
		South Washroom Daily Flow (L/day):	7300.00
		Total Proposed Tank Volume	76200.00 Litres (2*Daily Flow: Trailer = Residential)
		Absorption Trench Design	
		Fill Based:	Yes
		T-Time: Imported Sand (Assumed)	10 min/cm
		Length of Distribution Trench = $QT/200 = (38100)(10)/(200) = 1905$ m	
		Mantle Area = $Q/4 = (38100)/(4) = 9525$ sq.m	
		Number of Rows R'qd	63.5
		Separation between Rows (m)	1.6
		Length (m)	29
		Approximate Area (including mantle)	127m x 75m
Therefore, use 64 runs at 29m each (1,905 m total) and mantle 103.70 x 92.0 (9540m2)			
Absorption Trench Design - From Treatment Unit (Level II, III or IV) - (Option considered, but not proposed)			
		Length of Distribution Trench = $QT/300 = (38100)(10)/(300) = 1270$ m	
		Mantle Area = $Q/4 = (38100)/(4) = 9525$ sq.m	
		Number of Rows R'qd	63.5
		Separation between Rows (m)	1.6
		Length (m)	29
		Approximate Area (including mantle)	101.5m x 92m
		Holding Tank Design	
		Total Proposed Tank Volume	266700 Litres
		Type A Dispersal Bed Design	
		Stone Area = $Q/B = 38100/50 = 762$ sq.m	
		Sand Area = $QT/400 = (38100)(50)/(400) = 4762.5$ sq.m	
		Shallow Buried Trench	
		Length of SBT Distribution Pipe (Table 8.7.3.1) = $Q/30 = 1270$ m	
South Washroom and Seasonal Trailers Combination - Onsite Sewage System - (Preferred Option)			
		Daily Flow Rate (Washrooms) =	7300
		Number of Sites (275 L/p*d) =	104
		Daily Flow Rate (Trailer Sites) =	28600
		Combined Daily Flow Rate: Q (L/day) =	35900.00
		Total Proposed Tank Volume	71800.00 Litres (2*Daily Flow: Trailer)
		Absorption Trench Design	
		Fill Based:	Yes
		T-Time: Imported Sand (Assumed)	10 min/cm
		Length of Distribution Trench = $QT/200 = (35900)(10)/(200) = 1795$ m	
		Number of Absorption Trenches (30m max, between 500mm to 1000mm wide, 600mm to 900mm in depth)	
		Mantle Area = $Q/4 = (35900)/(4) = 8975$ sq.m	
		Number of Rows R'qd	60
		Separation between Rows (m)	1.6
		Length (m)	29
		Approximate Area (including mantle)	114m x 79m
Therefore, use 60 runs at 29m each (1,795 m total) and mantle 103.70 x 86.6 (8975m2)			

Existing		South Washroom and Seasonal Trailers Combination with Greywater Pits - (Option considered, but not proposed)	
Soil Characteristics		Q(L/day) = 22700.00 *	
Soil Type: Clay		*Daily Flow reduced to 50% Assuming Greywater is 50% of the total daily flow.	
T-Time: min/cm (Per Exact Septic 50 Lab Test)		Total Proposed Tank Volume 45400.00 Litres (2*Daily Flow: Trailer = Residential)	
North Washroom		BLACKWATER	
Existing Tank (gallons) 1000		Absorption Trench Design	
Length of Distribution Trench (6 individual distribution trenches (m)) 384.84		Fill Based: Yes	
		T-Time: Imported Sand (Assumed) 10 min/cm	
		Length of Distribution Trench = $QT/200 = (22700)(10)/(200) = 1135$ m	
		Number of Absorption Trenches (30m max, between 500mm to 1000mm wide, 600mm to 900mm in depth)	
South Washroom		Mantle Area = $Q/4 = (22700)/(4) = 5675$ sq.m	
Existing Tank (gallons) 1000		Number of Rows R'qd 37.8	
Length of Distribution Trench (10 individual)		Separation between Rows (m) 1.6	
		Length (m) 29	
		Approximate Area (including mantle) 59.5m x 92m	
Therefore, use 38 runs at 29m each (1,102 m total) and mantle 103.70 x 54.75 (5,675 m²)			
GREYWATER (3 Fixture Units)			
Qttotal		15400	
Q(Small Trailers)		600	
Fill Based:		No	
T-Time: Native Soil		50 min/cm	
Lr=400/T		8 l/day/m ²	
Sidewall Area of pit		75 sq.m	
H=(M)		1.5 max realistic	
L=(M)		9	
W=(M)		4	
19mm Clear Stone Void Ratio		0.4	
SW1		27 (2 sides)	
SW2		12 (2 sides)	
SW3 (Bottom)		36 (Bottom)	
Total Area (sq.m)		75	
Total Storage		21.6	
Infiltration Rate		3.33333E-06 (m/s)	
Contact Area		75 (m ²) (Bottom only)	
Safety Factor		1.5	
A*K*i/SF		0.000167 (m ³ /s)	
Draw-down Time		36.0 (hr)	
GREYWATER (5 Fixture Units)			
Qttotal		15400	
Q(Small Trailers)		1000	
Fill Based:		No	
T-Time: Native Soil		50 min/cm	
Lr=400/T		8 l/day/m ²	
Sidewall Area of pit		125 sq.m	
H=(M)		1.5 max realistic	
L=(M)		15	
W=(M)		4.5	
19mm Clear Stone Void Ratio		0.4	
SW1		45 (2 sides)	
SW2		13.5 (2 sides)	
SW3 (Bottom)		67.5 (Bottom)	
Total Area (sq.m)		126	
Total Storage		40.5	
Infiltration Rate		3.33333E-06 (m/s)	
Contact Area		2.22222E-06	
Safety Factor		126 (m ²) (Bottom only)	
A*K*i/SF		1.5	
Draw-down Time		0.00028 (m ³ /s)	
		40.2 (hr)	

Summary of Septic Beds - No Treatment Unit Options

Septic Bed Location	Expected Flows (L/s)	Septic Tank Size (L)	Bed Size	Dosage Volume Considerations	Maximum Number of Cycles per Pump per Day	Dose Volume per 15min Cycle for each Dosage Pump (L/min)
North Washroom - Washroom Facility	7,300	14,600	Mantle = 64.0m x 28.6m = 1,831m ² Length of Distribution Trench = 365m Number of Rows = 14 Length per Row = 27m	Dose Volume 1252 Total Chamber Vol. * 16452	6	83.5
North Washroom - Onsite Sewer System (Preferred Option)	9,500	19,000	Mantle = 64.0m x 37.2m = 2,376m ² Length of Distribution Trench = 475m Number of Rows = 18 Length per Row = 27m	Dose Volume 1609 Total Chamber Vol. * 21210	6	107.3
South Washroom and - (Most Conservative)	38,100	76,200	Mantle = 103.7m x 92m = 9,540m ² Length of Distribution Trench = 1,914m Number of Rows = 64 Length per Row = 29m	Dose Volume 6147 Total Chamber Vol. * 82947	7	409.8
South Washroom and - Onsite Sewer System (Preferred Option)	35,900	71,800	Mantle = 103.7m x 86.6m = 8,975m ² Length of Distribution Trench = 1,795m Number of Rows = 66 Length per Row = 29m	Dose Volume 6339 Total Chamber Vol. * 78739	6	422.6
South Washroom and - Greywater Pit Option	22,700	45,400	Mantle = 103.7m x 54.75m = 5,675m ² Length of Distribution Trench = 1135m Number of Rows = 38 Length per Row = 29m	Dose Volume 3650 Total Chamber Vol. * 49650	7	243.4

*Includes enough volume to include an emergency storage contingency and 600L of freeboard.



PLANNING • CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL

Project No.: SBM-23-2061
 Project Name: AW Conservation Area
 Date: September 17, 2025

LONDON LOCATION
 1599 Adelaide St. N., Unit 301
 London, ON N5X 4E8
 P: 519-471-6667

www.sbmltd.ca

KITCHENER LOCATION
 132 Queen St. S. Unit 4
 Kitchener, ON N2G 1V9
 P: 519-725-8093

sbm@sbmltd.ca

COST ESTIMATE - OPTION 1 (MAGENTA COLOURED SERVICING ON PLAN) - RAISED FILL BASED ABSORPTION TRENCH SEPTIC SYSTEM WITH GRAVITY SEWERS					
ITEM	DESCRIPTION	ESTIMATED QTY	UNIT	UNIT PRICE	TOTAL
'A' - REMOVALS & SITE PREPARATION					
A1	Mobilization, demobilization, removals of existing and disposal at suitable location	1	L.S.	\$30,000.00	\$ 30,000.00
Subtotal of 'A' - REMOVALS & SITE PREPARATION				Sub-Total	\$30,000.00
'B' - SEPTIC SYSTEM (NORTH WASHROOM)					
B1	19,000 L Septic Tank, with Pump Chamber (internal or external), and required dosage pumps (supplied and delivered to site)	1	ea	\$10,320.00	\$ 10,320.00
B2	Construction of raised absorption trench septic bed (mantle area 2,376 m ² and total run length 486 m) & tank installation	1	LS	\$258,500.00	\$ 258,500.00
B3	New 1200 mm sanitary MH to OPSD 701.010 c/w pipe grouting, bencing OPSD 701.021 and frame & lid to OPSD 401.020	3	ea	\$8,000.00	\$ 24,000.00
B4	New 200 mm PVC DR35 sanitary sewer including excavation, local dewatering (if required), bedding (to OPSD 802.010), backfilling with approved native material, proper compaction of bedding and backfill, fittings, collars, and all other required connections/ fixtures.	146.24	m	\$225.00	\$ 32,904.00
B5	New 100 mm PVC DR35 sanitary sewer including excavation, local dewatering (if required), bedding (to OPSD 802.010), backfilling with approved native material, proper compaction of bedding and backfill, fittings, collars, and all other required connections/ fixtures.	174	m	\$175.00	\$ 30,450.00
B6	Supply and install new 100 mm diameter Sanitary Cleanout	5	ea	\$1,000.00	\$ 5,000.00
B7	Supply and install new 50 mm diameter forcemain	165	m	\$200.00	\$ 33,000.00
Subtotal of 'B' - SEPTIC SYSTEM (NORTH WASHROOM)				Sub-Total	\$394,174.00
'C' - SEPTIC SYSTEM (SOUTH WASHROOM)					
C1	71,800 Septic Tank, with Pump Chamber (internal or external), and required dosage pumps (supplied and delivered to site)	1	LS	\$52,200.00	\$ 52,200.00
C2	Construction of raised absorption trench septic bed (mantle area 8,975 m ² and total run length 1,795 m) & tank installation	1	LS	\$975,000.00	\$ 975,000.00
C3	New 1200 mm sanitary MH to OPSD 701.010 c/w pipe grouting, bencing OPSD 701.021 and frame & lid to OPSD 401.020	12	ea	\$8,000.00	\$ 96,000.00
C4	New 200 mm PVC DR35 sanitary sewer including excavation, local dewatering (if required), bedding (to OPSD 802.010), backfilling with approved native material, proper compaction of bedding and backfill, fittings, collars, and all other required connections/ fixtures.	853	m	\$225.00	\$ 191,925.00
C5	Supply and install new 100 mm PVC DR35 building sanitary sewer including excavation, local dewatering (if required), bedding (to OPSD 802.010), backfilling with approved native material, proper compaction of bedding and backfill, fittings, collars, and all other required connections/ fixtures.	1039	m	\$175.00	\$ 181,825.00
C6	Supply and install new 100 mm diameter Sanitary Cleanout	13	ea	\$1,000.00	\$ 13,000.00
C7	Supply and install new 50 mm diameter forcemain	263	m	\$200.00	\$ 52,600.00
Subtotal of 'C' - SEPTIC SYSTEM (SOUTH WASHROOM)				Sub-Total	\$1,562,550.00
'D' - OPERATIONS AND MAINTENANCE					
D1	Pump-out rate (\$350/4000 gallons, or \$350/15,142 litres) (113,100 L)	1	1 yr	\$2,615.00	\$ 2,615.00
Subtotal of 'D' - OPERATIONS AND MAINTENANCE				Sub-Total	\$2,615.00
SUMMARY					
				'A' - REMOVALS & SITE PREPARATION	\$ 30,000.00
				'B' - SEPTIC SYSTEM (NORTH WASHROOM)	\$ 394,174.00
				'C' - SEPTIC SYSTEM (SOUTH WASHROOM)	\$ 1,562,550.00
				'D' - OPERATIONS AND MAINTENANCE	\$ 2,615.00
				Subtotal 'A' to 'E' =	\$ 1,989,339.00
				Contingency Allowance (approx 15%) =	\$ 300,000.00
				Subtotal =	\$ 2,289,339.00
				HST (13%) =	\$ 297,614.07
				TOTAL (HST Inclusive) =	\$ 2,586,953.07

Items B2/C2 is based on cost estimate provided by Patton Excavating & Grading LTD, received on January 17, 2024. (Quote: 750 sq.m mantle at \$116,424 and 3,120 sq.m mantle at \$494,802)
 Item E1 is based on a pumpout costing \$2,615, which is required every 3-5 years depending on system usage.

Project No.: SBM-23-2061
Project Name: AW Conservation Area
Date: September 17, 2025

COST ESTIMATE - OPTION 2 (BLUE COLOURED SERVICING ON PLAN) - RAISED FILL BASED ABSORPTION TRENCH SEPTIC SYSTEM WITH GREYWATER PITS w/ TREATMENT UNIT (FOR SOUTHWASHROOM)					
ITEM	DESCRIPTION	ESTIMATED QTY	UNIT	UNIT PRICE	TOTAL
'A' - REMOVALS & SITE PREPARATION					
A1	Mobilization, demobilization, removals of existing and disposal at suitable location	1	L.S.	\$30,000.00	\$ 30,000.00
Subtotal of 'A' - REMOVALS & SITE PREPARATION				Sub-Total	\$30,000.00
'B' - SEPTIC SYSTEM (NORTH WASHROOM)					
B1	14,600 L Septic Tank and Pump Tank (internal or external) (supplied and delivered to site)	1	ea	\$8,736.00	\$ 8,736.00
B2	Construction of raised absorption trench septic bed (mantle area 1,831 m ² and total run length 365 m) & tank installation	1	LS	\$228,400.00	\$ 228,400.00
B3	Supply and install new 50 mm diameter forcemain	85	m	\$200.00	\$ 17,000.00
Subtotal of 'B' - SEPTIC SYSTEM (NORTH WASHROOM)				Sub-Total	\$254,136.00
'C' - SEPTIC SYSTEM (SOUTH WASHROOM + SEASONAL TRAILERS)					
C1	Waterloo Biofilter Treatment Unit Configuration (not including the installation cost)	1	LS	\$254,563.26	\$ 254,563.26
C1.1	PROVISIONAL ITEMS: (1) Control Building (price TBD), (1) Flow Meter, (2) SensorTechnics Level Transducers, and (1) Optical DO Sensor	1	LS	\$13,630.00	\$ 13,630.00
C2	Construction of raised absorption trench septic bed (mantle area 5,675 m ² and total run length 1,140 m) & tank installation	1	LS	\$617,100.00	\$ 617,100.00
C7	Supply and install new 50 mm diameter forcemain	106	m	\$200.00	\$ 21,200.00
Subtotal of 'C' - SEPTIC SYSTEM (SOUTH WASHROOM + SEASONAL TRAILERS)				Sub-Total	\$906,493.26
'D' - GREYWATER PITS					
D1	Sandy fill to surround greywater pits 0.6m on all sides (19 m ³ per pit)	3407	t	\$30.00	\$ 102,219.26
D2	Clearstone fill for greywater pits (11.25 m ³ per pit)	2268	t	\$45.00	\$ 102,060.00
D3	Construction of greywater pit (for 112 total pits)	1	LS	\$160,000.00	\$ 160,000.00
Subtotal of 'D' - GREYWATER PITS				Sub-Total	\$364,279.26
'E' - OPERATIONS AND MAINTENANCE					
E1	Pump-out rate (\$350/4000 gallons, or \$350/15,142 litres) (113,100 L)	1	1 yr	\$2,615.00	\$ 2,615.00
Subtotal of 'E' - OPERATIONS AND MAINTENANCE				Sub-Total	\$2,615.00

SUMMARY	
'A' - REMOVALS & SITE PREPARATION	\$ 30,000.00
'B' - SEPTIC SYSTEM (NORTH WASHROOM)	\$ 254,136.00
'C' - SEPTIC SYSTEM (SOUTH WASHROOM + SEASONAL TRAILERS)	\$ 906,493.26
'D' - GREYWATER PITS	\$ 364,279.26
'E' - OPERATIONS AND MAINTENANCE	\$ 2,615.00
Subtotal 'A' to 'E' =	\$ 1,557,523.52
Contingency Allowance (approx 15%) =	\$ 240,000.00
Subtotal =	\$ 1,797,523.52
HST (13%) =	\$ 233,678.06
TOTAL (HST Inclusive) =	\$ 2,031,201.58

Items B2/C2 is based on cost estimate provided by Patton Excavating & Grading LTD, received on January 17, 2024. (Quote: 750 sq.m mantle at \$116,424 and 3,120 sq.m mantle at \$494,802)
Item D3 is based on the septic bed estimate provided by Dan Frisen, scaled down to suit the updated flow rate (75%), considering the greywater pits.
Item E1 is based on a pumpout costing \$2,615, which is required every 3-5 years depending on system usage.



LONDON LOCATION
 1599 Adelaide St. N., Unit 301
 London, ON N5X 4E8
 P: 519-471-6667

KITCHENER LOCATION
 132 Queen St. S. Unit 4
 Kitchener, ON N2G 1V9
 P: 519-725-8093

www.sbmltd.ca

sbm@sbmltd.ca

Project No.: SBM-23-2061
 Project Name: AW Conservation Area
 Date: September 17, 2025

COST ESTIMATE - OPTION 3 (BLUE COLOURED SERVICING ON PLAN) - RAISED FILL BASED ABSORPTION TRENCH SEPTIC SYSTEM w/ NO TREATMENT UNIT					
ITEM	DESCRIPTION	ESTIMATED QTY	UNIT	UNIT PRICE	TOTAL
'A' - REMOVALS & SITE PREPARATION					
A1	Mobilization, demobilization, removals of existing and disposal at suitable location	1	L.S.	\$30,000.00	\$ 30,000.00
Subtotal of 'A' - REMOVALS & SITE PREPARATION				Sub-Total	\$30,000.00
'B' - SEPTIC SYSTEM (NORTH WASHROOM)					
B1	14,600 L Septic Tank and Pump Tank (internal or external) (supplied and delivered to site)	1	ea	\$8,736.00	\$ 8,736.00
B2	Construction of raised absorption trench septic bed (mantle area 1,831 m ² and total run length 324 m) & tank installation	1	LS	\$200,050.00	\$ 200,050.00
B3	Supply and install new 50 mm diameter forcemain	165	m	\$200.00	\$ 33,000.00
Subtotal of 'B' - SEPTIC SYSTEM (NORTH WASHROOM)				Sub-Total	\$241,786.00
'C' - SEPTIC SYSTEM (SOUTH WASHROOM)					
C1	76,200 L Septic Tank (supplied and delivered to site)	1	LS	\$74,900.00	\$ 74,900.00
C2	Construction of raised absorption trench septic bed (mantle area 9,540 m ² and total run length 1,920 m) & tank installation	1	LS	\$1,037,500.00	\$ 1,037,500.00
C3	Supply and install new 50 mm diameter forcemain	355	m	\$200.00	\$ 71,000.00
Subtotal of 'C' - SEPTIC SYSTEM (SOUTH WASHROOM)				Sub-Total	\$1,183,400.00
'D' - OPERATIONS AND MAINTENANCE					
E1	Pump-out rate (\$350/4000 gallons, or \$350/15,142 litres) (113,100 L)	1	1 yr	\$2,615.00	\$ 2,615.00
Subtotal of 'D' - OPERATIONS AND MAINTENANCE				Sub-Total	\$2,615.00

SUMMARY	
'A' - REMOVALS & SITE PREPARATION	\$ 30,000.00
'B' - SEPTIC SYSTEM (NORTH WASHROOM)	\$ 241,786.00
'C' - SEPTIC SYSTEM (SOUTH WASHROOM)	\$ 1,183,400.00
'D' - OPERATIONS AND MAINTENANCE	\$ 2,615.00
Subtotal 'A' to 'E' =	\$ 1,457,801.00
Contingency Allowance (approx 15%) =	\$ 220,000.00
Subtotal =	\$ 1,677,801.00
HST (13%) =	\$ 218,114.13
TOTAL (HST Inclusive) =	\$ 1,895,915.13

Items B2/C2 is based on cost estimate provided by Patton Excavating & Grading LTD, received on January 17, 2024. (Quote: 750 sq.m mantle at \$116,424 and 3,120 sq.m mantle at \$494,802)
 Item E1 is based on a pumpout costing \$2,615, which is required every 3-5 years depending on system usage.

Meeting Date: October 23, 2025 **Item 7.7**
Report Date: August 19, 2025
Submitted by: Kelli Smith, Greg Wilcox

Subject: Master Plan for Coldstream Conservation Area

Recommendation:

That the Board of Directors acknowledges the report regarding the updated Master Plan for Coldstream Conservation Area; and further directs staff to proceed with stakeholder and public consultation.

Background:

Staff have recently updated the Master Plan for the Coldstream Conservation Area as part of the objectives outlined in the 2024 Conservation Areas Strategy and as indicated by the strategic goals in the 2023-2028 Strategic Plan. Many of the property management and master development plans for the lands owned by the SCRCA are outdated and require significant updates. Highlights of the plans are provided below, for additional information see the draft Master Plan attached to this report.

Coldstream Conservation Area Highlights

- Determine future use or plan for the concession/washroom building.
- Decommissioning of old pit and vault washrooms.
- Highlights the unique environmental features found on the property.

Strategic Objectives(s):

Goal 3.9 Management of Authority Owned Lands

Through the completion and implementation of Property Management Plans, the Authority continues to manage its lands to balance revenue production with effective management of woodlands, wetlands, and biodiversity.



Coldstream Conservation Area Master Plan



Last Management Plan: November 1975

Date Updated: May 2025

Acknowledgements

< A space to show appreciation/extend thanks to any groups/individuals that dedicated time, data or funds to the process of creating/updating the management plan. (Delete section if unused) >

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Executive Summary

< INSERT summary of entire document here. Highlight of property uses, environmental features and recommendations. >

This plan provides direction for the management of <property name> for the next 10 to 20 years. Updates may be completed during this time on an as needed basis.

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Table 9: Description of Recreational Infrastructure
Table 10: Final Management Recommendations

Goals and Objectives

This master plan will serve to direct staff in forecasting the necessary upgrades and maintenance for the site. It will prioritize the protection, management and enhancement of habitats on the site and benefit wildlife within the watershed. This plan will also encourage public safety, environmental education, passive and active recreation and a healthy environment within our watershed for the next 10-20 years. The plan will align with the St. Clair Region Conservation Authority's (SCRCA) core values.

Vision

- A healthy and sustainable natural environment in the St. Clair Region.

Mission

- to provide leadership through coordination of watershed planning, implementation of resource management programs and promotion of conservation awareness, in cooperation with others.

This plan supports the following goals and objectives as outlined in SCRCA's strategic plan.

Goal 1. Provide recreation and education opportunities for the public to enjoy, learn from, and respect our natural environment

Through the lands we manage and own, as well as the educational programs we deliver, the SCRCA provides opportunities for our citizens to understand and appreciate the value of their natural environment as well as the social and economic benefits of protecting that environment.

Objective

- *Ensure the conservation lands remain valuable assets to the community and can withstand the pressures of growth and climate change*

Goal 2. Protect, manage and restore our woodlands, wetlands and natural habitat.

Because what we do on land is reflected in our water and ecosystems, the SCRCA develops programs that protect our land resources and promotes watershed stewardship practices that lead to healthy, sustainable communities and industries.

Objective

- *Manage Authority owned lands through a balance of revenue production and effective management of woodlands, wetlands and biodiversity*

Purpose of the Plan

The Coldstream Conservation Area Master Plan has been prepared as a reference document to guide the current and future uses, management, operation, and development of this property while meeting the goals and objectives of the St. Clair Region Conservation Authority. These goals and objectives are related to the SCRCA Conservation Areas Land Strategy. This master plan provides broad context direction for day-to-day operation and includes existing management practices and recommendations for the property and relies on the input of stakeholders and the public.

Existing Conditions

General Description

The Coldstream Conservation Area is a popular conservation area used by the residents of Poplar Hill/Coldstream as well as the surrounding areas. The Coldstream Conservation Area consists of 117 acres (47.33 hectares) occupying part Lot 8 Concession 8 and part Lots 6 through 9, Concession 9 in the Township of Middlesex Centre (formerly Lobo Township), Middlesex County. The Sydenham River winds through the property and is impounded at the Coldstream Dam. The property is bisected by Coldstream Road and contains hiking trails on each side of the property.

A historic feature on the property is the remnant foundation of the Marsh Mill. This foundation marks the location of a mill site going back to 1842. The mill was originally powered by water and used as a sawmill to supply lumber to the Marsh Furniture Factory. Associated with the Marsh Mill was the Marsh General Store which sits adjacent to Mill Road and eventually referred to as the Marsh Store. The Marsh store was severed from the Coldstream Conservation Area and sold in 1994. Much of the land surrounding the Coldstream Conservation Area is in agriculture and residential development.

Location Details

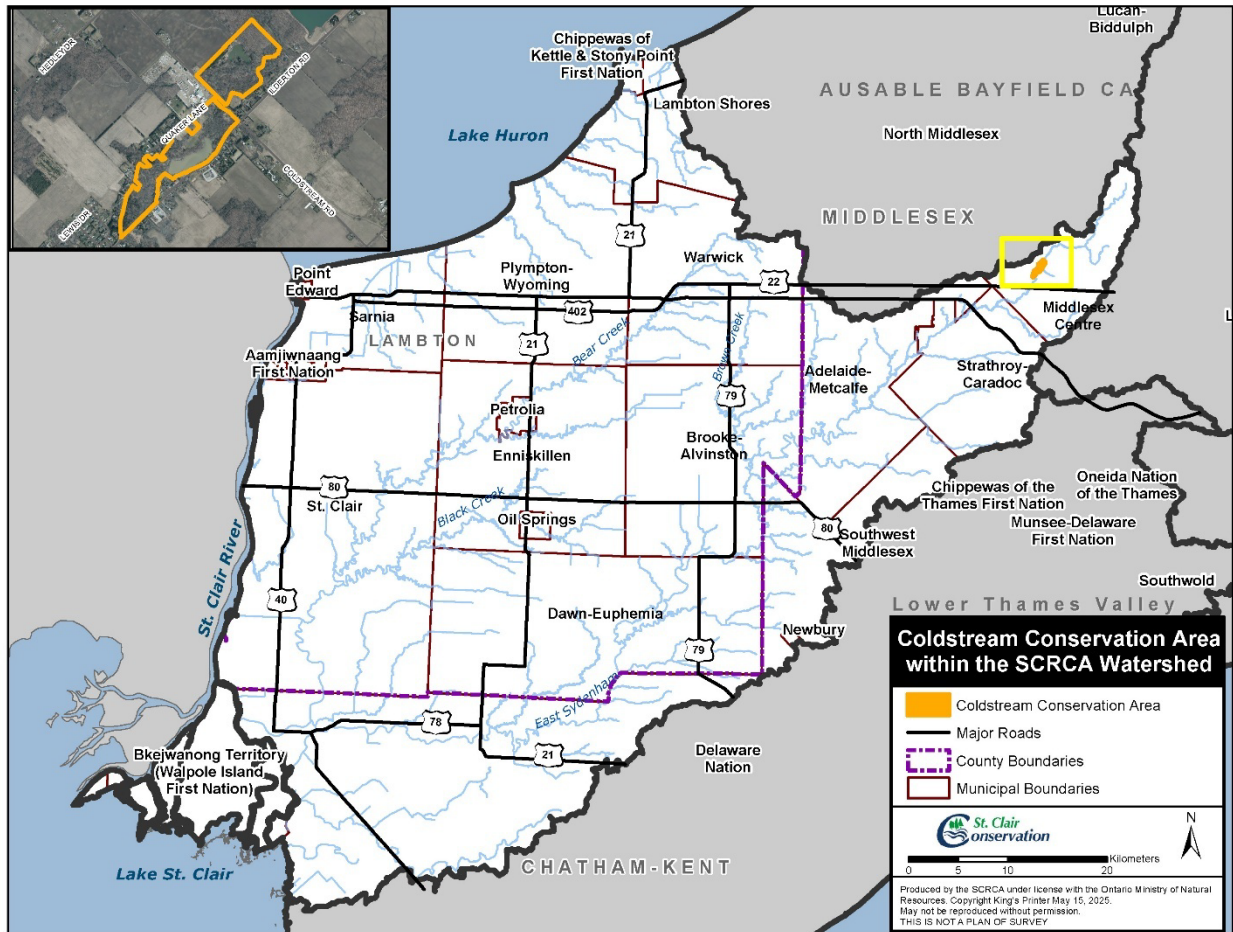


Figure 1 Regional Context Map

The Coldstream Conservation Area is situated in the Sydenham Headwaters sub watershed roughly 11 km downstream of its source at Ilderton. The property is located on Quaker Lane in the hamlet of Coldstream, Ontario. It is situated approximately 13 km northeast of Strathroy and 25 km west of London.

Area	117 acres (47.33 ha)
Address	327 Quaker Lane, Lobo ON (main parking lot)
Lot and Concession	Lot 6-9, Con 8-9 Middlesex Centre (Lobo)
Municipality/Town/City	Poplar Hill - Coldstream
County/Region	Middlesex
Watershed	St. Clair Region
Ecodistrict	7e-6
Latitude	43.0188460000000000, -81.4990870000000000
Longitude	43.0255630000000000, -81.4932990000000000
Zoning of the Property	Open Space

Table 1 Location Details

Site Acquisition and History

The Coldstream Conservation Area was acquired in 1967-1971 as 10 separate parcels. Prior to purchase, much of the property was utilized for extraction of gravel with the final property, Lot 9 Concession 9 on the northeast side of Coldstream Road having active extraction up until termination of the lease in 1975. Since its inception the Coldstream Conservation Area has been developed and utilized as a multi-use recreation area meeting the overall goals of the Authority to provide a wide range of recreational opportunities for the people living in and around the watershed.

Capital development on the property over the first ten years consisted of developing a road system and parking lots, a 60-site campground with 28 serviced sites, a dam and 16 acre lake complete with a 500 foot long beach, a combination washroom/concession building, a picnic pavilion, a boathouse, a maintenance shed, a dumping station, a gatehouse, footbridges, outhouses, a nature trail with boardwalk, installation of sport fields, landscaping and tree planting. Camping was active from 1972 and into the 80's. By the mid 80's due to security concerns camping was reduced to group/scout camping only and slowly phased out. Outhouses were installed to accommodate campers and visitors of the park during the peak popularity of the campground. These were pit and vault systems that were emptied out on a regular basis and the waste trucked to the dumping station for treatment. Since the decline in camping at the park and the alternative use of portable washrooms, the outhouses have gone into disrepair and require removal. These outhouse systems have the potential to cause environmental risk from leaching, and their close proximity to the river could pose a significant risk to the water quality and health of humans and wildlife.

In addition to camping and recreation the property was also a location for outdoor education, one program in particular, Christmas at the Marsh Store, was very popular and was the only program offered for several years. Education programming ran until the early 90's when the Marsh Store was severed and sold for a tearoom/craft store.

In 1970, the Coldstream Dam and reservoir were constructed for recreational purposes including swimming, boating and fishing. The dam structure is approximately 3.35m high and consists of a 45m long retaining wall of vertical sheet piles made of heavy gauge ARCH-Type individual sheets locked together at joint during installation. Large armor stone was placed on the downstream side of the dam ranging in size from 16-24 inches in diameter and placed on a slope of 3:1 horizontal to vertical. An earthen berm approximately 40m long is located at the southern end of the sheet pile dam. The dam does not contain any spillways or stop logs so there is no way to adjust the water levels in the reservoir. The dam is equipped with a bottom draw valve or a low flow bypass valve however, the condition of the valve is believed to be non-operatable. Recreational use of the reservoir declined in the early 80's after bacteriological counts conducted by the Middlesex County Health Unit led to an extended closure of the Coldstream beach to swimmers. Sedimentation over time in the reservoir has also resulted in shallower water preventing other recreational activities like boating.

In 1994, the Coldstream Conservation Area was leased to the municipality and managed by a local community group called the Enviro Friends of Coldstream. This

lease agreement continued until 2022 at which point the lease agreement with the municipality was dissolved and the SCRCA took over the management of the property.

Partnership Agreements

The Enviro-Friends of Coldstream was a grassroots environmental community group who volunteered from 1994 – 2022 to operate and maintain the Coldstream Conservation Area. The community group hosted many fundraising events to support updates and improvements to the park. The final project of the group stands in the form of the Bruce Alan 'Al' Bycraft Memorial Bridge. This bridge provides improved accessibility to the property and would not have been possible without the support of the Enviro-Friends of Coldstream and the Poplar Hill Lions who donated funds to make the project a reality.

Conservation Authority Programs/Services

Due to changes under section 21.1(1) and (2) to the *Conservation Authorities Act* R.S.O., c.27 as amended, and prescribed through Ontario Regulation 686/21 Mandatory Programs and Services, the SCRCA is required to categorize all programs of the authority into three categories (Category 1, 2 and 3). The dams located on the property fall within Category 2. Category 2 programs and services are those that a conservation authority provides at the request of a Municipality. The funding is provided by the benefiting Municipality.

The Coldstream Conservation Area also falls under the Category 2 program under Ontario Regulation 686/21 of the *Conservation Authorities Act* for Mandatory Programs and Services.

Environmental Features

Ecological Designations

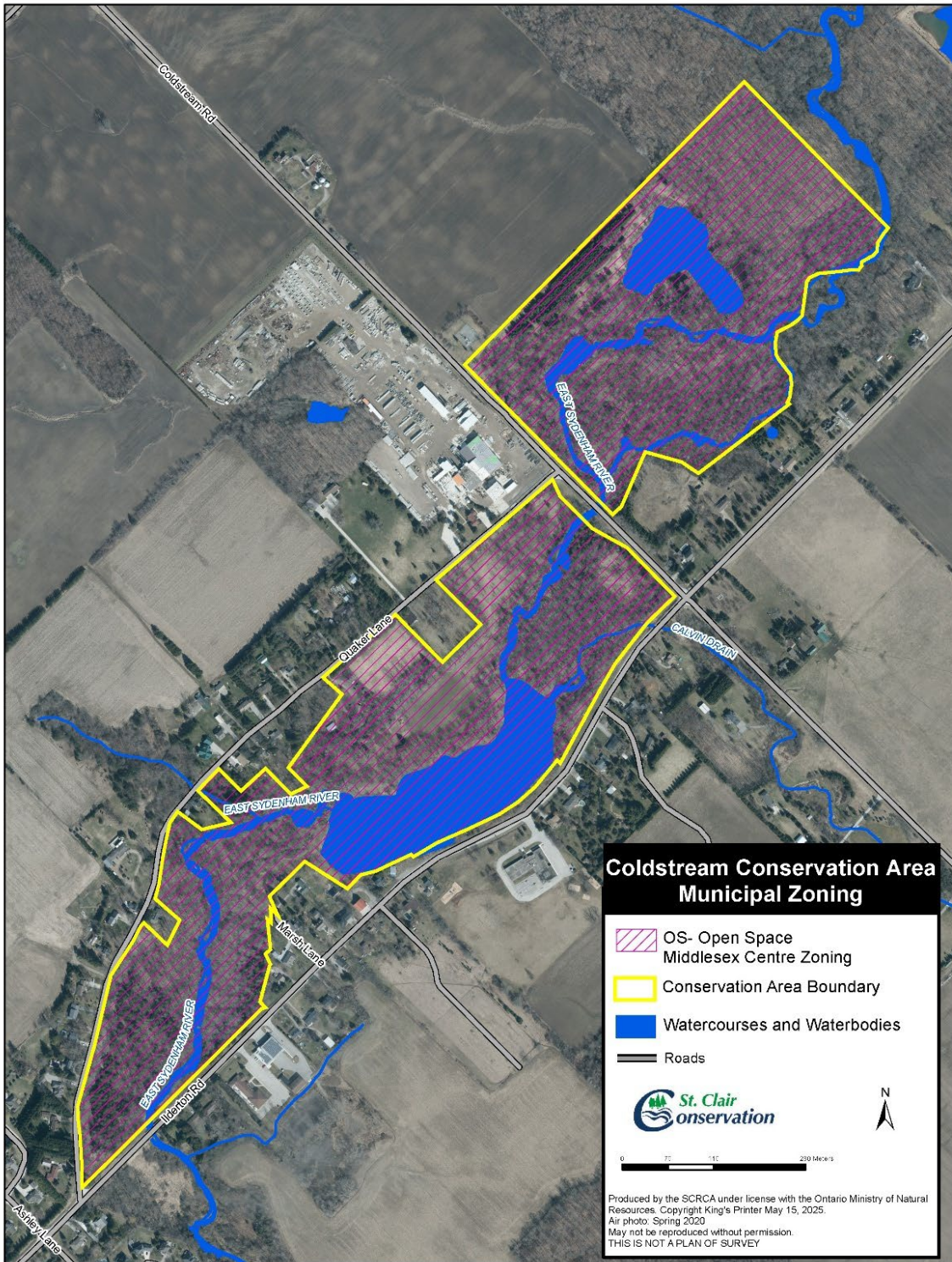


Figure 2 Zoning Designations Map

The Coldstream Conservation Area is part of the following environmental designations:

- Provincially Significant Wetland – Sydenham River Wetland Complex
- Significant meadow
- Thicket
- Mixed woodland
- Wetland swamp
- Valley land

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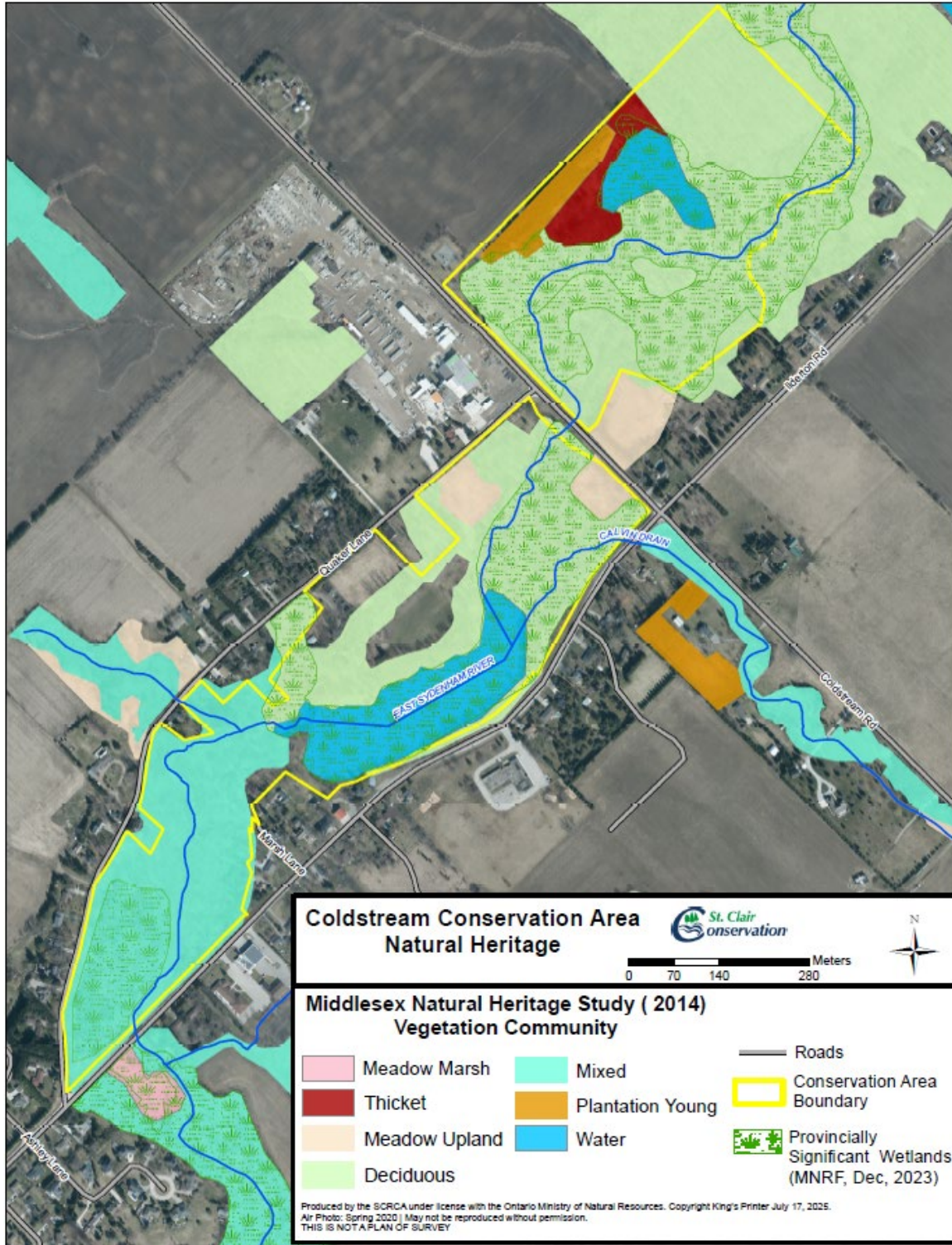


Figure 3 Natural Heritage Designations Map

Portions of the property are also part of the Conservation Land tax Incentive Program (CLTIP).

The Sydenham River, which meanders through the Coldstream Conservation Area, is the only major watershed that lies completely in the Canadian Carolinian Life Zone and supports an incredible amount of biodiversity. At least 80 species of fish and 34 species of freshwater mussels are found in the Sydenham, making it one of the most species-rich watersheds in all of Canada. More than 20 species of fish, mussels, and reptiles that live in and around the Sydenham River are listed nationally or provincially as Species at Risk and include species of global conservation concern.

Coldstream Conservation Area is also situated within a portion of the Sydenham River Wetland complex, a Provincially Significant wetland consisting of deciduous swamp and a small Cedar Swamp. Dominated by White cedar and Yellow birch this is a very rare habitat feature not often found in southwestern Ontario.

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Natural Hazards and Hydrology

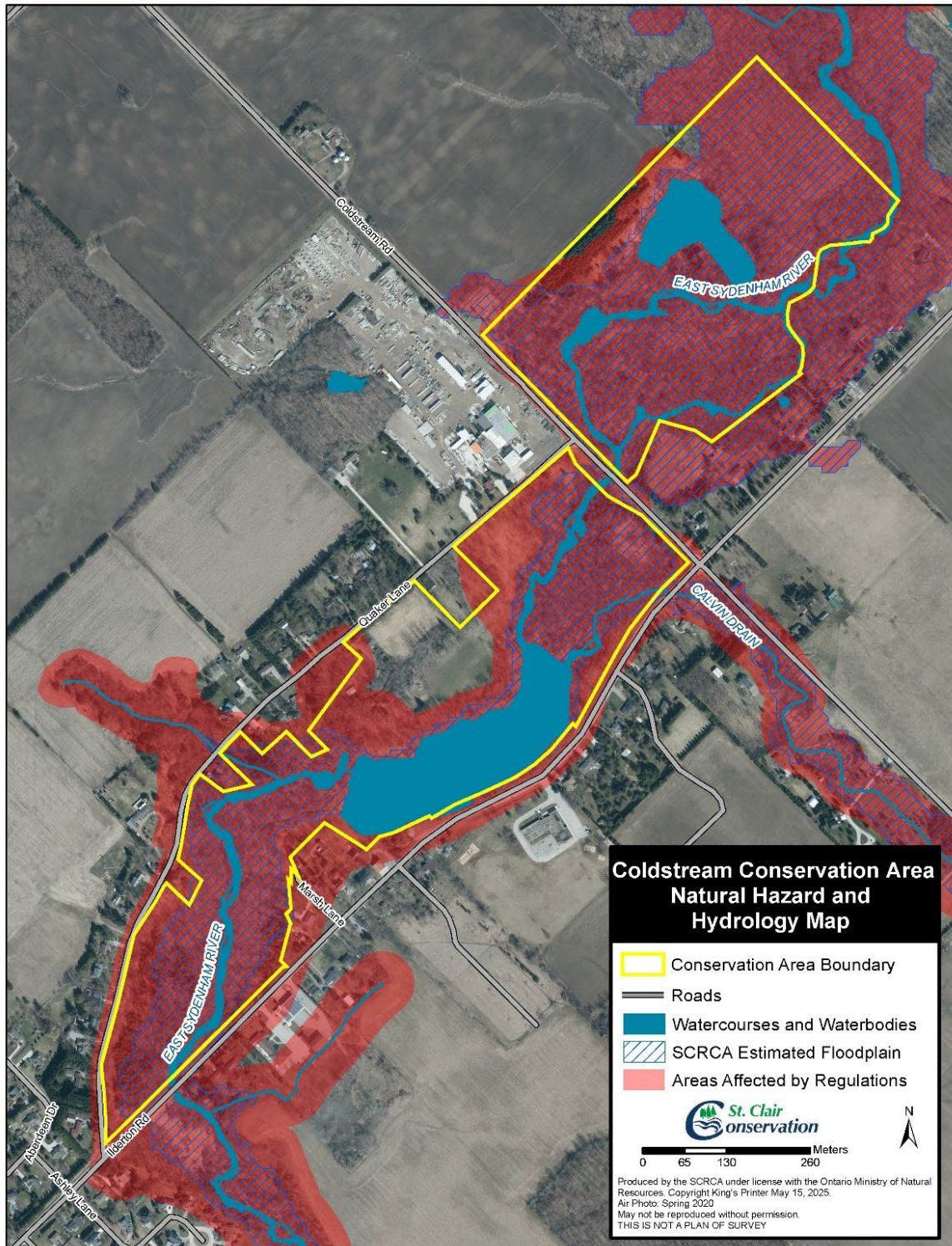


Figure 4 Natural Hazards and Hydrology Map

The Coldstream Conservation area is traversed by the headwaters of the Sydenham River draining a watershed of roughly 63 square kilometers. Headwaters refer to the furthest

upstream point of a watershed and are made up of small fast-moving watercourses and wetlands. The headwaters of any river system are important for the health of the system as they aid in the control of flooding, provide clean water and support aquatic life.

The Coldstream Dam is one of only two impoundments on the East Sydenham River. Dams can negatively impact river hydrology and ecosystems by creating barriers to fish passage, impeding mussel distribution, altering thermal regimes, altering sediment transport, and degrading water quality (temperature, oxygen levels, algal growth, and bacteria levels). Local concerns have been raised about the water quality in the reservoir, specifically the algal blooms that occur.

Approximately 98% of the property is regulated by the SCRCA for floodplain, wetland and meander belt due to presence of the river, valley and low-lying areas. Much of the property has been identified as part of the Sydenham River Wetland Complex (SC8) a Provincially Significant Wetland evaluated by the Ministry of Natural Resources and Forests.

ELC Inventory

The Ecological Land Classification system (ELC) is a hierarchical system that identifies and describes areas of land with similar physical features. The purpose of the ELC is to help classify land, through mapping, into ecological units for planning and resource management.

Ecological Land Classification (ELC) surveys were completed on May of, 2024. The property is located in:

Ecozone	Mixedwood Plains
Ecoregion	Lake Erie-Lake Ontario
Eco District	7E-6, London

The following 12 types of vegetation communities were identified on the 47.33-hectare property including four forests, three swamps, one thicket, open water, one meadow, plantations, and communities with cultural influence consisting of parkland. Locations are displayed on the map and further described in the following table.

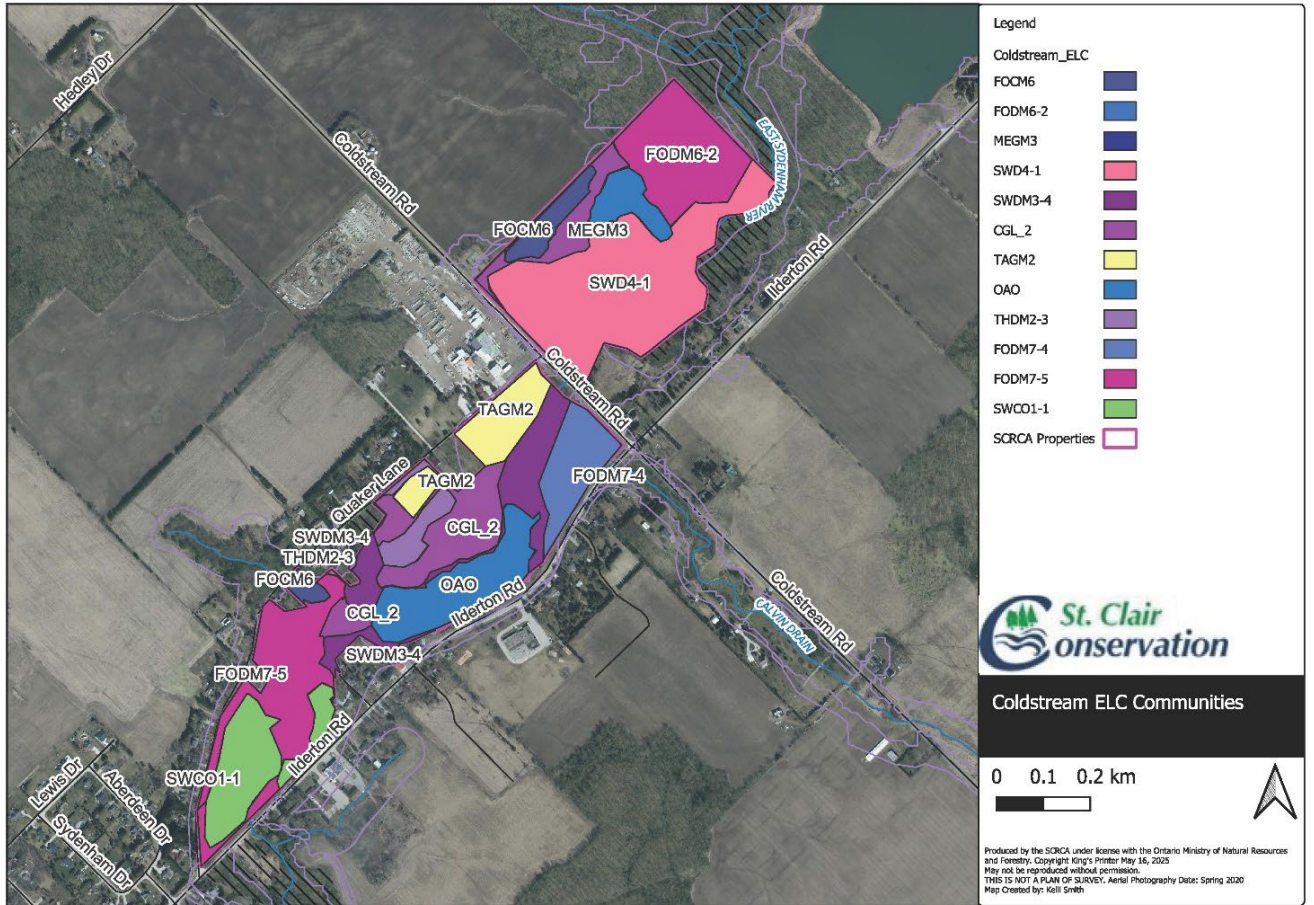


Figure 5 ELC Vegetation Communities Map

Vegetation Community Sizes

Vegetation Community	ELC Code	Vegetation	Environment	S-Rank	Size (ha)
Naturalized Conifer Plantation	FOCM6	Not given	Not given	--	1.49
Dry-Fresh Graminoid Meadow	MEGM3	Not given	Not given	--	3.75
Fresh-Moist Sugar Maple-Black Maple Deciduous Forest	FODM6-2	Sugar Maple with Green Ash, Black Ash Red Maple, White Elm, Yellow Birch, Basswood and Beech associates; dominant	Moist yet well drained sites; often along floodplains	S3?	4.97

		species varies			
Willow Mineral Deciduous Swamp	SWD4-1	Black willow, reddish willow, peach-leaved willow with White Elm, Green Ash, Manitoba Maple, Trembling Aspen		S5	11.10
Manitoba Maple Mineral Deciduous Swamp Type	SWDM3-4	Not given	Not given	S5	2.22
Fresh-Moist Black Walnut Lowland Deciduous Forest	FODM7-4	White Elm, willows, Black Walnut, Black Maple, Basswood, Green ash and Black Ash dominate separately or in variable mixtures	Typically associated with riparian zones and terraces; stream and river banks and floodplains	S2, S3	2.59
Medium Mineral Mixed Plantation	TAGM2	Not given	Loamy substrates	--	2.65
Chokecherry Deciduous Shrub Thicket	THDM2-3	Not given	Not given	--	1.2
Fresh-Moist Black Maple Lowland Deciduous Forest	FODM7-5	White Elm, willows, Black Walnut, Black Maple, Basswood, Green ash and Black Ash	Typically associated with riparian zones and terraces; stream and river banks and floodplains	S3?	10.15

		dominate separately or in variable mixtures			
White Cedar Organic Coniferous Swamp	SWC01-1	Almost entirely dominated by White Cedar	Organic substrates – Of, Om, Oh (OIP 1985)	S5	2.65

Table 2 Vegetation Communities Description and Size

Two of the vegetation communities contain provincially significant ecosites. The Fresh-Moist Black Walnut Lowland Deciduous Forest Type (FODM7-4) has an S-rank of S2, S3 which is Rare to Uncommon in Ontario with an estimated less than 100 occurrences and an estimated areal extent of less than 1,000 ha. It is considered to have a very small range in the province (less than 3%). The Fresh-moist Sugar maple-Black maple deciduous forest type (FODM6-2) has an S-rank of S3?, meaning this type of community is ranked as Rare to Uncommon but not enough numeric data is known. It is estimated there are less than 100 occurrences in the province of this community and an estimated areal extent of less than 25,000ha and is considered to have a very small range (less than 3%).

Reference: *Natural heritage resources of Ontario: S-ranks for communities in site regions 6 and 7* <https://www.ontario.ca/document/significant-wildlife-habitat-technical-guide/appendix-j-natural-heritage-resources-ontario-s-ranks-communities-site-regions-6-and-7#section-7>

The Fresh Moist Sugar Maple – Black Maple Forest Type is also home to one of the most diverse spring ephemeral habitats in the London area, with species such as White Trout Lily, Bloodroot, Moonseed, and Trillium blooming after the first hint of warm weather in the spring. Spring ephemerals are vital to pollinators and often provide bees, beetles, and other pollinators with their first source of nectar during the spring season.

Species – Flora and Fauna

The following table provides a list of species that were witnessed incidentally during the 2024 site visits. Supplemental surveys and research have been conducted on the property by other organizations and academic institutions resulting in additional species records (see Appendix C). SCRCA staff has identified two provincially rare flora species on the property, one of which is a species at risk. The habitat for these species should be protected and supported and is further described in the final management recommendations section.

Flora

Floral Inventory							
Scientific Name	Common Name	CW	GRank	COSEWIC	Nrank	SARO	SRank
<i>Rubus x neglectus</i> (<i>Rubus idaeus</i> ssp. <i>strigosus</i> X <i>Rubus</i> <i>occidentalis</i>)	Black, Red, and Hybrid Raspberry)		GNA		NU		SNA
<i>Salix x sepulcralis</i>	(<i>Salix alba</i> X <i>Salix</i> <i>babylonica</i>)	-3	GNA		NNA		SNA
<i>Viola x malteana</i>	(<i>Viola labradorica</i> X <i>Viola rostrata</i>)		GNA		NNR		SNA
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	3	G5		N5		S5
<i>Tilia americana</i>	American Basswood	3	G5		N5		S5
<i>Fagus grandifolia</i>	American Beech	3	G5		N5		S4
<i>Ulmus americana</i>	American Elm	-3	G5		N5		S5
<i>Elaeagnus umbellata</i>	Autumn Olive	3	GNR		NNA		SE3
<i>Barbarea vulgaris</i>	Bitter Wintercress	0	GNR		NNA		SE5
<i>Carya cordiformis</i>	Bitternut Hickory	0	G5		N5		S5
<i>Prunus serotina</i>	Black Cherry	3	G5		N5		S5
<i>Robinia pseudoacacia</i>	Black Locust	3	G5		NNA		SE5
<i>Acer nigrum</i>	Black Maple	3	G5		NNR		S4?
<i>Juglans nigra</i>	Black Walnut	3	G5		N4		S4?
<i>Sanguinaria canadensis</i>	Bloodroot	3	G5		N5		S5
<i>Ranunculus hispidus</i>	Bristly Buttercup	0	G5		NNR		S3
<i>Cornus canadensis</i>	Bunchberry	0	G5		N5		S5
<i>Quercus macrocarpa</i>	Bur Oak	3	G5		N5		S5
<i>Asarum canadense</i>	Canada Wild-ginger	5	G5		N5		S5
<i>Prunus virginiana</i>	Choke Cherry	3	G5		NNR		S5
<i>Arctium minus</i>	Common Burdock	3	GNR		NNA		SE5
<i>Taraxacum officinale</i>	Common Dandelion	3	G5		N5		SE5

<i>Ceratophyllum demersum</i>	Common Hornwort	-5	G5		N5		S5
<i>Rubus idaeus</i>	Common Red Raspberry	3	G5		N5		S5
<i>Sonchus oleraceus</i>	Common Sow-thistle	3	GNR		NNA		SE5
<i>Phleum pratense</i>	Common Timothy	3	GNR		NNA		SE5
<i>Ilex verticillata</i>	Common Winterberry	-3	G5		N5		S5
<i>Lysimachia nummularia</i>	Creeping Jennie	-3	GNR		NNA		SE5
<i>Rumex crispus</i>	Curly Dock	0	GNR		NNA		SE5
<i>Hesperis matronalis</i>	Dame's Rocket	3	G4G5		NNA		SE5
<i>Populus deltoides</i>	Eastern Cottonwood	0	G5		N5		S5
<i>Juniperus virginiana</i>	Eastern Red Cedar	3	G5		N5		S5
<i>Thuja occidentalis</i>	Eastern White Cedar	-3	G5		N5		S5
<i>Pinus strobus</i>	Eastern White Pine	3	G5		N5		S5
<i>Plantago lanceolata</i>	English Plantain	3	G5		NNA		SE5
<i>Lonicera periclymenum</i>	European Honeysuckle		GNR		NNA		SEH
<i>Larix decidua</i>	European Larch	5	G5		NNA		SE2
<i>Floerkea proserpinacoides</i>	False Mermaidweed	0	G5	NAR	N4		S4
<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil	3	GNR		NNA		SE5
<i>Lonicera dioica var. glaucescens</i>	Glaucous-leaved Honeysuckle	3	G5T5		N5		SU
<i>Zizia aurea</i>	Golden Alexanders	0	G5		N5		S5
<i>Cornus racemosa</i>	Gray Dogwood	0	G5		N5		S5
<i>Fraxinus pennsylvanica</i>	Green Ash	-3	G5		N5		S4
<i>Arisaema dracontium</i>	Green Dragon	-3	G5	SC	N3	SC	S3
<i>Glechoma hederacea</i>	Ground Ivy	3	GNR		NNA		SE5
<i>Geranium robertianum</i>	Herb-Robert	3	G5		N4		S5
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit	-3	G5		N5		S5

<i>Maianthemum racemosum</i>	Large False Solomon's Seal	3	G5		N5		S5
<i>Lemna minor</i>	Lesser Duckweed	-5	G5		N5		S5?
<i>Acer negundo</i>	Manitoba Maple	0	G5		N5		S5
<i>Podophyllum peltatum</i>	May-apple	3	G5		N5		S5
<i>Heracleum sphondylium</i>	Meadow Cow Parsnip	5	GNR		NNA		SE1
<i>Rosa multiflora</i>	Multiflora Rose	3	GNR		NNA		SE5
<i>Quercus rubra</i>	Northern Red Oak	3	G5		N5		S5
<i>Picea abies</i>	Norway Spruce	5	G5		NNA		SE3
<i>Vinca minor</i>	Periwinkle	5	GNR		NNA		SE5
<i>Ribes cynosbati</i>	Prickly Gooseberry	3	G5		N5		S5
<i>Sambucus racemosa</i> <i>ssp. Pubens</i>	Red Elderberry	3	G5T5		N5		S5
<i>Trillium erectum</i>	Red Trillium	3	G5		N5		S5
<i>Cornus sericea</i>	Red-osier Dogwood	-3	G5		N5		S5
<i>Phalaris arundinacea</i>	Reed Canary Grass	-3	G5		N5		S5
<i>Vitis riparia</i>	Riverbank Grape	0	G5		N5		S5
<i>Euonymus obovatus</i>	Running Strawberry Bush	3	G5		N5		S4
<i>Acer saccharinum</i>	Silver Maple	-3	G5		N5		S5
<i>Symplocarpus foetidus</i>	Skunk Cabbage	-5	G5		N5		S5
<i>Impatiens capensis</i>	Spotted Jewelweed	-3	G5		N5		S5
<i>Hypericum punctatum</i>	Spotted St. John's-wort	0	G5		N5		S5
<i>Geum vernum</i>	Spring Avens	3	G5		N4		S4
<i>Maianthemum stellatum</i>	Star-flowered False Solomon's Seal	0	G5		N5		S5
<i>Acer saccharum</i>	Sugar Maple	3	G5		N5		S5
<i>Platanus occidentalis</i>	Sycamore	-3	G5		N4		S4
<i>Thalictrum pubescens</i>	Tall Meadow-rue	-3	G5		NNR		S5
<i>Parthenocissus vitacea</i>	Thicket Creeper	3	G5		N5		S5
<i>Vicia cracca</i>	Tufted Vetch	5	GNR		NNA		SE5

<i>Liriodendron tulipifera</i>	Tulip Tree	3	G5		N4		S4
<i>Jeffersonia diphylla</i>	Twingleaf	3	G5		N4		S4
<i>Fraxinus americana</i>	White Ash	3	G5		N5		S4
<i>Populus alba</i>	White Poplar	5	G5		NNA		SE5
<i>Picea glauca</i>	White Spruce	3	G5		N5		S5
<i>Trillium grandiflorum</i>	White Trillium	3	G5		N5		S5
<i>Erythronium albidum</i>	White Trout-lily	3	G5		N4		S4
<i>Daucus carota</i>	Wild Carrot	5	GNR		NNA		SE5
<i>Rubus idaeus ssp. strigosus</i>	Wild Red Raspberry	3	G5T5		N5		S5
<i>Fragaria virginiana</i>	Wild Strawberry	3	G5		N5		S5
<i>Betula alleghaniensis</i>	Yellow Birch	0	G5		N5		S5

Table 3 Flora Species Observed

Fauna

The following table lists the fauna species observed during the 2024 field surveys. SCRCA staff did not identify or observe any species at risk during the survey. Though some special concern species like Snapping Turtle have been observed on the property on multiple occasions.

Fauna Species Inventory				
Scientific Species Name	Common Species Name	Srank	COSEWIC	SARA Status
<i>Branta canadensis</i>	Canada Goose	S5	0	0
<i>Anas platyrhynchos</i>	Mallard Duck	S5	0	0
<i>Ardea herodias</i>	Great Blue Heron	S4	0	0
<i>Castor canadensis</i>	Beaver	S5	0	0
<i>Anaxyrus americanus</i>	American Toad	S5	0	0
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	S5	0	0
<i>Corvus brachyrhynchos</i>	American Crow	S5	0	0
<i>Cardinalis cardinalis</i>	Northern Cardinal	S5	0	0
<i>Poecile atricapillus</i>	Black-capped Chickadee	S5	0	0
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	S5	0	0
<i>Spinus tristis</i>	American Goldfinch	S5	0	0
<i>Dumetella carolinensis</i>	Gray Catbird	S5B, S3N	0	0
<i>Turdus migratorius</i>	American Robin	S5	0	0
<i>Melospiza melodia</i>	Song Sparrow	S5	0	0
<i>Cyanocitta cristata</i>	Blue Jay	S5	0	0
<i>Tamias striatus</i>	Eastern Chipmunk	S5	0	0
<i>Sitta carolinensis</i>	White-breasted Nuthatch	S5	0	0
<i>Icterus galbula</i>	Baltimore Oriole	S4B	0	0

Dryobates villosus	Hairy Woodpecker	S5	0	0
Myiarchus crinitus	Great Crested Flycatcher	S5B	0	0
Lithobates sylvaticus	Wood Frog	S5	0	0
Aix sponsa	Wood Duck	S5B, S3N	0	0
Dryocopus pileatus	Pileated Woodpecker	S5	0	0
Molothrus ater	Brown-headed Cowbird	S5	0	0
Spinus pinus	Pine Siskin	S5	0	0
Colaptes auratus	Northern Flicker	S5	0	0
Quiscalus quiscula	Common Grackle	S5	0	0
Charadrius vociferus	Killdeer	S4B	0	0
Setophaga coronata	Yellow-Rumped Warbler	S5B, S4N	0	0
Vireo gilvus	Warbling Vireo	S5B	0	0
Pheucticus ludovicianus	Rose-breasted Grosbeak	S5B	0	0

Table 4 Fauna Species Observed

Forest Management

SCRCA staff completed a forest inventory in 2012, and mapping was updated in 2012. This inventory looked at the forested areas, woodlands, and plantations throughout the property and identified management actions and noted damage caused by insects, disease and pests. The 2012 forest inventory is included in Appendix B. Although there is currently no active harvesting planned, woodland management in the form of tree removal may occur due to risk management or habitat improvements. Updated forest inventories, forest health monitoring and climate change may suggest a more active management role of the woodlands.

It is also noted that as the effects of a changing climate become more prevalent, the growth and health of the forests will be affected. One anticipated change is the lack of available moisture as temperatures increase. This will put certain native woody species outside of their current and historic growth zones. To mitigate these impacts, the SCRCA will ensure species diversity is maintained or increased in the forest communities and encourage or introduce drought tolerant species or those with the greatest climatic range for planting or reforestation projects to ensure the sustainability of these forests.

Site Use

Current Land Uses

The Coldstream Conservation Area provides passive recreation with over 4 kilometers of nature trails. The following table identifies the permitted uses on the property.

Permitted & Unpermitted Site Uses			
Activity	Permitted (Yes/No)	Occurring (Yes/No)	Notes: (e.g. Conditions, Parties Involved, Start/End Date)
Passive Recreation			
Dog Walking	Yes	Yes	Dogs must be on a leash and under control of the owner at all times.
Fishing	Yes	Yes	Must follow provincial regulations and guidelines.
Foraging (Food Gathering)	No	No	Where requested collaboration with Indigenous communities is encouraged.
Motorboat Use	No	No	Not permitted on the reservoir.
Off Road Vehicle Use	No	Yes	Damage has occurred on the property, damaging trails and the river bed.
Horseback Riding	No	No	
Hunting	No	No	
Mountain Biking	Yes	Yes	Bikes are permitted on marked trails but should remain aware

			of other users and travel at modest speeds.
Hiking	Yes	Yes	Permitted only on marked trails
Paddling	Yes	Yes	Canoes and kayaks, no motors
Snowmobiling	No	No	
Observing/Photographing Nature	Yes	Yes	
Swimming	No	No	Reservoir is unsafe for swimming due to high bacteria levels.
Recreational Drone Use	No	No	Permission may be available by permit.
Active Recreation			
Soccer	Yes	No	Old soccer field present at park but not actively used, was previously used for minor soccer program but no longer meets their needs. Soccer fields are not level and would require investment to make them functional again. Field is not currently offered to rent due to poor condition.
Snow Shoeing	Yes	No	

Playgrounds	Yes	Yes	
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Table 5 Permitted and Unpermitted Site Uses

***Some unpermitted activities may be assessed on a case-by-case basis and special permission can be granted in certain circumstances.*

Land and Resource Management Activities

The SCRCA may conduct a variety of activities to improve the land and natural resources of the property or to generate revenue. Examples of these activities are described below.

Fish Stocking – fish stocking has occurred on the property in the past when funding for such activities was available. Although there is no current fish stocking occurring it is an activity that may be done where the SCRCA feels the activity will improve the natural ecosystem function and/or improve recreational opportunities.

Forestry (reforestation, harvesting) - these activities are not active on a yearly basis but could be completed when recommended through the Forest Management Plan.

Planting (native species, other) - this activity occurs minimally throughout the property and generally consists of infill planting in low numbers through the SCRCA memorial tree program or other donations/grants.

Invasive Species Management – ongoing activity, use of manual and/or chemical control when needed. The scope of project varies depending on funding.

Herbicide Application – in general herbicide is not used on the property for aesthetic purposes, limited spot spraying for poison ivy or for invasive species control may be completed where necessary.

Prescribed Fire – although prescribed fire is used as a management activity on some properties particularly in prairie or pollinator habitat the use of prescribed fire may not be an appropriate control method for this property.

Adjacent Land Use

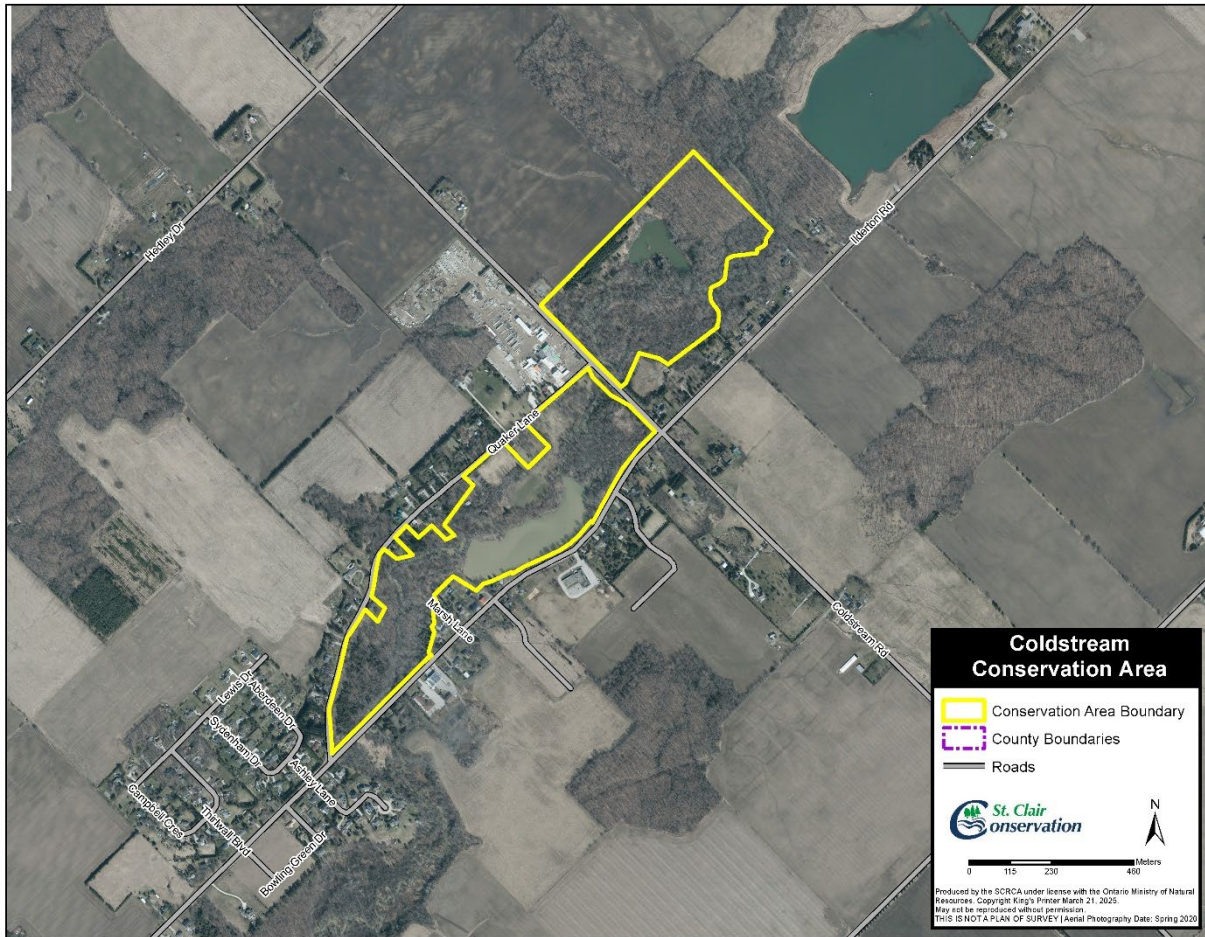


Figure 6 Adjacent land use surrounding Coldstream CA

The Coldstream Conservation Area is surrounded predominantly by agricultural land. Single family residential homes are also present within the hamlet of Coldstream and industrial infrastructure in the form of a concrete factory (Coldstream Concrete) lies adjacent to the conservation area on the northwest corner of the Quaker Lane/Coldstream Road junction. Significant woodlands and natural areas also exist in the surrounding lands.

The boundaries indicated on this map are approximate and not to survey grade.

Development and Infrastructure
Buildings and Structures

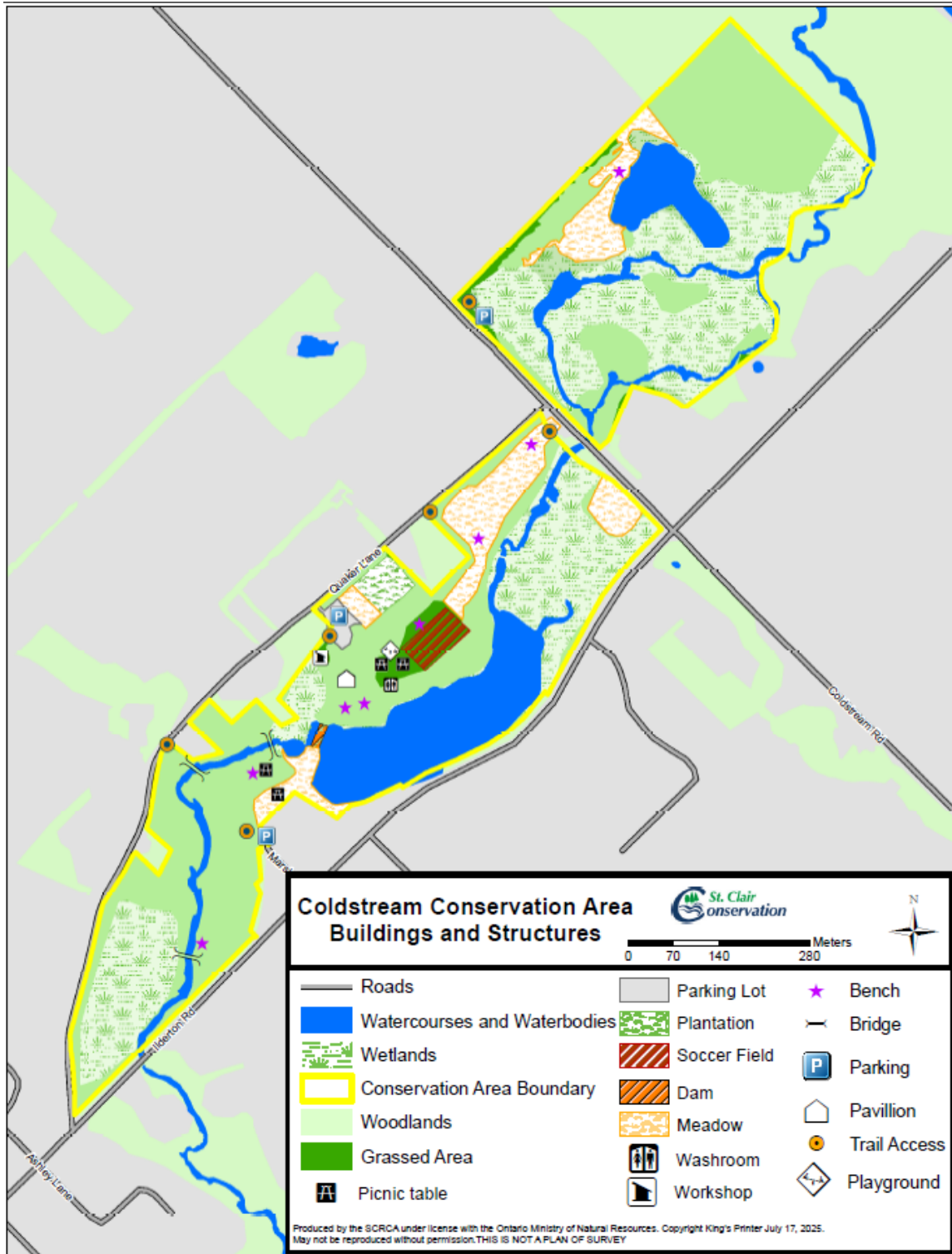


Figure 7 Buildings and Structures

Description	Comments
Five-sided pavilion - 38' diameter Pavilion in day-use area, wood structure with shingled roof and steel posts.	Recent roof replacement in 2019. Picnic tables provided in pavilion. One hydro receptable located in pavilion, fed from concession building. No longer rented to groups as of 2024 due to challenges with some renters. Some minor maintenance required soon.
Concession building and washroom – 22' x 40' block wall building with shingled roof, wood siding and brick	When constructed, this was a combined concession building and washroom/shower facility. It was used by swimmers, day-use visitors, and campers. The washrooms remained in operation following beach and campground closures until 2019. Municipal staff noted plumbing deficiencies when under their management, washroom facility closed since 2019. No longer a demand for concession area. Washrooms facilities are much larger than required for current needs. Significant renovation is needed to rehabilitate this building; immediate requirements include new roof, soffit and fascia, post replacement on covered entrance to washroom, concrete sill repair, and full interior renovation. This building uses well water with a septic system.
Workshop - 28'x40' steel sided steel roof over wood pole barn construction,	Steel siding/roofing replaced in 2023 New overhead door 2023
Outhouse (Privies) (3) - Pit and vault style washroom, no plumbing, 2 include concrete vault, 1 unknown	No longer in use In state of disrepair Should be properly decommissioned when funding is available

Table 6 Description of Buildings and Structures

Trails

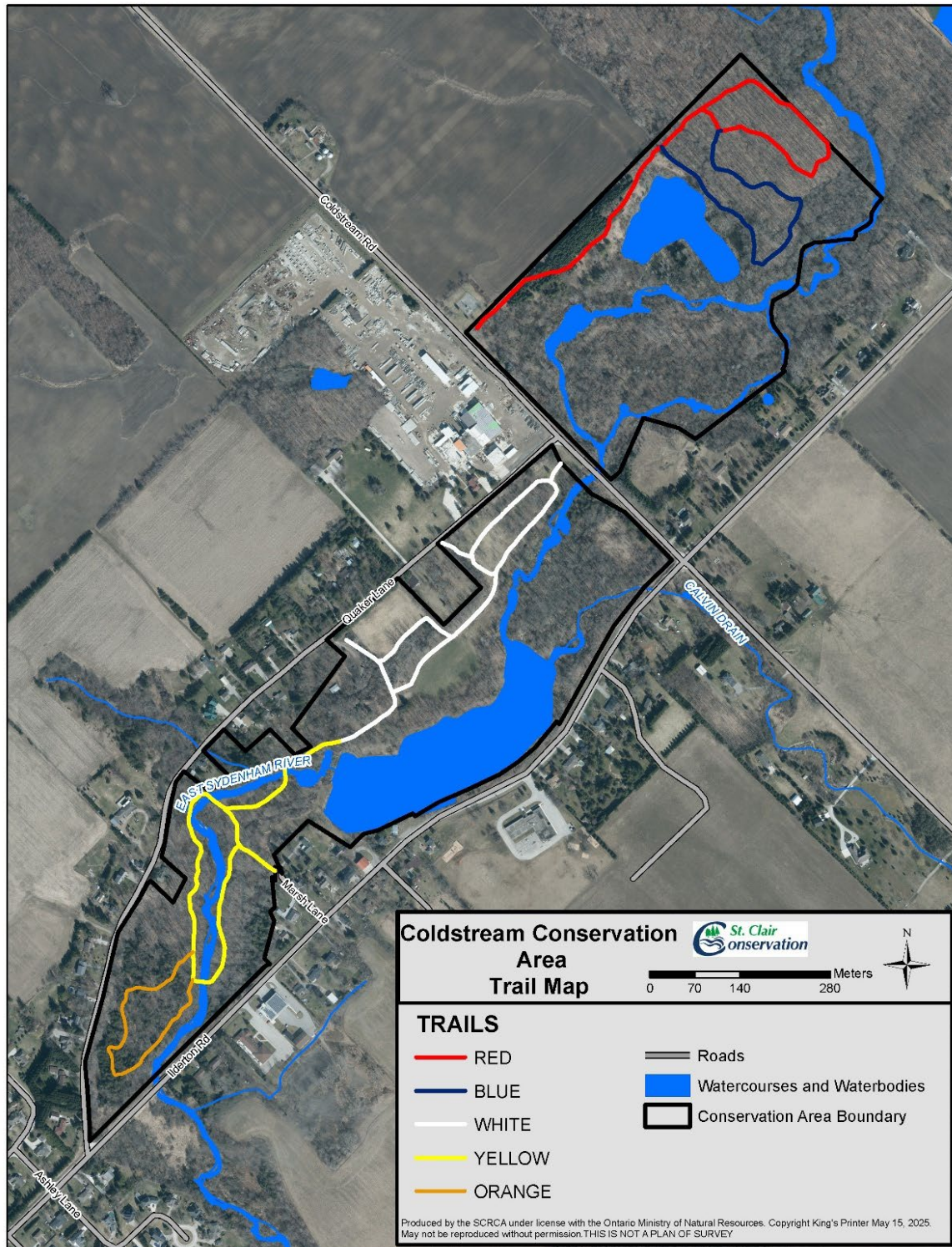


Figure 8 Trails Map

Description	Comments
<p>Orange Trail – 0.5km trail made up of natural surfacing and boardwalks. Traverses through a cedar swamp</p>	<p>Approximately 1,300 feet of boardwalk through a provincially significant cedar swamp wetland. Boardwalk was replaced in 2021/2022</p>
<p>Yellow Trail – 1.0km trail made up of a combination of natural surfacing and 2m wide compacted stone dust, connects areas on either side of the river by three bridge crossings</p>	<p>Trail prone to flooding immediately downstream of dam Trail washouts experienced during flooding on both sides of steel memorial bridge, small boardwalks experience damage during significant flood events</p>
<p>Wooden Deck Pedestrian Bridge – two steel parallel Vierendeel trusses with vertical cross bracing and gusseted cross beams supported by piles 55’ span, 50’ of which is free span, trusses overlaid with 2x10 wood plank decking. Handrails on both sides of decking consisting of wood supported by steel posts from the trusses.</p>	<p>Modifications completed based on recommendations provided in Paragon Engineering Ltd’s report (1995) Narrow bridge creates challenges for multiple users Entry to bridge has numerous large roots protruding from the ground, trip hazard and challenge for strollers Occasionally large logs jam up under the bridge in flooding events Railings don’t have vertical balusters</p>
<p>Old Cement Deck Road Bridge</p>	<p>Often used for photography (engagement, family, wedding etc.) Concerns with aging structure Cracks evident in concrete abutments Some evidence of damaged steel components Original road crossing pre acquisition Now pedestrian use only</p>
<p>Steel Memorial Bridge - 17m span, 2m wide metal bridge on concrete abutments. Constructed of “weathering” steel finish to provide a natural looking, maintenance free finish</p>	<p>Installed in 2022/2023 Funds were donated by the Enviro-Friends of Coldstream and the Poplar Hill Lions In memory of Bruce Alan ‘Al’ Bycraft, a longtime member of the Enviro-Friends of Coldstream</p>
<p>White Trail – 1.1km long trail, 2m wide compacted stone dust trail provides access to the playground and pavilion, contains rest benches and picnic tables,</p>	<p>Stone dust surface installed in fall 2023</p>
<p>Blue Trail – 0.6km trail, made up of natural surfacing, traverses a sugar maple woodlot and boasts many spring ephemerals</p>	<p>Narrow footpath provides views to the pond. Additional mountain bike trails and ramps created in the past, signage posted to prevent further damage.</p>

<p>Red Trail – 1.0km trail made up of natural surfacing, mature maple forest, many spring wildflowers.</p>	<p>ATV damage has been a concern in the past; trail went under rehabilitation efforts in 2022</p>
<p>Quaker Lane Parking lot - Gravel parking with cedar posts delineating parking area</p>	<p>Parking lot reconfigured in 2024 Larger capacity, well used and considered the main parking area for the park Portable washrooms located seasonally in this area Cedar trees limbed up and thinned in 2024 to improve visibility into the parking lot and reduce unwanted behaviour</p>
<p>Marsh Lane Parking Lot - Small gravel parking lot located at the end of Marsh Lane</p>	<p>Low usage Gate providing staff maintenance access.</p>
<p>Coldstream Road Parking Lot</p>	<p>Gravel parking lot re-constructed in 2022 with concrete barriers Generally sufficient space for current uses (parks 6-8 vehicles)</p>

Table 7 Description of Trails and Roads

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Fences, Power Lines, Pipelines and Easements

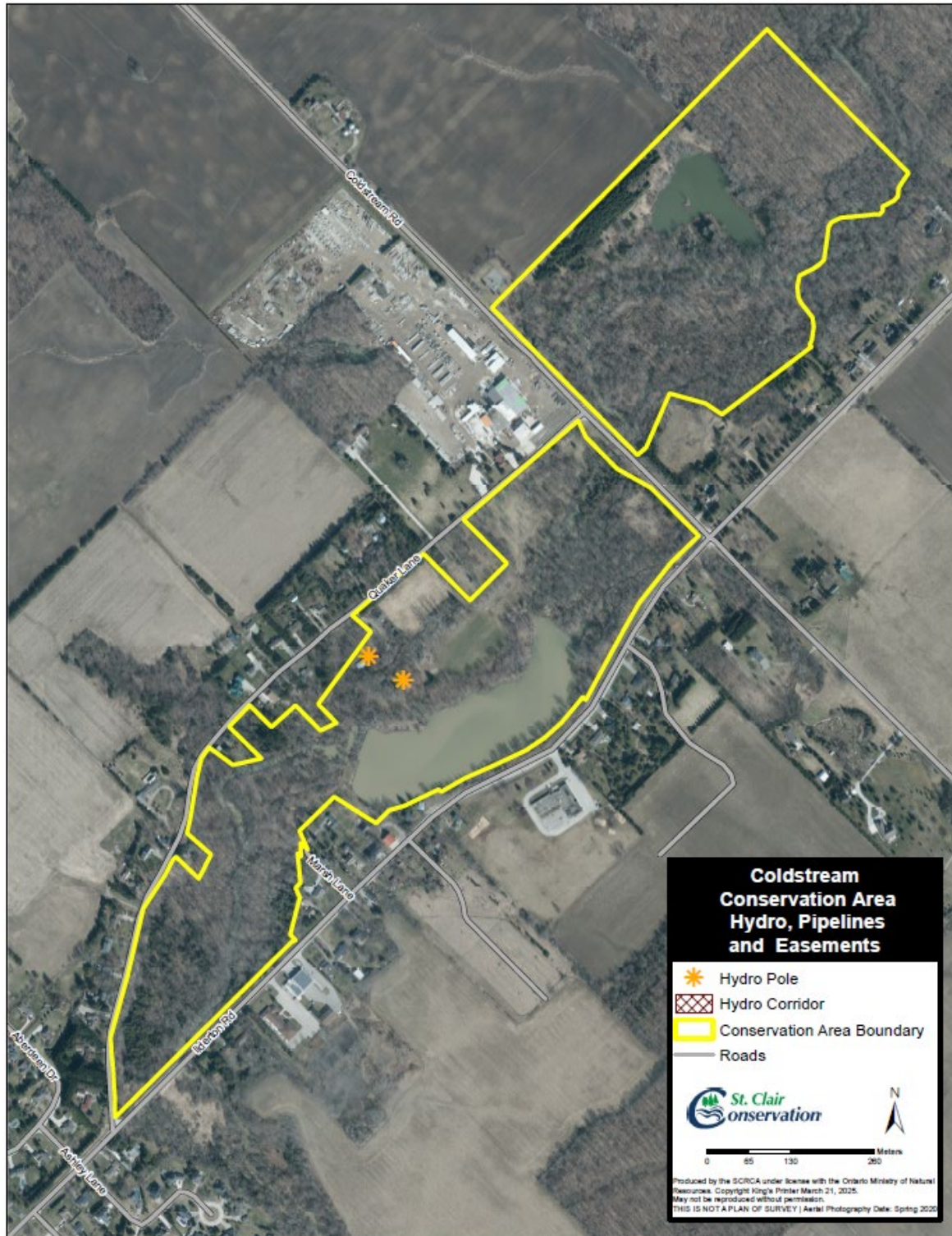


Figure 9 Hydro, Pipeline and Easements Map

Description	Comments
Powerlines	<p>Two hydro poles on site, one near workshop, second between workshop and concession/washroom building</p> <p>Overhead wires extend to concession building</p> <p>An underground line runs from concession/washroom building to the pavilion</p>

Table 8 Description of Power Lines, Pipelines or Easements

Recreational Infrastructure (see Figure 7)

Description	Comments
Soccer field	<p>Previously two soccer fields existed. One adjacent to the main parking lot has been retired and planted to trees and pollinator habitat. The second field (adjacent to the playground) is in poor condition and is not level, the field is no longer being rented due to condition and demand. It is available for casual use by visitors.</p>
Playground with swing set	<p>The playground is in good condition, designed for children aged 18 months to 12 years, installed in 2002, woodchip base.</p>

Table 9 Description of Recreational Infrastructure

Dam and Reservoir

The 11-acre (4.45 hectare) reservoir is a prominent feature of the property, the original purpose of the reservoir was to support recreational opportunities like swimming, boating and fishing, making it a popular attraction for campers and visitors alike. The White Trail loop meanders along the northern side of the reservoir providing viewing opportunities to visitors. The reservoir is fed by the East Sydenham River, and a smaller watercourse called the Calvin Drain. Since the installation of the dam and creation of the reservoir the depth of sedimentation has increased in the reservoir. Additionally, the water quality has declined, resulting in negative impacts to recreational activities and wildlife habitat.

Dams in general can negatively impact river ecosystems by creating barriers to fish passage, impeding mussel distribution, altering thermal regimes, altering sediment transport, and degrading water quality (temperature, oxygen levels, algal growth, and bacteria levels). Local concerns have been raised about the water quality in the reservoir, specifically the algal blooms and high bacteria counts leading to the closure of

the reservoir for swimming. Dams are a source of liability and safety concerns to visitors, additionally, the costs to replace these features are significant. Due to these environmental impacts, liability, and safety concerns, the SCRCA has investigated the feasibility of removal of this structure.

A feasibility study conducted by GSS Engineering Consultants was prepared in 2023 to provide options and recommendations to remove the dam structure. Options identified range from a full removal of the dam, gradual or partial removal of the dam and construction of a by-pass channel around the reservoir to leave the dam in place. Based on these identified options, preliminary concept drawings were created to show how the park will look if the dam is removed and the area restored, these are outlined below. With support from the Municipality of Middlesex Centre the SCRCA will further pursue the option of decommissioning this dam and seek public consultation. Further studies will focus on two options including phased removal and partial removal of the dam. This will be a separate public consultation process from this Master Plan.

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Concepts for Restoration

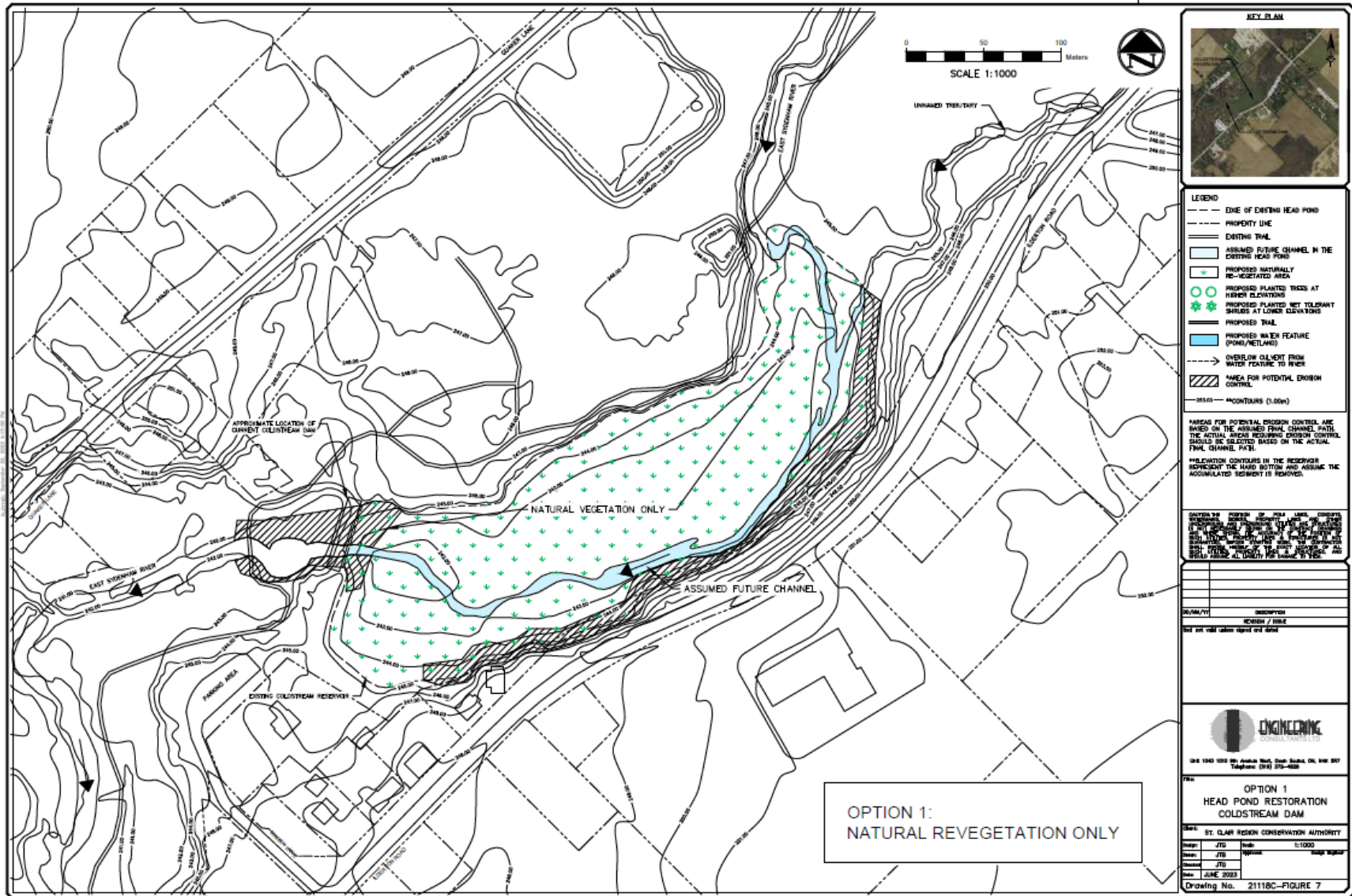


Figure 10 Natural Revegetation Only

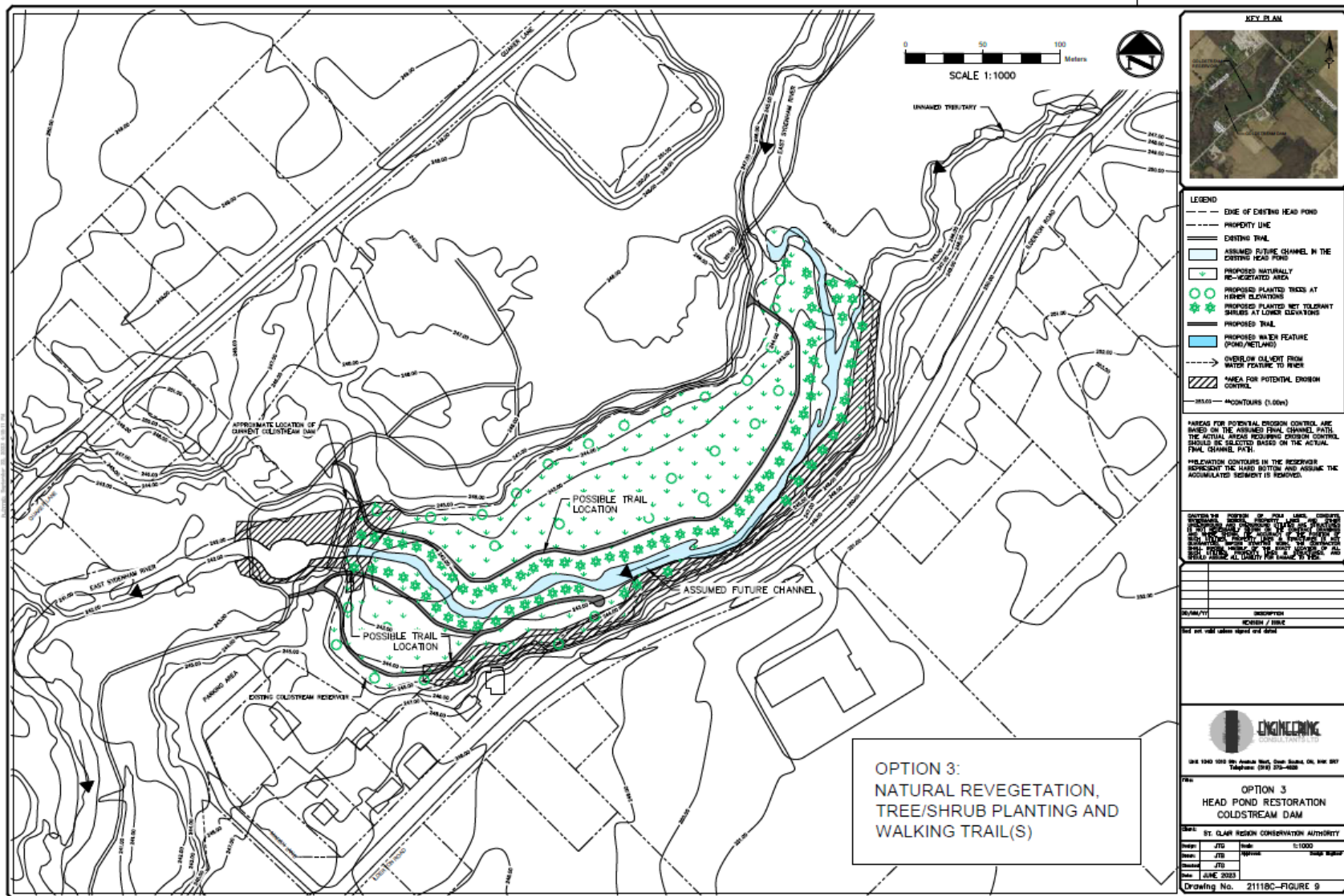


Figure 12 Natural Revegetation, Tree/Shrub Planting and Walking Trail(s)

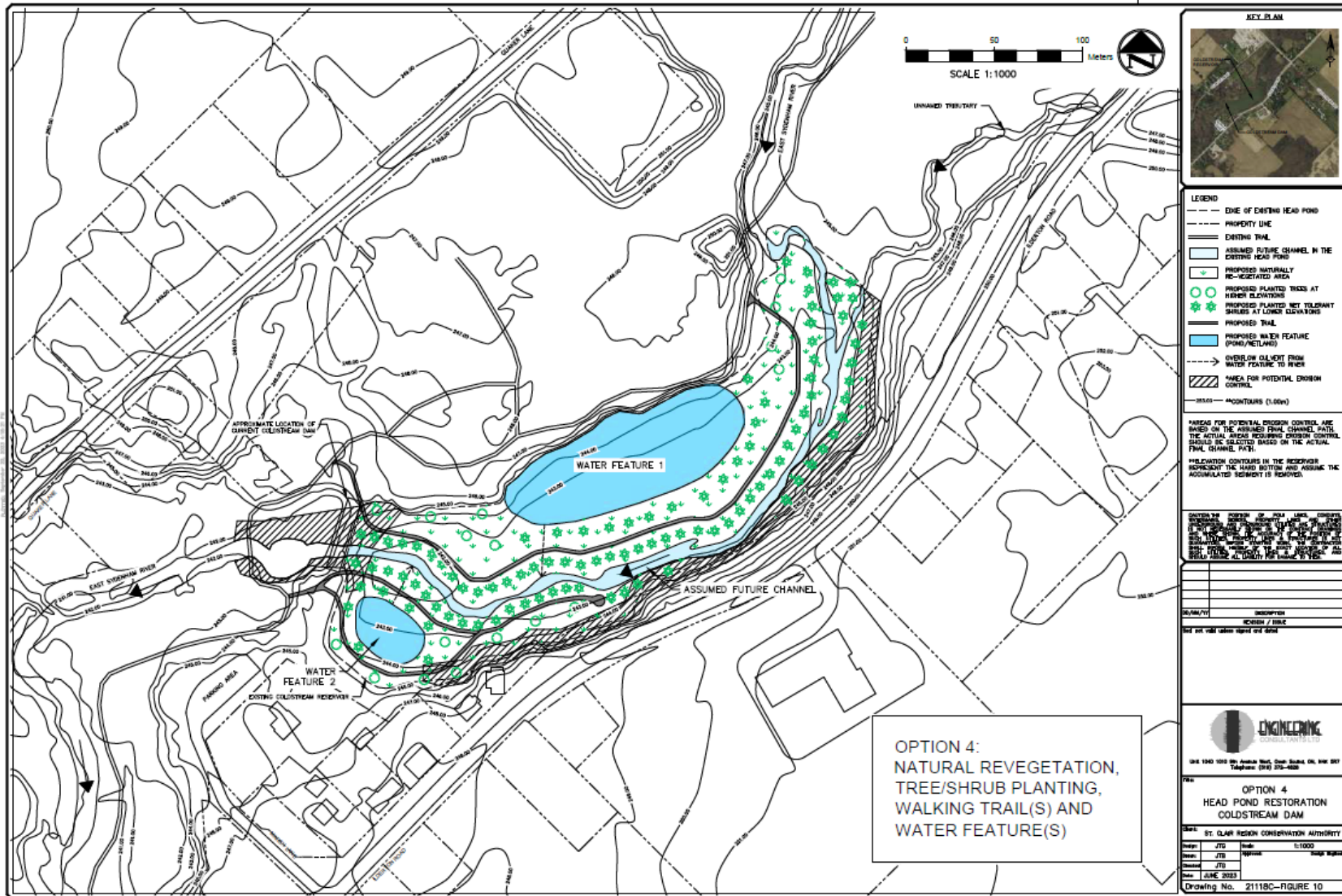


Figure 13 Natural Revegetation Tree/Shrub Planting, Walking Trail(s) and Water Feature(s)

Educational Opportunities

Minimal education programming exists at the Coldstream Conservation Area. Staff provide an aquatic identification course to high school students once a year. Requests for programming at this property by local schools were more frequent prior to 2020.

This property has the potential for educational use and site-specific educational programs. The pavilion provides a sheltered outdoor space for small groups, and the concession/washroom building could be repurposed for educational programs or a satellite classroom.

Final Management Recommendations

Final Management Recommendations are listed below. To achieve these goals, funding will be secured through various funding sources including grants and donations.

Action	Recommendation	Cost
Signage	<ul style="list-style-type: none"> Remove outdated wooden signage 	\$1,000
	<ul style="list-style-type: none"> Install caution signage around dam 	\$250
Trails	<ul style="list-style-type: none"> recommend upgrading trail in locations prone to wash out 	\$3,500-\$5,000
	<ul style="list-style-type: none"> Cut away exposed roots from trail in targeted areas (e.g. at bridge entrances) 	Staff Time
	<ul style="list-style-type: none"> Monitor for unauthorized uses, improve deterrence and increase enforcement if required of off-road vehicles* 	Increased Staff Time See further detail below
	<ul style="list-style-type: none"> Orange trail boardwalk should be extended at each end to span wet areas 	\$12,000 - \$17,000
Forest Management/Natural Areas	<ul style="list-style-type: none"> Thin volunteer poplars from plantation in old soccer field 	Staff Time
	<ul style="list-style-type: none"> Only native species or those acceptable to the area will be planted for forestry or wildlife habitat on the property 	Unknown
	<ul style="list-style-type: none"> Protect natural and sensitive features by controlling/restricting usage 	Unknown
	<ul style="list-style-type: none"> Removal of hazard trees as per the SCRCA Hazard Tree Policy 	Unknown

	<ul style="list-style-type: none"> Any trees cut, or debris falling naturally, will be removed from trails, parking lots, or other managed areas as necessary, with an appropriate amount of material left onsite to decompose naturally 	Unknown
Recreation	<ul style="list-style-type: none"> Complete basic soccer field improvements (fill holes and level field for casual use, no rentals) 	\$4,000-\$10,000
Dam and Reservoir	<ul style="list-style-type: none"> Continue to investigate the feasibility of removal of the dam 	See dam decommissioning study (2023)
Infrastructure	<ul style="list-style-type: none"> Remove three pit and vault outhouses on the property which are in close proximity to the Sydenham 	\$10,000
	<ul style="list-style-type: none"> Concrete repairs around pavilion perimeter 	\$5,000 - \$7,500
	<ul style="list-style-type: none"> Hire structural engineer to review the condition of the old concrete road bridge and provide recommendations 	\$5,000-\$10,000
	<ul style="list-style-type: none"> Install railings on three concrete abutments to old concrete road bridge 	\$8,000-\$10,000
	<ul style="list-style-type: none"> Install parking lot lighting to deter unwanted activities and improve visibility during low light hours 	\$5,000-\$10,000
	<ul style="list-style-type: none"> Investigate future use or removal of concession/washroom building and identify alternatives* 	See options below
	<ul style="list-style-type: none"> The remnant water wheel concrete structure poses a risk to the public if people were to climb on it, recommend removal* 	\$5,000-\$8,000 see further detail below

Invasive Species	<ul style="list-style-type: none"> • Locate areas of buckthorn and remove 	Ongoing and grant dependent
	<ul style="list-style-type: none"> • Identify phragmites patches and control using manual and chemical options 	

Table 10 Final Management Recommendations

** Budget costs are in 2025 dollars, projects and budgets are to be reviewed prior to implementation.

*** Major capital items dependent on fundraising/grant

*Additional details for select recommendations**

Off-road vehicle Damage

The northern woodlot located on the northeast side of Coldstream Road has experienced off-road vehicle damage for many years. As a means to deter this unwanted activity and damage, the SCRCA constructed a parking lot at Coldstream Road to encourage hikers to use this restored trail loop. Additionally, signage was installed, and large concrete blocks were placed at various locations to prevent use by off-road vehicles. In 2022, SCRCA undertook a major repair of the trails to remediate the ruts and damage. These efforts made to deter the unwanted use have led to a significant improvement, however, the property is still experiencing unauthorized use and damage by off-road vehicles. The SCRCA should continue to implement deterrents and increase enforcement if required.

Remnant Water Wheel Structure

There is an old concrete structure located on the north side of the Marsh Lane parking lot. This is the remnant of a water wheel that was propelled by a control gate on the dam. When the SCRCA acquired the properties making up the Coldstream Conservation Area the water wheel was in poor condition and not functioning. In the 1980's, the SCRCA refurbished the water wheel with limited success. With increasing liability surrounding the structure it was fenced off and abandoned. Part of the concrete from the water wheel is still present on the property but has in recent years been fenced off to prevent people from being on or near it. As the structure no longer has a purpose it is recommended that the SCRCA remove the structure to eliminate the risk to visitors.

Washroom/Concession building

The original intent of the washroom/concession building was to act as a central hub for the property consisting of a concession booth, changing area for the beach and soccer fields, and a washroom facility including showers for campers. The washroom portion of the building is larger than what is required for the current demand of the property. A significant investment is needed to restore the building, and a new use should be identified to justify the restoration. If an alternative use cannot be identified the SCRCA should consider removal and/or replacement of the building with a smaller washroom building.

Alternative uses for the building could consist of a satellite classroom for the SCRCA education program, a location for community outreach events or a location to host summer day-camps. The sections below provide additional information and options identified by staff.

Day-Camp Opportunity

The Coldstream Conservation Area has the potential to provide an ideal location for summer day camps if desired by the community and with success in sourcing funds for a building. The existing infrastructure on the property including playground, pavilion, hiking trails, open field/soccer fields, picnicking areas and natural features would provide lots of opportunity for kids to play, learn and explore. Based on a survey of camps hosted by local Municipalities and neighboring Conservation Authorities, there is a high demand for summer day camps in the area. Assessing both the information gathered from the surveys and existing infrastructure staff have come up with the following for consideration.

A weekly program with an environment/outdoor education focus could run for up to 9 weeks in the summer. This will require additional summer staff to run the program estimated at three staff per group. Group sizes of approximately 20 kids would be considered with up to two groups maximum, depending on space available. The cost of such a program would be \$250-\$300/week per child with the option of extended hour fees, this is comparable to other day camps in the area.

The Coldstream Conservation Area is missing a suitable building that would provide shelter for kids during inclement weather and on rainy days. The existing Washroom/Concession building could be renovated and/or expanded to provide this feature. Excluding infrastructure costs, it is anticipated that a summer day camp program of this nature would be financially self-sufficient.

Alternative Uses

Option 1: Building Removal, Site Restoration, and Continued Use of Portable Washrooms

Permanent removal of the building is the cheapest option for both capital cost and long-term maintenance/operating expenses. Currently, none of SCRCA's other day-use properties have washroom buildings (only campgrounds). For several years, Coldstream has been operating with portable washrooms (seasonally) in the Quaker Lane parking lot.



Option 2: Building Removal and Replacement with Small Washroom Building

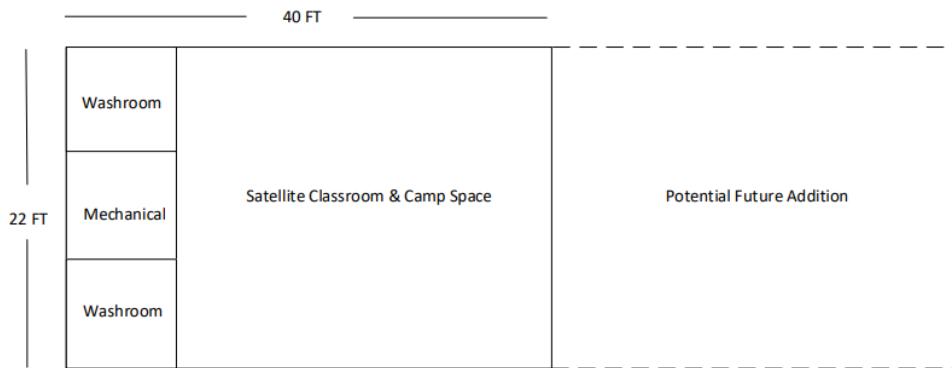
The existing washrooms are larger than required for current property use. When constructed, the washrooms serviced the campground, soccer fields, and functioned as a change facility for the beach. The existing washrooms have multiple stalls and shower facilities. The building does not meet accessibility standards. If it is desirable to have a permanent washroom building but there is no future need for the remainder of the building, an option would be to replace the building with a smaller facility. The picture below shows a 2-stall washroom with mechanical room. A building such as the one shown can be ordered as a prefabricated unit that gets delivered and set in place.



Option 3: Renovate Building to Accommodate Smaller Washroom Facilities and a Satellite Classroom/Camp Space

The existing building could be salvaged and renovated to meet future needs. The building would need to be fully renovated, and the washroom size reduced. The remainder of the building would need to be repurposed in some way. One option would be to use the remaining space for a satellite classroom for the education program. SCRCA’s education facility at Lorne C. Henderson Conservation Area is too far from this area of the watershed to be practical to serve local schools. A satellite classroom would allow for programming in this area of the watershed.

Additionally, this classroom space could provide other opportunities and benefits to the community. It could be used for a summer day camp program or as a meeting space for a local community group. If demand for space is high (day camp), there would be space for a future addition.



Cost Comparison:

	Capital Cost Estimate	Annual Operating Expense (Not including programs)
Option 1	\$10,000	\$3000
Option 2	\$345,000 - \$370,000	\$7,500 - \$10,000
Option 3	\$250,000 - \$325,000	\$8,500 - \$12,000

*Annual Operating costs need to be supported by the Municipality of Middlesex-Centre

*Capital costs would need to be obtained through grant, donation, or municipal support

Pros and Cons:

	Pros	Cons
Option 1	<ul style="list-style-type: none"> • Lowest capital and operating cost • Provides washrooms seasonally 	<ul style="list-style-type: none"> • Most visitors prefer a permanent washroom facility • Loss of existing infrastructure • Portable washrooms are less accessible




	<ul style="list-style-type: none"> • Can easily add washrooms during busiest times • Lowest demand on SCRCA staff (washrooms supplied and maintained by 3rd party) 	<ul style="list-style-type: none"> • Portable washrooms located in parking lot are less central on the property
Option 2	<ul style="list-style-type: none"> • New washroom facility would be accessible • New facility would be a low maintenance construction • Would provide better visitor experience than portable washrooms • Prefab unit simplifies construction/installation process 	<ul style="list-style-type: none"> • Expensive for two washroom stalls • SCRCA will need to have staff clean once or twice per week or hire a 3rd party cleaning service
Option 3	<ul style="list-style-type: none"> • Uses existing structure • Would provide better visitor experience than portable washrooms • Less expensive than options 2 • Satellite classroom/camp space provides additional benefits to community 	<ul style="list-style-type: none"> • The older structure needs extensive renovation • Must spend some money on the roof asap to prevent deterioration of the building • Limited storage space for satellite classroom

Summary of Consultation (to be completed following consultation period)

Appendices

Appendix A: Photos of the Site

Buildings and Infrastructure

<p>Pavilion #1 – located in the day-use area</p>	
<p>Concession Building and Washroom – located in the day use area between soccer field and reservoir</p>	
<p>Workshop – located west of the Quaker Lane parking lot</p>	

Outhouses (Privies) (3) – The first is located off the trail from the Quaker Lane parking lot between the soccer field and the new plantation – this privy was constructed by the Enviro Friends of Coldstream during their management of the property.



The other two outhouses (privies) are located on the eastern end of the property towards Coldstream Road, these are located in the old campground area.



Cement structure – remnant water wheel foundation located north of Marsh Lane parking lot



Trails and Roads

Orange Trail – 0.5km trail made up of natural surfacing and boardwalks. Traverses through a cedar swamp



Yellow Trail – 1.0km trail made up of a combination of natural surfacing and 2m wide compacted stone and dust, connects areas on either side of the river by three bridge crossings



Wooden pedestrian bridge – located on yellow trail connecting trail from Marsh Lane to the cedar swamp



Cement road bridge located downstream of dam off Quaker Lane Road access



Steel memorial bridge located immediately downstream of the dam



White Trail – 1.1km long trail, 2m wide compacted stone and dust trail meanders through day use area and old campground



Blue Trail – 0.6km trail, made up of natural surfacing, traverses a sugar maple woodlot on the eastern side of the property access off Coldstream Road



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Red Trail – 1.0km trail made up of natural surfacing, mature maple forest off Coldstream Road



Quaker Lane Parking lot - Gravel parking with cedar posts delineating parking area



Marsh Lane Parking Lot - Small gravel parking lot located at end of Marsh Lane



Coldstream Road Parking Lot across from Coldstream Concrete



Recreation

Soccer field – located in day use area



Playground and swing set – located in day-use area across from concession/washroom building and soccer field



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Appendix B: Coldstream Conservation Area Forest Inventory 2012

Coldstream Forest Management

Concession 9 Lobo, Part Lot 6, Part Lot 7 & RP 33R5596 Part 1, &
Concession 8 Lobo, Part Lot 8, Concession 9 Lobo, Part Lots 7, 8, &
Concession 9 Lobo, Part Lot 9 Plan MRD 122 Part 1 to 2
Municipality of Middlesex Centre, Middlesex County

Property Description

Total Forested Area: 42.2ha

CLTIP Area: 19.6ha

Reservoir CLTIP Area: 4.3ha

This property is divided into east and west parts by Coldstream Rd. The east part is 18.2ha while the west part is 20ha. The west part is also bound by Ilderton Rd to the south and Quaker Line to the North. There are several residential properties that have been severed from the original lots on both Ilderton Rd and Quaker Line which has led to an irregularly shaped boundary. The east part is part of a much larger wooded area but is not fenced and the property boundaries are unclear. The East Sydenham River runs through the property and is dammed to form a small lake in the west part of the property. It is joined just upstream of the dam by the Calvin Drain and is joined downstream of the dam by another unnamed municipal drain. The eastern portion is rolling while the western portion has some steep side slopes but is generally flat to gently undulating flood plain.

Past Activities

Gravel was once extracted from both the east and west parts of the property. Much of this area has reforested naturally, but there are some areas of plantations as well. The authority acquired the property in the late 1960s. It replaced the old dam along the East Sydenham River and created two beaches along with a picnic area, campground, sports fields and washroom facilities. The beaches were closed in the mid-1980s and some of this area has been allowed to naturalize. A network of walking trails has been created in the west part of the property. Unauthorized ATV trails have been created in the east portion of the property and several neighbours have created trails that link their properties to the conservation area. Friends of Coldstream currently manage the property on the Authority's behalf.

Tree planting was undertaken on the property in various blocks beginning in the early 1970s. The most recent planting took place in the early 1990s and was infill planting for plantations dating from the mid-1980s. Three permanent sample plots were established in 1985 in the east part of the property. These plots were measured periodically until 2003. Timber was harvested from the area in 1995 using good forest management practices. A Significant portion of the property has been classified as Provincially Significant Wetland and registered in the Conservation Land Tax Incentive Program

(CLTIP). This will restrict the types of forest management practices and uses that are allowed on this property in the future.

Objectives and Strategies

The primary objectives for this property are for environmental protection and recreation. A large portion of the property is considered a provincially significant wetland and Green Dragon, a species of special concern, has been found on the property. Several butternuts, another species-at-risk, have also been found growing throughout the property. Maintaining this property as a conservation area is very important to the local area. There is very little forest cover in the area, and wind erosion and water contamination are problems in the area. A block of forest this size has great environmental value especially as it acts a riparian buffer. Secondary objectives for this property include providing wildlife habitat and nature appreciation. The production of forest products and return on investment are not objectives for this property, although they may result from time to time as a result of trying to achieve the primary and secondary objectives.

These objectives will be implemented through a six compartment plan. Each compartment will be managed according to the forest cover and the recreational opportunity it provides to the public. The majority of the management activities within the conservation area will be carried out by the Friends of Coldstream.

Compartment 1: Tolerant Hardwood

Area: 6.2ha

CLTIP Area: 1.5ha

This compartment was not part of the gravel extraction operation. It is gently rolling and moderately well drained. Three permanent sample plots were established in 1985 and measured in 1985, 1990, 1995, and 2003. Timber was marked and harvested in 1995 using good forest practices. A network of trails has been created and maintained in the area by ATV users. Trail use is extensive, and soil has become rutted in some areas and compacted and impermeable in others. The Sydenham River flows through the compartment.

Species Composition:

Species	%
Sugar Maple	50
White Ash	15
Bur Oak	15
Basswood	5
White Oak	5
Red Oak	5
Other Species*	5

* Black cherry, white elm, beech, ironwood, bitternut hickory and butternut

In previous inventories, bitternut hickory made up 10% of the species composition. Hickory bark beetle has killed many of the bitternut hickories in this area and now they are far less abundant and relegated to other species status. A butternut had previously been found in the area, but it had a severe infestation of butternut canker and was not expected to survive much longer. It was not found in the most recent field surveys.

Regeneration and Understory:

There is regeneration of sugar maple, white ash, basswood and white elm. Manitoba maple, elderberry, raspberry and choke cherry can also be found in more open areas.

Basal Area:

Basal area varied from 12m²/ha to 28m²/ha with an average of 16m²/ha.

	Polewood		Saw timber								Total	
	Pole 10-24cm		Small 26-36cm		Medium 38-48cm		Large 50-60cm		X-Large 62+cm		ALL 10+ cm	
	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS
B.A.	2.4	0.8	6.0	1.6	3.2	0.8	0.8	0.0	0.4	0.0	12.8	3.2
TOTAL	3.2		7.6		4.0		0.8		0.4		16.0	

Diseases and Insects:

Emerald ash borer was found in the white ash. Hickory bark beetle was found in the bitternut hickory. Nectria canker was found on the maples, and black knot fungus was found on choke cherry. Butternut blight was noted on the butternut.

Quality:

The compartment is in good to fair condition. The ash trees in this compartment are in serious decline from the emerald ash borer and hickory bark beetle has decimated the bitternut hickory. This partially accounts for the low basal area in the compartment. However, the maples and oaks are relatively disease free and growing well.

Wildlife:

No wildlife was observed.

Objectives:

The objectives for this compartment are to retain forest cover and promote forest health and biodiversity.

Recommendations:

- The existing trails through the compartment should become formal authorized trails with permitted uses.
- Deter ATV use in the area by blocking trail entrances and posting signs. The trails run through provincially significant wetland areas and ATV use is an incompatible use under the CLTIP agreement
- If the permanent sample plots are still desired, the markings should be refreshed, and the plots should be re-measured
- An attempt should be made to find the butternut in the area and evaluate its health.

- The basal area is not high enough to recommend any harvesting at this time
- The property boundaries should be located and marked
- Inspect the trails and remove hazard trees annually

Compartment 2: Former Gravel Pit

Area: 12.8ha

CLTIP Area: 7.4ha

This area was formerly used to extract gravel. It has rolling topography and some areas of pits and mounds where the gravel was extracted and the spoils dumped. The largest of these gravel pits has filled with water and is now a pond. It empties to the East Sydenham River which flows through the compartment. It has largely reforested naturally, although the authority planted a small portion of the area in the mid-1980s with infill planting as recently as the mid-1990s. A network of trails has been created and maintained in the area by ATV users. Trail use is extensive, and soil has become rutted in some areas and compacted and impermeable in others. A bridge has been constructed over the Sydenham, but neighbours complain that it continually washes out. This bridge was not constructed by Authority staff and constitutes a hazard. Much of this area has been designated provincially significant wetland and is protected under the CLTIP agreement.

Species Composition:

Species	%
Black Locust	25
Willow	15
Eastern Cottonwood	15
Sugar Maple	10
Hawthorn	10
White Ash	5
Black Walnut	5
Basswood	5
Black Cherry	5
Other Species*	5

* silver maple, Manitoba maple, green ash, bur oak, Norway spruce, white pine and butternut

This area formerly contained as much as 40% white ash. Emerald ash borer has decimated the ash component of this compartment. Many large gaps have been created, and these areas have largely been colonized by shrub species such as dogwood. Two butternuts have been recorded in this compartment. Neither was found during the most recent survey. Both were reported to have butternut canker and to be in serious decline.

Regeneration and Understory:

Regeneration of willow, eastern cottonwood, green ash, Manitoba maple, black cherry and sugar maple were found. Choke cherry, red osier dogwood, honeysuckle, nannyberry, grapevine and raspberry make up the rest of the understory. In places, advanced regeneration of sugar maple can be found. In areas where pockets of ash have died the regeneration is mainly Manitoba maple with a high density of shrubs such as red osier dogwood and raspberry.

Basal Area:

Basal area varied greatly from 2m²/ha to 38m²/ha and averaged 19.6m²/ha. In areas where the ash had formerly been dense, basal area was now very low. In the black locust and maple areas, the basal area was quite high.

	Polewood		Saw timber						Total			
	Pole 10-24cm		Small 26-36cm		Medium 38-48cm		Large 50-60cm		X-Large 62+cm		ALL 10+ cm	
	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS
B.A.	3.6	0.0	4.8	0.8	4.8	1.2	1.2	2.0	0.4	0.8	14.8	4.8
TOTAL	3.6		5.6		6.0		3.2		1.2		19.6	

Disease and Insects:

Black knot fungus was found on choke cherry. Emerald ash borer has dramatically reduced the ash component in this compartment.

Quality:

The species composition varies considerably throughout the compartment and so does the quality. In areas formerly dominated by ash, the quality is very poor with basal areas of as little as 2m²/ha and dominated by shrubs and less desirable species of regeneration such as Manitoba maple. In other areas where black locust or sugar maple is the major component, the quality is good to very good. The areas of spruce plantation are growing well and have reached crown closure. The trees are beginning to self-prune. The white pine in these plantations is not fairing as well and many appear chlorotic.

Wildlife:

Previous surveys had found signs of beaver in the compartment, but none were found during this survey. No other wildlife signs were noted.

Objectives:

The objectives for this compartment are to retain forest cover and promote forest health and biodiversity.

Recommendations:

- The existing trails through the compartment should become formal authorized trails with permitted uses.
- Deter ATV use by blocking trail entrances and posting signs. The trails run through provincially significant wetland areas and ATV use is an incompatible use under the CLTIP agreement

- An attempt should be made to find the butternuts in the area and evaluate their health.
- The basal area is not high enough to recommend any harvesting at this time
- The property boundaries should be located and marked
- Inspect the trails and remove hazard trees annually
- The spruce plantations should be thinned to release crop trees and promote species diversity
- Monitor regeneration in the large gaps. Replanting in combination with vegetation management may be desirable to speed reforestation
- Permanently remove the washed-out bridge from the compartment

Compartment 3: Forest Southeast of Campground

Area: 5.0ha

CLTIP Area: 1.5ha

Most of this area was day use area or parking for the day use area from the time that the dam was constructed until the beaches closed in the mid-1980s. The East Sydenham River flows through the compartment and the lake formed by the dam forms the southwest limit of the compartment. The Calvin Drain also flows through the compartment and joins the Sydenham at the lake. The compartment is low and flat and floods often. Drainage is poor in many spots. The area is wooded, and a small area of cedar was planted in the early 1980s. The parking lot area is still open but is slowly being reclaimed by forest. A bridge over the Sydenham joins this compartment to compartment 4 and the main recreational areas of the Conservation Area. From the foot of the bridge a number of informal trails strike off in different directions and meander through the compartment. The old out-houses for the beach are still standing but are no longer in use or in good condition.

Species Composition:

Species	%
White and Green Ash	45
Bur Oak	20
Black Walnut	15
Sugar Maple	5
White Elm	5
Other Species*	5

* Manitoba maple, black ash, eastern cottonwood, willow, hawthorn, silver maple, black cherry, red elm, cedar, Siberian elm and butternut.

Two butternuts were previously noted in this compartment south of the Calvin Drain. They were not observed during the most recent survey. One is reported to be in fair condition, but the other was in serious decline due to butternut canker.

Regeneration and Understory:

Regeneration is mainly Manitoba maple with smaller elements of hawthorn, white ash, and white elm. Dogwood, nannyberry, high bush cranberry, and raspberry make up the rest of the understory. Purging buckthorn was found in the old parking lot area.

Basal Area:

Basal area ranged from 18m²/ha to 22m²/ha and averaged 21m²/ha.

	Polewood		Saw timber								Total	
	Pole 10-24cm		Small 26-36cm		Medium 38-48cm		Large 50-60cm		X-Large 62+cm		ALL 10+ cm	
	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS
B.A.	1.0	2.0	3.0	3.0	4.0	2.0	0.5	3.0	0.0	2.5	8.5	12.5
TOTAL	3.0		6.0		6.0		3.5		2.5		21.0	

Disease and Insects:

Butternut canker was found on the butternut, and emerald ash borer has moved into this compartment but the infestation has not progressed as far as in Compartment 2. Black knot on choke cherry was noted in previous inventories.

Quality:

The quality of the compartment is quite poor. More than half of the basal area is UGS trees, mostly ash which are in decline from the emerald ash borer. With Manitoba maple, hawthorn and white ash being the dominant regeneration, it could be some time before this area returns to a high quality forest.

Wildlife:

Deer trails can be observed through the area. No other wildlife observations were made.

Objectives:

The objectives for this compartment are to continue to allow the area to reforest and to promote forest health and biodiversity. As well the recreational values of this compartment can be enhanced.

Recommendations:

- Trails in the area should be properly established and maintained to discourage the use of informal trails and to provide a linkage between the well-established trails in the east and west parts of the property.
- If this is not done, then the bridge to this compartment from Compartment 4 should be decommissioned and removed. The area should then be left to naturalize
- Monitor the purging buckthorn and control as required
- Monitor the emerald ash borer infestation. Planting and vegetation control may be required to speed reforestation.
- The butternuts in the compartment should be found and their health assessed.

Compartment 4: Day Use and Campground

Area: 4.6ha

This area was a former gravel pit. It has soccer pitches, a pavilion, playground, washrooms and campsites. The area is mowed on a regular basis. The majority of the trees in this area were planted. While there are trees in this compartment, it cannot be considered forested and is managed primarily for recreation.

Species Composition:

Silver maple, eastern cottonwood, black cherry, Scots pine, black locust, white and green ash, trembling aspen, white spruce, Norway spruce, sugar maple, white pine, basswood, bur oak, sycamore, red oak, white cedar, and European willow can all be found in this compartment

Diseases and Insects:

No diseases or insects were noted in this survey. It is reasonable to assume that emerald ash borer has attacked the ash in this compartment. Previous surveys noted Nectria canker on basswoods.

Objectives:

The objective for this compartment is to continue to provide an area for recreational purposes

Recommendations:

- Turf maintenance should be continued
- Hazard trees should be identified and removed annually
- Landscape trees should be pruned by an arborist every 5 to 10 years. Trees should be pruned to improve branch structure, culturally control insects and disease, and large dead branches should be removed.
- Trees that die should be removed and another should be replanted. In the case of ash, a different species should be selected for replanting.

Compartment 5: River Valley Forest

Area: 11.5ha

CLTIP area: 2.8 ha

This area is comprised of some treed parkland with mowed grass, and a few areas of planted trees, but much of the area has always been forested and has regenerated naturally. The East Sydenham River flows over the dam and through this compartment. It is joined from the north by an unnamed drain. There is a well-used trail system that runs through the compartment. The area is flat to gently undulating flood plain with steep side slopes. Emerald ash borer has killed a number of large ash trees along the trail network. The property boundary in this compartment is very irregular and in a number of spots the boundaries are unclear.

Species Composition:

Species	%
Sugar Maple	35
White Ash	30
Black Cherry	10
Basswood	10
Eastern Cottonwood	5
Bitternut Hickory	5
Other Species*	5

* bur oak, red oak, black locust, chinquapin oak, ironwood, Norway spruce, black walnut, and butternut.

The Norway spruce is in a plantation. Three butternuts have been found growing in this compartment and are listed in the Woodland Species-at-Risk Inventory. They are described as having minor to moderate damage from butternut canker. They were not found during this inventory.

Regeneration and Understory:

Choke cherry is the dominant understory component. White ash, black walnut, sugar maple and bitternut hickory regeneration is also common. Dogwood, nannyberry, grapevine, and raspberry are also present. In the areas of treed parkland there is mowed turf grass between the trees so there is no regeneration or woody shrubs.

Basal Area:

Basal area ranged from 12m²/ha to 40m²/ha and averaged 20.3m²/ha.

	Polewood		Saw timber								Total	
	Pole 10-24cm		Small 26-36cm		Medium 38-48cm		Large 50-60cm		X-Large 62+cm		ALL 10+ cm	
	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS
B.A.	1.7	0.9	3.7	1.4	6.0	2.6	1.1	1.4	0.9	0.6	13.4	6.9
TOTAL	2.6		5.1		8.6		2.6		1.4		20.3	

Disease and Insects:

Black knot was found on the choke cherry and Nectria canker was found on the maples. Bitternut canker was reported on the butternut. Emerald ash borer is attacking the ash in this compartment. Hickory bark beetle was noted in past inventories.

Quality:

The stand is in fair condition. In some areas the death of the ash trees has left large openings that have become dominated by shrubs. However, the other species in the compartment are mostly disease-free and are growing well.

Wildlife:

No wildlife observations were made.

Objectives:

The objectives for this compartment are to maintain the recreational value of the compartment while retaining forest cover and promoting forest health.

Recommendations:

- Turf and trail maintenance should be continued
- Hazard trees should be identified and removed annually. Dying ash trees along the trail network should be removed before they become too hazardous to remove
- Landscape trees should be pruned by an arborist every 5 to 10 years. Trees should be pruned to improve branch structure, culturally control insects and disease, and large dead branches should be removed.
- Landscape trees that die should be removed and another should be replanted
- The butternut trees should be located and their health evaluated
- The property boundaries should be identified to ensure there are no encroachments

Compartment 6: Cedar and Birch Lowlands

Area: 2.1ha

CLTIP Area: 2.1ha

This area is provincially significant wetland and is contained within compartment 5. The drainage is very poor. Many of the cedars have exposed roots or stilt roots. It is unknown whether this appearance is due to soil erosion or germination on nurse logs which have since decayed. This in conjunction with a high water table which does not allow for deep rooting depth have left these trees poorly rooted and many have uprooted as a result. A boardwalk trail runs through the compartment.

Species Composition:

Species	%
Yellow Birch	45
Eastern White Cedar	25
Black Ash	20
Silver Maple	5
Other Species*	5

* Bur oak, green ash

The perimeter of the compartment has dense groves of eastern white cedar. The interior is mainly yellow birch and black ash.

Regeneration and Understory:

Regeneration is mainly ash and eastern white cedar. Sugar maple was also found, although it is unlikely that these trees will thrive because the site conditions are not suited to this species. Choke cherry was also found.

Basal Area:

Basal area ranged from 26m²/ha to 28m²/ha and averaged 27m²/ha.

	Polewood		Saw timber								Total	
	Pole 10-24cm		Small 26-36cm		Medium 38-48cm		Large 50-60cm		X-Large 62+cm		ALL 10+ cm	
	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS
B.A.	6.0	2.0	4.0	4.0	4.0	1.0	2.0	2.0	2.0	0.0	18.0	9.0
TOTAL	8.0		8.0		5.0		4.0		2.0		27.0	

Diseases and Insects:

Tinder conk was found on the yellow birch. Black knot was found on the choke cherry. The ash trees have been attacked by the emerald ash beetle and most are in decline.

Quality:

The quality of this stand is fair. The ash trees in this compartment are in decline due to the emerald ash borer, yet the basal area of the compartment, considering only the AGS trees is good and the yellow birch and eastern white cedar are growing well for the most part.

Objectives:

The objectives for this compartment are to maintain the recreational value of the compartment while retaining forest cover and promoting forest health.

Recommendations:

- Inspect the boardwalk annually and repair as required
- Identify and remove hazardous trees annually

Property Level Recommendations:

- Locate and identify property boundaries
- Locate and assess the health of previously identified butternut trees
- The existing trails through the east part of the property should become formal authorized trails with permitted uses and a linkage to the well-used trails in compartment 5 should be created through compartment 3
- Landscape trees should be maintained by an arborist at prescribed intervals
- Grass maintenance should be continued
- Hazard trees should be identified and removed annually
- Trail maintenance should be performed as required

Appendix C: Species List

Common Name	Scientific Name
Agrimony	<i>Agrimonia eupatoria</i>
Alternate-leaved Dogwood	<i>Cornus alternifolia</i>
American Beech	<i>Fagus grandifolia</i>
American Crow	<i>Corvus brachyrhynchos</i>
American Goldfinch	<i>Spinus tristis</i>
American hog-peanut	<i>Amphicarpaea bracteata</i>
American Robin	<i>Turdus migratorius</i>
American Toad	<i>Anaxyrus americanus</i>
Autumn Olive	<i>Elaeagnus umbellata</i>
Avens	<i>Geum canadense</i>
Baltimore Oriole	<i>Icterus galbula</i>
Basswood	<i>Tilia americana</i>
Beaver	<i>Castor canadensis</i>
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Bitter wintercress	<i>Barbarea vulgaris</i>
Bitternut Hickory	<i>Carya cordiformis</i>
Bittersweet nightshade	<i>Solanum dulcamara</i>
Black Cherry	<i>Prunus serotina</i> var. <i>serotina</i>
Black Locust	<i>Robinia pseudoacacia</i>
Black Maple	<i>Acer nigrum</i>
Black snakeroot	<i>Actaea racemosa</i>
Black walnut	<i>Juglans nigra</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Blacknose Dace	<i>Rhinichthys atratulus</i>
Blackside Darter	<i>Percina maculata</i>
Bloodroot	<i>Sanguinaria canadensis</i>
Blue cohosh	<i>Caulophyllum thalictroides</i>
Blue Jay	<i>Cyanocitta cristata</i>
Blue vervain	<i>Verbena hastata</i>
Bluegill	<i>Lepomis macrochirus</i>
Bluntnose Minnow	<i>Pimephales notatus</i>
Bottlebrush grass	<i>Elymus hystrix</i>
Bristly buttercup	<i>Ranunculus hispidus</i>
Bristly greenbriar	<i>Smilax tamnoides</i>
Broad-leaved sedge	<i>Carex platyphylla</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Bugleweed	<i>Ajuga reptans</i>
Bulblet bladder fern	<i>Cystopteris bulbifera</i>
Bunchberry	<i>Cornus canadensis</i>

Bur oak	<i>Quercus macrocarpa</i>
Buttercup species	<i>Ranunculus</i> sp.
Canada Goose	<i>Branta canadensis</i>
Canada st. john's-wort	<i>Hypericum canadense</i>
Canada waterleaf	<i>Hydrophyllum canadense</i>
Canada wild-ginger	<i>Asarum canadense</i>
Cardinal flower	<i>Lobelia cardinalis</i>
Celandine	<i>Chelidonium majus</i>
Chokecherry	<i>Prunus virginiana</i> var. <i>virginiana</i>
Cinquefoil	<i>Potentilla inclinata</i>
Clearweed	<i>Pilea pumila</i>
Coltsfoot	<i>Petasites frigidus</i>
Common burdock	<i>Arctium minus</i>
Common Carp	<i>Cyprinus carpio</i>
Common Dandelion	<i>Taraxacum officinale</i>
Common Grackle	<i>Quiscalus quiscula</i>
Common greenbriar	<i>Smilax rotundifolia</i>
Common Hornwort	<i>Ceratophyllum demersum</i>
Common Shiner	<i>Luxilus cornutus</i>
Common sow-thistle	<i>Sonchus oleraceus</i>
Common timothy	<i>Phleum pratense</i> ssp. <i>pratense</i>
Common water-parsnip	<i>Sium suave</i>
Cottonwood	<i>Acronicta lepusculina</i>
Cow parsnip	<i>Heracleum maximum</i>
Cream violet	<i>Viola striata</i>
Creek Chub	<i>Semotilus atromaculatus</i>
Creeping yellow loosestrife	<i>Lysimachia nummularia</i>
Curled dock	<i>Rumex crispus</i>
Cut-leaved toothwort	<i>Cardamine concatenata</i>
Dame's rocket	<i>Hesperis matronalis</i>
Dogwood	<i>cornus</i> sp.
Downy yellow violet	<i>Viola pubescens</i> var. <i>pubescens</i>
Dutchman's breeches	<i>Dicentra cucullaria</i>
Early meadow-rue	<i>Thalictrum dioicum</i>
Eastern Chipmunk	<i>Tamias striatus</i>
Eastern Gray Squirrel	<i>Sciurus carolinensis</i>
Eastern Spring beauty	<i>Claytonia virginica</i>
Enchanter's nightshade	<i>Circaea canadensis</i>
English Plantain	<i>Plantago lanceolata</i>
European Honeysuckle	<i>Lonicera periclymenum</i>
European larch	<i>Larix decidua</i>
Evergreen wood fern	<i>Dryopteris intermedia</i>
False mermaidweed	<i>Floerkea proserpinacoides</i>

False nettle	<i>Boehmeria cylindrica</i>
False solomon's seal	<i>Maianthemum racemosum</i>
Field horsetail	<i>Equisetum arvense</i>
Foamflower	<i>Tiarella cordifolia</i>
Fringed yellow loosestrife	<i>Lysimachia ciliata</i>
Garlic mustard	<i>Alliaria petiolata</i>
Giant solomon's seal	<i>Polygonatum biflorum</i> var. <i>commutatum</i>
Golden alexanders	<i>Zizia aurea</i>
Goldenrod	<i>Solidago caesia</i> var. <i>caesia</i>
Goldfish	<i>Carassius auratus</i>
Grasses	gramminoid sp.
Gray Catbird	<i>Dumetella carolinensis</i>
Great Blue Heron	<i>Ardea herodias</i>
Great blue lobelia	<i>Lobelia siphilitica</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>
Green Sunfish	<i>Lepomis cyanellus</i>
Greenside Darter	<i>Etheostoma blennioides</i>
Ground-ivy	<i>Glechoma hederacea</i>
Hairy Woodpecker	<i>Dryobates villosus</i>
Harbinger-of-spring	<i>Erigenia bulbosa</i>
Harlequin Blue flag	<i>Iris versicolor</i>
Hawthorn	<i>Crataegus chrysoarpa</i> var. <i>subrotundifolia</i>
Herb-Robert	<i>Geranium robertianum</i>
Honewort	<i>Cryptotaenia canadensis</i>
Hooked buttercup	<i>Ranunculus recurvatus</i> var. <i>recurvatus</i>
Hornyhead chub	<i>Nocomis biguttatus</i>
House Wren	<i>Troglodytes aedon</i>
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>
Japanese knotweed	<i>Reynoutria japonica</i> var. <i>japonica</i>
Joe pye weed	<i>Eutrochium maculatum</i> var. <i>bruneri</i>
Johnny Darter	<i>Etheostoma nigrum</i>
Kidney-leaved buttercup	<i>Ranunculus abortivus</i>
Killdeer	<i>Charadrius vociferus</i>
Knapweed	<i>Centaurea nigra</i>
Largemouth Bass	<i>Micropterus salmoides</i>
Least Darter	<i>Etheostoma microperca</i>
Lily-of-the-valley	<i>Convallaria majalis</i>
Liverworts	<i>cephaloziella</i>
Longear Sunfish	<i>Lepomis megalotis</i>
Lopseed	<i>Phryma leptostachya</i>
Mallard	<i>Anas platyrhynchos</i>
Manitoba Maple	<i>Acer negundo</i> var. <i>texanum</i>

Marsh marigold	<i>Caltha natans</i>
Mayapple	<i>Papaipema rutila</i>
Milfoil	<i>Myriophyllum alterniflorum</i>
Moneywort	<i>Bacopa monnieri</i>
Moonseed	<i>Menispermum canadense</i>
Mudpuppy	<i>Necturus maculosus</i>
Multiflora Rose	<i>Rosa multiflora</i>
North American Red Raspberry	<i>Rubus idaeus</i> ssp. <i>strigosus</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Northern Flicker	<i>Colaptes auratus</i>
Northern Hog Sucker	<i>Hypentelium nigricans</i>
Northern Redbelly Dace	<i>Chrosomus eos</i>
Norway spruce	<i>Picea abies</i>
Ostrich fern	<i>Matteuccia struthiopteris</i>
Pale jewelweed	<i>Impatiens pallida</i>
Periwinkle	<i>Vinca minor</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Pine siskin	<i>Spinus pinus</i>
Plantain-leaved sedge	<i>Carex plantaginea</i>
Poison ivy	<i>Toxicodendron radicans</i> var. <i>radicans</i>
Poplar	<i>Populus</i> sp.
Prickly gooseberry	<i>Ribes cynosbati</i>
Pumpkinseed	<i>Lepomis gibbosus</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Red Ash	<i>Fraxinus pennsylvanica</i>
Red baneberry	<i>Actaea rubra</i> ssp. <i>rubra</i>
Red cedar	<i>Juniperus virginiana</i>
Red clover	<i>Trifolium pratense</i>
Red Elderberry	<i>Sambucus racemosa</i>
Red oak	<i>Quercus rubra</i>
Red Trillium	<i>Trillium erectum</i>
Redfin Shiner	<i>Lythrurus umbratilis</i>
Red-osier Dogwood	<i>Cornus sericea</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Reed canary grass	<i>Xylomoia chagnoni</i>
Ribes	<i>Ribes</i> sp.
Riverbank Grape	<i>Vitis riparia</i>
Rock Bass	<i>Ambloplites rupestris</i>
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>
Running strawberry	<i>Euonymus obovatus</i>
Sensitive fern	<i>Onoclea sensibilis</i>
Serviceberry	<i>Amelanchier bartramiana</i>
Sharp-lobed hepatica	<i>Hepatica acutiloba</i>

Silver maple	<i>Acer saccharinum</i>
Skunk cabbage	<i>Symplocarpus foetidus</i>
Small Duckweed	<i>Lemna minor</i>
Small white aster	<i>Symphotrichum racemosum</i>
Smartweed	<i>Persicaria sagittata</i>
Song Sparrow	<i>Melospiza melodia</i>
Spinulose wood fern	<i>Dryopteris carthusiana</i>
Spotted cranesbill	<i>Geranium maculatum</i>
Spotted jewelweed	<i>Impatiens capensis</i>
Spring avens	<i>Geum vernum</i>
Spring beauty	<i>Claytonia caroliniana</i>
Squirrel-corn	<i>Dicentra canadensis</i>
Star-flowered false solomon's seal	<i>Maianthemum stellatum</i>
Stinging nettle	<i>Urtica dioica</i> ssp. <i>dioica</i>
Stonecat	<i>Noturus flavus</i>
Sugar Maple	<i>Acer saccharum</i>
Swamp milkweed	<i>Asclepias incarnata</i> ssp. <i>incarnata</i>
Sycamore	<i>Platanus occidentalis</i>
Tall meadow-rue	<i>Thalictrum pubescens</i>
Thimbleweed	<i>Anemone virginiana</i>
Tufted Vetch	<i>Vicia cracca</i>
Tulip tree	<i>Liriodendron tulipifera</i>
Twinleaf	<i>Jeffersonia diphylla</i>
Two-leaved toothwort	<i>Cardamine diphylla</i>
Violet	<i>Viola</i> sp.
Virginia creeper	<i>Parthenocissus quinquefolia</i>
Virginia smartweed	<i>Persicaria virginiana</i>
Virginia waterleaf	<i>Hydrophyllum virginianum</i> var. <i>virginianum</i>
Warbling Vireo	<i>Vireo gilvus</i>
Water hemlock	<i>Cicuta maculata</i>
Water-horehound	<i>Lycopus americanus</i>
White Ash	<i>Fraxinus americana</i>
White baneberry	<i>Actaea pachypoda</i>
White cedar	<i>Thuja occidentalis</i>
White Crappie	<i>Pomoxis annularis</i>
White Elm	<i>Ulmus americana</i>
White Pine	<i>Pinus strobus</i>
White Spruce	<i>Picea glauca</i>
White Sucker	<i>Catostomus commersonii</i>
White trillium	<i>Trillium grandiflorum</i>
White trout-lily	<i>Erythronium albidum</i>

White turtlehead	<i>Chelone glabra</i>
White vervain	<i>Verbena urticifolia</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Wild blue phlox	<i>Phlox divaricata</i>
Wild Carrot	<i>Daucus carota</i>
Wild chicory	<i>Cichorium intybus</i>
Wild columbine	<i>Aquilegia canadensis</i>
Wild cucumber	<i>Echinocystis lobata</i>
Wild garlic	<i>Allium vineale</i>
Wild leek	<i>Allium tricoccum</i> var. <i>burdickii</i>
Wild licorice	<i>Galium lanceolatum</i>
Wild Strawberry	<i>Fragaria virginiana</i> ssp. <i>glauca</i>
Willow sp.	<i>Salix</i> sp.
Willowherb	<i>Epilobium arcticum</i>
Winterberry	<i>Ilex verticillata</i>
Wood anemone	<i>Anemone quinquefolia</i> var. <i>quinquefolia</i>
Wood Duck	<i>Aix sponsa</i>
Wood frog	<i>Lithobates sylvaticus</i>
Wood nettle	<i>Laportea canadensis</i>
Wood-sorrel	<i>Oxalis corniculata</i>
Yellow Birch	<i>Betula alleghaniensis</i>
Yellow trout-lily	<i>Erythronium americanum</i>
Yellow-Rumped Warbler	<i>Setophaga coronata</i>
Zigzag goldenrod	<i>Solidago flexicaulis</i>

Appendix X: Community Consultation for the Vision of the _____ Conservation Area/property.

Community consultation for ___ Conservation Area took place in the form of _____. The event was advertised by _____.

The following Stakeholders were contacted for opinions throughout the process of the plan.

___ Number of community members participated.

< Poster/Handout highlighting the details of the Open House, this may also include an informational article if applicable >

Appendix X: Stakeholder Comments/Feedback

The following stakeholders were consulted during the process of updating the management plan and their concerns were noted and considered.

Appendix X: Public Comments/Feedback from Public Open House

“.....”
~ ~ ~
“.....”
~ ~ ~
“.....”

Appendix X: Vision for the Future of the _____ Property

Elements for Inclusion As Identified and Described at Community Open House

Meeting Date: October 23, 2025
Report Date: September 24, 2025
Submitted by: Ashley Fletcher

Item 8.1 (a)

Subject: Business Arising

Regarding BD-24-62

Report to be provided at a future meeting

Directors request that a report be provided exploring the options and costs associated with providing an electric vehicle (EV) charging station within campground parking lots. It is also suggested that campground rules and regulations be proactively updated to prohibit EV charging on camp sites.

Regarding BD-25-59

Document to be provided for distribution to Board Members in October

Directors request that SCRCA staff prepare a 1-page information sheet justifying the increase in levy which can be provided to municipal council.

Meeting Date: October 23, 2025
Report Date: October 2, 2025
Submitted by: Emily De Cloet

Item 8.1 (b)

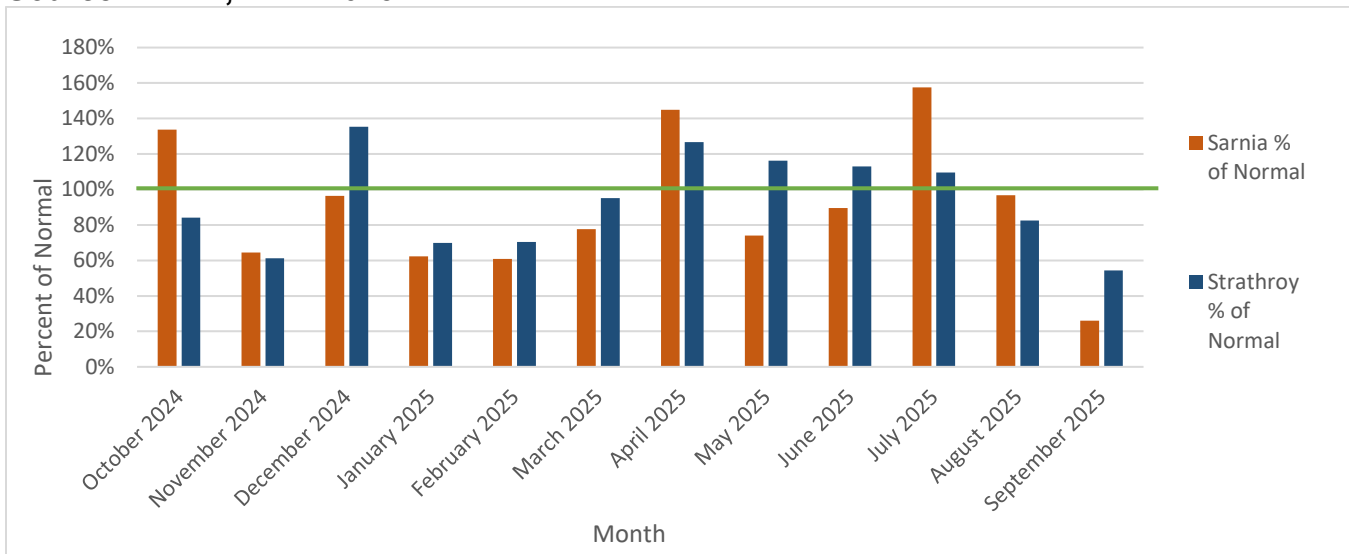
Subject: Current Watershed Conditions

Report Highlights:

- Heavy rainfall events in the spring and summer have helped keep conditions within their normal ranges for the 3- and 18-month indicator thresholds for most areas in the watershed.
- Rainfall in September was well below normal, with many gauges reporting between 30% and 60% of what is the typical amount for the month. The lack of rainfall was also apparent in streamflow averages, which reported predominately between 30% and 65% of normal flows.
- The surrounding lakes are between 20 cm and 22 cm below their water levels for last year. The lakes continue to sit near average, with Lake Huron 13 cm below it's long-term monthly average, and Lakes St. Clair and Erie 7 cm above their average.

Precipitation Trends

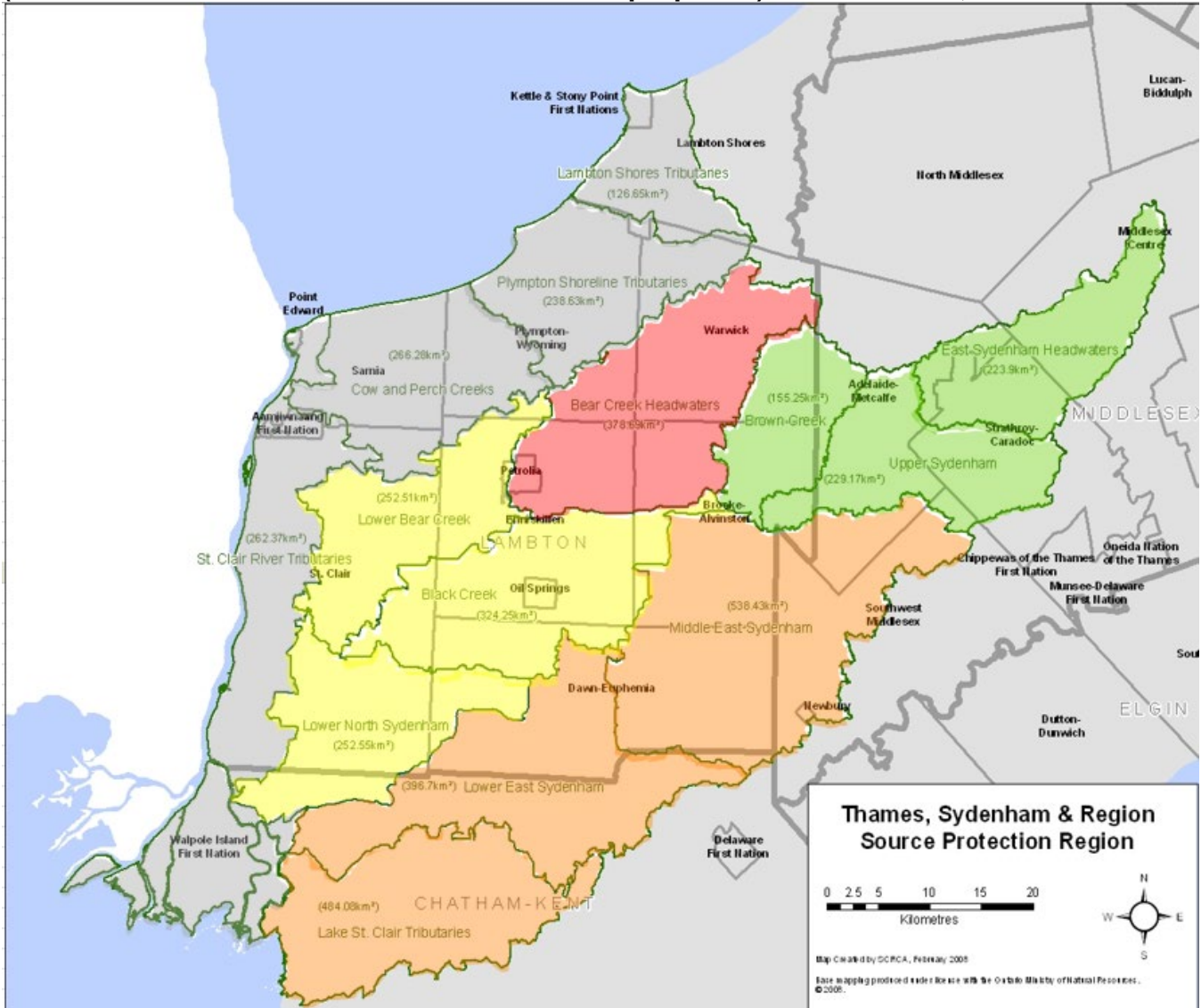
Figure 1: Monthly precipitation as percent of normal values for Sarnia and Strathroy.
Source: ECCC, MNR 2025.



- Figure 1 illustrates the stark differences between stations throughout the year. Strathroy and Sarnia were both below their typical monthly rainfall in August and September, however long-term precipitation averages have been bolstered by heavy rainfall events, such as those in April and July.

Streamflow Trends

Figure 2: Flow averages as a percent of the lowest average summer month flow value (indicator threshold used for low water status purposes). Source: MNR, SCRCA 2025.



- Figure 2 depicts sub watershed streamflow conditions for September as a percent of the lowest average summer month flow. Flows that are above 70% are shown in green, 50-70% are shown in yellow, orange for 30-50% and red for values below 30%.

Lake Level Trends

Table 2: Surrounding lakes water level comparison. Source: ECCC, 2025.

August 2025	Lake Huron	Lake St. Clair	Lake Erie
Mean for Month (Preliminary Data)	176.46	175.26	174.36
Mean for Month Last Year	176.68	175.48	174.56

Change	-0.22	-0.22	-0.20
Mean for Month, Last 10 years	176.94	175.64	174.69
Change Compared to Current	-0.48	-0.38	-0.33
Mean for Month, All Time	176.59	175.19	174.29
Change Compared to Current	-0.13	0.07	0.07
Statistics for Period of Record			
Maximum Monthly Mean / Year	177.42	175.97	175.02
	2020	2020	2019
Change Compared to Current	-0.96	-0.71	-0.66
Minimum Monthly Mean / Year	175.77	174.41	173.43
	1964	1934	1934
Change Compared to Current	0.69	0.85	0.93

- Water levels on the surrounding lakes continue to decline compared to levels in 2024, as well as the past decade.
- Long-term data shows that the lakes are sitting near average, deviating only 7 and 13 cm from mean.

Forecast and Flood/Drought Threat

Streamflow throughout the watershed is below normal and water levels in Wallaceburg are well below bankfull thresholds. At the time of this report, no significant rainfall is expected, however we could see increased precipitation should the remnants of an Atlantic hurricane track into Southern Ontario. The flood threat is low, with continued concern for low water levels and drought conditions should precipitation remain below normal.

Meeting Date: October 23, 2025 **Item 8.1 (c)**
Report Date: October 2, 2025
Submitted by: Melissa Deisley, Jeff Vlasman, Meagan Weber,
 Merrick Van Der Vaart
Subject: Regulations Activity Summary

A summary of staff activity related to the Conservation Authority's *Prohibited Activities, Exemptions and Permits Regulation* (Ontario Regulation 41/24) is presented below. This report covers the period from August 1, 2025 to September 30, 2025

Regulations Permits Issued						
Application #	Location	Municipality	Proposal	Submitted	Issued	Days
R#2024-0552	7315 Shiloh Line	Brooke-Alvinston	New single family dwelling	Jul-21	Aug-13	23
R#2025-0410	2380 Old Walnut Rd (closest address)	Brooke-Alvinston	replace culvert	Jul-18	Aug-19	32
R#2025-0424	North of 3884 Nauvoo Road, Brooke-Alvinston	Brooke-Alvinston	Fill in valley land to be able to farm area better	Aug-27	Sep-22	26
R#2024-0156	6650 Angler Line	Chatham-Kent	tear down/rebuild dwelling	Sep-02	Sep-29	27
R#2025-0256	1315 Jackson St, Dresden	Chatham-Kent	new storage building, addition and swale	Aug-15	Aug-15	1
R#2025-0354	673 Murray St, Wallaceburg	Chatham-Kent	build a new detached garage	Jul-08	Aug-07	30
R#2025-0361	611 Sandra Cres, Wallaceburg	Chatham-Kent	build a deck	Jun-30	Aug-11	42
R#2025-0392	27137 St Clair Rd, Wallaceburg	Chatham-Kent	aerial pipeline repair/replacement	Aug-12	Aug-19	7
R#2025-0413	Brick Rd & Base Line	Chatham-Kent	SCR - like-for-like pole replacement	Sep-03	Sep-19	16

R#2025-0421	590 LaFontaine St, Wallaceburg	Chatham- Kent	build an addition	Aug-08	Sep-08	31
R#2025-0423	1 McDonald St, Mitchell's Bay	Chatham- Kent	build a second storey deck	Jul-31	Sep-02	33
R#2025-0427	9159 Oldfield Ln, Oldfield	Chatham- Kent	replace culvert / driveway	Sep-09	Sep-12	3
R#2025-0467	7161 Base Ln (closest address)	Chatham- Kent	install new pipeline	Aug-13	Sep-03	21
R#2025-0466	3647 Rokeby Ln (closest address)	Enniskillen	water crossing for fibre in RoW	Aug-13	Sep-11	29
R#2025-0464	5720 Cedar Point Ln (closest address)	Lambton Shores	water crossing for fibre in RoW	Aug-13	Sep-11	29
R#2025-0308	450 Greenfield St, Petrolia	Petrolia	repair foundation & build deck	Aug-26	Sep-04	9
R#2021-0196	3890 Ferne Ave	Plympton- Wyoming	tear down/rebuild dwelling	Jul-18	Sep-12	56
R#2023-0258	6906 Maitland St, Camlachie	Plympton- Wyoming	tear down / rebuild dwelling	Aug-17	Aug-29	12
R#2024-0254	3232 Devonshire Road	Plympton- Wyoming	addition to garage	Jul-15	Aug-01	17
R#2024-0405	6875 Hyde Street, Camlachie	Plympton- Wyoming	liquid fill dumped & bank alteration	Aug-13	Sep-10	28
R#2025-0465	5730 Kerrigan Rd (closest address)	Plympton- Wyoming	water crossing for fibre in RoW	Aug-13	Sep-11	29
R#2025-0233	2876 Old Lakeshore Rd, Sarnia	Sarnia	tear down/rebuild dwelling	Aug-06	Aug-29	23
R#2025-0270	1776 Lakeshore Rd, Sarnia	Sarnia	seawall replacement and groyne repair	Aug-07	Aug-29	22
R#2025-0364	5866 Glendon Drive	Southwest Middlesex	Wetand creation/enhance ment	Aug-11	Sep-02	22
R#2025-0401	Corner of Conservation Rd & Lobelia Dr	Southwest Middlesex	erosion control and wetlands	Jul-15	Aug-08	24
R#2025-0164	1167 Oil Springs Line, Moore	St. Clair	Re-align class F drain	Aug-22	Sep-03	12

R#2025-0281	509-511 Princess St, Port Lambton	St. Clair	build an addition & attached garage	Aug-29	Sep-08	10
R#2025-0325	1789 St. Clair Pkwy, Courtright	St. Clair	roof repair/modification and deck build	Jul-23	Aug-28	36
R#2025-0394	285 Albert St, Port Lambton	St. Clair	install a launcher & receiver	Jul-10	Aug-18	39
R#2025-0448	618 Stanley Ln (closest address)	St. Clair	replace pipeline	Aug-07	Sep-09	33
R#2025-0406	7220 First School Rd, Warwick	Warwick	water crossing for fibre in RoW	Aug-13	Aug-22	9
Total Permits Issued: 31		Average Number of Days to Issue for this Period: 23.58				

Regulations Inquiries

FileReference	Municipality	Location
R#2025-0527	Unknown	Unknown General Inquiry
R#2025-0523	Adelaide-Metcalf	Project 10064 - Buchanan TS & Sarnia Scott TS
R#2025-0533	Adelaide-Metcalf	NE Corner of Murphy and Sexton
R#2025-0244	Brooke-Alvinston	6423 Petrolia Ln, Alvinston
R#2025-0428	Brooke-Alvinston	west of 6557 James St, Inwood
R#2025-0435	Brooke-Alvinston	west of 8207 Sydenham Line
R#2025-0475	Brooke-Alvinston	Sexton Rd, Brooke
R#2025-0495	Brooke-Alvinston	8362 Petrolia Ln, Alvinston
R#2024-0223	Chatham-Kent	318 Gillard Street
R#2025-0199	Chatham-Kent	472 Isaac St, Dresden
R#2025-0355	Chatham-Kent	2011 Dufferin Ave, Wallaceburg
R#2025-0368	Chatham-Kent	30 + 34 DeMall Dr (Rolling Acres Sub)
R#2025-0434	Chatham-Kent	behind 29770 Tamway Rd
R#2025-0437	Chatham-Kent	1123 Elgin St, Wallaceburg
R#2025-0447	Chatham-Kent	110 Water St, Wallaceburg
R#2025-0450	Chatham-Kent	8409 North River Rd, Wallaceburg
R#2025-0455	Chatham-Kent	8409 North River Rd, Wallaceburg
R#2025-0469	Chatham-Kent	25 L Pinsonneault St, Mitchells Bay
R#2025-0472	Chatham-Kent	7059 Dufferin Ave, Wallaceburg

R#2025-0477	Chatham-Kent	470 Brown St, Dresden
R#2025-0481	Chatham-Kent	6562 North Waterfront Reserve
R#2025-0505	Chatham-Kent	29259 Arnold Rd, Wallaceburg
R#2025-0508	Chatham-Kent	across from 446 Oak St, Bothwell
R#2025-0511	Chatham-Kent	5756 Bluewater Ln, Wallaceburg
R#2025-0532	Chatham-Kent	SCRCA Watershed - General Inquiry from Contractor
R#2025-0408	Dawn-Euphemia	901 Florence Rd, Florence
R#2025-0461	Dawn-Euphemia	1329 McCready Rd, Bothwell
R#2025-0473	Dawn-Euphemia	5654 Bentpath Ln, Oakdale
R#2025-0525	Dawn-Euphemia	5669 Bentpath Ln, Croton
R#2024-0592	Enniskillen	5673 Oil Springs Ln, Oil Springs
R#2025-0471	Enniskillen	west of 3859 Caroline St
R#2025-0486	Enniskillen	3466 Oil Heritage Rd, Petrolia
R#2025-0300	Lambton Shores	5428 Oak Ave, Lambton Shores
R#2025-0445	Lambton Shores	6290 Willam St, Lambton Shores
R#2025-0463	Lambton Shores	9688 Ipperwash Rd, Ipperwash
R#2025-0490	Lambton Shores	Enterprise Dr, Forest
R#2025-0494	Lambton Shores	6865/6871 Clemens Ln, Lambton Shore
R#2025-0520	Lambton Shores	6392 Tanner Rd, Lambton Shores
R#2025-0530	Lambton Shores	5476 Huron View Ave, Lambton Shore
R#2025-0541	Lambton Shores	70 MacHenry St, Forest
R#2025-0436	Middlesex Centre	beside 22556 Vanneck Rd
R#2025-0493	Middlesex Centre	23605 Coldstream Rd, Komoka
R#2025-0497	Middlesex Centre	23605 Coldstream Rd, Komoka
R#2024-0412	Plympton-Wyoming	4914 Ann St, Hillsboro
R#2025-0029	Plympton-Wyoming	3209 Egremont Rd, Plympton
R#2025-0113	Plympton-Wyoming	3494 Queen St, Camlachie
R#2025-0395	Plympton-Wyoming	5092 Forest Rd, Wyoming
R#2025-0430	Plympton-Wyoming	3846 Ferne Ave, Camlachie
R#2025-0432	Plympton-Wyoming	4262 Bluepoint Dr, Plympton
R#2025-0433	Plympton-Wyoming	4262 Bluepoint Dr, Plympton
R#2025-0439	Plympton-Wyoming	Bluepoint Dr, Plympton
R#2025-0441	Plympton-Wyoming	4945 Edith Ln, Plympton
R#2025-0443	Plympton-Wyoming	4187 Bluepoint Dr, Plympton

R#2025-0446	Plympton-Wyoming	4187 Bluepoint Dr, Plympton
R#2025-0457	Plympton-Wyoming	4350 Lambton Ln, Camlachie
R#2025-0468	Plympton-Wyoming	4434 Fisher Ln, Camlachie
R#2025-0474	Plympton-Wyoming	3160 Douglas St, Plympton
R#2025-0479	Plympton-Wyoming	4148 Bluepoint Dr, Plympton-Wyoming
R#2025-0483	Plympton-Wyoming	4148 Bluepoint Dr, Plympton-Wyoming
R#2025-0484	Plympton-Wyoming	4262 Bluepoint Dr, Plympton
R#2025-0500	Plympton-Wyoming	4005 Cullen Dr, Plympton
R#2025-0506	Plympton-Wyoming	4187 Bluepoint Dr, Plympton-Wyoming
R#2025-0517	Plympton-Wyoming	4246 Bluepoint Dr, Plympton
R#2025-0531	Plympton-Wyoming	3852 Lakeshore Rd, Camlachie
R#2025-0539	Plympton-Wyoming	3197 Michigan Ln, Plympton
R#2025-0540	Plympton-Wyoming	4148 Bluepoint Dr, Plympton
R#2025-0542	Plympton-Wyoming	4148 Bluepoint Dr, Plympton
R#2025-0543	Plympton-Wyoming	4531 Egremont/6492 Oil Heritage Road
R#2025-0458	Point Edward	710 Alexandra St, Point Edward
R#2025-0513	Point Edward	Hwy 402 - Front St N to Uttoxter Rd
R#2025-0202	Sarnia	1441 Christina St N, Sarnia
R#2025-0282	Sarnia	2263 Lambert Rd, Sarnia
R#2025-0318	Sarnia	Cow Creek Upstream
R#2025-0374	Sarnia	504 Woodrowe Ave, Sarnia
R#2025-0452	Sarnia	1010 Plank Rd, Sarnia
R#2025-0459	Sarnia	5600 Blackwell Sideroad, Unit 423
R#2025-0478	Sarnia	1930 Franklin Ave, Bright's Grove
R#2025-0480	Sarnia	2273 Goldie Ln, Sarnia
R#2025-0501	Sarnia	1930 Franklin Ave, Bright's Grove
R#2025-0504	Sarnia	2940 Old Lakeshore Rd, Sarnia
R#2025-0512	Sarnia	1930 Franklin Ave, Bright's Grove
R#2025-0524	Sarnia	2547 Old Lakeshore Rd, Bright's Grove
R#2023-0128	Southwest Middlesex	3375 Carolinian Drive (lot across from)
R#2025-0412	Southwest Middlesex	5857 Glendon Dr, Appin
R#2025-0485	Southwest Middlesex	23888 Dundonald Rd, Glencoe
R#2025-0489	Southwest Middlesex	Argyll Dr & Pratt Siding, Alvinston
R#2022-0229	St. Clair	2594 Bickford Line (adjacent property), Brigden

R#2023-0327	St. Clair	61 Charlton St, Courtright
R#2025-0335	St. Clair	3891 St. Clair Pkwy, Port Lambton
R#2025-0362	St. Clair	1143 St. Clair Pkwy, Mooretown
R#2025-0381	St. Clair	485 East River Rd, Wallaceburg
R#2025-0417	St. Clair	393 Beresford St, Corunna
R#2025-0429	St. Clair	2276 Lambton Ln, Wallaceburg
R#2025-0454	St. Clair	St. Clair River
R#2025-0487	St. Clair	4687 St. Clair Pkwy, Port Lambton
R#2025-0499	St. Clair	469 Polymoore Dr, Moore
R#2025-0502	St. Clair	826 White Ln, Sombra
R#2025-0521	St. Clair	1545 Kimball Rd (Nicholls Memorial Forest)
R#2025-0528	St. Clair	463 Broadway Street
R#2025-0529	St. Clair	4633 St. Clair Pkwy, Port Lambton
R#2025-0538	St. Clair	Tyler Dr, Port Lambton
R#2021-0421	Strathroy-Caradoc	6631 Century Drive
R#2024-0710	Strathroy-Caradoc	Christina Rd & Falconbridge Rd
R#2025-0196	Strathroy-Caradoc	22691 Glen Oak Rd, Strathroy
R#2025-0260	Strathroy-Caradoc	370 Albert Street, Strathroy
R#2025-0449	Strathroy-Caradoc	8043 Olde Dr, Strathroy
R#2025-0453	Strathroy-Caradoc	320 Metcalfe St W, Strathroy
R#2025-0462	Strathroy-Caradoc	570 Dewan St, Strathroy
R#2025-0492	Strathroy-Caradoc	118 Scott St, Strathroy
R#2025-0526	Strathroy-Caradoc	17 Hull Road, Strathroy
R#2025-0482	Warwick	SCRCA Watershed
Total Regulations Inquiries: 111		

Regulations - DART Completed Files

File Reference	Municipality	Drain / Watercourse
R#2023-0096	Plympton-Wyoming	McDonald and Mcdonald Gillatly Drain
R#2024-0169	Plympton-Wyoming	Shea Ferguson Drain
R#2024-0138	Sarnia	Henderson Drain
R#2025-0456	Southwest Middlesex	McLachlan Drain

Total DART Permits Issued: 4

R#2025-0536 4128 / 4130 St Clair Parkway St. Clair

Increased river front shore
area is leaching soil into
the St Clair River

Total Regulations Violations with Activity for this Period: 13

Meeting Date: October 23, 2025 **Item 8.1 (d)**
Report Date: October 2, 2025
Submitted by: Melissa Deisley, Shelby Campbell, Kelsey Oatman

Subject: Planning Activity Summary

A summary of staff activity related to Municipal Plan Input and Review is presented below. This report covers the period from August 1, 2025 to September 30, 2025

Municipal Plan Input and Review			
File Reference	Location	Municipality	Municipal File
PL#2023-0033	1352 Napperton Drive	Adelaide-Metcalfe	B03-2023
PL#2023-0108	Egremont Dr & Hansford Rd (29064 Hansford)	Adelaide-Metcalfe	Z10-2023, Z09-2025
PL#2025-0054	6423 Petrolia Line	Brooke-Alvinston	B-004/25
PL#2025-0056	1934 Dufferin Ave	Chatham-Kent	
PL#2025-0071	24819 & 24821 Prince Albert Road	Chatham-Kent	
PL#2025-0077	10010 & 10062 Cedar Hedge Line	Chatham-Kent	B-43/25, B-44/25, & B-49/25 A-36/25
PL#2025-0082	1123 Elgin Street	Chatham-Kent	
PL#2025-0090	577 Isaac Street	Chatham-Kent	
PL#2025-0058	477 Dawn Mills Road	Dawn-Euphemia	B002-25 A001-25
PL#2024-0036	2960 Oil Heritage Road	Enniskillen	
PL#2020-0022	9338 West Ipperwash Road	Lambton Shores	ZO-08/2020 A12-2025
PL#2022-0052	9395 Ipperwash Road	Lambton Shores	OPA03-2024 (OPA11) Z08-2024 (By-law 44 of 2024)
PL#2025-0049	9723 Ipperwash Road	Lambton Shores	Z07-2025
PL#2025-0063	10698 Lamont Drive	Middlesex Centre	A-17-2025
PL#2025-0036	2614 Frederick Street	Oil Springs	
PL#2018-100	4051 Discovery Line	Petrolia	38T-21007
PL#2020-0070	First Ave and Fourth St	Petrolia	D14

PL#2022-0053	Country View Drive	Petrolia	38T-24003
PL#2018-022	Queen Street	Plympton-Wyoming	ZBA 51-2018 38T-18004 B01-2018, B01-2020
PL#2018-116	3790 Lakeshore Road	Plympton-Wyoming	38C-21005 B-15/22
PL#2021-0081	Lot 16 Con Front, King St	Plympton-Wyoming	125 of 2023 B-13/21 A-24/23
PL#2023-0027	6851 Fleming Road	Plympton-Wyoming	B-05/23, B-06/23 A-26/23
PL#2025-0015	4933 Edith Lane	Plympton-Wyoming	B-03/25
PL#2025-0052	Sante Drive	Plympton-Wyoming	
PL#2025-0062	3209 Egremont Rd	Plympton-Wyoming	A-10/25
PL#2025-0078	3842 Ferne Avenue	Plympton-Wyoming	A-14/25
PL#2025-0085	5309, 5310 Leyton Street, and 5507 Co-op Street	Plympton-Wyoming	ZBA 38 of 2024
PL#2019-115	1600 Venetian Blvd	Point Edward	Z-01-2025 38T-25003
PL#2020-0014	6068 Blackwell Sideroad	Sarnia	
PL#2020-0083	4957 Kimball Road	Sarnia	1-2023-85 of 2002 SD3-2021; SD1-2022
PL#2021-0050	Pamela Court	Sarnia	OPA #39, OPA #45, OPA #9 No. 7-2022-85 of 2022
PL#2022-0104	1378 Lakeshore Road	Sarnia	B26/2022, B30/2022, B18/2025, B19/2025 A42/2022
PL#2023-0010	1441 Christina St North	Sarnia	A16/2023; A24/2025
PL#2024-0074	2056 Lakeshore Road	Sarnia	A49/2024
PL#2024-0076	Lot 14, Con 5, Sarnia (Confederation Line)	Sarnia	
PL#2025-0065	1612 London Line	Sarnia	
PL#2025-0069	Business Park Drive (2024 London Line)	Sarnia	
PL#2025-0073	Business Park Drive (402 Business Park)	Sarnia	
PL#2025-0075	Pamela Court, Sarnia	Sarnia	
PL#2025-0081	2263 Lambert Road	Sarnia	A37/2025
PL#2025-0084	6170 Glendon Drive	Southwest Middlesex	P8-2025

PL#2023-0020	Indian Rd & St. Clair Parkway	St. Clair	Amendment No. 28 17 of 2024 38T-25001
PL#2025-0024	303 & 305 Lincoln Avenue	St. Clair	
PL#2025-0037	1371 Petrolia Line	St. Clair	B-05-25
PL#2025-0042	west of 1715 Bickford Line	St. Clair	B-04-25
PL#2025-0044	3863 St. Clair Parkway	St. Clair	A-11-25; A-20-25
PL#2025-0074	3891 St. Clair Parkway	St. Clair	A-24-25
PL#2025-0076	509-511 Princess Street	St. Clair	A-23-25
PL#2025-0088	east of 2351 Greenfield Road	St. Clair	B-15-25
PL#2018-018	22805 Adelaide Road	Strathroy-Caradoc	ZBA15-2021 39T- SC2101
PL#2021-0122	131 and 135 Caradoc St N	Strathroy-Caradoc	
PL#2022-0041	Saulsbury St, Part Lot 20, Part 5, Con 4, SER	Strathroy-Caradoc	39T-SC1601
PL#2023-0071	8157 Inadale Drive	Strathroy-Caradoc	ZBA16-2023 SPA9- 2023
PL#2025-0007	320 Metcalfe Street W	Strathroy-Caradoc	ZBA1-2025 SPA4- 2025
PL#2025-0059	370 Albert Street	Strathroy-Caradoc	
PL#2025-0072	54 Pannell Lane	Strathroy-Caradoc	A17-2025
PL#2025-0079	Lot 7, Carrie St	Strathroy-Caradoc	
PL#2025-0080	8524 Falconbridge Drive	Strathroy-Caradoc	B7-2025; B8-2025; B9-2025
PL#2025-0089	25198 & 25308 Melbourne Road	Strathroy-Caradoc	B15-2025; B16-2025
PL#2021-0069	308 St. Clair Street	Warwick	Z-05-23 38T-23004
PL#2024-0066	east of 7985 Confederation Line	Warwick	
PL#2025-0060	7360 Egremont Rd, 6613 Bethel Rd & 7402 Egremont Rd	Warwick	B-04-25; B-05-25
PL#2025-0087	7844 Confederation Line	Warwick	
Total Plan Review Items: 63			

Environmental Assessments

File Reference	Location	Municipality
EA#2025-0005	3595 Tecumseh Rd (Closest address)	St. Clair
EA#2025-0007	19820 St Clair Pkwy, Courtright	St. Clair
EA#2025-0001	Hwy 402 - Kerwood Road to 2.5 km East of Airport Road.	Warwick

Total Environmental Assessments: 3

Legal Inquiries

File Reference	Location	Municipality
LL#2025-0027	2594 Murphy Drive	Adelaide-Metcalf
LL#2025-0026	1221 James Street	Chatham-Kent
LL#2025-0030	9338 West Ipperwash Road	Lambton Shores
LL#2025-0028	3270 Devonshire Road	Plympton-Wyoming
LL#2025-0029	behind 454 Bickford Line	St. Clair

Total Legal Inquiries: 5

Prepared By: Chunning Li
 September 25, 2025
 DRAFT

ST CLAIR REGION CONSERVATION AUTHORITY
Statement of Revenue and Expenditure
As at August 31, 2025

	Actual To Date			Annual Budget Prorated		Variance from Budget	
	Revenue	Expenditures	Surplus(Deficit)	Revenue	Expenditures	Revenue	Expenditures
Flood Control & Erosion Control	\$540,864	\$245,281	\$295,583	\$280,253	\$280,253	\$260,611	(\$34,973)
Capital Projects/WECI	\$1,771,717	\$758,111	\$1,013,607	\$1,882,000	\$1,882,000	(\$110,283)	(\$1,123,889)
Conservation Area's Capital Development	\$0	\$0	\$0	\$67,667	\$67,667	(\$67,667)	(\$67,667)
IT Capital	\$20,343	\$4,901	\$15,443	\$11,593	\$18,000	\$8,750	(\$13,099)
Equipment	\$59,729	\$41,824	\$17,905	\$59,722	\$53,315	\$7	(\$11,491)
Planning & Regulations	\$842,116	\$525,362	\$316,755	\$639,068	\$639,068	\$203,048	(\$113,706)
Technical Studies/Healthy Watersheds	\$2,260,069	\$1,891,907	\$368,162	\$1,681,700	\$1,681,700	\$578,369	\$210,207
Recreation	\$1,817,043	\$1,228,561	\$588,482	\$1,218,120	\$1,218,120	\$598,923	\$10,441
Property Management	\$158,752	\$253,310	(\$94,558)	\$149,697	\$216,364	\$9,054	\$36,946
Education	\$70,838	\$106,503	(\$35,665)	\$97,818	\$97,818	(\$26,980)	\$8,685
Communication	\$143,593	\$94,190	\$49,402	\$88,177	\$88,177	\$55,415	\$6,013
Source Water Protection	\$221,903	\$109,373	\$112,530	\$189,123	\$189,123	\$32,780	(\$79,750)
Conservation Services	\$456,466	\$367,457	\$89,009	\$291,407	\$291,407	\$165,059	\$76,051
Administration/AOC Management	\$1,546,712	\$664,844	\$881,868	\$729,774	\$729,774	\$816,938	(\$64,930)
	\$9,910,145	\$6,291,623	\$3,618,522	\$7,386,120	\$7,452,786	\$2,524,025	(\$1,161,164)

Notes:

1. General and special levies have been invoiced and are recorded in the actual revenue reported above. See General Levy Report for amounts outstanding.
2. The significant variances from budget to actual is reflective of the nature/timing and uniqueness of the particular projects. The variances will reduce and disappear as the year progresses.
3. Budget for the year is divided by 12 and multiplied by the number of months in the reporting period, this does not reflect the seasonality of the nature/ timing of projects



ST. CLAIR REGION CONSERVATION AUTHORITY

Cheques issued August-September 2025

CHQ. #	DATE	VENDOR	DESCRIPTION	AMOUNT
124606	2025-08-06	Fortify Protection Incorporated	Campground security	\$ 12,559.95
124615	2025-08-06	UULawn Care & Landscaping	Grass cutting	\$ 7,627.23
124619	2025-08-13	Acorn Tree Service	Trimming, branch & tree removal, cleanup	\$ 15,435.80
124632	2025-08-13	Jeff Shea	SPRI 2025 - reduced tillage equipment	\$ 20,000.00
124642	2025-08-20	Armtec Inc.	Supplies - Rondeau Park watercourse crossing	\$ 24,401.41
124643	2025-08-20	Bluewater Trailer Sales Ltd.	Utility trailer for Warwick	\$ 6,635.78
124648	2025-08-20	GEI Consultants	McLean - ecological services - Phase 1 design	\$ 6,227.71
124656	2025-08-25	Dronelogics Systems Inc.	Mavic drone, battery kit, & mapping software	\$ 17,389.73
124665	2025-09-02	Crump Enterprises Ltd.	Wetland construction - McKellar Farms & Bright's Grove	\$ 25,000.00
124671	2025-09-02	KT Excavating	Gravel & culvert - Perch Creek Trail	\$ 6,260.20
124699	2025-09-10	UULawn Care & Landscaping	Grass cutting	\$ 7,398.97
124706	2025-09-24	Congdon Concrete	Concrete work at Clark Wright workshop	\$ 17,898.06
124709	2025-09-24	GEI Consultants	McLean - ecological & geotechnical services - Phase 1	\$ 29,213.96
124711	2025-09-24	Hortico Inc.	Lambton tree planting at Oil Museum & TD Tree Events	\$ 8,175.55
124718	2025-09-24	560789 Ontario Ltd. o/a R&M Construction	Wetland restoration - Keith McLean Conservation Lands	\$ 318,694.97
TOTAL CHEQUE DISBURSEMENTS -				\$ 522,919.32

Internet banking payments for August-September 2025

TRANS #	DATE	VENDOR	DESCRIPTION	AMOUNT
10956	2025-08-31	Hydro One Networks Inc.	Electricity	\$ 40,053.48
10958	2025-08-31	Libro Credit Union - Visa	Employee expenses	\$ 7,358.69
10963	2025-08-31	OMERS	Employee pension plan	\$ 50,159.74
10964	2025-08-31	Ontario Minister of Finance	Employer Health Tax	\$ 6,238.71
10967	2025-08-31	Receiver General	Payroll source deductions	\$ 186,528.53
10969	2025-08-31	RWAM Insurance Administrators	Employee group benefits	\$ 20,058.61
10971	2025-08-31	Township of Warwick	Property taxes	\$ 6,106.99
10983	2025-09-30	Hydro One Networks Inc.	Electricity	\$ 39,809.24
10986	2025-09-30	OMERS	Employee pension plan	\$ 50,961.92
10987	2025-09-30	Petro Canada Inc.	Gas	\$ 5,025.35
10989	2025-09-30	Receiver General	Payroll source deductions	\$ 54,637.12
10991	2025-09-30	RWAM Insurance Administrators	Employee group benefits	\$ 19,561.87

TOTAL INTERNET BANKING DISBURSEMENTS - \$ 486,500.25

Major Visa purchases:	OLTA - annual membership	\$ 595.00
	Prolab Scientifique - filters	\$ 1,141.30
	Conservation Ontario	\$ 565.00
	Bluewater Trailer	\$ 500.00
	Hydro One	\$ 3,106.57

PAYROLL RUNS		
Payroll No. 17		\$ 114,327.80
Payroll No. 18		\$ 111,565.77
Payroll No. 19		\$ 112,596.07
Payroll No. 20		\$ 94,084.76
TOTAL PAYROLL RUNS -		\$ 432,574.40



2025 GENERAL LEVY SUMMARY

MUNICIPALITY	GROSS LEVY	PAID TO DATE	OUTSTANDING
Adelaide Metcalfe Tp	\$ 32,760.80	\$ 32,760.80	\$ -
Brooke-Alvinston Tp	\$ 29,048.29	\$ 29,048.29	\$ -
Chatham-Kent Mn	\$ 219,146.98	\$ 219,146.98	\$ -
Dawn-Euphemia Tp	\$ 43,791.86	\$ 43,791.86	\$ -
Enniskillen Tp	\$ 31,468.39	\$ 31,468.39	\$ -
Lambton Shores Mn	\$ 86,252.27	\$ 86,252.27	\$ -
Middlesex Centre Mn	\$ 40,175.56	\$ 40,175.56	\$ -
Newbury V	\$ 2,638.86	\$ 2,638.86	\$ -
Oil Springs V	\$ 3,496.55	\$ 3,496.55	\$ -
Petrolia Tp	\$ 43,765.12	\$ -	\$ 43,765.12
Plympton Wyoming Tp	\$ 96,663.84	\$ 48,331.92	\$ 48,331.92
Point Edward V	\$ 35,061.95	\$ 35,061.95	\$ -
Sarnia	\$ 616,272.74	\$ 462,204.56	\$ 154,068.18
Southwest Middlesex Mn	\$ 19,444.58	\$ 19,444.58	\$ -
St Clair Tp	\$ 184,750.98	\$ 184,750.98	\$ -
Strathroy-Caradoc Tp	\$ 153,371.40	\$ 153,371.40	\$ -
Warwick Tp	\$ 37,839.84	\$ 37,839.84	\$ -
TOTAL	\$ 1,675,950.01	\$ 1,429,784.79	\$ 246,165.22

Foundation Memorial Forest Dedication – 2025:

The Foundation Memorial Forest Dedication was held on Sunday, September 28th at the Lorne C. Henderson Conservation Area in Petrolia. Duncan Skinner and Greg Grimes provided remarks on behalf of the St. Clair Region Conservation Foundation and St. Clair Region Conservation Authority, respectively. Approximately 70 people attended the dedication where a Butternut Tree was planted as a symbol for all trees dedicated over the last year through donations from individuals not associated with a funeral home program. From September 2024 to August 2025, 98 trees were dedicated through individual donations to the program and planted throughout 12 Authority and Foundation properties. To date, a total of 2,682 trees have been dedicated through the Foundation's Memorial Forest Program.



Duncan Skinner (left), President of the St. Clair Region Conservation Foundation and Greg Grimes (right), Chair of the St. Clair Region Conservation Authority attend the Memorial Forest Dedication service at the Lorne C. Henderson Conservation Area.



The family of Barbara Gonyou planted the ceremonial tree at the 2025 Memorial Forest Dedication service.

Conservation Awards:

A list of possible conservation award recipients will be brought forward at the Board meeting in December. Board members wishing to nominate any individual or organization should contact Donna Blue at the SCRCA Administration Office (dblue@scrca.on.ca; (519) 245-3710 Ext. 219).

St. Clair Region Conservation Foundation and Conservation Education Fundraising

The St. Clair Region Conservation Foundation raises funds to support the work of the Conservation Authority. One of the main Authority programs supported by the Foundation is Conservation Education. Efforts are made to secure funds from corporate sponsors, special events, and the BINGO program. Additionally, the Conservation Authority applies for government grants to support the education program. Current efforts include:

St. Clair Region Conservation Foundation:

Plains Midstream Canada: Since 2018, Plains Midstream Canada (PMC) has supported the SCRCA's Spring Water Awareness Program (SWAP). Typically held throughout the months of March and April, the program teaches students about the hazards of spring floodwaters. The 2024-2025 school year marked the end of the current agreement between the SCRCA and PMC. In the summer of 2025, PMC was acquired by Keyera Corporation, a Canadian-owned energy company focused on natural gas and natural gas liquids. Despite the change in ownership, PMC representatives feel encouraged that interest will remain in supporting the SWAP program moving forward.

Friends of the St. Clair River (FOSCR): A request has been submitted to the Friends of the St. Clair River community group to seek their continued sponsorship of the "River RAP" education program that is offered to both elementary and secondary school students. In 2025, the organization provided \$7,500 to allow the SCRCA to deliver this program free-of-charge.

St. Clair Region Conservation Authority:

Department of Fisheries and Oceans Canada (DFO) – Habitat Stewardship Program (Aquatic): The Department of Fisheries and Oceans Canada (DFO) Canada, through the Habitat Stewardship Program (Aquatic) stream, is providing \$18,500 for the 2025-2026 fiscal year (ending March 31, 2026). The funding will support the delivery of the Aquatic Species at Risk education program throughout the watershed.

Canada Water Agency (CWA) – Great Lakes Freshwater Ecosystem Initiative: In collaboration with the Biology Department, the SCRCA was successful in securing funding through the CWA's Great Lakes Freshwater Ecosystem Initiative. The continued development and delivery of the "Farmers of the Future" education program will be

supported through this funding with \$42,388 provided for the 2025-2026 fiscal year (ending March 31, 2026). The “Farmers of the Future” program will engage junior and high school aged students in experiential learning opportunities focussed on phosphorus and phosphorus reduction.

Environment and Climate Change Canada (ECCC) – Carolinian Priority Place:

Funding in the amount of \$5,600 from ECCC through the Carolinian Priority Place fund will support the production of a video focussing on turtles in the St. Clair River watershed.

Ministry of the Environment, Conservation, and Parks (MECP) – Canada-Ontario Agreement (COA) – Healthy Lake Huron program

– A funding request has been submitted by the SCRCA Biology department to MECP and includes \$10,000 for conservation education. If successful, the funding will support SCRCA’s continued partnership with Hillside School at Kettle and Stony Point First Nation in delivering the Land-based Education program.

Dow Canada Charitable Grant Program

– Dow Canada has provided \$9,700 in funding to support conservation education programs at the Lorne C. Henderson Conservation Area and/or in-school education programs for schools within St. Clair the St. Clair region.

Media and Social Media Analytics:

In order to continually improve upon our activities related to local media outlets and social media, communications staff will be reviewing analytics to help assess our communications efforts.

The following statistics cover the timeframe from August 1, 2025, to September 30, 2025:

Media Relations:

Activity	2025 (August – September)	2024 (August – September)
Media Releases	2	6
News Article Mentions	33	113

Social Media

Facebook:

Activity	2025 (August – September)	2024 (August – September)
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Post Reach*	19,440	77,049
Page Visits	55,996	3,600
Likes/Followers	2,959	2,770
Posts	20	37

***Post Reach** – The number of people who saw any content from your Page or about your Page, including posts, stories, ads, social information from people who interact with your Page, etc.

X (Formerly Twitter)

Activity	2025 (August – September)	2024 (August – September)
Posts	21	30
Impressions	4,561	6,309
Followers	936	925
Engagements*	137	73

* **Engagements** = clicks, retweets, replies, follows, and likes

Instagram

Activity	2025 (August – September)	2024 (August – September)
Total Followers	1,294	1,100
Views	11,776	10,514
Reach	1,698	2,946
Engagements*	189	549

* **Engagements** = The number of likes or reactions, saves, comments, shares and replies on your content

Strategic Objectives(s):

Goal 4 – Provide recreation and education opportunities for the public to enjoy and learn from our natural environment.

Recent and Scheduled Meetings

Canadian RAP Implementation Committee (CRIC)

- April 25, 2024
- June 18, 2024
- November 27, 2024.
- Next meeting is anticipated to be scheduled in fall 2025.

Friends of the St. Clair River (FOSCR)

- February 24, 2025
- March 19, 2025
- April 10, 2025
- June 24, 2025
- September 9, 2025

Binational Public Advisory Council (BPAC)

- February 13, 2025
- May 15, 2025.
- August 6, 2025

Outreach and Engagement

Newsletter

Friends of the St. Clair River and the RAP Office continue to partner on the production of St. Clair River News, a free monthly e-newsletter: [August 2025 Newsletter](#) and [September 2025 Newsletter](#).

St. Clair River Evening – Honouring the St. Clair River

The annual St. Clair River Evening will be held on October 23, 2025 at the Corunna Legion. Speakers will highlight projects that have been completed in the St. Clair River AOC over the past 30 years, including habitat projects and the contaminated sediment remediation project. An elder from Aamjiwnaang First Nation or Walpole Island First Nation will also speak about the Indigenous connection to water. Registration is open until October 7th.

Strategic Objectives(s):

Goal 3 – Protect, manage, and restore our natural systems including woodlands, wetlands, waterways, and lakes.

Financial Impact:

Funding for the RAP Coordinator position is provided by the Ministry of the Environment, Conservation and Parks (MECP) and Environment and Climate Change Canada (ECCC).

Funding was secured from MECP for the 2024-2025 and 2025-2026 fiscal years under their Great Lakes Program. Funding was secured from ECCC for the 2024-2025 and 2025-2026 fiscal years under the federal Great Lakes Freshwater Ecosystem Initiative Program.

The RAP Coordinator holds monthly meetings with ECCC and MECP to provide regular updates on the status of the RAP work and prepares project status reports and financial update reports in accordance with the timelines in the respective funding agreements.



September 25, 2025

Via Email

To: Chair Greg Grimes – ggrimes@villageofpointedward.com

Cc: Board Coordinator – afletcher@scrca.on.ca

Cc: Bob Bailey, MPP Sarnia–Lambton – bob.baileyco@pc.ola.org

St. Clair Region Conservation Authority

205 Mill Pond Crescent

Strathroy, ON N7G 3P9

Attention: Greg Grimes, Chair, Board of Directors

Dear Chair Grimes,

The Town of Plympton-Wyoming is currently in the process of developing its 2026 municipal budget, which is expected to be presented to Council in January.

Looking ahead to 2026, Council anticipates that the rate of inflation will align more closely with the Bank of Canada's long-term target. In light of this, Council respectfully requests that the St. Clair Region Conservation Authority (SCRCA) exercise reasonable budgetary restraint and aim to limit any increase in its 2026 budget to 3% or less.

Council recognizes the financial challenges faced by conservation authorities, particularly in light of constraints imposed by recent provincial legislation. We sincerely appreciate any efforts the SCRCA can make to minimize budget increases during these economically difficult times.

We also acknowledge the important services the SCRCA provides to the residents of Plympton-Wyoming. Given the current economic outlook, Council is committed to ensuring that municipal resources are allocated in a fiscally responsible manner that supports strategic priorities and maintains approved service levels.

To support our budget planning timeline, we kindly request that the SCRCA submit its 2026 budget proposal to the Town by November 7, 2025.

Should you have any questions or require further clarification, please do not hesitate to contact me.

Sincerely

Adam Sobanski, CET.

Chief Administrative Officer

Town of Plympton-Wyoming

From: jess.jessome
To: ggrimes@villageofpointedward.com; [Ashley Fletcher](mailto:Ashley.Fletcher)
Subject: Support for Conservation Authority Funding and Fair Hearing Guidelines
Date: October 6, 2025 8:04:47 PM

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You don't often get email from jessjessome@msn.com. [Learn why this is important](#)

Please see below email I have send to a Plympton Wyoming Councillor in light of a regular board meeting on October 8th 5:00 regarding SCRCA

If you have any questions please feel free to reach out,

Thank you

Jessica

From: jess.jessome <[REDACTED]>
Sent: Monday, October 6, 2025 7:55 PM
To: KRodriques@plympton-wyoming.ca <krodriques@plympton-wyoming.ca>
Cc: Gary Atkinson <gatkinson@plympton-wyoming.ca>; Adam Sobanski <asobanski@plympton-wyoming.ca>; NMcewan@plympton-wyoming.ca <nmcewan@plympton-wyoming.ca>; sclark@scrca.on.ca <sclark@scrca.on.ca>; planning@scrca.on.ca <planning@scrca.on.ca>; Erin Kwarciak <ekwarciak@plympton-wyoming.ca>; drinking.water@ontario.ca <drinking.water@ontario.ca>; Wells, Helpdesk (MECP) <wellshelpdesk@ontario.ca>; B Woolvett@plympton-wyoming.ca <bwoolvett@plympton-wyoming.ca>; Bailey, Bob <bob.bailey@pc.ola.org>; JVanklaveren@plympton-wyoming.ca <jvanklaveren@plympton-wyoming.ca>; Alex Boughen <aboughen@plympton-wyoming.ca>; MVasey@plympton-wyoming.ca <mvassey@plympton-wyoming.ca>
Subject: Support for Conservation Authority Funding and Fair Hearing Guidelines

Dear Councillor Rodrigues,

I wanted to thank you for bringing forward the resolution requesting that the Province review and reconsider the current fee freeze placed on Conservation Authorities. I support your leadership on this matter, as I believe the freeze undermines the ability of local conservation authorities to

operate effectively and fairly.

As a resident of Wanstead, I've seen firsthand how proper drainage, flood prevention, and watershed management directly affect our homes and our well water. Conservation Authorities like the SCRCA need stable funding to fulfill their responsibilities — especially in rural communities where local waterways and ditches connect into the wider Bear Creek and St. Clair systems.

I also want to express my support for the SCRCA's Updated Hearing Guidelines. While I understand some may view them as restrictive, I believe these guidelines strengthen fairness and accountability by reducing potential conflicts of interest. Ensuring that hearings are handled independently — without local political influence — protects both applicants and residents. It ensures that decisions are made on evidence and environmental policy, not local pressures.

Together, a fair hearing process and stable funding will help restore public confidence and ensure that decisions are transparent, consistent, and protective of both the environment and community wellbeing.

Thank you again for your efforts to bring attention to these issues and for advocating for balanced, responsible governance.

I would like my comments added as a public input letter for the October 8th Regular Council Meeting Agenda Sections 5.1 and 5.2

Jessica Jessome of Wanstead

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