



Board of Directors Meeting

A G E N D A

December 16, 2021

2:00 p.m.

1. First Nations Acknowledgement	
2. Call to Order	
3. Adoption of Agenda	
4. Disclosure of Conflicts of Interest	
5. Approval of Previous Meeting Minutes	
5.1) Board of Directors Remote Meeting Minutes – November 3, 2021	3
6. Business Arising from the Minutes	
7. Presentations	
7.1) Sharon Creek Conservation Area Survey Results	5
7.2) Chatham-Kent Forest By-Law Update	5
8. New Business	
9. Business for Approval	
9.1) Income and Expenditure vs Budget to October 31, 2021	6
9.2) LTVCA 2022 Fee Schedules	10
9.3) LTVCA Transition Plan – Bill 229	13
9.4) 2022 Preliminary Budget Consultations	22
9.5) Longwoods Road Conservation Area - Magic of Lights – Extension of Event	23
9.6) Sharon Creek Conservation Area Survey Results	24
10. Business for Information	
10.1) C.A.O.'s Report	25
10.2) Water Management	27
10.3) Planning and Regulations	31
10.4) Conservation Area Lands	38
10.5) Conservation Services	40
10.6) Communications, Outreach and Education	47
10.7) Joint Health & Safety Committee Minutes – December 1, 2021	55
10.8) Wheatley Two Creeks Association Minutes – November 4, 2021	58
11. Correspondence	
11.1) SWM Support – Maintaining LTVCA Current Levy	59
11.2) Up to 10% of homes could now be 'uninsurable' because of flood risk. Could yours be one?..	60
11.3) Report to Chatham-Kent Natural Heritage Committee of the Whole - Mapping Project of Forest Cover and Natural Heritage Features	68

11.4) Report to Chatham-Kent Natural Heritage Committee of the Whole - Conservation Authorities Land Stewardship Programs 2014 - present.....	78
12. In Camera	88
13. Other Business	89
14. Adjournment	89

1. First Nations Acknowledgement

We will begin by acknowledging that the land on which we gather is the traditional territory of First Nations people who have longstanding relationships to the land, water and region of southwestern Ontario. We also acknowledge the local lower Thames River watershed communities of this area which include Chippewas of the Thames First Nation, Oneida Nation of the Thames, Munsee Delaware Nation, Delaware Nation, and Caldwell Nation. We value the significant historical and contemporary contributions of local and regional First Nations and all of the Original peoples of Turtle Island (North America). We are thankful for the opportunity to live, learn and share with mutual respect and appreciation.

5. Approval of Previous Meeting Minutes

5.1) Board of Directors Remote Meeting Minutes November 3, 2021



Board of Directors Meeting

DRAFT MINUTES

The meeting of the Lower Thames Valley Conservation Authority's Board of Directors was held remotely via the LTVCA's Administration Office at 100 Thames Street, Chatham, at 2:00 P.M. on Wednesday, November 3, 2021. The following directors were in attendance: T. Thompson, L. McKinlay, M. Hentz, P. Tiessen, C. Cowell, A. Finn, R. Leatham and J. Wright. H. Aerts, S. Emons, and S. Hipple were unable to attend the meeting.

1. First Nations Acknowledgment

M. Peacock read the First Nations acknowledgement.

2. Call to Order

Chair, Trevor Thompson called the meeting to order.

3. Adoption of Agenda

BD-2021-55 C. Cowell – L. McKinlay

Moved that the agenda be adopted as presented.

CARRIED

4. Disclosures of Conflicts of Interest

None Declared.

5. Approval of Previous Meeting Minutes

BD-2021-56 A. Finn – P. Tiessen

Moved that the Board of Directors remote meeting minutes of October 21, 2021 be approved.

CARRIED

6. Business Arising from the Minutes

None Declared.

7. Business for Approval

7.1) Funding for the Indigenous Community Education Centre

BD-2021-57 C. Cowell – A. Finn

Moved that the Lower Thames Valley Conservation Authority Board of Directors authorizes the removal of up to \$204,000 from reserves for the funding of the Indigenous Community Education Centre should it be required.

And further, that these funds are to offset any funding not raised by the Lower Thames Valley Conservation Foundation required to provide a 25% match to federal funding for this project.

CARRIED

8. Correspondence

None

9. Other Business

Update given on the Magic of Lights event being held at Longwoods Road CA from November 19 – January 2.

10. Adjournment

BD-2021-58 M. Hentz – C. Cowell

Moved that the meeting be adjourned.

CARRIED

Trevor Thompson
Chair

Mark Peacock, P. Eng.
CAO/Secretary-Treasurer

7. Presentations

7.1) Sharon Creek Conservation Area Survey Results

Vance Stark will provide a power point presentation on the Sharon Creek Conservation Area Survey Results.

7.2) Chatham-Kent Forest By-Law

Mark Peacock will provide a power point presentation on the Chatham-Kent Forest By-Law.

9. Business for Approval

9.1) Income and Expenditure vs Budget to October 31, 2021

Date: December 16, 2021
Memo to: LTVCA Board of Directors
Subject: **Income and Expenditure vs Budget to October 31, 2021**
From: Todd Casier, CPA, CA, Manager, Finance and Administrative Services

Background:

Review the 2021 Budget to the Revenue and Expenditures for the 10 months ended October 31, 2021.

REVENUE	2021 BUDGET	2021 BUDGET OCT PROJECTED	2021 ACTUAL TO OCT 31	\$ VARIANCE TO PROJECTED
GRANTS	1,128,824	940,687 *	1,415,623	474,936
GENERAL LEVY	1,477,082	1,477,082 ^	1,477,082	0
DIRECT SPECIAL BENEFIT	205,000	205,000 ^	205,000	0
GENERAL REVENUES	508,490	423,742 *	679,200	255,458
FOUNDATION GRANTS & REVENUES	0	0 *	305	305
RESERVES	0	0 *	0	0
CASH FUNDING	3,319,396	3,046,511	3,777,210	730,699
OTHER	0	0	70,000	70,000
TOTAL FUNDING	3,319,396	3,046,511	3,847,210	800,699

*-based on a 10 of 12 month proration of the budget

^-based on cash received to date

Grant income is greater than budgeted due to the reversal of deferred revenue for ongoing programs, the timing of grants invoiced and increased or new Water Quality, employment, education, OMAF and ALUS grants.

Note: Grant income is based on funds received/invoiced and not matched to expenses, meaning there may be expenses outstanding and not recognized in the attached expense statement. At year-end, each grant is reviewed individually and unspent funds are reduced from grant income and deferred for future expenditures.

Levy revenue is shown on a cash basis. All municipalities are paid in full.

General Revenue is above budget due to the following factors:

- Planning & Regulations, Conservation Areas, Conservation Services and Chatham-Kent Greening have seen a huge increase in demand and usage over budgeted. This is partially offset by Education being below budget.

Foundation Grants and Revenues budget are zero because of the uncertainty of funds available.

Reserves are zero as this account is used to balance the statement at year-end if expenses are greater than revenues.

Other revenues are above budget due to the donation of property to the Conservation Authority

EXPENSES	2021 BUDGET	2021 BUDGET OCT PROJECTED	2021 ACTUAL TO OCT 31	\$ VARIANCE TO PROJECTED
WATER MANAGEMENT				
FLOOD CONTROL STRUCTURES	194,441	162,034	128,424	(33,610)
EROSION CONTROL STRUCTURES	9	7	12	5
FLOOD FORECASTING AND WARNING	200,602	167,168	122,141	(45,027)
TECHNICAL STUDIES	126,250	105,208	112,983	7,775
PLANNING & REGULATIONS	279,822	233,185	270,886	37,701
WATERSHED MONITORING (PGMN)	93,441	77,868	138,830	60,962
SOURCE PROTECTION	32,481	27,067	35,205	8,138
THAMES MOUTH DEBRIS REMOVAL	0	0	0	0
Water Management Subtotal	927,046	772,537	808,481	35,944
CONSERVATION & RECREATION PROPERTIES				
CONSERVATION AREAS	631,238	526,031	637,763	111,732
COMMUNITY RELATIONS AND EDUCATION				
COMMUNITY RELATIONS	188,262	156,885	139,537	(17,348)
CONSERVATION EDUCATION	84,669	70,558	54,397	(16,161)
SKA-NAH-DOHT VILLAGE	114,813	95,678	106,624	10,946
Community Relations & Education Subtotal	387,744	323,121	300,558	(22,563)
CONSERVATION SERVICES/STEWARDSHIP				
CONSERVATION SERVICES (FORESTRY)	99,995	83,329	106,908	23,579
CHATHAM-KENT GREENING PROJECT	446,513	372,095	471,009	98,914
PHOSPHORUS REDUCTION	599,579	499,649	519,417	19,768
SPECIES AT RISK	227,281	189,401	194,749	5,348
Conservation Services/Stewardship Subtotal	1,373,368	1,144,474	1,292,083	147,609
CAPITAL/MISCELLANEOUS				
ADMINISTRATION BUILDING				
REPAIRS/UPGRADES	0	0	0	0
UNION GAS CENTENNIAL PROJECT	0	0	0	0
EMPLOYMENT PROGRAMS (FED/PROV)	0	0	0	0
Capital/Miscellaneous Subtotal	0	0	0	0
TOTAL EXPENDITURES	3,319,396	2,766,163	3,038,885	272,722

Water Management

Flood Control Structures are below budget due to reduced staffing available due to increased demand in other programs.

Flood Forecasting and Warning expenses are below budget due to one minor flood event on the Thames River this year, several large annual invoices received later in the year and staffing being utilized by other programs.

Technical Studies are comparable to budget.

Planning and Regulations is above budget due to the large influx of permits and the resources and staffing required to process these permits.

Watershed Monitoring is above budget due to the increase of a Water Quality grant and the increased expenses.

Source Protection is above budget due to the timing of when employees work on this program.

Conservation Areas

Conservation area expenses are above budget due to increased wage costs covered by employment grants received after the budget was created, the costs of opening and operating of the Conservation Area campgrounds, most of the other larger Conservation Area operational costs being incurred and increased usage by the public.

Community Relations and Education

Community Relations and Conservation Education are below budget due to decreased usage and funding available. SKA-NAH-DOHT Museum and Village is slightly above budget due to new grants to purchase equipment.

Conservation Services/Stewardship

Conservation Services (Forestry) and Chatham-Kent Greening expenses are above budget because of increased demand and most large activities, like tree planting, and related expenses have been completed.

Phosphorous Reduction is above budget due to increased OMAF COA and ALUS grants and the increased expenses. Species at Risk is comparable to budget.

Capital/Miscellaneous

No Capital/Miscellaneous expenses to date.

Summary:

	2021 BUDGET	2021 BUDGET OCT PROJECTED	2021 ACTUAL TO OCT 31	\$ VARIANCE TO PROJECTED
TOTAL CASH FUNDING	3,319,396	3,046,511	3,777,210	730,699
TOTAL EXPENDITURES	3,319,396	2,766,163	3,038,885	272,722
OPERATING SURPLUS (DEFICIT)	0	280,348	738,325	457,977
LESS: ACQUISITION OF CAPITAL ASSET	0	0	(139,881)	(139,881)
NET CASH FUNDING SURPLUS (DEFICIT)	0	280,348	598,444	318,096

At October 31, 2021, LTVCA's operating surplus is favourable due to increased grant and general revenue over budget and partially offset by increased expenditures due to the increased grants and the seasonal nature of some expenditures.

Note: The difference between the projected budget funding and projected budget expenditures is due to the recognition of the full General Levy and Special Levy versus all other income and expenses are prorated for the period.

Recommendation:

That the Board of Directors receives the Budget vs Revenue and Expenditures report for the period ended October 31, 2021.

The reports align with the following objectives of the LTVCA's Strategic Plan:

4. Improve Transparency and Understanding of Financial Statements

Respectfully Submitted

Recommended:

Todd Casier, CPA, CA

Manager, Financial and Administrative Services

Reviewed:

Mark Peacock, P. Eng.

C.A.O. / Secretary Treasurer

9.2) LTVCA 2022 Fee Schedules

Background:

An annual review of the various fee schedules at the Conservation Authority is performed with the new fee schedules to be brought before the Board of Directors for approval prior to the applicable year.

Discussion:

All fee schedules have been reviewed by their respective department. There were no changes recommended or made to the Regulation Fees, Planning and Technical Review Fees or Conservation Services Fees. As we move forward with planning agreements, new planning fees may be brought back to the Board of Directors at a later date.

Education Programs Fees – Change in In-class rates

The fee changes for the Education Programs are normally implemented at the beginning of the school year and will be brought forward at a meeting in 2022 if changes are recommended. However, to address COVID-19 issues, the LTVCA is moving to promote more in-class programming. In order to do so, a simplified fee rate is recommended as follows:

The current in-class rate for conservation education is:

- Half Day, 2 programs, flat rate of \$190 + travel
- Full Day, 4 programs, flat rate of \$315 + travel

Travel

- 0-30 minutes, \$60
- 31-60 minutes, \$120
- 61-90 minutes, \$200

Recommended Rates:

Proposed fees and details for offering in-class programming:

- In-class programs available to schools within the 10 municipalities served by LTVCA
- Mileage will be charged at the LTVCA rate (at the moment this is \$0.40/km)
- Mileage will be based upon the distance from 8348 Longwoods Road to the school building as per Google Maps
- Program fees will be \$6 per student per program with a minimum fee of \$90 per program

The Conservation Areas Fees - minor modifications.

**Lower Thames Valley Conservation Authority
2022 Conservation Areas Fee Schedule**

ALL PRICES INCLUDE HST

	Longwoods Road	Big Bend	CM Wilson	EM Warwick	Sharon Creek
Camping (Single Sites ¹)		✓	✓		
Group Camping (5 person min.)	✓	✓	✓	✓	
Seasonal Camping		✓	✓		
Pavilion/Area Rental	✓	✓	✓		
Day Use Fee	✓ coin or credit card		✓ coin or credit card		✓ MacKay Pay
2022 CA Parking Pass	✓		✓		✓

Day Use Parking Passes

Vehicle Permit	5.00 per day
Bus	110.00 per day
2022 CA Parking Pass	60.00 each, or two for 90

<u>Camping</u>	<i>Nightly</i>	<i>Monthly</i>	<i>Half Season (10 weeks)</i>	<i>Season (Victoria Day - Thanksgiving)</i>
Premium Sites	40.00	625.00	1000.00	1800.00 (other fees may apply)
Hydro & Water/Waterfront Sites (Big Bend)				
Hydro Only	38.00			
Unserviced	32.00			1600.00 (other fees may apply)
Extra Overnight Vehicle	5.00 per night			
Group Camping	10.00 per person (5-person minimum)			
Winter Storage of Camper	200.00 (Thanksgiving – Victoria Day (CM Wilson Only))			
Firewood	10.00/bag			

<u>EM Warwick[†]</u> <i>(Includes all buildings)</i>	<i>Weekends/night</i>	<i>Fri & Sat bundle</i>	<i>Sun-Thurs/night</i>	<i>Weekly</i>
Year-Round	400.00	600.00	250.00	1100.00
Scouts/Cadets/Guides (Nov-Apr)	250.00	450.00	150.00	750.00
Reservation Deposit*	50% of total bill due at time of booking (\$100 of which non-refundable without 30 days' notice)			
Firewood	50.00 per ½ face cord			

<u>Pavilion Rental[†]</u>	<i>Per day, excludes parking (Guests must use Pay & Display machine OR Purchase permits in advance)</i>
Pavilion/Area Rental	100.00 (for outdoor and pavilion weddings \$200 consultation fee also applies)
Barn (CM Wilson)	250.00
Per 25 Vehicle Permits	50.00
Reservation Deposit*	100.00 (Non-refundable without 30 days' notice)
Wedding Consultation Fee	200.00 (includes one CA Parking Pass for couple)

CM Wilson Barn Wedding[†]

1000.00	Includes:
	<ul style="list-style-type: none"> Outdoor area rental and use of outdoor area for photos Parking for 25 vehicles, one CA Parking Pass for couple Access to setup day before at 2:00 pm, including access to host rehearsal dinner Teardown before 1:00 pm day after, including access to host brunch 50% of total bill due at time of booking (\$100 of which non-refundable without 30 days' notice)

Photography Permits

Single Day (not incl. parking)	60.00
Annual (not incl. parking)	200.00

Other

Non-Camper Sewage Disposal	50.00 (CM Wilson Only, May-Oct)
Cleaning Fee	150.00 first hour, 50/hour thereafter

¹ Includes one vehicle per site; limit 4 persons per site unless family unit; Let's Camp processing Fee additional

[†] Requires \$150 Security/Damage Deposit, to be refunded if applicable

* Reservation deposit applied to total bill

Prices are subject to change

Modifications:

- The fee for an annual season pass be changed from \$60 for one to allowing two passes to be purchased for \$90.
- Clarification has been provided that off season rates for E.M. Warwick C.A. is for Scouts, Guides and Cadets only
- Fees for Photographic Permits have been introduced – generally applicable to C. M. Wilson C.A.

Recommendation:

That the 2022 Conservation Areas and Conservation Education Fee Schedules be adopted as presented.

9.3) LTVCA Transition Plan - Bill 229

Date: December 16, 2021
Memo to: LTVCA Board of Directors
Subject: **Bill 229 Transition Plan**
From: Mark Peacock, P. Eng., C.A.O. / Secretary Treasurer

Background:

The purpose of the Transition Plan is to provide conservation authorities and municipalities with the path, tasks and timelines to address changes to the budgeting and levy process based on mandatory programs and services (Category 1), municipal programs and services (Category 2), and other programs and services (Category 3) and the need, in some cases, to reach agreements to allow levies to be collected. The Transition Plan describes activities in the period (Transition Period) between the current levy process and the new process which must be completed by January 1, 2024.

Phase 1 of the transition period is August, 2021 – February 28, 2022 and has two deliverables. The first is developing a Transition Plan which includes a timeline and work plan. The Transition Plan is required to be submitted to the member municipalities and Ministry of Environment, Conservation and Parks (MECP) by December 31, 2021. The second is the Inventory of Programs and Services, which is to be completed and provided to member municipalities and MECP by February 28, 2022. To be completed by the deadline of December 31, 2021, the Transition Plan must include a work plan and timeline for the authority to meet the requirements for the first and second phases of the transition period. A copy of this transition plan must be sent to each participating municipality in the authority's area of jurisdiction and to the Ministry of Environment, Conservation and Parks. The Transition Plan must be published onto the authority's website or made available to the public by other means (as per Section 3 of the regulation: Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the Act).

Phase 2 of the transition period includes developing and finalizing Memorandums of Understanding (MOU) or agreements between conservation authorities and member municipalities in accordance with any regulations governing municipal programs and services. These agreements must be completed by January 1, 2024.

The Transition Plan is attached to this report.

Consultation:

In compliance of Bill 229, the Lower Thames Valley Conservation met with its member Municipality's to review Bill 229 and the transition plan for that Bill. Authority staff contacted each member municipality with an offer to meet and review the Bill 229 Transition Plan and 2022 budget.

Below are the results:

Chatham-Kent	Presentations to Municipal Staff Oct 14 th , provided documentation, satisfied with presentations
Dutton-Dunwich	Presentations to Municipal Staff Nov 8 th , Council Presentation Nov 24 th , provided documentation, satisfied with presentations
Lakeshore	Provided presentations to Municipal staff on December 3 rd
Leamington	Presentations to Municipal Staff Oct 25 th , provided documentation, satisfied with presentations
London	Presentations to Municipal Staff Nov 26 th , provided documentation, satisfied with presentations
Middlesex Centre	Provided presentations to Municipal staff to be included in Dec 8 th Council package
Southwest Middlesex	Presented to Council Dec 8 th , provided documentation, satisfied with presentations

Southwold	Spoke to Municipal staff Dec 3 rd , Kettle Creek CA and LTVCA to present to management together, date to be determined
Strathroy-Caradoc	Spoke to Municipal Staff, Nov. 29 th , no further communication requested
West Elgin	Council Presentation Dec 2 nd , provided documentation, satisfied with presentations

Recommendation:

That the Board of Directors approves the Transition Plan;

AND that the Transition Plan be forwarded to member municipalities, Conservation Ontario and the Province of Ontario.

The reports align with the following objectives of the LTVCA's Strategic Plan:

1. Strengthen and Increase Collaboration with Community Stakeholders
4. Improve Transparency and Understanding of Financial Statements

Respectfully Submitted

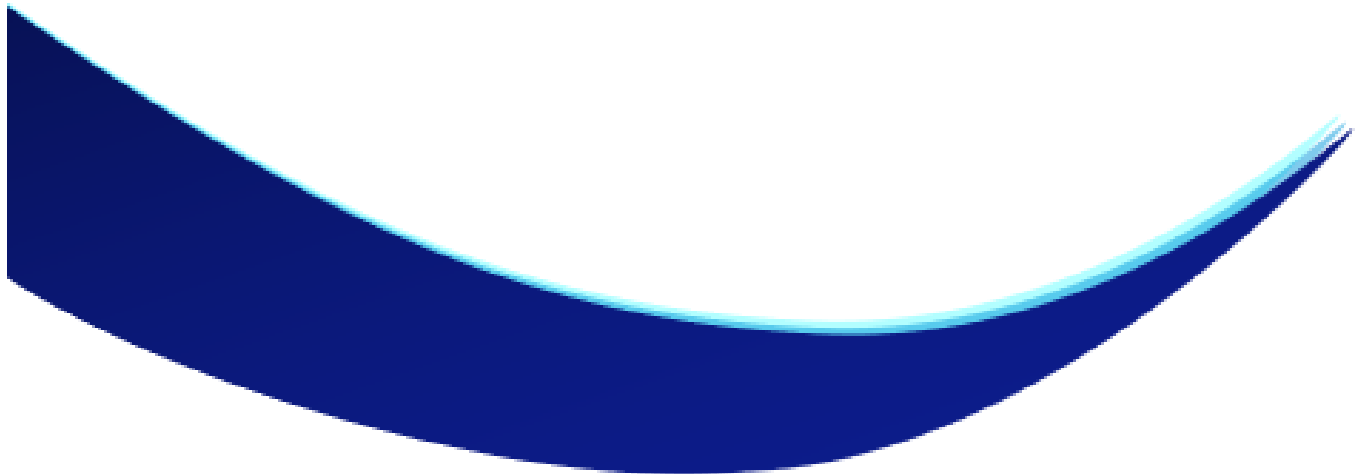
Mark Peacock, P. Eng.
CAO Secretary-Treasurer

LOWER THAMES VALLEY CONSERVATION AUTHORITY

BILL 229: TRANSITION PLAN



DECEMBER, 2021



DEVELOPING A WORK PLAN

The work plan was the first step in developing a Transition Plan that details how the Lower Thames Valley Conservation Authority (LTVCA) will move from the present municipal levy process to one defined in Bill 229 and its associated regulations. The initial version of the work plan was defined prior to the issuance of regulations namely: 1. Mandatory Programs and Services Regulation (O. Reg. 686/21) and 2. Transition Plan and Agreements Regulation (O. Reg. 687/21). The work plan was presented and approved at the August 19th LTVCA Board of Director's Meeting. Revisions to the work plan have occurred due to the release of the regulations and have been reflected in the Transition Plan provided below.

THE TRANSITION PERIOD

The purpose of the transition period is to provide conservation authorities and municipalities with the time to address changes to the budgeting and levy process based on mandatory programs and services (Category 1), municipal programs and services (Category 2), and other programs and services (Category 3) and the need, in some cases, to reach agreements to allow levies to be collected.

REGULATORY PROCESS REQUIREMENTS FOR THE TRANSITION PLAN

Phase 1 of the transition period is August, 2021 – February 28, 2022 and has two deliverables. The first is developing a Transition Plan which includes a timeline and work plan. The Transition Plan is required to be submitted to the member municipalities and Ministry of Environment, Conservation and Parks (MECP) by December 31, 2021. The second is the Inventory of Programs and Services, which is to be completed and provided to member municipalities and MECP by February 28, 2022. To be completed by the deadline of December 31, 2021, the Transition Plan must include a work plan and timeline for the authority to meet the requirements for the first and second phases of the transition period. A copy of this transition plan must be sent to each participating municipality in the authority's area of jurisdiction and to the Ministry of Environment, Conservation and Parks. The Transition Plan must be published onto the authority's website or made available to the public by other means (as per Section 3 of the regulation: [*Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the Act*](#)).

Phase 2 of the transition period includes developing and finalizing Memorandums of Understanding (MOU) or agreements between conservation authorities and member municipalities in accordance with any regulations governing municipal programs and services. These agreements must be completed by January 1, 2024.

This document focuses on the Transition Plan.

The Transition Plan is to include the consultation process on the inventory of all the Authority's programs and services and the steps to be taken to enter into MOUs/agreements where municipal levy is required to fund non-mandatory programs and services.

The process will support 2024 budget discussions including the new categorization of Conservation Authority (CA) programs and services:

Category 1: Mandatory programs and services where municipal levy could be used without any agreement.

Category 2: Non-mandatory programs and services at the request of a municipality with municipal funding through a MOU or agreement.

Category 3: This category includes other non-mandatory programs and services a CA determines are advisable. These may use municipal levy through a MOU/agreement. Programs and services in Category 3 may also be funded through other means. In the latter situation, an MOU/agreement with the municipality is not required.

The majority of the efforts will focus on developing financial scenarios and MOUs/agreements. Conservation authority staff will be engaged in this work with communication and consultation with municipalities (staff and council). It is proposed that the CA Board of Directors will review draft documents prior to circulation to municipalities for approval.

TIMELINE CONSIDERATIONS

The October 2022 municipal election has a significant effect on the Transition Plan schedule. The Lower Thames Valley Conservation Authority work plan is based on the premise that municipalities will prefer the newly-elected councils to enter into the MOU/agreements. The same premise is used with the LTVCA board of directors which may have a turn-over in membership following the election. However, Conservation Authority staff will do background work, consult, draft financial scenarios and prepare the framework of agreements in 2022.

Although each conservation authority has its own budget processes and timelines, we will make efforts to coordinate with neighbouring conservation authorities that share a municipality.

MUNICIPAL CONSULTATION ON TRANSITION PLAN

In compliance of Bill 229, the Lower Thames Valley Conservation met with its member Municipality's to review Bill 229 and the transition plan for that Bill. At the same meeting the 2022 preliminary budget was reviewed with each Municipality. Authority staff contacted each member municipality with an offer to meet and review the Bill 229 Transition Plan and 2022 budget.

Below is the consultation to date with area municipalities:

Chatham-Kent	Presentations to municipal staff Oct 14 th , provided documentation, satisfied with presentations
Dutton-Dunwich	Presentations to municipal staff Nov 8 th , Council Presentation Nov 24 th , provided documentation, satisfied with presentations
Lakeshore	Provided presentations to municipal staff on December 3 rd
Leamington	Presentations to municipal staff Oct 25 th , provided documentation, satisfied with presentations
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Middlesex Centre	Provided presentations to municipal staff to be included in Dec 8 th Council package
Southwest Middlesex	To present to Council Dec 8 th , provided documentation
Southwold	Spoke to municipal staff Dec 3 rd , Kettle Creek CA and LTVCA to present to management together, date to be determined
Strathroy-Caradoc	Spoke to municipal staff Nov 29 th , was looking into interest in presentation
West Elgin	Council Presentation Dec 2 nd , provided documentation, satisfied with presentations

PHASE 1: TRANSITION PLAN AND INVENTORY OF PROGRAMS AND SERVICES

Task	Date
<i>Phase 1: October 2021 – February 28 2022</i>	
<u>Work Plan</u>	
Develop Work Plan Timeline	Aug 2021
Present and get approval of work plan (first version) from Board of Directors	Aug 19 2021
Initial discussions with neighbouring CAs	Sept to Nov 2021
Meet with municipal staff and councils (if requested) regarding work plan and 2022 budget	Oct, Nov 2021
<u>Transition Plan</u>	
Develop Transition Plan Draft	Nov 2021
Circulate Draft Transition Plan to Board of Directors and municipalities	Nov. 2021
Present and get approval of Transition Plan from Board of Directors	Dec 16, 2021
Provide Transition Plan to Municipalities	Dec 2021
Provide Transition Plan to MECP	Dec. 31 2021
Transition Plan on Website	Dec. 31 2021
<u>Phase 1 General</u>	
Establish communication with municipal staff	Oct, Nov 2021
Request Municipality determine lead staff person(s)	Oct, Nov 2021

<u>Inventory of Programs and Services</u>	
Discuss with neighbouring CAs	Nov, Dec 2021
Develop inventory of current programs & services template	Nov 2021
Review last 3/5 years of budget and prepare inventory	Dec 2021 – Jan 2022
Provide draft inventory to Board of Directors	Jan 2022
Present draft inventory to Board of Directors	Feb 17, 2022
Provide Inventory to Municipalities	Feb 18 2022
Provide Inventory to MECP	Feb. 28 2022
Inventory on Website	Feb. 28 2022

PHASE 2: MOUS/AGREEMENTS

Task	Date
<i>Phase 2: January 2022 -December 2023</i>	
Draft inventory with categories 1, 2 and 3	Jan, Feb 2022
Develop draft Watershed Based Resource Management Strategy to provide strategic guidance for programs 2024 to 2027 – to be finalized in 2024	Jan 2022 to Jan 2023
Negotiate Draft Municipal Planning Agreements (continue work from 2019 drafts)	Nov 2021 to July 2022
Consult with municipalities on inventory	Mar – Aug 2022
Draft four-year financial forecast 2024-2027 based on cat 1,2, and 3	Mar – Aug 2022
Create draft MOU/agreements for "other programs and services" requiring levy	Aug 2022 - June 2023
Bring Draft four-year financial forecast 2024-2027 to BOD meeting for review	Aug 2022
Develop 2024 financial scenario to complete 6 deliverable defined by regulation in 2024	Sept 2022 - Jan 2023
Finalize levy distribution into mandatory and non-mandatory service areas 2024-2027	Jan 2023 - June 2023
Bring draft MOU/agreements with cost apportionment scenarios to BOD	Feb 2023
Consult with municipal staff / councils (as requested) on draft MOU/agreements	March, April 2023
Revise MOU/agreements as necessary	April - June 2023
Finalize draft MOU/agreements at staff level with revisions	June 2023
Return to BOD with revised financial plan/MOU/agreements (if necessary)	June 2023
Resolution from BOD to circulate MOU/agreements to municipalities	June 2023
Consult with municipal staff on revised MOU/agreements (if necessary)	June - Aug 2023
Circulate MOU/agreements to municipalities	June - Aug 2023

Attend municipal council meetings as requested	Jan 2022 - Nov 2023
Revise and finalize inventory	Sept 2023
Develop draft 2024 budget	Sept 2023
BOD approves draft 2024 budget to circulate to municipalities	Oct 2023
Submit copies of signed MOU/agreements to MECP	Dec 31 2023
Transition period ends	Jan 1 2024
Submit final version of inventory to municipalities	Jan 31 2024
Submit final version of inventory to MECP	Jan 31 2024
Post final MOUs/agreements on CA website	Jan 31 2024
BOD approves 2024 budget – AGM	Feb 2024

PROGRESS REPORTS TO MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS

Progress Reports	Date
Progress report to MECP and municipalities	July 1 2022
Progress report to MECP and municipalities	Oct 1 2022
Progress report to MECP and municipalities	Jan 1 2023
Progress report to MECP and municipalities	April 1 2023
Progress report to MECP and municipalities	July 1 2023
Progress report to MECP and municipalities	Oct 1 2023

COMMUNICATIONS PLAN

A successful transition will require effective and timely communications. Audiences and communication methods will vary but the messages need to be consistent.

Audience	Method of Communications
LTVCA Staff	In person/online meetings, email
LTVCA Board of Directors	Board meeting reports, email
Municipal staff	Phone, email, meetings, respond to inquiries

Municipal councils	Delegations to council, webinars
General public	Media releases, social media, fact sheets, respond to inquiries, webinars
Neighbouring CAs	In person/online meetings, email

9.4) 2022 Preliminary Budget Consultations

Date: December 16, 2021
Memo to: LTVCA Board of Directors
Subject: **2022 Preliminary Budget Consultation**
From: Todd Casier, CPA, CA, Manager, Finance and Administrative Services
Mark Peacock, P. Eng., C.A.O. / Secretary Treasurer

Background:

The preliminary budget was sent out to each municipality on November 3, 2021 with an invitation to meet with each municipalities Executive Management Team or Council. Each municipality was then contacted over the following weeks to enquire if they would like a presentation of the preliminary 2022 Budget.

Consultations:

Below are the results:

Chatham-Kent	Presentations to Municipal Staff Oct 14 th , provided documentation, satisfied with presentations
Dutton-Dunwich	Presentations to Municipal Staff Nov 8 th , Council Presentation Nov 24 th , provided documentation, satisfied with presentations
Lakeshore	Provided presentations to Municipal staff on December 3 rd
Leamington	Presentations to Municipal Staff Oct 25 th , provided documentation, satisfied with presentations
London	Presentations to Municipal Staff Nov 26 th , provided documentation, satisfied with presentations
Middlesex Centre	Provided presentations to Municipal staff to be included in Dec 8 th Council package
Southwest Middlesex	Presented to Council Dec 8 th , provided documentation, satisfied with presentations
Southwold	Spoke to Municipal staff Dec 3 rd , Kettle Creek CA and LTVCA to present to management together, date to be determined
Strathroy-Caradoc	Spoke to Municipal Staff, 2022 Preliminary Budget provided in Dec 6 th Council Agenda, no further communication requested
West Elgin	Council Presentation Dec 2 nd , provided documentation, satisfied with presentations

Recommendation:

That the Board of Directors receive this report for information.

The reports align with the following objectives of the LTVCA's Strategic Plan:

4. Improve Transparency and Understanding of Financial Statements

Respectfully Submitted

Todd Casier, CPA, CA
Manager, Financial and Administrative Services

Mark Peacock, P. Eng.
C.A.O. / Secretary Treasurer

9.5) Longwoods Road Conservation Area - Magic of Lights - Extension of Event

Date: December 16, 2021

Memo to: LTVCA Board of Directors

Subject: Longwoods Road Conservation Area-Magic of Lights – Extension of Event

From: Randall Van Wagner, Manager Conservation Lands and Services



The Magic of Lights has developed into a very popular event. Upwards of around 1000 cars have been attending the show per night. The LTVCA is taking the opportunity to hand out over 7000 brochures and promotional material that will entice visitors to come back for educational events, purchase Annual Permits, and see what else LTVCA has to offer. Many positive articles and news items have been created on the event.

On the other hand, some issues have arisen with neighbours due to cars not following instructions. Event organizers have been responding individually to every issue as it is brought forward. Extra staffing, signage, instructions and bollards in neighbours driveways have been provided to address concerns.

The original event was set to end January 2nd, due to demand they have requested a one-week extension from Jan.2-Jan. 8th 2022.

Recommendation: that staff re-negotiate with Magic of Lights and provide a one-week extension of the show.

The report aligns with the following objectives of the LTVCA's Strategic Plan:

1. Strengthen and Increase Collaboration with Community Stakeholders

Recommended by:
Randall Van Wagner,
Manager, Conservation Lands and Services

Reviewed by:
Mark Peacock, P. Eng.
C.A.O. / Secretary Treasurer

9.6) Sharon Creek Conservation Area Survey Results

Date: December 16, 2021

Memo to: LTVCA Board of Directors

Subject: Sharon Creek Conservation Area Survey results

From: Randall Van Wagner, Manager Conservation Lands and Services

A presentation on this item will be provided to the Board of Directors by: Eastern Supervisor Vance Stark – more details on the survey will be provided during the presentation.

A public survey of Sharon Creek Conservation Area was conducted online through Survey Monkey from Sept.1 to Oct 31st. Interesting statistics were gleaned from the results included:

1. Over 240 respondents
2. Greater than 50% of users go for Watercraft use
3. Greater than 50% of users are ok with the current fee schedule
4. 93 respondents would like to see watercraft launching improved
5. 60 respondents said they would like to volunteer and be part of “Friends of Sharon Creek”

A “Friends of Sharon Creek” committee was actively involved for approximately 15 years supporting the Sharon Creek Conservation Area. This was a dedicated group of local people who raised money and undertook projects. The Lower Thames Valley Conservation Foundation holds approx. \$20,000 of funds that were raised by that group and not spent. The group raised over \$100,000 (Eco-Action grant) for the tall grass prairie on site, built site wetlands, and upgraded the parking lot to name a few projects. Also important were community events with the group organizing an annual fishing derby. Additionally, they started the memorial tree program on the site. Approximately 10 years ago the group disbanded for a number of reasons including vandalism and some of the leaders moving away from the community. Staff feel that with the input from users, it is time to consider reforming a “Friends of Sharon Creek” group.

Recommendation: That LTVCA staff reach out to volunteers, to form a “Friends of Sharon Creek” group. Including development of a terms of reference, work plan and setting goals around improving and managing the property in cooperation with LTVCA staff.

AND, that this be brought back to the LTVCA Board of Directors for Approval.

This report aligns with the following objectives of the LTVCA’s Strategic Plan:

1. Strengthen and Increase Collaboration with Community Stakeholders

Recommended by:
Randall Van Wagner,
Manager, Conservation Lands and Services

Reviewed by:
Mark Peacock, P. Eng.
C.A.O. / Secretary Treasurer

10. Business for Information

10.1) C.A.O.s Report

Date: December 16, 2021

Memo to: LTVCA Board of Directors

Subject: C.A.O.'s Report

From: Mark Peacock, P. Eng., C.A.O. / Secretary Treasurer

Covid-19 update

Opening of Offices

The Pandemic Management Committee continues to meet three times a week to review questions and provide direction to staff as they deal with Covid 19. All activities being undertaken away from home are being done under staff developed and approved Covid 19 Standard Operating Procedures (SOP) to ensure compliance with all local, provincial and federal requirements. All activities undertaken at LTVCA facilities are done in compliance with the LTVCA COVID-19 Safety Plan.

The Pandemic Management Committee recommend to staff that the administrative offices be opened to staff starting December 1, 2021. Arrangements have been made to ensure safety of staff. Due to increasing COVID-19 numbers, some staff are continuing to work from home. With a very tight office layout, this was deemed to be appropriate. The Pandemic Management Committee will continue to assess this situation.

The LTVCA Vaccination Policy came into full effect on December 1, 2021 requiring all staff to be fully vaccinated with 2 shots. All staff have complied with this requirement.

Christmas Holiday Hours

Each year the CAO reviews the Christmas holiday hours with the chair as these change year to year. This year Christmas is on Saturday, Boxing Day is on a Sunday and New Years Day is on a Saturday, so these Statutory Holidays will be observed either before or after the holiday. The following chart summarizes what the holiday will look like for LTVCA staff. The office is currently closed to the public so if people are working in the period Tuesday Dec 28th to Thursday December 30th they will likely be working from home. Contract staff will have the option to take the time off unpaid as they get 4% vacation pay instead of time off. Many municipalities within the watershed are observing Christmas holidays in this way.

Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
December 24 Stat used for Christmas Day	25 Stat not used – for <u>Christmas Day</u>	26 Stat not used for <u>Boxing Day</u>	27 Stat used for Boxing Day	28 – use vacation or lieu for holiday	29 use vacation or lieu for holiday	30 use vacation or lieu for holiday
31 Stat used for New Years' Day	Jan 1 stat not used for <u>New Years' Day</u>	Jan 2 2022	Jan 3 2022 Return to work			

Red: Days where staff have to use Lieu or vacation (to get day off) or attend work.

Recommendation:

The C.A.O. / Secretary Treasurer Report be received for information.

The report aligns with the following objectives of the LTVCA's Strategic Plan:

1. Strengthen and Increase Collaboration with Community Stakeholders

Respectfully Submitted

Mark Peacock, P. Eng.

C.A.O. / Secretary Treasurer

10.2) Water Management

10.2.1) Flood Forecasting and Operations

Flood Messaging and Flood Events

There have been 19 flood messages issued since the last written report to the Board of Directors.

One of these was a standing message issued for Lake St. Clair and Lake Erie shoreline flooding and intended to cover the month of November. The December standing message was delayed due to event messages at the beginning of the month. Two messages were Flood Outlook messages for the Lake Erie shoreline and Erie Shore Drive. Two messages were Flood Outlook messages for Lake Erie, Erie Shore Drive and Rondeau Bay. There were 6 Flood Watches for Lake Erie and Erie Shore Drive, and one Flood Watch covering both lakes and Rondeau Bay. Two of the flood messages were upgraded to Flood Warnings for Erie Shore Drive. These messages were issued on November 12th and November 24th. These events that triggered Flood Warning were fairly typical of the 30 to 40 km/hr wind events seen over the last few years. The houses impacted were primarily near the east end of the road. Wave spray and breakwall overtopping in the rear yards of the properties caused water to flow into the front yards of around 20 to 30 properties where it accumulated. Enough water accumulated in the front yards that it spread out into the roadway where it would then cross over at the control locations. Flows across the road were not significant enough to worry about damage to the roadway. The Flood Watch issued on December 4th was in response to various forecasts and a Special Weather Statement from Environment Canada calling for gale force winds with gusts of up to 100 km/hr along the Lake Erie shoreline. This would have produced significant flooding down on Erie Shore Drive, however, those forecasted winds never appeared.

There were also four Flood Outlook messages and one Flood Watch message issued for potential flooding on local watercourses due to heavy rains in the forecasts. The McGregor Creek Diversion Channel was operated twice since the last report. It was operated from the evening of October 29th to the evening of October 31st (the event associated with the Flood Watch) and from late overnight on December 6th to the morning of December 8th. Neither of these events produced flows high enough on the Thames River itself to warrant messages about river flooding.

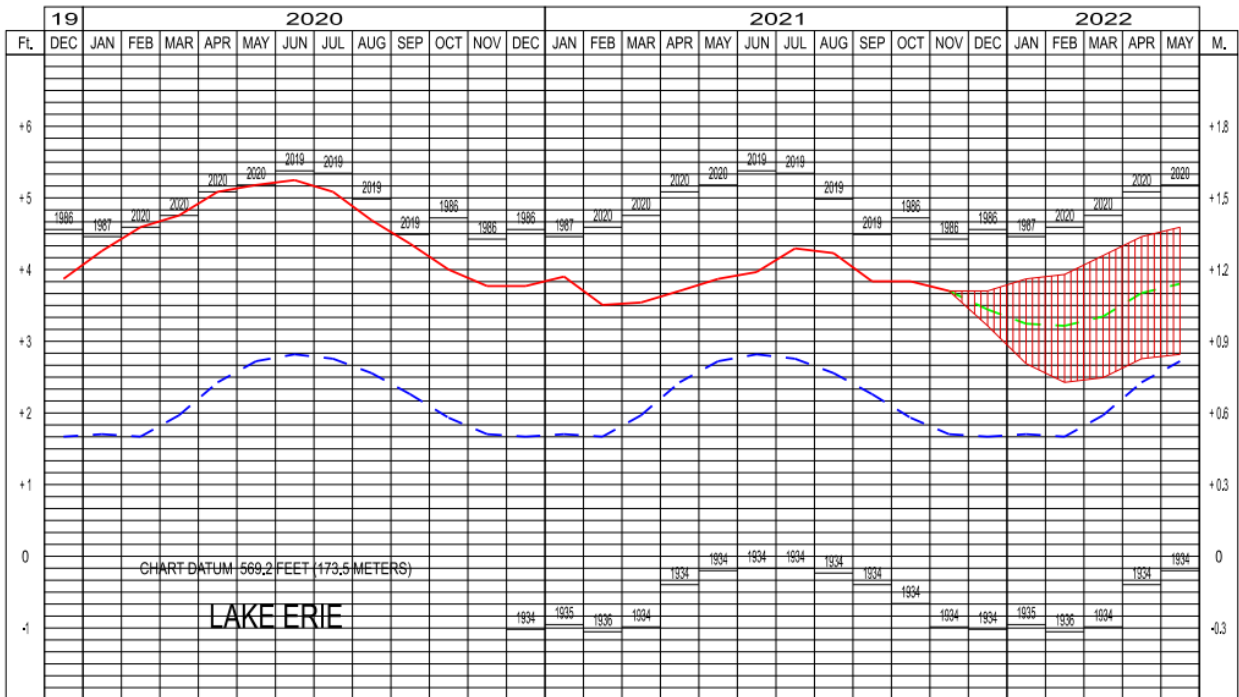
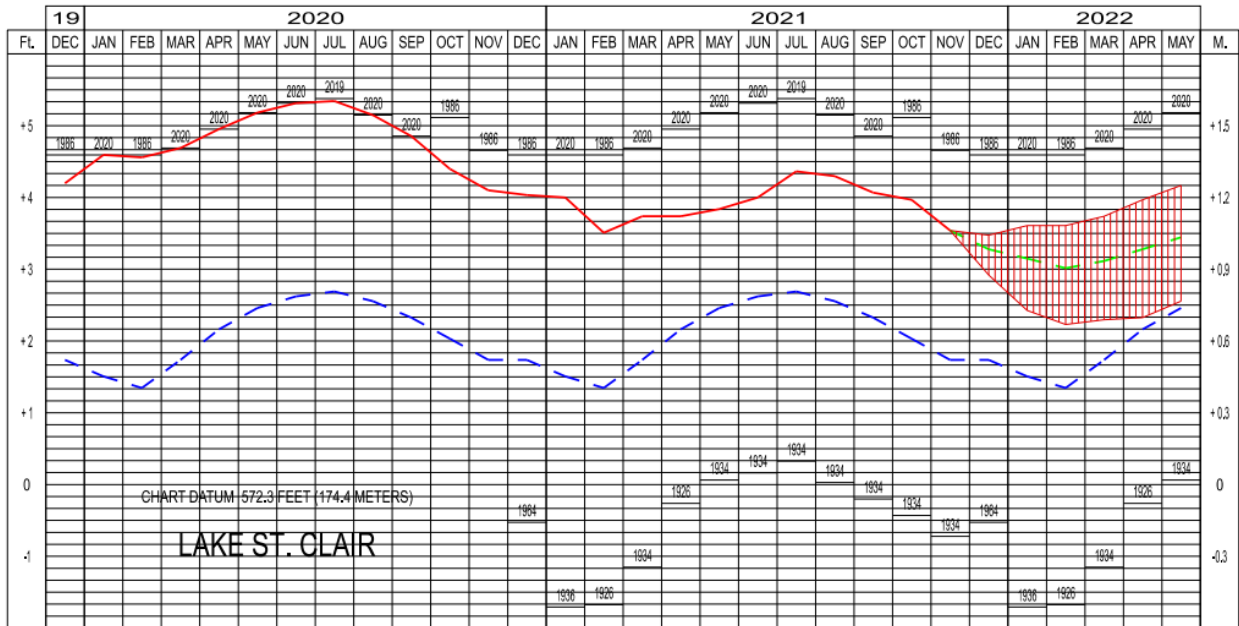
Report on Lake Conditions

Average daily water levels on Lake Erie at the beginning of December were around 174.59 m (I.G.L.D.). This is down about 55 cm from last year's peak daily average water level record set at the end of May. The all-time record high monthly average for December was 174.89 m, set in 1986. Water levels at the beginning of December were still 58 cm above what would be considered normal for the month of December. Water level forecasts suggest that water levels will decline around 5 cm over the next month.

Average daily water levels on Lake St. Clair at the beginning of December were around 175.42 m (I.G.L.D.). This is down about 66 cm from last year's peak daily average water level record set during the third week of May. The all-time record high monthly average for December was 175.8, set in 1986. Water levels at the beginning of December were 49 cm above what would be considered normal for the month of December. Water level forecasts suggest that water level will decline around 5 cm over the next month.

Weather conditions throughout the summer and autumn have not been as dry as previously predicted and as a result lake levels have not declined as much as previously predicted. Water levels on Lake Erie are only down 5 to 10 cm from where they were at this time of the year in 2020 or 2019. Lake St. Clair levels are down around 20 to 25 cm from where they were at this time of the year in 2020 or 2019. This means that there is still the potential for significant shoreline flooding this winter while the lakes remain free of ice, particularly on Lake Erie. Such flooding is highly dependent on weather conditions and whether we get high wind events to cause large waves and lake setup.

The figures below are published by the U.S. Army Corp of Engineers and graph the monthly average water levels and water level forecast over the next 6 months. These versions were published at the beginning of December.



10.2.2) Flood Control Structures

A significant amount of debris has had to be removed from the gates of both the Diversion Channel Dam and the 6th Street Dam this year. Debris was removed from the gates of the Diversion Dam most recently on November 4th. This latest rainfall and high flow event has brought more debris to the gates of the structures which will need to be removed once flows have dropped off but before McGregor Creek has frozen over for the season.

The LTVCA is continuing with its program of spraying, mowing and brush removal from the McGregor Creek Diversion Channel. Since the last report, further mowing has been undertaken. In addition, a contractor was brought in to spray for woody vegetation.

Regular seasonal maintenance is being conducted on the LTVCA's other flood control structures.

10.2.3) Low Water Response Program

The Low Water Response Program looks at both precipitation and flow in local watercourses in determining whether there is a low water condition. For precipitation, both 18-month and 3-month rainfall totals are examined and the program thresholds are: Level 1, 80% of average; Level 2, 60% of average; and Level 3, 40% of average. For flows, the average flow over the last month is examined and winter thresholds are: Level 1, 70% lowest average summer flow (LASF); Level 2, 50% LASF; and Level 3, 30% LASF. During the growing season, LTVCA staff create a brief custom report summarizing conditions around the watershed, which is available by request. However, during the non-growing season, there is very little water demand on the river so these custom reports are not generated. The province provides broad regional screening on a monthly basis, which are examined by the LTVCA for any indication of potential issues. The provincial screening does not suggest any kind of low water concerns.

Further information on the Provincial Low Water Response Program can be found at <https://www.livestudies.gov.on.ca/webapps/swmc/low-water-response/>

10.2.4) Watershed Monitoring

Watershed-wide, surface water quality monitoring continues at 22 sites throughout the watershed. The sampling was being conducted under two programs, the Provincial (Surface) Water Quality Monitoring Program (PWQMN) and a special grant under Canada-Ontario Agreement (COA) Respecting the Great Lakes Basin Ecosystem. However, the PWQMN program does not typically operate from December through March. As a result, the COA grant covers the sampling during the winter season, as well as sampling for any particular events likely to generate significant nutrient runoff.

As part of the Provincial Groundwater Monitoring Network, the LTVCA typically samples groundwater quality at 7 wells around the watershed late in the year. Due to other program requirements, this sampling has not yet been completed. If the sampling is unable to be completed by the end of the year, the Ministry of Environment Conservation and Parks (MECP) has confirmed that the sampling can be pushed into early next year.

10.2.5) Vandalism at Chatham water level gauge

The Water Level gauge for the City of Chatham located at 300-320 Grand Ave East has been vandalized again. Vandals broke into the gauge housing overnight on December 5th and stole the battery powering the station. Unable to re-secure the station, LTVCA staff removed the rest of the equipment from the site. The gauge is managed under a partnership between Water Survey of Canada (Environment Canada), Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry, and the LTVCA. Under the agreement, Water Survey maintains the station, including typically paying for repairs, with the LTVCA providing local support. However, the continued vandalism raises concerns about the continued use of the location, at least in the short term.

This gauge is extremely important as it is used in the operation of the 6th St Dam. It is also the gauge location where all floods in the City of Chatham have been measured going back into the 1920s. The property was formerly used by Chatham-Kent (CK) as a Public Works yard. Around 2015, after CK stopped using the property, vandalism at the location started to increase and it has been particularly bad over the last few years. Ongoing development at the site raises the hope that once completed vandalism in the area will decrease. However, decisions will need to be made shortly regarding what to do in the interim as the gauge needs to be operational in case the 6th St. Dam needs to be operated.



Chatham gauge at 300-320 Grand Ave E, December 7th, 2021.

The reports align with the following objectives of the LTVCA's Strategic Plan:

2. Strengthen and Increase Collaboration with Community Stakeholders
3. Increase the Awareness of the Value of Good Watershed Stewardship
4. Improve Capital Asset Review

10.3) Planning and Regulations

10.3.1) Planning

From October 1st to the end of November 30th, there have been 83 planning submissions reviewed by staff with respect to the Provincial Policy Statement, Section 28 of the Conservation Authorities Act and Ontario Regulation 152/06. On average it takes roughly 5 days to respond to submissions, ranging from same day response to 15 days for more involved planning submissions. There have also been 38 phone calls that have been dealt with in that time frame, with more and more proponents reaching out to staff via email (numbers not tracked).

Planning Numbers	2019 Totals	2020 Totals	Jan totals	Feb-Mar totals	Apr-May totals	Jun-Jul totals	Aug-Sep totals	Oct-Nov totals	2021 Totals
Chatham-Kent	150	259	13	55	63	60	52	55	298
Elgin	76	67	6	13	21	9	13	11	73
Essex	16	46	3	7	6	6	7	6	35
Middlesex	48	35	5	8	9	7	11	11	51
Total Numbers	290	407	27	83	99	82	83	83	457

**OP, ZBL, OPA, ZBLA, Consents, Minor Variances, Plans of Subdivision, Legal Inquiries*

Staff are starting to work most days in the office, with some work from home still taking place, with COVID 19 Standard Operating Procedures and work from home plans in place. Several conference call / zoom meetings have taken place with proponents / consultants / agencies / member municipalities and counties around planning matters. Several site inspections have also taken place, keeping in mind COVID protocols. Planning services continue to be used / accessed by the public, our member municipalities and other agencies via telephone and email communication at this time.

New Planning Staff

A new staff member has been added to the planning department. Connor Wilson was hired as the new Planning Technician to take over plan review items from member municipalities, legal inquiries and property inquiries. He started on November 29th and is being trained under Section 28 Regulations, the LTVCA policies and operational guidelines, and how they apply to planning matters.

Source Water Protection

Source Protection staff have confirmed that the DWSP program is being funded for the next two years (2022-2023). Staff are currently putting together the Workplan for the two-year time frame. Also, staff just received word on Friday that the Director Technical Rules - Phase II, has been approved, but has not yet been received.

10.3.2) Section 28 Regulations / Permitting

In the months of October and November, the LTVCA received 113 permit applications with respect to Section 28 of the Conservation Authorities Act and Ontario Regulation 152/06. Of the 657 permit applications received in the first 11 months of 2021, all but 47 had been approved by staff. Three applications were approved by the Executive Committee, six applications were cancelled by the applicants, two applications are on hold, and the remaining 36 applications were in the queue to be reviewed by staff as of the end of November.

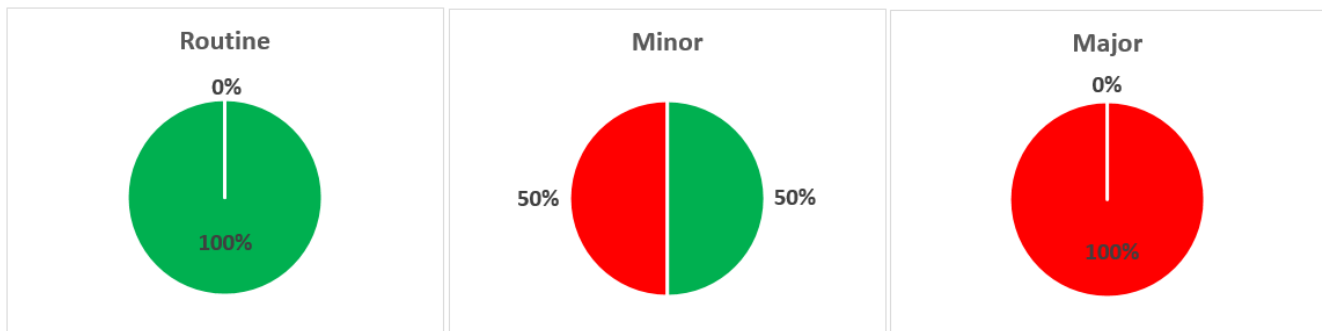
The regulations program continues to experience a very strong demand for resources. The number of permit applications received in the first five months of the year was more than the program sees for the entire 12 months of a “normal” year. The number of permit applications received thus far in 2021 eclipses every single year prior.

In an attempt to keep pace with the demand and to support the Regulations Technician, the Resource Technician and Water Resources Engineer continue to help with processing permits and responding to regulations inquiries. While the GIS Technician had been providing support with surveying for floodplain development for part of the year, unfortunately they are now unable to support the Regulations program in this manner which has resulted in the further delay of processing of floodplain development applications. There is no foreseeable decline in service demand for the future of the program.

\$148,550 has been collected thus far this year (as of the end of November) in permit application and hearing fees. 2021 also set a record for permit fee revenues, so far being \$20,500 above what was received in all of 2020.

Permit Processing Timelines:

For applications issued since the last board report and up to the end of November, the charts and table below indicate that 100% of “routine”, 50% of “minor”, and 0% of “major” permit applications met their applicable customer service standard for turnaround time. Permit turnaround times continue to lag behind the LTVCA’s & Conservation Ontario’s customer service standards.



Complexity of Application	# of Days to Review Permit Applications				
	0 - 14 Days	15 - 21 Days	21 - 28 Days	29 - 90 Days	> 90 Days
Routine	25	0	0	0	0
Minor	29	19	20	27	1
Major	0	0	0	1	0

For the months of October and November, the average turnaround time for a routine permit application was one day (ranged between 0 and 5 days). The average turnaround time for a minor permit application was 26 days (ranged between 0 and 206 days). For private property minor complexity permits, the average turnaround time was 34 days.

In a comparison of October and November data between 2020 and 2021, the processing time for routine permit applications improved greatly, going from an average of 14 days in 2020 to one day in 2021. This improvement is largely due to the Water Resources Engineer that was hired near the end of 2020 taking on the task of processing most of the applications identified as being routine in complexity. The processing time for minor permit applications in the same period increased, going from an average of 19 days in 2020 to 26 days in 2021.

Another required aspect of the Regulations program is the organization and handling of Hearings. It can take a significant amount of time to manage the applications up to the point a Hearing is deemed need. Then, further time is required to prepare, arrange, and conduct the hearings. There have been four hearings thus far in 2021. The average amount of time between when an application is submitted and when a decision is made by the Executive Committee on the application is 125 days (ranging from 78 to 148). At the time of writing of this report, there are three complete applications in the queue which require hearings. The oldest of which was submitted to our office on September 02, 2021. The earliest estimated date for the hearings to be held is likely to be late January or in February or March of 2022 based on current workloads. The ongoing delay of hearings generates complaints from the applicants.

Property Inquiries:

Up to the end of November, 1540 property inquiries (including permit pre-consultation questions) were received and responded to by the Regulations Technician which is 269 more since the last board report. At the time of writing of this staff report, the current response time to property and pre-consultation inquiries is approximately 5 business days for e-mails and 20 business days for phone calls.

Section 28 Enforcement:

In the first 11 months of 2021, 51 complaints / tips were received from the public about possible Section 28 enforcement issues. Historically, the LTVCA receives around 30 complaints/tips regarding Section 28 enforcement per year.

39 of the 51 issues are confirmed violations or potential violations of the Conservation Authorities Act and Ontario Regulation 152/06. Two of the 39 confirmed or potential violations have been resolved.

The reports align with the following objectives of the **LTVCA's Strategic Plan**:

2. Strengthen and Increase Collaboration with Community Stakeholders
3. Increase the Awareness of the Value of Good Watershed Stewardship

Staff Report

O.Reg. 152/06 Permit Applications
(Up to November 30, 2021)

B.D. 12/15/2021

App No.	Location	Community/ Township	Municipality	Decision	Processing Time (days)
221-2021	South Street Subdivision	Glencoe	Southwest Middlesex	Granted: Nov 12, 2021	2
305-2021	6491 Krista Lane	Melborne	Southwest Middlesex	Granted: Sept 30, 2021	78
334-2021	Gray Line	Port Glasgow	West Elgin	Granted: Oct 22, 2021	206
464-2021	145 Tuscany Trail	Chatham	Chatham-Kent	Granted: Oct 01, 2021	53
465-2021	153 Tuscany Trail	Chatham	Chatham-Kent	Granted: Oct 01, 2021	53
469-2021	126 Thames Street	Chatham	Chatham-Kent	Granted: Oct 18, 2021	69
473-2021	11714 Rose Beach Line	Howard	Chatham-Kent	Granted: Oct 01, 2021	44
476-2021	Duart Road @ Deshaw Drain	Orford	Chatham-Kent	Granted: Oct 01, 2021	45
477-2021	Bury Road @ Gesner McKerracher Drain	Orford	Chatham-Kent	Granted: Oct 06, 2021	50
478-2021	Duart Road @ Gesner McKerracher Drain	Orford	Chatham-Kent	Granted: Oct 06, 2021	50
479-2021	McLean Line @ Gillis Drain	Orford	Chatham-Kent	Granted: Oct 06, 2021	50
498-2021	11407 River Line	Harwich	Chatham-Kent	Granted: Oct 18, 2021	55
505-2021	Winterline Road @ Boyle Drain	Dover	Chatham-Kent	Granted: Nov 02, 2021	62
506-2021	716 Bloomfield Road	Chatham	Chatham-Kent	Granted: Oct 06, 2021	35
509-2021	6405 County Road 8	Tilbury West	Lakeshore	Granted: Oct 06, 2021	34
510-2021	87 Wellington Street	Shrewsbury	Chatham-Kent	Granted: Oct 13, 2021	42
512-2021	McLean-Switzer Branch	Ekfrid	Southwest Middlesex	Granted: Oct 07, 2021	34
513-2021	76 Adelaide Street	Shrewsbury	Chatham-Kent	Granted: Oct 06, 2021	42
514-2021	22499 Gray Line, Site A3	Aldborough	West Elgin	Granted: Oct 18, 2021	76
515-2021	1025 Indian Creek Road West	Chatham	Chatham-Kent	Granted: Oct 18, 2021	41
517-2021	125 Tuscany Trail	Chatham	Chatham-Kent	Granted: Oct 18, 2021	39
518-2021	78 Adelaide Street	Shrewsbury	Chatham-Kent	Granted: Oct 18, 2021	36
521-2021	751 Keil Drive	Chatham	Chatham-Kent	Granted: Oct 18, 2021	34
522-2021	755 Keil Drive	Chatham	Chatham-Kent	Granted: Oct 18, 2021	34
523-2021	1262 Bluff Line	Wheatley	Chatham-Kent	Granted: Nov 04, 2021	50
525-2021	89 Brock Street	Shrewsbury	Chatham-Kent	Granted: Oct 18, 2021	32
527-2021	251 Detroit Line	Wheatley	Chatham-Kent	Granted: Nov 03, 2021	47
528-2021	6523 Krista Lane	Ekfrid	Southwest Middlesex	Granted: Nov 09, 2021	78
532-2021	Rose Beach Line Utility Relocations	Howard	Chatham-Kent	Granted: Oct 07, 2021	14
533-2021	Hedegard Drain	Tilbury East	Chatham-Kent	Granted: Oct 01, 2021	1
534-2021	McIntosh Drain	Tilbury East	Chatham-Kent	Granted: Oct 01, 2021	1
536-2021	Wright Drain	Raleigh	Chatham-Kent	Granted: Oct 01, 2021	1
537-2021	34987 Southdel Drive	Southwold	Southwold	Granted: Oct 01, 2021	4
538-2021	Dieleman Drain	Ekfrid	Southwest Middlesex	Granted: Oct 01, 2021	0
539-2021	54 Dundee Drive	Chatham	Chatham-Kent	Granted: Oct 18, 2021	20
540-2021	19035 Haven Avenue	Lighthouse Cove	Lakeshore	Granted: Nov 03, 2021	36
541-2021	142 Tuscany Trail	Chatham	Chatham-Kent	Granted: Oct 19, 2021	20
542-2021	29283 Lakeview Line	Dunwich	Dutton Dunwich	Granted: Oct 08, 2021	9

App No.	Location	Community/ Township	Municipality	Decision	Processing Time (days)
543-2021	Clachan Road Bridge	Bothwell	Chatham-Kent	Granted: Nov 03, 2021	1
544-2021	189 Queen Street	Wardsville	Southwest Middlesex	Granted: Oct 04, 2021	5
545-2021	18068 Erie Shore Drive	Erie Shore Drive	Chatham-Kent	Granted: Oct 06, 2021	5
546-2021	Indian Creek Road East	Chatham	Chatham-Kent	Granted: Oct 26, 2021	19
547-2021	11003 River Line	Harwich	Chatham-Kent	Granted: Oct 07, 2021	1
548-2021	Erieau Road @ Allin Drain	Harwich	Chatham-Kent	Granted: Oct 12, 2021	5
549-2021	10845 River Line	Harwich	Chatham-Kent	Granted: Oct 25, 2021	18
550-2021	230 Canal Road	Lighthouse Cove	Lakeshore	Granted: Nov 03, 2021	28
551-2021	420 Bayview Avenue	Erieau	Chatham-Kent	Granted: Oct 12, 2021	5
552-2021	7008 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
553-2021	7298 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
554-2021	7314 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
555-2021	7360 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
556-2021	Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
557-2021	Crow Road @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
558-2021	6746 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
559-2021	Creek Line @ Ouellette Drain Branch	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
560-2021	7957 Creek Line @ 3rd Concession Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
561-2021	6856 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
562-2021	6900 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
563-2021	6950 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
564-2021	6982 Creek Line @ Pain Court Creek Drain	Dover	Chatham-Kent	Granted: Oct 29, 2021	22
565-2021	6876 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
566-2021	7026 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
567-2021	6960 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
568-2021	Rivard Line @ Toulouse Pumping Works	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
569-2021	6970 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18

App No.	Location	Community/ Township	Municipality	Decision	Processing Time (days)
570-2021	Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
571-2021	6384 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
572-2021	6804 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
573-2021	6824 Rivard Line @ Bachand Drain	Dover	Chatham-Kent	Granted: Oct 25, 2021	18
575-2021	24125 Prince Albert Road	Chatham	Chatham-Kent	Granted: Oct 12, 2021	0
576-2021	200 Junction Avenue	Chatham	Chatham-Kent	Granted: Nov 03, 2021	22
577-2021	11530 Rondeau Drive	Rondeau Bay Estates	Chatham-Kent	Granted: Nov 03, 2021	21
578-2021	12067 River Line	Howard	Chatham-Kent	Granted: Nov 08, 2021	26
579-2021	22499 Gray Line, Site A16	Aldborough	West Elgin	Granted: Oct 25, 2021	23
581-2021	55 Maple Leaf Drive	Chatham	Chatham-Kent	Granted: Oct 18, 2021	4
582-2021	Vogler Drain	Zone	Chatham-Kent	Granted: Oct 15, 2021	1
583-2021	Donoho Drain	Howard	Chatham-Kent	Granted: Oct 15, 2021	1
584-2021	22499 Gray Line - M1	Aldborough	West Elgin	Granted: Nov 19, 2021	33
585-2021	18038 and 18042 Erie Shore Drive	Erie Shore Drive	Chatham-Kent	Granted: Nov 03, 2021	5
586-2021	775 Towanda Boulevard	Erie Beach	Chatham-Kent	Granted: Nov 03, 2021	8
587-2021	Green Line Drain	Howard	Chatham-Kent	Granted: Oct 26, 2021	1
588-2021	21527 Gray Line	Aldborough	West Elgin	Granted: Nov 09, 2021	20
589-2021	46 Dundee Drive	Chatham	Chatham-Kent	Granted: Nov 08, 2021	19
590-2021	12783 River Line	Howard	Chatham-Kent	Granted: Nov 23, 2021	28
591-2021	41 Dundee Drive	Chatham	Chatham-Kent	Granted: Nov 08, 2021	17
592-2021	4th Concession Line @ Government Drain #4	Romney	Chatham-Kent	Granted: Nov 02, 2021	8
593-2021	4th Concession Line @ Branch Barton Drain	Romney	Chatham-Kent	Granted: Nov 02, 2021	8
594-2021	Goodreau Line @ Government Drain #3	Tilbury East	Chatham-Kent	Granted: Nov 02, 2021	8
595-2021	Badder Line @ Gilbert Drain	Tilbury East	Chatham-Kent	Granted: Nov 02, 2021	8
596-2021	Badder Line @ Government Drain #1	Tilbury East	Chatham-Kent	Granted: Nov 02, 2021	8
597-2021	19095 Haven Avenue	Lighthouse Cove	Lakeshore	Granted: Nov 19, 2021	25
598-2021	24803 Pioneer Line	West Lorne	West Elgin	Granted: Nov 09, 2021	14
599-2021	Riverview Line	Raleigh	Chatham-Kent	Granted: Nov 23, 2021	27
600-2021	5105 County Road 46	Tilbury West	Lakeshore	Granted: Oct 28, 2021	1
602-2021	Brown Drain	Howard	Chatham-Kent	Granted: Oct 28, 2021	0
618-2021	Glen Oak Road @ Hendry Drain	Caradoc	Strathroy-Caradoc	Granted: Nov 09, 2021	11
619-2021	42 Dundee Drive	Chatham	Chatham-Kent	Granted: Nov 08, 2021	18
620-2021	24377 Gray Line	Aldborough	West Elgin	Granted: Nov 01, 2021	0

App No.	Location	Community/ Township	Municipality	Decision	Processing Time (days)
621-2021	Everitt Creek Drain	Chatham	Chatham-Kent	Granted: Nov 01, 2021	0
622-2021	10751 Westminster Drive	Delaware	Middlesex Centre	Granted: Nov 23, 2021	36
623-2021	Winters Drain	Howard	Chatham-Kent	Granted: Nov 03, 2021	0
624-2021	McCargon Drain No.2	Howard	Chatham-Kent	Granted: Nov 03, 2021	0
625-2021	McCargon Drain No.1	Howard	Chatham-Kent	Granted: Nov 03, 2021	0
626-2021	Creek Road @ McGregor Creek	Harwich	Chatham-Kent	Granted: Nov 16, 2021	13
627-2021	Creek Road @ Indian- McGregor Creek Diversion Channel	Harwich	Chatham-Kent	Granted: Nov 16, 2021	13
628-2021	9362 Kent Centre Line	Harwich	Chatham-Kent	Granted: Nov 25, 2021	21
629-2021	Spring Creek Drain	Howard	Chatham-Kent	Granted: Nov 04, 2021	0
630-2021	Spring Creek Drain East Branch	Howard	Chatham-Kent	Granted: Nov 04, 2021	0
631-2021	13016 McLarty Line	Howard	Chatham-Kent	Granted: Nov 08, 2021	4
633-2021	735 Tisdelle Drive	Lighthouse Cove	Lakeshore	Granted: Nov 09, 2021	1
634-2021	12 Sienna Court	Chatham	Chatham-Kent	Granted: Nov 09, 2021	3
635-2021	6515 Maple Line	Dover	Chatham-Kent	Granted: Nov 10, 2021	2
636-2021	Elliot Drain	Ekfrid	Southwest Middlesex	Granted: Nov 12, 2021	2
637-2021	Jones Drain	Ekfrid	Southwest Middlesex	Granted: Nov 12, 2021	2
638-2021	113 Tuscany Trail	Chatham	Chatham-Kent	Granted: Nov 23, 2021	11
639-2021	118 Tuscany Trail	Chatham	Chatham-Kent	Granted: Nov 23, 2021	11
640-2021	133 Tuscany Trail	Chatham	Chatham-Kent	Granted: Nov 26, 2021	12
641-2021	146 Tuscany Trail	Chatham	Chatham-Kent	Granted: Nov 26, 2021	12
642-2021	Krause Drain	Aldborough	West Elgin	Granted: Nov 26, 2021	10
644-2021	Johnston Drain	Raleigh	Chatham-Kent	Granted: Nov 22, 2021	0
646-2021	Imeson Drain	Tilbury West	Lakeshore	Granted: Nov 25, 2021	0
647-2021	William Street Bridge	Chatham	Chatham-Kent	Granted: Nov 26, 2021	2
650-2021	Government Drain #6	Mosa	Southwest Middlesex	Granted: Nov 29, 2021	0

10.4) Conservation Area Lands

10.4.1) Conservation Area Visitation / Camping, October 1 - November 30, 2021

Longwoods Road Conservation Area – 2,140 people (2,199 in 2020) (Includes 2 people per pay & display permit (transaction) Pay and Display Permits – 847 vehicles (1,024 in 2020)

E.M. Warwick Conservation Area – 242 people (149 in 2020)

Big Bend Conservation Area – 685 people (878 in 2020)

C.M. Wilson Conservation Area – 4,058 people (2,793 in 2020) (Includes 2 people per pay & display permit (transaction) Pay and Display Permits – 88 vehicles (230 in 2020)

Sharon Creek Conservation Area – 154 *Day Use Transactions on MacKay Pay* (259 transactions in 2020)

2022 Parking Passes – 61 sold in October/November 2021 (68 sold October/November 2020)

10.4.2) CK Forest By-law Update

As of July 2021 Chatham-Kent council has implemented a temporary forest by law. LTVCA staff have provided significant resources to assist Chatham-Kent staff with reports, analysis of the Aerial Photography and the presentation of LTVCA Stewardship work and GIS results. Monday November 29, 2021 this information was presented to the Chatham -Kent Natural Heritage Committee of the Whole. The reports were well received and a vote to continue with the Temporary Forest By-Law. Staff will continue to work with this committee over the next few months, providing information on LTVCA Stewardship activities.

The Upper Thames River Conservation Authority (UTRCA) is conducting a peer review of the results. The General public will also be given an opportunity to review and comment on the analysis.

Draft preliminary Aerial photography analysis resulted in the following:

Municipality of Chatham-Kent Land Area Analysis			
*Areas calculated in hectares	2010	2015	2020
CK Total Area	246,045.0	246,045.0	246,045.0
Forested Area in CK (no Delaware First Nation)	10,518.5	9,846.0	9,684.7
% Forested Area in CK	4.28%	4.00%	3.94%
Forested Areas excluding Provincial Parks (PP), no FN	9,532.5	8,860.0	8,698.7
% of forested area in CK (no PP, no FN)	3.87%	3.60%	3.54%
Forest lost in CK (no PP, no FN)	-	672.5	161.3
Regional Analysis			
Total Area (CK+FN)	247,289.0	247,289.0	247,289.0
Forested Area of FN	721.0	721.0	721.0
Total Forested Area (CK+FN)	11,239.5	10,567.0	10,405.7
Regional Forest Area % (CK+FN)	4.55%	4.27%	4.21%

10.4.3) Conservation Areas

Big O Conservation Area



Through our OJCP job creation program we are adding in a new viewing platform that will provide visitors a view of the adjacent sewage lagoon property. These lagoons are great at attracting shore birds and are quite popular birding areas for visitors. This structure is addressing a concern from the Ontario Clean Water Agency (OCWA) which oversees the management of the lagoons.

Other properties will see trail improvements such as: McGeachy Pond, Sinclair's Bush, Ashton Forest, Mosa Forest and Merlin Conservation Area.

C.M. Wilson Conservation Area

With a successful camping season coming to a close, staff have now winterized the water systems, shut down the pond aeration pumps and are starting to organize and put away equipment for the winter. Over \$10,000 of gravel was brought in to top up the roads throughout the entire conservation area, which was paid for through additional revenues.

Two Creeks Conservation Area

The Wheatley Two Creeks Association are planning on building a new pavilion to cater to the wedding industry. LTVCA has provided engineered drawings to the Association, with plans to start in the spring of 2022. The WTCA will be covering the full costs of the materials and build itself.

Diversion Channel

This past fall LTVCA staff applied two different herbicides (*Glyphosate and Garlon*) to *Phragmites Australis* and undesirable woody stems that impede flood waters flowing down the channel. Funds are earmarked to hire a contractor to brush the LTVCA Diversion Channel in between Indian Creek Rd and Park Ave. within the City of Chatham. This work is to be completed before Dec.31st 2021.

The reports align with the following objectives of the **LTVCA's Strategic Plan**:

2. Strengthen and Increase Collaboration with Community Stakeholders
3. Increase the Awareness of the Value of Good Watershed Stewardship

10.5) Conservation Services

10.5.1) Stewardship Report

General Stewardship Update

Annual report information is being gathered and compiled for 2021. Contributions for spring trees are coming in. So far the Retired Teachers have offered \$2500 for larger trees, Retro Suites has offered \$5000 for trees. Half will be for larger trees and the other half is to be allocated to community or private land projects. Wijnokiiyng ON Works of Wallaceburg has acquired \$2500 of large trees for Walpole Island.

Program promotion continues watershed wide. We currently stand at 43,000 seedlings and approximately 400 large trees sold for spring 2022. Wetland acreage for 2022 is at 3.5. Prairie acreage is at 21 for spring 2022. Dutton Dunwich is about to release the order form for the annual ReLEAF program. Due to limited supply, they will not offer large trees this year.

Chatham-Kent Secondary School has committed to a bluebird and duck box build project. This project supported by ECCC and LTVCA will see 50+ bluebird boxes and 11+ duck boxes built as a school project. The nesting structures will be distributed to landowners who have previously done stewardship projects with LTVCA and the student builders will also be allowed to take one home.

Progress continues on the Red Barn outdoor private areas project. Fire pits, trail, small animal paddock and bio swale have been plotted. Next steps are to determine space remaining for shrubs, trees, and tall grasses to privatize each fire pit zone.

Ducks Unlimited and Imagine McGregor

Staff are working on several potential wetland projects at the moment. There are a couple that may still be able to be dug this year, but this is weather dependent. The rest are going to put in the que for next year!

Kicking off November 1st, Imagine McGregor and the rest of the stewardship team have started a radio ad campaign focused on getting habitat facts out into the community. Staff started off with a radio show, discussing the topic staff were focusing on this month, biodiversity, its importance and how the stewardship department really helps protect and increase it. The ad is then played for a month and a half, and discusses biodiversity's importance for humans. Check out CFCO, COOL FM and CKYS to hear the ad played. The next topic for the ads will be discussing our tree sales which end March 1st. Staff will also be highlighting in the interview and on their radio calendar "in the loop" the other events staff have coming up this winter.

Staff are working on a Winter Webinar Series which will share information with the public about native plants, their importance, what the LTVCA Stewardship does, how people can contribute to conservation and water management on a small scale and the history of the area. Based on a survey sent out through Instagram, staff chose timing of the events and an incentive for people to attend all 4 webinar topics. They are going to be every other week, each on a Monday at the same time, 7pm, starting January 10th. The first speaker is New York Times's Bestselling author Doug Tallamy talking about Nature's Best Hope, encouraging backyard conservation with the use of native plants. Next on January 24th the stewardship team is going to be discussing what staff do to in terms of conservation and programs we offer. February 7th, Mike Smith founder of ReLeaf Chatham-Kent will discuss Greening Your Grounds. This is a practical guide to making small changes on your landscape to help absorb and filter stormwater. Staff are then having a webinar on February 21st to help people connect, care about, and steward our local environment by talking about its history.

Events are also being planned for the spring; prairie plug sales, community plantings, tree giveaways and such. Staff are in the process of applying for the Intact Municipal Climate Resiliency Grant for which there are some possible project locations for flood mitigation. Staff are working on possible projects with Hydro-One and CWF focusing on pollinator habitat. Staff will be applying for the Eco Action grant to help fund the continuation of the Imagine McGregor program.

ALUS Chatham-Kent Update

Staff have had quite a few site visits this fall with landowners, some of which already have established restoration projects through the ALUS program and are interested in restoring additional land. Tree planting has gained the most interest so far for 2022, however we also have wetlands and tall grass prairie on our list of projects which we hope to establish in the coming year. Our PAC Meeting was held November 18 and most of the members were able to join us in-person once again to discuss and approve these upcoming projects.

Just recently staff had a meeting with Canadian Wildlife Federation about their funding program sponsored by the government to help restore monarch habitat which will benefit many pollinators in our watershed. Staff already have a few projects that would fit perfectly with this program and will be proposing them to CWF in the upcoming weeks.

Additionally, Ontario Federation of Hunters and Anglers also donated to our ALUS program. On December 7th Brian Moore from OFAH met with staff as well as a landowner and excavator to take a photo presenting the cheque and commemorate the donation at a newly established wetland.

ALUS Middlesex

The end of the year has been busy with finalizing participant contracts, project establishment, applying to the CAP program, and preparing reports for different funders. ALUS Middlesex has completed final reports to ALUS Canada and is preparing to mail-out annual payments to 45 participants. ALUS Middlesex was a part of 33 projects this year, engaging 17 new farmers and enrolling 133.35 acres into the program.



Figure 1 The Greystead wetland project being excavated a day before the snow arrived. Wetland is located in the Ausable Bayfield watershed and adjacent to the sensitive Mud Creek.

ALUS Elgin

Continuing to collaborate with farmers and conservation partners, ALUS Elgin has added 120 new acres of restored land into the program in 2021, bringing the total number of acres enrolled to 617. The restored land ensures marginal farmland remains productive with the offering of ecosystem services. The types of projects include tallgrass prairie establishments, tree plantings and wetland restorations.

ALUS Elgin is in the midst of transitioning between legal entities and will be coming to the Lower Thames Valley Conservation Authority in the New Year!



Figure 2 present state of an established wetland in St. Thomas, ON. The wetland was constructed in 2019 and has become a haven for local wildlife.

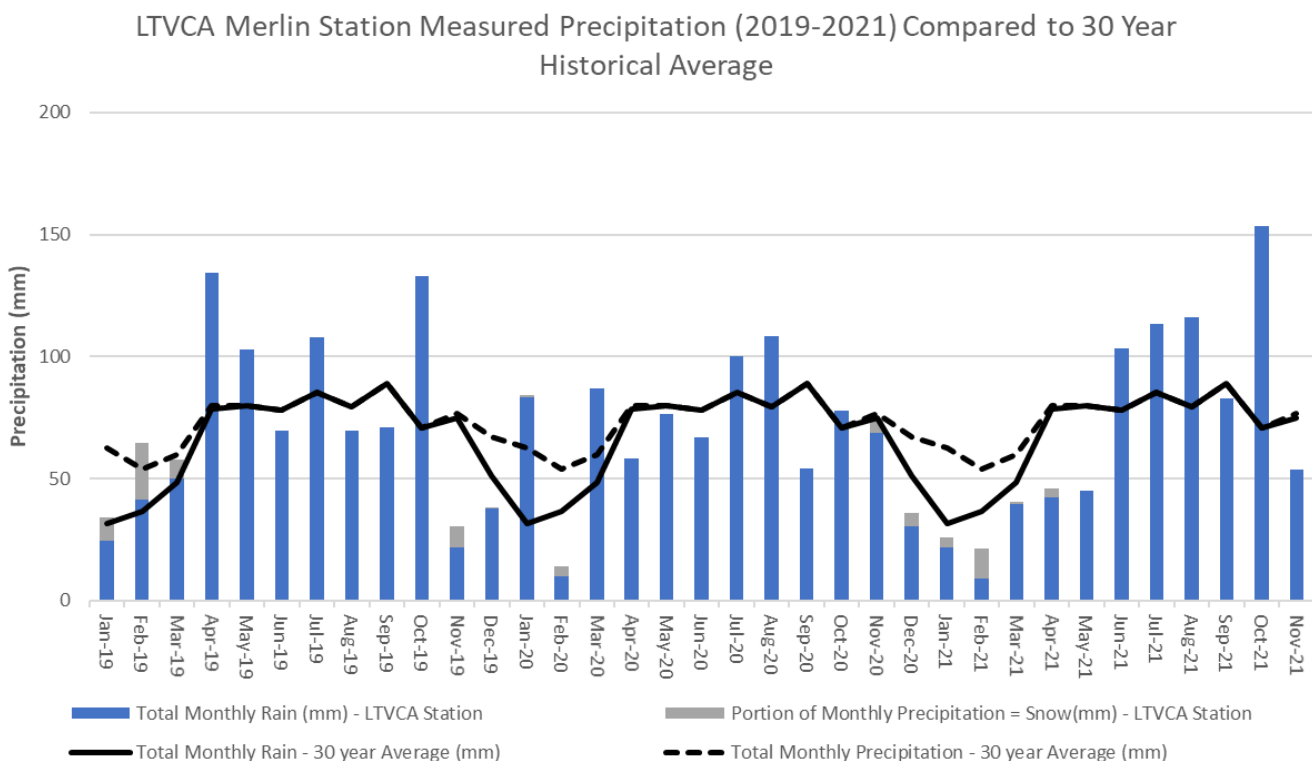
10.5.2) Phosphorus Reduction Initiatives

New LTVCA Outreach Specialist Hired – Sarah Cook

The LTVCA has hired a new employee for the Outreach Specialist position. Sarah Cook will start in the position on December 13th. Sarah is from Blenheim and has an Associate Diploma in Environmental Management from the University of Guelph Ridgetown Campus. Sarah has extensive experience working in the agricultural sector with Pride Seeds. Her experience with agriculture related customer service, communication, and event planning will be assets to the LTVCA in the Outreach Specialist role. Sarah will be supporting the Lands & Conservation Services Department with outreach and communications efforts with the goal of increasing community engagement and participation in LTVCA stewardship initiatives. The Outreach Specialist will also be supporting the Agricultural Program Coordinator with administering and promoting the LTVCA Soil Health Program and McGregor & Jeannettes Creek Phosphorus Reduction Program.

CAP and ECCC: McGregor and Jeannettes Creek Phosphorus Reduction Program (MJCPRP) **McGregor and Jeannettes Creek Subwatershed Monitoring & Modeling**

LTVCA project staff continued to collect water quality samples and flow data at monitoring stations in the McGregor and Jeannettes Creek subwatershed during the Fall of 2021. Monthly precipitation totals during October of 2021 (153 mm) were significantly higher than the 30-year monthly average (71mm) for the region at the station located north of Merlin Ontario. This is the largest amount of monthly precipitation the LTVCA has measured during October since monitoring began in the subwatershed during 2017.



This precipitation caused a significant amount of runoff in the subwatershed that required water sampling and stream gauging. Since the beginning of October, the LTVCA has monitored 7 significant flow events in the McGregor & Jeannettes Creek subwatersheds. With the watershed already saturated, the LTVCA anticipates that the potential is high for a number of significant flow events this Winter and Spring.

LTVCA staff also successfully deployed the Acoustic Doppler Current Profiler during the month of November (ADCP). This is a major milestone for the LTVCA, the ADCP can provide accurate stream flow data during significant flow events when it is not safe to wade watercourses to collect flow data. Furthermore, it will enable the LTVCA to collect flow data for streams that are too wide and deep to wade. This data will significantly improve our understanding of water quantity during major precipitation and flow events.

All collected water quality data will be used to calculate nutrient loads. Furthermore, University of Guelph Water Resource Engineers will use the collected data to configure the subwatershed Soil & Water Assessment Tool (SWAT) models. The SWAT models will be used to estimate the phosphorus reductions that result from the implementation of agricultural BMPs. The modeling report should be released by May of 2022.

Sampling, monitoring, and modeling activities are funded in part by the following agencies and organizations:

1. Environment and Climate Change Canada (ECCC): Great Lakes Protection Initiative (GLPI)
2. Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) – Canadian Agricultural Partnership
3. Agriculture and Agri-Food Canada (AAFC) – Canadian Agricultural Partnership
4. Ontario Soil and Crop Improvement Association (OSCIA) – Administer the ONFARM project

MJCPRP Best Management Practice (BMP) Incentive Program

With harvest complete in the region, the LTVCA Agricultural Program Coordinator is working with farmers to complete and process claims for approved BMP projects that were implemented during the 2021 growing season. The claim deadline for the MJCPRP is January 7th, 2022. All projects are spatially mapped and the claims are validated to ensure projects proceeded as planned. It's the LTVCA's goal to have the claims and payments processed by January 31st, of 2022. Final BMP project implementation numbers will be provided in the 2022 annual report.

If all projects proceed as planned this could result in \$102,00.00 in financial contributions to support local farmers with implementing projects such as: planting cover crops, grid or zone soil sampling to inform nutrient application practices, alternative phosphorus application practices, and erosion control projects.

The BMP incentive program is solely funded by an Environment & Climate Change Canada (ECCC) Great Lakes Protection Initiative contribution agreement. This agreement will conclude on March 31st of 2022. In the future the LTVCA will need to assess if the BMP incentive program will be offered beyond 2021 and how it could be funded. At this time no funding is secured.

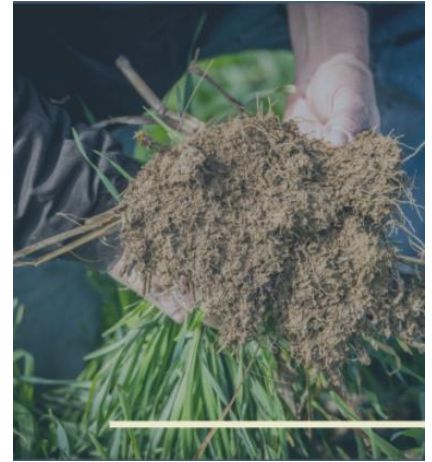


LTVCA: Soil Health Program

The LTVCA Agricultural Program Coordinator is also working with farmers to complete the claim and payment process for the 2021 Soil Health Program. The claim deadline for this incentive program is January 7th, of 2022. It's the LTVCA's goal to have all 68 project claims processed by January 31st of 2022.

If all cover crop and soil sampling projects proceed as planned, this could result in the program providing \$124,366.00 in financial contributions to farmers to implement soil health projects across the entire LTVCA watershed. Final program numbers will be included in the 2021 annual report.

The Soil Health program is funded by an Environment & Climate Change Canada (ECCC) Great Lakes Protection Initiative contribution agreement. The agreement expires during March of 2022, the LTVCA will need to identify and secure additional funding sources to offer this program again during 2022.



On-Farm Applied Research & Monitoring (ONFARM) Program

The LTVCA recently created a short video to describe the project and to showcase the 20km² Jeannettes Creek study subwatershed. Furthermore, preliminary nutrient loading results were discussed in the video. The general public can also view the video at the LTVCA Youtube channel:



<https://www.youtube.com/watch?v=TON9EreMDXM>

From November 2021 – March 2022 the LTVCA will be conducting land management surveys with willing farmers in the Jeannettes Creek ONFARM study subwatershed. The surveys will be designed to collect information on crop rotations, crop yields, tillage practices, fertility practices, and Best Management Practices (BMPs). This extensive data will be used to configure a subwatershed IMWEBs model for the Jeannettes Creek study area. Dr. Wanhong Yang from the University of Guelph has been contracted to configure the model which has the capacity to simulate phosphorus loads and estimate nutrient reductions that result from the practices farmers are implementing in the subwatershed. In the future, the LTVCA will also have the capacity to use the IMWEBs model to identify project implementation scenario that will allow us to achieve watershed P reduction targets.

10.5.3) Aquatic Species at Risk (SAR)

Species at Risk fieldwork has nearly wrapped up for the 2021 season. eDNA samples have been submitted for metabarcoding analysis. Verification of species identifications from fish and mussel surveys have been completed. Permit reports documenting fish and mussel species found and an aquatic species survey report are being completed. Temperature and light data loggers will be removed as soon as water levels are low enough to permit their extraction.

Flyers are being printed for distribution to landowners in priority subwatersheds to promote stewardship activities to improve water quality and aquatic habitat for 33 fish and mussel SAR in the LTVCA (livestock exclusion fencing, improved stream crossings for livestock, alternate watering sources, riparian buffers and wetland creation). Ranchers allowing livestock to access watercourses, in particular, will be contacted to encourage them to undertake livestock exclusion projects. These individuals should contact stewardship@ltvca.ca for further information. Please spread the word.



Habitat protection signs for fish and mussel species at risk have been placed at Tecumseh Park, Thames Grove Conservation Area, the government dock at Jeannettes Creek and at Eelūnaapéewi Lahkéewiit (Delaware at Moraviantown). Additional signs have been distributed for placement at three conservation areas (Big Bend, Dutton-Dunwich and Delaware), Rondeau Provincial Park and the boat launch at Lighthouse Cove.

Fish and mussel SAR interpretive signs are being prepared for Big Bend, Dutton–Dunwich, Delaware, Rondeau Bay marshes and McGeachy Pond Conservation Areas.

A funding proposal has been submitted to the Canada Nature Fund for Aquatic Species at Risk (CNFASAR) to support work next fiscal to determine the extent of invasive populations of Water Lettuce and Chinese Mysterysnail in McGregor Creek and Water Hyacinth in Baptiste Creek and assess the feasibility of their removal. In addition, the proposal requests funds to conduct outreach activities to educate the public about aquatic invasive species and the damage they can cause to local aquatic ecosystems.

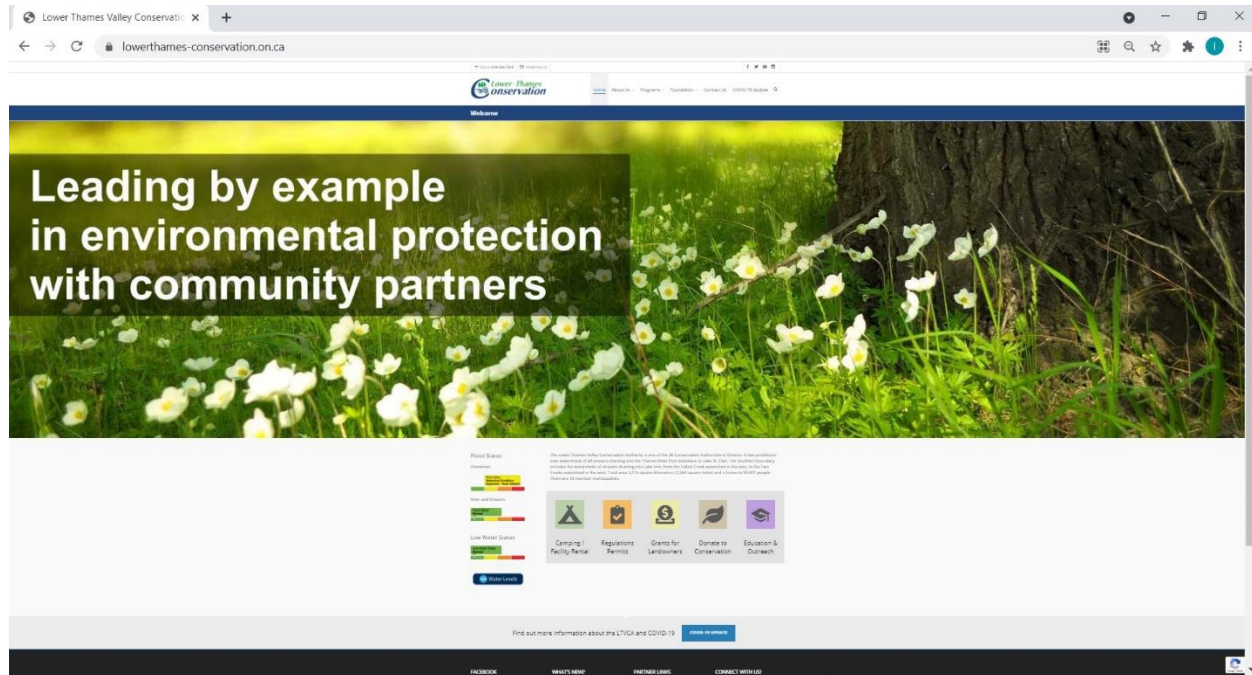
Bioacoustic Monitoring of Bat and Bird Species at Risk

The LTVCA has been granted \$47,294 in Habitat Stewardship Program funding over two fiscal years (2021/22 to 2022/23) by Environment and Climate Change Canada for *Habitat Identification, Species Distribution and Management Planning for Avian and Bat Species at Risk in the Mosa Forest Conservation Area*. The contract has just been signed.

10.6) Communications, Outreach and Education

10.6.1) Website Updates

Ongoing are the postings of watershed and shoreline conditions, Minutes and Agendas of Board Reports, changes in fees, updates regarding programs and services of the LTVCA and virtual/onsite events and activities.



Our website alerts visitors of the current status of COVID-19 Pandemic health unit and government guidelines that affect our conservation area usage and our programs and services. During the pandemic the LTVCA website is updated to inform the public about the procedures we are using to respond to inquiries and requests to purchase items from the Conservation Authority as offices remain closed to the public.

10.6.2) Social Media

Since the October 21, 2021 meeting of the Board of Directors, daily social media posts on the LTVCA's general social media platforms have been issued. (**Facebook** – 2,865 followers for an increase of 35 followers; **Twitter** – 1,219 followers for an increase of 10 followers; **Instagram** – 912 followers for an increase of 31 followers), **YouTube** 86 subscribers for an increase of 1 subscriber. Posts focus on the LTVCA's ongoing programs and services, following environmental issues across our watershed, how we are social adapting to the COVID-19 Pandemic and keeping public informed.

The **Ska-Nah-Doht Village's Facebook** page currently has over 2,338 followers and 2,248 page likes. The **Instagram page for the Village** has 181 followers.

Posts are circulated daily to Directors of the LTVCA and Foundation, First Nations Communities, Municipal Councils/Clerks/CAO's, MP's and MPP's, Ska-Nah-Doht Advisory Committee, all staff, Conservation Ontario, and watershed media (as needed).

We have reinforced the importance of all the COVID-19 protocols, removal of garbage and pet waste, and have encouraged visitors to support our conservation areas through payment of parking fees and the purchase of 2022 parking passes.

In addition to the daily departmental posts, there were posts and media releases created on our social media and website for other major events associated with the LTVCA over the past couple of months:

- Shoreline and Watershed Conditions Statements as needed
- A living river...the Thames
- Weekly public opening hours for Resource Centre/Ska-Nah-Doht Village Museum
- Sharon Creek Conservation Area Community Survey
- Employment Opportunities with the LTVCA
- Conservation Ontario Fall Into Nature Healthy Hikes Campaign
- Natural Heritage Committee Meeting updates
- Safety Tips for Wildlife re: Halloween decorations
- Witches Paddle at Sharon Creek
- Magic of Lights Longwoods
- Climate Change articles
- Winter Webinar survey
- Remembrance Day
- Service Interruptions at Longwoods, C.M. Wilson, Sharon Creek and Walter Devereux Conservation Areas
- Agricultural Conferences
- Longwoods Accessible Boardwalk Official Recognition Ceremony
- CBC Marketplace episode on home insurance and living in floodplains
- Sknowledge
- Upcoming Winter Fun at Longwoods

Departmental Social Media Post Messages – October 13, 2021 – December 7, 2021

- **Water Management Mondays**
 - *October 18 – Surveying barrier beach at tip of Rondeau Provincial Park*
 - *October 25 – LTVCA Collects Bathymetry Data (depth readings)*
 - *November 1 – Another Wet Weekend in the Lower Thames Watershed*
 - *November 8 – Measuring water flow in streams and rivers using sound waves!*
 - *November 15 – Wednesday is GIS Day!*
 - *November 22 – Flood Watch – Lake Erie Shoreline*
 - *November 29 – Property in a Floodplain? Check with the LTVCA to confirm.*



PROPERTY IN A FLOODPLAIN?
Check with the LTVCA to confirm.

Floodplains are areas of land beside a river system which stretch from the banks of the channel to the base of the valley walls that tend to be prone to flooding.

In some very flat areas, there may be no apparent valley and the flood prone area can be very large.

60 Years 519-354-7310 info@ltvca.ca ltvca.ca Lower Thames Conservation

Remember to Social Distance

- **Stewardship Tuesdays**

- October 19 – Plan Spring Tree Planting Now!
- October 26 – Rotary Improves Local Habitat!
- November 2 – Major wetland project completed near Ridgetown
- November 9 – We are hosting a webinar series and we want your opinion!
- November 16 – Site Preparation is key to successful tree planting
- November 23 – New Wetland planned for Walter Devereux Conservation Area
- November 30 – Perfect time is NOW! Plan your 2022 tree planting project.
- December 7 – Join us for a winter webinar series!



Watershed Stewardship & Restoration

Perfect time is NOW!

Plan your 2022 tree planting project.

Tree sales open til March 1.

stewardship@ltvca.ca

Remember to Social Distance

Lower Thames Conservation 519-354-7310 info@ltvca.ca ltvca.ca 60 Years

- **Conservation Area Wednesdays**

- October 13 – 'for a breath of fresh air...visit a conservation area!
- October 20 – Tallgrass prairie maintenance...why is it necessary at Sharon Creek CA?
- October 27 – A Big Thank you to our seasonal campers at C.M. Wilson Conservation Area!
- November 3 – Thanks for 250+ responses to our survey for Sharon Creek Conservation Area
- November 10 – 2022 Conservation Area Parking Passes Now On Sale!

- November 17 – Road Maintenance Continues at C.M. Wilson Conservation Area
- November 24 – Explore All Our Conservation Areas! 2022 Parking Passes Great Stocking Stuffers!
- December 1 – Lighthouse Conservation Area – Lighthouse Cove Community Group's Annual Thames River Lighthouse Illuminations!



Relax, Refresh & Return

2022 Conservation Area Parking Passes Now On Sale!

LTVCA Conservation Area Parking Passes for 2022 are now available for purchase online!

Purchase 1 pass at the regular price of \$60 or 2 passes for \$90!

Great stocking stuffers - supporting a good cause!

[Link attached](#)

Remember to social distance!

 519-354-7310
info@ltvca.ca
www.ltvca.ca

 60 Years

Lighthouse Conservation Area
- at the mouth of the Thames River

• Outreach and Education Thursdays

- October 14 – Check Back Weekly for Museum Hours
- October 21 – Grab a Map and Explore Longwoods and Ska-Nah-Doht
- October 28 – Artifact Case Project – the finishing touches
- November 4 – We're Going to be on Film!
- November 11 – Activity Kits Available!
- November 18 – Work in Progress! Pop-Up Exhibits are coming to a community near you in 2022!
- November 25 – Winter is Coming! Be prepared for the COLD!
- December 2 – Let it Snow...Let it Snow, Let it Snow!



Outreach & Education

We're Going to be on Film!

Longwoods and Ska-Nah-Doht Village are thrilled to have been 1 of the locations for an upcoming video production.

It was a great time with the performers, cast, and crew!
Can't wait to see the product of all of their talents!

Instilling inherent value for our natural & heritage resources.

 519-264-2420
info@ltvca.ca
ltvca.ca


 60 Years



Remember to Social Distance

- **Phosphorus / Water Quality Fridays**

- *October 15 - #ONFARM Warm Weather – time for fall equipment maintenance*
- *October 22 – Using flow tracker after rain #ONFARM*
- *October 29 – Sampling pumps to understand how phosphorus moves from fields to creeks #ONFARM*
- *November 5 – Recording water depth in drains tells us amount of water the pumps move annually #ONFARM*
- *November 12 – Optimizing Conservation Practices webinar*
- *November 19 – EFA 2021 Virtual Conference*
- *November 26 – LTVCA samples small flow events to help in calculations of nutrient runoff.*
- *December 3 – Living Laboratories Initiative – Ontario Inter-conference Series*



Phosphorus Reduction Initiatives

Recording water depth in drains
tells us amount of water the pumps move annually #ONFARM

We downloaded level loggers in some Jeannettes Creek pump schemes.

Continuously recording water depth in drains gives us more information on how much water the pump is moving in a year.

The sensor has 6 months of memory so we won't download again until spring.

REMEMBER TO SOCIAL DISTANCE

Lower Thames Conservation 519-354-7310
info@ltvca.ca ltvca.ca

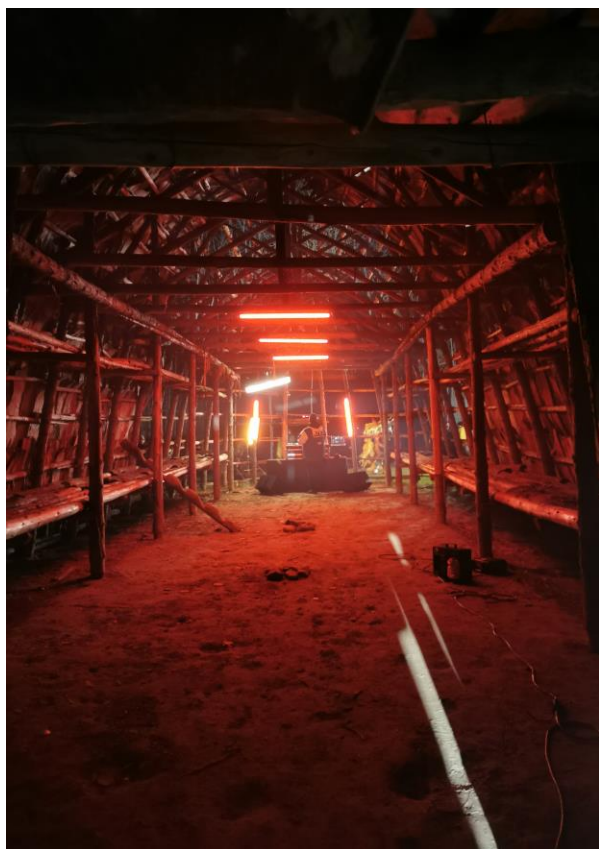
60 Years

PLUS WE POST AND SHARE OTHERS' MESSAGES ON OUR SOCIAL MEDIA PLATFORMS:

- **encourage people to use our conservation areas safely during the COVID-19 pandemic**
- **articles of public interest from local media regarding ecosystems and the environment, and local environmental issues** (erosion, flooding, emergency preparedness, wetlands, grasslands, pollinators)
- **watershed community based environmental initiatives** including reposting municipal posts; sharing London Canoe Club posts (for Sharon Creek Conservation Area)
- **cool facts about nature** – local plants, birds, trees, animals and thing families can do with their children to engage with nature in their own back yards or in a conservation area during the pandemic – helping people to reconnect with nature
- **supporting Conservation Ontario's social media campaigns: *Healthy Hikes***
- **sharing of neighbouring Conservation Authorities' information**
- **sharing of municipal public health information** – CK Public Health, London Middlesex Health, St. Thomas Elgin Health, Windsor

10.6.3) Education Programming Developments / Ska-Nah-Doht Village and Museum

On November 2, 2021 the Communication, Outreach, and Education Department managed an on-site film shoot. The Curator was present at all times during filming. The anticipated release of the production is January 2022, at which time Ska-Nah-Doht and LTVCA are able to share their role in the production and its name with the public.



In October and November LTVCA educators provided 15 programs to school groups and 5 programs to Scout and Guide troops.



Matthews Hall Independent School
@MHLondonOntario

...

Grade 3 took their learning outside to the Ska-Nah-Doht Village and Museum last week @LTVCA Another successful field trip!



2:34 PM · Oct 12, 2021 · Twitter Web App

Ska-Nah-Doht Village and Museum received word that their application for support from the Reopening Fund for Heritage Organizations under the Museum Assistance Program has been approved. This amounts to 10% of the museum's operating budget for this year—it should be noted that this is not an annual funding source.

On Friday, December 2, 2021 two of the 6 artifact cases developed by LEEANNE DOXTATOR were delivered to their new homes at Antler River and Delaware Central Public School. Educators at these locations were thrilled to receive the cases and look forward to their students being able to make use of these hands-on resources when restrictions allow. The remainder of the cases, which are to be donated to local schools and educational facilities, will be delivered in the coming weeks.

As of December 2, 2021 the Ska-Nah-Doht Museum has welcomed 123 visitors through our doors since reopening on October 19, 2021 (not including Education Program visitors). Response has been wholly positive to the reopening of the museum, and we have heard from many others expressing their excitement that they will be able to visit the indoor portion of Ska-Nah-Doht Village and Museum again during their next visit.

The pop-up exhibits are progressing well. It is anticipated that they will be installed at their first locations early in the new year.



The Communications, Outreach, and Education team are working on logistics for the implementation of in-class programming in order to meet the needs of schools within the watershed as fieldtrip restrictions remain in place.

10.6.4) Lower Thames Valley Conservation Foundation

On November 19th, the Longwood Accessible Boardwalk Recognition Ceremony was held onsite with a number of dignitaries in attendance! This was a celebration of the completion of the project which had received a \$94,000 Ontario Trillium Foundation (OTF) capital grant, an application to OTF submitted by the LTVCFoundation. MPP Monte McNaughton, Strathroy-Caradoc Mayor Joanne Vanderheyden, Foundation President Dan McKillop, Ontario Trillium Representative, LTVCA CAO Mark Peacock, Oneida Job Development workers, Ontario Job Creation Program workers, Lucas Michielson from Millworks Custom Carpentry and Stone (contractor), Sheila Simpson – grant writer, Sandi Hipple – Strathroy-Caradoc Councilor and LTVCA Director, and LTVCA staff that had worked directly on the project were in attendance. Not able to attend, however recognized for their contributions, were John teBokkel of Springwater Engineering LTD. and Tacho Metal Post.



Next meeting of the Foundation Board of Directors is a scheduled zoom meeting for December 15.

The reports align with the following objectives of the **LTVCA's Strategic Plan**:

2. Strengthen and Increase Collaboration with Community Stakeholders
3. Increase the Awareness of the Value of Good Watershed Stewardship

10.7) Joint Health & Safety Committee Minutes, December 1, 2021

Health & Safety Committee Meeting Minutes December 1, 2021

A. Vriends, V. Towsley, T. Casier, M. Peacock

i. Minutes

No issues noted.

ii. Business Arising from the Minutes

a) Eye Wash Stations

Distribution of single use bottles still needs to be completed, as well as SOP's. Staff information session on use and storage to be held.

b) Operation of water systems

- PPE needs to be in place, e.g. eye wash station, face shield when dispensing chlorine
- Adam and Vance will need to create the SOP, and it will need to be consistent between them

c) Life Jackets

- Need to purchase for staff use, 2 x-large, 2 large and 2 medium, labelled 'LTVCA staff use'

iii. New Business

Fall restraint harness needed at CM Wilson. Adam look into the purchase of one.

Admin building roof – may need to have someone come in to fix the on-going problem leaks / gaps in the roof.

iv. Training 2022

a. Training at Heights

Vance - expires April 15, 2022 – needs refresher
Francois Gallant – unknown

b. First Aid - Training Expiring in 2022

1. Greg VanEvery - February 5 - NEEDS 1 day renewal – Standard with CPR A
2. Daniel Bittman - March 4 - NEEDS 1 day renewal – Standard with CPR C
3. Randall Van Wagner - March 5 - NEEDS 1 day renewal – Standard with CPR A
4. Vance Stark - March 20 - NEEDS 1 day renewal – Standard with CPR C
5. Jason Wintermute - April 12 - NEEDS 1 day renewal – Standard with CPR C
6. Valerie Towsley - April 12 - NEEDS 1 day renewal – Standard with CPR C
7. Ryan Carlow - April 12 - NEEDS 1 day renewal – Standard with CPR C
8. Peter Moddle - April 23 - NEEDS 1 day renewal – Standard with CPR C
9. Jerry De Zwart - May 23 - NEEDS 1 day renewal – Standard with CPR C
10. Michael Latham - May 23 - NEEDS 1 day renewal – Standard with CPR C

All training for the above staff, 1 through 8, should be done in January to avoid busy seasons within the departments (e.g. tree planting, flooding, etc.).

1. Elizabeth Philip – needs training
2. Connor Wilson – needs training
3. Francois Gallant – unknown

Other potential training? Backhoe? Cold-water survival training

(<https://survivalbytraining.com/specialty-survival-courses/cold-water-immersion-course/>)?

Power boat licences / training (Neil)?

On the Additional Training form – need to change Other License/Certification wording, from ‘What is required’ to such as ‘Other Applicable Training’ or like verse.

v. **Incidents / Accidents**

Water Management Employee - September 25, 2021

No WSIB form submitted

Minor injury

No time taken off - no medical treatment sought by employee

Discussed incident with employee, no further action taken, situation not remedial (i.e. garbage on side of road, unseen trip hazards).

Administrative Employee - November 15, 2021

No WSIB form submitted

Minor injury

No time taken off - no medical treatment sought by employee

Longwood’s Road CA reception area door at resource centre needs to have a sign that states ‘for emergency use only’. Door requires repairs.

vii. Other business

Virtual Health and Safety Board

Being worked on.

Workplace Safety – Inspection Sheets for 2022

S:\Administration\HR\Health & Safety\H&S Inspections

Staff to ensure workplace safety inspection sheets are updated for 2022.

Valerie to go over monthly inspection sheets with Adam.

Small vehicle repair issues go to Todd.

Need to make sure first aid kits are up to date on restocking.

H & S update for next staff meeting: vehicles, first aid kits, additional training, etc.

Elections for H & S Committee members for the 2022 season at February staff meeting. Employee members must commit for the entire year.

Next meeting date – Tuesday, March 1, 2022. 2022 Meeting and Inspection schedule to be set at that meeting.

**2021 Joint Health and Safety Committee
Meeting and Site Inspection Tour Schedule**

- Meeting – Admin – Tuesday, March 2, 2021
- Meeting – Wednesday, June 2, 2021
- Meeting – Wednesday, September 1, 2021
- Meeting – Wednesday, December 1, 2021

- AREA 2 Inspection – May 5
- AREA 4 Inspection – May 12
- AREA 3 Inspection – June 9
- AREA 5 Inspection – November 10, 2021
- AREA 1 Inspection – November 10, 2021

*Inspections to continue to be done individually until pandemic has passed.

10.8) Wheatley Two Creeks Association Minutes, November 4, 2021

WHEATLEY TWO CREEKS ASSOCIATION

Minutes of meeting held at Two Creeks November 4th, 2021

ATTENDANCE: Gerry Soulliere, Roger Dundas, Mike Diesbourg, Rick Taves, Lorna Bell, Linda & Lee Pearce, Pauline Sample, Joe Pinsonneault, Mark Peacock (LTV), Adam Gibb (M.C. Wilson Con. Area), Bruce & Marj Jackson

AGENDA: Moved by Rick sec by Roger agenda be accepted as outlined. (Carried)

MINUTES: Moved by Marj sec by Roger minutes be accepted as printed. (Carried)

MEMORIAL GROVES: Plaques have been put in place on adopted trees in memory of Ron Haley and Lee Palser. Bench has been received for Ron, yet to be placed.

PROPERTY & EQUIPMENT: Herby Curby's for garbage pickup are not feasible as we would be charged like a business. It was moved by Rick sec by Linda to raise rental rate of big pavilion to \$250. as of Jan 1st, 2022 and class it as a charge not a donation.

CONCERTS: All bands booked for 2020 have been asked to play for 2022. Nine out of fourteen are confirmed. Have applied for Grant.

FINANCIAL REPORT: Submitted by Roger: Account balance Aug 31/21 \$53,663.57

Account balance Nov 1/21 \$40,035.11

Moved by Mike, sec by Linda financial report be accepted as given. (Carried)

CORRESPONDENCE: None

OLD BUSINESS: Wedding Gazebo estimate is \$11,000. not including cement. Mark has some plans he will make available. Budget will have to be worked out. Grant available if applied for by Dec. 3rd, 2021.

NEW BUSINESS: 1) Pavilion will be used for Armistice Day celebration Nov. 11th.

2) BIA would like permission to light up Two Creeks for Christmas.

3) Rick to guide WAPS Grade 4 class on a trail hike and to plant 25 trees Fri. Nov. 5th at 9 am

4) Lower Thames has a new 4x8 map sign ready for installation.

5) Looking for a meeting place.

Roger moved for adjournment at 7:12 pm

Marjorie Jackson, Acting Secretary

11. Correspondence

11.1) SWM Middlesex Support Maintaining LTVCA Current Levy



Municipality of Southwest Middlesex

Resolution # 2021-275

Moved by Councillor Cowell

Seconded by Councillor Sholdice

THAT Council approve maintaining the current levy approach with the Lower Thames Valley Conservation Association for a term of two (2) years.

BD-2021-32 H. Aerts – C. Cowell

Moved that LTVCA staff approach Member Municipalities and neighbouring Conservation Authorities regarding a 2-year agreement to maintain the current levy approach to allow for proper negotiations of the new levy protocol.

Further, That this request be forwarded to the province.

Carried

A handwritten signature in black ink, reading "Denny Giles".

Deputy Clerk November 16, 2021

11.2) Up to 10% of homes could now be 'uninsurable' because of flood risk. Could yours be one?

MARKETPLACE

Up to 10% of homes could now be 'uninsurable' because of flood risk. Could yours be one?

Lack of insurance awareness, vague real estate rules and incomplete flood maps leave Canadians at risk

[Steven D'Souza](#), [Jeremy McDonald](#), [Jenny Cowley](#) · CBC News · Posted: Nov 26, 2021 4:00 AM ET | Last Updated: 20 minutes ago



Richmond Hill, Ont., resident Derrick Terakita stands beside the waterway that runs behind his home. His insurance company recently told him that because of the rising threat of climate change, his area was no longer eligible for overland flood insurance. (Steven D'Souza/CBC)

Many homeowners are unprepared for flooding because they lack critical information thanks to murky real estate rules, incomplete floodplain maps and an insurance industry pulling back from high-risk areas, a *Marketplace* investigation has found.

Marketplace also found homeowners who lost their flood protection because of multiple claims or specifically because of the growing risk of climate change. The Insurance Bureau of Canada (IBC) warns it's a situation more Canadians could find themselves in.

The IBC told *Marketplace* it estimates that anywhere from six to 10 per cent of Canadian homes are currently uninsurable due to flooding and that estimate could go up as more insurance companies update their risk assessments to account for the rising threat of climate change.

"As the risk from climate change increases, yes, more Canadians could become uninsurable," said Craig Stewart, vice-president, federal affairs with the IBC.

According to a [2019 federal government report](#), Canada's climate is warming at double the rate of the rest of the world, and the IBC estimates that currently [1 in 10 Canadian homes](#) is at high risk of flooding and some face possible repeated flooding over the next 20 years.

But would prospective homeowners be warned about that risk? Going undercover, posing as new homebuyers in Ontario, a *Marketplace* team found there's no Canada-wide requirement for agents or sellers to warn potential buyers that they're moving into a flood-prone area. *Marketplace* was told on two occasions that homes were not in floodplains when public data showed otherwise. In another test, a producer posing as a prospective home seller also found agents didn't always advise her to disclose past flood damage.

The recent flooding in British Columbia has made the issue of flood insurance coverage top of mind for many homeowners, as some residents there, unable to find coverage, turn [to provincial disaster assistance](#), and others assess what coverage they have [as the cleanup begins](#).

'They're trying to protect their money'

But in some cases, even being prepared isn't enough. Derrick Terakita knew his home in Richmond Hill, north of Toronto, was in a floodplain and thought he had adequate coverage, until he got his insurance renewal this year. In May his insurance provider informed him it was taking away his overland water coverage. The reason: the increasing severity of weather due to climate change.

"I was a little bit ticked off, but then it's an insurance company, they're trying to protect their money," Terakita told *Marketplace*.



Murky real estate rules and insurance eligibility leaving Canadians with big bills after flooding

Flooding is the most costly and common natural disaster in Canada, but risk-averse insurance companies and the lack of a nationwide requirement for real estate agents to disclose flood risk are leaving Canadians vulnerable. 2:16

Overland flood insurance typically protects homeowners from flooding from a body of water overflowing onto dry land. According to the IBC, protection from flooding due to burst pipes or appliances is typically included in most home policies. Sewer backup protection is also commonly available as an add-on. But overland flood insurance only became an option in Canada in 2015, following massive flooding in southern Alberta in 2013 that, at the time, was ranked as the [costliest natural disaster in Canadian history](#).

Marketplace connected Terakita with an insurance expert to better understand his situation. He then contacted his insurance broker to see if his provider could reinstate his coverage if he took steps to protect his home. The answer was no.

'Insurance will become a luxury for the rich'

"We can't really offer the coverage because again, it's no longer applicable to your territory," the broker told Terakita over the phone as *Marketplace* cameras rolled. "Even if there was some sort of mitigation put into place, it's still not going to be applicable."



Insurance expert Jason Thistlethwaite says that if we don't manage climate risk better, insurance may eventually become a luxury and unaffordable for most people. (Steven D'Souza/CBC)

Marketplace showed Terakita's experience with his insurance company to Jason Thistlethwaite, an associate professor in the School of Environment, Enterprise and Development at the University of Waterloo in Ontario.

"It's unfortunate but insurance companies are businesses and they're looking at their bottom line and they are going to make a judgment on their risk appetite," said Thistlethwaite, who noted that flooding is the most costly and common hazard in Canada.

Thistlethwaite worries that many more Canadians will soon find themselves in Terakita's shoes.

"Insurability — or markets where insurance is available and affordable — is eroding in Canada," Thistlethwaite said. "Unless we make more effort to manage climate risk, insurance will become a luxury for the rich and unaffordable for most."

Insurance industry responds

Stewart from the IBC agrees that insurance companies need to do a better job of giving incentives to customers like Terakita who want to be proactive in protecting their home.



Craig Stewart, seen here evaluating the aftermath of a tornado, is with the Insurance Bureau of Canada. He says the industry can't shoulder all the risk for insuring high-risk homes and that a government-backed, high-risk insurance pool needs to be created. (Submitted by Craig Stewart)

He says in a competitive marketplace, customers like Terakita can shop around for coverage. Though he acknowledges that finding another option isn't guaranteed and the industry has its limitations when it comes to overland insurance protection.

"The industry's new to [overland flood protection] in Canada, but we're only going to be able to provide a certain amount of protection. We are going to need to collaborate with the government, especially for those who will continue to reside in the highest-risk areas in the country."

The solution the IBC proposes is a national high-risk residential flood insurance program, which would provide insurance to residents in the most flood-prone areas, funded by the federal government.

It's one idea the Liberal government is studying as part of its [National Task Force on Flood Insurance and Relocation](#), which was formed last year. The group is also studying options to relocate people who live in areas with repeated flooding.

Stewart, a member of the task force through the IBC, says they'll present recommendations to Minister of Emergency Preparedness Bill Blair in the spring, but programs aren't likely to roll out until 2023 or 2024.

"We need all hands on deck, and insurers will absolutely play their part in addressing the problem, but we can't do it alone," Stewart said.



Debris litters a road in the Sumas Prairie flood zone in Abbotsford, B.C., on Nov. 22. (Ben Nelms/CBC)

Asked by CBC News about the insurance situation during a news conference in Ottawa last week, Blair said the recent flooding in British Columbia underscores the importance of the task force's work.

"It does, I think, add an element of urgency to our work with the insurance industry and the development of a National Flood Insurance Plan," Blair said.

Government-backed flood insurance does come with its share of problems. In the U.S., the National Flood Insurance Program has a \$20 billion US shortfall and is often criticized for using outdated information and incentivizing rebuilding in problem areas.

Homeowners unaware of the risk

Despite the stark warnings about the impact of climate change and the threat of flooding, the issue isn't always top of mind. A 2020 survey by Partners for Action, a climate resiliency network based at the University of Waterloo, found only six per cent of Canadians living in designated flood-risk areas knew they lived in such an area, and only a quarter said their insurance company had discussed flood coverage options with them.

In Toronto, Woodee Aboy recently moved into his home but didn't know the neighbourhood is a floodplain designated by the Toronto and Region Conservation Authority until *Marketplace* knocked on his door. He was also unsure that his home insurance policy covered him against all types of flooding.

After *Marketplace* connected him with an insurance expert, he contacted his provider and found he was in fact fully covered for a range of flood scenarios, including overland.

"Gaining that confidence, gaining that peace of mind has been a very fulfilling experience to tell you honestly," Aboy told *Marketplace*.

No Canada-wide requirement for disclosing future flood risk

Aboy and other homeowners *Marketplace* spoke with say they were not informed when they purchased their home that there was a risk of potential flooding.



Toronto resident Woodee Aboy wasn't aware his home was located in a flood-prone area until contacted by Marketplace. He later confirmed that his home insurance policy does protect him for a range of flood scenarios. (Steven D'Souza/CBC)

Part of the challenge, *Marketplace* found, is that disclosure rules around future flood risk are vague and vary across the country. It's not information real estate agents may know how to find, or the flood mapping in the area may be out of date or incomplete.

In an undercover test, *Marketplace* posed as buyers looking at Greater Toronto Area properties situated in floodplains — areas designated [in publicly available maps](#) by the Toronto and Region Conservation Authority. The result: agents selling two of four properties denied the homes were at risk of potential flooding.

Marketplace: "I noticed there's a waterway nearby. I'm just wondering, are there flooding issues, or is flooding a concern for that area?"

Agent: "For that property? No, it's too far away."

Marketplace: "So it's not on a floodplain or anything?"

Agent: "No no no."

Marketplace: "So we shouldn't be worried about that?"

Agent: "No, no."

Later, posing as a seller looking to unload a home that had had previous flood damage, a producer called agents in five cities: Vancouver, Calgary, Winnipeg, Toronto and Montreal. *Marketplace* found nine out of 10 agents were clear that past flooding should be disclosed. But one agent said that if the cause of the flood had been repaired, then there was no need for disclosure.

Cheryl Evans, a director at the University of Waterloo's Intact Centre on Climate Adaptation, explains what steps homeowners can take to try and flood-proof their homes 2:00

The agent's advice, however, seems to line up with information *Marketplace* received from the regulator in his home province, the Real Estate Council of Alberta (RECA). "If the defect is properly repaired, there is no longer a defect, and disclosure is not required," RECA said.

The rules around disclosure in some provinces also leave some room for interpretation. For example, the Real Estate Council of Ontario (RECO), the regulator in that province, says that past flooding is "often" considered a latent defect — defined as "a physical defect that is not discoverable through a visual inspection." RECO says sellers are only obligated to disclose these when the issue is "dangerous" or could make the property "uninhabitable," though it notes the issue often ends up in the courts.

"It is to your advantage to be as truthful as you can, for your own protection, when you're making these declarations," one agent advised.

Marketplace producers also asked some of those agents whether disclosing future flood risk or floodplains was recommended, but answers were less clear. Some recommended disclosing, some said it was speculative and "buyer beware."



Toronto real estate agent Chris Chopik wants to see more transparency in the industry around climate risk. (CBC)

The challenge, experts say, is that there is no Canada-wide requirement to disclose future flood risk.

"There's a requirement to disclose known risks, so the question comes, what is known and what's knowable?" said Toronto real estate agent Chris Chopik.

Chopik has been pushing for years for more transparency around climate risk in real estate. He'd like to see something akin to a walk score, but for climate: an easy-to-digest number assessing a home's overall risk from the impacts of climate change.

Floodplain mapping lacking

In the U.S., the [Federal Emergency Management Agency \(FEMA\)](#) and private companies like [ClimateCheck](#) have flood-risk maps, where a user plugs in an address and gets a flood-risk assessment.

The federal government has committed \$63 million to improving floodplain mapping within three years, but experts say there's a long way to go.

"I would describe floodplain mapping as saying, right now we're at the Windows '95 version of flood mapping," said Stewart with the IBC. "What we need to do in pretty short order is get up to Windows 10. We are behind other countries."

That means homeowners are left to navigate numerous sites from [insurance companies](#), as well as [provinces and local conservation authorities](#). Experts like Thistlethwaite at the University of Waterloo say some maps across Canada are inconsistent. Some [are years out of date](#) and lack the detail that some [other countries provide](#).

Prince Edward Island recently launched a new [coastal hazards platform](#), while a researcher at Western University in Ontario recently released what the university calls the [first Canada-wide maps](#) showing how floodplains may be affected by various climate change scenarios over the next 80 years.

Chopik says that while there are fears that more information about potential flood risk could devalue a home, ultimately more information will level the playing field and make potential buyers aware of climate-related risks.

"If we're going to make this a fair marketplace where we have caveat emptor — buyer beware — we really need a place where everyone can look at the risk soberly and then make decisions."

Report to the Municipality of Chatham-Kent-Natural Heritage Committee of the Whole

Subject: Mapping Project of Forest Cover and Natural Heritage Features

Prepared by: Randall Van Wagner, Manager Conservation Lands and Services,
Lower Thames Valley Conservation Authority, B.Sc./NRM, Member of the Ontario
Professional Foresters Association

Neil Pothier, GIS Technician, Lower Thames Valley Conservation Authority, BSc/GDP

Summary:

The Lower Thames Valley Conservation Authority has undertaken a project employing provincially accepted techniques using data provided from South Western Ontario Ortho-imagery Project (SWOOP 2020) as a backdrop. The project was undertaken to prepare a detailed and comprehensive mapping of forest cover in the Municipality of Chatham-Kent. This work is part of a larger program to complete a detailed and comprehensive mapping product of the natural heritage features in the Municipality. This product has many uses including the development of mapping that will support municipal Official Plan updates. The maps are provided in a draft form, as third-party peer review of the project has not been completed as of the time of writing of this report.

The first step of the project involved the digitizing of all woodlots greater than 0.5 ha based on techniques undertaken in 2015 to complete a forest cover analysis at that time. By completing this analysis, a comparison of forest cover in the year 2015 vs the year 2020 can be undertaken.

The analysis shows the following:

Acronyms used in below chart

CK-Municipality of Chatham-Kent

FN-Delaware First Nation at Moraviantown|

PP-Provincial Parks- Rondeau and Wheatley

Municipality of Chatham-Kent Land Area Analysis			
• Area calculated in hectares	2010	2015	2020
CK Total Area	246,045.0	246,045.0	246,045.0
Forested Area in CK (no Delaware First Nation)	10,518.5	9,846.0	9,684.7
% Forested Area in CK	4.28	4.00	3.94
Forested Areas excluding Provincial Parks (PP), no FN	9,532.5	8,860.0	8,698.7
% of forested area in CK (no PP, no FN)	3.87	3.60	3.54
Forest lost in CK (no PP, no FN)		672.50	161.30
Regional Analysis			
Total Area (CK+FN)	247,289.00	247,289.00	247,289.00
Forested Area of FN	721.00	721.00	721.00
Total Forested Area (CK+FN)	11,239.50	10567.00	10405.70
Regional Forest Area % (CK+FN)	4.55	4.27	4.21

Notes Regarding Data Presented in this Report:

1. The information provided in this analysis is both preliminary and draft in nature as the peer review and public review of this information has not been completed. Please note that results may change when these reviews have been completed.
2. The 2020 analysis represents a snap shot in time and will not include forest cover removed after March, 2020.
3. The land area defined within the Municipality of Chatham-Kent has changed since 2010 due to an improved GIS data layer. This new data is consistently used in this analysis.
4. Forested areas have been recalculated/updated for the 2015 analysis based on the data presented to the Natural Heritage Implementation Committee and input/revisions provided by that group.
5. Due to lands being moved into the ownership of Clear Creek Provincial Park subsequent to the 2010 analysis, these lands have not been shown as

provincial park lands to allow comparison of results between 2010, 2015 and 2020

6. Erosion of forested and non-forested lands along Lake Erie has been included in the 2020 analysis.

Mapping of Forest Cover in the Municipality of Chatham-Kent

In 2015 the Lower Thames Valley Conservation Authority used an accepted methodology most recently described in "*Upper Thames River Conservation Authority, Vegetation Cover and Natural Heritage Mapping Rules*", 2018 for the preparation of forest cover mapping. This approach allowed the product to be consistent with Natural Heritage mapping undertaken in recent years in Southwestern Ontario. This methodology has been used in a number of local counties and employs methodologies used in a number of provincial natural heritage mapping programs. The recent 2021 project (using 2020 air photos) employs the above 2015 methodologies to allow comparison of forest cover and definition of forest cover change in the 5-year interval.

It must be noted that the depiction of forest cover in this analysis is for the year 2020 (March 2020) and does not include forested areas removed after the air photos were taken in that year. This product represents a picture in time.

The first step of the mapping of the Natural Heritage features of the municipality was the digitizing of forest cover. All forested areas 0.5 ha and greater have been mapped in the municipality. Additionally, forested areas 0.2 to 0.5 ha in size have been digitized to allow further analysis. This finer level of mapping was not completed in 2015 and therefore comparisons of these smaller areas cannot be undertaken.

Forest cover mapping is a part of the larger Natural Heritage System mapping. Techniques for forest cover mapping are described below.

Mapping Natural Heritage System Features

Natural Heritage features have been identified using a standard set of rules and guidelines to support the development of a Natural Heritage System and to define and compare forest cover in the Municipality of Chatham-Kent. Photo interpretation techniques using data provided from South Western Ontario Ortho-imagery Project (SWOOP 2020) as a backdrop were used to prepare a detailed and comprehensive mapping product of the natural heritage features in the Municipality. Air photo interpretation enables coarse level identification of vegetation communities without a site visit. Mapping rules as defined within the Southern Ontario Land Resources

Information System (SOLRIS) Image Interpretation Manual (MNR 2004) assisted in defining the basic rules of mapping some of the vegetated features. A majority of the Natural Heritage Vegetation feature mapping rules are based on guidance from the Ministry of Natural Resources and Forestry (MNR), Natural Heritage Reference Manual (NHRM) for Natural Heritage Policies of Provincial Policy Statement, 2005, Second Edition (MNR 2005). The NHRM is a document that supports the Provincial Policy Statement, for use in supporting Municipalities of Ontario to create Natural Heritage System Studies to assist in making land use planning decisions that may have an impact on the Natural Heritage System. Certain guidelines within NHRM have been adjusted based on other technical review completed by the Upper Thames River Conservation Authority (UTRCA) and approved by peer review.

Vegetation Communities

The smallest unit mapped in this study is the *Vegetation Community*. The *Vegetation Community* is a unit of vegetation that is normally visible and consistently interpreted on remotely sensed images. *Vegetation Communities* are internally homogenous and distinguishable at a 1:2,000 scale by the dominant types of plant forms that characterize the *Vegetation Community*. The *Vegetation Communities* must be at least 0.5 ha in area and 30 m wide to be included (length is the longer direction and width is the shorter). This minimum width was chosen to ensure the protection of the roots of some of the tree species. Tree roots often extend out from the core of the tree to a distance of at least the height of the tree, and the average height of a mature tree in the UTRCA is 30 m. The Natural Heritage Reference Manual (section 7.3.2) suggests 0.5 ha in size and 40 m width, but the width was reduced to 30 m for the reasons mentioned above. The LTVCA felt that this assumption was consistent with forest cover in our watershed and therefore used the 30m width for this project.

Vegetated areas 20 to 30 m wide and connected to two or more *Vegetation Communities* are considered connecting features (e.g., hedgerows), not woodlands. Unconnected vegetated areas of the same width are not mapped or included in this study. Linear treed areas <20 m wide are considered windbreaks and are mapped or included in this study. The features defined as windbreaks in this manner are not included in the forest cover results presented below. It is understood that windbreaks do provide many benefits to the environment including protection from soil erosion. For consistency, the 30 m width was chosen as the minimum width for thickets and meadows as well as woodlands. Thickets and meadows are also not included in the forest cover analysis.

A Minimum Mapping Unit (MMU) of 0.5 ha was used as the minimum size of an isolated *Vegetation Community*. The Ecological Land Classification (ELC) (Lee *et al.* 1998) uses 0.5 ha and that is one of the standards referenced as being acceptable.

Additionally, forest cover areas of 0.2 ha to 0.5 ha have been digitized but not included in the forest cover analysis as they were not included in the 2015 results. This smaller size of forest cover areas was defined to allow the municipality to consider these forested areas.

False colour imagery (e.g. infrared Imagery) was used to distinguish between conifer and deciduous forested areas.

Vegetation Communities are mapped and updated guided by the manual on-screen digitizing procedures outlined in the Southern Ontario Land Resources Information System (SOLRIS) Image Interpretation Manual (MNR 2004), with the following notes:

- **Small Intrusions** – Existing buildings, structures, gardens, manicured areas and waterbodies that are < 20 m in width are considered part of the surrounding natural feature (i.e., they do not cause a break in the *Vegetation Community*), as per the SOLRIS manual. This included vegetated drains if the minimum width criteria were met.
- **Roads, Railroads, Watercourses** – All municipal roads, railroads and watercourses were mapped as separate *Vegetation Communities* regardless of their width.

Table 1 provides a description of each *Vegetation Community* including how they are identified and the ELC (Ecological Land Classification) equivalent. Note: not all of these communities are included in the forest cover mapping as they do not represent mature forest.

Table 1. Definition and attributes of the 18 *Vegetation Communities*

<i>Vegetation Community</i>	Description and Methods uses for Identification on Imagery	ELC Equivalent
1. Deciduous Woodland (Forest)	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Comprised of tree species that lose their leaves at the end of the growing season and are capable of reaching heights of several metres (typically 20-30 m). - Individual deciduous trees have a billowy texture on air photography. If the image is taken when trees are not in leaf, individual trees have a translucent appearance such that tree trunks can be seen through the branching canopy. 	FOD
2. Mixed Woodland	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Comprised of a combination of coniferous and deciduous tree types scattered throughout. - Each tree type comprises >25% but <75% of the canopy. 	FOM

3. Coniferous Woodland	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Comprised of >60% coniferous (cone-bearing) tree species capable of reaching heights of several metres. - Individual trees are dark green in colour and have a conical shape with a pointed top. 	FOC
4. Mature Plantation	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Comprised of deciduous and/or coniferous tree species. - In the past, most plantations start as planted rows of conifers, but in time deciduous trees filled in. - Boundary distinguishable by at least one edge with a straight line. - At maturity, individual trees or rows of trees are not clearly discernible at 1:2,000. 	CUP
5. Deciduous Swamp	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Deciduous woodland with a more open canopy (indicating lower tree vigor) located in a wetland as identified by MNR or CAs. - The standing water, common in spring, appears dark in colour. 	SWD
6. Mixed Swamp	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Mixed woodland (coniferous and deciduous) with a more open canopy (indicating lower tree vigor) located in an MNR or CA identified wetland area. 	SWM
7. Coniferous Swamp	<ul style="list-style-type: none"> - Contains ≥60% tree cover. Coniferous woodland with a more open canopy (indicating lower tree vigor) located in a MNR or CA identified wetland area. - Treed bogs, a type of coniferous wetland, are uncommon and often have a pond or low open thicket at the centre. 	SWC
8. Plantation Swamp	<ul style="list-style-type: none"> - Contains ≥60% tree cover. A mature plantation with a more open canopy (indicating lower tree vigor) located in a MNR or CA identified wetland area. - Trees are usually conifers (planted). 	CUP
9. Upland Thicket	<ul style="list-style-type: none"> - Comprised of 25 to 60% tree or shrub cover. Shrubs are woody plants that are not capable of reaching heights of several metres. - < 20% standing water. 	TPW, CUT, CUW
10. Wetland Thicket	<ul style="list-style-type: none"> - A thicket <i>Vegetation Community</i> that is found either along a watercourse, has ≥20% standing water, or is located in a MNR or CA identified wetland area. - Has either 10-25% tree cover or, <10% tree cover and >25% shrub cover. - Dark water tones interspersed throughout demarking standing water. 	SWT, FET, FES, BOT, BOS
11.0 Young Plantation	<ul style="list-style-type: none"> - Comprised of coniferous (usually) or deciduous trees planted in rows that are discernable at 1:2,000 scale. Trees short, not mature. - Boundary distinguishable by at least one edge with a straight line - Does NOT include fruit/nut orchards or Christmas tree farms and these may need to be verified at the site level if in question. 	CUT, CUW

12. Young Plantation Wetland	- A young plantation <i>Vegetation Community</i> located in a MNR or CA identified wetland area where individual trees or rows of trees are discernible at 1:2,000. Trees are usually young conifers.	CUT
13.0 Upland Meadow	- Comprised of grasses or forbs where less than 25% of the canopy is comprised of woody plants. Trees or shrubs often widely scattered.	TPO, CUM
14.0 Meadow Marsh	- A meadow marsh <i>Vegetation Community</i> located in a MNR or CA identified wetland comprised of cattails, wetland grasses and other wetland forbs (non-treed). - Fens and open bogs may not be distinguished in the wetland mapping layer, but these habitats are uncommon in the region. They should be distinguished when conducting EIS surveys.	FEO, BOO, MAM, MAS, SAS, SAM, SAF
15.0 Water Bodies	- Comprised of a body of standing water ≥ 20 m wide <u>adjacent</u> to another <i>Vegetation Community</i> . Can include a: <ul style="list-style-type: none"> man-made pond associated with construction or extraction (e.g., aggregate pit), reservoir created by a dam or barrier, natural pond within a wetland or a natural water feature such as a kettle lake, or sewage lagoon found in/on the outskirts of an urban area. - Appears as a flat plain surface on air photos; may show patterns of wind disturbance, floating aquatic vegetation, or cloud reflections.	QAO
16.0 Major Watercourse	- A linear feature >1 km long and mostly >20 m wide and containing flowing water at least for part of the year. - Delineated as a polygon using bank-full width as seen on aerial photography flown in the spring. - See Section 2.4.5 for more details.	QAO
17.0 Connected Vegetation Feature	- A linear feature comprised of woody plants (trees, shrubs) that connects two or more <i>Vegetation Communities</i> , often called a buffer, hedgerow or shelterbelt. - Length is >20 m and width is >20 m but <30 m. See Section 2.4.6 - Considered one feature as long as there are no gaps >20 m. - Often located between farm fields.	--
18.0 Watercourse Bluff and Depositional Areas (Bars, Beaches)	- Bluffs: Areas of mostly bare soil along the outside meander of a watercourse or on steep slopes not being actively cultivated. - Bars, Beaches: Appears as a sediment/stone depositional area along inside bends of watercourses. - Currently not mapped.	BBO, BBS, BBT, BLO, BLS, BLT, CLO, CLS, CLT, TAO, TAS, TAT

Results

Although a number of analysis can be undertaken on data generated from a Natural Heritage mapping project, the subject of this report is the forest cover of the Municipality of Chatham-Kent. The lands within the municipality can be divided into elements based on ownership. This division allows a number of understandings to be developed regarding forest cover in the municipality. The divisions of ownership used in this study are:

1. Private ownership
2. Provincial Parks and Conservation Areas
3. First Nations Lands

Once again it is noted that this analysis includes forested areas equal to or larger than 0.5ha.

The following table provides a comparison of results from the 2010, 2015 and 2020 forest cover analysis:

Municipality of Chatham-Kent Land Area Analysis			
• Area calculated in hectares	2010	2015	2020
CK Total Area	246,045.0	246,045.0	246,045.0
Forested Area in CK (no FN)	10,518.5	9,846.0	9,684.7
% Forested Area in CK	4.28	4.00	3.94
Forested Areas excluding Provincial Parks (PP), no FN	9,532.5	8,860.0	8,698.7
% of forested area in CK (no PP, no FN)	3.87	3.60	3.54
Forest lost in CK (no PP, no FN)		672.50	161.30
Regional Analysis			
Total Area (CK+FN)	247,289.00	247,289.00	247,289.00
Forested Area of FN	721.00	721.00	721.00
Total Forested Area (CK+FN)	11,239.50	10567.00	10405.70
Regional Forest Area % (CK+FN)	4.55	4.27	4.21

Notes Regarding Data Presented in this Report:

1. The information provided in this analysis is both preliminary and draft in nature as the peer review and public review of this information has not been completed. Please note that results may change when these reviews have been completed.
2. The 2020 analysis represents a snap shot in time and will not include forest cover removed after March, 2020.
3. The land area defined within the Municipality of Chatham-Kent has changed since 2010 due to an improved GIS data layer. This new data is consistently used in this analysis.
4. Forested areas have been recalculated/updated for the 2015 analysis based on the data presented to the Natural Heritage Implementation Committee and input/revisions provided by that group.
5. Due to lands being moved into the ownership of Clear Creek Provincial Park subsequent to the 2010 analysis, these lands have not been shown as provincial park lands to allow comparison of results between 2010, 2015 and 2020
6. Erosion of forested and non-forested lands along Lake Erie has been included in the 2020 analysis.

Recommended Review of Results

Lower Thames Valley Conservation Authority (LTVCA) has requested the services of the *Upper Thames River Conservation Authority (UTRCA)* to review and provide quality control (peer review) of the woodland / forested areas digitized. The first steps are the review of mapping rules set out by LTVCA to ensure the mapping is being completed consistently throughout the Municipality. To complete the work, UTRCA staff will randomly select ten percent of the total number of features from each feature size category, and these features will be reviewed for accuracy and consistency. At the time of the writing of this report, the peer review is ongoing.

In addition to the peer review, it is recommended that the municipality consider making the mapping available to the public for their review and comment. Comments and questions regarding the mapping should be directed to LTVCA staff so information can be gathered and revisions made as required.

References-

Lee, H., W. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig, and S. McMurray. 1998. *Ecological Land Classification for Southern Ontario. First Approximation and its Application*. Ontario Ministry of Natural Resources, South-Central Science section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Ministry of Municipal Affairs and Housing (MMAH). 2020. *Provincial Policy Statement*.

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Ministry of Natural Resources (MNR). 2010. *Natural Heritage Reference Manual for Policy 2.3 of the Provincial Policy Statement*. 2nd edition.

Report to the Municipality of Chatham-Kent Natural Heritage Committee of the Whole

Subject: Conservation Authorities Land Stewardship Programs 2014-present

Prepared by:

Randall Van Wagner, Manager Conservation Lands and Services, Lower Thames Valley Conservation Authority, B Sc, Ontario Professional Foresters Association

Neil Pothier, GIS Technician, Lower Thames Valley Conservation Authority, B Sc

Summary:

The following report summarizes the stewardship programs of the Lower Thames Valley and St Clair Region Conservation Authorities in the Municipality of Chatham-Kent.

Species at Risk restoration, innovative agricultural programs aimed at more efficient and sustainable farming practices, tree planting, wetland restorations and tall grass prairie plantings are some of the elements of these programs. In support of this work, Conservation Authorities monitor watercourses, test new approaches and provide results to the community. Additionally, through education and outreach, members of the community engage in this work.

It requires funds to complete this work, and in order to get those funds Conservation Authorities use funding from the Municipality of Chatham-Kent as seed money to match to grants and donations available from a variety of sources. This means that the total municipal funds are multiplied many times to support the extensive services offered within the municipality.

Specific details of the programs offered and the funding used, are provided in the following report and a presentation to be given to council on November 29, 2021, regarding these details.

Natural Heritage Stewardship and Conservation Authorities:

Background

The objects of every authority are to “establish and undertake, in the area over which it has jurisdiction, a program designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals.” (Conservation Authorities Act, Section 20.) In order to meet this object, Conservation Authorities’ programs include those to restore ecosystems, assist farmers and landowners with technical and financial support, provide the most current science and research to our landowner’s and use that research to position ourselves as the leader in habitat restoration. These programs directly support a number of goals defined within the Natural Heritage Strategy of the Municipality of Chatham-Kent.

Prior to European settlement this region had 3 main ecosystem types: Tall Grass Prairie, Carolinian Forest and Wetlands. Many of the example programs listed below work to conserve and restore these ecosystem types.

Species at Risk Program

There are over 100 fish species in LTVCA and 19 of these are Species at Risk. This is equal to 20% of the species present. Additionally, there are 36 mussel species in LTVCA and 14 of these are Species at Risk (SAR). This is equal to 39% of the species present. The LTVCA and SCRCA undertake significant aquatic and terrestrial Species at Risk Programs in the Municipality of Chatham-Kent. In the year 2021 funding of \$334,000 has been acquired to undertake this work in the Municipality of Chatham-Kent.

Programs include:

1. Threat assessment conducted for aquatic SAR in 55 sub-watersheds
2. Sub-watersheds prioritized to guide implementation of projects to benefit aquatic SAR
3. Landowner incentive programs
4. Restoration projects
5. Education and Outreach
6. Surveys and Research

It should be noted that SAR staff are engaged in support of the Municipality of Chatham-Kent Drainage department for the maintenance and construction of municipal drains. Examples include SAR staff providing support in undertaking fish rescue/relocations on the Drake Rd and the North Marsh drain systems.

Imagine McGregor

Allow citizens to 'Imagine what McGregor Creek can be'

Urban development and intensive agriculture have put added pressures on the aquatic systems of McGregor Creek by increasing surface water runoff, erosion and sedimentation within the watercourse. The resulting impacts have a significant effect on water, habitat quality and the natural experience enjoyed by residents of Chatham-Kent.

The completion of stream restoration projects in and along the reaches of the McGregor Creek can also have a direct influence on the water quality and habitat of the Thames River.

Imagine McGregor works with local citizens to improve their watershed. Major components of the project include:

1. Stewardship – Focus on returning to your roots (pun on caring for local area and agriculture) – working with residents to consider projects on their properties.
2. Technical Work – Watershed clean ups and restoration projects (e.g. tree plantings) to bolster land productivity and improve the watershed's ecology.
3. Community Engagement – examples: Webinar series- topics to include importance of native plants, incorporating them into your landscape, and largescale projects (potentially on natural history of the area), Radio ad for habitat facts- share some knowledge with local listeners and promote programs, and a youth environmental art show.

Agricultural Programs

In the Municipality of Chatham-Kent the LTVCA and SCRCA provide agricultural programs to:

1. Deliver Agricultural Incentive Programs to farmers to increase the adoption of Best Management Practices (BMPs) to:
 - Improve watershed soil health.
 - Reduce agriculturally sourced phosphorus (P) loads in the Thames River Basin.
2. Enhance sub watershed water quality monitoring operations to:
 - Regionally identify and validate the efficacy of BMP's.
 - Track watershed environmental performance (ex. CO-LEAP 40% P Reduction Target for Lake Erie).

3. To ensure robust locally collected data is informing provincial and federal policy decisions.
4. Share research and monitoring results with local farmers and policy makers to inform decision making.

Summary of LTVCA Agricultural Program funding		
	years	amount
McGregor and Jeanettes Creek Phosphorous Reduction Program	2018-2022	\$821,433.45
McGregor and Jeanettes Creek BMP Incentive Program	2019-2021	\$240,000
LTVCA Soil Health Program	2020-	\$163,662.60
On-Farm Applied Research Program	2019-2023	\$591,079.04
Living Labs Ontario	2020-2023	\$60,000
Canada-Ontario Agreement Great Lakes Water Quality	2020	\$77,700
Thames River Phosphorus Reduction Collaborative	2018-2022	60,000

ALUS Programs - Alternative Land Use Service

In the Municipality of Chatham-Kent the ALUS program was established in 2018. ALUS is an innovative community-developed and farmer-delivered program that produces, enhances and maintains ecosystem services on agricultural lands. It does this through supporting project establishment and providing annual payments to support the maintenance of these projects. The basis of the program is as follows:

1. Governed by a Project Advisory Committee (PAC) consisting of 15 members and a minimum of 50% farm producers.
2. Provides annual payments for each acre enrolled in the program.
3. Funds are for maintenance of the projects providing ecosystem service.

2019-2020 ALUS Chatham-Kent Statistics:

Active Participants with Established Projects: 56

Hectares restored/enrolled = 77

TOTAL Funds 2019-2020 (Non Municipal) = \$343,240

Summary of Deliverables from LTVCA Stewardship Projects

The following table summarizes the trees planted and reforestation efforts in the years 2014 to 2021:

LTVCA Historical Record for Chatham-Kent				
*86% OF TREES ARE OF NATIVE CAROLINIAN SPECIES ZONE 38 ORIGIN				
Private Lands				
Reforestation	Seedlings	Acres	Hectares	Public Lands
				Large potted trees
2014	56026	93	37.4	
2015	88176	147	58.8	500
2016	107235	179	71.5	800
2017	82885	138	55.3	3200
2018	44260	74	29.5	500
2019	45495	76	30.3	300
2020	63218	105	42.1	1016
2021	56264	94	37.5	1196
Totals 2014-2021	543,559	906	366	6,316

St. Clair Region CA Restoration projects	# trees	area
2015	4200	2.1ha
2016	3810	1.9ha
2017	n/a	n/a
2018	2175	1.1ha
2019	6850	3.4ha
2020	10380	5.2ha
<u>totals</u>	<u>27,400</u>	<u>13.7ha</u>

The following table summarizes the area of wetland restoration in the years 2014 to 2021:

	Acres	Hectares
2014	210	84
2015	72	28.8
2016	55	22
2017	25	10
2018	33	13.2
2019	60	24
2021	31	12.4
2021	40	16
	526	212

The following table summarizes the area of Tall Grass Prairie Restoration in the years 2014 to 2021:

	Acres	Hectares
2014	45	18
2015	66	26.4
2016	37.5	15
2017	49	19.6
2018	50	20.0
2019	60	24.0
2020	131	52.4
2021	82	32.8
	520.5	210

In order to accomplish this work, staff use municipal levy as seed funding to apply for grants and donations to fund stewardship projects. The following table summarizes funding obtained for stewardship by the LTVCA in the years 2014 to 2021:

Funding Raised from 2014		\$ 9,130,000.00
2014	\$ 800,000.00	
2015	\$ 1,200,000.00	
2016	\$ 922,000.00	
2017	\$ 1,300,000.00	
2018	\$ 1,400,000.00	
2019	\$ 1,300,000.00	
2020	\$ 1,186,000.00	
2021	\$ 1,022,000.00	
Landowner contributions		\$ 1,005,370.00
TOTAL FUNDING INPUT		\$ 10,135,370.00

2021 summary:

Chatham-Kent General + Special Levy allocated to Stewardship=\$202, 384.96
 Grants and donations (2021) **\$1,022,000.00**

Equals \$1 to \$5 ratio

LTVCA newly donated Conservation Area Lands in CK

Significant donations are made to the LTVCA to support conservation efforts within the Municipality of Chatham-Kent. Additionally, many landowners donate lands in efforts to conserve and create living legacies for the people of Chatham-Kent. The following lists the lands donated to the LTVCA in the years 2011 to 2021:

Recently donated LTVCA Conservation Areas			
	type	year	size
Merlin Conservation Area	restoration site- trees, trail, prairie	2011	2.8 ha
Stirling Conservation Area	Provincially Significant Wetland	2011	8.1 ha
Courey Islands	Provincially Significant Wetland	2015	52.6ha
Myslik Conservation Area	restoration site- trees, wetlands, prairie	2015	40.5 ha
Skakel Conservation Area	future site of Mokilay Memorial Forest	2016	22.3ha
Ward Conservation Area	wetlands, prairie, Carolinian Forest	2018	9.7ha
Kenessee Tall Grass Prairie	Tall Grass Prairie and Wetland cell	2018	4.9ha
Ashton Forest Conservation Area	Carolinian Forest SAR Butternut	2020	10.5ha

SCRCA newly donated Conservation Area Lands in CK

- Peers Wetland (Wallaceburg)- 12 hectares
- Keith MacLean CA- 130 hectares
- Bates CA-229.6 hectares

The above represents a total of 523 hectares of donated lands at 11 new Conservation Areas. Additionally, this represents an approximate value of over **\$9 million dollars**.

Education & Outreach

The LTVCA & SCRCA actively engage farmers, municipal councils and the general public to share information about watershed initiatives and research results. The work is done in a number of ways including webinars, tours, presentations, one on one meetings and demonstrations. Every year residents are given opportunities to learn about stewardship, and with that learning, become involved in improving their communities. The pandemic has challenged us in providing these opportunities but with new ideas and practices, the outreach continues.

The 2021 Cultivating Conservation Tour was held in September. This allowed the public the ability to tour 4 sites of significance across the watershed and to learn and see examples of:

- Wetland and Native Grassland restoration
- Tree Plantings

- Woodlot Management
- Urban Low Impact Development
- Soil Health and Water Quality Demonstrations & Results
- Tour ended at Red Barn Brewery with guest speaker

Conclusion

In summary, the LTVCA and SCRCA continue to deliver and offer financial incentives to both the rural and urban community, for restoration of our natural areas. These programs are very well utilized, with strong uptake and interest. It is the Conservation Authority staff that seek out these grant programs and bring the financial partners to our community.

12. In Camera Session

12.1) A matter addressing one of the following:

- a) The security of the property of the Authority;
- b) Personal matters about an identifiable individual, including employees of the Authority;
- c) A proposed or pending acquisition or disposition of land by the Authority;
- d) Labour relations or employee negotiations;
- e) Litigation or potential litigation, including matters before administrative tribunals (e.g. Local Planning Appeal Tribunal), affecting the Authority;
- f) Advice that is subject to solicitor-client privilege;
- g) A matter in respect of which the General Membership, Executive Committee, Advisory Board or committee or other body may hold a closed meeting under another act;
- h) Information explicitly supplied in confidence to the Authority by Canada, a province or territory or a Crown agency of any of them;
- i) A trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the Authority, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization;
- j) A trade secret or scientific, technical, commercial or financial information that belongs to the Authority and has monetary value or potential monetary value; or
- k) A position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the Authority.

Moved that the Board of Directors meet 'in camera'.

CARRIED

Moved that the Board of Directors move out of the 'in camera' session.

CARRIED

13. Other Business

14. Adjournment
