Board of Directors Meeting

A G E N D A

August 22, 2024
2:00 p.m.

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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, Caldwell Nation and Walpole Island First Nation. We acknowledge the first nations people within the villages, towns and cities of our communities. 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 Meeting Minutes – June 20, 2024

Board of Directors Meeting

DRAFT MINUTES

The meeting of the Lower Thames Valley Conservation Authority's Board of Directors was held in person and remotely via the LTVCA's Administration Office at 100 Thames Street, Chatham, at 2:00 P.M. on Thursday, June 20, 2024. The following directors were in attendance: S. Emons, K. Loveland, P. Tiessen, L. Vogler, M. Vink, R. Leatham, P. Van Meerbergen and H. Aerts. S. Hipple, T. Thompson, A. Finn and M. Bondy sent their regrets.

1. First Nations Acknowledgment

   Mark Peacock read the First Nations acknowledgement.

2. Call to Order

3. Adoption of Agenda

   BD-2024-25 R. Leatham – M. Vink

   Moved that the agenda be adopted as amended with the removal of item 12. In Camera Session.

   CARRIED

4. Disclosures of Conflicts of Interest

   None Declared.

5. Approval of Previous Meeting Minutes

   BD-2024-26 L. Vogler – K. Loveland

   Moved that the Board of Directors meeting minutes of April 18, 2024 be approved.

   CARRIED

6. Business Arising from the Minutes

   None declared.

7. Presentations

   7.1) Watershed Based Resource Management Strategy and Work Shop Session

Mark Peacock, CAO/Secretary-Treasurer, and Valerie Towsley, Watershed Resource Planner provided a Power Point Presentation to the Board of Directors on the LTVCA's Draft Watershed Based Resource Management Strategy and led the Board through a workshop session.

A number of suggestions were recorded for inclusion in the strategy.

BD-2024-27 P. Tiessen – R. Leatham

Moved that the Watershed Based Resource Management Strategy presentation and the work shop session be received as presented.

CARRIED

7.2) Financial Update: Longwoods Resource Centre Revitalization and Indigenous Learning Centre Capital Project

Mark Peacock, CAO/Secretary-Treasurer, provided a Power Point Presentation on the Financial Update for the Longwoods Resource Centre Revitalization and Indigenous Learning Centre Capital Project. Prior to the meeting a written report was handed out to the Board and forwarded via email to members meeting via zoom.

BD-2024-28 H. Aerts – P. Van Meerbergen

Moved that the presentation and report on the Financial Update: Longwoods Resource Centre Revitalization and Indigenous Learning Centre Capital Project be received.

CARRIED

8. New Business

None declared.

9. Business for Approval

9.1) Income and Expenditure vs Budget to May 31, 2024

BD-2024-29 L. Vogler – M. Vink

Moved that the Board of Directors receives the Budget vs Revenue and Expenditures report for the period ended May 31, 2024.

CARRIED

10. New Business

10.1) C.A.O.'s Report

BD-2024-30 P. Van Meerbergen – P. Tiessen

Moved that the C.A.O. / Secretary Treasurer report be received for information.

CARRIED

10.2) Water Management
10.3) Planning and Regulations
10.4) Conservation Area Lands
10.5) Conservation Services
10.6) Communications, Outreach and Education
10.7) Wheatley Two Creeks Association Minutes – April 4, 2024
10.8) Wheatley Two Creeks Association Annual Minutes – May 2, 2024

BD-2024-31 K. Loveland – R. Leatham

Moved that New Business items 10.2) to 10.8) be received for information.

CARRIED

11. Correspondence

11.1) Conservation Ontario's 2023 Annual Report

11.2) CO Re: Amendments to the Class EA for Remedial Flood and Erosion Control Projects

11.3) MECP Re: Environmental Assessment Act, Notice of Amendments; Class EA for Remedial Flood and Erosion Control Projects

BD-2024-32 P. Van Meerbergen – L. Vogler

Moved that Correspondence items 11.1) to 11.3) be received for information.

CARRIED

12. In Camera Session

Cancelled.

13. Other Business

None noted.

14. Adjournment

BD-2024-33 P. Tiessen – L. Vogler

Moved that the meeting be adjourned.

CARRIED

Sarah Emons
Chair

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

5.2) Board of Directors Meeting Minutes – July 27, 2024

Special Board of Directors Meeting

MINUTES

Special Meeting at the Call of the Chair

July 24, 2024
7:30 p.m.

A Special Meeting of the Lower Thames Valley Conservation Authority's Board of Directors was held via zoom at 7:30 P.M. on Wednesday, July 24, 2024 at the call of the Chair. A roll call was held with the following members in attendance: P. Tiessen, T. Thompson, H. Aerts, K. Loveland, L. Vogler, M. Vink, and S. Hipple. Regrets were sent in by S. Emons, P. Van Meerbergen, A. Finn, R. Leatham and M. Bondy.

1. First Nations Acknowledgement

   Mark Peacock read the First Nations Acknowledgement.

2. Call to Order

   Vice Chair, Paul Tiessen called the Special Meeting of the Board of Directors to order at 7:30 PM.

3. Adoption of Agenda

   BD-2024-34 K. Loveland – T. Thompson

   Moved that the agenda be adopted as presented.

   CARRIED

4. Disclosure of Conflicts of Interest

   None declared.

5. Business for Approval

   5.1) New FedDev Tourism Growth Grant – Approval of Project

   Question - Whether the in-kind costs would result in any further expenses. Answer - Expenses are already covered under the existing project budget for the year, so there would be no further additional costs incurred.

Question - Would the bathroom renovations include total demolition? No sense doing the work if it's not taken right down to the studs. Answer - Yes, both washrooms will be gutted.

BD-2024-35 S. Hipple – L. Vogler

Moved That the FedDev South Western Ontario Tourism Growth Grant – Project be approved; and

That the Chair and CAO Secretary-Treasurer be authorized to sign an agreement with FedDev South Western Ontario for receipt of grant funds.

CARRIED

6. Other Business

None noted.

7. Adjournment

BD-2024-36 L. Vogler – H. Aerts

Moved that the meeting be adjourned.

CARRIED

Paul Tiessen
Vice Chair

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

7. Presentations

7.1) 2025 Preliminary Budget Presentation

Mark Peacock and Todd Casier will provide a presentation to the Board of Directors on the 2025 Preliminary Budget Presentation.

9. Business for Approval

9.1) Preliminary 2025 Budget Expectations

Date: August 22, 2024
Memo to: LTVCA Board of Directors
Subject: **2025 Preliminary Budget Preparation Report**
From: Todd Casier, CPA, CA, Manager, Corporate Services

Background:

As part of the current Lower Thames Valley Conservation Authority Strategic Plan (2016-2021) the Conservation Authority developed 12 objectives in 4 General Areas. The Financial Objectives were as follows:

4. Improve Transparency and Understanding of Financial Statements
5. Improve Capital Asset Review
6. Strengthen Staff Stability (financial stability, attraction & retention)

In order to achieve objective 4, a number of initiatives were defined. Year 1, 3 & 5 of these initiatives have been achieved including preparation of financial statement for each board meeting that improves the boards understanding of the financial position of the LTVCA, involving managers in their budget process and allowing Managers to manage their budgets with collaboration with the Manager, Corporate Services.

Objective	Ownership	Measurement	Candidate Initiatives	Budget Implications
4. Improve Transparency and Understanding of Financial Statements	Financial Services Specialist & Management Team	Quarterly statements for each program reviewed with program managers	Year 1- Quarterly statements reflecting reality Year 3- Managers have adequate information and capacity for financial decisions Year 5- Managers manage budgets in collaboration with Todd	Budget neutral Budget neutral Budget neutral

To address this requirement, in 2018 the budgeting process was revised, allowing managers more say in budget development and more responsibility in financial management of their departments. In order to provide additional time for staff consultation to occur, this preliminary budget report is being presented at the August 2025 Board meeting.

2025 Budget Preparation Process:

1) August/September – spreadsheets prepared showing each account with current to date results, the past two years of actuals and initial proposed budget assuming:
   a) Salaries carried forward with increase based on merit and 3.9% COLA increases
   b) Payroll allocated based on past experience and current expectations
   c) Projects being carried forward will be based on known expectations

d) General Expenses based on past trends modified by current expectations

2) August/September – Managers review staff work plans with staff to determine changes and new projects/priorities/requirements for 2025 budget
3) August/September – Todd provide spreadsheets to managers for their areas of budget
4) August – Budget Preparation Report to Board providing general assumptions and process to develop 2025 preliminary budget
5) August - November continue meeting with municipalities regarding 2025 budget assumptions at their convenience
6) September/October – Mark and Todd meet with individual Managers to review and prepare preliminary budget (more than one meeting per manager may be required)
7) September/October – Mark and Todd meet to review overall budget and challenges and compile complete preliminary budget
8) September/October – meeting with managers to review preliminary budget prior to finalization
9) October Board Meeting – Preliminary Budget and levy presented to the Board of Directors for review and approval
10) October – budget and levy circulation and notification (min 30 days as per Act)
11) January – final review of budget with management team
12) February – final review and approval by board at annual meeting

Budget Preparation Assumptions:

The budget will be prepared based on:

1. 6% total general levy increase, 5% operations and 1% asset management
2. Merit increases for staff to be considered in draft budget,
3. Cost of living increases of 3.9% will be provided to staff in 2025

Details for driving factors to be presented at August Board Meeting.

Recommendations:

That the Board approve the budget assumption of a 6% general levy increase, and
That staff bring the preliminary 2025 budget to the October meeting for review and approval.

Recommended by:
Todd Casier, CPA, CA,
Manager, Corporate Services

Reviewed by:
Mark Peacock, P. Eng.
CAO / Secretary-Treasurer

9.2) Income and Expenditure vs Budget to June 30, 2024

Date: August 22, 2024
Memo to: LTVCA Board of Directors
Subject: **Income and Expenditure vs Budget to June 30, 2024**
From: Todd Casier, CPA, CA, Manager, Corporate Services

Review the 2024 Budget to the Revenue and Expenditures for the 6 months ended June 30, 2024.

REVENUE	2024 BUDGET	2024 BUDGET JUN PROJECTED		2024 ACTUAL TO JUN 30	$ VARIANCE TO PROJECTED
GRANTS	1,468,581	823,214	*	1,160,913	337,699
GENERAL LEVY	1,661,053	1,661,053	^	1,596,913	(64,140)
DIRECT SPECIAL BENEFIT	205,000	205,000	^	205,000	0
GENERAL REVENUES	1,021,460	421,807	*	551,871	130,064
FOUNDATION GRANTS & REVENUES	0	0	*	0	0
RESERVES	0	0	*	0	0
CASH FUNDING	**4,356,094**	**3,111,074**		**3,514,697**	**403,623**
OTHER	0	0		0	0
TOTAL FUNDING	**4,356,094**	**3,111,074**		**3,514,697**	**403,623**

*-based on a 6 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/budgeted or new grants including the grant for the Resource Centre Elevator.
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, spent funds for grant programs not invoiced are set-up as receivables and added to grant income, unspent funds are reduced from grant income and deferred for future expenditures.

Levy revenue is shown on a cash basis. The following municipalities are paid in full as of August 14th, 2024: Chatham-Kent, Dutton/Dunwich, Lakeshore, Leamington, Middlesex Centre, Southwold, Strathroy-Caradoc, Southwest Middlesex and West Elgin.

General Revenue is comparable to 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 accounts at year-end if expenses are greater than revenues.

EXPENSES	2024 BUDGET	2024 BUDGET JUN PROJECTED	2024 ACTUAL TO JUN 30	$ VARIANCE TO PROJECTED
WATER MANAGEMENT				
FLOOD CONTROL STRUCTURES	201,524	100,762	97,271	(3,491)
EROSION CONTROL STRUCTURES	12	6	5	(1)
FLOOD FORECASTING AND WARNING	123,534	61,767	43,577	(18,190)
TECHNICAL STUDIES	119,061	59,530	42,750	(16,780)
PLANNING & REGULATIONS	448,690	224,345	189,069	(35,276)
WATERSHED MONITORING (PGMN)	143,333	71,666	76,000	4,334

SOURCE PROTECTION	27,690	13,845	20,003	6,158
THAMES MOUTH DEBRIS REMOVAL	0	0	0	0
Water Management Subtotal	**1,063,844**	**531,921**	**468,675**	**(63,246)**
CONSERVATION & RECREATION PROPERTIES				
CONSERVATION AREAS	**781,568**	**390,784**	**413,257**	**22,473**
COMMUNITY RELATIONS AND EDUCATION				
COMMUNITY RELATIONS	165,495	82,747	54,447	(28,300)
CONSERVATION EDUCATION	131,363	65,682	57,965	(7,717)
SKA-NAH-DOHT VILLAGE	144,587	72,294	39,348	(32,946)
Community Relations & Education Subtotal	**441,445**	**220,723**	**151,760**	**(68,963)**
CONSERVATION SERVICES/STEWARDSHIP				
CONSERVATION SERVICES (FORESTRY)	199,888	99,944	128,547	28,603
CHATHAM-KENT GREENING PROJECT	600,481	300,240	374,187	73,947
PHOSPHORUS REDUCTION	1,070,568	535,284	443,274	(92,010)
SPECIES AT RISK	198,300	99,150	128,465	29,315
Conservation Services/Stewardship Subtotal	**2,069,237**	**1,034,618**	**1,074,473**	**39,855**
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	**4,356,094**	**2,178,046**	**2,108,165**	**(69,881)**

Water Management

Flood Control Structures and Erosion Control Structures are comparable to budget.

Flood Forecasting and Warning expenses are below budget due to several large annual invoices received later in the year.

Technical Studies are below budget due to staff time being spent in other areas.

Planning and Regulations are below budget due some larger expenses incurred later in the year.

Watershed Monitoring is comparable to budget.

Source Protection is comparable to budget.

Conservation Areas

Conservation area expenses are above budget due the costs of opening of the Conservation Area campgrounds.

Community Relations and Education

Community Relations, Conservation Education and Ska-Nah-Doht Museum and Village are below budget due to staff spending time in other programs and the departure of an Educator.

Conservation Services/Stewardship

Conservation Services (Forestry) and Chatham-Kent Greening expenses are above budget as most large activities, like tree and prairie planting, and the related expenses have been completed.

Phosphorous Reduction is below budget as most activities and related expenses are completed during the summer months and Cover Crop/Precision Agriculture expenditures have not started.

Species at Risk is above budget due to March 31 year-end budget expenditures.

Capital/Miscellaneous

No Capital/Miscellaneous expenses to date.

Summary:

	2024 BUDGET	2024 BUDGET JUN PROJECTED	2024 ACTUAL TO JUN 30	$ VARIANCE TO PROJECTED
TOTAL CASH FUNDING	4,356,094	3,111,074	3,514,697	403,623
TOTAL EXPENDITURES	4,356,094	2,178,046	2,108,165	(69,881)
OPERATING SURPLUS (DEFICIT)	**0**	**933,028**	**1,406,532**	**473,504**

At June 30, 2024, LTVCA's operating surplus is favorable mostly due to less expenditures compared to budget because of the seasonal nature of a large amount of the Conservation Authorities expenses.

Recommendation:

That the Board of Directors receives the Budget vs Revenue and Expenditures report for the period ended June 30, 2024.

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, Corporate Services

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

9.3) Regulation Policy Updates

To: LTVCA Board of Directors
From: Jason Wintermute, Manager, Watershed & Information Services
Date: 01 August 2024
Subject: Update RE: Policies and Procedures to Support C.A. Act Planning and Permitting

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Purpose of this Staff Report

The purpose of this Staff Report is to provide an update regarding the development review policies (*Policies and Procedures to Support Administration of the Conservation Authorities Act Part VI and Ontario Regulation 41/24, 01 April 2024*) including feedback received thus far as part of the initial consultation period as well as to further refine and improve the next version of the policies. This update serves to satisfy a motion from the Board of Directors' meeting on 28 March 2024.

Background

The development review policies, which were approved by the Board of Directors on 28 March 2024, came into effect on 01 April 2024. The updated policies were created to replace the LTVCA's previous policy documents related to the Section 28 regulations program and were in response to the provincial government's updates to the Conservation Authorities Act and the implementation of the new replacement regulation (O. Reg. 41/24) associated with Section 28 of the Act.

Consultation Update

The policies were posted to our website for public consultation at the end of March and were open for comment up until May 15th. No direct comments on the document itself had been received from members of the public, municipal staff, or the development industry as of the writing of early June.

The policy document hasn't yet been circulated directly to municipal staff for consultation as additions and revisions which speak directly to municipal interactions (including Planning Act related sections) are required. It is hoped to have this work completed for the next draft. However, the link for the new online regulation screening map was circulated to municipal building department staff and to some planning staff. Feedback received regarding usability issues with the map was addressed and the map was re-published. Feedback from municipal staff since has been entirely positive regarding the new online mapping. Municipal/county staff have requested that the LTVCA provide the mapping file to them so that it can be incorporated directly into municipal/county GIS databases for internal and external use. At the time of writing of this report, the data has been shared with our member municipalities and the counties having jurisdiction within our watershed. The GIS Technician continues to work on improving the accuracy of the map in and around valley systems.

Second Draft Update

While using the document, staff have identified a number of revisions required for the second draft. The required revisions range from minor formatting changes to the inclusion of entirely new sections (e.g. LTVCA-specific practices and procedures, municipal plan review, O. Reg. 41/24 exemptions, etc.) and policies. The following policy items have been flagged for inclusion in the next draft as a result of regular correspondence with members of both the public and development industry:

1) Policies for development activity within the Thames River floodplain within the defined Chatham Special Policy Area.

Note: The LTVCA has historically used and continues to use the related Special Policy Area policies from Chatham-Kent's Official Plan and, while mentioned within the first draft of the document, the specific policies from the Official Plan hadn't been included in the first draft. Specifically outlining these special policies within the document will provide further clarity to those using the document.

2) Policies for development activities within the Thames River floodplain within the defined Thamesville Special Policy Area.

Note: The LTVCA has historically used and continues to use the related Special Policy Area policies from Chatham-Kent's Official Plan and, while mentioned within the first draft of the document, the specific policies from the Official Plan hadn't been included in the first draft. Specifically outlining these special policies within the document will provide further clarity to those using the document.

3) Policy for temporary garden suites (such as a mobile home) in an erosion hazard.

Previous LTVCA policies included wording which would allow small habitable secondary structures which were temporary in nature and which had received municipal planning approvals. In the current policy draft, a similar policy was mistakenly left out. Staff propose the following policies be approved for inclusion in the second draft of the policy document where the definition of a garden suite is "a one-unit detached residential structure containing bathroom and kitchen facilities that is ancillary to an existing residential structure and that is designed to be portable":

Development within the Shoreline Erosion Hazard:

Development activity associated with the placement of a garden suite on a property may be permitted provided the following are met:

a) There is no feasible alternative site outside of the erosion hazard and that the proposed development is located in an area of least (and acceptable) risk. As a minimum, the garden suite must be a minimum of 15 m beyond the stable slope allowance;
b) There is an agreement in place with the municipality which includes a time limit of no more than 20 years for the structure to be on the property;
c) The development activity will not prevent access into and through the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
d) There is no impact on existing and future slope stability and bank stabilization;
e) The potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans (if applicable); and,
f) Flooding and dynamic beach hazards (if applicable) have been adequately addressed.

Development within the Erosion Hazard of an Apparent (Confined) River or Stream Valley:

Development activity associated with the placement of a garden suite on a property may be permitted provided the following are met:

a) There is no feasible alternative site outside of the erosion hazard and that the proposed development is located in an area of least (and acceptable) risk. As a minimum, the garden suite must be a minimum of 6 m beyond the stable slope allowance;
b) There is an agreement in place with the municipality which includes a time limit of no more than 20 years for the structure to be on the property;
c) The development activity will not prevent access into and through the erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
d) There is no impact on existing and future slope stability and bank stabilization;

e) The potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans (if applicable); and,
f) The flood hazard (if applicable) has been adequately addressed.

4) Policy for raising of existing structures within a watercourse's flood fringe.

While a policy exists for the raising of existing structures within the floodplain of a Great Lake, a similar policy specific to the flood fringe of a two-zone watercourse wasn't included. Staff propose the following policy which is based off the similar existing policy for the same development activity within the floodplain of the shoreline:

Development Within Flood Fringe of a Watercourse (Two-Zone):

Structural modifications to an existing structure may be allowed where:

a) The works are for flood protection; or,
b) The works are necessary to address safety or structural faults.

Raising of existing structures will be permitted provided that the structure is raised such that the minimum openings into the structure are at or above the regulatory flood datum. It may be necessary to have a structural engineer provide written documentation that the structure is structurally sound and able to be lifted.

5) Policy for docks along Lake Erie or Lake St. Clair.

Staff currently use Policy 3.5.1.5 (Development activity associated with existing uses located within the shoreline flood hazard) and Policy 3.5.3.6 (Development activity associated with existing uses located within the shoreline erosion hazard) with respect to proposals related to permanent docks along the shorelines of Lake Erie, Lake St. Clair, and Rondeau Bay. However, to the general user of the policy document, it isn't clear that those policies also apply to permanent docks. The dock policy currently included within the document is only for docks on a small portion of the Thames River and on the canals in Lighthouse Cove. Staff propose the following separate policies for docks along the shorelines of Lake Erie, Lake St. Clair, and Rondeau Bay:

Development within the Shoreline Flood Hazard:

Development activity associated with the construction of docks may be permitted provided the following are met:

a) All mechanical and electrical works be located a minimum of 0.3 m above the regulatory flood elevation;
b) Where the bed of the shoreline is defined in ownership, that consent is provided by the landowner;
c) The proposed works do not interfere with, or pose a hazard to, navigation or create a public safety hazard;
d) The proposed works comply with Transport Canada's minor works criteria for a dock;
e) The proposed works do not interfere with water flow and currents (post only, no cribs);
f) The proposed works do no impede dynamic beach processes on the subject, adjacent, or nearby properties; and,
g) Erosion and dynamic beach hazards (if applicable) have been adequately addressed.

For new permanent docks, the works must be designed by a qualified engineer. For repairs or like-for-like replacements of existing docks, the works don't have to be engineered but engineering is encouraged.

Sign-off / approval from Transport Canada, Fisheries and Oceans Canada, the Ontario Ministry of Environment, Conservation and Parks, and the Ontario Ministry of Natural Resources and Forestry may be required as part of the application package as well as notification of adjacent and updrift and downdrift property owners.

Development within the Shoreline Erosion Hazard:

Development activity associated with the construction of docks may be permitted provided the following are met:

a) The development activity will not prevent access to and through the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
b) There is no impact on existing and future slope stability and bank stabilization;
c) Where the bed of the shoreline is defined in ownership, that consent is provided by the landowner;
d) The proposed works do not interfere with, or pose a hazard to, navigation or create a public safety hazard;
e) The proposed works comply with Transport Canada's minor works criteria for a dock;
f) The proposed works do not interfere with water flow and currents (post only, no cribs);
g) The proposed works do no impede dynamic beach processes on the subject, adjacent, or nearby properties; and,
h) Flooding and dynamic beach hazards (if applicable) have been adequately addressed.

For new permanent docks, the works must be designed by a qualified engineer. For repairs or like-for-like replacements of existing docks, the works don't have to be engineered but engineering is encouraged.

Sign-off / approval from Transport Canada, Fisheries and Oceans Canada, the Ontario Ministry of Environment, Conservation and Parks, and the Ontario Ministry of Natural Resources and Forestry may be required as part of the application package as well as notification of adjacent and updrift and downdrift property owners.

6) Policy prohibiting infilling of the river's valley between Thamesville and Chatham.

On June 22, 1995, the LTVCA's Board of Directors moved a motion regarding the adoption of a recommendation by MacLaren Engineers as part of the Flood Plain Study "that the river valley from the Thamesville area to Chatham remain as is with encroachments, dyking and in-filling prohibited and the hydraulic significance of the flood be maintained." This was a policy meant to ensure that the regulatory flood wasn't restricted or constrained so that there wouldn't be an impact on flood levels and existing flood proofing requirements in Chatham, Thamesville (including upstream of Thamesville), and even the extent of the floodplain in the area in-between. This policy should have been included in the new policy manual. Staff propose the following policy which is based off the previously existing policy:

Development Within One-Zone Regulatory Floodplain or Within Floodway of a Watercourse; and, **Development Within Flood Fringe of a Watercourse (Two-Zone):**

That encroachments, dyking and in-filling be prohibited and the hydraulic significance of the flood be maintained for the Thames River valley between the Thamesville area and Chatham.

Recommendations

That effective August 23, 2024, staff continue to use both the Chatham and Thamesville Special Policies as specified in the Chatham-Kent Official Plan for development activity within the defined areas of each community; and,

Further That effective August 23, 2024, the following garden suite policies be approved for use by staff and included within the Erosion Hazard sections related to shorelines of Lake Erie, Lake St. Clair, Rondeau Bay, and apparent (confined) river or stream valleys:

Development within the Shoreline Erosion Hazard:

Development activity associated with the placement of a garden suite on a property may be permitted provided the following are met:

a) There is no feasible alternative site outside of the erosion hazard and that the proposed development is located in an area of least (and acceptable) risk. As a minimum, the garden suite must be a minimum of 15 m beyond the stable slope allowance;
b) There is an agreement in place with the municipality which includes a time limit of no more than 20 years for the structure to be on the property;
c) The development activity will not prevent access into and through the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
d) There is no impact on existing and future slope stability and bank stabilization;
e) The potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans (if applicable); and,
f) Flooding and dynamic beach hazards (if applicable) have been adequately addressed.

and,

Development within the Erosion Hazard of an Apparent (Confined) River or Stream Valley:

Development activity associated with the placement of a garden suite on a property may be permitted provided the following are met:

a) There is no feasible alternative site outside of the erosion hazard and that the proposed development is located in an area of least (and acceptable) risk. As a minimum, the garden suite must be a minimum of 6 m beyond the stable slope allowance;
b) There is an agreement in place with the municipality which includes a time limit of no more than 20 years for the structure to be on the property;
c) The development activity will not prevent access into and through the erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
d) There is no impact on existing and future slope stability and bank stabilization;
e) The potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans (if applicable); and,
f) The flood hazard (if applicable) has been adequately addressed.

Further That effective August 23, 2024, the following policy be approved for use by staff and included within the Flood Hazard policy section of two-zone watercourses:

Development Within Flood Fringe of a Watercourse (Two-Zone):

Structural modifications to an existing structure may be allowed where:

a) The works are for flood protection; or,
b) The works are necessary to address safety or structural faults.

Raising of existing structures will be permitted provided that the structure is raised such that the minimum openings into the structure are at or above the regulatory flood datum. It may be necessary to have a structural engineer provide written documentation that the structure is structurally sound and able to be lifted.

Further That effective August 23, 2024, the following permanent dock policies be approved for use by staff and included within the Flooding and Erosion Hazard sections related to shorelines of Lake Erie, Lake St. Clair, and Rondeau Bay:

Development within the Shoreline Flood Hazard:

Development activity associated with the construction of docks may be permitted provided the following are met:

a) *All mechanical and electrical works be located a minimum of 0.3 m above the regulatory flood elevation;*
b) *Where the bed of the shoreline is defined in ownership, that consent is provided by the landowner;*
c) *The proposed works do not interfere with, or pose a hazard to, navigation or create a public safety hazard;*
d) *The proposed works comply with Transport Canada's minor works criteria for a dock;*
e) *The proposed works do not interfere with water flow and currents (post only, no cribs);*
f) *The proposed works do no impede dynamic beach processes on the subject, adjacent, or nearby properties; and,*
g) *Erosion and dynamic beach hazards (if applicable) have been adequately addressed.*

For new permanent docks, the works must be designed by a qualified engineer. For repairs or like-for-like replacements of existing docks, the works don't have to be engineered but engineering is encouraged.

Sign-off / approval from Transport Canada, Fisheries and Oceans Canada, the Ontario Ministry of Environment, Conservation and Parks, and the Ontario Ministry of Natural Resources and Forestry may be required as part of the application package as well as notification of adjacent and updrift and downdrift property owners.

and,

Development within the Shoreline Erosion Hazard:

Development activity associated with the construction of docks may be permitted provided the following are met:

a) *The development activity will not prevent access to and through the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;*
b) *There is no impact on existing and future slope stability and bank stabilization;*
c) *Where the bed of the shoreline is defined in ownership, that consent is provided by the landowner;*
d) *The proposed works do not interfere with, or pose a hazard to, navigation or create a public safety hazard;*
e) *The proposed works comply with Transport Canada's minor works criteria for a dock;*
f) *The proposed works do not interfere with water flow and currents (post only, no cribs);*
g) *The proposed works do no impede dynamic beach processes on the subject, adjacent, or nearby properties; and,*
h) *Flooding and dynamic beach hazards (if applicable) have been adequately addressed.*

For new permanent docks, the works must be designed by a qualified engineer. For repairs or like-for-like replacements of existing docks, the works don't have to be engineered but engineering is encouraged.

Sign-off / approval from Transport Canada, Fisheries and Oceans Canada, the Ontario Ministry of Environment, Conservation and Parks, and the Ontario Ministry of Natural Resources and Forestry may be required as part of the application package as well as notification of adjacent and updrift and downdrift property owners.

Further That effective August 23, 2024, the following policy be approved for use by staff and included within the Flood Hazard policy section of both one-zone and two-zone watercourses:

Development Within One-Zone Regulatory Floodplain or Within Floodway of a Watercourse; and,
Development Within Flood Fringe of a Watercourse (Two-Zone):

That encroachments, dyking and in-filling be prohibited and the hydraulic significance of the flood be maintained for the Thames River valley between the Thamesville area and Chatham.

Further That the second draft of the document entitled *Policies and Procedures to Support Administration of the Conservation Authorities Act Part VI and Ontario Regulation 41/24* be provided to member municipalities and the public (via publishing on the web) for feedback.

Further That the second draft of the document entitled *Policies and Procedures to Support Administration of the Conservation Authorities Act Part VI and Ontario Regulation 41/24* be brought to the October 2024 Board of Directors meeting with any comments received from the public and member municipalities.

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

Customer/Stakeholder Objectives
1) Strengthen and Increase Collaboration with Community Stakeholders

Internal Processes Objectives
9) Improve Internal Understanding of Roles & Responsibilities

Capacity Building Objectives
12) Strengthen Program Review Policy(s)

Prepared by:

Jason Homewood, P.Geo.
Water Resources and Regulations Technician

Reviewed By:

Jason Wintermute
Manager, Watershed and Information Services

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

9.4) CM Wilson Event Barn Renaming

Date: June 4th, 2024
Memo to: LTVCA Board of Directors
Subject: Report on Renaming the CM Wilson Event Barn
From: Genevieve Champagne, Manager Conservation Lands and Services

Information Received

Jane Wright approached the LTVCA in prior years to possibly have the CM Wilson Event Barn renamed to the **"Stenton Barn"** in order to honour the donation made by Horace and Irene Stenton. The family has also requested a plaque of remembrance in some form or another and this has been discussed with the family. This request was done a few years ago, however with the change over in staff it has not been brought forward to the board for consideration.

A Brief History

The LTVCA had received a hand-written letter from Horace Stenton, offering the barn to 3 conservation areas in the mid 70's. The letter to my understanding has been lost on the LTVCA side and the family did not have a copy of the letter. The letter was said to describe the construction of the barn and some history on the structure itself. The barn was accepted by the LTVCA and deconstructed and then reconstructed at CM Wilson Conservation Area in 1974.

Cost Implications

The cost implication for the renaming of the barn is minimal as it would be a change in our internal documentation and a few additional signage components as well as a framed photo with a plaque noting the original donation hung within the barn. The family noted that when doing the official hanging of the framed photo plaque that they would like family present but not a large event with a media release.

Recommended Resolution

Be it Resolved That:

The CM Wilson event barn be recognized and renamed as the "Stenton Barn", allowing staff to create new signage denoting this name change and the purchase of the donation plaque in honour of the Stenton Families donation to CM Wilson Conservation Area.

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

1. Strengthen and Increase Collaboration with Community Stakeholders

Respectfully Submitted:
Genevieve Champagne,
Manager Conservation Lands and Services

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

9.5) Lifting of the LTVCA's COVID-19 Vaccination Policy

Date: Aug 20, 2024
Memo to: LTVCA Board of Directors
Subject: Lifting of the LTVCA's COVID-19 Vaccination Policy
From: Mark Peacock, P. Eng., C.A.O. / Secretary Treasurer

Background:

During the start of the COVID-19 pandemic both municipalities and conservation authorities developed policies that required staff vaccinations and that any newly hired staff provide a vaccination confirmation to the CAO prior to a contract being signed.

The Lower Thames Valley Conservation Authority Vaccination Policy states:

2. On or before November 30, 2021 current employees and Board members must provide evidence to the CAO that:
(a) Confirms they are fully vaccinated against COVID-19; or
(b) Provides a documented medical reason for not being fully vaccinated against COVID-19; or
(c) Provides a documented personal sincerely held religious or creed based reason for not being fully vaccinated against COVID-19.

Discussion:

It is noted that, due to changes in the pandemic, many conservation authorities and municipalities have repealed their Covid-19 Policies. Additionally, there are many staff with the required 2-3 initial vaccinations but records have not be kept regarding vaccinations after the first few vaccination cycles.

It is recommended that the Lower Thames Valley Conservation Authority Vaccination Policy be repealed. It is felt that, although the policy worked well during the epidemic, it is now time that the policy be abandoned.

Recommended Resolution:

That the Lower Thames Valley Conservation Authority repeals the LTVCA Vaccination Policy

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. Business for Information

10.1) C.A.O. / Secretary Treasurer Report

Date: Aug 20, 2024
Memo to: LTVCA Board of Directors
Subject: CAO /Secretary-Treasurer Report
From: Mark Peacock, P. Eng., C.A.O. / Secretary Treasurer

Watershed Based Resource Management Strategy

On August 12 staff presented the Draft Preliminary Watershed Based Resource Management Strategy to The Township of Southwold council. Over the next two months staff will be attending council meetings across the watershed to further present the Watershed Based Resource Management Strategy. This timing will allow the LTVCA to receive municipal input prior to October, at which time staff will be bringing the draft report to the board for approval. Additionally, the Draft Preliminary Watershed Based Resource Management Strategy has been posted to the LTVCA website for comment.

2025 Draft Budget

The months of July and August have been spent developing a draft preliminary budget for 2025 and continuing to work on the LTVCA Asset Management Plan. Managers have been consulted and following the boards approval of the assumptions used in the budget, the final budget will be prepared for review and approval in the October Board of Directors meeting. During the final budget preparation process, further consultation will be completed with staff to ensure the best assumptions for revenue and expenses are included.

Longwoods Rd Resource Centre Revitalization and Indigenous Learning Centre Phase 2 - Existing Septic System Issues

LTVCA staff have been the designers of the septic system expansion required to service the Indigenous Learning Centre additional washroom needs. The design was based on the existing septic system approved drawings and permits. However, during the installation of the additional runs needed, it was determined that the existing system was not built according to the original permits and that a large portion of the bed was not functioning properly. When this was discovered, staff prepared a new design to replace the existing bed, obtained municipal approval and received a very favourable proposal from the contractor to complete the work. The original estimate for cost did consider that some parts of the old system would have to be replaced (but not the whole bed). That being said, the cost to complete the expansion and the full bed replacement is within the original budget and will not effect overall costs. As of the writing of this report the septic bed has been replaced and the installed bed approved.

Recommended Resolution:

That the Chair and CAO Secretary-Treasurer Report
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 6 flood messages issued since the last written report to the Board of Directors.

One of these was a Flood Watch message issued on August 2nd due to intense thunderstorm activity dropping substantial amounts of rain across the watershed. Various areas throughout the watershed saw up to 50 mm of rain, while some areas in the western portion of the watershed saw 75 mm or more. Due to the heaviest rainfall being centred in the west of the watershed, this rain mostly impacted the smaller watercourses and tributaries, and had little impact on the Thames River itself.

Two Watershed Condition Statement – Flood Outlook messages were issued on August 6th. Again, heavy thunderstorm activity dropped substantial amounts of rain over the watershed. Most areas saw at least 25 mm that day, but the McGregor Creek watershed in Chatham-Kent saw over 50 mm of rain after having experienced over 15 mm of rain the previous day. The timing and amount of rain that fell in the afternoon pushed water levels on McGregor Creek high enough that the McGregor Creek Diversion Channel needed to be operated. The Diversion was in operation from the evening of August 6th into the afternoon of August 8th.

Another Watershed Condition Statement – Flood Outlook message was issued on July 9th when Rainfall Warnings were issued by Environment Canada due to the remnants of Hurricane Beryl passing through the region. By the time the rain had finished, the region did not receive enough rain to be concerned with Diversion operations or water levels on the Thames River. However, it did saturate the watershed and set up conditions that would lead to flooding the next week.

Summer Thames River flooding event

Two other flood messages, a Watershed Condition Statement – Flood Outlook and a Flood Watch, were issued on July 17th and were associated with a large high-water event originating in the upper Thames River watershed. This was a significant event as it produced flows on the Thames River usually only seen during a spring melt type event.

Between July 9th and 16th, the upper Thames River watershed received between 75 and 170 mm of rainfall from several convective storms which rolled through the region. The lower Thames River watershed had also received rainfall, but not nearly in the same quantities that the upper watershed had received. The Upper Thames River Conservation Authority operated their flood control infrastructure to reduce the peak flows and flooding along the river. Coming out of London, the river peaked on July 17th with a flow of 581 m3/s. The river peaked in the Currie Road / Thames Road area of Dutton Dunwich & Southwest Middlesex on July 19th at 458 m3/s. In Chatham-Kent, the river peaked near Thamesville on July 20th at 436 m3/s and later that same day in Chatham 2.3 m above the 'normal' water level from before the storms had arrived.

The river's flood flats and portions of the adjacent valley lands were inundated as the water routed down through the system. Areas of the flood flats and valley lands which were being utilized for crops were flooded. Within the City of Chatham, the promenade along the river, the boat launch area of Thames Grove Park, as well as Simcoe Lane under the Fifth Street Bridge were inundated. The LTVCA had issued a Flood Outlook safety bulletin for the river and adjacent lands in the early morning hours of July 17th followed up by a Flood Watch advisory later on the 17th which covered the river as well as the forecasted issue areas in the City of Chatham. Additional communications took place with Chatham-Kent municipal staff throughout the event.

While the water level in the City of Chatham reached a height that the dams could have been closed and the McGregor Creek Pump Station could have been operated, it didn't reach a height which would have necessitated operations for the purposes of basement flood protection in South Chatham. The dams remained open throughout the event and allowed for continued drainage of urban and agricultural lands in both the Indian and McGregor Creek systems.

Simcoe Lane under the 5th St. Bridge in Chatham, July 20th.


Thames River in Chatham between 3rd Street and 5th Street Bridges July 20th.

Facing Tecumseh Park and 6th Street Dam in Chatham, Thames River (left) and McGregor Creek (right), July 20th.

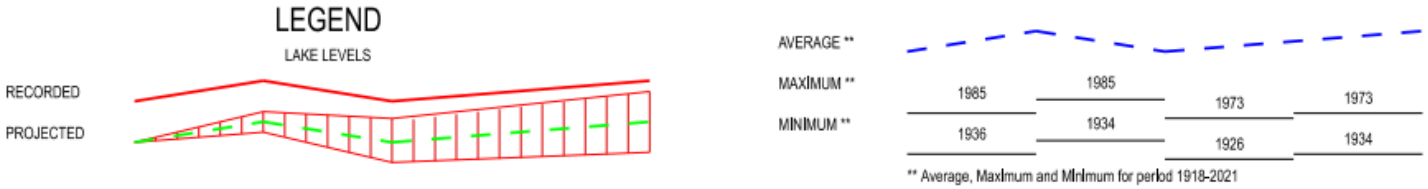
Report on Lake Conditions

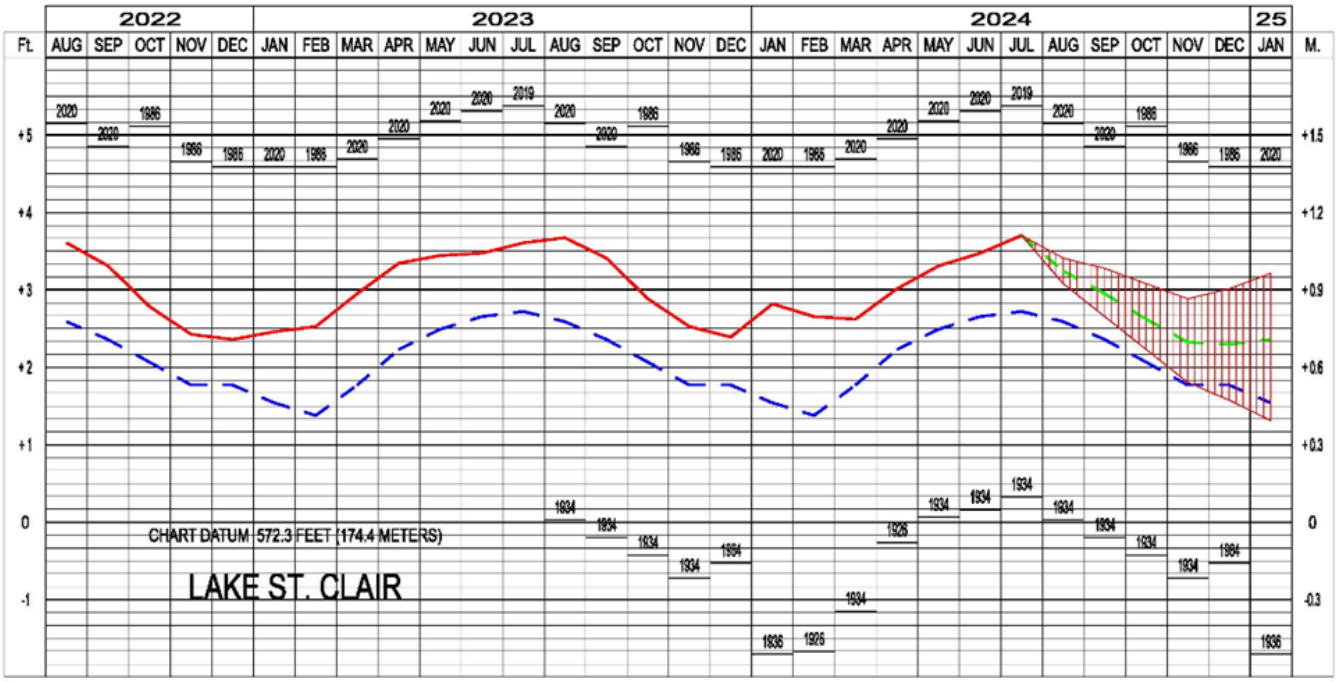
Average daily lake levels on Lake Erie at the beginning of August were around 174.59 m (I.G.L.D.). The all-time record high monthly average for August was 175.02 m, set in 2019. Water levels at the beginning of August were still 30 cm above what would be considered normal for the month of August. However, current water levels are still quite close to where they were this time last year and in 2022. Water levels now appear to be in their seasonal decline. Water levels are predicted to drop around 10 cm by the beginning of September.

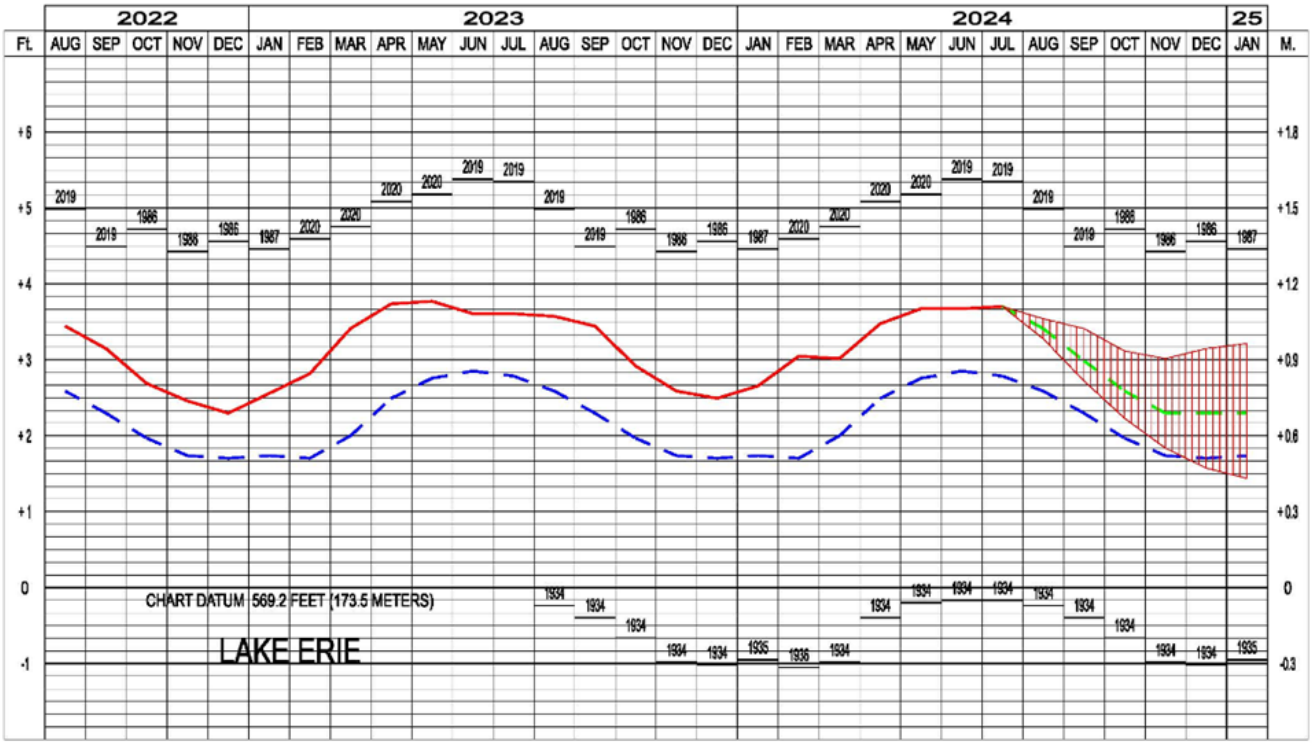
Average daily water levels on Lake St. Clair at the beginning of August were around 175.48 m (I.G.L.D.). The all-time record high monthly average for August was 175.97, set in 2020. Water levels at the beginning of August were 29 cm above what would be considered normal for the month of August. However, current water levels are still quite close to where they were this time last year and in 2022. Forecasts suggest that water levels should reach their peak soon and begin their seasonal decline. Water levels are predicted to drop around 10 cm by the beginning of September.

Stronger wind events (most likely gale force wind events lasting several hours in duration) are now required to cause minor flooding along the LTVCA's Lake St. Clair shoreline and along most of its Lake Erie shoreline. However, the damage caused by high lake levels over the last few years along Erie Shore Drive means it's likely still more vulnerable at lower wind speeds.

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 August.







10.2.2) Flood Control Structures

The Thames River has seen above average rainfall over the last few months. As a result, the McGregor Creek Diversion Channel needed to be operated from the evening of August 6th into the afternoon of August 8th. Another flood event in the lower Thames River watershed, lasting from July 17th to the 22nd, saw water levels in Chatham rise enough that the 6th St. Dam could have been operated. However, water levels did not rise quite high enough to make it necessary. Further details of these events can be found under Flood Forecasting and Operations.

Due to the frequent and heavy rains, together with equipment issues, the regular seasonal maintenance around the flood control structures had fallen behind somewhat these last couple of months. Noticeable to the general public is that mowing has been delayed.

Over the next couple of months, the LTVCA intends on continuing the work begun last year on the pumps at the 6th St. Backwater Dam and Pumping Station. Last year, the first of three pumps was inspected and had its seals replaced. The intention is to inspect and replace the seals on the other two pumps this summer. The work will involve pulling the pump one at a time, transporting them to Schepens Ltd in Wallaceburg for the inspection and maintenance, replacing the seals, removing sediment from the pump chamber, and then reinstalling the pump. Any additional required maintenance will be determined during the inspections. The MNRF's Water and Erosion Control Infrastructure (WECI) grant program has approved the LTVCA's grant application and will be covering $22,219 of the estimated $44,438 cost of the work.

McGregor Creek Diversion Channel Groundwater Monitoring Well Abandonment

In June, the LTVCA carried out a well abandonment project related to the McGregor Creek Diversion Channel.

During the design phase of the Diversion Channel, there was expressed concern that the channel would have a measurable impact on the water levels and quality of three aquifer systems in the area. In 1989, prior to construction, 12 piezometer nests (12 sites of multi-depth monitoring wells) were installed on both sides of the channel alignment for monitoring.

The monitoring was carried out over a period of six years which included the time periods before, during, and after construction of the Diversion Channel. With respect to water quality, it was reported at the conclusion of the monitoring period in 1995 that the parameters analyzed remained reasonably consistent during the monitoring period and were generally within the guidelines for drinking water established by the Ontario Ministry of Environment and Energy (the applicable ministry at the time). With respect to water levels, it was also reported that the levels remained consistent with the nature of the aquifers. With no discernible impact of the channel on the aquifer systems in the area, it was recommended in 1995 that the wells be abandoned in accordance with the applicable regulation of the Ontario Water Resources Act (at that time).

In November 2023, the LTVCA was contacted by a landowner asking if we could remove the "LTVCA pipes" that were on their property or within the municipal road allowance abutting their property. Upon investigation, it was determined that the wells were, in fact, the LTVCA's installed as part of the above-mentioned project. It is unknown why the wells were not properly abandoned in the '90s. LTVCA staff were able to locate two piezometer nests on the landowner's property and two nests adjacent to the property in the roadside ditch. All nests were in a state of poor condition and were unusable had the LTVCA wanted to monitor them again.

Staff obtained seven quotes from licensed well contractors and G.S. Primo was awarded the contract. An encroachment permit was also obtained from the Municipality of Chatham-Kent. Once the encroachment permit was obtained, the utility locates were completed and the four identified piezometer nests that the landowner had contact us about were all abandoned on June 28th in accordance with Ontario Regulation 903 under the Ontario Water Resources Act.

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 the summer 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 report summarizing conditions around the watershed, which is available by request.

Looking at the rainfall over the last three months, May, June and July all saw above average amounts of rainfall. This pattern was consistent throughout the watershed. The source of this rain was primarily thunderstorm activity. However, the remnants of Hurricane Beryl also passed through the region dropping additional rain. For the 3-month rainfall total, stations around the watershed recorded between 99% and 166% of normal rainfall. The 18-month rainfall totals also all showed above average rainfall. As mentioned in the Flood Forecasting and Operations section, there was a flood event in July. As a result, the flow indicator values well exceed the program thresholds.

Based on these rainfall indicators there does not appear to be a need to declare any kind of Low Water Condition.

Further information on the Provincial Low Water Response Program can be found at
https://www.lioapplications.lrc.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. Since it is PWQMN program season, analysis for 8 of these sites per month is being covered by the PWQMN program. The remainder is being covered by the recently signed agreement with MECP funded through the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (COA).

In addition to the regularly scheduled PWQMN monthly sampling, which is designed to determine baseline water quality conditions, the MECP funded program looks to sample water quality during high runoff events. Since the last board report, 7 events have been sampled across the watershed. As these summer events are caused by localized thunderstorms, not all sampling stations saw the same rainfall across all events, and the water quality impacts of the runoff events are also variable.

Several additional sampling runs have also been undertaken with an algae sensor to see whether there were any concerns yet regarding blue-green algae blooms. So far at least, and elevated flows seem to be discouraging the algae bloom that has become an almost annual occurrence.

An automated water sampling station at Talbot Creek has been installed to assist staff in capturing water quality samples during runoff events. The distance from the office to Talbot Creek can make collecting samples in a timely matter difficult. The station is now functioning, and samples are being collected from it.

After some troubleshooting, there are now dissolved oxygen sensors at three pump stations in Chatham-Kent; Rivard Pump Station, Dauphin Pump Station and Deary Pump Station. This data will complement water quality sampling and hopefully provide insight into the fate of dissolved phosphorous held back by the pumps.

Benthic sampling was completed in June. This year, 11 sites were sampled across the watershed.

For the PGMN program, Well W185-1, located east of Wallacetown and south of Iona, was upgraded with a barologger. Troubleshooting was also conducted on equipment in the network, including data upload issues at that well. Data downloads from the PGMN network locations have been completed and will be sent off to MECP as per program requirements.

10.2.5) Harmful Algal Blooms (HAB)

Lake Erie Blooms

The U.S. National Oceanic and Atmospheric Administration (NOAA) issues a seasonal forecast, typically in early July, for potential HABs on Lake Erie. The Seasonal Lake Erie HAB Forecast gives coastal managers and drinking water facility operators a general sense of how "bad" the upcoming bloom season has the potential to be. The seasonal forecast is an ensemble of models based largely upon phosphorus discharge from the Maumee River. This year's seasonal forecast was updated on July 25th. (see forecast below).

During the bloom season, the operational NOAA Lake Erie HAB Forecast provides the current extent and 5-day outlooks of where the bloom will travel and what concentrations are likely to be seen, allowing managers to determine whether to take preventative actions. At the time this agenda was drafted, the most recent Forecast was from August 9th (see forecast below).

The cyanobacteria bloom is present in western Lake Erie, but cloud cover has obscured satellite imagery this week. As of August 4, the Microcystis bloom is largely on the U.S. side of the lake and extends from Maumee Bay north to Stony Point, MI and to the south towards Catawba Island, OH and into the western basin. Bloom concentrations are highest in Maumee Bay. In addition to the bloom in Lake Erie, imagery also shows a potential bloom in Lake St. Clair, largely along the Canadian shoreline through Chatham-Kent.

Thames River Blooms

So far this year, there have been no reports of algae blooms on the Thames River or its tributaries. Monitoring for potential algae blooms is conducted by LTVCA staff with an algae sensor, when the potential for a bloom seems to exist. On one occasion, monitoring seemed that there was the potential for a bloom to form. However, shortly after a significant rainfall event raised water levels on the river and flushed it out.

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

NCCOS NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

SCIENCE SERVING COASTAL COMMUNITIES

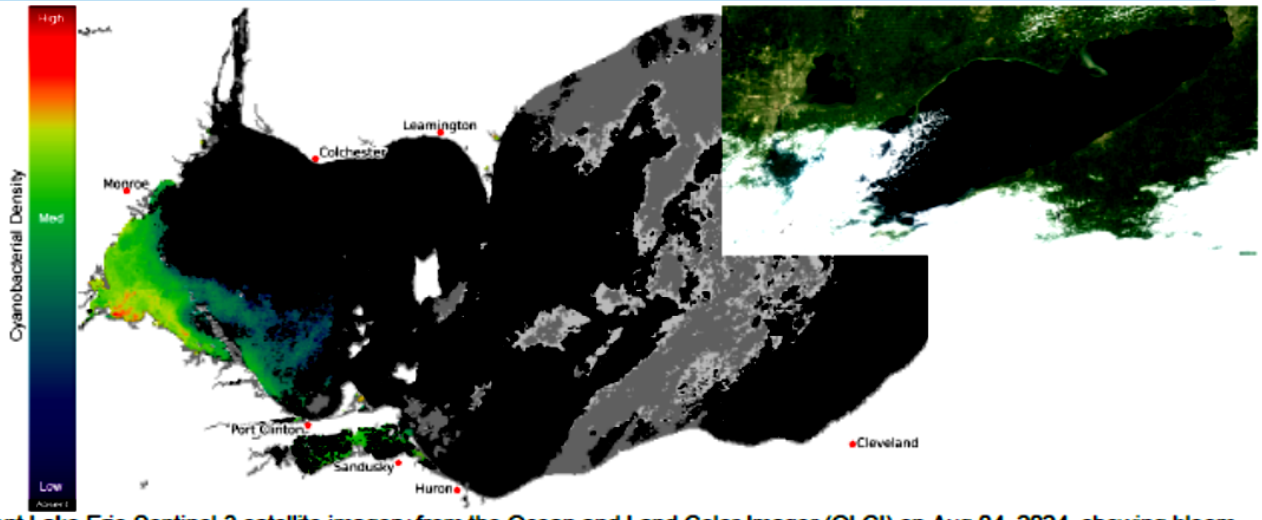
Lake Erie Harmful Algal Bloom Forecast

2024-08-09

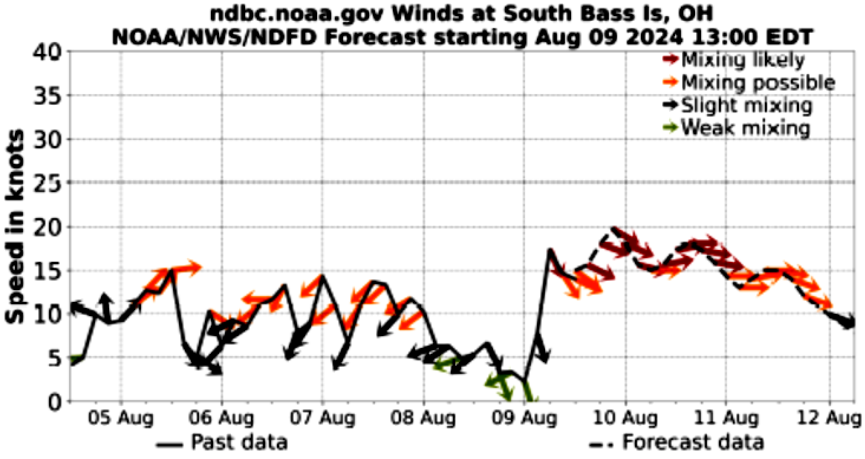
Summary

The cyanobacteria bloom is present in western Lake Erie but cloud cover or winds above 9.0 mph prevent determining the area. Clouds have obscured satellite imagery this week. As of August 4, the *Microcystis* bloom extends from Maumee Bay north to Stony Point, MI and to the south towards Catawba Island, OH and into the western basin. Bloom concentrations are highest in Maumee Bay. Sandusky Bay has a local bloom of mixed cyanobacteria. No recent toxin data currently available.
--NCCOS HAB Forecasting Team 5 August 2024

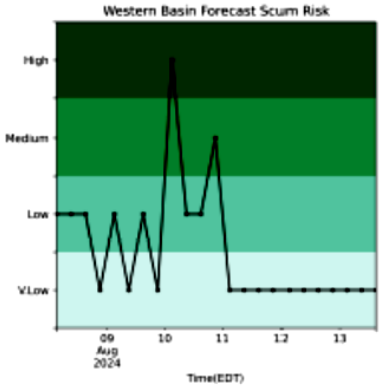
The past few days of imagery can be seen at the HAB monitoring site. The Lake Erie Forecast is operated by the National Centers for Coastal Ocean Science. Contact hab@noaa.gov for technical Questions. Last Updated: 2024-08-09 01 PM EST



Current Lake Erie Sentinel-3 satellite imagery from the Ocean and Land Color Imager (OLCI) on Aug 04, 2024, showing bloom location and extent in the western basin. Grey indicates clouds or missing data. The estimated threshold of cyanobacteria detection is 20,000 cells/mL. Inset shows a truecolor image of the entire lake. Data derived from Copernicus Sentinel-3.



Wind speed and direction from SouthBassIs, OH. Blooms mix through water column at wind speeds > 15 knots.



Where the bloom is present in western Lake Erie, the potential risk of scum.

For more information visit: coastalscience.noaa.gov/science-areas/habs/hab-forecasts/lake-erie/

1305 East West Hwy, Rm 8110
Silver Spring, Maryland 20910
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noaacoastalsci | noaa.coastal.sci

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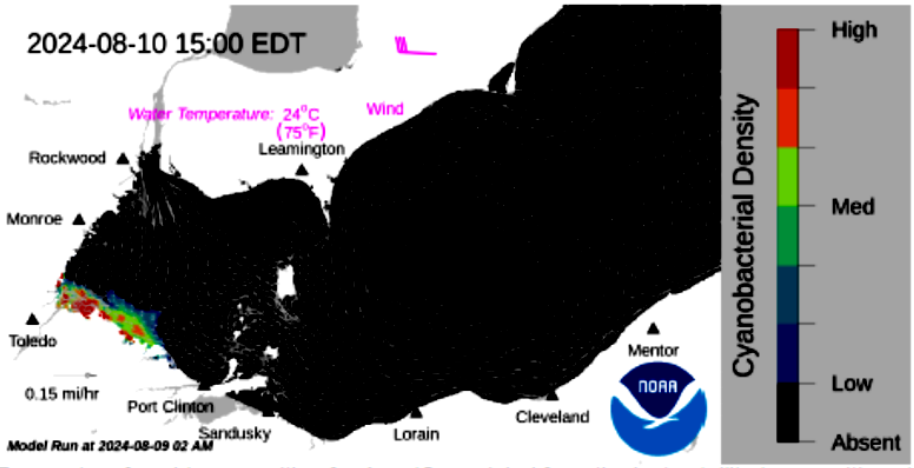
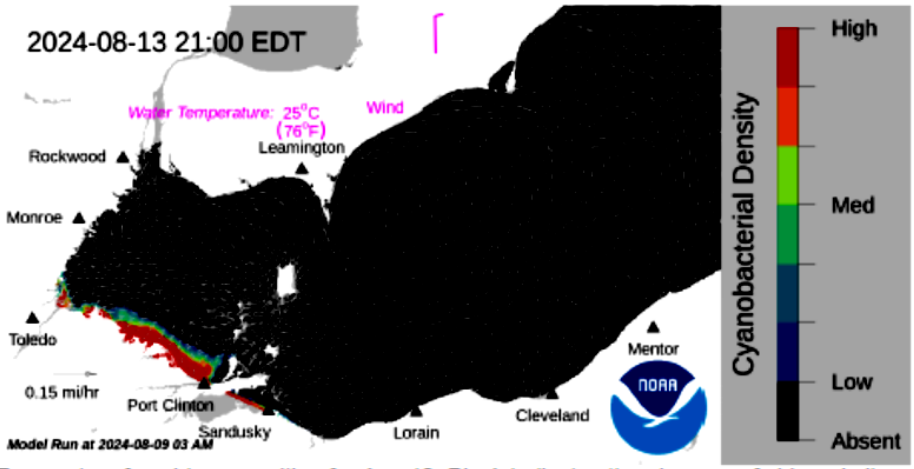
Lake Erie Harmful Algal Bloom Forecast

2024-08-09



Forecast surface bloom position for Aug 10, modeled from the last satellite image with water currents estimated from the Lake Erie Operational Forecast System (LEOFS). Potential for bloom movement is forecast in 3-dimensions with a hydrodynamic model using satellite imagery and currents. The modeled output does not contain clouds. Black indicates the absence of chlorophyll and gray indicates area with no data. The arrows show forecasted currents. Water temperature and winds (in magenta) are the averages for the western basin from the model.



Forecast surface bloom position for Aug 13. Black indicates the absence of chlorophyll and gray indicates area with no data. The arrows show forecasted currents. Water temperature and winds (in magenta) are the averages for the western basin from the model.

Additional resources:

- Archived Lake Erie Forecasts
- More information about our bloom monitoring imagery
- FAQs - Frequently Asked Questions about cyanobacteria and the forecasts NOAA issues
- Contributors and Data Providers
- Lake Erie HAB Forecast Guide - User guide to help navigate the forecast products
- Lake Erie Hypoxia Forecast

For more information visit: coastalscience.noaa.gov/science-areas/habs/hab-forecasts/lake-erie/

1305 East West Hwy, Rm 8110
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coastalscience.noaa.gov
noaacoastalsci | noaa.coastal.sci

Western Lake Erie HAB Seasonal Projection Update

Bulletin 08- 2024-07-25

Summary: This Bulletin provides an updated estimate of potential *Microcystis* harmful algal bloom (HAB) severity. The projected severity depends on input of total bioavailable phosphorus (TBP) from the Maumee River during the loading season (Mar. 1-Jul. 31), and uses measurements of Maumee River discharge from the USGS and TBP loads measured by the Heidelberg U. National Center for Water Quality Research.

With Maumee River TBP load observations through July 21 we continue to predict a potential bloom severity of ~5 with a range of 4.5-6. Rainfall and associated runoff in July was within the forecast uncertainty and resulted in an additional ~15 metric tons of TBP. With this modest increase, we continue to expect a moderate to larger-than-moderate summer bloom.

The bloom was established by June 24th, which is the earliest bloom start we've identified since our monitoring began in 2002. While there have been local bloom impacts along the Michigan coast, the bloom has been slower to expand than last year, likely because of weather conditions (i.e., high wind and clouds). The bloom will reach a peak in August, continuing into September, with variation in size and location due to wind. While toxicity varies throughout the bloom, toxins concentrate in surface scums during calm weather. People and pets should not swim in areas with scum. Information on the location and intensity of the bloom can be found at NOAA's Lake Erie Harmful Algal Bloom Forecast webpage. For additional information on safe recreation, please visit Ohio EPA's webpage on HABs.

Predicted Bloom Severity

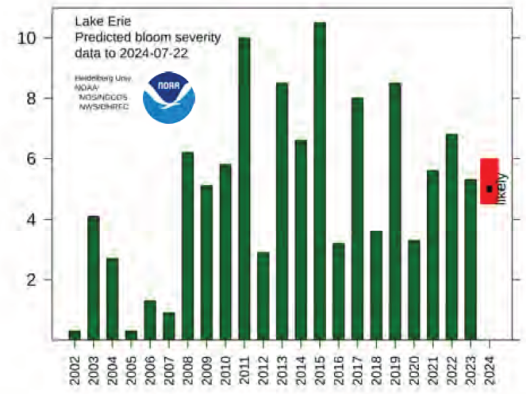

Fig. 1. Predicted bloom severity as compared to previous years. The wide red bar is the likely range of severity based on the limits of the forecast uncertainty (4.5-6) with a median of 5.

Cumulative Total Bioavailable Phosphorus

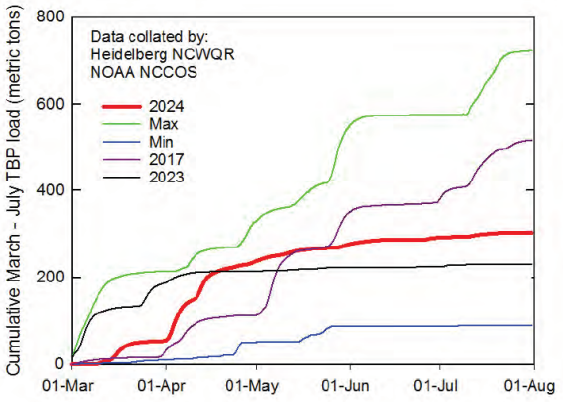

Fig. 2. Cumulative TBP loads for the Maumee River (Waterville, OH). Each line denotes a different year or the min/max cumulative load since 2002. The solid red line is the measured load to July 21, 2024.

Total Bioavailable Phosphorus

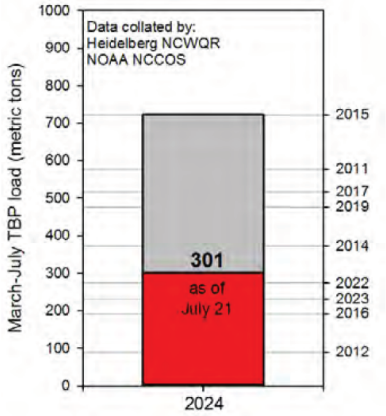

Fig. 3. Total bioavailable phosphorus (TBP) load accumulated from the Maumee River near Waterville, OH to date. The right axis denotes the TBP load from selected previous years.

Satellite Image

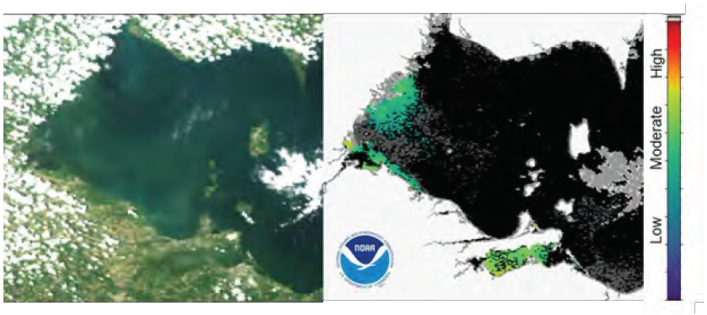

Fig. 4. True color image (left) and cyanobacteria index (CICyano, right) for western Lake Erie on 20 July 2024 derived from the Copernicus Sentinel-3a satellite. The *Microcystis* bloom extends from Maumee Bay north to Pointe Mouillee State Game Area, MI and to the south to Magee Marsh Wildlife Area, OH and into the western basin to West Sister Island. Sandusky Bay has a local bloom of mixed cyanobacteria.

For more information visit: coastalscience.noaa.gov/science-areas/habs/hab-forecasts/lake-erie/ *or* ncwqr.org/

Questions? Contact: hab@noaa.gov
1305 East West Hwy, Rm 8110
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10.3) Planning and Regulations

10.3.1) Planning

From the end of May 2024 through to the end of July 2024, there were 43 planning submissions reviewed by staff for this reporting season with respect to the Provincial Policy Statement, Section 28 of the Conservation Authorities Act and Ontario Regulation 41/24. 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 62 phone calls and over 233 email responses to inquiries that staff have responded to.

Planning Numbers	2023 Totals	Jan Totals	Feb Totals	Mar Totals	Apr Totals	May Totals	June Totals	July Totals	2024 Totals
Chatham-Kent	270	14	16	15	23	39	11	20	138
Elgin	89	7	2	2	2	0	0	3	16
Essex	17	3	0	0	5	0	0	3	11
Middlesex	35	6	1	1	0	1	5	1	15
Total Numbers	**411**	**30**	**19**	**18**	**30**	**40**	**16**	**27**	**180**

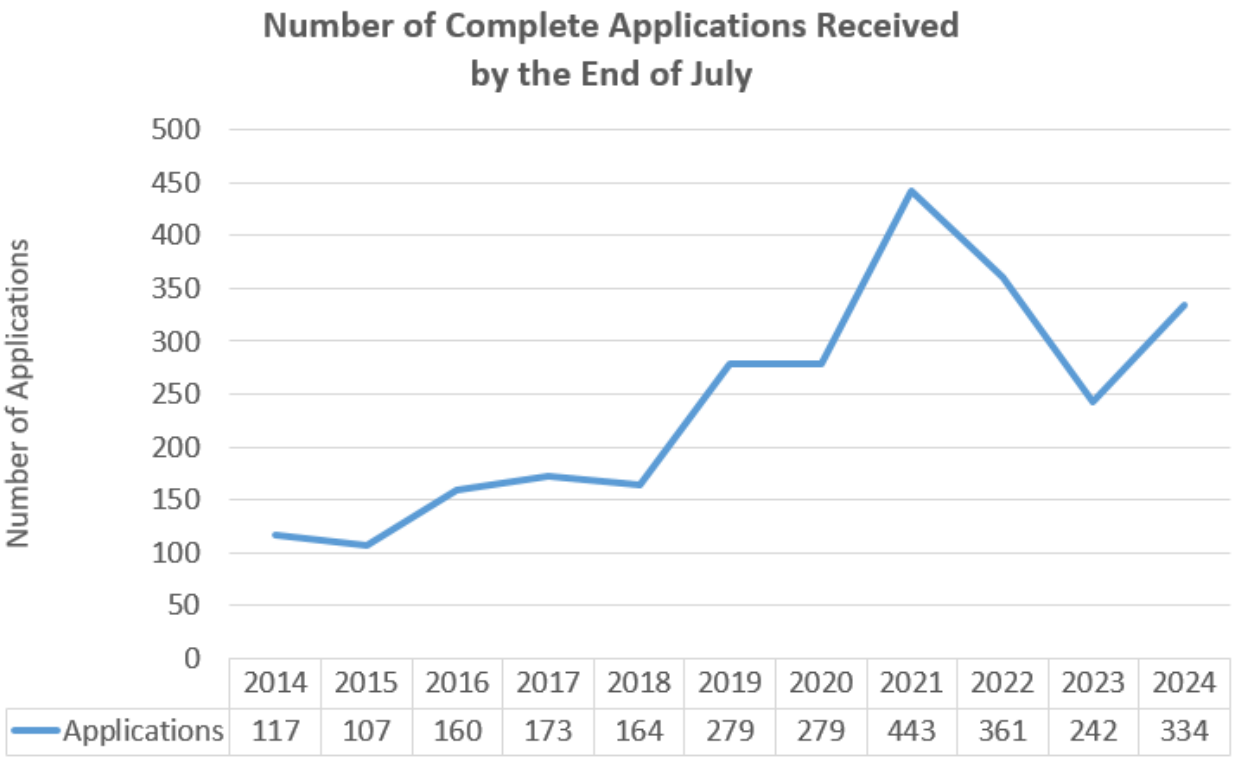
10.3.2) Planning Fees

MUNICIPALITY	2024 PLANNING JUN TO JUL	2024 YEARLY PLANNING TOTAL	2024 LEGAL JUN TO JUL	2023 TOTAL
Chatham-Kent	$2,000.00	$3,750.00	$1,250.00	
Elgin County				
Southwold	$0	$700.00		$930.00
Dutton Dunwich	$0	$0	$125.00	$230.00
West Elgin	$400.00	$800.00	$125.00	$7,595.00
Essex County				
Lakeshore	$1,200.00	$2,100.00		$1,115.00
Leamington	$0	$0		
Middlesex County				
Southwest Middlesex	$0	$0		
Strathroy-Caradoc	$0	$0	$125.00	
Middlesex Centre	$0	$0		
London	$0	$0		
YTD Total	**$3,600.00**	**$3,750.00**	**$1,750.00**	**$9,870.00**

10.3.3) Section 28 Regulations / Permitting

In the months of June and July, the LTVCA received a total of 69 new permit applications with respect to Section 28 of the Conservation Authorities Act and Ontario Regulation 41/24. Of the 69 new applications and, combined with previously submitted “incomplete” applications, a total of 74 applications were deemed to be “complete” and could be reviewed. Those 74 applications were in addition to the previous queue of 66 “complete” applications leading into this reporting period. 97 of those 140 “complete” applications were processed and all were approved by staff with conditions. As of the end of July, 43 “complete” applications were in the queue for processing.

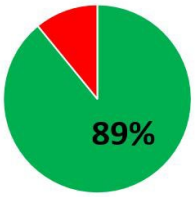
Between the beginning of the year and up to the end of July, the LTVCA had received a total of 334 “complete” applications. Comparatively, the number of complete permit applications received by the end of May in previous years is tracked below:



$62,750 in permit application fees had been collected, or is to be collected, as of the end of July which is up $13,625 from the last board report.

10.3.4) Application Timelines:

Review for Completeness:



Under the new regulation (O. Reg. 41/24), the LTVCA is required to determine whether or not an application is considered to be “complete” or “incomplete” and provide a response of such within 21 calendar days. For the months of June and July, the average response time with respect to this was 8 days (ranging between 0 and 60 days). 89% of all applications met the required timeline for response which is a decrease from the previous two months.

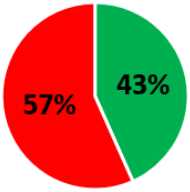
Permit Processing:

For applications issued in June and July, the table and charts below indicate that 100% of “routine” and 43% of “minor” permit applications met their applicable customer service standard for turnaround time.

Complexity of Application	# of Days to Review Permit Applications				
	0 - 14 Days	15 - 21 Days	21 - 28 Days	29 - 90 Days	> 90 Days
Routine	7	0	0	0	0
Minor	32	7	4	47	0

Major	0	0	0	0	0

For the months of June and July, the average turnaround time for a routine permit application was 4 days (ranged between 0 and 12 days). The customer service standard for routine permits is a turnaround within 14 days. The processing time for routine permit applications is meeting the customer service target.



For the months of June and July, the average turnaround time for a minor permit application was 33 days (ranged between 0 and 63 days). For private property minor complexity permits, the average turnaround time was 7 days (ranged between 0 and 21 days). The customer service standard for minor complexity permits is a turnaround within 21 days. The processing time for minor permit applications is generally not meeting the customer service target as there has been a large influx of applications from a single utility company working on a very large fibre optic project in our watershed. Staff have been coordinating with the company to meet their scheduling priorities while also prioritizing 'regular' minor applications from private property owners. The processing time for private property minor complexity permits is meeting the customer service standard.

10.3.5) Property Inquiries:

Up to the end of July, 718 property inquiries (including permit pre-consultation questions) were received and responded to by the Regulations Technician which is 209 more since the last board report. The June and July inquiries were responded to with ~630 e-mails and ~10 phone calls.

At the time of writing of this staff report, the current response time to property and pre-consultation inquiries is up to 15 business days for both e-mails and phone calls. The response time has significantly worsened since the last board meeting.

10.3.6) Regulation Mapping Update:

The GIS Technician continues to work towards improving the accuracy of the screening map in areas in and around valleys (ravines and gullies). Updated mapping has been offered to staff at our member municipalities and counties which have jurisdiction in the LTVCA's watershed.

10.3.7) Section 28 Enforcement:

In the first seven months of 2024, 18 complaints / tips were received from the public about possible enforcement issues which is six more than the last board report. 13 of the 18 issues are confirmed violations or potential violations of the Conservation Authorities Act and the regulation. Four of the 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

10.3.8) O. Reg. 152/06 Permit Applications

O.Reg. 41/24 Permit Applications
(Applications Processed in June and July 2024)

B.D. 08/22/2024

App No.	Location	Community / Township	Municipality	Decision	Processing Time (days)
192-2024	Creek Line adjacent to Pain Court Creek Drain	Dover	Chatham-Kent	Granted: June 7, 2024	9
193-2024	Creek Line adjacent to 3rd Concession Drain	Dover	Chatham-Kent	Granted: June 7, 2024	9
194-2024	Bear Line Road adjacent to Gray Drain	Dover	Chatham-Kent	Granted: June 10, 2024	12
195-2024	Pain Court Line adjacent to Bourdeau Drain	Dover	Chatham-Kent	Granted: June 18, 2024	20
197-2024	Jacob Road adjacent to Bachand Drain	Dover	Chatham-Kent	Granted: July 3, 2024	35
198-2024	Jacob Road at Toulouse Pumping Works	Dover	Chatham-Kent	Granted: July 5, 2024	37
199-2024	Jacob Road adjacent to Rivard Drain	Dover	Chatham-Kent	Granted: July 5, 2024	37
200-2024	Heron Line adjacent to Rivard Drain	Dover	Chatham-Kent	Granted: July 5, 2024	37
201-2024	3rd Concession Drain at 7841 Creek Line	Dover	Chatham-Kent	Granted: July 8, 2024	26
202-2024	3rd Concession Drain at 7891 Creek Line	Dover	Chatham-Kent	Granted: July 8, 2024	26
203-2024	Grande River Line	Dover	Chatham-Kent	Granted: July 8, 2024	40
204-2024	Jacob Road	Dover	Chatham-Kent	Granted: July 10, 2024	42
205-2024	6455 Grande River Line	Dover	Chatham-Kent	Granted: July 10, 2024	42
206-2024	Wilcox-Oullette Drain at 23726 Winter Line Road	Dover	Chatham-Kent	Granted: July 10, 2024	42
207-2024	Belle Rose Line adjacent to Terry Mechanical Drain	Dover	Chatham-Kent	Granted: July 10, 2024	42
208-2024	Jacob Road adjacent to Rivard Drain	Dover	Chatham-Kent	Granted: July 10, 2024	42
209-2024	Belle Rose Line adjacent to Gowrie Drain	Dover	Chatham-Kent	Granted: July 12, 2024	44
210-2024	Belle Rose Line at Adelard Couture Pump Works	Dover	Chatham-Kent	Granted: July 12, 2024	44
211-2024	Big Pointe Road adjacent to Adelard Couture Pump Works	Dover	Chatham-Kent	Granted: July 12, 2024	44
212-2024	Big Pointe Road adjacent to Couture-Gebel Drain	Dover	Chatham-Kent	Granted: July 12, 2024	44

O.Reg. 41/24 Permit Applications
(Applications Processed in June and July 2024)

B.D. 08/22/2024

App No.	Location	Community / Township	Municipality	Decision	Processing Time (days)
213-2024	Big Pointe Road at Gowrie Drain	Dover	Chatham-Kent	Granted: July 12, 2024	44
214-2024	St. Philippes Line adjacent to Myers Relief Drain East Branch	Dover	Chatham-Kent	Granted: July 12, 2024	44
215-2024	Myers Relief Drain East Branch at 6772 St. Philippes Line	Dover	Chatham-Kent	Granted: July 12, 2024	44
216-2024	Myers Relief Drain East Branch at 6781 St. Philippes Line	Dover	Chatham-Kent	Granted: July 12, 2024	44
217-2024	St. Philippes Line at Boyle Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
218-2024	St. Philippes Line adjacent to Bourgeois Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
219-2024	Ouellette Road adjacent to Boyle Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
220-2024	Tecumseh Line between #5615 and #5717	Raleigh	Chatham-Kent	Granted: July 31, 2024	63
221-2024	6081 Riverview Line	Raleigh	Chatham-Kent	Granted: July 31, 2024	63
222-2024	Marsh Line near #6484	Dover	Chatham-Kent	Granted: July 31, 2024	63
223-2024	Big Pointe Road adjacent to Lauzon Emery Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
224-2024	Mallard Line adjacent to Hebert Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
225-2024	Mallard Line at Boyle Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
226-2024	Big Pointe Road near Mallard Line	Dover	Chatham-Kent	Granted: July 31, 2024	63
228-2024	Jacob Road at Hebert Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
229-2024	Mallard Line at Hebert Branch Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
230-2024	Hebert Drain at 6365 Mallard Line	Dover	Chatham-Kent	Granted: July 31, 2024	63
231-2024	Hebert Drain at 6452 Mallard Line	Dover	Chatham-Kent	Granted: July 31, 2024	63
232-2024	Rivard Line adjacent to Hoover Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63

O.Reg. 41/24 Permit Applications
(Applications Processed in June and July 2024)

B.D. 08/22/2024

App No.	Location	Community / Township	Municipality	Decision	Processing Time (days)
233-2024	Winterline Road between Rivard Line and Boyle Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
234-2024	Rivard Line at Boyle Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
235-2024	Hoover Drain at 7338 Rivard Line	Dover	Chatham-Kent	Granted: July 31, 2024	63
236-2024	Hoover Drain at 7450 Rivard Line	Dover	Chatham-Kent	Granted: July 31, 2024	63
237-2024	Balmoral Line adjacent to Myers Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
238-2024	Town Line Road adjacent to McFarlane Relief Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
239-2024	Belle Rose Line adjacent to Terry Mechanical Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
240-2024	Terry Mechanical Drain at 5803 Belle Rose Line	Dover	Chatham-Kent	Granted: July 31, 2024	63
241-2024	Given Line between 5995 and 6635	Dover	Chatham-Kent	Granted: July 31, 2024	63
242-2024	Given Line adjacent to Couture Pump Works	Dover	Chatham-Kent	Granted: July 31, 2024	63
243-2024	Jacob Road adjacent to Rivard Drain	Dover	Chatham-Kent	Granted: July 31, 2024	63
244-2024	Jacob Road at Fifth Concession Mechanical Works	Dover	Chatham-Kent	Granted: July 31, 2024	63
245-2024	Jacob Road adjacent to Peltier Pump Works	Dover	Chatham-Kent	Granted: July 31, 2024	63
273-2024	7335 Fairview Drive	Duttona Beach	Dutton Dunwich	Granted: July 23, 2024	14
277-2024	66 Murray Street	Chatham	Chatham-Kent	Granted: June 10, 2024	5
279-2024	370 Bayview Ave	Erieau	Chatham-Kent	Granted: June 10, 2024	1
280-2024	Rivard Line at Toulouse Pumping Works	Dover	Chatham-Kent	Granted: July 5, 2024	25
281-2024	Taylor Drain	Southwold	Southwold	Granted: June 25, 2024	13
282-2024	Community of Erieau	Erieau	Chatham-Kent	Granted: June 13, 2024	0
283-2024	Big Creek at 1626 County Road 8	Mersea	Leamington	Granted: June 18, 2024	0
284-2024	Edward Street at Harrison Drain	Ridgetown	Chatham-Kent	Granted: July 3, 2024	20
285-2024	130 Stanley Street	Chatham	Chatham-Kent	Granted: June 18, 2024	0
286-2024	Creek Line near 6927	Dover	Chatham-Kent	Granted: June 18, 2024	0
287-2024	740 Ross Lane	Erieau	Chatham-Kent	Granted: June 18, 2024	40

O.Reg. 41/24 Permit Applications
(Applications Processed in June and July 2024)

B.D. 08/22/2024

App No.	Location	Community / Township	Municipality	Decision	Processing Time (days)
288-2024	500 Indian Creek Road West	Chatham	Chatham-Kent	Granted: June 18, 2024	0
289-2024	Simpson Line near 4716	Tilbury East	Chatham-Kent	Granted: June 19, 2024	0
290-2024	17671 Erieau Road	Erieau	Chatham-Kent	Granted: June 24, 2024	0
291-2024	Centre Side Road at Arnold Creek	Chatham	Chatham-Kent	Granted: July 30, 2024	20
292-2024	Lindsay Road at Everitte Creek Drain	Chatham	Chatham-Kent	Granted: July 29, 2024	19
293-2024	1120 Post Point Lane	Erieau	Chatham-Kent	Granted: July 5, 2024	11
294-2024	24 Detroit Drive	Chatham	Chatham-Kent	Granted: July 5, 2024	8
295-2024	Lighthouse Developments - Gray Line	Aldborough	West Elgin	Granted: July 11, 2024	13
296-2024	Douglas Road between 19116 and 19138	Raleigh	Chatham-Kent	Granted: July 29, 2024	19
297-2024	7136 Talbot Trail	Raleigh	Chatham-Kent	Granted: July 5, 2024	8
298-2024	23528 Industrial Road	Thamesville	Chatham-Kent	Granted: July 4, 2024	0
299-2024	139 Rosewood Crescent	Chatham	Chatham-Kent	Granted: July 4, 2024	0
300-2024	Ptaszynski Branch of the Kersey Drain	Raleigh	Chatham-Kent	Granted: July 29, 2024	26
306-2024	8577 Furnival Road	Port Glasgow	West Elgin	Granted: July 29, 2024	21
307-2024	40 Legacy Lane	Chatham	Chatham-Kent	Granted: July 29, 2024	20
312-2024	1408 Mersea Road 10	Mersea	Leamington	Granted: July 16, 2024	1
313-2024	616 Bloomfield Road	Chatham	Chatham-Kent	Granted: July 29, 2024	11
315-2024	33066 Knights Court	Iona Station	Dutton Dunwich	Granted: July 22, 2024	7
317-2024	50 Wilcox Street	Chatham	Chatham-Kent	Granted: July 22, 2024	12
319-2024	9686 Pinehurst Line	Harwich	Chatham-Kent	Granted: July 30, 2024	5
321-2024	25354 Townline Road	Dover	Chatham-Kent	Granted: July 31, 2024	7
322-2024	19 to 22872 Victoria Street	Thamesville	Chatham-Kent	Granted: July 24, 2024	1
323-2024	29240 to 29338 Jane Road	Thamesville	Chatham-Kent	Granted: July 25, 2024	1
324-2024	14139 Base Road to 29099 Zone Road 4	Thamesville	Chatham-Kent	Granted: July 25, 2024	1
325-2024	21143 Muncey Road	Caradoc	Strathroy-Caradoc	Granted: July 24, 2024	7
336-2024	18366 Lagonda Crescent	Rondeau Bay Estates	Chatham-Kent	Granted: July 30, 2024	6
337-2024	5 Wood Street	Shrewsbury	Chatham-Kent	Granted: July 30, 2024	1
338-2024	56 Creek Road	Chatham	Chatham-Kent	Granted: July 31, 2024	0
339-2024	21824 Communication Road (401 Ramp)	Kent Centre	Chatham-Kent	Granted: July 31, 2024	0
340-2024	9355 Pinehurst Line	Kent Centre	Chatham-Kent	Granted: July 31, 2024	0
341-2024	20275 Communication Road	Blenheim	Chatham-Kent	Granted: July 31, 2024	0
342-2024	21659 Communication Road	Kent Centre	Chatham-Kent	Granted: July 31, 2024	0

O.Reg. 41/24 Permit Applications
(Applications Processed in June and July 2024)

B.D. 08/22/2024

App No.	Location	Community / Township	Municipality	Decision	Processing Time (days)
343-2024	21815 Communication Road	Kent Centre	Chatham-Kent	Granted: July 31, 2024	0
344-2024	21915 Communication Road	Kent Centre	Chatham-Kent	Granted: July 31, 2024	0

10.4) Conservation Lands

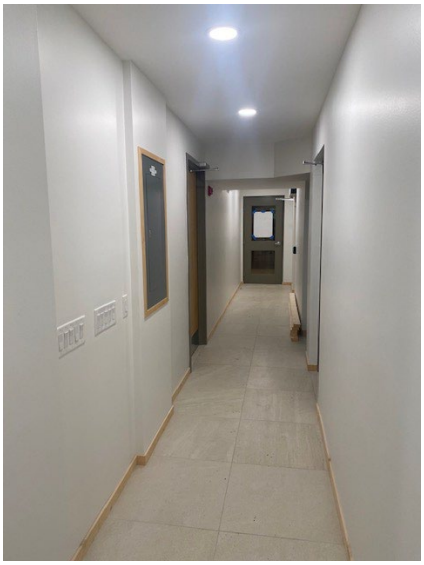
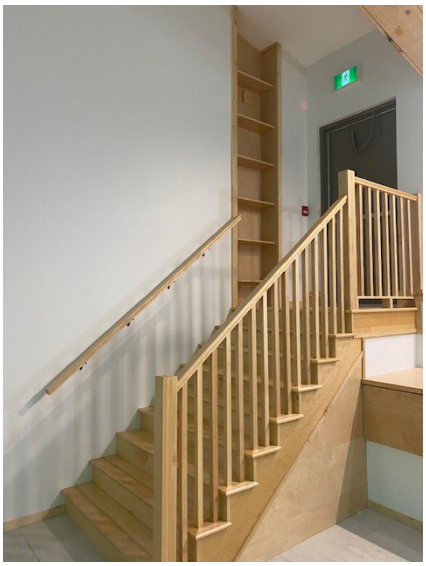
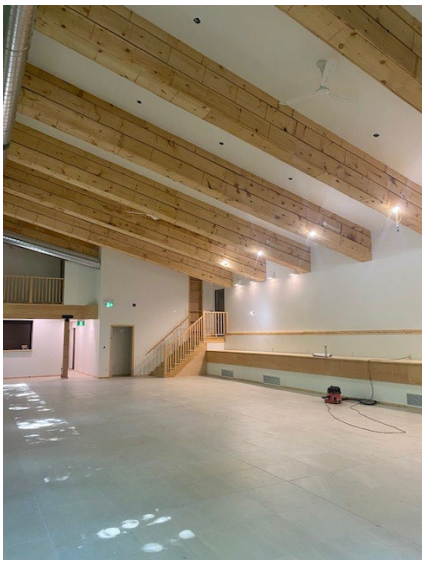
10.4.1) Conservation Areas

Longwoods Road Conservation Area

The Longwoods Road Resource Centre has been under major renovation and constructions since October 2023, the resource centre is at substantial completion and currently in the holdback period of the contract for the renovations of phase 1 construction with Tradition. The next step within Phase 1 is to work on the completion of Fire Reservoir/ Dry Hydrant Installation, Septic upgrade and transportation connections. Overall the original building has received new furnaces, windows, doors and life safety system; while the new build consisted of a commercial kitchen, accessible bathroom, utility storage, furnace room and a grand hall for events, education and display. The remaining portions are the septic, fire reservoir, drainage, pathway, driveway and external site grading. The next phase will take place in the original building and consist of two new bathrooms upgrade, the middle theater room turning into a gallery, furnishings, electrical upgrades and an elevator.



Figures above: Commercial Kitchen, Servicing Area, Fire Reservoir pit preparation

Figures above: Hallway, Hall emergency exit and display case, the event space

Figure above: The Hall with light fixtures.

6th Street Dam

Every so often the Lands staff need to attend the 6th Street Dam to clear debris that gathers during rainfall events. This maintenance is required in order to ensure the dam is in working order should flooding events occur. Staff cleared a substantial amount of debris that had built up at the dam prior to Hurricane Beryl moving through in the event the Authority was required to operate the structure. The debris can be large and very tedious to break up, this is no easy task and requires several staff to work together to direct the staff in the boat, on what can be visually seen from above which might not be visible from the boat. Often times staff on land will help from the edge with tying onto debris and pulling it away to help redirect the debris.

6th St. Dam- Nolan and Nicole in the boat clearing debris.

Camping

Camping season is in full swing, E.M Warwick, Big Bend and C.M Wilson are moving through the season. The inclement weather of heavy rainfalls and storm frequency is keeping the Lands Staff on their toes as they are always striving to keep the campgrounds clean and functional. Our camp Rangers at CM Wilson have been creative this summer with refreshing the horseshoe boxes and creating a craft event for the campers over the August Long Weekend.

Rental Houses

The LTVCA has 4 rental houses and staff are moving through asset management of those properties. Staff are working together to put together a comprehensive list of the properties and the assets located at each location. The rental houses at CM Wilson, Longwoods, Millstream and Lighthouse play a key role in that asset management document. Two of the rental houses have long standing residents while Livermore has new residents as of June of 2024 and Lighthouse is being cleaned and prepped for new residents in the coming months.

Team Building and Donations

A handful of staff from the LTVCA had a wonderful opportunity to participate in a Golf Tournament that was hosted by Middlesex Centre, "The Middlesex Centre Wardens Charity Golf Tournament" where the Ska-Nah-Doht Village and Museum/ Lower Thames Valley Foundation were featured as a recipient of the charity fundraising. The Charity Fundraiser featured 3 select organizations to honour, the event which raised $33,300; resulting in the Foundation receiving $11,100. Middlesex Centre reached out to the LTVCA Lands Department about our participation as a recipient and in order to honour that gesture the staff participated in the event itself. Four staff attended the golf tournament where we had the honour to represent our organization, the foundation and our watershed.

Figures above: Mark Peacock, Genevieve Champagne, Warden Aina DeViet, Dan McKillop accepting the donation from Middlesex County.

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) General Update

Most folks are taking vacations and using up extra lieu time accumulated from the spring planting season. Projects continue to trickle in, and we are lining up things for 2025 while completing 2024 wetlands. Rains have continued to make the tree growing season a success with regular and adequate moisture.

New partnerships are being developed through Trout Unlimited Canada and Chatham-Kent Drainage to attend to the McGregor Creek bank failures occurring through many farms East of Chatham. This is in addition to the many Urban programs and events we are doing for the McGregor Creek.

The Enbridge Shoreline project is in its 3rd growing season and is showing results. At least 8m of beach at the toe of the bluff along Rose Beach Line, Morpeth has been reclaimed with the establishment of native grasses and forbes. There have been two additional prairie plantings with landowners on top of the bluff and another municipal right of way tree planting to aid in these shoreline efforts to mitigate erosion.

Rose Beach Line reclamation at toe of bluff 2024

Top of bluff project - Wilson Prairie; Hill Rd. 2024

Sarah Riley is finishing up as our Reforestation Maintenance Assistant. She was able to secure a weekend Ranger position under Mike Shore at Longwoods going forward.

Likewise, Madelaine Boucher will complete her U of Western Co-Op placement as the ALUS ELGIN ASSISTANT and has been extended by the Participant Advisory Committee to the end of the year.
Both have provided excellent service to our Conservation Services Programming this summer term. Thank you!

Eastern District: Our Eastern District Stewardship Technician, Tyler Thornton is currently communicating and following up with local landowners who consistently reach out and are inquiring about future projects to be conducted on their properties. All reporting and post-planting quality assessments for his corresponding tree planting projects that were funded by Trees Canada have been completed and submitted accordingly. Tyler is currently in communications with Trees Canada regarding a rewarded "Community Tree Grant" program that will be used to facilitate the planting of 160 large stock trees, as street planting (right of way) trees for 160 residential lots within a subdivision in the Talbotville Settlement Area, which resides in the Kettle Creek district. The Trees are to be planted in the month of September and the project will be conducted in liaison with the municipality of Southwold, and Kettle Creek Conservation Authority. Documentation to fulfill the LTVCA regulatory needs in regard to constructing wetlands in regulated areas is currently being written. Tyler is working in liaison with contractors and local residents to construct wetlands for the 2024 fall season, where he is in the process to complete 5 wetlands (total of 2.6 acres) in the eastern district this fall. Tyler is planning an outreach event that will be conducted at the United Church in Dutton on August 11th and is aimed to inform participating residents about the LTVCAs goals and objectives, brief history, invasive plant species in Ontario, and stewardship programs that the LTVCA provides that residents would be able to participate in on their respective properties. Two tall grass prairie & forbs mix grassland projects (total of 4 acres) are scheduled to be completed in early fall. Two seed collecting webinars, which were presented by the Forest Gene Conservation Association were attended on July 5th & July 12th respectively, to further develop knowledge in seed collecting practices and techniques to gather viable seed in the future for our partnering nurseries. Forest Ontario hosted a post tree planting seminar in Barrie at Liberty North, which was also attended, and valuable insight was provided regarding what to expect from our nurseries for upcoming 2025 season.

Kelsey Dramnitzke Tree Planting (1.7 acres) & Wetland (0.5 acres)

Tara Hadler Tree Planting (2 acres) & Tall Grass Prairie/Forbs Grassland (1 acre)

Wetlands and Ducks Unlimited Canada Partnership

Another wetland was completed during a dry period at the end of June. This project consisted of 3 wetland cells approximately 0.33 acres each totalling close to 1 acre of new wetland habitat. This project area has a high restoration value as it sits between two large, wooded areas. Restoring this area creates a habitat corridor connecting nearly 1.5 kms of natural area and 105 acres in total.

Two more wetland projects are currently under construction, with many more being finalized and coordinating construction times.

Interim reporting for WCPP has been completed and we are on track on implementing our target numbers. Work is being done on solidifying the remaining projects and making sure everything is good to go for construction to begin once the crops are off.

Completed Wetland Projects:

Drury Line Wetland #1 – 0.3 acres

Drury Line Wetland #2 – 0.3 acres

Drury Line Wetland #3 – 0.3 acres

ALUS Middlesex

ALUS Middlesex is nearing the end of its project establishment efforts for the current field season, having restored 80 acres since the beginning of May. These projects include the restoration of tallgrass prairie habitat, tree planting and wetland projects. Over the coming months, the team will complete a few additional wetland projects while fulfilling annual monitoring requirements. Monitoring and Research Co-op Student, Lela Burt has reported numerous wildlife, amphibian and bird sightings while conducting site monitoring, including the threatened pollinator species, the Monarch butterfly.

Figure 1: The endangered Monarch butterfly was captured by summer student Lela Burt, at a monitoring site earlier this season.

For participants enrolled in the delayed hay program, July 15th marked the first cut of their hay fields, a time when most bobolink nestlings are likely to have fledged. Meadows and hayfields serve as crucial breeding habitats for this at-risk migratory bird species, and mowing too early in the season poses a threat to their young. To date, ALUS Middlesex has enrolled over 200 acres in delayed hay projects and extends sincere gratitude to these participants for their ongoing commitment to protecting species-at-risk populations.

Figure 2: By incentivizing delayed hay cutting, the ALUS program aims to improve the nesting success of grassland birds such as the threatened Bobolink.

The team has increasingly shifted focus to their upcoming outreach initiatives, aimed at engaging landowners for the 2025 field season. Outreach activities will begin with an Appreciation Event scheduled for August 7th, recognizing and thanking their funding agencies and valued partners for their steadfast support of environmental stewardship. Keynote speakers will include ALUS CEO Bryan Gilvesy and our partners from TD Friends of the Environment Foundation. September 10 -12th, ALUS Middlesex will participate in Canada's Outdoor Farm Show for the first time. Held at the Discovery Farm in Woodstock, this event has drawn over 300 attendees and more than 700 exhibitors for over 30 years, featuring 100+ acres of live demonstrations. ALUS Middlesex is excited to showcase our work and connect with new and prospective participants.

ALUS Elgin

As of July 2024, ALUS Elgin has one new wetland established, with expressions of interest from landowners for eight others, totalling to 8.25 potential acres of restored habitat. These are primarily budgeted to be funded by the MECP WCPP grant. These wetlands have also been an excellent opportunity to collaborate with various partners including the Elgin Clean Water Program, and Ducks Unlimited. Other funding is also being pursued currently, primarily the Environment and Climate Change Canada Precision Conservation grant through ALUS Canada.

Figure 1. Perl wetland and surrounding grassland, established in spring of 2024 in partnership with Elgin Clean Water Program.

ALUS Elgin also recently orchestrated an outreach event in which a class of 25 grade five/six elementary school students from Eva Circe-Cote French Immersion Public School came to an ALUS Elgin participant's property in Sparta, ON., and learned about the importance of/partaking in the planting of various grassland plants. We ran a similar event previously, in which the same students assisted with planting wetland plant species on the same property. Through this experience,

and strong community engagement with school staff, the children were able to garner their learning to make in-class presentations on the importance of the different plant species used.

Figure 2. Established ALUS Elgin wetland in Sparta, ON., around which Eva Circe-Cote French Immersion students took part in a plug planting event.

In July we completed the interim reports for ALUS Canada and our funders, which served as a progress update on projects planned and completed, as well as a review of our budget thus far. We are on track with hitting our wetland targets but fell below for trees. This report has allowed us to make informed decisions about work completed moving forward.

We had eleven participants eligible for renewal this year and have secured funding to continue funding another five years of annual payments for these, using MECP grassland funding as well as Environment and Climate Change Canada grants. These contracts total to 75.4 acres of wetland, tree, modified agriculture, and grassland projects. They have proven to be successful projects, and these participants are continuing to send in their desire to continue their contract with ALUS Elgin.

ALUS Chatham-Kent

Interim reports for funders, and for ALUS Canada, have been submitted & finalized. We used our funding effectively to ensure we hit all our targets & to fund double the tree projects we received funding for.

ALUS CK's very first participants are now eligible to renew their Conservation Agreements. We have secured enough funding from Environment and Climate Change Canada's 'Carolinian Zone Priority Place' to cover an additional five years of annual payments for fifteen participants with thirty-three projects. The 33 projects include eight tree projects over thirteen acres, four wetlands totaling twelve acres, sixteen acres of grasslands (buffers and wetland riparian habitat), and 5 acres of delayed haying (to protect endangered birds such as the Bobolink). These projects produce ecological benefits for everyone by sequestering carbon, reducing phosphorus runoff and erosion, providing flood & drought mitigation, and by increasing climate resiliency, biodiversity and connectivity between crucial habitats for species at risk.

In June and July we: planted a 2.5 acre pollinator patch in Wheatley; seeded several new wetlands in South Kent with tallgrass prairie & oats; assisted farmers in identifying beneficial aquatic native plants on their lands; participated in a seed collection webinar (the more tree seeds we can gather regionally, the more regionally-adapted trees the nurseries can grow for us); conducted a site visit to assess a portion of a farm struggling to be productive & experiencing erosion in the field & along a drain; and, assessed a new tree project with a responsible landowner, who flagged out all of the almost 2,000 trees we planted in May!

ALUS Chatham-Kent didn't have a PAC meeting in June or July. Seventy percent of our PAC are farmers, and the summer months are too busy to get enough farmers together indoors. Despite this, we found a way to connect and make the

decision that instead of planning a tour by ourselves, and to give the tour the best chance at success, we will collaborate with the Agriculture department of the LTVCA for their Cultivating Conservation Tour. This year's Cultivating Conservation Tour is on September 11th & will showcase three ALUS Chatham-Kent projects, in honour of our 5th birthday. We also received a bit of extra funding for outreach, to print our newly designed postcard, and to purchase T-shirts & hats for our tour hosts, ALUS participants and for the PAC.

Figure 1: When you look at things from a different angle, you never know what you might see.

Urban Stewardship

Over the summer months, the Urban Stewardship program has engaged community groups in several impactful activities to promote environmental stewardship through our urban areas. To start, we collaborated with elementary students from Chatham Christian School to plant a pollinator garden at their school to enhance their outdoor classroom area. This initiative aimed to educate young students about the importance of pollinators and biodiversity, creating a shared space for both wildlife and hands-on learning opportunities.

We also conducted a double-header invasive removal event with students from UCC High School. The first group focused on removing woody invasives from the Thames Grove tallgrass prairie, while the second group targeted herbaceous invasives from the Brown Drain in Chatham. These efforts were crucial in maintaining the health of these ecosystems and preventing the spread of invasive species.

Additionally, we planted a pollinator garden at C.M. Wilson Conservation Area with volunteers from the Woodbridge factory, further expanding our network of pollinator-friendly habitats. We also teamed up with volunteers from Enbridge through their Fueling Futures program to enhance the tall grass prairie at Henry Smyth Park in Chatham. The volunteers added a new section of native species to the existing garden, contributing to the preservation and growth of this important ecosystem.

To support our urban stewardship program, we held a rain barrel sale in partnership with rainbarrel.ca, successfully selling 40 barrels. This is a part of a larger effort to promote water conservation and sustainable backyard initiatives. The proceeds from this sale will be reinvested into future urban stewardship initiatives and volunteer events.

July was wrapped up with two back-to-back invasive removal volunteer events with Community Living Chatham, where students helped remove woody invasives from the tall grass prairie at Thames Grove Conservation Area. This group has been tackling this area for the past 3 years, fostering a great sense of stewardship that has been rewarded with very tangible results.

With several more volunteer events lined up for the rest of the summer and fall, we look forward to growing our impact on the urban areas of the LTVCA watershed in partnership with its community members.

10.5.2) Phosphorus Reduction Initiatives

Agricultural Monitoring

In collaboration with the University of Waterloo's Biogeochemistry department, a longitudinal water sampling study was conducted in the Jeannettes Creek subwatershed. The LTVCA Agricultural Program Coordinator and Master's students from the University of Waterloo worked together to gather water quality and quantity data. In June, water samples were collected from 11 different locations, with plans for additional sampling in the fall to continue monitoring and analysis. This study aims to assess nutrient levels and the impact of agricultural outputs on different subwatersheds in Southern Ontario.

On-Farm Applied Research & Monitoring (ONFARM) Program

The ONFARM program that is developed by the Ontario Ministry of Agriculture, Food Affairs and is delivered by the Ontario Soil and Crop Improvement Association has been busy conducting edge-of-field crop research during the summer growing season. Project activities are aimed at determining the effectiveness of Best Management Practices (BMPs). LTVCA staff have been actively involved in soil and water sampling, as well as utilizing drone and SWAT mapping technologies. At the edge-of-field sites, soil sampling included: core samples, plant counts, residue counts, and bulk density assessments. Notably, at the Fairview edge-of-field site, additional work encompassed Soil Water And Topography (SWAT) mapping and pedology sampling. A pedologist who works with the Soil Resource Group examined various soil aspects, such as physical and chemical properties, the role of soil organisms, soil unit description and mapping, and the origin and formation of soils.

The LTVCA water monitoring staff have also made headway for the ONFARM project through diligently inputting historical water quantity data into the WISKI Database. WISKI was developed in partnership with water agency authorities, engineers, and hydrologists. The WISKI system combines advanced tools for managing, collecting, editing, storing, and presenting time series data. Although this process is time-consuming, it will greatly enhance data analysis and reporting for the LTVCA. In the future months water quality data will also be input into the WISKI system.

In July, discussions took place at a meeting with other agricultural researchers at the University of Guelph regarding Dr. Wanhong Yang's Integrated Modelling for Watershed Evaluation of Beneficial Management Practices (IMWEBs) project. This study aimed to assess the beneficial impacts of current and future natural infrastructure projects established by LTVCA farmers in the Jeannettes and McGregor Creek subwatersheds. The IMWEBs hydrological model, which is both science-based and data-driven, evaluates changes in water quantity and quality and measures the impact of these projects on carbon sequestration and biodiversity. This model offers valuable insights into enhancing the health of the Lake Erie basin through environmental restoration. Other conservation authorities and stakeholders shared thoughts on how the development model can be put to use for future projects and research purposes.

10.5.3) Aquatic Species at Risk (SAR)

Two Navigating the Waters of Fish Identification educational factsheets are being developed. The first will help fishers identify redhorse fish species, a number of which are SAR, from similar sucker and carp species. The second will help fishers identify four native lamprey species (Silver, Chestnut, Northern Brook and American Brook Lamprey) from the non-native and parasitic Sea Lamprey. These factsheets will encourage fishers to return SAR, as well as all native species, back to the water as quickly as possible.

Updates to the final Habitat Stewardship Program (HSP) and Canada Nature Fund for Aquatic SAR (CNFASAR) reports have been submitted to Fisheries and Oceans Canada and cash flow statements for 2024/25 have been submitted. Temperature and dissolved oxygen data loggers continue to monitor environmental conditions experienced by fish and mussel SAR in the Thames River and Baptiste Creek. Data logger deployment instructions have been updated.

Terrestrial Species at Risk

Alexander Dabski was hired on July 2nd for eight weeks as a Wildlife Technician through the federal *Canada Summer Jobs* program. Song Meter Mini acoustic recording units were retrieved from Rondeau Bay Marshes, Stirling, McGeachy Pond and C. M. Wilson Conservation Areas. Xander is now in the process of analysing the data to determine the breeding birds and amphibians present at these conservation areas.

Anabat Swift detectors remain deployed to record bat activity into the fall. Unfortunately, the detector installed at the Rondeau Bay Marshes Conservation Area was tampered with. Its microphone wire was cut and the battery lead damaged; an estimated $150 US in damage to the equipment.

Survey123 electronic data forms are being developed to help collect Anabat Swift and Song Meter Mini field data, saving time and reducing the potential for transcription errors from hard copy field sheets.

10.6) Communications, Education and Outreach

10.6.1) Social Media

As of July 30, 2024, the Lower Thames Valley Conservation Authority's Facebook page has 3,732 Followers, the Instagram page for the Authority has 1,319 Followers, and the Authority has 1,260 followers on X (formerly Twitter).

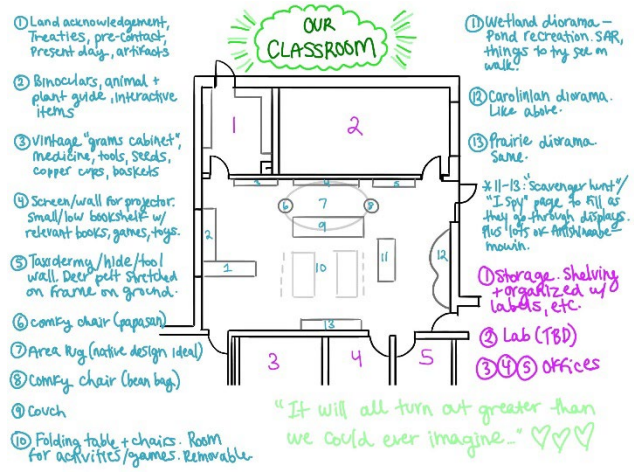
10.6.2) Communications and Outreach

The Communications Specialist has begun looking into options for updates to the LTVCA website. An initial presentation has been made to the LTVCA managers. In the meantime, the Curator / Team Lead Communications & Education continues to update the layout and content of the current website with hopes of improving functionality.

10.6.3) Education Programming

C.M. Wilson Learning Centre

The team at C.M. Wilson Learning Centre was joined by a new Indigenous Community Educator, Mariah Alexander. They have been working on setting up the classroom using this blueprint and vision board. A list of items to be procured is being created. The Curator / Team Lead Communications & Education has provided some materials from Ska-Nah-Doht Museum as a start.



To guide this work the Indigenous Community Educator has been developing indigenous education programming for the space. They have been, and will continue to join the Community Educator and Curator at Longwoods for programs to see which ones can be adapted to C.M. Wilson, learn content for sharing at Longwoods, as well as inspire new ideas.

With each programming idea, the Indigenous Community Education has begun creating an outline of the program that includes: a description of the activity, materials needed to run it, what the purpose of it is in regards to conservation, how it relates to the strategic plan objectives of the LTVCA, as well as how it relates to Ontario curriculum requirements. They have also begun creating a wildlife colouring book featuring species at C.M. Wilson Conservation Area, with the hope that this book can connect people to local wildlife, bring attention to the Learning Centre, and supply us with a bit of income for future programming.

Education programs continue to be promoted in the Western part of the watershed. Conservation programming was offered to a summer camp at St. Anne's School in Blenheim. The students became familiar with species at risk, identified benthic invertebrates and their role indicating water quality, and explored food chains.

Chatham-Kent and Lambton Children's Water Festival

The new steering committee for the Water Festival have begun implementing plans for the 2024 festival. The Indigenous Community Educator at C.M. Wilson will be taking on a staff liaison role with the committee. The Festival will continue to be supported by the St. Clair Region Conservation Authority, as well as the Lambton Kent District and St. Clair Catholic District School Boards.

Longwoods Road Conservation Area / Ska-Nah-Doht Village and Museum

The Community Educator and Curator / Team Lead Communications and Education continue to see community groups for programming through July and August. It is estimated that close to 400 people will conduct programming originating from Longwoods throughout the summer.

In addition to pre-booked programs, many local groups have made use of the space at Longwoods for self-guided programs over the last few weeks.

The Community Educator will be participating in Hands-On Heritage Day at the Museum of Ontario Archaeology in London on August 17, 2024.

10.6.4) Ska-Nah-Doht Village and Museum

As of July 30, 2024 the Ska-Nah-Doht Village's Facebook page has 3,927 Followers. The Instagram page for the Village has 675 Followers.

Filming at Ska-Nah-Doht

A number of film companies have expressed interest in using Ska-Nah-Doht Village and Museum spaces for upcoming shoots. Location Scouts from the varied productions will be visiting with the Curator over the coming weeks to see if our spaces can meet their needs.

CMOG

The Community Museum Operating Grant application for 2024 was submitted in June, including the Emergency Preparedness Plan that was the 2024 application requirement. We await follow-up questions and funding confirmation. The Curator will begin working on a Digitization Plan, the 2025 requirement, during the summer months. CMOG is an annual grant that provides the museum with $22 992 in operational support.

Emergency Preparedness Plan

Copies of the Emergency Preparedness Plan for Ska-Nah-Doht have been put in a centralized location at the main office in Chatham as well as Burwell House at Longwoods Road Conservation Area. The Curator is gathering some final items to the emergency preparedness kit.

Fundraising for the Indigenous Community Education Centre and Ska-Nah-Doht Museum Revitalization

The Curator continue to work with the Lower Thames Valley Conservation Foundation towards fundraising for the extension and revitalizations taking place at SND Museum.

LTVCA staff participated in the Middlesex County Warden's Charity Golf Tournament on June 18th. The Lower Thames Valley Conservation Foundation received $11 000 towards their fundraising goal for the Indigenous Community Education Centre.

Gallery Updates

As completion of the extension approaches the Curator has begun working on new exhibit plans. Given further space changes in the coming months exhibits will continue to transition.

In order to help animate the new spaces at Ska-Nah-Doht Museum the Curator / Team Lead Communications & Education will be meeting with the Executive Director and Exhibit & Collections Manager to see what items may be able to be rehomed with us as they complete their move from 21 Wharncliffe Road to 100 Kellogg's Lane.

Community Survey

As part of this endeavour, and SND's current 5-year strategic plan, a community survey is in circulation. Just over 50 responses have been received as of July 30, 2024. If you have not completed the survey please take the time to do so.

10.7) Ska-Nah-Doht Advisory Committee Minutes – May 31, 2024

MINUTES

May 31, 2024

The meeting of the Ska-Nah-Doht Advisory Committee was held in person and via zoom at 6:00 P.M. on Friday, May 31, 2024. The following members were in attendance: D. Fairbairn, B. Bruinink, R. Doane, C. Parker, K. Loveland, M. Peacock. Also, in attendance: A. Klages.

Note: D. Fallon has retired from the Advisory Committee. We thank him for his years of service.

1. Minutes of the Last Meeting

SND-2024-9 D. Fairbairn – K. Loveland

Moved that the minutes of the March 21, 2024 meeting be approved.

CARRIED

2. Business for Approval

2.1) Emergency Preparedness Plan

The committee discussed the contents of the plan and approval process for the document. The committee provided approval of the plan, pending further approval by the LTVCA Health and Safety Committee.

Note: Health and Safety Committee provided their approval of the plan on June 5, 2024.

SND-2024-10 C. Parker – R. Doane

Moved that the Emergency Preparedness Plan be approved by the committee; full approval pending Health and Safety approval, provided June 5, 2024.

CARRIED

3. Business for Information

3.1) Staff Update

The Curator has taken on additional administrative roles while Administrative Assistant on leave.

Community Educator attending professional development opportunity.

Weekend Visitor Services staff member has been brought on for the summer months. Additional Visitor Services support will be brought on for the month of June.

3.2) Grant and Funding Updates

The Curator is working on the CMOG application, due the end of June. During the summer they will begin work on the Digitization Plan.

No youth summer positions were received through Canada Summer Jobs to the museum for summer 2024. Assessment of staff capabilities for summer events and programming will take place as a result.

The Curator continues to provide grant writing support to the LTVCF in relation to the Indigenous Community Learning Centre.

3.3) Education Programs

An update on pre-booked programming and indoor museum statistics from 2023 was provided.

Education programming remains at capacity for the spring of 2024. Educator support was provided at the Thames Valley District School Board and London District Catholic School Board Heritage Fair at Fanshawe Pioneer Village and the St. Thomas-Elgin Water Festival.

A meeting will be scheduled with the London District Catholic School Board as a follow-up regarding concerns about student attendance at the Battle of Longwoods Education Day. The Curator will be working with UTMRS to contact local Indigenous organizations and educators who

may wish to support Education Day and the Public event to fill that information need. C. Parker suggested contacting Bill Hill, a Mohawk educator who works with both boards.

A correction to the numbers provided in the Agenda for Battle of Longwoods Education Day was provided: 494 students, 44 adults.

Bookings are being taking for summer programs.

3.4) Events and Workshops

Limited event and timed programs may be possible during the summer of 2024 because of current staffing levels. Twilight Tuesdays will not run this summer in favour of other.

Artifact Day, hosted with the support of the Ontario Archaeological Society London Chapter, will be hosted on July 7, 2024.

3.5) Update on the Indigenous Education Centre

Most work is now complete at the extension. The kitchen, painting, trim, and final touches remain. Septic and parking lots will follow after completion of indoor work.

The Curator will begin working on new and updated exhibit layouts and content for the museum and new space in July.

The construction process for the LULA lift, has been initiated.

SND-2024-11 K. Loveland – D. Fairbairn

Moved that item 3.1 – 3.5 be received for information.

CARRIED

4. Other Business

5. Next Meeting Date

September 19, 2024

November 14 or 28, 2024?

March 20, 2025

6. Adjournment

SND-2024-12 D. Fairbairn – C. Parker

Moved that the meeting be adjourned.

CARRIED

Chair

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

10.8) Wheatley Two Creeks Association Meeting Minutes – June 6, 2024

WHEATLEY TWO CREEKS ASSOCIATION

General meeting held on June 6 2024 at Two Creeks

Attendence: Rick Taves, Mike Diesbourg, Ken Hatt, Gerry Soulliere, Steve Logan, Lee & Linda Pearce, Lorna Bell,Bruce & Marj Jackson, Joe Pinsonneault, Vicki & Erin Haley, Roger Dundas.

Agenda: Moved by Lorna, sec. by Rick agenda be accepted as given (Carried).

Minutes: Moved by Phil, sec. by Joe minutes be accepted as read (Carried).

Memorial Groves: A fallen Black Locust needs to be cut up and removed. The grass has been cut once, Gerry will ask Kevin to cut it closer to the weekend concert if possible.

Prop. & Equip.: We are waiting for a call from the contractor on when he will remove the Willow culvert. We will receive a cheque for $2000.00 from the Windmill Fund by the end of June. The Fish Fest will be using our facility during the festival. We are also waiting on the engineer's report so that the posts in the pavilion can be installed permanently. Steve from the Bike club proposed that they would build a Temporary bridge over the Willow site once the culvert is removed. Rick moved, Roger sec. to accept his proposal. (Carried). 1 plug in the large pavilion needs replacing.

Concerts: We have received $1925.00 for our buttons so far this year. Slim Pickerel will play the second week.

Financial Report: Submitted by Roger. Account balance as of April 30 2024 was $51,370.40. Account balance as of May 31 2024 was $52,140.08. Moved by Roger sec. by Phil report be accepted as given. (Carried).

Correspondence: None.

Old Business: None.

New Business: None.

Adjournment: Roger moved for adjourment at 6:52pm.

Phil Humphries, secretary.

11. Correspondence

11.1) Will a $1-billion flooding bill finally make the GTA take stormwater seriously?

Shoring up our cities to withstand the impacts of extreme weather may not be the most exciting proposal for city budgets, but flooding in the Greater Toronto Area this week is proof that it is critical

By **Fatima Syed**
July 19, 2024 4 min. read

The Don Valley Parkway was partially submerged during heavy rains in Toronto on July 16. The cost of this latest flood will be massive for residents and businesses — much of the damage was predictable, and might have been reduced if governments had followed years of expert advice.
Photo: Arlyn McAdorey / The Canadian Press

It looked like a river was rushing down one of the oldest roads in Mississauga because, well, that's exactly what was happening. After record-breaking rainfall, Little Etobicoke Creek burst through its banks and flooded Dundas Street, a major artery lined with homeless shelters, long-term care homes and countless businesses.

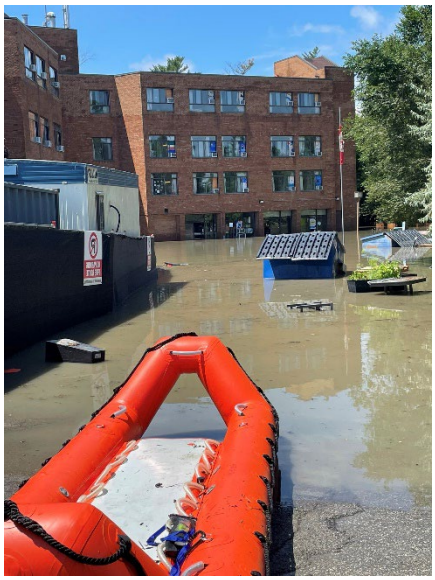
That was on July 8, 2013.

This past June, over a decade later, the city released an environmental study of the area after that massive flood, with one clear recommendation: strengthen the banks to prevent flooding.

But the recommendation came too late.

This week, on July 16, Little Etobicoke Creek burst its banks again during another record-breaking storm. Floodwaters surged across the parking lot of the Tyndall Seniors Village — built on the creek's banks in 1976 — turning cars and garbage bins into fast-moving aquatic hazards that smashed through the first-floor windows of the long-term care facility. The water inside the building was nearly two metres deep by the time first responders arrived. Over 12 hours, 114 senior residents were moved out on a dinghy and relocated to two hotels and two other long-term-care facilities

indefinitely, the Toronto Star reports. A new facility was already planned nearby, on higher ground, but has yet to be built.



First responders rescue seniors from a Mississauga long-term care facility that was heavily flooded during the July 16 torrential downpour. Photo: Mississauga Fire / X

Across the Greater Toronto Area this week, the results of a torrential downpour — some parts of Ontario saw more than 121 millimetres of rain in just three hours — left destruction and gaping jaws in its wake. Drivers abandoned their cars on submerged roadways and waded to safety. A major food bank pleaded for help to save its rations in a flooded warehouse. Three workers in Halton Hills were trapped in a tunnel rapidly filling with floodwater; they were rescued, thankfully.

If you flicked past them on TV or social media, you might mistake these moments for scenes from a Hollywood disaster movie rather than reporting from a major Canadian city. But to describe them as cinematic is false, because they reflect a recurring and terrifying reality for the people impacted. And acknowledging the lessons of our reality is the only way we'll ever learn from them.

Don't build on floodplains.

Create more green urban spaces to help soak up water.

Expand drainage systems to handle bigger storms.

Reinforce the shores of creeks, rivers and lakes so they don't spill into surrounding areas.

Beef up emergency response funds.

Instead, southern Ontario cities are still dominated by hard surfaces that leave rainfall nowhere to go but into our buildings and lives. Our cities are not designed to withstand extreme weather events and we've been slow to adapt to the realities of an increasingly volatile planet.

We know we need to. After the 2013 flood, three levels of government pledged efforts to mitigate future flood-caused damage. But in the tradeoff of political decision-making, these expensive and deeply unsexy projects are rarely pushed through quickly.

In 2017, former Toronto Mayor John Tory famously refused to support a stormwater charge that could have supported flood prevention. "It's better not to try to unscramble an egg," he said of a proposal to charge property owners a share

of the costs to convert hard surfaces into green spaces that absorb water. Toronto City Council shelved a similar proposal again this year.

The bill for Toronto's constant punting of the need to deal with stormwater has come due this week. Countless homeowners with flooded basements (including Ontario Premier Doug Ford himself), car dealerships with flooded lots and businesses with drowned warehouses will be filing for insurance support expected to balloon to more than one billion dollars — much more than the 2013 floods.
That bill comes as insurance companies across Canada rethink the risk of flooding. In March, Desjardins Group said it will no longer offer new mortgages or insurance in high-risk flood zones.

As the Doug Ford government pushes development through green spaces and weakens conservation authorities, we're left with a province dangerously exposed to extreme weather.

Toronto City Hall was leaking hours before a flood warning was issued. The Don Valley Parkway — the only expressway connecting downtown Toronto to the north of the city — was quickly submerged, yet stayed open until drivers were already stranded in the water. An overwhelmed sewer system left three Toronto water treatment facilities with no choice but to discharge 1.3 billion litres of partially treated sewage into Lake Ontario.

Even the buildings and spaces designed to withstand extreme floods couldn't. Toronto's Evergreen Brickworks was unscathed during the 2013 floods thanks to a robust preparation and mitigation plan. To protect the repurposed site, which is on a flood plain, it was constructed with permeable materials, green spaces and 20,000-litre rain barrels. And still, it's underwater and closed indefinitely.

Over my five years as a climate reporter, I've tried to convey that global warming and its results aren't an abstract phenomenon. From buildings and housing to health, wildlife and the economy, the climate emergency will impact every aspect of our lives — as it clearly did this week in southern Ontario. And we need to reckon with these impacts, which unfortunately aren't new.

In 1954, Hurricane Hazel dropped 111 millimetres of rain in 12 hours on Toronto and 81 people were killed. It was one of Ontario's worst natural disasters to date. The response then was to usher in flood-prevention policies — such as protected green spaces and more careful development practices — and conservation authorities to enact them. Meteorologists have used the term "100-year storm" to describe an event like Hurricane Hazel, which means there is a one per cent chance of it occurring in any given year. Since 2013, the Greater Toronto Area has had three, including this week.

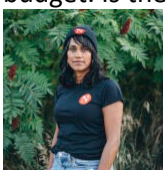
Still, many governments have delayed their duty to reduce risk and mitigate the effects of such storms. But it is possible to act quickly and effectively.

After devastating floods in 2004 caused more than $100 million in damage, the City of Peterborough earmarked up to $5 million annually to implement a flood-reduction program that has seen buildings and sewer systems upgraded to handle extreme rainfall. It has meant that recent storms were less destructive, and less expensive.

The catastrophic floods of July 16 are a reminder that the Greater Toronto Area is still profoundly unprepared for the future that climate change will bring. But the storms of that future are already gathering on the horizon — bigger, wetter and getting closer every day.

11.2) Who should pay when development causes floods?

Ontario is gearing up to build intensely, while the federal government wants to cut its ballooning disaster assistance budget. Is the cost of flood recovery being passed on to people without the power to protect themselves?



By Denise Balkissoon - March 4, 2023 20 min. read

Flooding along the north shore of Lake Erie in 2018. Recent changes to Ontario development policy mean that watershed management bodies can no longer review development applications that could impact significant woodlots, valley lands, fish habitat or species at risk — even though many of those concerns are intertwined with flood prevention. Photo: Essex Region Conservation Authority / Flickr

Here's a thing I learned recently: developing a floodplain or wetland doesn't just create new homes at high risk of floods. It also increases the flood risk of existing neighbourhoods, near and not-so-far.

It makes sense when you think about it, I just hadn't before — when spongy wetlands upstream from my house absorb heavy rain or melting snow, they keep that water from rushing down swollen rivers to the shores and sewers near me, perhaps right into my basement. Unpaved floodplains, or the flat areas around waterways, are similar: they go underwater so that everything around them doesn't.

What this means is that brand new neighbourhoods on wetlands or floodplains aren't just a concern for the people who live there, they're a concern for everyone in the area, even the region. So if you live in southern Ontario, you should probably be concerned.
For months now, the provincial government has been making big changes to development processes — changes conservationists say are weakening oversight over flood risk. At the same time, the federal government is working hard to cut its ballooning disaster aid budget, which largely goes to the aftermath of floods. Its plan is to make Canadians more aware of their individual flood risk — and then get them to shoulder more individual responsibility.

Which is a tricky proposition: sure, I spent thousands fixing up my basement knowing full well I live a kilometre away from a river that often spills over in spring. But it's not my choice to pave over land two hours away. A few years from now, water that's no longer absorbed over there could start the chain reaction that fills my river up to the last drop, after which it flows into my house.

Flooding along western Lake Erie in 2018. Windsor-Essex is Ontario's most flood-prone region, with the insurance premiums to prove it.
Photo: Essex Region Conservation Authority / Flickr

My mind has ridden a merry-go-round since I realized just how far the effects of environmentally short-sighted development could reach. It goes like this: it's 2030, there's a giant storm, and my basement fills up after the river overflows. Two big reasons are that the city I live in can't adequately handle stormwater, and a town an hour away built houses on former farmland.

The municipal governments say they can't afford to spend more money on stormwater management or environmental planning because the province eliminated the development charges they once used to fund those things. The provincial government says it killed those fees because federal population targets left no choice but to accelerate housing construction by any means necessary.

And the federal government says I shouldn't be living so close to the river, even if a dramatic increase in low-density development paved over many of the spaces that used to absorb water when I first moved in. The one bit of assistance that the feds will hopefully be able to offer by 2030 is helping me get re-insured, because claiming these damages will raise my premiums, perhaps so high I can't afford them.

At the end of the carousel ride, I land on two questions. First, just who should pay if environmentally unsound development causes floods? Second, have Canadian governments decided the answer to that question is individuals, even if we don't have the information or power to protect ourselves?

Feds plan to make Canadians more aware of flood risk — and more responsible for recovery costs

Right now, no province or territory requires real estate sellers — whether developers or individuals — to provide flood risk information. And if a diligent buyer wanted to know the chance their dream home could go under water, it's difficult to get a clear answer, said Jason Thistlethwaite, an associate professor in the school of environment, enterprise and development at the University of Waterloo. In most of the country, he said, floodmaps are outdated, confusing and hard for non-professionals to find.

Thistlethwaite is associate director of the research group Partners for Action, which aims to bring accessible flood prevention information to the public. A few years ago, it did a study where it "played the role of the average Canadian, trying to find information on flood risk to their property," he said. Finding publicly available maps required "quite a bit of internet sleuthing and detective work," Thistlethwaite said. Of those they found, over 62 per cent failed to meet "very basic criteria."

It's better if you pay, but even on the institutional level, there's no set of flood maps considered the national standard. Researchers, insurers and lenders each buy maps from one of three companies, all of them based outside of Canada, Craig Stewart of the Insurance Bureau of Canada told me.

Canada's bill for disaster relief is skyrocketing. To have homeowners in high-risk areas shoulder some of the cost, the federal government is considering a national flood insurance program, which exists in countries like the U.S.A., the U.K. and France.
Photo: Justin Tang / The Canadian Press

Stewart is the bureau's vice president of climate change and federal issues, and said that because those maps are proprietary, insurers have limits on what information can be shared with potential clients. Some governments purchase the same flood maps, while others make their own. This means that when different organizations discuss risk or mitigation, they could be working off of different information.

This lack of accessible, standardized maps was one of two key problems identified last August by a federal task force on flood insurance and relocation, which Thistlethwaite advised. Led by Public Safety Canada, it included representatives from the B.C. and Ontario governments, the Canada Mortgage and Housing Corporation and the insurance industry, including the Insurance Bureau of Canada.

One of the task force's main goals was to figure out how to cut the federal government's ballooning bill for Disaster Financial Assistance Arrangements, the money it sends to provinces and territories to cope with the aftermath of natural disasters. Since the program was created in 1970, it's paid out over $12 billion. And, as The Globe and Mail reported in November, the pace of eligible disasters keeps speeding up. The most common are storm-related floods.

The lack of flood mapping flows directly into the second key problem the task force dove into in its report: ignorant of their flood risk, a worrying number of homeowners lack adequate flood insurance. Most have decent sewer-back up insurance, said Stewart, but aren't covered for overland floods. That's essentially what it sounds like — when a big storm causes a lake, river or coastline to overflow, sending water over land into your house. "That's the one we're most concerned about," he said.

The mapping problem has an obvious solution: the federal natural resources department is leading a three-year, $63.8 million flood hazard identification and mapping program, a Public Safety Canada spokesperson told The Narwhal in an email. Focused on the country's "higher-risk areas," the program is being done in collaboration with Public Safety and Environment and Climate Change Canada, as well as provinces, territories and Indigenous communities.

Right now, no province or territory requires real estate sellers — whether developers or individuals — to provide flood risk information. A three-year, $63.8 million federal flood hazard identification and mapping program is part of a long-term strategy to make Canadians aware of their flood risk. Photo: Christopher Katsarov Luna / The Narwhal

Public Safety said the federal government intends to build a public portal where this flood data is easy for citizens, smaller governments, researchers and businesses to find and understand. The department didn't include a timeline, but as Stewart expected, funding for the portal was announced in the March federal budget: $15.3 million over three years, beginning in 2023.

Thistlethwaite said this mapping is a monumental task, and long overdue. In England and some American states, he said, it's easy to plop an address into a government website to learn its flood risk. Some foreign sites also prompt users to buy better flood insurance.

Which leads us to the federal government's attempt to solve the second problem: inadequate insurance coverage. Resolving this issue will be complicated. About 20 per cent of homeowners find overland flood insurance inaccessible, said Stewart. For about half, it's unaffordable. The other half are simply ineligible.
"The risk is just too high. It's predictable," Stewart said. "We know these places are going to flood." One sticking point, he said, is reinsurance: after a disaster payout, private insurance is often unavailable or unaffordable. The only way around this, he believes, is a national flood insurance program. This, too, was a line item in the March budget: $31.7 million earmarked for Public Safety, the Canada Mortgage and Housing Corporation and the Department of Finance to "stand-up a low-cost flood insurance program, aimed at protecting households at high risk of flooding and without access to adequate insurance."

These exist in other countries, and the Public Safety report noted the pros and cons of various systems. In France, homeowners pay 12 per cent on top of their insurance policy towards natural disaster relief. Mortgage holders are required to have specific flood insurance, and the government underwrites reinsurance provided by private companies. The U.S. requires mortgage holders in designated flood-prone areas to have specific coverage from private insurers, which it underwrites. The U.K. has capped premiums in an attempt to keep flood insurance affordable: there, homeowners pay a levy on insurance policies, which private insurers put into a pool used for payouts in high-risk areas.

Public Safety told The Narwhal that "a suite of anticipatory financing tools, including insurance options, will be made available … to support those Canadians at medium and high risk," but didn't offer more information on possible timelines or structures. A month or so later, the March budget committed the government to "offering reinsurance through a federal Crown corporation and a separate insurance subsidy program."

Municipalities in Ontario and beyond are often cut off from the decision-making that sets long-term environmental outcomes in motion. They can also lack the resources to protect themselves.
Photo: Justin Tang / The Canadian Press

Throughout the report, the idea that homeowners need to be made aware of their risk and then become responsible for it is repeated, often. In other countries, subsidized insurance premiums will grow over time. The U.K.'s affordability caps are in place until 2039, after which the expectation is that "properties would be sufficiently de-risked by this time to move towards risk-based pricing."

The message is that Canada relies too much on reactive measures — mainly expensive post-disaster government assistance — and needs to shift to proactive measures. High insurance premiums would be a "price signal" about neighbourhood-level flood risk that might just convince people to live somewhere drier. For some, the report says, de-risking will ultimately mean relocation, a whole other kettle of fish that will disproportionately displace Indigenous communities.

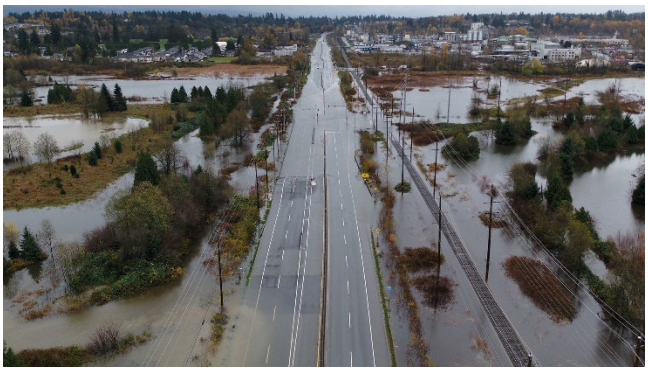
To Thistlethwaite, the federal goal of reducing costs by sharing risk makes sense. But it's also somewhat unfair to the little guys — not just individuals but, sometimes, municipalities. On one hand, he said, cities need to think twice about allowing fancy development on waterfronts, factoring in flood recovery costs along with property tax revenues.

On the other, municipalities are often cut off from the decision-making that sets long-term environmental outcomes in motion. In its report, Public Safety notes that spreading Canada's $2.9 billion in flood risks costs around doesn't reduce it. Only prevention and mitigation can do that, and only higher levels of governments can do that meaningfully.

"Governments in Canada, for the most part, are finding being responsible for the recovery associated with flooding and climate risk, no longer socially … politically and economically sustainable, so [they're] trying to find ways to get out of it," Thistlethwaite said.

"And one of the principal ways that they're doing that is by very quietly downloading responsibilities that were once handled by, let's say, the federal government, provincial government, to municipalities, even homeowners."

In its email, Public Safety Canada said its interest in insurance programs is "not necessarily focused on reducing costs, but rather making communities less vulnerable and ensuring Canadians have the support and resources they need to recover after a flooding event." It also said that "While the Government of Canada completes its work on creating a low-cost national flood insurance program, Canadians living in high risk areas where flood insurance is currently unavailable are still fully eligible under the federal Disaster Financial Assistance Arrangements, though specific terms of eligibility are set by provinces and territories."



Researchers and municipalities in B.C. had long warned that many dikes were on the verge of failure, especially those maintained by small towns with few resources. In November 2021, the Sumas dike in Abbotsford failed, resulting in floods and landslides that killed five people.
Photo: Province of British Columbia / Flickr

Is Ontario repeating mistakes made prior to major flooding in B.C.?

A national insurance program could include carrots as well as sticks. The Public Safety report notes that this also happens elsewhere: the U.S. and France both reward local action, often offering communities that actively reduce flood risk cheaper insurance.

It's a nice idea, if locals have the power and money to protect themselves. That wasn't the case in British Columbia in the lead-up to the fall 2021 atmospheric river. Researchers and municipalities had long warned that many of the province's dikes were on the verge of failure, as reported by The Globe and Mail and CBC. In fact, reported the Vancouver Sun, those warnings began soon after the B.C. government downloaded responsibility for dikes to municipalities in the early 2000s. By 2013, the province's own reports noted that downloading had created a haphazard patchwork of maintenance. Small towns with low property tax revenues were especially under-resourced for the job.

In 2020, politicians in Abbotsford, population 150,000, noted the need for other levels of government, including south of the border, to help lessen the city's flood risk. They didn't receive it. So, in November 2021, the Sumas dike in Abbotsford failed. It put an entire region under water, resulting in floods and landslides that killed five people.

That storm and its aftermath catapulted B.C. to the top of the list for federal Disaster Financial Assistance Arrangement payments. As of November 2022, B.C. had been allotted nearly $5 billion since the program's inception. More than half of that — $3 billion-plus — are costs incurred in late 2021.

The B.C. government has committed more than $2 billion towards flood recovery. It also updated its Emergency Program Act last year to state that compensation for future disasters will not include expenses “for which insurance was reasonably and readily available.”
Photo: Darryl Dyck / The Canadian Press

The B.C. government has committed more than $2 billion of its own budget towards flood recovery. It also updated its Emergency Program Act last year to state that compensation for future disasters will not include expenses “for which insurance was reasonably and readily available.” It’s a move that illustrates why the insurance industry supports a federally-backed program: the 2021 disaster resulted in $675 million in insurable losses, the province’s most costly weather event ever.

Over to Ontario which, as Premier Ford likes to mention, hasn’t received a Disaster Financial Assistance Arrangements payment from the federal government in 15 years. This is true. Canada’s most populous province has the lowest payments, per capita, than everywhere else.

As of last November, Ontario had received just under $239 million in assistance through the federal disaster program in the 50-plus years it’s been running. Even tiny New Brunswick, at $382 million, outstripped Ontario. And sure, we don’t have an ocean coastline, but neither does Saskatchewan, which sits at $902 million.

Some of it is luck, absolutely. But there’s broad consensus that our good luck has been made better thanks to conservation authorities, Ontario’s unique watershed management bodies. Thistlethwaite, Stewart, the Canada Mortgage and Housing Corporation, the federal government and — wait for it — the Ford government have all credited conservation authorities with dramatically reducing the risk and damage of floods, in part because of their commitment to accurate, regular flood mapping.

Volunteers help clear out a house that was flooded in Princeton, B.C. The 2021 storm and its aftermath catapulted the province to the top of the list for federal Disaster Financial Assistance Arrangement payments.
Photo: Government of British Columbia / Flickr

Yet, despite his own government’s acknowledgement of their importance, Ford is currently weakening or eliminating much conservation authority oversight of development.

More than two weeks before this story was published, The Narwhal sent a list of detailed questions to Ford, Natural Resources Minister Graydon Smith, Municipal Affairs and Housing Minister Steve Clark and staff in both ministries, including Helen Collins, an acting director in the housing ministry who was on the Public Safety task force.

None acknowledged receipt of the questions, which concerned changes to development policy and conservation authority oversight; whether the province accepts the findings of the Public Safety task force, including cautions against overdevelopment; what flood maps the government refers to in its policy-making; and how the Ford government believes developers should receive information on flood plains, flood maps and flood mitigation when planning new developments.

On February 27, Smith did answer questions in the legislature about Ontario's flood strategy posed to him by a colleague, Progressive Conservative MPP Goldie Ghamari. When asked about the government's mitigation of flood risk, Smith pointed to $30 million designated for "wetland recovery." The Narwhal has previously reported that experts find this commitment contradicts the government's dismantling of many wetland protections: when deciding which wetlands deserve provincially significant status, the province no longer considers species at risk or how small wetlands might contribute to a larger system.

The Garner Marsh in, Hamilton, Ont., is one of the wetlands in southern Ontario that helps mitigate flood risk. Experts say the province is spending money to protect wetlands while also dismantling many of the mechanisms for protection.
Photo: Christopher Katsarov Luna / The Narwhal

"Here we are, recognizing the vital nature-based solutions that wetlands provide on the one hand," Rebecca Rooney, an associate professor at the University of Waterloo who researches wetland ecology, told The Narwhal last October. "But then we're going to simultaneously greenlight a lot of irrevocable wetland loss … Right now I'm just reeling from the juxtaposition."

During Question Period, Smith also told Ghamari that the government has given individuals, communities and businesses $26 million in disaster recovery funds, but did not specify the time period. He said the government has committed $4.7 million to "help" municipalities carry out flood forecasting, but didn't specify what funding he is referencing.

Smith also said that the government has committed an extra $2 million to extend Build Back Better, a pilot project meant to help municipalities rebuild infrastructure after extreme weather. He did not clarify how that $2 million would be split up among the province's 444 municipalities.

Meanwhile, the March budget committed $48.1 million over five years and $3.1 million "ongoing" to Public Safety Canada to "identify high-risk flood areas and implement a modernized Disaster Financial Assistance Arrangements program, which would incentivize mitigation efforts."

Public Safety didn't answer when asked what a modern disaster payments program could look like, or what it meant to "incentivize mitigation" on the ground. But it seems like a jargony way to say that places that build climate resilience and infrastructure might be rewarded, while those that stick their heads in the sand could find themselves breathing mud. As for citizens that might want to prepare for the climate emergency but can't muster support or funds from the cities or province, that remains to be seen.

Environmental experts in Ontario are 'demoralized and almost exhausted'

In the legislature earlier this week, Ghamari and Smith also referenced a flooding strategy the province released in 2020, a year after huge spring floods led municipalities in Smith's riding of Parry Sound—Muskoka to declare a state of emergency. That strategy mentions the need to maintain wetlands and unpaved surfaces. It also states that "the most cost-effective and sustainable way of reducing risks is to keep people and property out of high risk areas."

The province's flood strategy also references conservation authorities 46 times, usually emphasizing the importance of cooperation between the province, municipalities and the watershed management bodies. But over the past few months, staff at conservation authorities all over southern Ontario have told The Narwhal that any cooperation that had been happening has essentially broken down, especially since the province announced massive reductions in the authorities' powers last fall.

It was Tim Byrne, chief administrative officer of the Essex Region Conservation Authority on the southwest tip of Ontario, who clued me in that thoughtless development could increase flood risk for all homes. "I'm demoralized and almost exhausted," he said in November, soon after the government unveiled a slew of changes that will affect the work he's done for 38 years.

For nearly seven decades, conservation authorities like his have protected drinking water, preserved endangered species habitat and helped shield people from the worst effects of natural hazards like floods, largely through oversight of the development process. And, if federal disaster payments are an indication, much of what they've been doing works.

Ontario Premier Doug Ford visited Bracebridge, Ont., during severe floods in May 2019. The premier has said that his government's plan to accelerate development will not mean building on floodplains, though he also said the responsibility to ensure that lies with developers.
Photo: Fred Thornhill / The Canadian Press

Yet the Ford government followed through with stripping many of their powers in late December. Now, conservation authorities can only review development applications that could cause flooding, erosion or other natural hazards. They can no longer review applications that could impact significant woodlots, valley lands, fish habitat or species at risk, even though many of those concerns are intertwined with leaving land able to absorb water.

Byrne said these limits set him up to fail. Imagine a subdivision proposal located on land that isn't a known floodplain, but that Byrne still believes could increase flood risk: without proving direct cause-and-effect, he can't mandate, or even suggest, specific stormwater infrastructure. Without oversight of full watersheds, he feels he's being left to watch as water flows from newly paved-over areas to the small patches still under his purview.

"How am I going to mitigate the damaging effect of runoff from destroying natural heritage features as it bowls and runs towards my rivers, creeks and streams, aimed at me from development in the headwater region?" he said. "You limit my capability to comment ahead of time, then you still pretend — wink, wink — that I can issue a permit for it at the tail end of the planning process."

Wanting to live near a bustling shipping port, early European settlers in the Windsor-Essex region drained wetlands for farming. Then came the post-World War II housing boom, and decades of sewer construction and engineering less sophisticated than it is today.
Photo: Essex Region Conservation Authority / Flickr

The Windsor-Essex region, where he lives, is an example of poor planning, or lack of planning. It's on the banks of the Detroit River and Lake St. Clair, with Lake Erie to the south and Lake Huron to the north. "We are this little blob that sticks right out into the Great Lakes," Byrne said.

The region is very flat, and its low-lying coast is very developed. Wanting to live near a bustling shipping port, early European settlers drained wetlands for farming. Then came the post-World War II housing boom, and decades of sewer construction and engineering less sophisticated than it is today.

Long story short, water no longer has anywhere to go — except for basements, 6,000 of which were flooded in the city of Windsor after a two-day storm in 2017. Windsor-Essex is Ontario's most flood-prone region, with the insurance premiums to prove it. Last year, the insurance site Rates.ca listed Windsor as the second most expensive place to get house insurance in Ontario, at $2,111 annually. The most pricey place is LaSalle, 13 km south of Windsor: at $2,400, annual premiums are more than double than in the province's cheapest place, Ajax (where the push to develop the headwaters of a local creek has locals worried about their own increased flood risk).

Late last year, the Ontario government forced both Hamilton and Halton Region to allow development applications on farmland and greenspace both local governments wanted to protect.
Photo: Christopher Katsarov Luna / The Narwhal

Windsor-Essex is a sobering case study as Ontario gears up to build intensely across its southern regions. There are unsettling echoes of B.C.'s dike issue, too. Rural towns with smaller property tax bases will have the hardest time replacing conservation authority expertise. And some communities that want to protect themselves can't — late last year, the province forced both Hamilton and Halton Region to allow development applications on land local governments wanted to protect.

Perhaps fearing the only reasonable line item on its disaster budget is about to spike, Canada has tried to slow Ontario down, a bit. In December, federal Environment Minister Steven Guilbeault told The Canadian Press that Ontario can't count on federal help if areas known to flood are built on irresponsibly. In response, Ford shot back that no floodplains would be developed — though he also said the responsibility to ensure that lay with developers.

Leaving aside the eagerness of any industry to regulate itself properly — what floodplains are we talking about, exactly? While conservation authorities have provided Ontario with better flood maps than most provinces, there's no guarantee those are the ones being used. Even when federal maps become available, Public Safety's email only stated that provinces "may use" them, not that everyone has agreed to work off of the same set of material.

It seems a bit like "floodplain" is becoming a buzzword that reduces the scope of the problem. In a region with this many basements, other types of unpaved areas are needed to absorb water. That means wetlands and farmland and forests, yes, but even soccer fields can help, said Byrne. Well, another recent bit of policy decreed that playgrounds on top of buildings can fulfill development requirements to build "parks."

Thistlethwaite said Public Safety's flood portal will provide residents, communities and municipalities with data they can use to advocate for resilience-building, or push back against thoughtless development. But the federal flood mapping program is a three-year project, meaning a portal launch date is at least that far away: this leaves Ontario a bit of a "regulatory purgatory," Thistlethwaite said.

Three years is plenty of time for small, local governments to get overwhelmed by development applications that they don't have the environmental expertise to analyze. It's more than long enough for homebuyers to put down pre-construction dollars for a future that might turn out differently than they imagine. With 319 acres of Ontario farmland disappearing daily, it's a totally plausible timeframe in which farmers whose fields are deluged as concrete gets poured around them could shrug, sell their land and leave.
Ten, 20 or 100 kilometres away from these decisions lies my basement and all the priceless and meaningless things I keep down there. In two, five or 10 years, if it all gets soaked, will there be anyone but myself to blame?

With files from Emma McIntosh.

Updated March 29 at 9:30 a.m. ET: This story was updated to include funding details for flood education and insurance included in the March 2023 federal budget.

12.Other Business

13. Adjournment