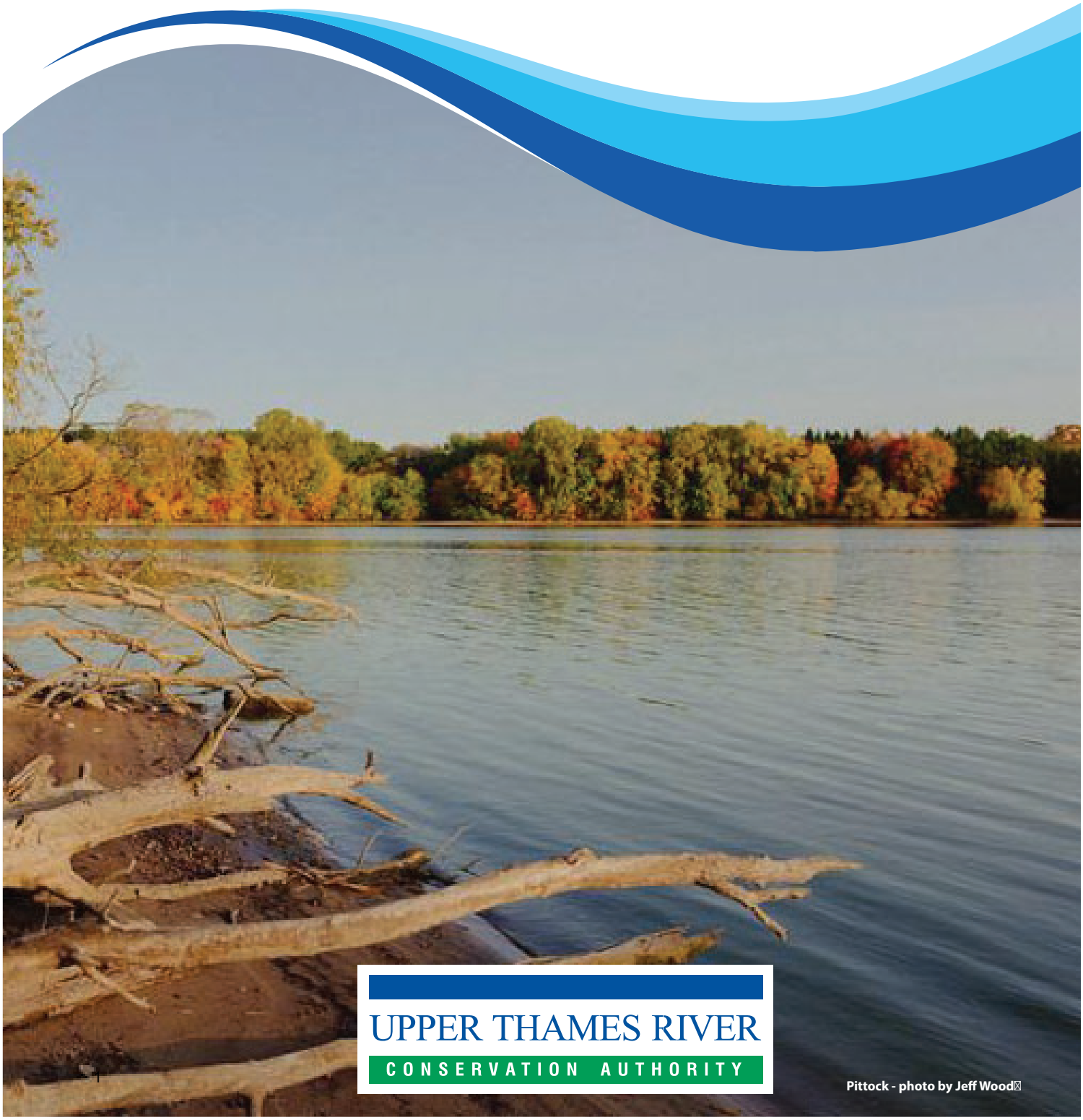
MEETING PACKAGE
NOV 2024

Board of Directors

Upper Thames River Conservation Authority



UPPER THAMES RIVER
CONSERVATION AUTHORITY

Pittock - photo by Jeff Wood

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Upper Thames River Conservation Authority Board of Directors' Meeting Agenda – November 2024

Date: November 26, 2024
Time: 9:30am
Place: Watershed Conservation Centre Board Room, Fanshawe Conservation Area – 1424 Clarke Road, London, ON

1. Territorial Acknowledgement

2. Modifications to the Agenda

3. Declarations of Pecuniary Interest

4. Presentations/Delegations

4.1. London Development Institute Delegation – Mike Wallace

4.2. Regulated Area Mapping Presentation

5. Administrative Business

5.1. Approval of Minutes of Previous Meeting: October 22, 2024

5.2. Business Arising from Minutes

5.3. Correspondence

6. Reports – For Consideration

6.1. 2025 Fees Policy and Fee Schedules – BoD-11-24-90

6.2. 2024 Meeting Addition and 2025 Board and Committee Meeting Schedules – BoD-11-24-91

6.3. Strategic Plan Update – BoD-11-24-92

6.4. Operations Plans and Ice Management Plan – BoD-11-24-93

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7. Reports – In Camera

7.1. Position, Plan and Instruction to be Applied to Negotiation – Land Lease Program Verbal Update

8. Reports – For Information

8.1. Administration and Enforcement – Section 28 Status Report – BoD-11-24-94

8.2. Project Status Update – BoD-11-24-95

8.3. 2025 Board Election Information – BoD-11-24-96

8.4. UTRCA Administrative Review Policy Under Section 8 of O.Reg. 41/24 – BoD-11-24-97

8.5. Thames River Current November Edition

9. Reports – Committee Updates

9.1. Finance and Audit Committee

9.2. Hearing Committee

10. Notices of Motion

11. Chair's Comments

12. Member's Comments

13. General Manager's Comments

14. Adjournment

Tracy Annett, General Manager

UPPER THAMES RIVER CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Tracy Annett
Date: November 12, 2024
File Number: BoD-11-24-90
Agenda #: 6.1
Subject: 2025 Fees Policy & Fee Schedules

Recommendation

THAT the proposed revisions to the Fees Policy and 2025 Fee Schedules be approved by the UTRCA Board of Directors for implementation beginning January 1, 2025.

Background

The Upper Thames River Conservation Authority (UTRCA) approved the Fees Policy in 2019. In keeping with Board direction, UTRCA charges fees for its services on a cost-recovery basis and the benefit received by the applicant from specific types of services. The policy states the following:

> *This Fee Policy & Schedules will be reviewed annually by the UTRCA Management Team, in conjunction with the annual budgeting process. The Management Team will seek information regarding fees, from various sources, as identified in the process and public notification section above; prepare a proposed revised Fee Schedule with a report to members regarding recommendations. The Board of Directors shall receive and make recommendation as to the proposed Fee Schedule.*

Upon annual review only minor policy edits have been made for clarity, as highlighted in the attached.

A direction from the Minister, received December 13, 2023, stated the following:

> *I am writing with regards to conservation authority fees for the 2024 year. As you are aware, a Minister's Direction ("Direction") was issued on December 28, 2022, directing conservation authorities not to change fees for programs and services associated with planning, development and permitting for the 2023 calendar year.....Pursuant to my authority under subsection 21.3 (1) of the Conservation Authorities Act, I am issuing a new Direction that extends the previous Direction for the upcoming year. The Direction will be in effect from January 1, 2024 to December 31, 2024 and applies to fees for the same programs and services specified in the Direction that was in effect for 2023.*

Since it is uncertain whether this direction will be extended through 2025, no increases to UTRCA planning, permitting or technical review fees are proposed at this time. Should the fee freeze be lifted, planning and regulations staff will review fees and bring forward proposed changes once that direction has been received.

Fee Schedules

Consistent with policy, an annual review of fee schedules for each program area has been undertaken. Where no changes have been made the column name reflects the 2025 Fees. Where changes have been identified both the 2024 and 2025 fess are provided for comparison purposes. Details regarding fee schedule revisions have been outlined below.

Planning and Regulations Fees

UTRCA's Environmental Planning and Regulations Unit typically updates the fee schedules every year to keep pace with cost-of-living and other initiatives, and to ensure a sustainable revenue source and high level of service. However, as noted above, due to the uncertainty around the continuation of the Provincial direction to freeze conservation authority fees related to planning and development, no changes are currently proposed for 2025. As such, a comparison column has not been included in the schedule.

A comprehensive review of the UTRCA's planning and regulatory processes is planned to be undertaken by an external consultant soon. The expected outcomes of this review are recommendations for how UTRCA processes may be improved to allow for faster approvals. This review will also consider the costs of undertaking the program and make recommendations about how our fees may be changed to maintain a high level of service. Any recommended changes to planning and development-related fees as a result of this review will be put into effect once the Provincial direction to freeze fees has been lifted.

Other Fees identified for inquiries, data requests, and field surveys have been reviewed. The fees did not change last year. The administrative component of data requests and field surveys has increased from $50 to $55.

Conservation Areas

Fanshawe, Pittock and Wildwood Conservation Areas annual fee review is undertaken with careful consideration of several factors including the assessment of operational costs and the evaluation of our competitors while continuing to follow and understand market trends with consideration for year-over-year UTRCA value additions. This transparent approach evaluates the need or demand for a fee increase and aims to ensure any proposed increase aligns with rising costs, improved amenities and value improvements while ensuring our rates remain competitive with local and comparable campground operations.

During 2024, outdoor recreational trends at our Conservation Areas were strong, however, user data confirms that select revenue centres within the day-use and campground operations did not meet our projected annual targets for 2024. Staff believe the contributing factors to this decline include our fees being at the higher end of market comparisons and a very wet operating season with two significant high-water events impacting campground and reservoir operations. For 2025, staff propose to maintain day-use fees at 2024 pricing while most other campground fees receive a nominal increase within a range of 2% to 4%. Specific day-use and campground fees are being raised to reflect market trends and demands for select programs or services.

Planning for Conservation Area's infrastructure improvements is well underway with considerable capital work anticipated for 2025. Coinciding with and guided by campground and day-use greenspace planning, improvements to roadways and campsites (seasonal and overnight) will be a priority. A significant project already underway at Fanshawe CA is the renovation of the Watson Porter Pavilion. This is a very popular pavilion for weddings, family reunions and corporate gatherings. Completion of these capital improvements will allow for greater ability to continue to remain competitive and apply appropriate fee increases for the respective programs and services within our CA's.

Forestry

A detailed review and assessment was conducted of the UTRCA Forestry Services, specifically Tree Planting Program fees. In September, the board approved an updated Fee Schedule to take effect for the Fall 2023 and 2024 Tree Planting Season. Many of the fees previously approved for 2024 remain unchanged and will continue to assist with recovering the costs of administering and delivering the program. Updates include the costs charged by nursery suppliers to be recovered.

Environmental Education Programs

In 2023, fees for environmental education programs underwent a significant update, and the majority will remain unchanged for 2025. The 2025 fee schedule has been updated to better distinguish individual programs, group similar offerings, and incorporate newly developed programs. Environmental education program fees are determined by balancing the intention to recover costs while at the same time keeping pricing competitive.

Land Management

Hunting
UTRCA staff continue to review and refine the hunting program and associated fees and fee structure. The fee for UTRCA hunting draw permits increased from $75 to $85 in 2024, and application numbers remained steady. Based on applicant and user feedback throughout 2024, an increase in 2025 fees may result in a reduced number of applications and an increased need for proactive enforcement for illegal entry. Therefore, staff propose to hold fees for hunting draw permits for 2025.

Prior to 2024, the Ellice and Gads Hill Swamps permitted hunters were able to obtain a hunting permit at no fee if they were a member of the Friends of Ellice and Gads Hill Swamps. In 2024, the hunting permit was introduced at $75. Considering the value offered for year-round hunting access to these lands for various small and large game,

a nominal increase to this hunting permit is proposed to increase the fee from $75 to $85 in 2025. This subtle increase from the 2024 rate will further support associated program costs and bring all hunting opportunities closer to parody.

Staff will continue to evaluate the hunting program throughout 2025. Exploring additional UTRCA properties for other hunting opportunities will further support program delivery, but equally as important, will help discourage illegal hunting and trespassing on our lands. As staff continue to evaluate the UTRCA hunting program, we recognize the importance of long term sustainability of these recreational opportunities to our land management program.

Land Lease
Throughout the watershed, UTRCA leases land to various charitable, not-for-profit and for-profit clubs and associations through short-term land leases. UTRCA land lease fees applied to these clubs and associations have remained largely unchanged since the early 2000's. Throughout 2024, staff have been working closely with club administration and executive committees to share and better understand respective operational needs and user interests, to strive for long-term program sustainability. While many of our clubs and user groups have limited financial resources, staff will be proceeding with phasing in land lease fee increases on a site-by-site basis to ensure consistency across our CA lands, while aiming to balance and offset operational costs and enhance cost-recovery and revenue-generating opportunities, where feasible. Given the unique circumstances and diverse land lease property arrangements, a standard fee schedule is not feasible.

Summary
The fee increases proposed reflect minor increases to account for inflation or costs associated with program delivery. The proposed increases are consistent with the UTRCA's fees policy.

Recommended by:
Tracy Annett, General Manager

Prepared by:
Jenna Allain, Manager, Environmental Planning and Regulations
Brent Verscheure, Manager, Lands, Facilities and Conservation Areas
Brad Glasman, Manager, Integrated Watershed Management
Teresa Hollingsworth, Manager, Community and Corporate Services

Attachments:

Upper Thames River Conservation Authority Fees Policy & UTRCA Fee Schedules

UPPER THAMES RIVER
CONSERVATION AUTHORITY

Upper Thames River Conservation Authority

Fees Policy

Approved by the Upper Thames River Conservation Authority Board of Directors, November 26, 2019, and amended on October 26, 2022.

- Fee Schedules revised November 24, 2020; effective January 1, 2021; amended May 25, 2021.
- Fee Schedules revised November 23, 2021; effective January 1, 2022; revised June 28, 2022; effective July 1, 2022.
- Fee Schedules revised November 22, 2022; effective December 31, 2022
- Schedule 3: Forestry Services Fees revised September 26, 2023; effective September 26, 2023.
- Fee Schedules revised November 28, 2023; effective January 1, 2024.
- Proposed Schedules revised November 26, 2024; effective January 1, 2025.

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Upper Thames River Conservation Authority Fees Policy

This Fees Policy was approved by the Upper Thames River Conservation Authority (UTRCA) Board of Directors, November 26, 2019, and amended on October 26, 2022.

Basis

Amendments to the Conservation Authorities Act were undertaken in 2020 to clarify the programs and services that conservation authorities (CAs) deliver. In 2021, O. Reg. 686/21 Mandatory Programs and Services provided additional clarity regarding the programs and services that CAs are required to provide. In April 2022, the Minister released Policy: Minister's list of classes of programs and services in respect of which conservation authorities may charge a fee ("Minister's List"). CAs may only charge a fee for a program or services that it provides if it is set out in the Minister's List. The Minister's List identifies that CAs may charge a fee for mandatory, municipal, and other programs and services where the user-pay principle is appropriate.

The Minister's List replaces the 1997 Policies and Procedures for the Charging of Conservation Authority Fees which was approved by the Minister of Natural Resources and Forestry. The new Minister's List comes into effect on January 1, 2023.

This policy document is intended to fulfill the requirements for each CA to adopt a written policy with respect to the fees it charges for the programs and services it provides.

The attached Fee Schedules are based on the user-pay principle. The fees and revenues generated are designed to assist with recovering the costs associated with administering and delivering the services on a program basis. Fees take into account estimated staff time, travel, and materials costs to provide the service, but do not exceed the cost of the service.

Legislative Framework

On January 1, 2023, the Conservation Authorities Act will be amended by enacting section 21.2 (1)-(12) "Fees for Programs and Services." Subsection (1) enables the Minister to determine the classes of programs and services in respect of which a CA may charge a fee. Subsection (2) requires the Minister to publish a List in a policy document. CAs may only charge a fee for a program or service that it provides which falls within this list.

Under the Conservation Authorities Act, programs and services delivered by CAs include:

- **Mandatory programs and services.** Mandatory programs and services that the conservation authority is required to provide [see 21.1 for further details]. These services are further defined in O.Reg. 686/21: Mandatory Programs and Services and may be funded by provincial grants, other sources, municipal apportionment and/or conservation authority self-generated revenue (e.g., user fees) where the user-pay principle is appropriate.
- **Municipal programs and services.** Programs and services that an authority agrees to provide on behalf of a municipality under a MOU or agreement [see 21.1.1 for further details]. The program or service may be funded by the municipality or by other funding mechanisms (e.g., user fees where the user-pay principle is appropriate) as per the MOU or agreement.

- **Other programs and services.** Programs and services that an authority determines are advisable to further the purposes of the Act [see 21.1.2 for further details]. The program or service may be funded by the municipality or by other funding mechanisms (e.g., user fees where the user-pay principle is appropriate) as per the cost apportioning agreement and the Minister's List.

Policy Direction

When updating existing fee schedules or establishing new fees, the following policy direction will be considered:

1) Fees need to be set with regard to legislative requirements and ability to sustain programs, and be based on a user-pay philosophy;
2) Fee increases should include inflation;
3) Fees must not exceed the costs of delivering the services;
4) Refunds of fees may carry an administrative cost/penalty;
5) Fees are reviewed at least annually and regular adjustments to fees are desirable;
6) Fee schedules are approved on an annual basis to inform the following year's budget.

Exemptions and In-Kind Services

The Authority may waive fees for non-profit conservation groups contributing to the protection and restoration of the natural environment. Examples include but are not limited to: Ducks Unlimited, Nature Conservancy of Canada, Ontario Federation of Anglers and Hunters, and various "Friends of" watershed groups.

In addition, in-kind technical services are routinely provided by the Authority to assist non-profit conservation groups. Technical services may be required for non-profit groups that do not have qualified professionals or funding to acquire the expertise to undertake projects that further achieve the environmental targets of the Authority.

Process and Public Notification

When developing and establishing fees, the Authority also considers the fees of Conservation Authorities offering the same level of service and technical advice, fees set by neighbouring Conservation Authorities, fees charged by local municipalities and agencies, and fees charged by the private sector for similar services.

Fees account for estimated staff time, travel, equipment, and material costs plus a reasonable charge to cover administration of the program, which normally includes an allocation for shared corporate services.

This Fees Policy has been established by the UTRCA Board of Directors and is administered and applied by UTRCA staff. The Management Team in consultation with the General Manager may waive or reduce fees under extenuating circumstances.

The public will be notified of any proposed increases or revisions to a fee schedule by way of posting a notice on the UTRCA website that the fee schedule will be reviewed on an identified date at an open meeting of the Authority's Board of Directors.

Implementation

While cost recovery is a requirement for certain services noted above, the Authority considers other factors when setting fees, such as fees of neighbouring Conservation Authorities, the nature and level of fees charged by local municipalities for related services, and, in some cases, the value of similar services provided by the private sector. It should also be noted that for some circumstances and programs, an attempt to charge a fee that would provide complete cost recovery is not feasible due to inability to pay and would result in reduced demand for the service, e.g., school education programs.

1. Planning and Regulations (Section 28 Permit Fees, Planning Act, and Technical Reviews)

The UTRCA administers its fee program for Planning and Regulations to achieve a partial cost recovery to-date for the plan review function. The program aims to achieve a 50-50 user fee to levy ratio to represent the maximum reliance on user fees in order to safeguard the planning and regulations program and its services against economic volatility and subsequent budgetary uncertainty. It is also intended to reflect that significant effort and resources are used for pre-consultation related to activities, proposals, and inquiries prior to application submissions as well as compliance activities. The fee schedules are based on the complexity of the application and technical review required, which influences the staff time and resources needed for the review.

Administration may consider the following issues and data, where relevant, to revise the fee schedules:

- Analysis of trends in workload changes as a result of shifts in the development market and types of applications;
- Consultation with developers/municipalities about work effort, new planning/legislative requirements, and streamlining;
- General overview of status of cost recovery;
- Statistics related to number of applications and annual changes, where required;
- Level of service/review expectation for processing timing;
- Areas of improvement for level of service/staffing demands;
- Cost cutting measures as required;
- Reserve fund requirements;
- Identification of specific/specialized municipal requirements;
- Trends in legal costs associated with appeals to the Ontario Land Tribunal and other legal services.

The UTRCA's objective is to provide an effective and efficient delivery of services consistent with the Client Service Standards for Conservation Authority Plan and Permit Review, endorsed by Conservation Ontario Council, June 24, 2019.

Exemptions to the application of these fees include:

- Non-profit conservation groups contributing to the protection and restoration of the natural environment. Examples include but are not limited to: Ducks Unlimited, Nature Conservancy of Canada, Ontario Federation of Anglers and Hunters;
- UTRCA for permit applications, Planning Act applications, inquiries, and site assessments.

2. Conservation Areas Fees

Conservation Areas fees are reviewed annually by Conservation Areas Unit staff following the end of the camping season in October. Criteria for setting fees are:

- Impact on or opportunity to support the organizational objectives;
- Anticipated operational expenses that will be incurred impacting the overall budget;
- Comments and feedback from Conservation Area users and interest groups;
- Comparison to similar operations and opportunities in the industry, including trends.

As part of the fee setting process, staff also review operational policies that pertain to the various aspects of the Conservation Area services and programs. Refund policies are included in this review and adjusted as necessary to ensure consistency with market comparators. Information pertaining to these policies is shared on our websites as well as available in print. Seasonal campers receive an electronic copy of both the fee schedule and policies annually.

When staff were discussing fees and units for 2025, consideration was also given to the impact a wet spring/early summer, as well as two significant high-water events in late July, had on visitation in 2024 at all three of our Conservation Areas.

Planning for Conservation Area's infrastructure improvements is well underway with considerable capital work anticipated to commence in 2025. Coinciding with and guided by campground and day-use greenspace planning, completion of these capital improvements will allow for greater ability to continue to remain competitive and apply appropriate fee increases for the respective programs and services within our CA's.

3. Forestry Services Fees

Fees for trees and services are reviewed and updated annually. An attempt is made to balance user fees with program costs while trying to maintain and, over the long term, expand natural areas according to the Environmental Targets Strategic Plan. It must be noted that without cost-sharing opportunities such as the Clean Water Program, 50 Million Tree Program, Ontario Power Generation, and others, the program would not be sustainable (i.e., tree numbers planted would drop considerably).

The cost of providing these services is based on the following principles:

- Tree costs are based on wholesale tree costs dependent on individual stock items. A mark-up is applied to cover costs associated with tree delivery and storage requirements;
- Planting fees for both machine planting and hand planting are based on staffing and equipment costs;
- Where the UTRCA is asked to replant areas to comply with court orders (e.g., Woodlands Conservation By-Law, CA Act Permit requirements), the fees charged reflect full cost recovery.

4. Community Education Program Fees

Conservation Education program fees are reviewed annually and changes implemented in time for promotion of fall programs. The fees advertised in September are in place for the school year. UTRCA conservation education programs are funded through a number of avenues including fees charged directly to the school classes participating, fees charged

directly to the School Board, and through corporate, foundation, or government sponsorships of specific programs.

The UTRCA offers programs on site (within Fanshawe and Wildwood Conservation Areas), off site (at wetlands or watercourses), in-class, and on school grounds. The fees charged for an on-site program is a cost per student per half day program. There is a minimum fee per program and most programs can accommodate two or three classes. This revenue is augmented by Authority levy funds to cover costs. Staff endeavour to control dependency on Authority levy funds by recovering as much of the program costs as the market will bear.

A number of factors are considered to determine the fees charged directly to the school classes, including:

- Availability of similar services;
- Surveys of prices charged by organizations offering similar services; and
- Demand for the program.

Off site, specialty programs are sponsored through corporate, foundation, or government funding. At times, a school board will arrange for the UTRCA to provide programming or professional development to a number of classes or staff. In these instances, the fees charged cover all costs incurred by the Authority.

5. Hunting Fees

Land Management staff undertake an annual review of the UTRCA hunting program and continue to refine fees based on applicant/user input and demand. Specifically, the criteria considered when contemplating an increase of the hunting program fees are:

- Anticipated increase in operational expenses to the program;
- Comments and feedback from applicants and permitted users of designated hunting areas;
- Comparison to similar operations and opportunities at other Conservation Authorities.

The fee setting process will include a review of operational policies and program administration. The Hunting Team will incorporate MNRF hunting regulation changes, UTRCA policy changes, admission agreements, terms and conditions (written permission) updates, GIS map updates, and applicable fee updates, which are shared on UTRCA websites and available in print.

Refunds

The UTRCA does not issue refunds for services or products once the application or order is submitted and the payment has been processed.

The Lands, Facilities, and Conservation Areas Unit has policies regarding refunds specific to the different programs and services offered. Policies regarding refunds are posted on the individual conservation area websites and copies are distributed to seasonal campers. Links to the websites are updated by January 1 for the upcoming operating season. Refunds are not offered for inclement weather nor are they offered when a permit holder is being evicted from the premises.

Appeal

The fee appeal process is based on the principles of fairness, opportunity, and notification. Application for an administrative fee review may be received for an appeal, 1) if a fee is contrary to the fees set out in the fee schedule, or 2) if the fee set out in the fee schedule is excessive in relation to the service or program received.

Requests for an administrative fee review must be in writing to the General Manager (or delegate) and specify the reason(s) for the request for review. Upon reconsideration of a fee that was charged by the Authority, the Authority may:

a) Order the person pay the fee in the amount originally charged;
b) Vary the amount of the fee originally charged, as the Authority considers appropriate; or
c) Order that no fee be charged for the program or service.

If not satisfied with the outcome, then an appeal will be directed to the UTRCA Board of Directors for a decision. Once heard, the appeal will be dismissed or upheld through a resolution passed by the Board of Directors. The appellant will be notified accordingly of the Board's decision.

If a refund is approved, a 10% administration fee will apply.

Date of Effect

The Fee Policy becomes effective as of the date of UTRCA Board of Directors approval unless stated otherwise.

Transition

The establishment of this Fee Policy supersedes and replaces all previous fee policies and/or schedules. The Fee Policy also applies to proposals not previously invoiced, such as draft approved plans of subdivision which predated any fee schedule.

Review

The UTRCA Fee Policy and Schedules will be reviewed annually by the UTRCA Management Team, in conjunction with the annual budgeting process. The Management Team will seek information from various sources regarding fees, as identified in the process and public notification section above; prepare a proposed revised Fee Schedules with a report to members regarding recommendations. The Board of Directors shall receive and make a recommendation as to the proposed Fee Schedules. Once approved, the revised Fee Schedules to this policy will be published on UTRCA's website, distributed to Municipal Clerks for posting, and provided in other materials used by the public.

Fee Schedules

Schedule 1: Planning and Regulations Fees (includes UTRCA Section 28 Permit Fees, Plan Review Fees, Technical Review Fees, and other fees)

Schedule 2: Conservation Areas Fees

Schedule 3: Forestry Services Fees

Schedule 4: Community Education Program Fees

Schedule 5: Hunting Fees

Schedule 1: Planning and Regulations Fees

Includes Upper Thames River Conservation Authority Section 28 Permit Fees, Plan Review Fees, Technical Review Fees, and other fees.

1a. UTRCA Section 28 Permit Fees

Category	Type	2025 Fee
Pre-consultation	Pre-consultation with the applicant regarding requirement	No Charge
Alterations to Wetlands and Watercourses	Routine - No engineering drawings required	$555.00
	Minor - Engineering drawings required	$1,160.00
	Major - Involves comprehensive review by various technical staff	$1,590.00
Development Applications	Routine - Limited review, minor in nature relative to cost, location, or impact (decks, patios, etc.)	$265.00
	Minor - Small scale (less than 500 square feet), and/or consistent with policy	$1,160.00
	Major - Medium scale, primary structures (greater than 500 square feet) and/or consistent with policy	$1,590.00
Linear Utility Corridor	Routine - May include linear utility crossings adjacent to watercourses and wetlands	$1,160.00
	Minor - May include linear utility corridors where a watercourse or wetland crossing is proposed	$1,590.00
	Major - May include linear utility corridors where multiple watercourse or wetland crossings are proposed	$6,360.00
Municipal Drain Review	Routine - Project is drain maintenance consistent with Standard Compliance Requirements in DART Protocol	$290.00
	Minor - Review of engineer's report and/or within regulated wetland limits	$900.00
	Major - Requires multiple site visits, and/or detailed review of engineering reports, and/or within regulated wetland limits	$1,590.00
Municipal Project Review	Routine - Does not require any technical reports or analysis (may include bridge or culvert repairs)	$1,160.00
	Minor - Requires technical reports or analysis to support application (may include minor bridge or culvert replacements)	$1,590.00
	Major - Works that cover large geographic areas such as multiple road culvert or bridge replacements	$5,300.00

Category	Type	2025 Fee
Complex Applications	Large scale development proposal and/or inconsistent with policy (e.g., multi-lot development, large scale municipal project, golf course, renewable energy project, etc.)	$6,360.00
	Large Fill - Volumes > 1000 m^3	$6,360.00 Plus $0.50/$m^3$ fill
	Aggregate Resources Act - Above water table	$6,360.00
	Aggregate Resources Act - Below water table	$11,130.00
Environmental Assessments	Standard	$1,160.00
	Intermediate	$5,300.00
	Full/Comprehensive	$10,600.00
Hearing Request	Streamlined Hearing	$850.00
	Full Hearing – Intermediate	$1,270.00
	Full Hearing – Major	$5,300.00
Clearance	Verification Letter (Hazards or Areas of Interference)	$265.00
Extensions	Minor application revisions and minor permit revisions and/or extensions	$140.00
Violation (work commenced prior to approval)	First occurrence Second and subsequent occurrences Note: Applications will only be accepted retroactively where works undertaken meet UTRCA board approved policies or where works are proposed that are intended to bring a project into compliance with said policies.	100% surcharge (cost recovery) 200% surcharge
Minister's Zoning Order (MZO)	Permit associated with Minister's Zoning Order (MZO)	100% surcharge of permit fee (cost recovery)

General Notes for All Permit Fees

Routine - Routine permit applications are activities that are documented through another approval process or are determined to have limited impacts on the control of flooding, erosion, pollution, or the conservation of land. Routine permit applications could be those involving Standard Compliance Requirements under the Drainage Act and Conservation Authorities Act Protocol, and non-habitable buildings and structures that are less than 10 m^2 in size.

Minor - Permit applications for development projects could be considered minor in nature due to project size, level of risk, location, and/or other factors. These projects have minor impacts on the control of flooding, erosion, pollution, or conservation of land. Based on the proximity of the project to the hazard, minor permit applications are reviewed by UTRCA staff and generally require standard recommendations or conditions. Minor permit applications could be those

involving, for example, minor fill, minor development, and minor site alteration where there is a high degree of certainty that issues associated with natural hazards are minimal.

Major - Major applications for Section 28 permits require significant UTRCA staff involvement. They could be highly complex projects, for example, large subdivisions requiring technical review supported by comprehensive analysis, or smaller scale site specific applications that require complex technical reviews. The proposals may involve developments with significant natural hazards, environmental impacts, or multiple approval processes requirements. Generally, these would include Plans of Subdivision and Condominium, large Site Plan Control applications, and major infrastructure development. Major applications could also include those where works have been undertaken or are in the process of being undertaken, without prior approval from the UTRCA, and those where works have been undertaken that do not comply with UTRCA Section 28 policies and restoration/remediation measures are required.

1. The UTRCA reserves the right to charge technical report review fees over and above the permit fees for projects that require a detailed technical report or reports covering one or more issues.
2. Large fill projects involve proposals for fill movement which exceed 1000 m^3. Smaller fill projects will be covered under other categories of the fee schedule.
3. Applications that fall under more than one category will be charged at the highest rate.
4. Large renewable energy projects are defined as:
    a. Class 3 solar facilities with a nameplate capacity greater than 10 kW.
    b. Class 3, 4 or 5 wind facilities equal to or greater than 50 kW.
    c. Any waterpower project involving construction of a new dam or retrofit of an existing dam.
    d. Any bio-fuel project (anaerobic digestion, biofuel, biogas, or thermal treatment facility) that would not fall under our general categories for buildings or building additions as outlined in the table above.
5. Large scale municipal projects – Projects that have generally come forward following a Class Environmental Assessment (EA), where input from the UTRCA has been solicited and the need for Section 28 approval has been acknowledged. UTRCA costs are related to multiple technical report reviews, preparation of correspondence, attendance at pre-consultation meetings, and site inspections. Estimated total project costs generally exceed $1 million. The UTRCA reserves the right to charge additional fees for significant technical report review.
6. Costs associated with legal review for agreements required for permits issued under a Minister’s Zoning Order (MZO) shall be paid by the applicant.
7. For EAs undertaken by private proponents (i.e., non-municipal EAs), standard, intermediate, and full/comprehensive categories are distinguished by the anticipated amount of staff time required for review. For the purposes of the fee schedule, intermediate will be defined as projects with estimated cumulative staff review time required of greater than 15 hours and major will be defined as projects with estimated cumulative staff review time required of greater than 30 hours. The UTRCA reserves the right to charge additional fees if peer review requirements warrant additional cost-recovery.
8. For Municipal Drain applications where only a scoped review of the engineer's report is undertaken, the lesser fee may be charged.
9. Projects carried out by the UTRCA or under the supervision of the UTRCA Clean Water Program may be exempt from this fee schedule.

Please contact UTRCA Regulations staff at 519-451-2800 to arrange a pre-consultation discussion prior to submission, or email regulationsinquiry@thamesriver.on.ca

1b. UTRCA Plan Review Fees

Application Review	Type	2025 Fee
Formal Pre-consultation	Fee will apply when a formal pre-consultation comment letter has been requested by a municipality. This fee will be deducted from subsequent review fees once a formal application is submitted.	$320.00
Comprehensive Official Plan Amendment	Includes housekeeping amendments initiated by Municipality	No charge
Official Plan Amendment	Minor/Routine - i.e., Single family residence	$580.00
	Major - Large scale, complex features, requiring technical studies	$1,590.00
Zoning By-law Amendment (ZBA)	Comprehensive ZBA initiated by Municipality	No charge
	Minor/Routine	$580.00
	Major - Large scale, complex features, requiring technical studies	$1,380.00
Consent (severance)	Minor/Routine	$425.00
	Major - Large scale, complex features, requiring technical studies	$850.00
Minor Variance	Minor/Routine	$265.00
	Major - Large scale, complex features, requiring technical studies	$1,325.00
Site Plan	Minor/Routine	$580.00
	Intermediate - Intermediate scale requiring scoped technical studies	$1,325.00
	Major - Large scale, complex features, requiring technical studies	$3,200.00
Draft Plan of Subdivision or Condo	-	$170 per lot to a maximum of $14,300.00
Processing Fee	-	$265.00

General Notes for all Application Fees

1. Fees are only collected for applications where natural hazard or natural heritage features affect the property.
2. The UTRCA reserves the right to waive the application fee or reduce the fee on a case-by-case basis.

3. Major applications include complex natural hazard and natural heritage issues involving multiple meetings and peer reviews to be completed by the UTRCA and/or other qualified professionals. The UTRCA reserves the right to determine what is considered to be a major application on a case-by-case basis.
4. Fees for multiple applications made for the same parcel within one year will be discounted as follows:
    - First application: full fee per lot/application,
    - Additional applications: 50% of the lesser of the application fee per lot/application.
5. A processing fee is charged in the following cases:
    - Provision of an extension letter,
    - Provision of a letter for a Draft Plan of Condominium for those proposals that are limited to conversion of existing buildings with no new construction or as long as the design complies with criteria established through a previous circulation (e.g., Subdivision or Site Plan).
6. Where an exception to a permit may be granted through the *Planning Act*, the review fee will be doubled.

1c. UTRCA Technical Review Fees (to support Section 28 and Plan Review Services)

Technical Review	2025 Fee
Environmental Impact Studies (EIS) (Minor) – Limited assessment, adjacent to feature	$795.00
EIS (Scoped) – Scoped assessment, adjacent to or within feature	$1,270.00
EIS (Comprehensive)	$2,330.00
Stormwater Management (SWM) Studies – Preliminary	$1,270.00
SWM Studies – Detailed Design	$2,330.00
Sediment and Erosion Control (SEC) Plan – Minor/Routine	No charge
SEC Plan/Report – Intermediate	$265.00
SEC Plan/Report – Major	$530.00
Geotechnical or Slope Stability Assessment – Scoped Report	$795.00
Geotechnical or Slope Stability Assessment – Full Report (1 lot)	$1,270.00
Geotechnical or Slope Stability Assessment – Full Report (multiple lots)	$1,700.00
Hydrogeology Assessments	$1,700.00
Other Technical Report	$1,270.00
Technical Expert Peer Review - External (Instance where there is a need for an outside Technical Expert)	$555.00 + TBD Technical Review

General Notes for Technical Review Fees

1. It is required that the proponent pre-consult with the UTRCA and the municipality prior to preparation and submission of a detailed technical report.
2. For the purpose of this fee schedule, Scoped Studies are generally recommended in situations where the nature of the natural heritage feature or hazard is well documented, similar development has been previously proposed, modelled and analyzed, impacts are not anticipated due to the location or nature of a proposed development, and mitigation options have been developed.
3. For the purpose of this fee schedule, Comprehensive Studies are generally recommended in situations that are more complex, where information is lacking, or where the risk or significance of the impact is high.
4. The fees for technical report review include one comprehensive report review and one revised report review. The UTRCA reserves the right to charge a processing fee or additional technical report fees for additional reviews.

1d. Other UTRCA Fees

Category	Type	2024 Fee	2025 Fee
Inquiry or Release of Agreements	Written response provided	$390.00	$390.00
	Written response provided (rush request)	$775.00	$775.00
	Verbal response provided	No charge	No charge
	Regulation Maps provided as digital pdf via email	No charge	No charge
Maps	Printed standard legal sized hardcopy	$25.00	$25.00
	Custom Map Fees - Contact GIS staff for exact prices	Administrative Fee $50.00 plus hourly rate Hourly rates $90.00 GIS $135.00 Engineering	Administrative Fee $55.00 plus hourly rate Hourly rates $90.00 GIS $135.00 Engineering
Data Requests	Specialized Data request – Contact staff for exact prices	Administrative fee $50.00 plus hourly rate Hourly rates $90.00 GIS $135.00 Engineering	Administrative Fee $55.00 plus hourly rate Hourly rates $90.00 GIS $135.00 Engineering
Data Portal	Open data portal – self serve	No Charge	No Charge
Other	GPS Surveying (generally involves a crew of two staff)	Administrative fee $50.00 plus hourly rate $135.00/hr + expenses, minimum 2 hr charge	Administrative fee $55.00 plus hourly rate $135.00/hr + expenses, minimum 2 hr charge
	Aquatic Ecosystem – Preliminary Assessment (generally involves a crew of two staff)	Administrative fee $50.00 plus hourly rate $135.00/hr + expenses, minimum 2 hr charge	Administrative fee $55.00 plus hourly rate $135.00/hr + expenses, minimum 2 hr charge

Category	Type	2024 Fee	2025 Fee
	Terrestrial Ecosystem – Preliminary Assessment (generally involves a crew of two staff)	Administrative fee $50.00 plus hourly rate $135.00/hr + expenses, minimum 2 hour charge	Administrative fee $55.00 plus hourly rate $135.00/hr + expenses, minimum 2 hr charge
	Photocopies	$0.10 per standard copy	$0.10 per standard copy

Schedule 2: Conservation Areas Fees (Fanshawe, Pittock and Wildwood)

All fees effective January 1, 2025

Day Use Revenue Centres

Service	Details	2024 Fee	2025 Fee
Day Use Fee	Vehicle day pass	$16.00	$16.00
	Non-vehicle day pass	$8.00	$8.00
	Seasons pass	$150.00	$150.00
	Bus day pass	$175.00	$175.00
	Shoulder Season vehicle day pass (April 1 to April 30, October 19 to November 30, 2025)	$10.00	$10.00
	Shoulder Season pedestrian/cyclist day pass (April 1 to April 30, October 19 to November 30, 2025)	$5.00	$5.00
Watercraft Fee	Motor/sailboat daily	$16.00	$17.00
	Motor/sailboat seasons pass	$150.00	$150.00
	Wet dock seasonal	$525.00	$575.00
	Wet dock monthly	$250.00	$275.00
	Wet dock weekly	$160.00	$175.00
	Wet dock daily	Reinstated in 2025	$30.00
	Dry dock seasonal	$250.00	$275.00
	Dry dock monthly	$150.00	$165.00
	Dry Dock daily	Reinstated in 2025	$25.00
Equipment Rental Fee	Canoe/kayak – 2 hours	$35.00	$40.00
	Canoe/kayak – 4 hours	$60.00	$60.00

Service	Details	2024 Fee	2025 Fee
	Paddle board (WCA) – 2 hours	$35.00	$35.00
	Backcountry canoe/kayak - daily (with Backcountry campsite reservation)	$35.00	$50.00
Pavilion Rental Fee	Watson Porter Pavilion – wedding	$2,700.00	$3,500.00
	Watson Porter Pavilion* - inclusive	$1,400.00	$1,600.00
	Watson Porter Pavilion	$500.00	$600.00
	Lakeview Pavilion* - inclusive	$750.00	$750.00
	Lakeview Pavilion	$350.00	$350.00
	Day Use Shelter	$150.00	$160.00

Notes:

- *Inclusive fee refers to the user paying an all-inclusive fee which includes the pavilion rental and entry for up to 100 (Watson Porter) or 50 (Lakeview) vehicles.

Campground Revenue Centres

Nightly Camping Fees

Service	2024 Fee	2025 Fee
Electrical – Double Unit (WCA)**	New in 2025	$117.00
Electrical – Double Unit (WCA)*	New in 2025	$109.00
Electrical – 50 amp**	$69.00	$72.00
Electrical – 50 amp*	$66.00	$67.00
Electrical**	$59.00	$61.00
Electrical*	$56.00	$57.00
Non-electrical - Premium (FCA)**	$57.00	$59.00
Non-electrical – Premium (FCA)*	$55.00	$56.00
Non-electrical – Backcountry (WCA/PCA)	$50.00	$56.00
Non-electrical**	$48.00	$50.00
Non-electrical*	$45.00	$46.00
Additional Vehicle Pass (daily/overnight)	$16.00	$16.00
Reservation fee (call centre, Internet, campground)	$16.00	$16.00
Change fee	$16.00	$16.00
Cancellation fee	$30.00	$32.00

Notes:

- **Peak Season – June 20 to September 1, 2025, Victoria Day long weekend (May 16-19, 2025), Thanksgiving long weekend (October 10-13, 2025)
- *Non Peak Season – May 1 to June 19, September 2 to October 19, 2025
- Fees for nightly camping and operating dates for individual Conservation Areas are subject to change.
- Fees listed are per campsite per night.

Group Camping Fee

Service	2024 Fee	2025 Fee
Electrical - 30 amp (WCA/FCA) (to a maximum/equivalent of 6 campsites)	$354.00	$396.00

Seasonal Camping Fees

Service	Details	2024 Fee	2025 Fee
Seasonal Camping Fee	Seasonal 50 amp (FCA)	$3,950.00	$4,070.00
	Seasonal 30 amp – Premium	$4,500.00	$4,675.00
	Seasonal 30 amp – Waterfront (PCA)	$3,975.00	$4,150.00
	Seasonal 30 amp	$3,700.00	$3,825.00
	Seasonal 15 amp	$3,350.00	$3,450.00
	Seasonal non-electric – Waterfront (FCA)	$2,850.00	$3,125.00
	Seasonal non-electric	$2,500.00	$2,750.00
	Seasons Vehicle Pass – Swipe Card	$150.00	$150.00
	Seasonal Site Administration Fee	$300.00	$400.00
Storage Fee	Trailer	$475.00	$475.00
	Shed / deck only	$250.00	$250.00
	Boat	$250.00	$275.00
Sewage Fee	Sewage disposal - weekly	$800.00	$825.00
	Sewage disposal - bi-weekly	$400.00	$415.00
	Sewage disposal - single	$65.00	$65.00
	Sewage disposal - unscheduled request	$125.00	$125.00
	Sewage disposal - non camper	$50.00	$50.00

Schedule 3: Forestry Services Fees

Planting Fees

UTRCA Planting: Seedlings

Planting Type	300-999 Trees	1000-2499 Trees	> 2500 Trees
Machine Planting	$3.00/tree	$2.40/tree	$1.35/tree
Hand Planting	$3.00/tree	$3.00/tree	$3.00/tree

Note: Plus cost of trees and HST. Includes 2 applications of herbicide.

UTRCA Planting: Large Stock

Tree Type	Notes	Planting Fee/Tree
Large Stock Coniferous	Minimum order 50 trees	$18.00
Large Stock Deciduous	Minimum order 25 trees	$42.00

Note: Plus cost of trees and HST.

Landowner Planting

Tree Type	Notes	Fee (Administration/ Shipping and Handling)
Seedlings	Minimum order 50 trees, must be ordered in lots of 10/species	$40.00 + HST
Large Stock	Minimum order 25 trees, can include both coniferous and deciduous large stock trees	n/a

Tree Prices

Tree Type	2024 Price/Tree (+HST)	2025 Price/Tree (+HST)
Coniferous Trees Large Stock	$17.00 - $20.00	$17.30 - $22.00
Deciduous Trees Large Stock	$34.50 - $46.50	$29.00 - $47.00
Wildlife Shrubs Large Stock	$14.00 - $24.50	$24.00 - $27.00
Coniferous Seedlings (18-40 cm)	$1.45 - $1.75	$1.55 - $1.85
Deciduous Seedlings (26-90 cm)	$1.80 - $2.20	$1.90 -$2.10
Wildlife Shrub Seedlings (20-35 cm)	$1.75 - $2.50	$1.80 - $2.65

Note: Price is dependent on species and nursery availability.

Schedule 4: Community Education Program Fees

Fee schedule effective in September to align with the school year.

Program Type	Program Details	Fee Details	2024 Fee	2025 Fee
Conservation Education	Conservation Area Programs	Per student Per group minimum	$8 $136	$8 $136
	In-Classroom and Off-site Programs	Per group	$150 - $250	$150-$250
Nature School	Half-Day and Full-Day Programs	Per Season	$100 - $360	$150 - $360
Specialist High Skills Major Certifications	On-Site and Off Site, Half-Day and Full-Day Programs	Per student Per group minimum	$15-$100 $250-$600	$15-$100 $250-$600
GREEN Leaders	Multi-Visit, Year Long Program	Per Class	$5,000	$5,000
Flooding STEM Programs	On-Site, Full-Day Programs	Per Class	$550	$550
Stream of Dreams	Whole School Program	Per Student	$10	$10
		Per Fish	$8	$8
Children's Water Festival	Full-Day Festival	Per Student	$12	$12

Note: In some instances, educational program fees are supported by a sponsor or grant.

Schedule 5: Hunting Fees

Permit Type or Location	2024 Fee	2025 Fee
Hunting Area Draws	$85	$85.00
Ellice and Gads Hill Swamps	$75	$85.00

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Tracy Annett
Date: November 13, 2024
File Number: BoD-11-24-91
Agenda #: 6.2
Subject: 2024 Meeting Addition and 2025 Board and Committee Meeting Schedules

Recommendation

That the Board amends the 2024 Meeting Schedule to add a December Board of Directors meeting on December 17th, 2024;

That the Board approves the attached 2025 Board of Directors Meeting Schedule; and

That the Board approves the attached 2025 Committee Meeting Schedules, pending discussion and approval by the 2025 Committees elected at the January election.

Background

Given the number of deliverables required to be completed by December 31, 2024 staff require additional time to prepare the documents for approval. As such, a December meeting is required.

Meeting Procedures are outlined in Section C.2.1 of the UTRCA's Administrative By-Law, effective September 1, 2024. It states that the General Membership shall approve a schedule for regular meetings in November for the upcoming year, and further, that the schedule will be posted to the Authority website December 1st. The attached schedule provides notice of regular meetings. The following conferences were considered in the proposed schedule:

- The Rural Ontario Municipal Association (ROMA) General Meeting:
- The Good Roads Conference; and
- Association of Municipalities of Ontario Conference (AMO)

Board of Directors meeting schedule

Last year the City of London shifted their council and committee schedule to daytime meetings. During the meeting schedule discussions for 2024 it was recognized that the shift limited the City of London Councillors from participation (and potential election). This year the Administrative Assistant gathered information on the Municipal Council and Committee schedule of the members. Limited options are available for alternative days and or times for BOD meetings. Shifting regular Board and Committee meetings to the fourth Thursday of the month was investigated but was ultimately found not to be a viable option.

As in previous years, Board of Directors meetings will be held on the fourth Tuesday of every month, at 9:30am. There are no meetings scheduled during July and December. Apart from the Annual General Meeting, all meetings will be held using a hybrid model, giving the members the option of attending in person, or virtually over Zoom.

The approved UTRCA Board of Directors and Committee Meeting Schedule will be forwarded to all member municipalities.

Committee meeting schedule

In 2023 both the Finance and Audit Committee and the Hearing Committee passed resolutions to schedule regular meetings. Staff are recommending a continuation of the 2024 meeting schedule, pending discussion and approval by the 2025 committees elected at the January election.

Summary

Board of Directors meetings will be held on the fourth Tuesday of every month, at 9:30am. There are no meetings scheduled during July and December.

Recommended by:

Tracy Annett, General Manager

Prepared by:

Michelle Viglianti, Administrative Assistant

Attachment:

- 2025 Board of Directors and Committee Meeting Schedule

UPPER THAMES RIVER
CONSERVATION AUTHORITY

2025 UTRCA Board of Directors and Committee Meeting Schedule

Tuesday, January 28, 2025, 9:30am
Tuesday, February 25, 2025 – Annual General Meeting, 9:30am – In Person
Tuesday, March 25, 2025, 9:30am
Tuesday, April 22, 2025, 9:30am
Tuesday, May 27, 2025, 9:30am
Tuesday, June 24, 2025, 9:30am
Tuesday, August 26, 2025, 9:30am
Tuesday, September 23, 2025, 9:30am
Tuesday, October 28, 2025, 9:30am
Tuesday, November 25, 2025, 9:30am

Finance and Audit Committee – Pending final approval by Committee

April 22, 2025, following the Board Meeting
September 23, 2025, following the Board Meeting

Hearing Committee – Pending final approval by Committee

January 28, 2025, following the Board Meeting
May 27, 2025, following the Board Meeting
August 26, 2025, following the Board Meeting
October 28, 2025, following the Board Meeting

The 2025 UTRCA Board of Directors meeting schedule was approved by the Upper Thames River Conservation Authority Board of Directors on November 26, 2025.

All meetings will held using a hybrid model, giving the members the option of attending in person, or virtually over Zoom. Municipal partners and members of the public are welcome to attend in person at 1424 Clarke Road, Fanshawe Conservation Area in the Watershed Conservation Centre or watch the livestream on the UTRCA website.

Please note, if additional Committee meetings are required, they will be scheduled at the call of the Committee Chair, following the policies set out in the UTRCA Administrative By-Laws and the Hearing Guidelines.

If you have any questions or require additional information, please contact the undersigned.

Michelle Viglianti,
Administrative Assistant
vigliantim@thamesriver.on.ca
519-451-2800 x222

UPPER THAMES RIVER CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Tracy Annett, Teresa Hollingsworth
Date: November 19, 2024
File Number: BoD-11-24-92
Agenda #: 6.3
Subject: Strategic Plan Update

Recommendation

That the results of the Strategic Plan Input Sessons be received and staff be directed to finalize updated vision and refinement of draft guiding principles / core values, and mission to be incorporated into the Watershed Management Strategy.

Background

In September of 2023 the UTRCA Board of Directors directed staff to engage a consultant to develop an updated strategic plan to define the Authority's values and direction. The timing of the Strategic Plan aligns well and further supports the Watershed-based Resource Management Strategy.

Discussion

The Upper Thames River Conservation Authority obtained Platinum Leadership, London Ontario to develop an updated Strategic Plan to guide the organization from 2025 to 2029.

Platinum Leadership has undertaken:

- A review of strategic objectives, programs, and services within the current operating environment,
- The inclusion of input from all staff and Board members through a series of 6 staff input sessions and an input session with Board members and the senior management team.
- All input received was compiled and provided in a Discovery Report circulated to members before the workshop on November 21.
- Lead a November 26th Workship utilizing the Discovery Report to provide an updated vision and refinement of draft guiding principles / core values, and mission.

A brief overview of the November 26th workshop will be presented during the board meeting with an opportunity for further discussion and input from members.

Next Steps

Staff will use the information gathered to incorporate vision, mission, and values into the Watershed Management Strategy. The Draft Strategy will be provided at the next meeting of the Board.

Working with the members and staff of the Authority, the consultant will:

- Refine the internal and external challenges and opportunities that may impact future decision-making, through an environmental scan and a SWOT analysis to expand on work completed to date.
- Lead a comprehensive engagement effort designed to facilitate member, staff, and partner input. This work may include meetings, interviews, and surveys with UTRCA members and staff, member municipal councilors and staff, and members of other environmental and partner organizations.
- Prioritize strategic objectives and organizational goals, including long- and short-term goals and plans of action or approaches to meet these goals.
- Define metrics whereby the implementation of the plan can be evaluated.

Timeline

Phase 1 – October to December – Board and Employee engagement has occurred, Prior to the end of 2024 the focus will be on Organizational Governance and the identification of Vision, Mission, Values and Guiding Principles.

Phase 2 – January & February - Interest holder engagement and consultants Discovery Report to include recommendations to inform priorities and goals. Board member workshop to decide.

Phase 3 – March – Management Team develops operational planning of strategies, key actions, timelines, resources and project leads with staff.

Phase 4 – April – Board of Directors received Draft Strategic Plan

Summary

Platinum Leadership will continue to reach out to the Board of Directors and Municipal Partners through their comprehensive engagement efforts. Engagement is expected to include meetings, interviews, and surveys with UTRCA members and staff, municipal councilors and staff, and members of other environmental and partner organizations.

Recommended by:

Tracy Annett, General Manager
Teresa Hollingsworth, Manager of Community and Corporate Services

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Chris Tasker
Date: November 19, 2024
File Number: BoD-11-24-953
Agenda #: 6.4
Subject: Ice Management and Operational Plans

Recommendation

That the Board of Director receive the attached Ice Management and Operational Plans, and that staff proceed to make them available for municipalities through the flood coordinators and post the operational plans on our website.

Background

Further to the updates provided in the September meeting of the Board, staff have prepared the attached plans to satisfy the requirements under the new Conservation Authorities Act, specifically O.Reg 686/21. This regulation requires that CAs develop and implement Operational Plans for Flood, Flow Augmentation and Erosion Control Structures.

It also requires that CAs provide programs and services for ice management, if the authority determines that ice management is necessary to reduce the risks associated with flooding. These programs or services shall include the development and implementation of an ice management plan. This plan is to identify how ice within the authority's area of jurisdiction may increase the risk of natural hazards; and the steps necessary to mitigate these risks, including identifying equipment and resources needed to carry out these steps.

Discussion

Attached are the following plans:

- Ice Management Plan
- Fanshawe Dam Operational Plan
- Wildwood Dam Operational Plan
- Pittock Dam Operational Plan
- Dykes and Floodwall Operational Plan
- Flood Control Channels Operational Plan

These documents satisfy our requirements under the regulation to have these plans. These plans will be updated through additional text edits and additional graphics to better support the information included in the plans. As such the versions attached still include a draft wordmark. Following these remaining edits, the UTRCA website will be updated to include the Operational plans. Also, the UTRCA Flood Contingency Plan will be updated to include the ice management plan. All plans will be added to the materials covered at the upcoming Flood Coordinators meeting.

Recommended by:

Chris Tasker, Manager, Water and Information Management
Mark Helsten, Senior Water Resources Engineer

Upper Thames River Conservation Authority
Ice Management Plan

2024-11-07

Background

Regulatory Requirements

Ontario Regulation 686/21: Mandatory Programs and Services under the Conservation Authorities Act requires Conservation Authorities (CAs) to provide programs and services for ice management within its area of jurisdiction, if the authority determines that ice management is necessary to reduce the risks associated flooding. These programs or services shall include the development and implementation of an ice management plan. This plan is to identify

> (a) how ice within the authority's area of jurisdiction may increase the risk of natural hazards; and
>
> (b) the steps that are necessary to mitigate these risks, including identifying equipment and resources needed to carry out these steps.

A CA may update the ice management plan from time to time as the authority considers it advisable.

In summary, the regulation provides no details beyond the two items identified above on what is needed as an ice management plan. It is within the CA's discretion as to whether an ice management plan is needed. This document is intended to satisfy those requirements for the Upper Thames River Conservation Authority (UTRCA).

Types of Ice Related Flooding

Ice jams are the result of two basic causes: (i) the freezing up of rivers, including frazil ice formation, and (ii) the break-up of solid ice during sudden and prolonged changes in weather conditions.

Frazil is a mass of frozen water particles which stick to each other and everything they touch. It generally forms in very cold conditions, when water is super-cooled (below -0.05 degrees Celsius).

In general, ice jams form at locations where there are constrictions on the river, such as:

- tight bends or narrow sections
- islands or shallow bars
- bridges
- changes in channel form (i.e. river confluences and changes in riverbed slope).

In some locations where velocities are slow, ice can form from the bottom of the river up, effectively creating a dam.

Ice Impacts in the UTRCA Watershed

Historically, ice jam flooding has not been a source of flood damage in the Upper Thames River basin. There are a few locations in the watershed where ice jams in undeveloped river valleys have resulted in flooding. One such example is the Motherwell area in the Municipality of West Perth however most of the impacted lands have been acquired by the UTRCA to mitigate potential flood damage and the structures potentially impacted by the ice related flooding have been removed.

There are some hydrometric gauges in the watershed where ice does cause an increased water level and, thus, incorrect estimates of river discharge. As such, flood forecasts must take this into account, however, there is no specific response needed, nor damage inflicted.

Given the limited historic ice related flooding, there is not much information to suggest that ice may increase the risk of flooding. As a result, a separate Ice Management Plan is not required. However, maintaining a simple Ice Management Plan as part of the Flood Contingency Plan keeps the potential for ice to affect flooding in the watershed in the minds of those involved with implementing the Flood Contingency Plan, both within the CA and the Municipal Flood Coordinators.

Future Potential for Ice Related Flooding

While there have not been significant historical flooding problems associated with ice in the UTRCA watershed, it may not remain this way in the future. Should new flooding hazards develop, or ice is found to increase the risk of flood hazards, this document will be updated as appropriate.

Integration with the Flood Contingency Plan

This Ice Mangement Plan forms a part of the UTRCA Flood Contingency Plan, by adding it as an appendix to the Contingency Plan. As part of the Flood Contingency Plan, it will be reviewed on an annual basis along with the rest of the Contingency Plan. It will also be included as a topic in the annual Flood Coordinators meeting, held annually.

Communication about ice related flooding would rely on the communications framework, contacts and protocols established in the Flood Contingency Plan. Communications about ice related flooding would be treated the same as other flood messages and be undertaken through municipal flood coordinators and in the form of flood bulletins.

The response to flooding could include actions such as closing roads impacted by flooding or providing notification of areas which should be evacuated. Ice impacts would

not be any different than other responses carried out by municipalities. In areas outside of the UTRCA with historical ice flooding problems equipment and resources may be maintained for response to ice related flooding (one such example is where ice breakers are needed to open up the mouth of the river, or arrangement made with contractors for construction equipment to assist with breaking up ice jams). However, with very limited ice impacts in the watershed, no such resources are maintained by the UTRCA or municipalities.

Ongoing Maintenance of the Ice Management Plan

This document will be reviewed annually as part of the Flood Contingency Plan review and updated as required.

Upper Thames River Conservation Authority Operational Plan for Fanshawe Dam

2024-11-16

Table of Contents

1. Purpose of Operational Plan

Ontario Regulation 686/21 requires that a Conservation Authority (CA) provide programs and services that support the operation, maintenance, repair, and decommissioning of the following types of infrastructure the CA owns or manages:

- Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation.
- Any erosion control infrastructure.

Programs and services provided shall include the development and implementation of an operational plan on or before December 31, 2024.

Some water control infrastructures in the Upper Thames River Conservation Authority (UTRCA) watershed are not owned by the CA but are managed through an agreement with the owner. These structures also require operational plans.

2. Purpose of Structure

2.1. Flood Control

Fanshawe Dam is just one of a series of eight dams recommended by the Upper Thames Valley Report (1952) as an essential component for complete flood control on the Thames River system. The primary purpose of Fanshawe Dam and Reservoir is to assist in flood control efforts to reduce flood damage in the City of London. Fanshawe Dam was constructed between 1950 and 1952, and cost $5M at the time, including land assemblage and the structure. Figure 1 shows the location of Fanshawe Dam and Reservoir on the North Thames River.

During a flood, the dam can reduce downstream flows on the North Thames River through London by storing flow in the reservoir and releasing it later. The level of flow reduction can range from 10% to 50%, depending on the type and severity of the flood and when it occurs.

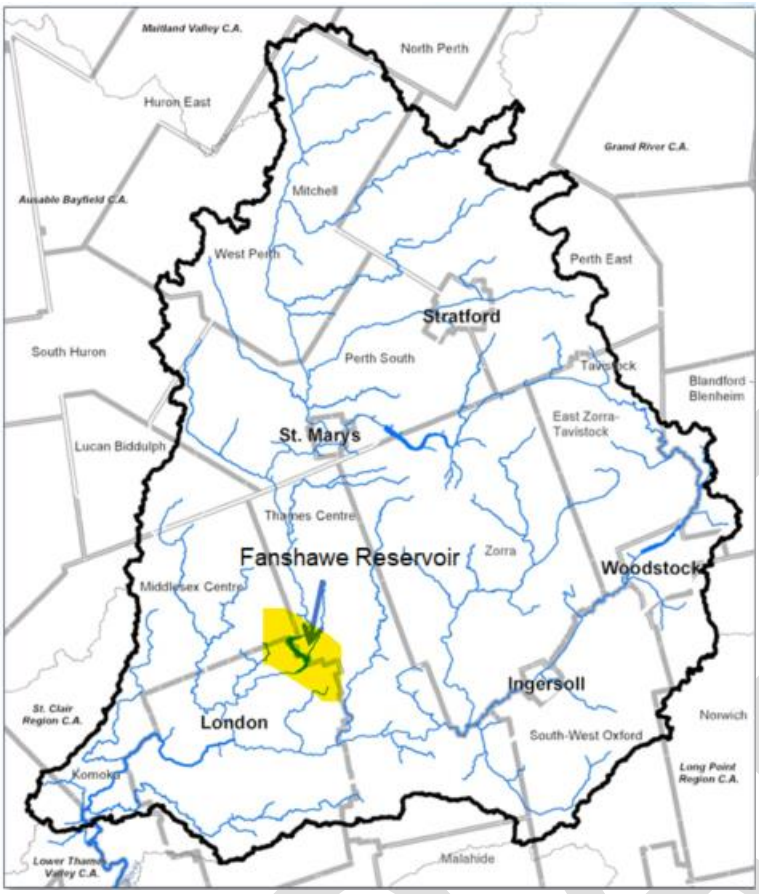

Figure 1 Location of Fanshawe Dam and Reservoir

2.2. Recreational Use

When the 1952 Upper Thames Valley Conservation Report was released, it made several recommendations about various forms of recreation in the UTRCA watershed, including:

- Beaches and pools for swimming,
- Boating and fishing areas,
- Individual picnic sites and group picnic grounds in parks,
- Individual and group camping areas,
- Trails for riding, hiking, and nature study.

The construction of Fanshawe Reservoir included acquisition of the surrounding lands comprising the Fanshawe Conservation Area (FCA), which over the years has provided all the above recreational opportunities. Services managed by the FCA staff include short term and seasonal camping, day use areas, and trails. In addition to these services, there are also seasonal land leases with private individuals, and lands leased for other recreation.

2.3. Hydro-electric Generation

In 1984, a small hydro-electric generator was added to Fanshawe Dam. A penstock was added to one of the previous 60-inch valves to direct the flow through a turbine to generate 500 MW of electricity, with appropriate flow and reservoir water level. This generator is operated as a run of the river generation facility without significantly impacting the levels or flows through the reservoir. Its operation is guided by a Water Management Plan.

3. Level of Service

Level of Service (LOS) refers to the ability of an asset or its components to perform the role for which it was designed and to the level or quantity of use for which it was intended. Because of the importance of Fanshawe Dam in continuing to reduce the risk of flooding along the North Thames River in the City of London, the LOS would be high. The amount of attention to and funding for operation and maintenance must reflect the importance of this asset.

LOS will be further considered through Asset Management Planning, and this section will be updated to reflect that ongoing work.

3.1. Service Life

A concrete/earthen embankment dam, such as Fanshawe Dam, should last at least 100 years, with proper inspection and maintenance. The lifespan of hydromechanical steel structures, electromechanical equipment, and control units is shorter than that of the main civil/structural components and are specified by the suppliers, who also provide instruction manuals describing operation and maintenance. Continued routine and preventative maintenance and the timely replacement of equipment will allow the dam to continue to meet its expected level of service and extend the structure's service life considerably.

4. Stakeholders and Beneficiaries

When operating dams, it is important to understand those who are impacted by the operations. Stakeholders of Fanshawe Dam are discussed below based on the type of benefits they receive from the operation of the dam.

Funding for the operation and maintenance of Fanshawe Dam is levied to the municipalities which shared in the funding of the local share of the dam. The City of London has annexed all the land adjacent to the river downstream of the dam and, as such, the City is the sole beneficiary of the dam’s flood control benefits. London funds the local share of the operation and maintenance of the dam through levy paid to the UTRCA.

From a flood control perspective, the City of London, its residents and business owners whose flood risks are reduced through the operation of the dam, all benefit from

Fanshawe Dam. Fanshawe Dam controls only 47% of the drainage area of the Thames River to the Forks of the Thames; therefore, the dam's flood risk reduction downstream of the Forks is lessened.

Fanshawe Conservation Area (FCA) was established around the reservoir to take advantage of the large waterbody created by the dam. The conservation area provides recreational opportunities for camping, boating, fishing, hiking, cycling, and other day use activities. Cottagers and other lease holders also benefit from the reservoir. FCA is a recreational destination and provides social and economic benefits to the surrounding area.

4.1. Communication with Stakeholders

Communications with stakeholders are important to the operation of the dam. Conservation area and property staff have established relationships with the various user groups around the reservoir and can efficiently distribute messages to these stakeholders. As such, it is important that these staff are kept up to date on any significant variation from typical operating conditions, such as unseasonably high or low water levels in the reservoir.

UTRCA flood control staff undertake flood time communications directly with municipal flood coordinators. In the event of a major flood where significant gate operations are necessary at Fanshawe Dam, communications with the City of London are through their municipal flood coordinator, consistent with the UTRCA Flood Contingency Plan.

5. Operations

5.1. Physical Characteristics

Fanshawe Dam controls runoff from 1450 km^2 of upstream drainage area, with a normal summer surface area of 260 ha, and a maximum surface area of 650 ha. Fanshawe is controlled by six vertical sluice gates, each measuring 30' x 30', as well as one 60-inch low flow control valve, and one 60-inch penstock to a small hydro-electric power generation facility downstream of the stilling basin.

Fanshawe Reservoir was designed as a run-of-river dam, meaning it is usually at its normal level of near 0.0 m relative (262.13 metres above sea level, masl, 860 feet above sea level, fasl), unless storage is required to reduce flooding. With the gates open, water freely discharges over the sill. As inflow increases, the water level rises, increasing discharge over the sill until the level reaches the gates. Once the water level rises sufficiently, the gates may be operated to control discharge downstream. The maximum operating level of Fanshawe Reservoir is 9.14 m (271.27 masl, 890 fasl).

The maximum discharge capacity of the Fanshawe Dam is calculated as 2600 m^3/s. This is sufficient to safely pass the probably maximum flood (PMF) safely through the dam.

The storage characteristics of Fanshawe Dam are illustrated in Figure 2. The green line represents storage in terms of hectare metres as a unit of volume (1 ha-m = 10000 m^3). The blue line shows the same information in terms of runoff storage in mm from the entire upstream drainage area of 1420 km^2. Both storage units are presented relative to the sill of the dam, which is the 0 m reference elevation.

The reservoir may be drawn down below the sill for maintenance purposes through the use of the valve and/or hydro-electric plant.

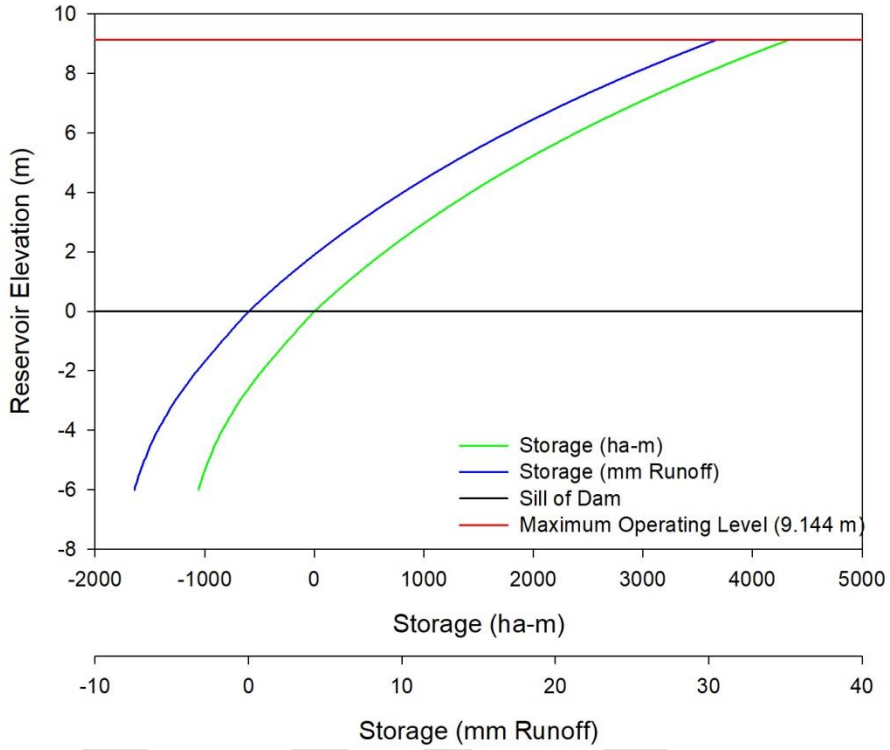

Figure 2. Fanshawe Reservoir Storage Characteristics

Reservoir operation guidelines are shown in Figure 3. Note that these guides are dictated by recreational and hydro-electric plant operation constraints and are disregarded in the event of flood control requirements. Notification of stakeholders is especially important when levels are forecast to rise above seasonal recreational constraints. The high constraints in the winter reflect when the hydro-electric plant may need to be closed down due to the head in the reservoir.

In this sense, this operating curve is less restrictive than typical flow augmentation operation guideline curves as the curves do not reflect flood control considerations. The graph does, however, provide a quick graphical reference to the seasonal variation of recreational constraints.

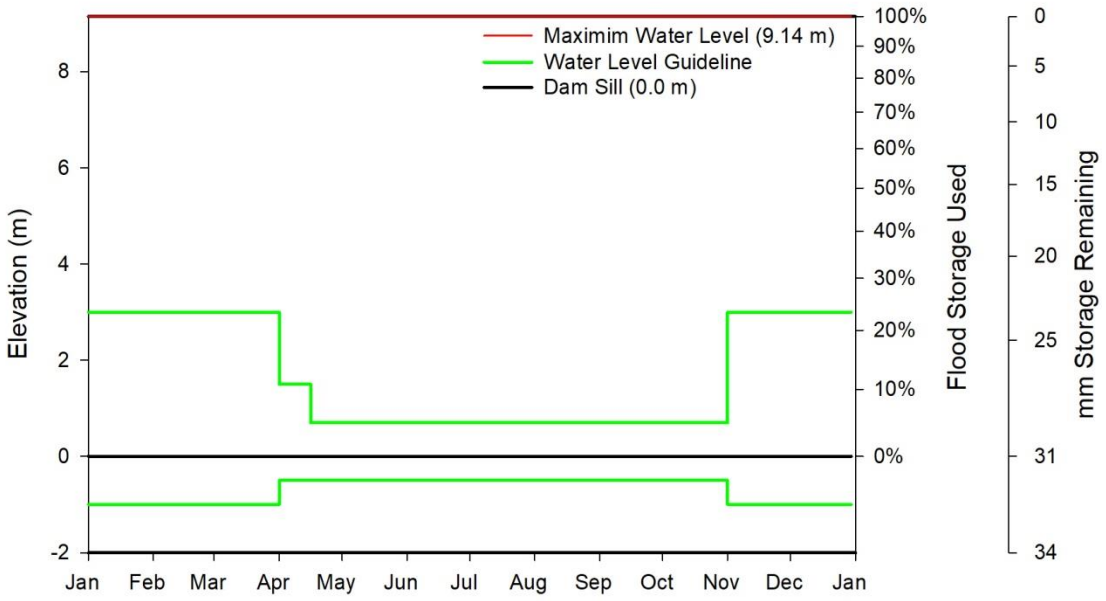

Figure 3. Fanshawe Dam Operation Guidelines

5.2. Flood Routing

When Fanshawe Dam was first commissioned in 1953, a set of instructions was provided on routing floods through the reservoir. Two separate routing schedules were provided, based on whether the flooding was rainfall or snowmelt based. For rainfall events there were two schedules, one for minor floods (less than 2” runoff, rainfall less than 2”-3” in 12 hours), and one for moderate (2”-4” runoff, 3”-6” rain in 24 hours or less). For snow melt events, there are also two schedules. When Fanshawe Reservoir is at its normal operating level, it retains about 30 mm of runoff storage. Fanshawe is capable of reducing downstream flooding by 10%-50%, depending on the magnitude of the event and whether it is the result of rainfall or snowmelt.

5.3. Downstream Constraints

The original Fanshawe Dam design specified the downstream channel capacity at 13000 ft^3/sec (370 m^3/sec), which in practice has proved reasonable, with minor flooding and road closures at Windermere Road and Adelaide Street, and some property damage beginning above this threshold.

A real-time hydrometric gauge, called North Thames River near Thorndale (02GD015), is located upstream. This gauge is operated by the Water Survey of Canada (WSC) with assistance from UTRCA under agreement. This gauge began recording data and estimating discharges in 1953. Note the UTRCA often refers to this station by a different nearby community, Plover Mills. The Thorndale station has an upstream drainage area of 1320 km^2 which represents 93% of the drainage area into the reservoir and provides an excellent source of reservoir inflows and timing.

6. Routine Maintenance

Routine inspection and maintenance are important to ensure the flood control structures are able to meet their purposes. Inspection and maintenance are guided by the structure's Operation, Maintenance and Surveillance Manual (OMS Manual). This manual identifies:

- Weekly inspections – carried out by maintenance mechanics, include a visual inspection of the buildings and equipment, verification of the operation of the discharge facilities (gates, valves) to the extent possible.
- Monthly inspections – generally carried out by the maintenance mechanics.
- Annual inspections – generally undertaken by engineering staff and maintenance mechanics, include a more thorough visual inspection of the dam embankment, buildings, and equipment, and testing the operation of equipment.

These inspections are in addition to routine health and safety inspections undertaken by the JHSC members. Dam Safety reviews and external inspections are also carried out approximately every 10 years.

7. Emergency Planning

As part of the UTRCA's Dam Safety Program, Emergency Preparedness Plan (EPP) and Emergency Response Plans (ERP) are being developed. Response to dam emergencies which may require communication with watershed residents relies on the Flood Contingency Plan which uses flood bulletins to communicate conditions to municipal flood coordinators, who implement municipal Emergency Plans. Recent municipal and joint agency tests of emergency plans have involved dam emergencies.

8. Roles and Responsibilities

Operations are directed by senior engineers based on the general principles described in this document. Careful consideration of the watershed conditions and forecasts requires the careful application of engineering judgement. Operations are undertaken by trained operators which include parks staff, maintenance mechanics, and other trained water and erosion control structure staff.

Routine maintenance is undertaken by dam maintenance mechanics and contractors where necessary.

Upper Thames River Conservation Authority Operational Plan for Wildwood Dam

2024-10-23 Rev 1

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1. Purpose of Operational Plan

Ontario Regulation 686/21 requires that a Conservation Authority (CA) provide programs and services that support the operation, maintenance, repair, and decommissioning of the following types of infrastructure the CA owns or manages:

- Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation.
- Any erosion control infrastructure.

Programs and services provided shall include the development and implementation of an operational plan on or before December 31, 2024.

Some water control infrastructures in the Upper Thames River Conservation Authority (UTRCA) watershed are not owned by the CA but are managed through an agreement with the owner. These structures also require operational plans.

2. Purpose of Structure

2.1. Flood Control and Flow Augmentation

The construction of a dam on Trout Creek, upstream of the Town of St. Marys (Figure 1), was proposed in 1948 as the first major project of the UTRCA after its formation in 1947. Originally designed as a flood control reservoir, there was considerable opposition, and the project was shelved. It was thought that improving certain land use practices would be more effective at improving flood control.

The Upper Thames Valley Conservation Report (1952) modified the plans for the dam, proposing that, in addition to providing flood protection to downstream communities, the reservoir supplement flows during the drier summer months. Construction began at the dam site in 1962 and finished in 1965. The cost of the dam and land base at that time was approximately $3.5 million.

Wildwood Dam and Reservoir are designed for both flow augmentation and flood control. The dam operation follows an annual cycle to supplement downstream flows during the drier summer months. At the beginning of the year, the reservoir is at approximately 3 m, relative (321.21 metres above sea level, masl, 1053.8 feet above sea level, fasl), which is its winter holding level to maintain aquatic habitat. The low reservoir has room to manage winter floods and to store runoff from snowmelt and rain in the winter and spring, which is used to fill the reservoir to the summer conservation level of 6.55 m, relative (324.76 masl, 1065.5 fasl). The summer conservation level is the level needed to provide flow augmentation through the summer and fall.

Approximately 10 million cubic metres of water are required to fill Wildwood reservoir from its winter holding level to its summer conservation level. This volume is the

equivalent of 70 mm of water covering the entire 140 km^2 area that drains into the reservoir.

Above the summer conservation level, there is an additional 6.3 million cubic metres of flood storage. This amount is equivalent to 44 mm of water covering the entire drainage area upstream of the reservoir.

The flow augmentation period typically begins in late June. Water is gradually released from the reservoir, augmenting flows in Trout Creek and in the North Thames River downstream to London, providing water quality and aquatic habitat benefits. During a dry summer, this release from Wildwood Reservoir provides 25% to 50% (or more) of the flow in the North Thames River.

By late fall, the reservoir has been drawn down to its winter holding level, maintaining sufficient water for aquatic habitat while increasing flood storage for fall and winter floods and to be ready for the next spring runoff.

During a flood, Wildwood Reservoir can reduce downstream flows on Trout Creek by storing flow in the reservoir and releasing it later. The level of flow reduction can range from 20% to 95%, depending on the type and severity of the flood and when it occurs. Trout Creek contributes only a small portion (13%) of the North Thames River water that flows through St. Marys, and operations at Wildwood have a less significant reduction of flows in the North Thames River.

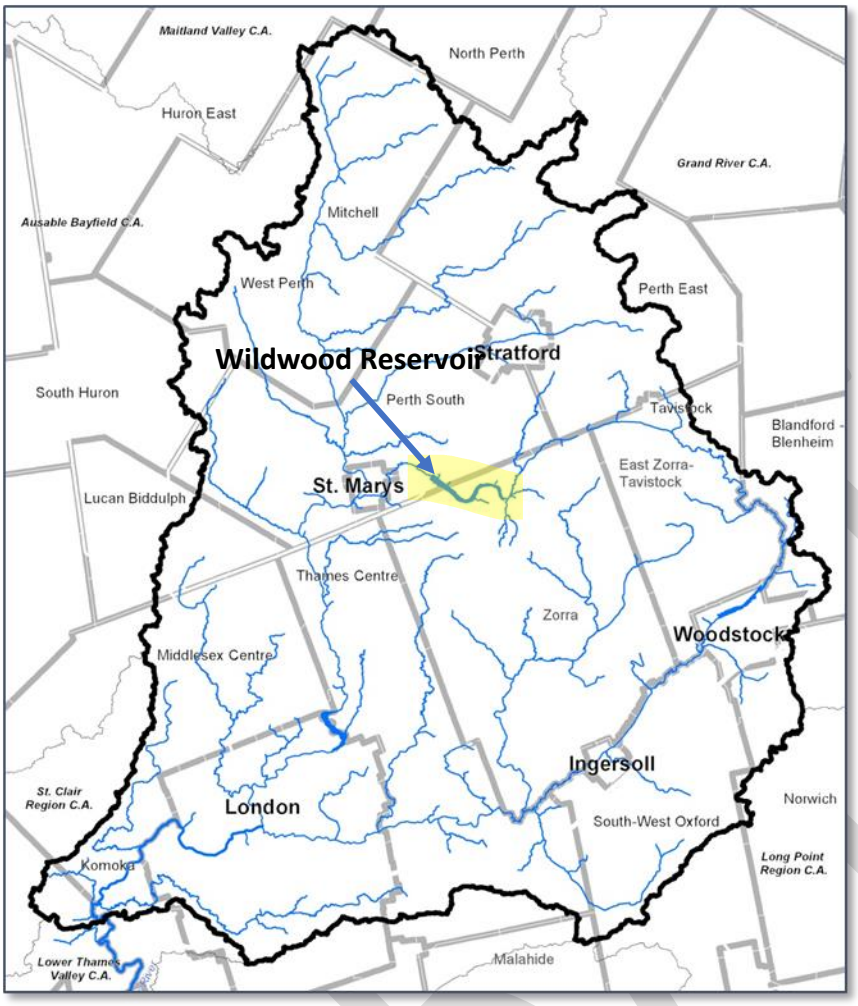

Figure 1 Wildwood Dam and Reservoir Location

2.2. Recreational Use

When the 1952 Upper Thames Valley Conservation Report was released, it made several recommendations about various forms of recreation in the UTRCA watershed, including:

- Beaches and pools for swimming
- Boating and fishing areas
- Individual picnic sites and group picnic grounds in parks
- Individual and group camping areas
- Trails for riding, hiking and nature study

The construction of Wildwood Reservoir included acquisition of the surrounding lands comprising the Wildwood Conservation Area (WCA), which over the years has provided the above recreational opportunities. In addition to services managed by the WCA staff

there is also a seasonal Land Lease Community, as well as other leases (such as a cooperatively run sailing club, and a camp leased to a local community group).

3. Level of Service

Level of Service (LOS) refers to the ability of an asset or its components to perform the role for which it was designed and to the level or quantity of use for which it was intended. Because of the importance for Wildwood Dam to continue to reduce the risk of flooding along Trout Creek in the town of St. Marys, as well as its role in augmenting stream flow on the Trout Creek and the North Thames River downstream through London in dry months, the required LOS would be high. The amount of attention to and funding for operation and maintenance must be reflective of the importance of this asset.

LOS will be further considered through Asset Management Planning and this section will be updated to reflect that ongoing work.

3.1. Service Life

A concrete/earthen embankment dam, such as Wildwood Dam, with proper inspection and maintenance should last at least 100 years. The lifespan of hydromechanical steel structures, electromechanical equipment and control units is shorter than that of the main civil/structural components and are specified by the suppliers, who also provide instruction manuals describing dam operation and maintenance. Continued routine and preventative maintenance along with the timely replacement of equipment will allow the dam to continue to meet its expected level of service and extend the structure's service life considerably.

4. Stakeholders and Beneficiaries

When operating dams, it is important to understand who is impacted by the operations. Stakeholders of Wildwood Dam are discussed below in three groups based on the type of benefits they receive from the operation of the dam.

Funding for the operation and maintenance of Wildwood Dam is levied to the municipalities that shared in the dam construction costs. This was established as 80% from London,14% from St Marys, and 6% allocated to all municipalities based on their relative share of the modified current value assessment of the watershed.

From a flood control perspective, the Town of St. Marys, its residents and business owners whose flood risks are reduced through the operation of the reservoir benefit the most from Wildwood Dam. Flood risk reduction on the North Thames River downstream of the confluence with Trout Creek in St Marys is greatly reduced as Trout Creek is only 13% of the drainage area and contributes a similar proportion of flows downstream.

Wildwood Dam and Reservoir provide flow augmentation maintaining flow in Trout Creek and the North Thames River. This reliable flow is beneficial for the general health of the watercourse and the aquatic life it supports. When planned, the reservoir was designed to provide reliable flow, in part, to assimilate effluent from downstream wastewater treatment facilities at St Marys and London.

Wildwood Conservation Area was established around the reservoir to take advantage of the large waterbody formed by the dam. It provides recreational opportunities for those using the facilities for camping, boating, fishing, hiking, cycling and other day use activities. Land lease and other lease holders also benefit from the reservoir.

The stable flows downstream of the dam also benefit recreational uses in the floodplain and watercourse. The flow augmentation also benefits those drawing water for such things as irrigation. The reservoir also effectively reduces flows downstream of the dam during many runoff events, reducing significantly the frequency of interruptions to recreational activities in the floodplain.

The Conservation Area (CA) is a recreational destination and provides social and economic benefits to the surrounding area.

4.1. Communication with Stakeholders

Communications with stakeholders is important to the operation of the dam. CA and property staff have established relationships with the various user groups around the reservoir and can efficiently distribute the messages to these stakeholders. As such, it is important that the CA staff are kept up to date on any significant variation from typical operating conditions such as unseasonably high or low water levels in the reservoir.

Flood time communications are undertaken directly by flood control staff to municipal flood coordinators. Most operations of Wildwood Dam have little impact on St Marys and none on downstream municipalities, however in the event of a major flood where significant gate operations were necessary at Wildwood Dam, communications with the Town of St Marys would be through their municipal flood coordinator consistent with the UTRCA Flood Contingency Plan.

Flood control staff have established direct communications with the management team at the St Marys Golf and Country Club so that they are kept apprised of changes in discharge from Wildwood Dam which may affect their golf course.

5. Operations

5.1. Physical Characteristics

Wildwood Dam controls discharge from 140 km^2 of the upstream drainage area with a normal summer surface area of 380 ha and a maximum surface area of 505 ha. Wildwood is controlled by four low level sluice gates, each measuring 12’ x 12’, as well as one 18-inch drain valve, and two 18” low flow control valves. Wildwood has four

baffle walls, above each of the gate bays. Flow starts going over the baffle walls slightly above the normal summer level, over which flow is discharged proportional to the height above the baffle walls. This acts as an automatic spillway (weir) for the structure, should the level rise quickly before operations commence. The maximum discharge capacity of the Wildwood Dam is calculated as 545 m^3/s. The Wildwood Reservoir has a maximum operating level of 8.23 m (326.44 masl, 1071 fasl).

5.2. Flood Routing

When Wildwood Dam was first commissioned in 1965, a set of instructions on routing floods through the reservoir was provided. In general, valves alone are to be used when the reservoir is below a threshold level, just above the summer operation level, at 7.01 m, relative (325.22 masl, 1067 fasl). The caveat is provided that, if the reservoir level was planned to be reduced before or during a major storm, gates could be operated earlier provided the downstream channel capacity (then estimated at 2000 ft^3/sec, or 57 m^3/s) was not exceeded. The opportunity for doing this is likely limited to snowmelt events which provide a longer lead time for forecasts and more reliable runoff forecast. Trying to keep within the more contemporary limit of 5 m3/sec during summer recreational use downstream significantly limits opportunities for doing this. Wildwood reservoir, when at its summer level of 6.55 m, still retains 44 mm of flood runoff storage.

5.3. Downstream Constraints

While the original dam design suggests 57 m3/sec (2000 ft3/sec) as the downstream channel capacity, more recent experience has shown that discharge, while it should not flood homes in St Marys, will come very close to some structures, and likely cause other problems. From experience, discharges between 20 and 30 m3/sec begins to flood back yards in St Marys along Widder Street, but still no serious flooding ensues. Once the reservoir level threshold of 7.01 m is reached, gate opening commences, increasing discharge further as the reservoir level continues to rise past higher threshold levels.

Modern operation attempts to keep the discharge at or below 5 m3/sec to the extent possible. Recreational activities in the flood plain downstream are affected by flows above 5 m3/sec. If discharges above 5 m3/sec are necessary, downstream considerations suggest that the duration of flows exceeding 5 m3/sec be minimized.

There is a real-time hydrometric gauge called Trout Creek near Fairview (02GD019), which is located upstream of the reservoir. It is operated by the Water Survey of Canada (WSC), with assistance from UTRCA under agreement. This gauge began recording data and estimating discharges in 1966, but did not provide real-time data access until 2002. While the Fairview station only measures 45 km2 of Wildwood's 140 km2 catchment (32%), it still provides a good indication of inflows (scaled by drainage area) and timing for operation decisions.

It is important that operators consider flow information, snow survey and precipitation data along with improved forecasting tools, which were not available when the original

flood routing instructions were established. This engineering judgement is an important part of contemporary operations of the dam.

5.4. Flow Augmentation

Wildwood Dam was designed and built with both flood control and flow augmentation in mind. As such it can reduce flood risk to downstream communities and provide additional flow during summer and early fall months. Wildwood typically begins the spring season at its winter level of 3.0 m, and is then filled with early spring snowmelt runoff, and later spring rainfall runoff, until it reaches its summer level of 6.55 m, generally by early to mid-May. Summer level is intended to be held until the level naturally begins to decrease, depending on the dryness of the year, and as late as the end of June, before augmentation begins. In many years, however, it is often difficult to keep it at its summer levels until late June without reducing the discharge.

The reservoir was designed to provide 1.1 m^3/sec (40 ft^3/s) through the drain valve from the end of June until late fall when winter elevation is reached. It is often not possible to maintain 1.1 m^3/sec during the filling stage as the dam was designed to capture all runoff to store sufficient water for maintaining discharge through the augmentation period. During periods when the reservoir is below its desired level it may also be necessary to reduce discharge during periods when there is adequate base flow downstream.

In the original design, the assumption was that any inflow to the reservoir was balanced by evaporation from its surface. The winter level in the original design was 0.0 m (318.21 masl, 1044 fasl). In 1993 a study was completed to examine alternate drawdown curves, allowing the winter level to be kept higher, partly to improve aquatic habitat over the winter, and to facilitate the ability to reach summer level by the end of May, which was not always possible historically. That study recommended a winter holding level of 2 m rather than 0 m as was done in the past. In the early 2000s, UTRCA staff evaluated keeping the level between 2.0 m and 3.0 m, which further improves habitat, while posing little additional flood risk due to the reservoir's large remaining storage capacity above 3.0m. An additional consideration in recent times are early snowmelt events, and the possibility that a new and sufficient snowpack is not established with which to fill the reservoir, requiring higher levels to be held earlier in the year than the original design considered.

A plot of the annual filling and drawdown guideline is included below. This plot has been developed to reflect the original text description and refined as discussed above. Watershed conditions can be challenging as they require real-time judgement. The solid green line illustrates that filling was originally intended to capture all runoff, beginning in February, until the reservoir was filled later in the spring. The dashed green line shows, in practice, how filling has been achieved historically. It indicates the long-term median reservoir elevations at the 1st and 15th of each month, from February until early May, and is used by operators as a guide to filling.

The drawdown curve, beginning in late June is also derived from the 1st and 15th of each month's long term median level, and coincides with the design that the reservoir provides 1.1 m^3/sec downstream.

The vertical axis on the left represents reservoir elevation, in terms of relative m, and the two vertical axes on the right show the same information presented in terms of first the percentage of reservoir storage used, and then the remaining mm of runoff storage between empty and maximum operating level.

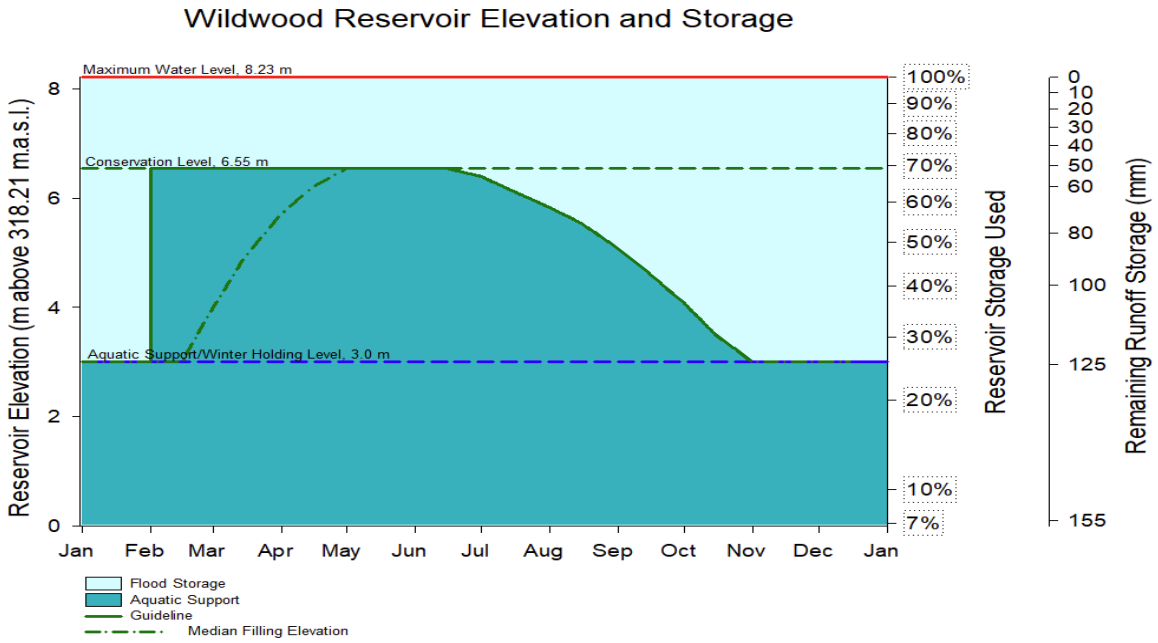

Figure 2 Wildwood annual filling and drawdown guidelines

5.5. Reservoir Capacity

Wildwood Reservoir has a large capacity relative to its drainage area of 140 km^2. To meet its summer target elevation (6.55 m) from a winter holding level of 3.0 m, requires 73 mm of runoff to be stored. Once at summer level, there remains 50 mm of runoff storage for managing flooding until maximum level is reached.

5.6. Climate Change Considerations

It is anticipated that climate change will affect reservoir filling. Current trends seem to suggest more precipitation earlier in the year and an earlier loss of snowpack. This raises uncertainty as to whether to capture runoff from early melt and rainfall events or to draw levels back down in January and February, ensuring appropriate storage for later spring events, while ensuring the target summer level is reached.

Climate change also presents additional challenges during the summer months, with more frequent, early summer events pushing reservoir levels toward the 7 m gate operation threshold. These levels can have a significant effect on recreational uses in the reservoir. Gate operations also have very significant impacts on downstream recreation as described in the Downstream Constraints section above.

6. Routine Maintenance

Routine inspection and maintenance are important to ensure the flood and flow augmentation structures are able to meet their purposes. Inspection and maintenance are guided by the structure's Operation, Maintenance and Surveillance Manual (OMS Manual). This manual identifies:

- Weekly inspections – generally carried out by trained park staff which include a visual inspection of the buildings and equipment, verification of the operation of the discharge facilities (gates, valves) to the extent possible. In the case of Wildwood Dam gates cannot be operated due to the significant increases in flows which would be released downstream and the difficulties on getting the gates to seal.
- Monthly inspections – generally carried out by the maintenance mechanics.
- Annual inspections – generally undertaken by engineering staff and maintenance mechanics which include a more thorough visual inspection of the dam embankment, buildings and equipment and testing the operation of equipment.

These inspections are in addition to routine health and safety inspections undertaken by the UTRCA's Joint Health and Safety Committee members. Dam Safety reviews and external inspections are also carried out approximately every 10 years.

7. Emergency Planning

As part of the UTRCA's Dam Safety Program, Emergency Preparedness (EPP) and Emergency Response Plans (ERP) are being developed. Responses to dam emergencies that require communication with watershed residents relies on the Flood Contingency plan. This plan uses Flood Bulletins to communicate conditions to municipal flood coordinators who then implement municipal emergency plans.

8. Roles and Responsibilities

Dam operations are directed by senior engineers based on the general principles described in this document. Careful consideration of the watershed conditions and forecasts requires the careful application of engineering judgement. Operations are undertaken by trained operators which include parks staff, maintenance mechanics and other trained water and erosion control structure staff. Routine maintenance is undertaken by dam maintenance mechanics and contractors as necessary.

Upper Thames River Conservation Authority Operational Plan for Pittock Reservoir

2024-11-01 – Rev 1

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1 Purpose of Operational Plan

Ontario Regulation 686/21 requires that a Conservation Authority (CA) provide programs and services that support the operation, maintenance, repair, and decommissioning of the following types of infrastructure the CA owns or manages:

- Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation.
- Any erosion control infrastructure.

Programs and services provided shall include the development and implementation of an operational plan on or before December 31, 2024.

Some water control structures in the Upper Thames River Conservation Authority (UTRCA) watershed are not owned by the CA but are managed through agreement with the owner. These structures also require Operational Plans.

2 Purpose of Structure

2.1 Flood Control and Flow Augmentation

Design concepts for Pittock Dam were described in the Upper Thames Valley Conservation Report (1952) with the objectives of providing flood protection to downstream communities and improving base flows during the drier summer months. In 1961 engineering design commenced to find the best combination of works in the Woodstock area. Two alternatives were considered, one which had dams on both the Thames River and Cedar Creek. The current location of a single dam upstream of Highway 59 was selected. Construction was started on the dam in 1964 and officially completed in 1967. The cost of the dam and land base at that time was close to $6 million.

Pittock Dam and Reservoir are designed for both flow augmentation and flood control. The dam operation follows an annual cycle to supplement downstream flows during the drier summer months. At the beginning of the year, the reservoir is at approximately 1 metre (283.7 masl, 930.8 fasl), which is its winter holding level to maintain aquatic habitat. The low reservoir has room to manage winter floods and to store runoff from snowmelt and rain in the winter and spring, which is used to fill the reservoir to the summer conservation level of 3.9 m (286.6 masl, 940.3 fasl). The summer conservation level is the level needed to provide flow augmentation through the summer and fall.

Approximately 5 million cubic metres of water are required to fill Pittock Reservoir from its winter holding level to its summer conservation level. This volume is the equivalent of 20 mm of water covering the entire 245 km^2 area that drains into the reservoir.

Above the summer conservation level, there is an additional 10 million cubic metres of flood storage. This amount is equivalent to 42 mm of water covering the entire drainage area upstream of the reservoir.

The flow augmentation period typically begins in late June. Water is gradually released from the reservoir, augmenting flows in the Thames River downstream to London, providing water quality and aquatic habitat benefits. During a dry summer, this release from Pittock Reservoir provides 30% to 40% (or more) of the flow in the south branch of the Thames River.

By late fall, the reservoir has been drawn down to its winter holding level, maintaining sufficient water for aquatic habitat while increasing flood storage for fall and winter floods and to be ready for the next spring runoff.

During a flood, the structure can reduce downstream flows on the Thames River by storing runoff in the reservoir and releasing it later. The level of flow reduction typically ranges from 20% to 50%, depending on the type (season) and severity of the flood and when it occurs.

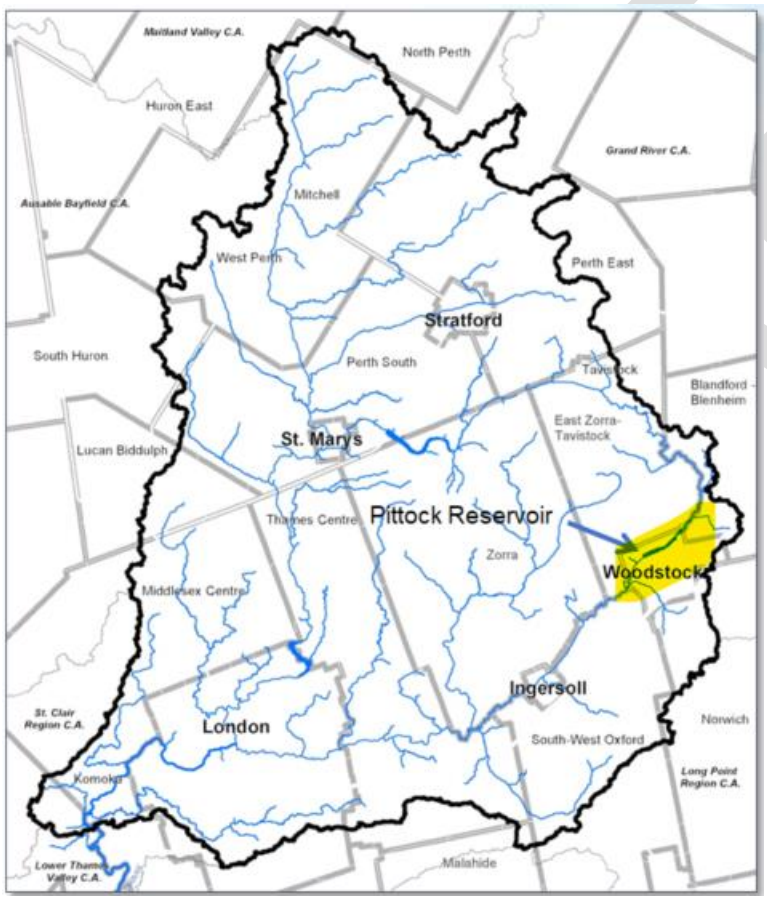

Figure 1 Location of Pittock Dam and Reservoir

2.2 Recreational Use

When the 1952 Upper Thames Valley Conservation Report was released, it made several recommendations about various forms of recreation in the UTRCA watershed, including:

- Beaches and pools for swimming
- Boating and fishing areas
- Individual picnic sites and group picnic grounds in parks
- Individual and group camping areas
- Trails for riding, hiking and nature study

The construction of Pittock Dam and Reservoir included acquisition of the surrounding lands comprising the Pittock Conservation Area (PCA), which over the years has provided the above recreational opportunities. In addition to the services managed by PCA staff some lands around the reservoir are subject to lease agreements (such as with the City of Woodstock which makes them open to public recreational use, and a sailing club).

3 Level of Service

Level of Service (LOS) refers to the ability of an asset or its components to perform the role for which it was designed and to the level or quantity of use for which it was intended. Because of the importance for Pittock Dam to continue to reduce the risk of flooding downstream on the south branch of the Thames River, as well as its role in augmenting stream flow downstream through London in dry months, the required LOS would be high. The amount of attention to and funding for operation and maintenance must be reflective of the importance of this asset.

LOS will be further considered through Asset Management Planning. As such this section will be updated to reflect that ongoing work.

3.1 Service Life

A concrete/earthen embankment dam, such as Pittock Dam, with proper inspection and maintenance should last at least 100 years. The lifespan of hydromechanical steel structures, electromechanical equipment and control units is shorter than that of the main civil/structural components and are specified by the suppliers, who also provide instruction manuals describing operation and maintenance. Continued routine and preventative maintenance and the timely replacement of equipment will allow the dam to continue to meet its expected level of service and extend the structure's service life considerably.

4 Stakeholders and Beneficiaries

When operating dams, it is important to understand who is impacted by the operations. Stakeholders of Pittock Dam are described below in three groups based on the type

benefits they receive from the operation of the dam. Funding for the operation and maintenance of Wildwood Dam is levied to the municipalities which shared in the funding of the local share of the Dam when it was constructed. While the cost of the construction of the dam and reservoir was originally shared by the local municipalities, with the establishment of the regional government of Oxford County the total 61.1% assigned to Oxford municipalities is levied against Oxford County for operation and maintenance of the dam. The City of London provides 32.9% of the local share, while 6% is allocated to all municipalities based on their relative share of the modified current value assessment of the watershed.

From a Flood Control Perspective, the City of Woodstock, the Town of Ingersoll, and their residents and business owners whose flood risks are reduced through the operation of the reservoir benefit the most from Pittock Dam. Flood risk reduction on the Thames River in London is reduced as Pittock Reservoir only controls about 20% of the drainage area of the south branch of the Thames River as it enters the city.

Pittock Dam and Reservoir provide flow augmentation maintaining flow in the Thames River. This reliable flow is beneficial for the general health of the water course and aquatic life it supports. When planned, the reservoir was designed to provide reliable flow, in part, to assimilate effluent from downstream wastewater treatment facilities at Woodstock, Ingersoll, and London. This flow augmentation function is the likely reason for London's significant share of the costs.

PCA was established around the reservoir to take advantage of the large waterbody formed by the dam. It provides recreational opportunities for those using the facilities for camping, boating, fishing, hiking, cycling and other day use activities. Lease holders also benefit from the reservoir as well as the people able to freely access the large areas of parkland around PCA through the lease with Woodstock.

The stable flows downstream of the dam also benefit recreational uses in the floodplain and watercourse. The flow augmentation also benefits those drawing water for such things as irrigation.

The Conservation area and all the people that are brought into the area also provide various social and economic benefits to the surrounding area.

4.1 Communications with Stakeholders

Communications with stakeholders is important to the operation of the dam. CA and property staff have established relationships with the various user groups around the reservoir and can distribute the messages to these stakeholders. As such, it is important that the CA staff are kept up to date on any significant variation from typical operating conditions such as unseasonably high or low water levels in the reservoir.

Flood time communications are undertaken directly by flood control staff to municipal flood coordinators. Most operations of Pittock Dam have little impact on Woodstock or Ingersoll, and less on downstream municipalities, however in the event of a major flood

where significant gate operations are necessary at Pittock Dam, communications with the Town of Ingersoll, and City of Woodstock would be through their municipal flood coordinator consistent with the UTRCA Flood Contingency Plan. Discharge from Pittock Dam when combined with flows from Cedar Creek may require Highway 2 to be closed.

5 Operations

5.1 Physical Characteristics

Pittock Dam controls 245 km^2 of upstream drainage area, with a normal summer surface area of 380 ha, and a maximum surface area of 450 ha. Pittock is controlled by five radial sluice gates, each measuring 24' x 21', as well as one 44 x 48 inch low flow control valve. The centre bay of the dam has a series of stop logs (11 logs 15" high) upstream of the radial gate. The top of the stoplogs is 3.99 m (286.689 masl, 940.6 fasl). The centre gate (bay 3) is left open 3 feet, so the bay acts as a passive spillway when water levels rise above the stop log top elevation. To improve aquatic habitat in winter months, two rows stop logs were installed in bays 1, 2, 4, and 5 in 2022, holding the winter level to between 0.75 m and 1.0 m. This change was made in accordance with a study completed in 1993 (see section 5.3).

The maximum discharge capacity of the Pittock dam is calculated as 850 m^3/s, with centre bay and habitat stop logs in place which is much more than the regulatory flood. With all logs removed, total capacity is estimated at 1120 m3/s which can safely pass Probably Maximum Flood (PMF). The Pittock Reservoir has a maximum operating level of 6.86 m (289.56 masl, 950 fasl).

5.2 Flood Routing

When Pittock Dam was first commissioned in 1967, a set of instructions on routing floods through the reservoir was provided. There are two sets of routing rules, one based on snow melt flooding, and the other based on rainfall flooding. In the non-snowmelt period, it is assumed the reservoir is full to summer conservation level, or being filled, and generally all gates (except centre bay with stop logs) are closed and discharge is controlled with the valve. Dam operations are completed based on the rate of rise of the water level in the reservoir, the water level elevation, and downstream constraints.

During the spring, when snow melt flooding is assumed, the reservoir begins at its winter holding level, and gates 1, 2, 4, and 5 are all set to 6 inches each. Gates are adjusted according to rate of rise and water level, with downstream constraints considered. During snow melt floods, the rate of rise before operations are considered is less than for rainfall-based floods, and the volumes to be managed are generally larger. Pittock reservoir, when at its summer level (3.9 m) still retains 42 mm of flood runoff storage.

5.3 Downstream Constraints

While the original dam design suggests 113 m^3/sec (4000 ft^3/sec) as the trigger for alerting the town engineer (now municipal Flood Coordinator identified in the Flood Contingency Plan) that flooding downstream will occur. In modern practice a threshold of approximately 50 m^3/sec, with the combined discharge from the dam and Cedar Creek will begin to overtop Dundas Street.

There is a real-time hydrometric gauge, called Thames River at Innerkip (02GD021) which is located upstream. This gauge is operated by the Water Survey of Canada (WSC) with assistance from UTRCA under agreement. This gauge began recording data and estimating discharges in 1978. While the Innerkip station only measures 148 km^2 of Pittock's 245 km^2 catchment (60%), it still provides a good indication for operation decisions, based on what is occurring upstream.

It is important that operators consider this flow information, snow survey and precipitation data along with improved forecasting tools, which were not available when the original flood routing instructions were established. This engineering judgement is an important part of contemporary operations of the dam.

5.4 Flow Augmentation

Pittock Reservoir was built as a dual-purpose reservoir, to protect downstream communities from flooding, as well as providing flow augmentation during summer and early fall months. Pittock typically begins the spring season at its winter level of 0.75 m to 1.0 m and is then filled with late spring snowmelt and rainfall runoff until it reaches its summer conservation level of 3.9 m, by early May. The summer conservation level is the level the reservoir must be filled to, to be able to achieve its flow augmentation. Summer level is held until it naturally begins to decrease, depending on the dryness of the year, and generally as late as the end of June, before augmentation begins. Due to the size of the reservoir relative to the watershed area, it is often possible to fill Pittock with rainfall runoff alone. Historically it has not been a problem to fill Pittock.

The reservoir was designed to provide 15 ft^3/s (0.42 m^3/sec) through the low flow valve from the end of June until late fall when winter elevation is reached. In the original design, the assumption was that any inflow to the reservoir was balanced by losses including evaporation from its surface. The winter level in the original design was 927.5 ft (0.0 m relative). In 1993 a study was completed to examine alternate drawdown curves, allowing the winter level to be kept higher, partly to improve aquatic habitat over the winter without impacting flood control. As of 2022, the winter level has been raised to 0.75 - 1.0 m through the use of two rows of stop logs in bays 1,2,4, and 5. These logs also allow the gates to be left open reducing the risk that they are frozen in place by the ice pack.

A plot of the annual filling and drawdown guideline is included below. This plot has been developed to reflect the original text description and refined as discussed above. Watershed conditions often provide challenges requiring judgment. The solid green line shows in practice how filling has been achieved historically, showing the long-term

median reservoir elevations at the 1st and 15th of each month, from February until early May. This is used by operators as a guide to filling. The drawdown curve, beginning in late June is also derived from the 1st and 15th of each month's long term median level, and coincides with the design that the reservoir provides 0.42 m^3/sec downstream.

The vertical axis on the left represents reservoir elevation, in terms of relative m, and the two vertical axes on the right show the same information presented in terms of first the percentage of reservoir storage used, and then the remaining mm of runoff storage between empty and maximum operating level.

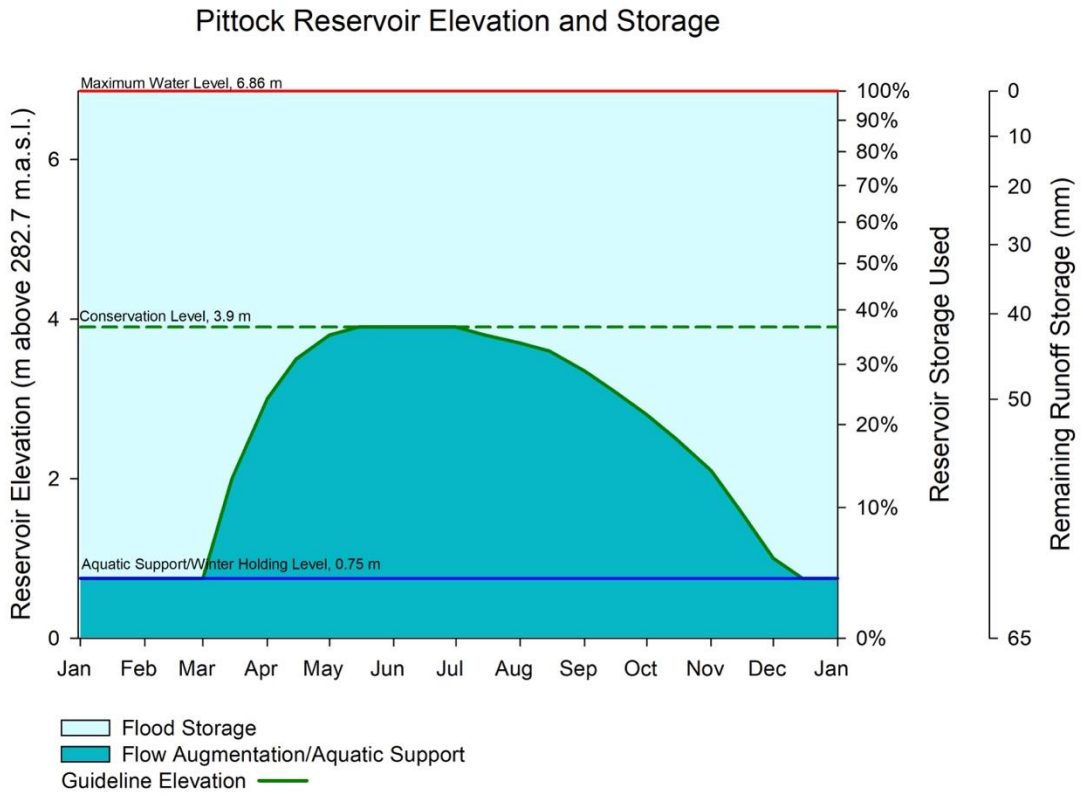

Figure 2 Pittock Filling and Drawdown Guidelines

5.5 Reservoir Capacity

Pittock reservoir has a relatively small capacity between winter and summer level, requiring the storage of only 23 mm of runoff to meet its summer target elevation. Once at summer level, there remains 42 mm of runoff storage until maximum level is reached

5.6 Climate Change Considerations

It is anticipated that climate change may affect reservoir filling. Current trends seem to suggest more precipitation earlier in the year and an earlier loss of snowpack. This raises uncertainty as to whether to capture runoff from early melt/rainfall events or to draw levels back down in January and February to ensure appropriate storage for later spring events, while also ensuring that the target summer level is reached. There is less risk in drawing the level back down at Pittock due to the limited amount of runoff required to bring it up to summer conservation level.

Climate change also appears to present additional challenges during the summer months, with more frequent early summer events pushing reservoir levels towards operation thresholds. This can have a significant effect on recreational reservoir uses.

6 Routine Maintenance

Routine inspection and maintenance are important to ensure the flood and flow augmentation structures are able to meet their purposes. Inspection and maintenance are guided by the structure's Operation, Maintenance and Surveillance Manual (OMS Manual). This manual identifies:

- Weekly inspections – generally carried out by trained park staff which include a visual inspection of the buildings and equipment, verification of the operation of the discharge facilities (gates, valves) to the extent possible. With reservoir levels at or near the summer conservation level gates operations must be restricted to not significantly increase downstream flows.
- Monthly inspections – generally carried out by the maintenance mechanics
- Annual inspections – generally undertaken by engineering staff and maintenance mechanics which include a more thorough visual inspection of the dam embankment, buildings and equipment and testing the operation of equipment.

These inspections are in addition to routine health and safety inspections undertaken by the JHSC members. Dam Safety reviews and external inspections are also carried out approximately every 10 years.

7 Emergency Planning

As part of the UTRCA's Dam Safety Program, Emergency Preparedness Plan (EPP) and Emergency Response Plans (ERP) are being developed. Response to dam emergencies which may require communication with watershed residents relies on the

Flood Contingency plan which uses Flood Bulletins to communicate conditions to municipal flood coordinators which implement municipal Emergency Plans.

8 Roles and Responsibilities

Operations are directed by senior engineers based on the general principles described in this document. Careful consideration of the watershed conditions and forecasts requires the careful application of engineering judgement. Operations are undertaken by trained operators which include parks staff, maintenance mechanics and other trained water and erosion control structure staff.

Routine maintenance is undertaken by Dam Maintenance Mechanics and contractors as necessary.

Upper Thames River Conservation Authority

Dykes and Floodwall Operational Plan

2024-11-16

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1. Purpose of Operational Plan

Ontario Regulation 686/21 requires that a Conservation Authority (CA) provide programs and services that support the operation, maintenance, repair, and decommissioning of the following types of infrastructure the CA owns or manages:

- Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation,
- Any erosion control infrastructure.

Programs and services provided shall include the development and implementation of an operational plan on or before December 31, 2024.

Some water control infrastructure in the Upper Thames River Conservation Authority (UTRCA) watershed is not owned by the CA but is managed through an agreement with the owner. These structures also require operational plans.

2. Purpose of Structures

The dykes and floodwall (collectively referred to as dykes) were built for the purpose of reducing the risk of flooding for the homes and businesses behind the structures. These dykes are effective at reducing risks associated with riverine flooding. However, they do not eliminate the risk of flooding from more severe floods than the dyke is designed to protect against, nor do they protect against local flooding from various sources behind the dykes.

2.1. London Dykes

Early settlements within London were established close to the Thames River and, therefore, frequently subjected to flooding. A formalized dyke system was established following flooding in 1883. The flood of 1937 overtopped the dykes and destroyed approximately 1100 properties resulting in the reconstruction and raising of some of the dykes.

This system of dykes includes the following areas:

- West London
- Ada-Jacqueline
- Broughdale
- Byron
- Coves
- Front Street
- Nelson-Clarence
- Riverview-Evergreen

The largest dyke, West London Dyke, will be discussed separately in the section below.

A feasibility study completed in 2018 looked at alternatives to bring the earthen dykes up to standards, including which dykes may no longer be needed. From this study, Environmental Assessments (EAs) were initiated on Broughdale and Riverview-Evergreen. No work has resulted from the Riverview-Evergreen EA and the Broughdale EA is discussed below. Alternatives for the other dykes remain to be considered through EAs.

In 1990, a project was undertaken by the UTRCA in partnership with the City of London to extend the Broughdale Dyke to reduce the risk from flooding for the Broughdale area upstream of Richmond Street. London has recently been successful in securing federal funding to allow for the further upgrade of Broughdale Dyke, building on the EA completed in 2019.

The feasibility study also documented that following the acquisition and clearing of structures previously protected by the Front Street Dyke, the dyke was breached to allow the area behind it to function as natural floodplain.

2.2. West London Dyke

The West London Dyke (WLD) serves a critical function to reduce flood risks within the West London area. It is also an integral component of the City's recreational pathway system and its location at the Forks of the Thames makes it a prominent structure in downtown London.

The WLD was rehabilitated in 1985. More recently, replacement of the section of dyke upstream of Queens Avenue to Rogers Avenue was necessary after structural deficiencies were noted following the initial stages of a concrete repair program initiated in 2006. The concrete-faced earthen dyke was replaced with a near vertical modular blockwall with geogrid reinforcement. A Master Repair Plan was developed, consulted on, and implemented in phases. This Master Repair Plan is expected to be completed in 2028.

Bridges at Queens Ave and Dundas/Riverside (Kensington Bridge) remain below the design elevation of the dyke and require active flood mitigation measures under more extreme floods. Areas on the upstream and downstream ends of the dyke will also require further attention to complete the flood protection to the regulatory flood standard to which the rest of the dyke is constructed. These active measures will be required until more permanent solutions are implemented.

2.3. St Marys Floodwall

Flooding in the Town of St Marys was a longstanding concern. In the 1940s, St Marys proposed a channelization project for the North Thames River but was not able to proceed with much of it as they had committed to their share of the construction of Wildwood Dam. When the St Marys Cement Company agreed to undertake channel and road improvements to allow for more land to be quarried, the Town also proceeded

with clearing and widening about ¾ of a mile of the channel not included in the cement company's work.

Although other options were considered, a floodwall was determined to be the preferred flood mitigation measure to reduce flood risk in downtown St Marys. Wildwood Dam on Trout Creek, together with a proposed dam upstream on the North Thames River (referred to as Glengowan Dam), were also considered. The St Marys Floodwall was constructed in 1990.

Through the Environmental Assessment which led to the construction of the St Marys Floodwall, it was determined that the municipality and its residents did not want a floodwall that would protect to the regulatory flood standard due, in part, to the height and cost. Instead, it was agreed to protect to the 100-year flood level (a flood having a 1% chance of occurring in any year).

Prior to the construction of the St Marys Floodwall, downtown St Marys was subject to regular flooding. Since the floodwall's construction, it has protected downtown St Marys from regularly occurring flooding. The highest flood since the floodwall was constructed was in February 2018.

3. Level of Service

Level of Service (LOS) refers to the ability of an asset or its components to perform the role for which it was designed and to the level or quantity of use for which it was intended. The amount of attention to, and funding for, operation and maintenance must be reflective of the importance of this asset.

The LOS varies for some of these structures. Factors affecting the LOS include the likelihood of a flood exceeding the flood level to which the dyke offers protection (approximate level of flood protection) and the consequences of the dyke being overtopped or failing (the number of structures protected), as described in the table below.

Dyke	Approximate Level of Flood Protection (recurrence interval in years and annual probability in percent)	Structures Protected	Preliminary Level of Service
Ada - Jacqueline	50 years (2%)	47	High
Broughdale	100 years (1%)	191 (including 7 apartment buildings)	High
Byron	15 years (6.7%)	6 (2 city owned)	Moderate to Low
Coves	225 years (4.4%)	281	High

Dyke	Approximate Level of Flood Protection (recurrence interval in years and annual probability in percent)	Structures Protected	Preliminary Level of Service
Front Street	Not Applicable	0 (breached after purchase and removal of properties protected by the dyke)	Not Applicable
Nelson - Clarence	25 years (4%)	0 (London purchased properties protected by the dyke and cleared the structures to create a park)	Not Applicable
Riverview - Evergreen	80 years (1.25%)	10 (13 lots purchased, cleared of structures, and zoned parkland)	Moderate
West London	250 years (0.4%) plus freeboard (for newly constructed sections)	More than 1000	High
St Marys Floodwall	100 years	52 (48 commercial)	High

LOS will be further considered through Asset Management Planning and this section will be updated to reflect that ongoing work.

3.1. Service Life

The service life of dykes, such as these, is difficult to estimate and will depend, among other things, on the type of dyke or floodwall. While some of the London dykes have existed since the late 1800s, most have been upgraded/rehabilitated or are in need of upgrades.

Local experience suggests that the service life of dykes in this area may be much less than that of the earthworks associated with the large dams in the area. For example, the West London Dyke underwent major improvements following the 1937 and/or 1947 floods, rehabilitation in the mid-1980s, and the current phased reconstruction (2005-2028). This might suggest a service life in the order of 30-50 years but it may be as much a function of the previous design, site conditions, materials used, and construction methods. It is expected that the new dyke designed and constructed today should have a longer life than some of the previous dyke sections. Regular inspection will be important to assess the state of each dyke, identify maintenance needed, and further assess service life.

As a comparison, the St Marys Floodwall was constructed in the 1990s and is still performing well and should be expected to continue as such for decades. This might suggest a somewhat longer service life, but it has not been without significant localized repairs.

Service life will be further assessed through Asset Management Planning and this section will be updated to reflect that ongoing work.

4. Stakeholders and Beneficiaries

Each of the dykes provides flood risk reduction to those who live or have businesses in the floodplain behind them. As such, the primary beneficiaries are the landowners, residents, and businesses with property protected by the dykes.

While the dykes provide considerable flood risk reduction to the properties behind them, they do not remove those properties from the floodplain. The existence and continued maintenance of these important flood control structures is reflected in reduced constraints on development behind the dykes, but these properties are still regulated and there are restrictions on development in the areas protected by the dykes. A Special Policy Area (SPA) was established behind the St Marys Floodwall and similar policies are in place behind some of the London dykes.

Most of the dykes also have paths integrated into, over, or adjacent to them, further expanding the stakeholders and beneficiaries to those who use these pathways for recreation or transportation.

Operating and maintenance costs of the flood control dykes are levied against the municipalities in which they are located (beneficiary).

4.1. Communication with Stakeholders

Communication with stakeholders is important to the operation of flood infrastructure. While these structures are not actively operated, flood time communications, including flood forecasts, are undertaken directly by flood control staff. These communications are with municipal flood coordinators consistent with the UTRCA Flood Contingency Plan. It is also important that dyke maintenance be coordinated between the UTRCA and municipalities.

5. Operations

Flood control dykes are not actively operated. These are generally passive flood mitigation measures that work in combination with other water control structures. It is, however, important that the structures are monitored during significant flood events to ensure that they continue to reduce risk from flooding. Monitoring during flood events is an important role for the municipality as failure of the dyke under flood conditions could be catastrophic. Municipalities must be prepared to implement their emergency plans if the dyke could overtop or fail.

Storm sewers often go through the dykes and discharge to the river through flap gates or backflow prevention devices. These flap gates are considered part of the storm water system and are, therefore, maintained by the municipalities. While dykes protect from

riverine flooding, they cannot control localized flooding behind the dykes. Again, this is a function of the storm water systems operated and maintained by municipalities.

While most dykes are passive in nature, some aspects may require active measures to ensure protection to the design levels. Monitoring during flooding is important, especially if there are locations where some active measures may be required. These active measures are discussed in the sections below.

5.1. West London Dyke

As the ongoing WLD reconstruction project nears completion, it will be important that active measures are in place for areas lower than the design level of the dyke. These locations have been described and measures considered in the West London Dyke Feasibility Study prepared for the City by Stantec. Areas where additional active measures will be necessary include:

- The downstream (west) end of the dyke in Cavendish Park,
- The upstream (north) end of the dyke north of Oxford Street at the railway line,
- The bridges across the North Thames River just upstream of the Forks (Queens Avenue and Kensington Bridges).

It is expected that active measures will be necessary until such a time as more permanent passive measures are implemented.

5.2. St Marys Floodwall

The Water Street bridge is a low point that can allow flood waters to flow into downtown. As floodwaters approach this level, it may be necessary to close the bridge and install sandbags or other materials to prevent the flow of water down the approach to this bridge.

6. Routine Maintenance

Routine inspection and maintenance are important to ensure the dykes are able to meet their purposes. Annual inspections are generally undertaken by UTRCA engineering staff. An external engineering inspection should be undertaken every five to 10 years.

Vegetation assessments are conducted every few years and controls implemented as appropriate. Vegetation management plans have been developed for the London dykes and are reviewed and updated as appropriate.

Surveillance during significant events is also important and undertaken by municipal staff as part of their flood watch.

7. Emergency Planning

Emergencies associated with flood control dykes are similar to dams in many ways. As these structures hold back considerable depths of water during a flood, emergency planning and surveillance is important. Forecasts of flooding would be communicated, similar to flooding elsewhere, through flood bulletins to municipal flood coordinators who then implement municipal emergency plans.

Emergency Preparedness Plans and Emergency Response Plans are being developed for flood control dams as part of the UTRCA Dam Safety Program. Similar plans should also be developed for the dykes.

Municipal Emergency Plans should include consideration of failure including options for topping up the structures and evacuating those behind the structures. Even if the structures perform as intended, flood events that surpass the capacity of the dyke are possible.

8. Roles and Responsibilities

The operation and maintenance of water control structures owned or built by the UTRCA are generally the responsibility of the UTRCA. The St Marys Floodwall falls into this category as a project of the UTRCA. The London dykes, however, were largely constructed by the City of London before UTRCA was formed and, as such, their operation and maintenance responsibilities are shared as outlined in various agreements described below.

Water control structures owned, operated, or maintained by the UTRCA are eligible for provincial funding (such as Section 39 operations and maintenance funding and Water and Erosion Control Infrastructure (WECI) funding for major maintenance). UTRCA involvement in the operation and maintenance of structures owned by municipalities also allows the involvement of staff familiar with dam and dyke design and maintenance as well as being part of a broader natural hazard reduction program (including interrelated operation and maintenance of other flood control structures, flood forecasting and warning, and natural hazard regulation).

As passive flood control structures, there are generally no physical operations required for most dykes.

Flood conditions are communicated to municipal flood coordinators through flood bulletins, as per the UTRCA Flood Contingency Plan. Municipal flood coordinators are responsible for engaging municipal emergency plans as appropriate. An important role of the municipal staff is surveillance of the dykes during major flood events and being prepared to respond or evacuate as appropriate.

8.1. St Marys Floodwall

As a passive flood control structure, no physical operations are required for the St Marys Floodwall. The floodwall, however, is located on top of, and adjacent to, features that pre-date the floodwall and remain the municipality's responsibility. Those features include stoplogs in the millrace, the weir across the North Thames River, and the stone channel walls of the millrace, island, and downstream channel. The inter-relationship of these features requires close cooperation between the Town and UTRCA.

As a project of the UTRCA, the maintenance of floodwall rests with the UTRCA. Maintenance activities undertaken by the UTRCA include routine inspection and preventative and capital maintenance. As the benefiting municipality, St Marys is responsible for the local share of these operation and maintenance costs, through the UTRCA levy.

8.2. London Dykes

A 1985 agreement is the basis for the shared responsibilities related to the London dykes. This agreement respects the City of London as the owner, the importance of integration within the flood control system, and the UTRCA's programs. It also notes the relationship established for the rehabilitation of the dyke in 1985. This agreement is relied upon today for the ongoing rehabilitation works funded by the federal government. It identifies that the title to works created by the construction belongs to the City, and that the City is to perform first line or minor maintenance, repair, and service. It places responsibility for major maintenance on the UTRCA but limits the responsibility to those works necessary to maintain the dykes' structural integrity.

In June 2017, a Memorandum of Understanding (MOU) was signed between London and UTRCA which further speaks to the shared responsibilities related to the operation and maintenance of the London dykes. This agreement was intended to facilitate and define the cooperative efforts, consider infrastructure owned by the City, document responsibilities, operationalize the other agreements and contracts, document the intent to add other structures, and provide administrative procedures. It documents background and supporting information to ensure that both parties have a shared understanding. This agreement allows the City and UTRCA to best utilize funding available for the continued operation and maintenance of the structures. It identifies that operation and routine maintenance are managed and planned by the UTRCA and maximizes the use of both UTRCA and City resources. It specifies a level of cooperation when it comes to major/capital maintenance.

These agreements speak to both the earth dykes and the West London Dyke.

As the benefiting municipality, London is responsible for the local share of these operation and maintenance costs, through the UTRCA levy. It is, however, important that these costs are invoiced as the work is undertaken so that it may be appropriately capitalized.

Upper Thames River Conservation Authority
Flood Control Channels
Operational Plan

2024-11-16

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1. Purpose of Operational Plan

Ontario Regulation 686/21 requires that a Conservation Authority (CA) provide programs and services that support the operation, maintenance, repair, and decommissioning of the following types of infrastructure the CA owns or manages

- Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation.
- Any erosion control infrastructure.

Programs and services provided shall include the development and implementation of an operational plan on or before December 31, 2024.

Some water control infrastructure in the Upper Thames River Conservation Authority (UTRCA) watershed are not owned by the CA but are managed through an agreement with the owner. These structures also require Operational Plans.

2. Purpose of Structure

2.1. Ingersoll Channel

The first major undertaking of the UTRCA was Ingersoll Channel. The plan was to transform a natural meandering river into a straighter, shorter reach. It involved a new channel from the bridge in Beachville to a point 2 miles downstream of Ingersoll. When constructed the channel was 32,725 feet long compared to the 39640 feet of the old river. The shorter, relatively straight channel with higher banks allowed larger flood flows to be passed through the channel before overflowing its banks, reducing flood risks.

The channel was built to provide immediate flood protection to the Town of Ingersoll and the industrial plants and quarries located in the river valley upstream of Ingersoll. The channel was designed to carry 8,000 cfs and safely pass 11,750 cfs peak flow, however the Thames Street bridge capacity limited discharge to 8,650 cfs, significantly less than the estimated peak flow of 1937. It was felt, however, that the channel would provide sufficient flood protection for most years and together with the 2 planned reservoirs should provide for the hypothetical flood referred to in the 1952 report (one third more than the 37 flood on the south branch). However, only one of the proposed reservoirs was constructed. While Ingersoll Channel significantly reduces flood risk to more frequent flood events, the current regulatory flood does overtop the banks resulting in a floodplain in which development is regulated.

The Ingersoll Channel was constructed from 1949-1950 at a cost of approximately $1,000,000. The province funded 75% of the project and the UTRCA share of 25% was levied to municipalities to be paid by the companies operating the limestone quarries along the river. The UTRCA share was split between the municipalities in the following amounts: North Oxford 75.25%, West Oxford 17.25%, Ingersoll 5%. With the formation

of the regional government for Oxford County, levy for the local share of operation and maintenance of the channel shifted to the County.

2.2. Mitchell Channel Improvement

The 1952 report assessed the flooding challenges in Mitchell and concluded that a dam with adequate storage was not feasible upstream of the flooding in Mitchell. It considered both channel improvements and diverting Whirl Creek around the town. Channel improvements were recommended.

Channel and Dam construction were undertaken as part of the same project which also included the purchase and removal of 2 buildings subject to regular flooding. The channels along the North Thames River and Whirl Creek in Mitchell significantly reduce the frequency and severity of flooding in Mitchell.

2.3. Stratford Flood Control Channel

As early as 1950, Stratford asked that steps be taken to alleviate flooding along the Avon River.

The Stratford Flood Control Channel was constructed as part of a larger project. The project also included the replacement of the dam upstream (east) of Huron Street with what is now called R Thomas Orr Dam, and the dredging of the reservoir known locally as Lake Victoria. The channel construction required a new bridge at St Vincent Street although the funding for the new bridge was not part of the project costs. The cost of the bridge was shared between the Ontario Department of Highways and City of Stratford. Senior government also declined to support the costs of channel construction downstream of John Street resulting in the downstream extent of the channel ending at John Street. The rest of the project was funded 75% by the province and UTRCA's 25% share was funded by Stratford, as the local beneficiary of the project.

The channel reduces flood risk to the homes along its length.

3. Level of Service

Level of Service (LOS) refers to the ability of an asset or its components to perform the role for which it was designed and to the level or quantity of use for which it was intended. Because of the importance for these flood control channels to continue to reduce the risk of flooding, the required LOS would be high. The amount of attention to, and funding for, operation and maintenance must be reflective of the importance of this asset.

LOS will be further considered through Asset Management Planning and this section will be updated to reflect that ongoing work.

3.1. Service Life

The service life of channels, such as these, is difficult to estimate. Natural rivers are continuously changing. Design and construction of flood control channels such as these is constantly battling against these natural forces. While the straightening and steepening of the channel increases its flood carrying capacity it also has an impact on the velocities and forces acting on the channel substrate and banks, often increasing erosion. Deposition of sediment along the channel may affect the flood carrying capacity of the channel. Vegetation can also have an impact on the capacity of the channel.

While there is no equipment to operate or maintain in channels (other than the John St Weir) it is still important that these channels are inspected regularly and maintained appropriately. Vegetation and erosion protection (gabion baskets, armour stone and riprap) are aspects of the channels that require attention. Continued inspection and maintenance can allow these channels to continue to meet their expected level of service well into the future.

Service Life will be further assessed through Asset Management Planning and this section will be updated to reflect that ongoing work.

4. Stakeholders and Beneficiaries

Each of the channels provides flood risk reduction to those who live or have businesses in the flood plain adjacent to the channels. These channels also have significant parkland and open space around the channels which support recreation. In Stratford and Mitchell the channels were built as part of larger projects which involved reconstruction of dams which support further recreational opportunities upstream of the channels but part of the same park system.

Operating and maintenance costs are levied against the municipalities that the channel is in (beneficiary). The local share of costs associated with Ingersoll Channel is funded by Oxford County. Stratford channel is funded by Stratford. Mitchell Channel is funded by West Perth.

4.1. Communication with Stakeholders

Communications with stakeholders is important to the operation of flood infrastructure. While these structures are not actively operated, flood time communications related to flood forecasts are undertaken directly by flood control staff to municipal flood coordinators consistent with the UTRCA Flood Contingency Plan. It is also important that channel maintenance also be communicated with the municipality.

5. Operations

Flood control channels are not actively operated. These are generally passive flood mitigation measures which work in combination with other water control structures. One exception is John Street Weir, described below.

5.1. John Street Weir

Stratford Channel from downstream of RT Orr Dam to John Street was deepened and straightened with gabion baskets protecting its deep banks. Gabion Baskets were replaced with armour stone when the wire baskets began failing allowing the rocks to escape and the baskets to slump. The Stratford Flood Control Channel includes a weir upstream of John St which is seasonally installed and removed. This stoplog weir provides a 5 foot deep backwater on the upstream side of the weir. The weir impacts the water level upstream (east) to the stilling basin of RT Orr dam (although the additional depth at the dam is much less).

The weir is installed in mid-May after spring flows have reduced to more seasonable levels, but before flows are too low to allow the small backwater to be filled. The small slide gate in the middle of the stoplog weir is opened to draw the level down so all the logs may be removed by crane in late October or early November. The schedule is dependent on flows, weather and site conditions.

6. Routine Maintenance

Routine inspection and maintenance are important to ensure the flood control channels are able to meet their purposes. Annual inspections are generally undertaken by engineering staff. Vegetation assessments are also conducted every few years. In the case of Ingersoll Channel, a vegetation management plan has been developed and is reviewed and refined as appropriate.

7. Emergency Planning

Emergencies associated with flood control channels are largely limited to the impacts of the floods that they help mitigate. Responses to flooding around these channels would be communicated, similar to flooding elsewhere, through Flood Bulletins to municipal flood coordinators who then implement municipal emergency plans.

8. Roles and Responsibilities

Inspection and maintenance of the Flood Control Channels is undertaken by the UTRCA Water and Erosion Control Structure staff and contractors/consultants as necessary.

The UTRCA owns many properties along the Ingersoll channel. Vegetation management of Ingersoll Channel is undertaken by Land Management staff with contractor assistance as necessary.

The lands along the Stratford and Mitchell Channels are municipal parkland which is maintained by the municipalities.

Installation and removal of the John Street Weir is undertaken by the UTRCA.

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Jenna Allain, Manager, Environmental Planning and Regulations
Date: November 14, 2024
File Number: BoD-11-24-94
Agenda #: 8.1
Subject: Administration and Enforcement – Section 28 Status Report

Recommendation

THAT the Board of Directors receive the report for information.

Background

The attached tables are provided to the Board as a summary of staff activity related to Section 28 of the Conservation Authorities Act and Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits. The table covers permits issued between October 1, 2024, and October 31, 2024.

To date, 195 permit numbers have been assigned in 2024 with 146 of those permits issued before October 31st. An additional 20 permits were issued in 2024 where the permit number was assigned in 2023, and one permit was issued in 2024 where the permit number was assigned in 2022. This brings the total number of permits issued in 2024 to 167. Twenty-four permit extensions or amendments have been issued in 2024, and staff have issued 278 clearances for regulated properties where proposed development was reviewed and determined not to require a Section 28 permit.

Information about permits in progress has been provided in the table below in a tally format. As noted above, 195 permit numbers have been assigned in 2024, with 146 issued by September 31st. Four permits have been issued in November 2024 and will be reported on in the next monthly Section 28 report. Two permits have been cancelled, leaving 43 permit applications currently in progress. We also have two additional permit applications from 2023 that are still in progress. In total, we have 45 permits in progress split by year the permit number was assigned, municipality and application type in the table below.

Table 1. Permits in Progress Tally

Municipality	Major	Minor	Routine	Total
Township of Blandford-Blenheim	0	1 (2024)	3 (2024)	4 (2024)
Township of East-Zorra Tavistock	0	1 (2024)	1 (2024)	2 (2024)
Town of Ingersoll	1 (2024)	0	1 (2024)	2 (2024)
City of London	10 (2024)	1 (2023) 5 (2024)	1 (2024)	1 (2023) 16 (2024)
Township of Lucan-Biddulph	0	0	0	0
Municipality of Middlesex Centre	5 (2024)	0	2 (2024)	7 (2024)
Township of Norwich	0	0	0	0
Township of Perth East	0	0	0	0
Township of Perth South	0	2 (2024)	0	2 (2024)
Town of St. Marys	0	0	0	0
City of Stratford	0	0	0	0
Municipality of South Huron	0	0	0	0
Township of South-West Oxford	1 (2024)	0	0	1 (2024)
Municipality of Strathroy-Caradoc	0	1 (2024)	0	1 (2024)
Municipality of Thames Centre	1 (2023) 2 (2024)	3 (2024)	1 (2024)	1 (2023) 6 (2024)
Municipality of West Perth	0	0	0	0
City of Woodstock	0	1 (2024)	1 (2024)	2 (2024)
Township of Zorra	0	0	0	0
TOTAL	**20**	**15**	**10**	**45**

Recommended by:

Jenna Allain, Manager, Environmental Planning and Regulations

Prepared by:

Joe Gordon, Regulations Coordinator
Jessica Schnaithmann, Land Use Regulations Officer
Ben Dafoe, Land Use Regulations Officer
Cari Ramsey, Land Use Regulations Officer
Mike Funk, Land Use Regulations Officer
Dave Griffin, Land Use Regulations Assistant
Richard Brewer, Land Use Regulations Assistant
Karen Winfield, Planning and Regulations Resource Specialist

UPPER THAMES RIVER
CONSERVATION AUTHORITY

Thames
Canadian Heritage River

Section 28 Status Report – Summary of Applications for 2024

Ontario Regulation 41/24

Report Date: October 2024

Client Service Standards for Conservation Authority Plan and Permit Review (CO, Dec 2019)

Permit #	Municipality	Location/Address	Category	Application Type	Project Description	Application Received	Notification of Complete Application	Permit Required By	Permit Issued On	Comply with Timelines	Staff
105-23	London	3700 Old Victoria Rd	Major	Complex	Moore Drain Watercourse Realignment	6-May-2024	1-Oct-2024	29-Oct-2024	2-Oct-2024	YES	Funk
168-24	London	Dingman SWMF B4, 1120 m east of Homewood Lane	Minor	Alterations to Wetlands & Watercourses	SWMF Sediment Cleanout	12-Sep-2024	4-Oct-2024	25-Oct-2024	7-Oct-2024	YES	Griffin
174-24	London	12 Gerrard Street	Minor	Development	Proposed Deck and Minor Addition the Existing Residential Dwelling	26-Sep-2024	7-Oct-2024	28-Oct-2024	8-Oct-2024	YES	Schnaithmann
170-24	St Marys	580 Widder Street East	Minor	Development	Proposed replacement of Single Family Residence & Septic System	12-Sep-2024	2-Oct-2024	23-Oct-2024	9-Oct-2024	YES	Brewer
54-24	London	412, 418 & 450 Oxford Street West	Major	Development	Proposed Receiving and Spreading of Fill from City of London Project - Mud Creek Restoration Project	27-May-2024	26-Sep-2024	24-Oct-2024	10-Oct-2024	YES	Schnaithmann

Permit #	Municipality	Location/Address	Category	Application Type	Project Description	Application Received	Notification of Complete Application	Permit Required By	Permit Issued On	Comply with Timelines	Staff
165-24	London	Fanshawe Yacht Club - Fanshawe CA	Minor	Municipal Project	Fanshawe Yacht Club Shoreline Rehabilitation Project (Phase I)	19-Sep-2024	8-Oct-2024	29-Oct-2024	15-Oct-2024	YES	Winfield
178-24	Zorra	235585 23rd Line & 23rd Line Road ROW	Minor	Municipal Project	Proposed streambank protection along Kintore Creek where significant erosion is impacting the road and private property.	19-Sep-2024	10-Oct-2024	31-Oct-2024	16-Oct-2024	YES	Winfield
154-24	London	West of Highbury Avenue South at the South Thames River	Routine	Municipal Project	Culvert Replacement and Erosion Protection	2-Oct-2024	7-Oct-2024	21-Oct-2024	17-Oct-2024	YES	Funk
177-24	London	West limit of Central Avenue	Routine	Municipal Project	Sanitary maintenance hole repair/replacement on slope	11-Oct-2024	18-Oct-2024	1-Nov-2024	25-Oct-2024	YES	Funk
183-24	Woodstock	Crossing a watercourse	Major	Utility Corridor	BELL23-081: Install HDPE/100mm cable using Directional Drill method. Crossing a watercourse	8-Oct-2024	25-Oct-2024	22-Nov-2024	25-Oct-2024	YES	Brewer
185-24	London	44 Duke Street	Minor	Development	Proposed Pool in Coves SPA	16-Oct-2024	16-Oct-2024	6-Nov-2024	25-Oct-2024	YES	Funk
155-24	Zorra	824043 Ann St., Embro	Major	Development	Shed and Shop Build	18-Jul-2024	28-Oct-2024	25-Nov-2024	28-Oct-2024	YES	Winfield
184-24	Zorra	105 Milton Street	Major	Development	Addition to Existing Auto Service Building & Naturalization of Parking Area	04-Oct-24	25-Oct-2024	22-Nov-2024	29-Oct-2024	YES	Griffin

Permit #	Municipality	Location/Address	Category	Application Type	Project Description	Application Received	Notification of Complete Application	Permit Required By	Permit Issued On	Comply with Timelines	Staff
179-24	Zorra	Harrington Conservation Area	Minor	Development	Proposed emergency repair and rehabilitation works associated with the Harrington Dam	10-Oct-2024	23-Oct-2024	13-Nov-2024	30-Oct-2024	YES	Winfield

UPPER THAMES RIVER CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Tracy Annett
Date: November 12, 2024
File Number: BoD-11-24-95
Agenda #: 8.2
Subject: Project Status Updates

Recommendation

THAT the Board of Directors receive the report for information.

Background

To assist the Board with previously discussed items the following status updates are provided. This report is updated and included at each meeting to identify project timelines and expected future reports.

Discussion

The table below provides progress and timelines associated with UTRCA projects and the strategies required to fulfil the requirements of O.Reg 686/21, Mandatory Programs and Services Regulation. Planned reports and updates at board meetings may change.

Many of the items provided below are directed by legislative changes, either directly through O.Reg 686/21 or through updated regulations that impact our projects / policy direction (e.g., Section 28 regulations under the Conservation Authorities Act (CAA). These projects will continue throughout 2024, regular updates will be provided.

Report Back Items	Planned report or update	Project lead(s)	Status
2024 Draft Budget and discussion items (October 2023 meeting Draft Budget provided)	January, provide update on Municipal Feedback February AGM – 2024 Budget Consideration	Teresa Brad Christine Tracy	Complete – Municipal Communications Ongoing - Status of contract discussions with Environment and Climate Change Canada Provided updated numbers in October for the proposed Category 1 deficit and the proposed category 3 levy / cost apportionment. Complete – Communications plan
WCC Building Update	January Will be marked complete in next report	Brent & Mike	Complete - Board Request. To provide an overview of the building now that we have used the space for 10 years, building performance.

Report Back Items	Planned report or update	Project lead(s)	Status
Review of S28 Violations	February Will be marked complete in next report	Jenna	Complete - Review of the 2023 violations at the February 2024 Board of Directors meeting
UTRCA Cash Management & Investment Policy	August - complete	Christine and Tracy	Complete – Report to F&A Committee in June, and report to the Board to follow at the August meeting.
Strategic Plan, (June and October 2024)	November	Tracy Teresa	In progress – RFP being developed. Timeline to be confirmed once consultant engaged. Report included with October Agenda, project initiation in the summer to align with Watershed Strategy. Update provided and ongoing
Hydro Plant (April 2024, October report to BOD)	October	Chris and Brent	In Progress - Consultant to be engaged to determine potential issues and estimates to resolve the issues. Staff change has delayed the RFP process. Update to be provided in next phases
Reserves Policy (April 2024 and May 2024 report to F&A in September)	Complete	Tracy Christine	Complete - Report to F&A – After the 2023 Audit the policy will be shared with the Finance and Audit committee for further discussion at the May meeting. Following F&A discussion, staff directed to prepare the Reserves Policy and Report approved in October.
Cyber Security	October – Postponed to January	Tracy Christine Chris	In Progress Report to F&A – Staff to prepare a report on the current state of cyber security for the organization and any recommendations to improve to be presented to the Finance and Audit Committee at the April meeting, in-camera. Directed staff for future updates. Report to the Board to follow.
Children's Safety Village (June 2023, February 2024)	October - Postponed to January	Teresa & Brent	Overdue – Internal Discussions on-going, business plan for use as education / visitors centre and campground registration. Update to be provided to BOD in the fall.
Retention Policy	August – Postponed to January	Tracy & Michelle	Overdue – updated retention policy to be prepared based on a collaborative CA draft. The CA draft has been legally reviewed. Aligning retention policies with integration of Microsoft 365 (file structure, naming conventions, etc.)

Report Back Items	Planned report or update	Project lead(s)	Status
Wetland Compensation Policy (March 2023 meeting and August 2023)	Postponed aligning with Section 28 Policies as outlined below	Jenna and Sarah	In progress - Draft Wetland Compensation Policies initiated. Changes to the CAA and CA roles in commenting on natural heritage features have required further examination. Report to be provided once finalized, date to be confirmed.
Section 28 Regulation Policies and Mapping (March 2024, September 2024)	January 2025	Jenna	In Progress - Release of new Regulations on Friday February 16th, effective April 1, 2024. May Meeting included Technical Checklists and S28 Compliance Procedures Staff will continue to: develop policies and procedures, and undertake consultation with municipalities, partners, and development groups., etc. In Progress - Hazard Mapping Consultation – Report at September Meeting and Presentation in October October – Administrative Review Policy and report back in November
Land Tenant Program Update (March 2022 meeting, November 2023, March 2024, August 2024, October 2024)	November	Brent and Mike	In Progress – Ongoing status of land tenant program, in-camera. Report provided. Update provided in October. Verbal in-camera update in November
Land Options	Q1 - 2025	Brent & Tracy	In progress - As requested at the October meeting, report back in the first quarter of 2025 with a report on options for parcels identified in closed session.
Advocacy for Fee Freeze to be lifted (September, 2024)	Complete	Tracy & Brian	Complete – Letter circulated to Municipalities. Discussion with Minister Smith suggested that he wanted data to support. Brian to lead Municipal support request. Tracy to explore other data options with CA's, particularly those in High growth areas. Final letter sent to Minister and provided as Correspondence at October meeting
Draft 2025 Budget & Communications Plan	Completed	Tracy, Teresa, and Christine	Completed – Circulate budget communications to F&A committee for feedback in July, to finalize materials to include at August Meeting (was based on

Report Back Items	Planned report or update	Project lead(s)	Status
(Preliminary Draft – August and F&A review in September)			advocacy required to support for City of London business case. Now preliminary budget shown are within City of London multi-year budget amounts). Summary Communications to be distributed at October meeting

Legislative Requirements	Planned report or update	Project lead(s)	Status
Land Management Strategy (February 2024, May, 2024)	October	Brent Brandon Cathy	Completed – To be completed by December 31, 2024 Inventory and acquisition and disposition policy are linked to this initiative. To be completed December 31, 202 Final Document provided in October
Land Inventory (August 2023, February 2024 and September)	October	Brandon, Phil, Cathy & Brent	Completed – Inventory update was provided in August. To be included with Lands Strategy and a legislative requirement. To be completed December 31, 202 The Lands Inventory will inform the Lands Strategy and acquisition and disposition strategy. Final Inventory provided in October
Land Acquisition and Disposition Strategy (February 2024 and September, 2024)	October	Brent & Brandon	Completed - Complements the Lands Strategy and Land Inventory. To be completed December 31, 2024. Final Document provided in October
Operations Plans and Ice Management Plan (November 2023 meeting, September)	November	Chris	In progress - Compiling background information. To be completed December 31, 2024 Final Documents to be provided in November
Watershed-Based Resource Management Strategy (September 2023, February 2024, and June)	December	Tara	In Progress – Complements the Strategic Plan. To be completed December 31, 2024. To Align with UTRCA Strategic Plan Item included in June Agenda, final report after consultation will be brought back in December
Asset Management	December	Chris	In progress – One component of overall group of assets within the UTRCA's Asset

Legislative Requirements	Planned report or update	Project lead(s)	Status
Plans related to natural hazard infrastructure (September, 2024)			Management Plan. To be completed December 31, 2024. Final Document to be provided in December
UTRCA Asset Management Plan (January 2024 Policy approved, and September Update)	January	Brent & Christine	In progress - May breakdown into Groups of Assets e.g., Natural Hazard Infrastructure, Fleet, Facilities etc. Regular progress reports to support the above Group of Assets as our first priority. (as below)

Definitions

Progress	Timeline
Not started	indicate project initiation date
In progress	anticipate completion date
Complete	date completed
Overdue	expected completion date and reasons for the delay
On Hold	other circumstances

Summary

The summary provided is intended to help track items requesting report updates to the Board and project updates to meet our legislative requirements. The number of projects underway in 2024 is significant. Items may be shifted to accommodate the number of agenda items and board meeting schedules.

Recommended by:

Tracy Annett, General Manager

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Tracy Annett
Date: November 12, 2024
File Number: BoD-11-24-96
Agenda #: 8.3
Subject: 2025 Board Election Information

Recommendation

That the Board of Directors receives the report for information.

Background

As required by the *Conservation Authorities Act*, the Upper Thames River Conservation Authority Board of Directors conducts elections each year. Nominations for the following positions will be accepted verbally during the January 2025 meeting:

- Board Chair (to be nominated and elected)
- Board Vice-Chair (to be nominated and elected)
- Five (5) positions on the Hearing Committee:
  - Past Chair (Appointed, if applicable. If there is no Past Chair, a 3rd "at large" member is to be nominated and elected)
  - Current Chair (appointed)
  - Current Vice- Chair (appointed)
  - Two (2) members elected at large (to be nominated and elected)
- Three (3) to five (5) positions on the Finance and Audit Committee:
  - Current Chair (appointed)
  - Current Vice-Chair (appointed)
  - One (1) to three (3) additional members elected at large (to be nominated and elected).
- Source Protection Striking Committee Member/ Committee Liaison (to be nominated and elected)

All Board members are eligible for any of the available positions, except as specified below in the Conservation Authorities Act under Section 17. All appointments are for a one-year term.

Members interested in any of these available positions are encouraged to communicate with their fellow board members to secure a nomination and support prior to the January meeting. Past practice has included calls and/or emails to fellow directors in an effort to secure support. In the event of more than one candidate seeking an individual position, elections will be held according to the Procedure for Election of Officers, Appendix 2, in the UTRCA Administrative By-law. Those interested in positions should be prepared to speak to their nomination and qualifications during the January meeting.

Section 17 of the CAA provided:

(1.1), a chair or vice-chair appointed under subsection (1) shall hold office for a term of one year and shall serve for no more than two consecutive terms.

(1.2) An authority in respect of which more than one participating municipality has been designated shall appoint chairs and vice-chairs from among the members appointed to the authority by each participating municipality on a rotating basis so as to ensure that a member appointed to the authority by a particular participating municipality cannot be appointed to succeed an outgoing chair or vice-chair appointed to the authority by the same participating municipality. 2020, c. 36, Sched. 6, s. 4. 2

Exception

(1.3) Despite subsections (1.1) and (1.2), upon application by an authority or a participating municipality, the Minister may grant permission to the authority or participating municipality to, subject to such conditions or restrictions as the Minister considers appropriate,

(a) appoint a chair or vice-chair for a term of more than one year or to hold office for more than two consecutive terms; or

(b) appoint as chair or vice-chair of the authority a member who was appointed to the authority by the same participating municipality that appointed the outgoing chair or vice-chair. 2020, c. 36, Sched. 6, s. 4.

Summary:

Election procedures and position descriptions are outlined in the Administrative By-Laws, Appendix 2 and B.2 respectively.

To ensure staff are properly prepared for the elections could you please advise Michelle Viglianti at vigliantim@thamesriver.on.ca and Tracy Annett at annettt@thamesriver.on.ca if you are planning to put your name forward for any of the above listed positions.

Recommended by:

Tracy Annett, General Manager

UPPER THAMES RIVER
CONSERVATION AUTHORITY

MEMO

To: UTRCA Board of Directors
From: Joe Gordon, Regulations Coordinator
Date: November 18, 2024
File Number: BoD-10-24-97
Agenda #: 8.4
Subject: UTRCA Administrative Review Policy Under Section 8 of O.Reg. 41/24

Recommendation

THAT the Board of Directors receive the report for information.

Background

At the October 22, 2024 Board or Directors meeting, the Board reviewed agenda item BoD-10-24-79 and approved the following motion:

> *THAT the Board of Directors approve the UTRCA Administrative Review Policy as presented; And FURTHER, THAT the General Manager/Secretary Treasurer and the Manager, Environmental Planning and Regulations be delegated as Administrative Review Officers with the Authority's powers for Request for Reviews pursuant to Section 8 of Ontario Regulation 41/24. AND THAT the Board ask staff to communicate to industry representatives the new approach and report back next month on any tweaks that are necessary.*

Since the October Full Authority meeting, staff finalized the policy document based on directions from the Board of Directors and circulated a copy along with the October staff report to the London Development Institute (LDI) by email on November 6, 2024.

To date, there has been no communication with staff received from LDI on the new policy document. We understand that LDI will be providing comments on the policy in their delegation.

The Request Form for Administrative Review is in the process of being developed as a user-friendly fillable PDF document before posting to the Authority's website.

Staff will continue to communicate with industry representatives and report back to the Board if feedback is received.

Prepared by:

Joe Gordon, Regulations Coordinator
Jenna Allain, Manager, Environmental Planning and Regulations

Recommended by:

Tracy Annett, General Manager / Secretary-Treasurer