Agenda
Environmental and Ecological Planning Advisory Committee

The 8th Meeting of the Environmental and Ecological Planning Advisory Committee
July 18, 2019, 5:00 PM
Committee Rooms #1 and #2

The City of London is committed to making every effort to provide alternate formats and communication supports for Council, Standing or Advisory Committee meetings and information, upon request. To make a request for any City service, please contact accessibility@london.ca or 519-661-2489 ext. 2425.

Next Meeting Date: August 15, 2019

Environmental and Ecological Planning Advisory Committee Report

The 7th Meeting of the Environmental and Ecological Planning Advisory Committee
June 20, 2019
Committee Rooms #1 and #2

Attendance

PRESENT: S. Levin (Chair), E. Arellano, I. Arturo, A. Bilson Darko, A. Boyer, A. Cleaver, R. Doyle, C. Dyck, S. Esan, P. Ferguson, L. Grieves, S. Hall, S. Heuchan, K. Moser, B. Samuels, S. Sivakumar, R. Trudeau, M. Wallace and I. Whiteside and H. Lysynski (Secretary)

ABSENT: L. Banks, J. Khan, B. Krichker and I. Mohamed

ALSO PRESENT: G. Barrett, C. Creighton, J. MacKay, L. McDougall, C. Saunders, M. Schulthess, B. Westlake-Power and E. Williamson

The meeting was called to order at 5:03 PM

1. Call to Order

1.1 Orientation

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee heard verbal presentations from C. Saunders, City Clerk, M. Schulthess, Deputy City Clerk and B. Westlake-Power, Deputy City Clerk, with respect to an orientation.

1.2 Disclosures of Pecuniary Interest

That it BE NOTED that M. Wallace disclosed a pecuniary interest in clause 5.2 of this Report having to do with the Old Victoria - Grenier Lands Geotechnical Investigation - Slope Stability, by indicating that his employer has a business relationship with Sifton Properties Limited.

1.3 Election of Chair and Vice Chair for the term ending November 30, 2019

That the following actions be taken with respect to the election of Chair and Vice-Chair for the term ending November 30, 2019:

a) notwithstanding section 4.12 of the General Policy for Advisory Committees, S. Levin BE ELECTED as Chair; and,

b) S. Hall BE ELECTED as Vice-Chair.

2. Scheduled Items

None.

3. Consent

3.1 6th Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the 6th Report of the Environmental and Ecological Planning Advisory Committee from its meeting held on May 16, 2019, was received.

3.2 5th Report of the Trees and Forests Advisory Committee

That it BE NOTED that the 5th Report of the Trees and Forests Advisory Committee from its meeting held on May 22, 2019, was received.

3.3 Municipal Council Resolution - 6th Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on June 11, 2019, with respect to the 6th Report of the Environmental and Ecological Planning Advisory Committee, was received.

3.4 Notice of Public Information Centre 1 - Dingman Drive East of Welllington Road to Highway 401 and Area Intersections - Municipal Class Environmental Assessment

That it BE NOTED that the Notice of Public Information Centre 1 for Dingman Drive, east of Wellington Road to Highway 401 and area intersections Municipal Class Environmental Assessment, was received.

4. Sub-Committees and Working Groups

4.1 Review of One River Master Plan Municipal Class Environmental Assessment

That the ~~attached~~ Working Group comments relating to the One River Master Plan Municipal Class Environmental Assessment BE FORWARDED to the Civic Administration for consideration.

4.2 You, Your Dog and Environmentally Significant Areas Brochure

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee held a general discussion with respect to the "You, Your Dog and Environmentally Significant Areas" brochure drafted by P. Ferguson; it being noted that this matter will be discussed further at the next meeting.

5. Items for Discussion

5.1 Trails Advisory Group for Environmentally Significant Areas

That R. Trudeau and K. Moser BE APPOINTED as the representative and alternate, respectively, to the Trails Advisory Group for Environmentally Significant areas.

5.2 Old Victoria - Grenier Lands Geotechnical Investigation - Slope Assessment

That it BE NOTED that the Old Victoria - Grenier Lands Geotechnical Investigation - Slope Assessment prepared for Sifton Properties Limited by exp Services Inc., was received.

6. Adjournment

Next Meeting Date: To be Determined

The meeting adjourned at 6:43 PM.

P.O. Box 5035
300 Dufferin Avenue
London, ON
N6A 4L9

June 26, 2019

L. Livingstone
Managing Director, Neighbourhood, Children and Fire Services

S. Stafford
Managing Director, Parks and Recreation

I hereby certify that the Municipal Council, at its meeting held on June 25, 2019 resolved:

That, on the recommendation of the Managing Directors of Parks and Recreation and Neighbourhood, Children and Fire Services, the following actions be taken with respect to the Draft Parks and Recreation Master Plan:

a) the above-noted Plan BE ADOPTED;

b) the Civic Administration BE DIRECTED to proceed with implementation of the Plan; it being noted that any/all implementation will be subject to funding through the multi-year budget process; and,

c) the Civic Administration BE DIRECTED to continue to consult with the Environmental and Ecological Planning Advisory Committee (EEPAC) and the Accessibility Advisory Committee (ACCAC) as the above-noted plan is implemented;

it being noted that the Civic Administration will undertake to provide a glossary of terms for use and inclusion in future iterations of the Master Plan;

it being further noted that verbal delegations from S. Levin, EEPAC and J. Madden, ACCAC, with respect to this matter, were received. (2019-R04) (3.3/7/CPSC)

C. Saunders
City Clerk
/dt

cc: A.L. Barbon, Managing Director, Corporate Services and City Treasurer, CFO
J. M. Fleming, Managing Director, Planning and City Planner
D. Baxter, Manager, Policy and Planning
P. D'Hollander, Manager IV, Neighbourhood Operations
A. MacPherson, Manager, Parks Planning and Operations
L. Loubert, Division Manager, Aquatics and Arenas
J.P. McGonigle, Division Manager, Culture, Special Events and Sport Services

The Corporation of the City of London
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www.london.ca

K. Scott, Executive Assistant to the Manager Director, Neighbourhood, Children and Fire Services
C. Kotsovos, Executive Assistant to the Managing Director, Parks and Recreation
K. Powell, Interim Executive Assistant to the Managing Director, Corporate Services and City Treasurer, CFO
Chair and Members, Accessibility Advisory Committee
Chair and Members, Environmental and Ecological Planning Advisory Committee

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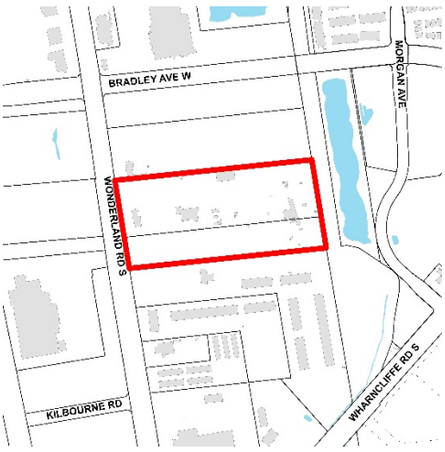
PUBLIC MEETING NOTICE

Official Plan and Zoning By-law Amendments

3334 & 3354 Wonderland Road South



File: OZ-9043
Applicant: Gateway Casinos and Entertainment Ltd.

What is Proposed?

Official Plan and Zoning amendments to allow:

- Casino and accessory uses including offices, restaurants, outdoor patios, auditoriums, meeting rooms, amusement games establishments, places of entertainment and stormwater pipe outlets

YOU ARE INVITED!

Further to the Notice of Application you received on April 17, 2019, and the Notice of Revised Application you received on June 5, 2019, you are invited to a public meeting of the Planning and Environment Committee to be held:

Meeting Date and Time: Monday, July 22, 2019, no earlier than 6:00 p.m.

Meeting Location: City Hall, 300 Dufferin Avenue, 3rd Floor

For more information contact:

Melissa Campbell
mecampbell@london.ca
519-661-CITY (2489) ext. 4650
Development Services, City of London
300 Dufferin Avenue, 6th Floor,
London ON PO Box 5035 N6A 4L9
File: OZ-9043

london.ca/planapps

To speak to your Ward Councillor:

Anna Hopkins
ahopkins@london.ca
519-661-CITY (2489) ext. 4009

Paul Van Meerbergen
pvanmeerbergen@london.ca
519-661-CITY (2489) ext. 4010

If you are a landlord, please post a copy of this notice where your tenants can see it. We want to make sure they have a chance to take part.

Date of Notice: July 3, 2019

Application Details

Commonly Used Planning Terms are available at london.ca/planapps.

Requested Amendment to the 1989 Official Plan

To change the designation of the rear (east) portion of the property from Multi-Family, Medium Density Residential to Wonderland Road Community Enterprise Corridor to permit a Casino and accessory uses on a greater portion of the property than would currently be allowed.

Requested Amendment to The London Plan (New Official Plan)

To change the designation of the rear (east) portion of the property from the Neighbourhoods Place Type to the Shopping Area Place Type to permit a Casino and accessory uses on a greater portion of the property than would currently be allowed.

Requested Amendment to the Official Plan (Southwest Area Secondary Plan)

To change the designation of the rear (east) portion of the property from Medium Density Residential to Wonderland Road Community Enterprise Corridor to permit a Casino and accessory uses on a greater portion of the property than would currently be allowed. To add a site specific policy to permit off-street parking, driveways, lanes, and aisles between the building and public sidewalk, notwithstanding the Wonderland Road Community Enterprise Corridor policies of subsection 20.5.6.1 and the Urban Design policies of subsection 20.5.3.9 which do not permit parking in this location.

Requested Zoning By-law Amendment

To change the zoning from a Holding Light Industrial Zone and an Environmental Review Zone to a Commercial Recreation Special Provision Zone and an Open Space Special Provision Zone to permit a Casino and accessory uses on the property and the protection of the Pincombe Drain. Changes to the currently permitted land uses and development regulations are summarized below. The complete Zoning By-law is available at london.ca/planapps.

Current Zoning

Zone: Holding Light Industrial (h-17·LI1/LI7) Zone
Permitted Uses: bakeries, business service establishments, laboratories, manufacturing and assembly industries, support offices, paper and allied products industries, printing, reproduction and data processing industries, research and development establishments, warehouse establishments, wholesale establishments, custom workshops, brewing on premises establishments, service trades, existing self-storage establishments, artisan workshops, craft breweries, automobile body shops, automobile repair garages, building or contracting establishments, repair and rental establishments, service and repair establishments, custom workshops.
Height: 50m

Zone: Environmental Review (ER) Zone
Permitted Uses: conservation lands, conservation works, passive recreational uses, managed woodlot, agricultural uses.

Requested Zoning

Zone: Commercial Recreation Special Provision (CR(_)) Zone
Permitted Uses: commercial recreation establishments, golf courses, private clubs, private outdoor recreation clubs, private parks, recreational buildings, recreational golf courses
Special Provision(s): Casino as an additional permitted use; a new definition of “Casino” applying to the subject property reading “means a facility for the purposes of gaming that is authorized by the Province of Ontario, where a portion of the facility may be devoted to uses in connection with the operation of a Casino including offices, restaurants, outdoor patios, auditoriums, meeting rooms, amusement games establishments and places of entertainment”; and a minimum parking rate of 1 space per 20 sq. m for a Casino. Increase the maximum building height to 16m in place of 12m. Reduce the minimum landscaped open space to 15% in place of 25%
Height: 16m

Zone: Open Space Special Provision (OS4(_)) Zone
Permitted Uses: conservation lands, conservation works; golf courses, sports fields, private parks and public parks without structures; cultivation or use of land for agricultural/horticultural purposes.
Special Provision(s): Stormwater pipe outlets in association with a Casino as an additional permitted use; and a lot with no minimum lot frontage in place of 15m.

The City may also consider the appropriateness of removing the Holding (h-17) provision, which limits the uses on the property to dry uses on individual sanitary facilities, until full municipal sanitary sewer and water services are available to service the site. The City may also consider other special provisions and/or holding provisions.

An Environmental Impact Study has been prepared to assist in the evaluation of this application.

Planning Policies

Any change to the Zoning By-law must conform to the policies of the Official Plan, London's long-range planning document. The front (west) portion of the property is in the Shopping Area Place Type in *The London Plan*, permitting a broad range of retail, service, office, entertainment, recreational, educational, institutional and residential uses, subject to the policies of the *Southwest Area Secondary Plan.*

The front (west) portion of the property is designated Wonderland Road Community Enterprise Corridor in the *1989 Official Plan*, which permits a broad range of commercial, residential, office and institutional uses as the main uses, subject to the policies of the *Southwest Area Secondary Plan*,.

The front (west) portion of the property is designated Wonderland Community Enterprise Corridor in the *Southwest Area Secondary Plan*, permitting a broad range of retail, service, office, entertainment, recreational, educational, institutional and residential uses.

The rear (east) portion of the property is in a Place Type or designation in all three plans intended to provide for residential development and the protection of the Pincombe Drain.

How Can You Participate in the Planning Process?

You have received this Notice because someone has applied to change the Official Plan designation and the zoning of land located within 120 metres of a property you own, or your landlord has posted the public meeting notice in your building. The City reviews and makes decisions on such planning applications in accordance with the requirements of the *Planning Act*. If you previously provided written or verbal comments about this application, we have considered your comments as part of our review of the application and in the preparation of the planning report and recommendation to the Planning and Environment Committee. The additional ways you can participate in the City's planning review and decision making process are summarized below. For more detailed information about the public process, go to the Participating in the Planning Process page at london.ca.

See More Information

You can review additional information and material about this application by:

- visiting Development Services at 300 Dufferin Ave, 6th floor, Monday to Friday between 8:30am and 4:30pm;
- contacting the City's Planner listed on the first page of this Notice; or
- viewing the application-specific page at london.ca/planapps.

Attend This Public Participation Meeting

The Planning and Environment Committee will consider the requested Official Plan and zoning changes at this meeting, which is required by the *Planning Act.* You will be invited to provide your comments at this public participation meeting. A neighbourhood or community association may exist in your area. If it reflects your views on this application, you may wish to select a representative of the association to speak on your behalf at the public participation meeting. The Planning and Environment Committee will make a recommendation to Council, which will make its decision at a future Council meeting.

What Are Your Legal Rights?

Notification of Council Decision

If you wish to be notified of the decision of the City of London on the proposed official plan amendment and zoning by-law amendment, you must make a written request to the City Clerk, 300 Dufferin Ave., P.O. Box 5035, London, ON, N6A 4L9, or at docservices@london.ca. You will also be notified if you speak to the Planning and Environment Committee at the public meeting about this application and leave your name and address with the Secretary of the Committee.

Right to Appeal to the Local Planning Appeal Tribunal

If a person or public body would otherwise have an ability to appeal the decision of the Council of the Corporation of the City of London to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the proposed official plan amendment is adopted, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the proposed official plan amendment is adopted, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to add the person or public body as a party.

If a person or public body would otherwise have an ability to appeal the decision of the Council of the Corporation of the City of London to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the by-law is passed, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

For more information go to http://elto.gov.on.ca/tribunals/lpat/about-lpat/.

Notice of Collection of Personal Information

Personal information collected and recorded at the Public Participation Meeting, or through written submissions on this subject, is collected under the authority of the *Municipal Act*, 2001, as amended, and the *Planning Act*, 1990 R.S.O. 1990, c.P.13 and will be used by Members of Council and City of London staff in their consideration of this matter. The written submissions, including names and contact information and the associated reports arising from the public participation process, will be made available to the public, including publishing on the City's website. Video recordings of the Public Participation Meeting may also be posted to the City of London's website. Questions about this collection should be referred to Cathy Saunders, City Clerk, 519-661-CITY(2489) ext. 4937.

Accessibility – Alternative accessible formats or communication supports are available upon request. Please contact accessibility@london.ca or 519-661-CITY(2489) extension 2425 for more information.

Building Renderings

The above image represents the applicant's proposal as submitted and may change.

Dingman EA Stakeholder Group: 8th Meeting

Date / Time: Wednesday, June 12, 2019, 2:00-3:30 pm

Location: Committee Room #3 – 2nd Floor, City Hall

Invited: Dingman Creek EA Stakeholders (via email)

	Agenda Item	Issue / Discussion
1.	**Chair's Opening Remarks** Shawna Chambers, P.Eng., DPA Division Manager of Stormwater 2:00-2:05 (5 mins)	• **Objectives of today's meeting:** o Present Recommended Master Plan Alternative o Discuss Evolution of EA process and Subsequent Studies o Receive input from Stakeholders
2.	**Dingman EA Evolution** Shawna Chambers 2:05-2:25 (20 mins)	• Progress since last stakeholder meeting (Dec. 5, 2018) • Three year monitoring pilot project with UTRCA • Master Plan EA – Phase 1, Approach 1 *(Stage 1)* • Phase 2 EA study to consider floodline updates *(Stage 2)* o Peer review status o **Q:** Will the findings of the peer review be distributed? o **A:** The peer review study is associated with the UTRCA's regulatory floodline update and is outside of the EA process. The peer review findings will not be publically available. o **Q:** Will the floodplain be distributed? o **A:** It is anticipated UTRCA will release a revised screening area to be considered in the Stage 2 works. • **Q:** How will the City ensure riparian needs and targets will be implemented and achieved through the two stage master plan approach? • **A:** The subwatershed-wide ECA targets and monitoring program will track the conditions.

		• **Q:** Will modeling address water quality, quantity and erosion control in the context of the two stage approach? • **A:** The consultant has run a high level PCSWMM model for the entire Dingman subwatershed that considers water quality, quantity and erosion control. Field work was completed as part of the Master Plan and includes site specific geomorphic work. Background studies such as the 2014 work is used as the basis for hydrogeological considerations.
3.	**Master Plan – Preferred Alternative** Dave Maunder, P.Eng., M.Sc. Aquafor Beech 2:25-2:45 (20 mins)	• Present modeling completed to compare stormwater servicing alternatives for Phase 1 lands • Review evaluation matrix • Present the preferred alternative • **Q:** How is the monitoring and maintenance of LIDs on private lands managed and controlled? **A:** The owner is responsible for maintenance of LID features on private lands. This may be through the condo board and is the same as the existing onus of the Permanent Private Systems (PPS) policy. Requirements can be establish by site agreements. **Q:** Is the City monitoring any of the pilot LID projects that are already in the ground to gain better understanding of how these features perform and what the maintenance challenges are? **A:** Western University is actively conducting a comprehensive monitoring program at Sarnia Road. It is visually apparent when LIDs aren't working as intended due to issues with standing water. **Q:** LIDs may not work at all sites. High groundwater levels and tight soil conditions could be restrictive at many sites within the Dingman Creek Subwatershed. **A:** Aquafor Beech has found that infiltration in tight soils is greater than typically assumed. Filtration and slower release rates is an appropriate LID approach in tight soils. High groundwater does limit LID options. **Q:** What is the life expectancy of LID systems? **A:** Third-pipe systems are anticipated to have a 50-year life span. There are examples of these types of projects implemented in Ontario in the early 90's that are still functional.
4.	**Implementation and Next Steps** Shawna Chambers 2:45-3:05 (20 mins)	**Implementation of LIDs:** • Design Standards Update • Available Financing

		Next Steps: • Master Plan Conclusion • Future Studies **Feedback:** • Complete and circulate minutes to Stakeholders • Receive input on the evaluation matrix and Master Plan preferred alternative • Receive input on continuation of the Stakeholder Group and participants • 2nd Public meeting: o **Wednesday, June 19, 2019**, 6-8pm, Bostwick Community Centre •
5.	**Working Group Discussion** 3:05 -3:30 (25 mins)	• Questions/comments N.B. Some discussion to occur throughout presentations above. • Comments to be provided by **Monday, July 8, 2019.**

Dingman Creek EA – Stakeholder Group Update

Dingman Stakeholder Meeting #8
June 12, 2019

Shawna Chambers, P.Eng., DPA
Division Manager, Stormwater Engineering, City of London
schambers@london.ca
519-661-2489 x7318

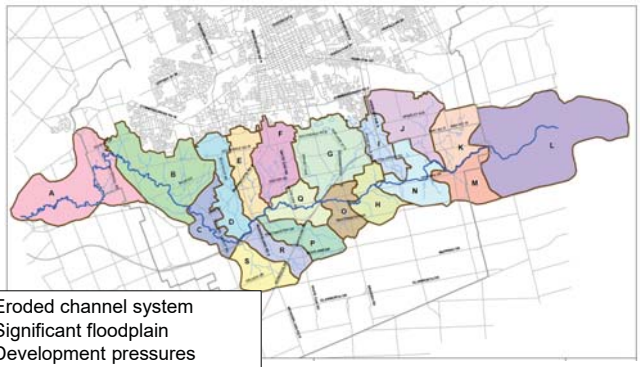
Outline

- Overview of EA Process
- Since Dec 5, 2018
  - UTRCA Monitoring Plan
  - Advisory Services
  - Evolution of the EA process
- Master Plan Recommendations (Aquafor)
- Design Standards Update
- Available Financing
- Next Steps

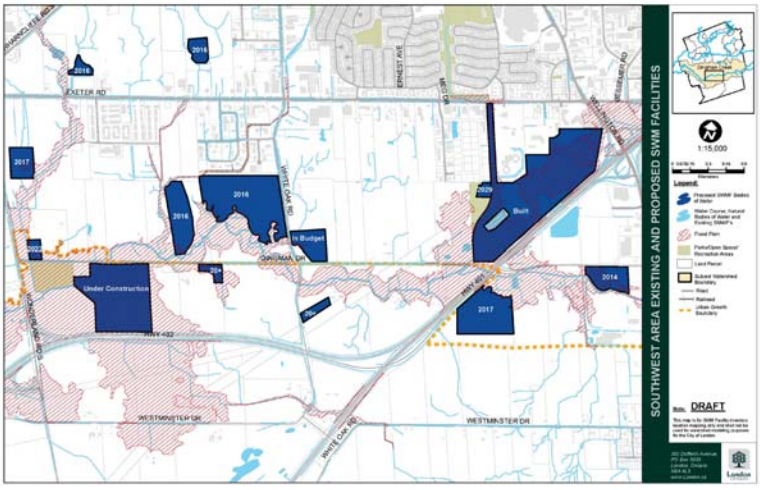
Dingman Creek Subwatershed Environmental Assessment

Purpose: To develop an innovative stormwater servicing strategy with consideration for current and potential flooding, erosion concerns, as well as wildlife/aquatic habitat and natural corridor enhancement.

Dingman Creek Subwatershed



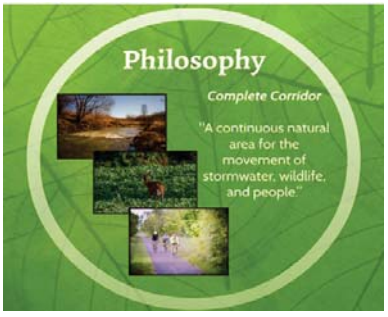
- Eroded channel system
- Significant floodplain
- Development pressures
- Several EAs completed
- Natural heritage features



Dingman Creek – 2015 Proposed SWMFs – "Land of Lakes"

Complete Corridor Approach

- Integrate natural heritage, open space, recreational, and SWM
- Continuous corridor for the protection, maintenance, rehabilitation, and restoration of ecological function
- Potential to replace wet ponds with LIDs and dry ponds along the floodplain



EA Problem Statement

The Dingman Creek Subwatershed (DCS) suffers from poor water quality, a lack of wildlife habitat, loss of trees and vegetation, as well as flooding and erosion issues. Sustainable growth within the Urban Growth Boundary of the DCS is a City of London priority. To maintain, enhance, and restore the DCS, the City needs a comprehensive plan to support both environmental and development goals. This plan must:

- Build on the 1995 and 2005 Dingman Creek Subwatershed Studies and be consistent with the goals and objectives of the Official Plan and Southwest Area Secondary Plan;
- Meet the targets established in the Environmental Compliance Approval (ECA);
- Create a "complete corridor" that provides a continuous natural area for the movement of water, wildlife, and people.

Note: The Dingman Creek Environmental Assessment will not delay construction of draft approved subdivisions.

Since December 5, 2018

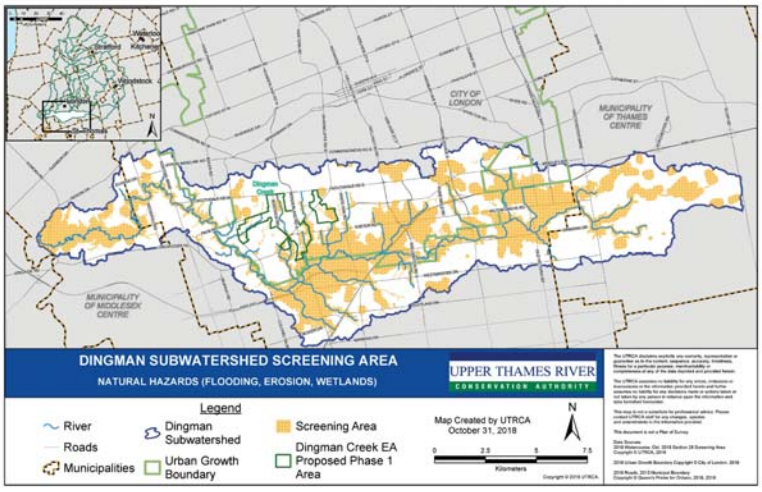
1. Subwatershed-wide monitoring Pilot Project with UTRCA adopted by Council
2. UTRCA Floodplain - Advisory Services of Floodplain modelling
3. Evolution of the Dingman Creek EA process

1. Subwatershed-wide Monitoring Plan

- Pilot Project with UTRCA adopted by Council in March 2019
- Review, compile, and analyze historical surface water monitoring baseline data using WISKI data sharing platform
- Continue existing monitoring program, including benthic and water chemistry
- Establish two additional flow or level monitoring stations
- Develop framework for annual monitoring report and 5-year trend analysis

2. UTRCA Floodplain

- Upper Thames River Conservation Authority (UTRCA) conducting Regional Floodplain Update in parallel with EA.
- Preliminary floodplain "screening area" presented to Planning Committee on November 12, 2018.
- Significant floodplain expansion along certain lengths of Dingman Creek and select tributaries.



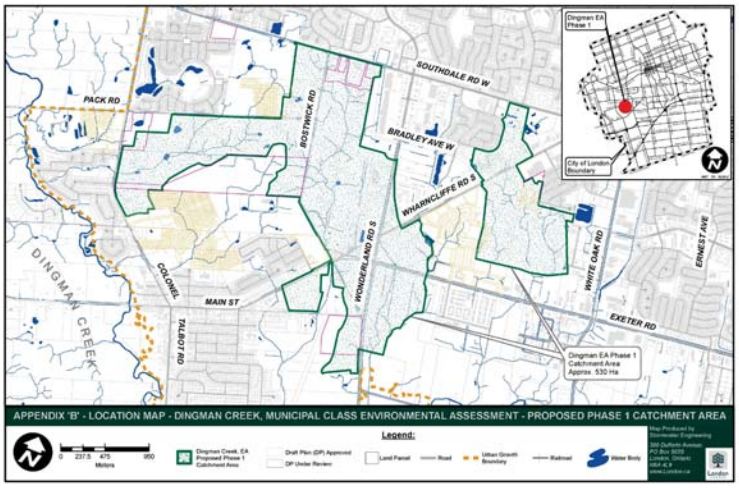
Dingman Creek "Screening Area" – Draft Hazard Lands

Advisory Services

- Consultant engaged to complete Advisory Services for UTRCA Floodplain since January 2019
- Scope includes:
  - Policy and best practices review across Ontario/Canada
  - Review of modelling assumptions
- Results presented to UTRCA/City/LDI in mid-May
- Consultant to work with UTRCA to revise modelling based on findings
- Consultant to prepare report end of July 2019
- Goal: To establish baseline Regulatory Floodplain

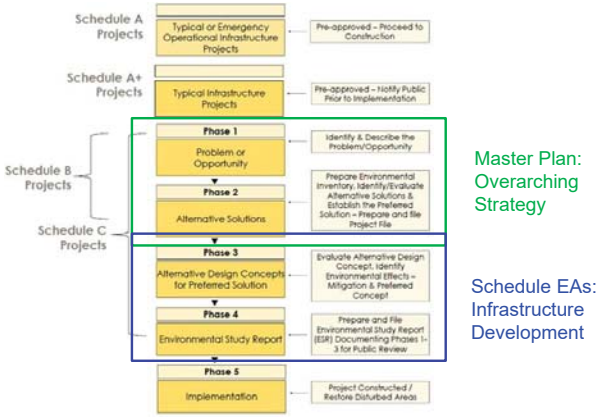
3. Evolution of Dingman Creek EA

- **Stage 1:** lands less impacted by floodplain expansion
  - Recommend Stormwater Servicing solutions for developable lands
  - Lands within recently completed EAs, outside of Dingman Creek zone of influence
- **Stage 2:** lands directly impacted by the proposed floodplain
  - Assess storage options to mitigate expansion of floodplain, including Complete Corridor
  - Recommend Stormwater Servicing solutions for developable lands



Dingman Creek EA – Stage 1 Catchment Areas

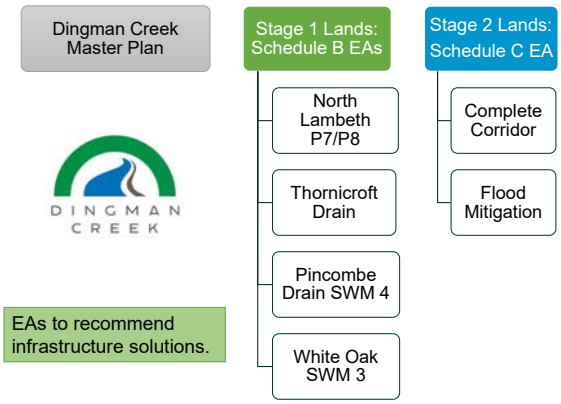
Environmental Assessment Process

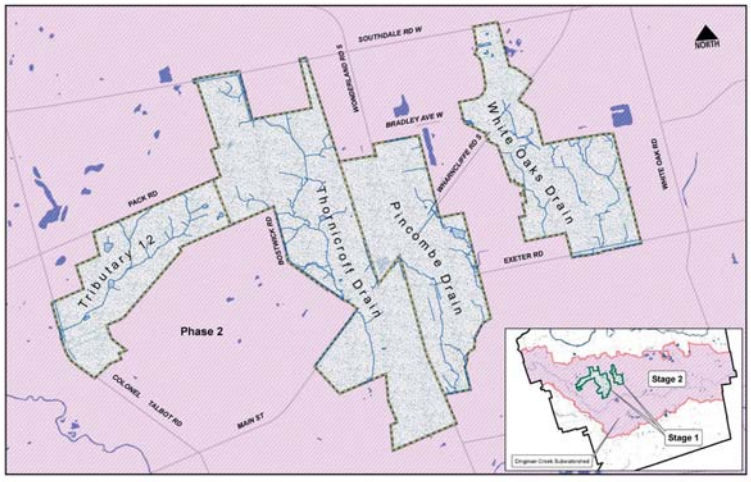


Master Plan: Overarching Strategy

Schedule EAs: Infrastructure Development

Dingman EA Flow Chart





Study Area Limits of Stage 1 Mini EAs

Advantages of Revised Process

- Master Plan to provide overarching strategy for Stage 1 lands, incorporate LIDs.
- Mini EAs:
  - Facilitate development within the 0-10 year period.
  - Expedite delivery of projects with up to four consultants working at the ground level.
  - Level of detail at EA stage adequate to move into detailed design and construction.
- Stage 2 Corridor EA to run in parallel
  - Evaluate concepts for Complete Corridor and floodplain mitigation.

Acknowledgements

Dave Maunder, M.Eng., P.Eng.
Principle
Aquafor Beech Ltd.
Maunder.d@aquaforbeech.com
519-224-3740

Sabrina Ternier
Senior Program Advisor, Innovations Unit
Ministry of Environment, Conservation and Parks
sabrina.ternier@ontario.ca
416-325-8223

Mark Snowsell
Land Use Regulations Officer
Upper Thames River Conservation Authority
snowsellm@thamesriver.on.ca
519-451-2800 ext 245

https://getinvolved.london.ca/DingmanCreek

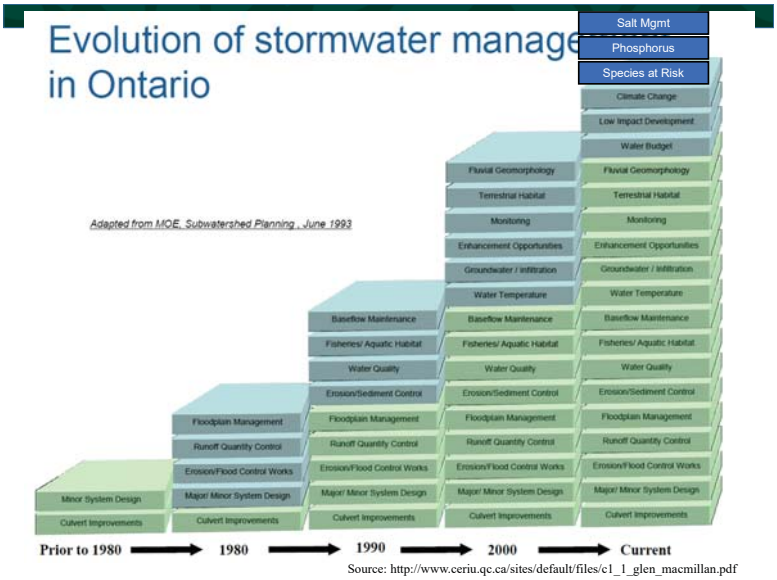
Making room for LIDs

Design Specifications and Requirements Manual 2019 Update – External Stakeholder Meeting

June 3, 2019

Shawna Chambers, P.Eng., DPA
Division Manager, Stormwater Engineering
schambers@london.ca
519-661-CITY x7318

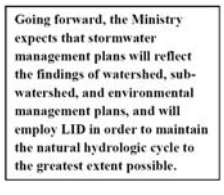
London.ca

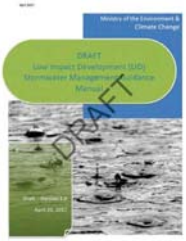


Source: http://www.ceriu.qc.ca/sites/default/files/c1_1_glen_macmillan.pdf

Opportunity for LIDs

- Ontario Ministry of Environment, Conservation and Parks (MECP) Bulletin, Expectations Re: Stormwater Management (*MECP, February 2015*)
- Regard for subwatershed conditions and maintain natural hydrologic cycle to the greatest extent possible
- Pending provincial LID Guidance Manual under new government


Going forward, the Ministry expects that stormwater management plans will reflect the findings of watershed, sub-watershed, and environmental management plans, and will employ LID in order to maintain the natural hydrologic cycle to the greatest extent possible.



Design Standard Update

Section 6.0 Stormwater Management

LID Highlights:
- Groundwater Considerations (NEW)
- Best Management Practices (NEW)
- Low Impact Development (NEW)

Runoff Control Hierarchy

General 25mm capture target (90th percentile of rain events)

Approach 2 includes LID application in tight/clay soils = Majority of sites in London

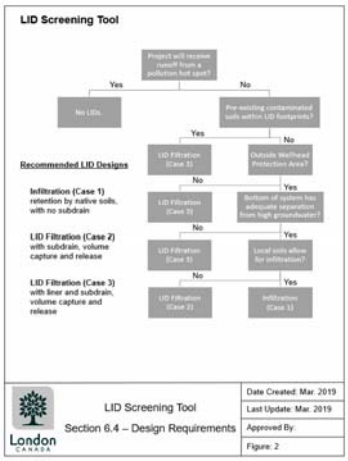
Better Site Design (reduced land clearing, preserve natural systems etc) **& Pollution Prevention**

Approach 1 (Retention) Infiltration, evapo-transpiration and or re-use. The volume does not become runoff.

Approach 2 (LID Volume Capture and Release) –utilize filtration to filter runoff. The controlled volume is filtered and released to the municipal sewer networks or surface waters at a reduced rate and volume (a portion may be infiltrated or evapotranspirated).

Approach 3 (Other Volume Detention and Release) – Other technologies which utilize filtration, hydrodynamic separation and or sedimentation (to detain and treat runoff. The controlled volume is treated and released to the municipal sewer networks or surface waters at a reduced rate.

Stormwater Practices



Low Impact Development

- Lot level stormwater management designs to complement traditional systems or as stand alone solution.
- LID Screening Tool: best suited LID type for specific site conditions. Can be used for site plan applications.

LIDs by Land Use

LIDs within Municipal Right-of-Way or Easement

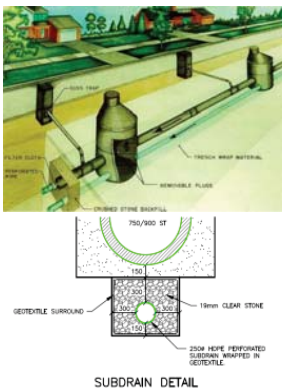
1. Third Pipe Systems
2. Bioretention Systems, Infiltration Swales or Dry Swales)

Selected based on:
- Effectiveness in meeting the 25mm volume capture;
- Integration into current construction practices;
- Cost; and,
- Long-term access, operations and maintenance.

Low Density: Municipal Right of Way

- Construct with local servicing
- Third pipe system
- Infiltration swales

Waterloo Street, London Ontario, Constructed 2017



SUBDRAIN DETAIL

Medium and High Density: Private Permanent Systems

- Linear infiltration (third pipe system and infiltration swales), plus:
  - Green/white roof storage
  - Green parking lot standards

Firehall 11, London Ontario, Constructed 2017

Other LID related updates

- Sediment and Erosion Controls
- Assumption process
- Operations and Maintenance requirements
- Updated IDF curves based on historical rainfall; addition of 25mm-4 hour event

Consultants and Developers encouraged to review updates.

Design Standards Review Process

- May 8, 2019 - design standard updates circulated to external stakeholders
- June 2, 2019 – presentation of stormwater design standard changes to external stakeholders
- June 14, 2019 (this Friday) - deadline for feedback

Development Charges

- DC Budget:
  - Total of $94.5M of proposed 2014 DC and 2019 DC SWM projects:
    - $34.1M of previously budgeted 2014 DC SWM works
    - $60.4M of proposed 2019 DC SWM works

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Stage 1 Projects

- $25.6M of new projects under review in Stage 1:
  - Tributary B12: North Lambeth SWMFs *P7** & P8 (2020)
  - Thornicroft Drain: North Lambeth SWMFs 1, 3, 4, 5 (2023-2033)
  - Pincombe Drain: SWMF 4 (2020)
  - White Oak Drain: SWMF 3 (2022)
- Mini EAs target completion by Fall 2020.
- Roll into detailed design and construction of preferred alternative as soon as practical.

*Previously budgeted**

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Stage 2 Projects

- $34.8M of new projects under review in Stage 2:
  - Thornicroft Drain: North Lambeth SWMFs 6 & 10 (2026)
  - Pincombe Drain: SWMF 5 (2025)
  - White Oak Drain: SWMF 4 (2027)
  - Old Oak 2 (2027)
  - Dingman Creek Online 2 (2019)
  - Dingman Creek Channel Remediation (2020)
  - *Dingman Creek Online 1**
  - *Pincombe Drain Remediation**
  - *Murray Marr 4 – Phase 1**
- Target EA completion in 2021.
- Roll into design/construction of recommended improvements.

*Previously budgeted**

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DC Local Servicing Policy

The 2019 Development Charges introduces an LID Subsidy intended to be applied to greenfield low density residential development when:

- The LID works are infiltration systems designed to improve water quality or the water balance within the new development;
- The LID works are constructed in conjunction with local stormwater servicing on City-owned lands or within a dedicated municipal easement; and,
- The design has been accepted by the City Engineer (or designate).

LID DC Subsidy

- Based on a 250mm diameter third pipe system installation but represents the maximum subsidy value per linear metre.
- Subsidy may be applied to other features such as linear swales, rain gardens, or biofilter technologies, all in accordance with the Local Servicing Policy.

**in force and effect August 4, 2019.*

Depth of Storm Sewer (m)	LID Subsidy
2.5	$279
3.0	$301
3.5	$324
4.0	$346
4.5	$369
5.0	$391
5.5	$414
6.0	$436
6.5	$458
7.0	$481
7.5	$503
8.0	$648
8.5	$792
9.0	$937
9.5	$1,081
10.0	$1,225

Site Plan Storm Credit

- Current storm rate (>1 acre) = $135.71 per ha/month
- ICI properties eligible for storm fee credit:

Case 1: Pervious Surface Credit

- Demonstrate contributing impervious area is less than storm sewer design sheet

Case 2: Green Infrastructure/LID

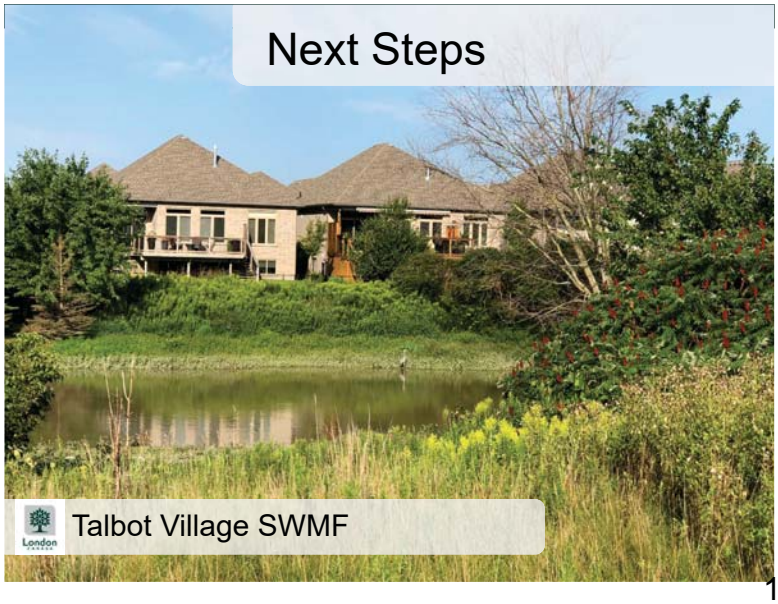
- Demonstrate infiltration measures/at source controls reduces runoff to the municipal system

- Up to 50% rate reduction available.
- More details at the bottom of this page:

http://www.london.ca/residents/Water/water-bill/Pages/Water-and-Wastewate-Rates.aspx

Summary

- Design Standards have been updated to encourage opportunities for LIDs
- 2019 Development Charges includes funding for traditional SWM systems and Linear LIDs as recommended by the Dingman Master Plan



Next Steps: Master plan

Wrap up Master Plan for Stage 1:

- Present overarching SWM strategy with LID targets for development lands in Stage 1 boundary
- Public Meeting #2 on June 19, 2019: Preferred Recommended Solution for Traditional & LIDs
- Notice of Completion: September CWC
- Report available for 30-day review period

EA Timelines

Fall 2019:
- Master Plan Notice of Completion
- Initiate 4 Mini-EAs for Stage 1 Lands
- Initiate Stage 2 Corridor EA

By end of 2020:
- Complete Mini EAs
- Move to design and construction

By end of 2021:
- Complete Stage 2 Corridor EA

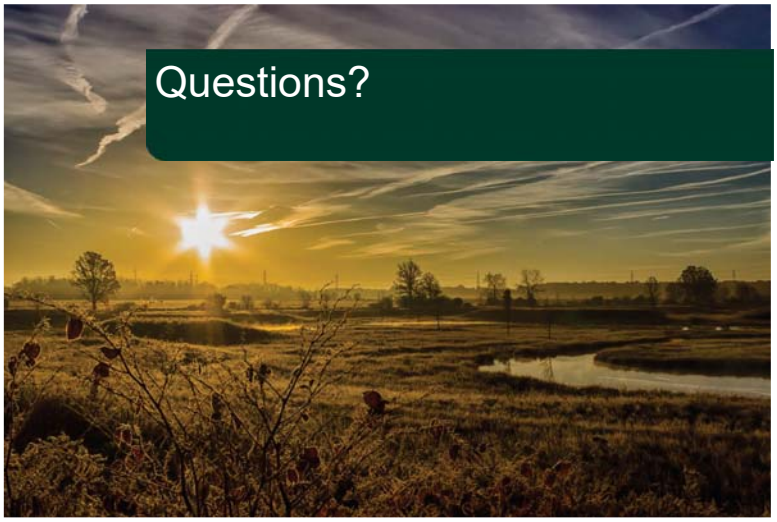
Stakeholder Outcomes

- Developed Problem Statement
- Confirmed EA Objectives
- Discussed what, where, & why of Low Impact Development technologies
- Established Watershed Goals, Objectives, Indicators and Targets
- Defined long list of EA alternatives
- Reviewed Evaluation Matrix

Stakeholder Group

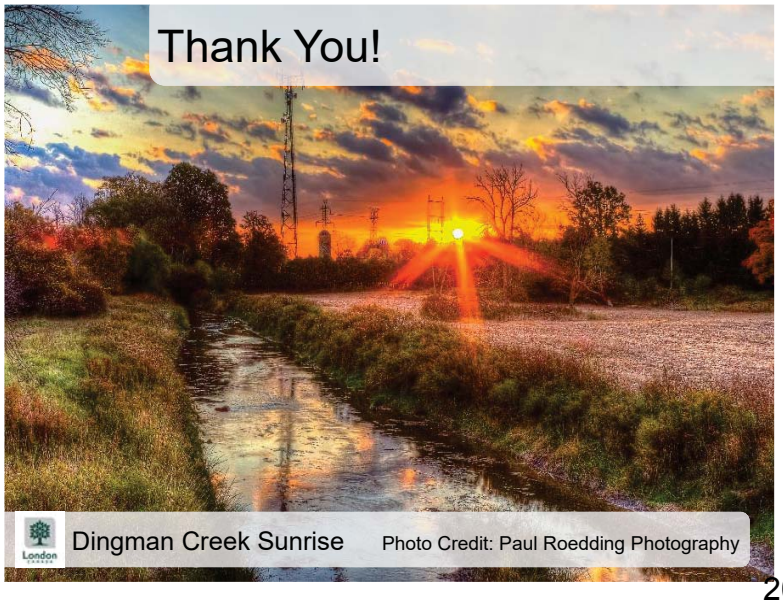
- Transparent means to communicate project evolution
- A forum for personalized involvement in the process.
- Stakeholder Group will be offered for Stage 2
  - Group vote!

Questions?



https://getinvolved.london.ca/DingmanCreek

Thank You!



Dingman Creek Sunrise Photo Credit: Paul Roedding Photography

Dingman Creek Subwatershed: Stormwater Servicing Strategy

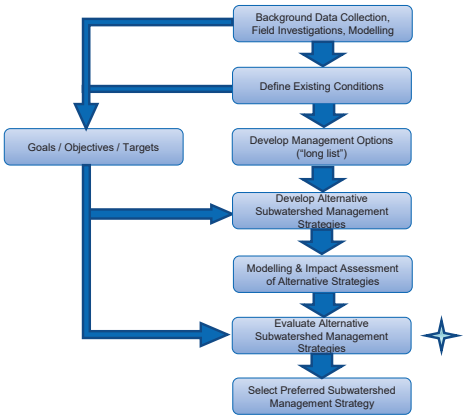
Aquafor Beech

JUNE 12, 2019

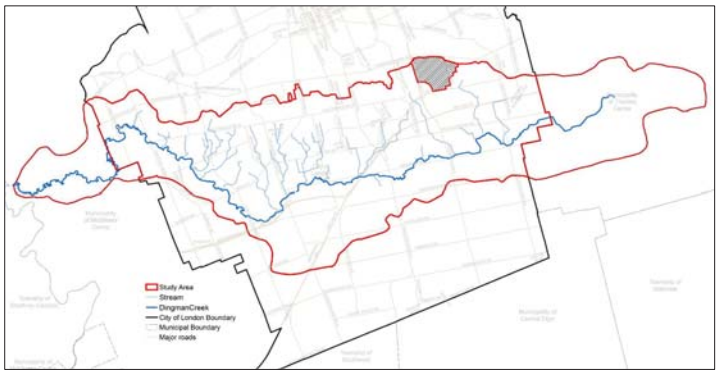
AGENDA

1. **Review of Alternative Subwatershed Management Strategies**
2. **Discussion of Evaluation Approach**
3. **Discussion on potential flood prone areas**
4. **Questions & Discussion**

STUDY PROCESS

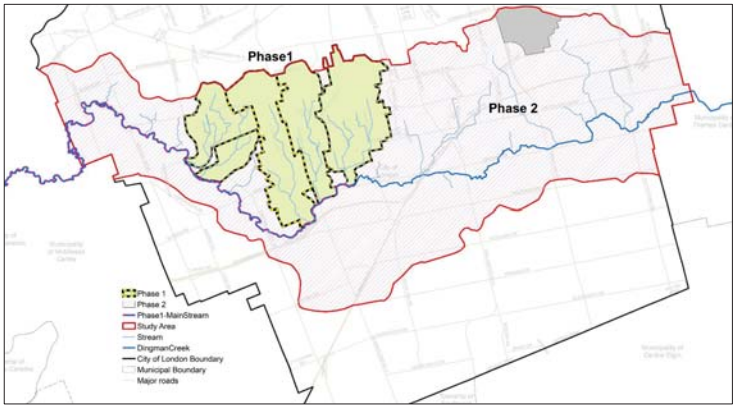


OVERALL MAP OF DINGMAN

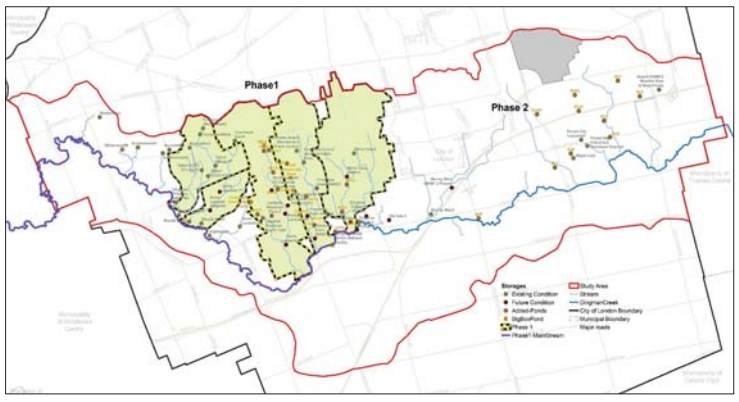


The Dingman Creek subwatershed is outlined in red, above. The headwaters originate in the Municipality of Thames Centre. Approximately 74% of the subwatershed is located within the City of London.

STAGE 1 AND 2 STUDY AREAS



EXISTING AND PROPOSED PONDS – STAGE 1 LANDS



1. REVIEW OF ALTERNATIVE SUBWATERSHED STRATEGIES PRESENTED AT LAST MEETING

Subwatershed Management Strategies:

1. **Do Nothing**
2. **Traditional SWM Strategy (end-of-pipe only)**
3. **Low Impact Development (LID) Strategy**
4. **Combined Traditional & LID**

(examples of each on the following slides)

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City of London
- LID Workshop-

Dave Maunder & Chris Denich
AQUAFOR BEECH LTD.
denich.c@aquaforbeech.com
Guelph / Mississauga / London/ Kingston

June 20, 2013

LIDs - Single Family Residential

- Recommended LID Approaches
  - Private property
    - Soil Amendments
  - Municipal Property:
    - 3rd Pipe
    - Perforated pipe systems
    - Grassed Swale Perforated Pipe Systems (GSPP)

LIDs – Multi-Family (Med Density)

- Condominium properties
  - O&M is the responsibility of the Condo
- Recommended LID Approaches
  - Soil Amendments
  - Perforated Pipe Systems
  - Permeable Pavements
  - Bioretention & Bioswales
  - Enhanced Swales
  - Soakaway Pits, Infiltration Trenches and Chambers

LIDs - Multi-Family (High Density)

- Condominium properties
  - O&M is the responsibility of the Condo
- Recommended LID Approaches
  - Soil Amendments
  - Perforated Pipe Systems
  - Permeable Pavements
  - Enhanced Swales

  - Bioretention & Bioswales
  - Soakaway Pits, Infiltration Trenches and Chambers
  - Green Roofs
  - Rainwater Harvesting

LIDs - ICI

- Recommended LID Approaches
  - Soil Amendments
  - Perforated Pipe Systems
  - Permeable Pavements
  - Enhanced Swales
  - Bioretention & Bioswales
  - Soakaway Pits, Infiltration Trenches and Chambers
  - Green Roofs
  - Rainwater Harvesting
  - etc

OBJECTIVE

The objective was to model perforated pipes in subcatchments with LIDs.

From our extensive LID modelling experience and past projects, infiltration trenches have been used to represent perforated pipe systems and appropriately simulate response times, as well as the allocation of infiltration, filtration and detention mechanisms.

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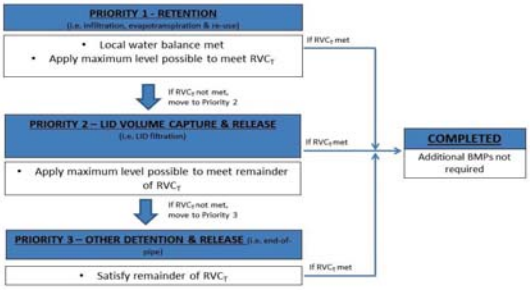

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LID KEY PARAMETERS (NON-CALIBRATED)

Parameters	Value in the Model	Default	Unit	Description
Berm height	100	N/A	mm	Maximum depth to which water can pond within the unit before overflow occurs (in inches or mm).
Vegetation volume (fraction)	0.0	N/A	-	The fraction of the volume within the storage depth filled with vegetation. Assuming perforated pipes are in the road way.
Surface roughness	0.3	0.1	-	Manning's n for overland flow over the surface.
Surface slope (%)	0.25	1.0	(%)	Slope
Thickness of Storage	450	N/A	(mm)	Thickness of the storage
Void Ratio of Storage	0.65	0.75	-	The volume of void space relative to the volume of solids. Typical values range from 0.5 to 0.75.
Seepage Rate	Varies (2.5-18)	0.5	(mm/hr)	The maximum allowable rate at which water infiltrates into the native soil below the layer (in inches/hour or mm/hour). This would typically be the Saturated Hydraulic Conductivity of the surrounding area.

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Runoff Volume and depth-2year			
Scenario	Rainfall (mm)	Vol (ML)	Runoff (mm)
Do Nothing	51.3	15.33	35.90
LID Only		11.96	28.02

Runoff Volume and depth – 100year			
Scenario	Rainfall (mm)	Vol (ML)	Runoff (mm)
Do Nothing	107.1	39.16	91.71
LID Only		35.78	83.78

*ML- Million litres

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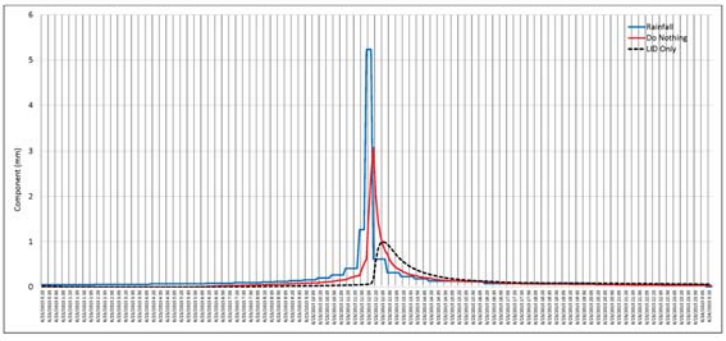
RUNOFF VOLUME AND DEPTH – 2 YEAR

Table 2. Runoff Volume and depth – 2 year			
Scenario	Rainfall	Vol (ML)	Runoff (mm)
Do Nothing	51.3	15.33	35.90
LID Only		11.96	28.02



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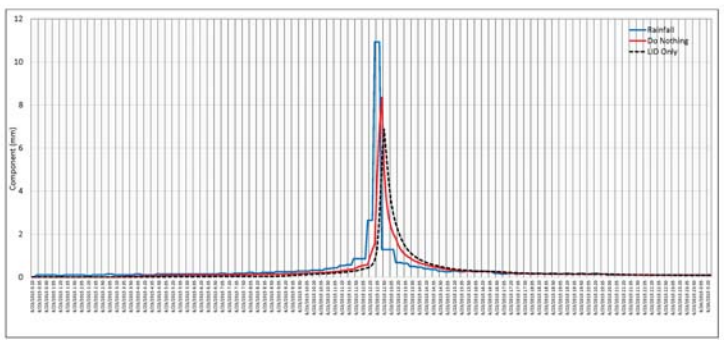
RUNOFF VOLUME AND DEPTH – 100 YEAR

Table 2. Runoff Volume and depth – 100 year			
Scenario	Rainfall (mm)	Vol (ML)	Runoff (mm)
Do Nothing	107.1	39.16	91.71
LID Only		35.78	83.78



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SUBWATERSHED MANAGEMENT STRATEGY 2: TRADITIONAL STORMWATER MANAGEMENT OPTIONS

Traditional end-of-pipe options:

- **Wet pond**
- **Dry pond**
- **Constructed wetland**
- **Oil-grit separator**

Recall: Traditional conveyance control SWM options are not proposed.



SUBWATERSHED MANAGEMENT STRATEGY 3: LOW IMPACT DEVELOPMENT (LID) STORMWATER MANAGEMENT OPTIONS

Source Control Options:

- **Bioretention**
- **Rainwater Harvesting**
- **Permeable Pavement**
- **Infiltration Galleries**


Conveyance Control Options:

- **Grassed swales**
- **Bioswales**
- **Perforated pipe / exfiltration systems**
- **Permeable pavement**


SUBWATERSHED MANAGEMENT STRATEGY 4: COMBINED TRADITIONAL & LID STORMWATER MANAGEMENT OPTIONS

End-of-Pipe and Conveyance Control Options (select examples):

- **Wet Pond**
- **Dry Pond**
- **Bioretention**
- **Grassed swales**
- **Bioswales**
- **Permeable pavement**
- **Etc.**

APPROACH TO EVALUATING ALTERNATIVE SUBWATERSHED STRATEGIES

Detailed Evaluation Criteria:

1. Natural Environment:

- Water quality
- Flooding
- Erosion
- Aquatic natural heritage
- Water balance

2. Economic:

- Capital cost
- O & M costs
- Infrastructure Protection

3. Social:

- Aesthetics/Recreation
- Integration with City/Agency Plans
- Compatibility with adjacent land uses
- Potential to increase private property land values

APPROACH TO EVALUATING ALTERNATIVE SUBWATERSHED STRATEGIES

Scoring for Evaluation Criterion:

THE SCORING SYSTEM

Score	Condition
4	Strategy maintains or improves existing conditions
3	⇩
2	Strategy somewhat impacts existing conditions
1	⇩
0	Strategy adversely impacts existing conditions

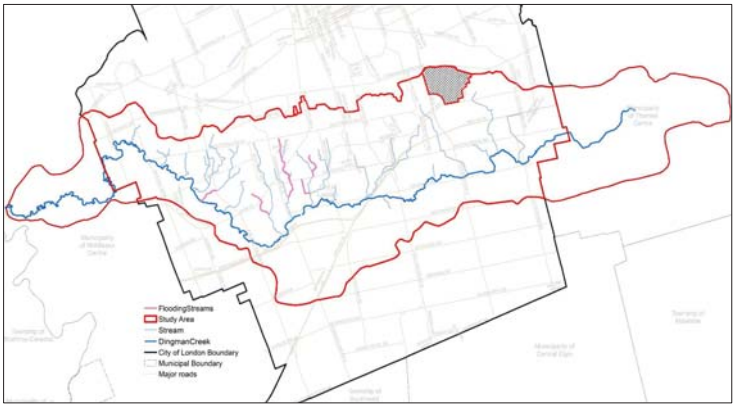
EVALUATION OF ALTERNATIVES

Evaluation Criteria	Do Nothing	Traditional SWM Strategy (end-of-pipe only)	Low Impact Development (LID) Strategy	Combined Traditional & LID
1. Natural Environment (Score out of 33.3)	0.0	20.0	23.3	30.0
Potential to improve water quality based on existing water quality conditions and ability to provide required water quality as per the MECP requirements	0	3	3	3
Potential Impact on Flooding	0	3	2	4
Potential Impact on Erosion	0	2	3	4
Potential Impact on Aquatic Habitat	0	2	3	4
Potential Impact on Water Balance	0	0	3	3
2. Social (Score out of 33.3)	2.1	18.7	18.7	31.2
Aesthetics/Recreation	1	3	3	4
Integration with other City/Agency plans, policies and initiatives (programs)	0	2	2	4
Compatibility with adjacent land uses	0	2	2	4
Potential to increase private property values	0	2	2	3
3. Economic (Score out of 33.3)	22.2	19.4	19.4	16.7
Construction Costs	4	2	3	1
Long Term Operation and Maintenance Costs	4	2	3	1
Infrastructure Protection	0	3	1	4
Total Normalized Score (1+2+3: Score out of 100)	24.3	58.1	61.4	77.9

FLOODING IMPLICATIONS

- **The Stage 1 study identified areas within the 5 subwatersheds which are subject to flooding under existing conditions or that would be as a result of development**
- **Assessment takes into consideration MNRF's policy that stormwater facilities are ineffective during the Regulatory (250 year) storm**
- **The Stage 2 study will address these areas in more detail**

POTENTIAL AREAS REQUIRING FURTHER ASSESSMENT



QUESTIONS?

Thank you for your participation and feedback!

Aquafor Beech Limited

EVALUATION OF ALTERNATIVES

Evaluation Criteria	Do Nothing	Traditional SWM Strategy (end-of-pipe only)	Low Impact Development (LID) Strategy	Combined Traditional & LID
1. Natural Environment				
Potential to improve water quality based on existing water quality conditions and ability to provide required water quality as per the MECP requirements	0	3	3	3
Potential Impact on Flooding	0	3	2	4
Potential Impact on Erosion	0	2	3	4
Potential Impact on Aquatic Habitat	0	2	3	4
Potential Impact on Water Balance	0	0	3	3
2. Social				
Aesthetics/Recreation	1	3	3	4
Integration with other City/Agency plans, policies and initiatives (programs)	0	2	2	4
Compatibility with adjacent land uses	0	2	2	4
Potential to increase private property values	0	2	2	3
3. Economic				
Construction Costs	4	2	3	1
Long Term Operation and Maintenance Costs	4	2	3	1
Infrastructure Protection	0	3	1	4
Total Score	**9**	**26**	**30**	**39**

EVALUATION OF ALTERNATIVES

Evaluation Criteria	Do Nothing	Traditional SWM Strategy (end-of-pipe only)	Low Impact Development (LID) Strategy	Combined Traditional & LID
1. Natural Environment (Score out of 33.3)	0.0	20.0	23.3	30.0
Potential to improve water quality based on existing water quality conditions and ability to provide required water quality as per the MECP requirements	0	3	3	3
Potential Impact on Flooding	0	3	2	4
Potential Impact on Erosion	0	2	3	4
Potential Impact on Aquatic Habitat	0	2	3	4
Potential Impact on Water Balance	0	0	3	3
2. Social (Score out of 33.3)	2.1	18.7	18.7	31.2
Aesthetics/Recreation	1	3	3	4
Integration with other City/Agency plans, policies and initiatives (programs)	0	2	2	4
Compatibility with adjacent land uses	0	2	2	4
Potential to increase private property values	0	2	2	3
3. Economic (Score out of 33.3)	22.2	19.4	19.4	16.7
Construction Costs	4	2	3	1
Long Term Operation and Maintenance Costs	4	2	3	1
Infrastructure Protection	0	3	1	4
Total Normalized Score (1+2+3: Score out of 100)	**24.3**	**58.1**	**61.4**	**77.9**

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Description of Natural Environment

Criteria	Measures for Assigning Scores
• Potential to improve water quality based on existing water quality conditions and ability to provide required water quality as per the MECP requirements	• Scoring ranges from 4 if the alternative exceeds an estimated 100% of the required water quality control as per MECP requirements to zero if no water quality treatment is provided. Interim scores are provided based on the percentage of the required water quality control that is provided
• Potential Impact on Flooding	• Scoring ranges from 4 if the alternative reduces flood potential to 0 if the alternative has the potential to increase flooding. Interim scores are provided based on the percentage of increase in flooding
• Potential Impact on Erosion	• Scoring ranges from 4 if the alternative reduces erosion potential to 0 if the alternative has the potential to significantly increase erosion potential. Interim scores are provided based on the percentage of increase in erosion potential
• Potential Impact on Aquatic Habitat	• Scoring ranges from 4 if the alternative • improves existing aquatic habitat to 0 if the alternative has the potential to significantly degrade existing habitat. Interim scores are provided based on the relative impact to habitat
• Potential Impact on Water Balance	• Scoring ranges from 4 if the alternative improves existing (pre-development) hydrologic cycle to 0 if the alternative significantly alters the cycle. Interim scores are provided based on relative impact to cycle.

Description of Social

Criteria	Description of Criteria	Measures for Assigning Scores
• Aesthetics/Recreation	• Potential for the alternative to become an asset to the community by integrating and improving the existing	• Scoring ranges from 4 if the alternative has a high potential to integrate into existing activities and/or improve aesthetics to 0 if

	site activities (walking/jogging, cycling, biking and hiking) and/or improve the site aesthetics	there is minimal potential and/or existing site uses will be lost to the community
• Integration with other City/Agency plans, policies and initiatives (programs)	• Potential for alternative to integrate with other City/Agency plans, policies and initiatives (programs) including, but not limited to: Parks Master Plan (park planning, park rehabilitation and service levels), urban forestry objectives, cycling and trails master plans and MECP Climate Change LID Stormwater Management Guidance Document	• Scoring ranges from 4 if the alternative has a high potential to complement existing City and Agency plans, policies and initiatives (programs) to 0 if the proposed alternative impedes plans, policies and initiatives
• Compatibility with adjacent land uses	• Potential for alternative to integrate with the adjacent land uses in regards to aesthetics, community expectations. It includes consideration for existing site uses and the expectation that adjacent residents have in maintaining these uses	• Scoring ranges from 4 if the alternative has a high potential to integrate with land uses in regards to community expectation and aesthetics; to 0 if the proposed alternative does not integrate well and, as such, would require a change as to how the site is perceived and therefore used by adjacent landowners
• Potential to increase private property values	• Potential for alternative to increase or decrease private property values	• Scoring ranges from 4 if the alternative increases overall property value to 0 if the alternative reduces values

Description of Economic

Criteria	**Description of Criteria**	**Measures for Assigning Scores**

• Construction Costs	• The relative estimated cost as compared to the other alternatives	• Scoring ranges from 4 if the relative cost, based on the identified factors is the lowest; to 0 if the relative cost is the highest
• Long Term Operation and Maintenance Costs	• The relative cost of operation and maintenance for the proposed alternative based on factors such as access/egress, sediment drying capability, ongoing general maintenance to associated infrastructure and overall maintenance frequency and intensity	• Scoring ranges from 4 if the relative operation and maintenance costs for the alternative is the lowest as compared to the other alternative to 0 if the alternative results int the highest operation and maintenance cost
• Infrastructure Protection	• Potential for the proposed alternative to protect existing or future infrastructure including streams, outfalls, storm sewers watercourse crossings	• Scoring ranges from 4 if the alternative is the most effective at protecting existing and proposed infrastructure thereby reducing risk; to 0 if existing/proposed infrastructure is most susceptible

Potential to improve water quality based on existing water quality conditions and ability to provide required water quality as per the MECP requirements

Do Nothing (0) Alternative would result in significant degradation to existing water quality

Traditional (3) Alternative will meet MECP requirements

LID (3) Alternative will meet MECP requirements

Traditional + LID (3) Alternative will meet MECP requirements

Potential to Improve Flooding

Do Nothing (0) Alternative would result in significant increases in flood potential

Traditional (3) Alternative would result in similar level of flood potential as per existing conditions

LID (2) Alternative would result in some increases in flood potential

Traditional + LID (4) Alternative generally reduces flood potential as compared to existing conditions

Potential to Improve Aquatic Habitat

Do Nothing (0) Alternative would result in significant degradation to aquatic habitat

Traditional (2) Alternative would result in some degradation to aquatic habitat

LID (3) Alternative would result in similar aquatic habitat as per existing conditions

Traditional + LID (4) Alternative would improve existing habitat

Potential to Improve Erosion

Do Nothing (0) Alternative would result in significant increase in erosion potential

Traditional (2) Alternative would result in some increase in erosion potential

LID (3) Alternative would result in similar level of erosion potential

Traditional + LID (4) Alternative would result in reduction of erosion potential

Potential Impact on Water Balance

Do Nothing (0) Alternative would result in significant alteration to the existing hydrologic cycle

Traditional (0) Alternative would result in significant alteration to the existing hydrologic cycle

LID (3) Alternative would maintain existing hydrologic cycle

Traditional + LID (3) Alternative would maintain existing hydrologic cycle

Aesthetics/Recreation

Do Nothing (1) Alternative will have potential to integrate into existing activities and will contribute to degradation of aesthetics

Traditional (3) Alternative will have high potential to integrate into existing activities and improve aesthetics

LID (3) Alternative will integrate into existing activities and would improve aesthetics over a broad range of sites

Traditional + LID (4) Alternative will have high potential to integrate into existing activities and would improve aesthetics over a broad range of sites

Integration with City/Agency plans, policies and initiatives

Do Nothing (0) Alternative is not consistent with either City of Agency plans, policies or initiatives

Traditional (2) Alternative is consistent with some City and Agency plans, policies and initiatives

LID (2) Alternative is consistent with some City and Agency plans, policies and initiatives

Traditional + LID (4) Alternative is consistent with a range of City plans, policies and initiatives as well as Agency policies

Compatibility with adjacent land uses

Do Nothing (0) Alternative would not integrate with adjacent land uses with respect to community expectations, aesthetics or maintaining existing uses

Traditional (2) Alternative would reasonably integrate with adjacent land uses with respect to community expectations, aesthetics or maintaining existing uses

LID (2) Alternative would reasonably integrate with adjacent land uses with respect to community expectations, aesthetics or maintaining existing uses

Traditional + LID (4) Alternative has high potential to integrate with a wide range of adjacent land uses with respect to community expectations, aesthetics and maintaining existing uses

Potential to increase property values

Do Nothing (0) Alternative has significant potential to reduce value of properties adjacent to watercourses

Traditional (2) Alternative has potential to increase property values adjacent to the proposed facilities

LID (2) Alternative has potential to somewhat increase property values in a wide range of land uses

Traditional + LID (3) Alternative has potential to increase property values adjacent to facilities and for a wide range of land uses

Construction Costs

Do Nothing (4) Alternative would have the lowest cost of the four which are presented

Traditional (2) Alternative would have the second highest cost of the four which are presented

LID (3) Alternative would have the third highest cost of the four which are presented

Traditional + LID (1) Alternative would have the highest cost of the four which are presented

Long Term Operation and Maintenance Costs

Do Nothing (4) Alternative would have the lowest cost of the four which are presented

Traditional (2) Alternative would have the second highest cost of the four which are presented

LID (3) Alternative would have the third highest cost of the four which are presented

Traditional + LID (1) Alternative would have the highest cost of the four which are presented

Infrastructure Protection

Do Nothing (0) Alternative would adversely impact existing and proposed infrastructure

Traditional (3) Alternative would be reasonably effective at protecting existing and proposed infrastructure

LID (1) Alternative would result in some effectiveness at protecting existing and proposed infrastructure

Traditional + LID (4) Alternative has the highest potential to protect existing and proposed infrastructure

From: Elmadhoon, Maged
Sent: July 8, 2019 12:09 PM
To: Lysynski, Heather
Cc: Bunn, Jerri-Joanne; Macpherson, Andrew; Haasen, John; Sypien, Violetta
Subject: Reso Letter - Dingman EAs

Hi Heather,

Please find below response to Council resolution Action Item “b” dated May 7, 2019 with respect to the correlation between the Dingman Creek Subwatershed Study and the Dingman Drive EA. Please share with members of EEPAC.

Transportation staff was fully aware that the Dingman Drive EA is located within the study area of the ongoing Dingman Creek Subwatershed EA. This was very clearly highlighted in the scope of the Dingman Drive EA study. The current Dingman Drive Class EA will examine options for road improvements which will likely include widening of the roadway from Wellington Road to just east of the 401 overpass. The City is also in the process of conducting the Dingman Creek Subwatershed-wide Stormwater Management Servicing Class EA Master Plan (Dingman SWM EA) in two Phases.

Phase 1 is in process and addresses future development lands. The Master Plan will identify stormwater targets for future development. Phase 1 will include individual EA’s to address four study area’s outside of the existing /future proposed floodlines. Phase 2 is expected to get underway later this year or early next year to address those lands within or impacted by existing and/or future flood lines.

The Dingman Drive EA project team will coordinate with the Dingman SWM EA study team update to coordinate consideration for floodplain improvements and stormwater control mitigation strategies related to the road improvement alternatives. The Dingman Road EA will include water quality/quantity and erosion control targets associated with the roadway area, potential realignment requirements, natural heritage impacts, and flood conveyance and/or mitigation (e.g. increase in road elevation.

Thanks
Maged

P.O. Box 5035
300 Dufferin Avenue
London, ON
N6A 4L9

May 8, 2019

P. McAllister
AECOM Canada Ltd.
410-250 York Street
London ON N6A 6K2

D. Baxter
Manager, Policy and Planning

M. Elmadhoon
Project Manager

I hereby certify that the Municipal Council, at its meeting held on May 7, 2019 resolved:

That the following actions be taken with respect to the 5th Report of the Environmental and Ecological Advisory Committee, from its meeting held on March 21, 2019:

a) the following actions be taken with respect to the Parks and Recreation Master Plan:

i) a Working Group BE ESTABLISHED consisting of S. Hall, S. Levin and R. Trudeau, to review and provide comments to the Civic Administration prior to April 23, 2019; and,
ii) the Environmental and Ecological Planning Advisory Committee (EEPAC) BE GRANTED delegation status when the Parks and Recreation Master Plan is presented to the Community and Protective Services Committee;

it being noted that the EEPAC reviewed and received the following with respect to this matter:

- the presentation from A. Macpherson, Division Manager, Parks Planning and Operations and S. Stafford, Managing Director, Parks and Recreation appended to the 5th Report of the Environmental and Ecological Planning Advisory Committee;
- the Children & Nature Facts from A. Macpherson, Division Manager, Parks Planning and Operations appended to the 5th Report of the Environmental and Ecological Planning Advisory Committee; and,
- a communication from A. Macpherson with respect to responses to the EEPAC comments on this matter;

b) the Project Managers BE REQUESTED to advise the Environmental and Ecological Planning Advisory Committee (EEPAC) of the correlation between the Dingman Creek Subwatershed Study and the Municipal Class Environmental Assessment currently being undertaken; it being noted that the EEPAC reviewed and received the Notice of Study Commencement for Dingman Drive East of Wellington Road to Highway 401 and area intersections Municipal Class Environmental Assessment, from M. Elmadhoon, Project Manager, The Corporation of the City of London and P. McAllister, Project Manager, AECOM Canada Ltd;

The Corporation of the City of London
Office 519.661.2500 x4856
Fax 519.661.4892
hlysynsk@london.ca
www.london.ca

c) the following actions be taken with respect to the Draft Plan of Subdivision and Zoning By-law Amendment for the properties located at 1938 and 1964 Commissioners Road East and 1645 Hamilton Road:

i) B. Krichker BE INCLUDED in the Environmental and Ecological Planning Advisory Committee (EEPAC) existing Working Group; and,
ii) the Working Group comments relating to the Draft Plan of Subdivision and Zoning By-law Amendment for the properties located at 1938 and 1964 Commissioners Road East and 1645 Hamilton Road BE POSTPONED to the next EEPAC meeting to allow the EEPAC to meet with staff;

d) the following actions be taken with respect to the communication dated April 8, 2019, from T. Cooke, Executive Director, Invasive Species Centre, congratulating the City of London on their excellent work on the London Invasive Plant Management Strategy:

i) the Civic Administration BE CONGRATULATED on their achievement; and,
ii) the above-noted communication BE RECEIVED;

e) clauses 1.1, 2.2, 3.1 to 3.5, inclusive, 3.7, 5.1 and 5.2 and 6.2, BE RECEIVED for information. (2.1/8/PEC)

C. Saunders
City Clerk
/lm

cc. A. Macpherson, Manager, Parks Planning and Operations
J. Bunn, Committee Secretary
Chair and Members, Environmental and Ecological Planning Advisory Committee

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City of London
Long Term Water Storage
Municipal Class Environmental Assessment

NOTICE OF PROJECT COMPLETION

The City of London has completed a Municipal Class Environmental Assessment (MCEA) to determine a preferred site for additional water storage to meet future growth within the City and address emergency storage supply and distribution needs. The study also considered the feasibility of retiring the existing Springbank Reservoir #2, McCormick Reservoir, White Oak Filter Plant, Lambeth Outer Drive Reservoir, Lambeth Well Supply, Reservoir and Pump Station and the Southwinds Well Supply, Reservoir and Pump Station to better optimize the overall water system. The study also considered standby power options for Arva Pump Station as part of this MCEA process.

Water Storage

The study determined, through a comparative evaluation of several aternative locations, that the preferred water storage strategy is to construct a new 100ML in-ground storage reservoir at the existing Springbank Reservoir complex by 2024 to replace the exisxting 45ML storage (Reservoir #2) to be retired.

Back up Power

The study determined that a standby generator set in a new or existing structure to provide backup power to the Arva pump station in the event of a power failure would allow the Arva PS to meet the City's day to day, peak or emergency needs.

Decommissioning

The study determined the Springbank Reservoir #2, McCormick Reservoir, White Oak Filter Plant, Lambeth Outer Drive Reservoir, Lambeth Well Supply, Reservoir and Pump Station and the Southwinds Well Supply, Reservoir and Pump Station will no longer be necessary for operational purposes and can be decommissioned.

A Project File has been prepared and will be placed on public record on July 11, 2019 to August 26, 2019 for forty-five (45) calendar days to be reviewed by members of the public and/or any other interested party at the following locations:

City of London City Hall 300 Dufferin Avenue, London Water Engineering Division 8th Floor	**London Public Library** Central Branch 251 Dundas Street, London
City of London www.london.ca/residents/Environment/EAs/Pages/LongTermWaterStorageOptions.aspx	

To provide comments, contact either of the following team members below:

Pat Lupton
Project Manager,
Corporation of the City of London
300 Dufferin Avenue
London ON, N6A 4L9
Tel: 519-661-CITY (2489) x. 5613
Email: plupton@london.ca

John Haasen
Project Manager,
AECOM Canada
250 York Street, Suite 410
London ON, N6A 6K2
Tel: 519-963-5889
Email: john.haasen@aecom.com

Information collected for the study will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act. Except for personal information, including your name, address and property location, all comments received throughout the study will become part of the public record and included in project documentation.

If concerns regarding this project cannot be resolved in discussion with the City of London, a person may request the Minister of the Environment Conservation and Parks (MECP) to issue an order to comply with Part II of the EA Act. This is known as a 'Part II Order", bumping up the status of this project to a full Individual Environmental Assessment. The procedure for a Part II Order request is as follows:

- First, the person with concerns directs them to the City of London and AECOM, during the forty-five (45) calendar day review period for consideration and mitigation.

- Second, if the concerns cannot be resolved, the person may submit a Part II Order request to the Minister of Environment Conservation and Parks by submitting the form found at the Ontario government Forms website (see below) by August 26, 2019. Search for "Part II Order" on the main page:

http://www.forms.ssb.gov.on.ca

The completed form and any supporting information must be sent to 77 Wellesley Street West, 11th floor, Toronto ON. M7A 2T5 with a copy of the request being sent to the Director of Environmental Assessment and Permissions Branch, the City of London and AECOM. All information required for submitting the Part II order including addresses are found on this form.

If no Part II Order requests are received by August 26, 2019, the project will be considered to have met the requirements of the Municipal Class EA and may proceed with detailed design, tendering and construction of the recommended works.

This Notice issued on July 11th, 2019.

Advisory Committee Work Plan – 2019

March 2019

Activity	Background	Responsibility	Timeline	Strategic Plan Alignment
Environmental Management Guidelines	This document was last updated in 2007. It has been a standing item in staff and EEPACs work plans since the last term of Council and EEPAC. There is money available from a Foundation to pay for the work and an agreement with the City has already been signed.	EEPAC will review the terms of reference and work with the consultant in cooperation with staff	As directed by staff	Building a Sustainable City
Protecting Environmentally Significant Areas	Communicating why it is important that dogs are controlled in and around Environmentally Significant Areas (cats indoors, dogs on leash) with the assistance of Corporate Communications; EEPAC will work with AWAC on this	P. Ferguson and Committee as a whole	To present to PEC no later than after EEPAC's May meeting	Building a Sustainable City
Collaboration with other Advisory Committees	An EEPAC representative is cross appointed to ACE where appropriate, EEPAC members will provide advice to its representative on this body Ongoing work with the Accessibility Advisory Committee to improve the process for accessible trails in ESAs	Chair and vice chair and Committee as a whole	As this involves staff, a timeline will be developed	Building a Sustainable City Strengthening our Community Leading in Public Service
Review of Environmental Impact Studies and Environmental Assessments submissions as part of Planning application and the *Environmental Assessment Act*	EEPAC is circulated and asked to review consultant submissions and provide input to City staff. In cases of significant disagreement, EEPAC advises PEC	Working Groups as required	As required, usually provide turnout in one meeting cycle	Building a Sustainable City

Conservation Master Plans for Environmentally Significant Areas	Review Phase 1 Natural Heritage Inventory, participate in Phase 2	Working Groups and Committee	Depends on timing of information from staff. Currently have received the Phase 1 Inventory for Meadowlily Woods Environmentally Significant Areas	Building a Sustainable City
Trail Advisory Group	EEPAC has a representative on this staff directed group. It reviews trail locations and potential new trails for compatibility with the Significant Wildlife Habitat, if any, in the area. Recent examples including Westminster Ponds/Pond Mills ESA, Medway Valley Heritage Forest ESA, Lower Dingman ESA.	Representative or alternative	As determined by staff	Building a Sustainable City Strengthening our Community
Wetland Relocation, Monitoring and Creation and Relocation of Wildlife	A Working Group has been established to do research on matters pertaining to wetland relocation. This has occurred in one location in the NW and is likely to be considered for the SW. There are no existing guidelines for this and how it should be included in development agreements.	R. Trudeau, C. Dyck, S. Sivakumar, C.	By the last meeting of this term of EEPAC	Building a Sustainable City