#### Ecological Community Advisory Committee Report

The 12th Meeting of the Ecological Community Advisory Committee November 16, 2023

Attendance

S. Levin (Chair), E. Dusenge, S. Evans, T. Hain, S. Hall, B. Krichker, R. McGarry, K. Moser, S. Sivakumar and V. Tai and H. Lysynski (Committee Clerk)

ABSENT: K. Lee, M. Lima and G. Sankar

ALSO PRESENT: K. Edwards, P. Masse, M. Shepley, M. Szarka and E. Williamson

and L. Williamson

The meeting was called to order at 4:31 PM; it being noted that E. Dusenge, S. Evans, T. Hain, B. Krichker, K. Moser, S. Sivakumar and V. Tai were in remote attendance.

#### 1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

#### 2. Scheduled Items

2.1 Dingman Creek Stage 2 EA – Floodplain Update Mitigation Strategy and Official Plan Amendment process

That it BE NOTED that the Ecological Community Advisory Committee received the <u>attached</u> presentation and heard verbal presentations from A. Sones, Environmental Services Engineer, with respect to the Dingman Creek Stage 2 Environmental Assessment - Floodplain Update Mitigation Strategy and Official Plan Amendment process.

#### 3. Consent

3.1 11th Report of the Ecological Community Advisory Committee

That it BE NOTED that the 11th Report of the Ecological Community Advisory Committee, from its meeting held on October 19, 2023, was received.

3.2 Municipal Council Resolution – 10th Report of the Ecological Community Advisory Committee

That, it BE NOTED that the Municipal Council resolution adopted at its meeting held on October 17, 2023, with respect to the 10th Report of the Ecological Community Advisory Committee, from its meeting held on September 21, 2023, was received.

3.3 Sarnia Road/Philip Aziz Environmental Assessment

That it BE NOTED that the Minutes of the EIS Scoping Meeting Consultation for the Western/Sarnia/Philip Aziz EA Detailed Design, from its meeting held on September 18, 2023, was received.

3.4 Revised Notice of Planning Application – 1982 Commissioners Road East

That it BE NOTED that the Revised Notice of Planning Application for Zoning By-law Amendments and the Notice of Public Meeting dated November 6, 2023, from M. Hynes, relating to the property located at 1982 Commissioners Road East, was received for information.

3.5 (ADDED) Notice of Planning Application - 2598-2624 Woodhull Road

That it BE NOTED that the Revised Notice of Planning Application for Zoning By-law Amendments and the Notice of Public Meeting dated November 6, 2023, from M. Hynes, relating to the property located at 2598-2624 Woodhull Road, was received for information.

#### 4. Sub-Committees and Working Groups

None.

#### 5. Items for Discussion

5.1 Lambeth Centennial Park Boardwalk Lifecycle Renewal

That it BE NOTED that the presentation from S. Levin, Chair, Ecological Community Advisory Committee, on how to review Environmental Impact Statements and received the Lambeth Centennial Park Boardwalk Lifecycle Renewal presentation as appended to the Agenda, was received.

5.2 (ADDED) December Meeting Date

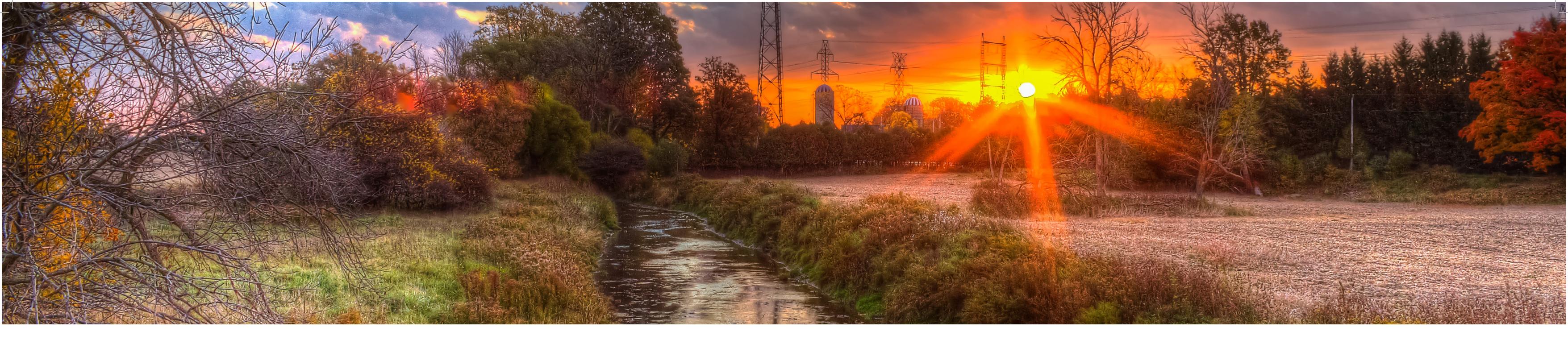
That it BE NOTED that the December Ecological Community Advisory Committee meeting date will be changed to December 14, 2023.

5.3 (ADDED) Attendance

That the appointment of K. Lee BE RESCINDED from the Ecological Community Advisory Committee due to lack of attendance.

#### 6. Adjournment

The meeting adjourned at 6:09 PM.



## WELCOME

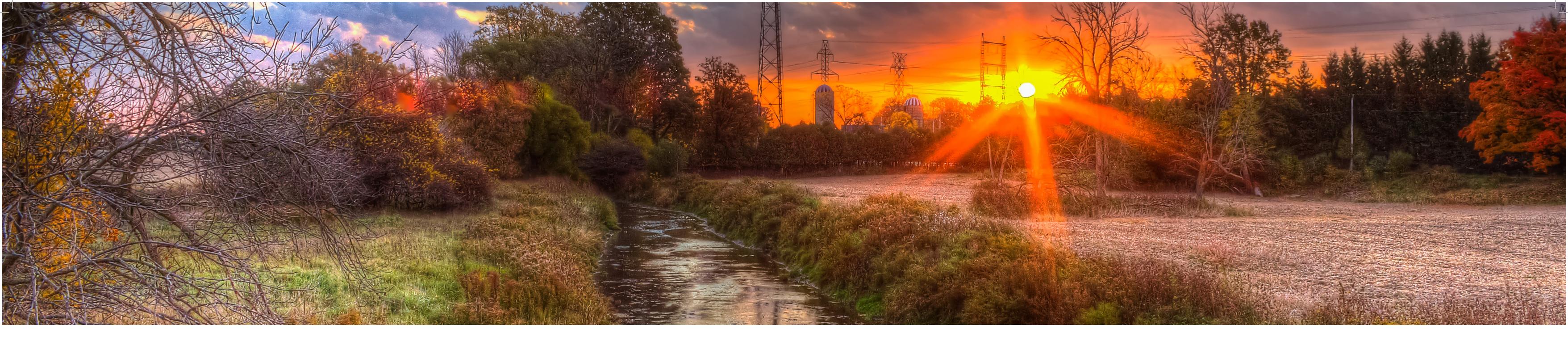
Dingman Creek Subwatershed Stage 2 Schedule C Municipal Class Environmental Assessment and Proposed Official Plan Amendment for Regulatory Floodplain Mapping

Open House — 6:00 to 7:30 p.m. Thursday, October 19, 2023

Presented by:







The City of London is situated on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron. We honour and respect the history, languages and culture of the diverse Indigenous people who call this territory home. The City of London is currently home to many First Nations, Métis and Inuit today. As representatives of the people of the City of London, we are grateful to have the opportunity to work and live in this territory.





#### WHAT IS THE PURPOSE OF THE PROJECT?

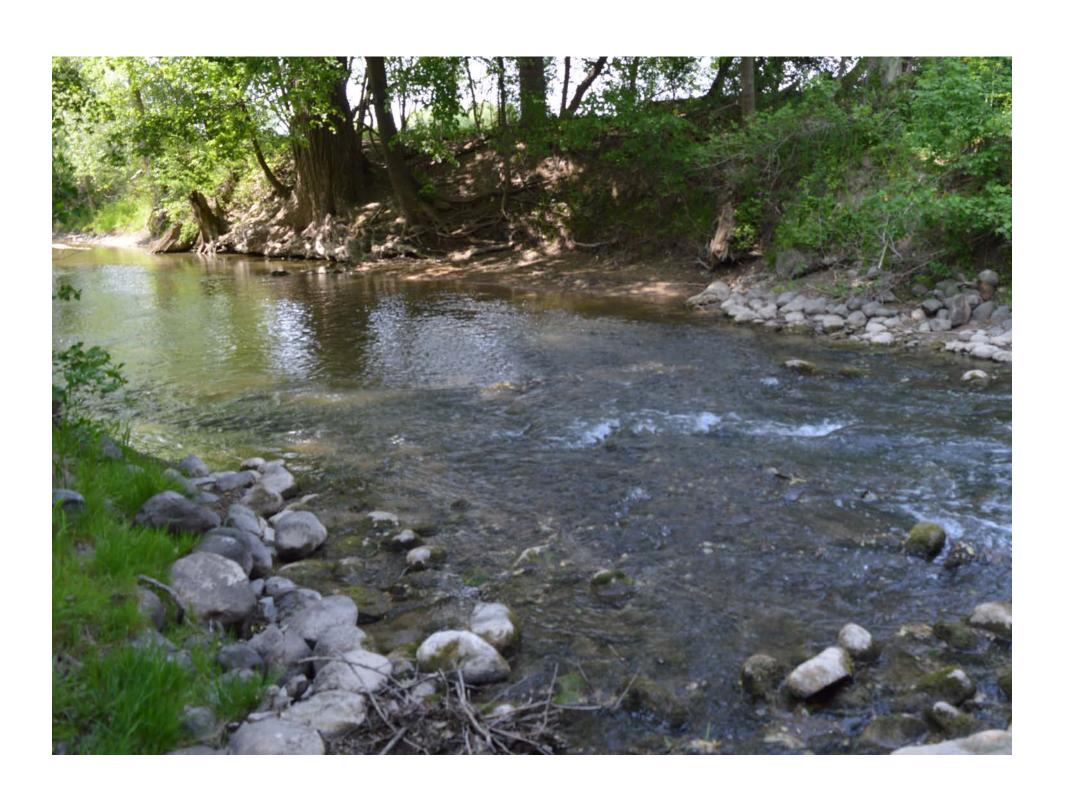
The objective of the Dingman Creek Subwatershed Stage 2 Environmental Assessment (EA) is to:

- Establish stormwater servicing strategy by accommodating future growth
- Assess potential flood mitigation and stormwater servicing alternatives to address imminent and future flooding and erosion risks
- Propose an approach that aligns with the City's vision of a complete corridor that integrates natural heritage, stormwater management and recreational uses

In parallel with the EA, an update of the Dingman Creek Regulatory Floodplain is under review and will conclude through an Official Plan Amendment process.



Jeffery the Salamander is the mascot for the Dingman Creek EA study! He is based on the Jefferson Salamander, which is an endangered species in Ontario.









#### WHAT IS DINGMAN CREEK EA STAGE 2?

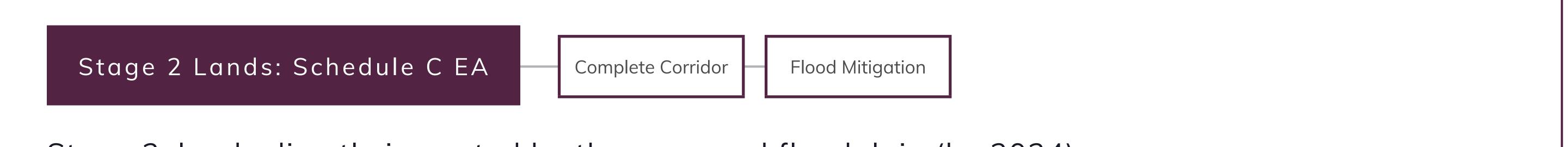


Dingman Creek Master Plan



Stage 1: lands less impacted by floodplain expansion to:

- Recommend Stormwater Servicing solutions for developable lands within 5-7 year Growth Period
- Generally outside of Dingman Creek zone of influence
- For more information on the Stage 1 EA visit: <a href="https://getinvolved.london.ca/DingmanCreek">https://getinvolved.london.ca/DingmanCreek</a>



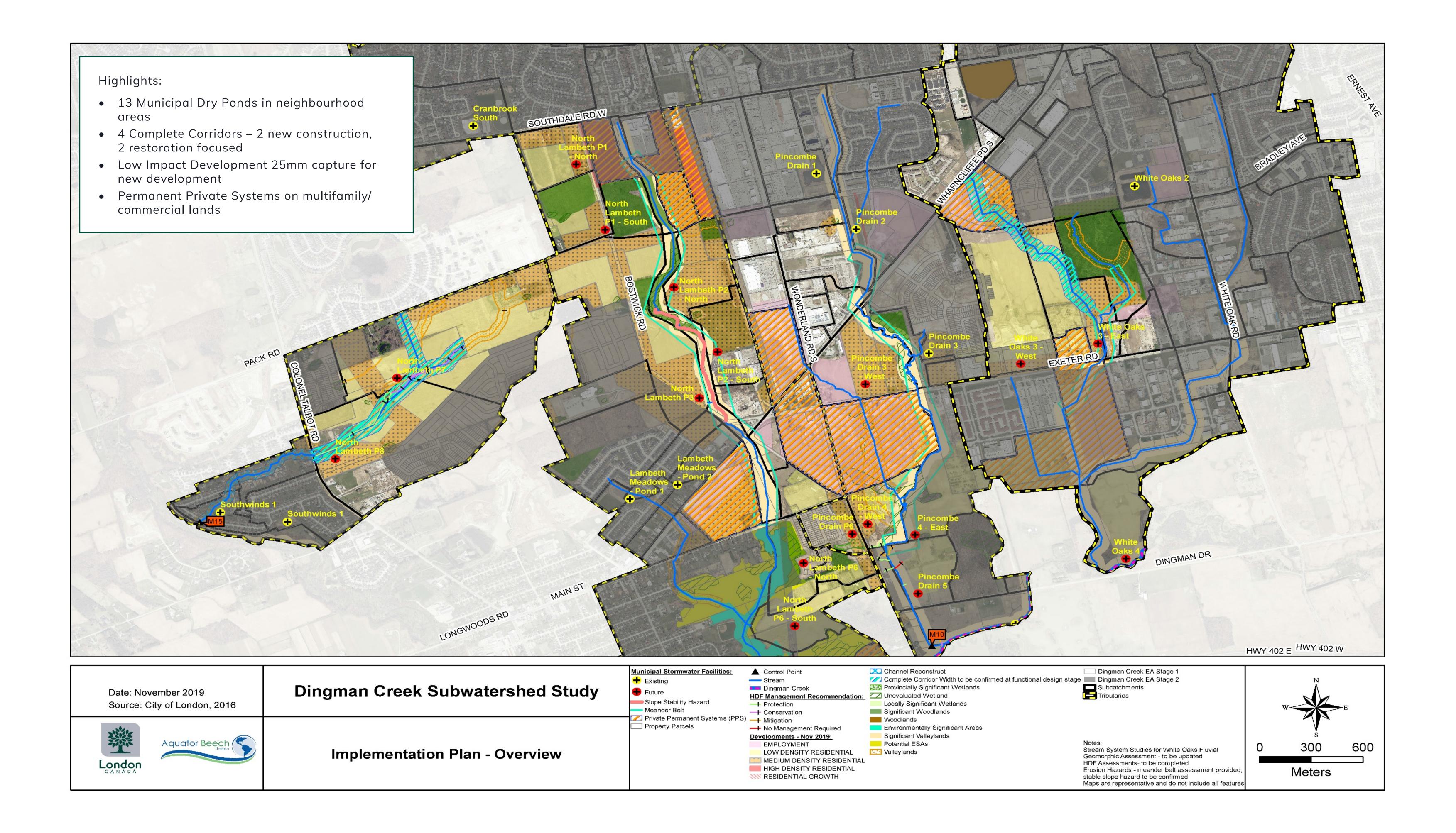
Stage 2: lands directly impacted by the proposed floodplain (by 2024)

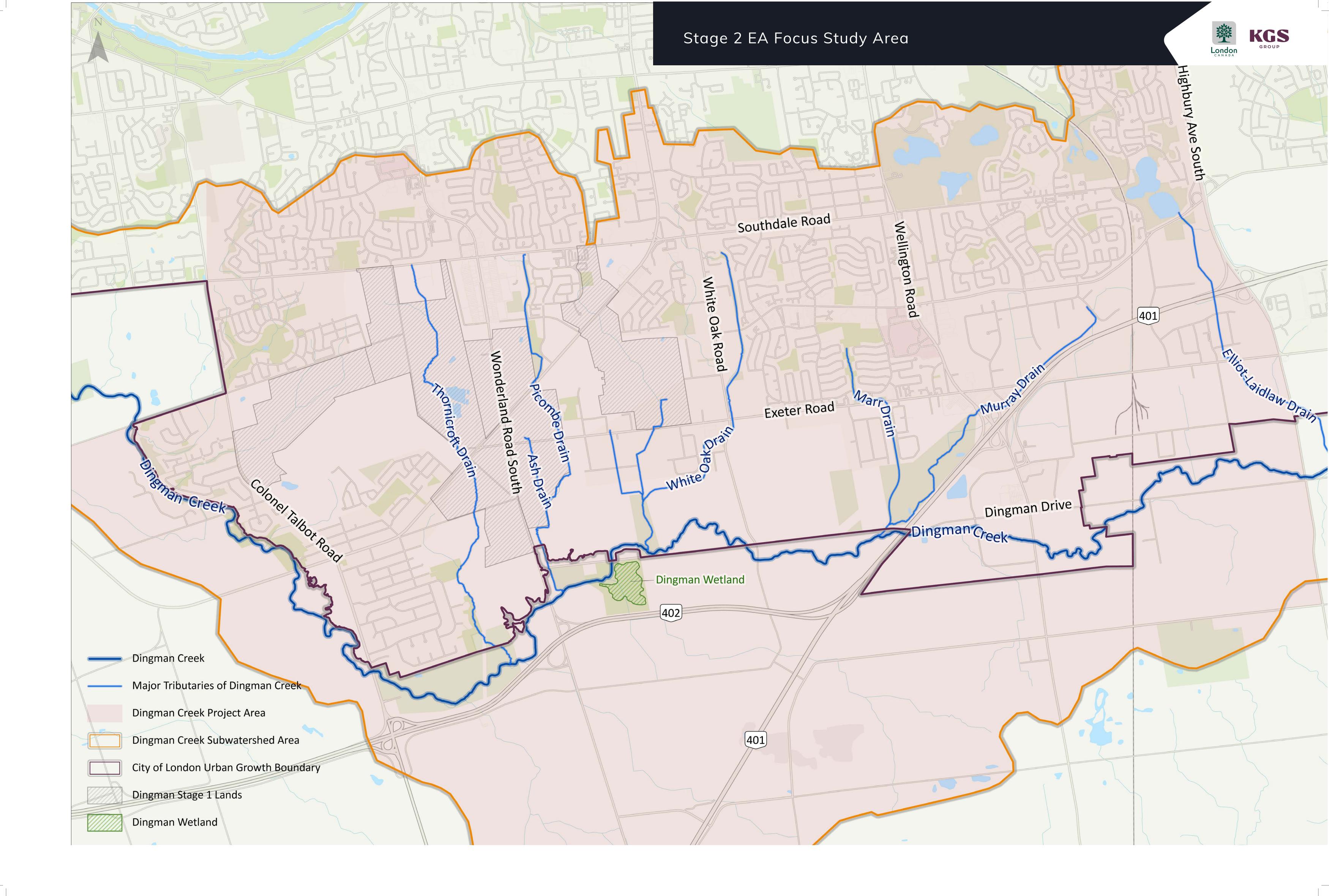
• Update floodplain and assess mitigation options

# Stormwater Strategy – Stage 1 EA Preferred Alternative (completed 2020)













#### CLASS EA PROCESS AND PROJECT TIMELINE

The Dingman Creek Stage 2 Lands is following the Class EA Process for Ontario Environmental Assessment Act and will cover all necessary phases of the Schedule 'C' EA Process.

- Step 1 Define Problem / Opportunity (completed)
- Step 2 Public Consultation: Draft Floodplain and Mitigation Strategies | Fall 2023 (this event)
- Step 3 Publish updated Preliminary Draft Floodplain Mapping online | October 2023
- Step 4 Targeted Consultation with Impacted Landowners and Neighbourhoods | Fall/Winter 2023
- Step 5 Develop Alternative Solutions and Select Preferred Alternative/s | Winter 2023/24
- Step 6 Develop Design Concepts for the Preferred Alternative/s | Winter 2023/24
- Step 7 Official Plan Amendment for Regulatory Floodplain | Summer 2024
- Step 8 Complete the Environmental Study Report | Summer 2024
- Step 9 EA Approval | Summer/Fall 2024





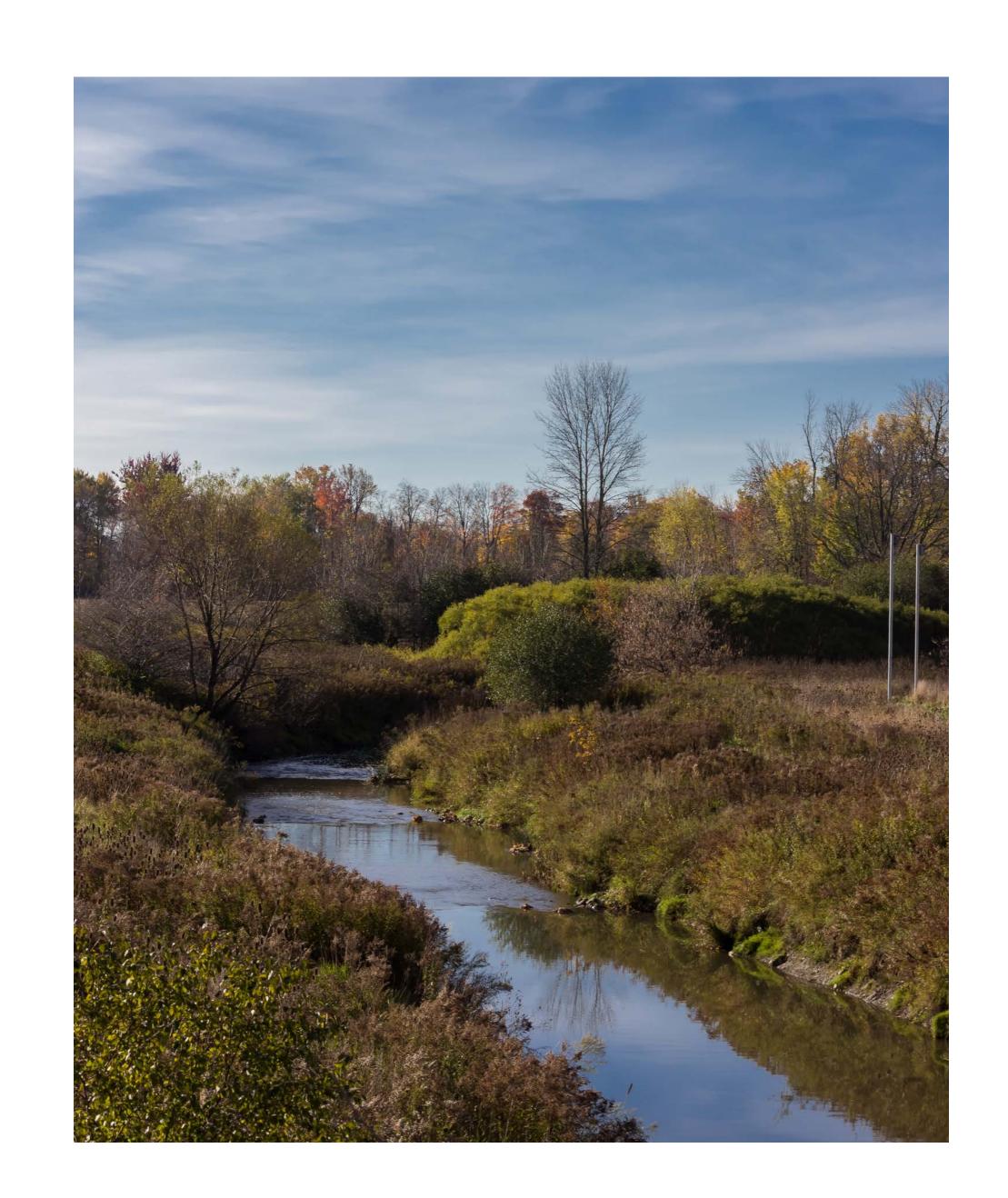
#### STAGE 2 - EA OPPORTUNITY / PROBLEM STATEMENT

The Dingman Creek Subwatershed (DCS) suffers from poor water quality, 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
- Create a complete corridor that provides a continuous natural area for the movement of water, wildlife and people.







#### WHY IS THE FLOODPLAIN CHANGING?

The floodplain map was developed over 30 years ago. The updated floodplain considers the following:

#### Climate Change

- The climate is changing
- The new model incorporates potential effects of climate change
- Large storm events continue to happen in urban areas. The City needs to prepare for flooding in existing and new development areas

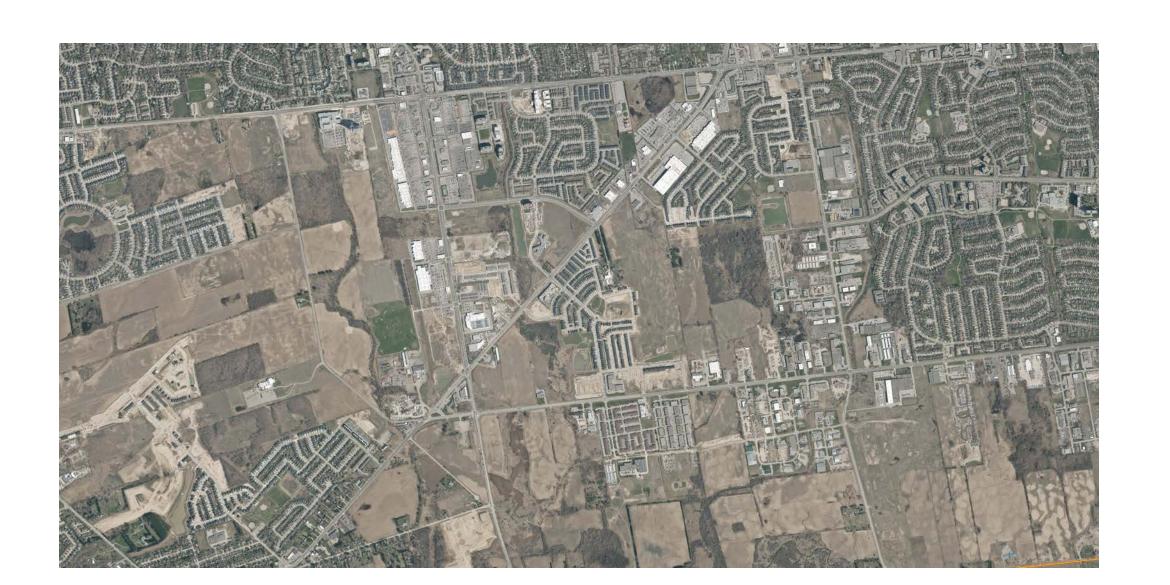
#### Better Technology and Data

- More advanced and accurate analysis and mapping tools have become available
- New and improved data includes meteorological / hydrological records and topographic base maps

#### Development within the Urban Growth Boundary

- Existing and future changes to the landscape in the Dingman Subwatershed have been included in the update
- The updated floodplain targets the City's 20-year growth boundary









#### WHAT IS A REGULATORY FLOODPLAIN?

#### What is a floodplain?

During normal conditions, the flow in the creek is contained within the main channel (i.e. within the creek banks).

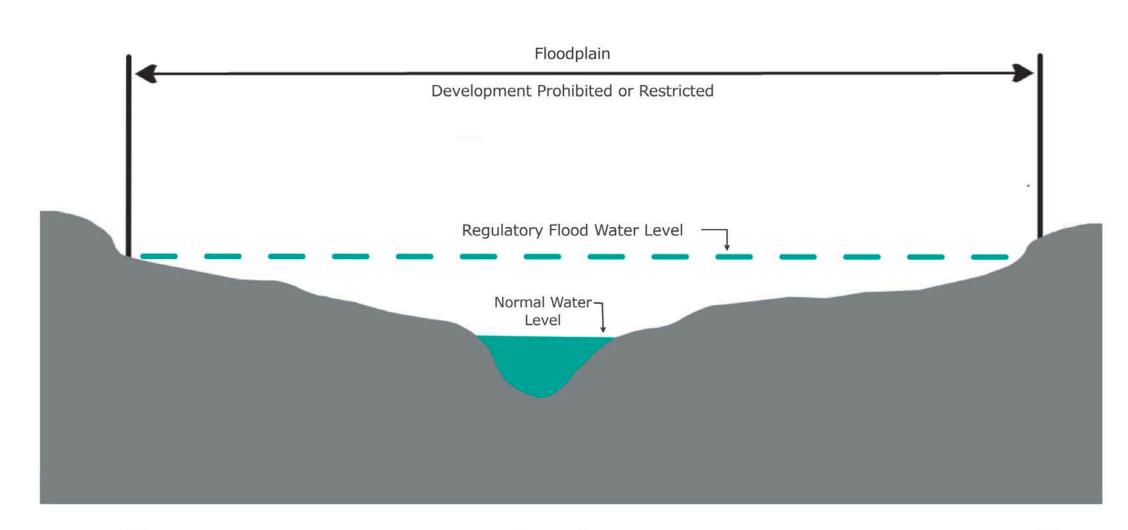
The floodplain is the area next to the main channel that is occupied by water during a flood, when the creek banks are overtopped.

#### What is a Regulatory Floodplain?

The floodplain that corresponds to the Regulatory Flood event.

In London, the Regulatory Flood is based on the flood of 1937. This event has an annual chance of 0.4% (250-year return period).

Within the Regulatory Floodplain, development is restricted to protect people and properties.







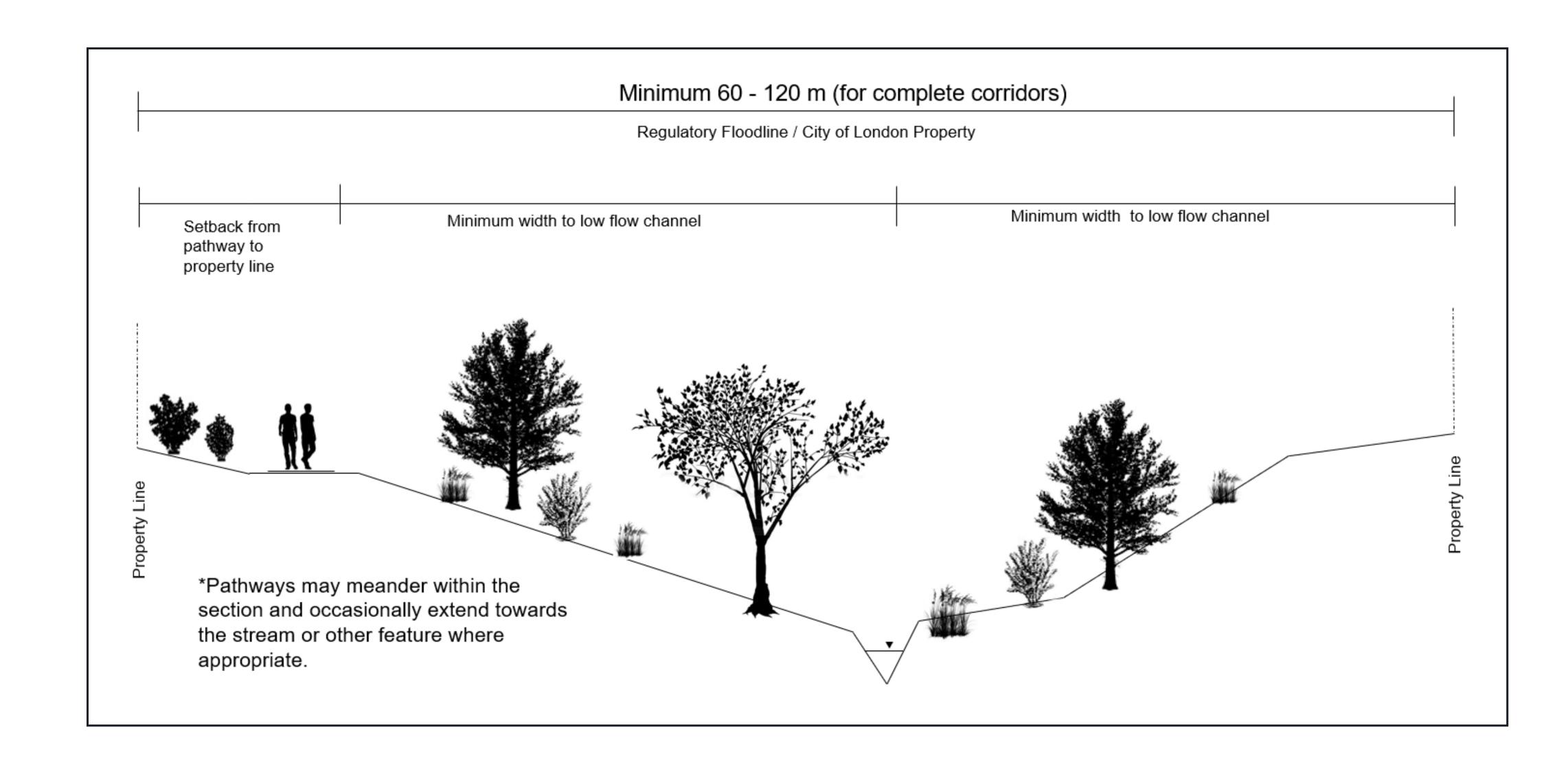


#### WHAT IS A COMPLETE CORRIDOR?

An overarching concept of the project is to create a naturalized corridor within South London, that promotes movement of water, wildlife and people.

The 3 components of the complete corridor:

- Natural Heritage to connect significant natural features
- Floodplain Corridor to convey water, provide habitat for aquatic life and expand flood storage
- Multiuse Pathway to encourage physical activity, such as walking, running, and cycling







#### WHAT IS A TWO ZONE FLOODPLAIN?

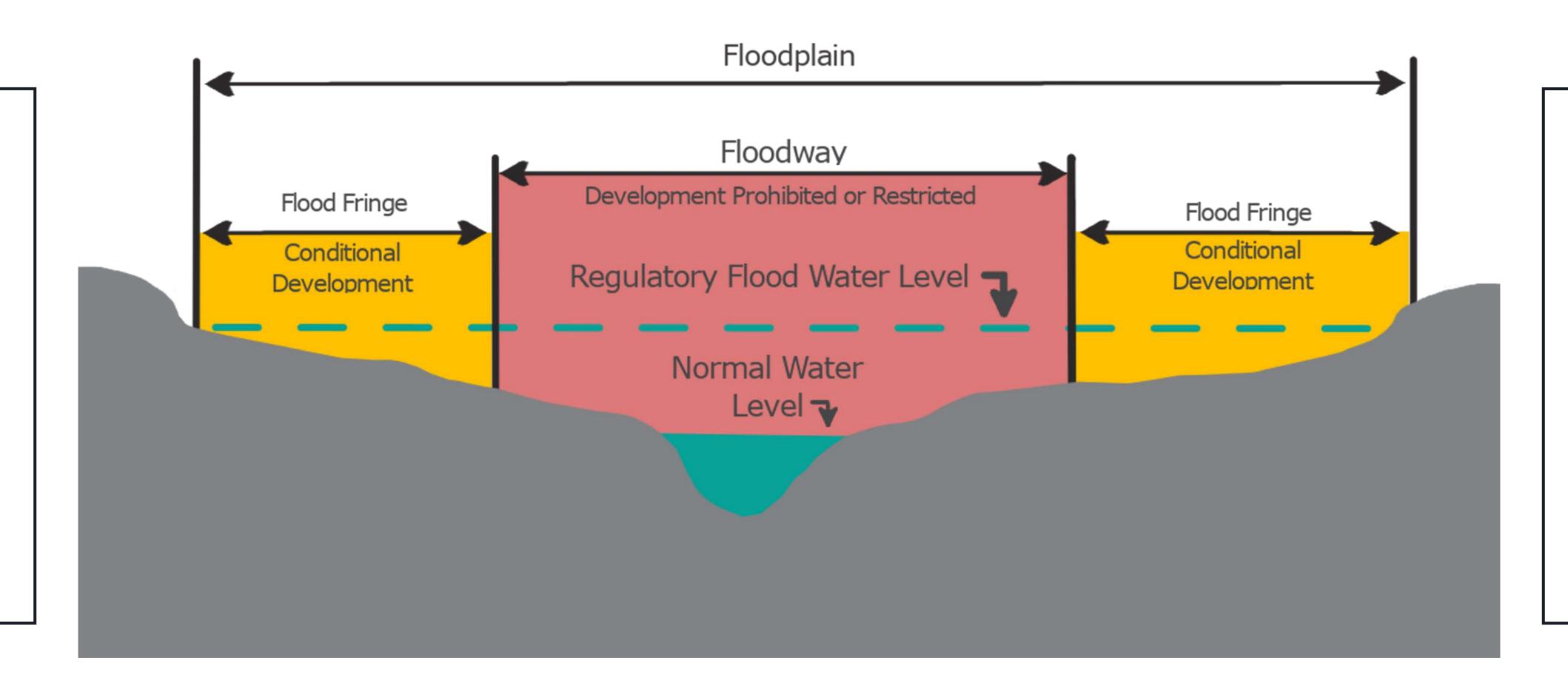
The previous Dingman Creek floodplain employed a one-zone that limited development anywhere in the floodplain.

A new approach is proposed to differentiate the floodplain into two zones, the floodway and flood fringe.

The use of the two-zone concept may allow for some new development within the flood fringe subject to policies and criteria to be developed through the Official Plan Amendment process.

#### Floodway

- Inner portion of the floodplain
- High hazard to human life and property
- Development prohibited or highly restricted
- Area required for the safe passage of flood flow



#### Flood fringe

- Outer portion of the floodplain
- Low hazard to human life and property
- New conditional development may occur as defined by provincial flood management policies and the Official Plan





#### WHAT IS THE LONDON PLAN?

The London Plan is the official plan for the City of London, adopted in 2016. An official plan describes policies on how land should be used.

An official plan deals mainly with issues such as:

- Where new housing, industry, offices and shops will be located
- What services like roads, watermains, sewers, parks and schools will be needed
- When, and in what order, parts of your community will grow
- Where natural heritage or hazard lands (such as floodplain) are located and how to maintain/protect them

#### The London Plan includes:

- Policies that apply city-wide, such as urban design, or servicing
- Policies that apply to areas specified on the map (designations or "place types")
- The guiding principles for growth and development over a set planning horizon
- Mapping to implement the above policies and place types

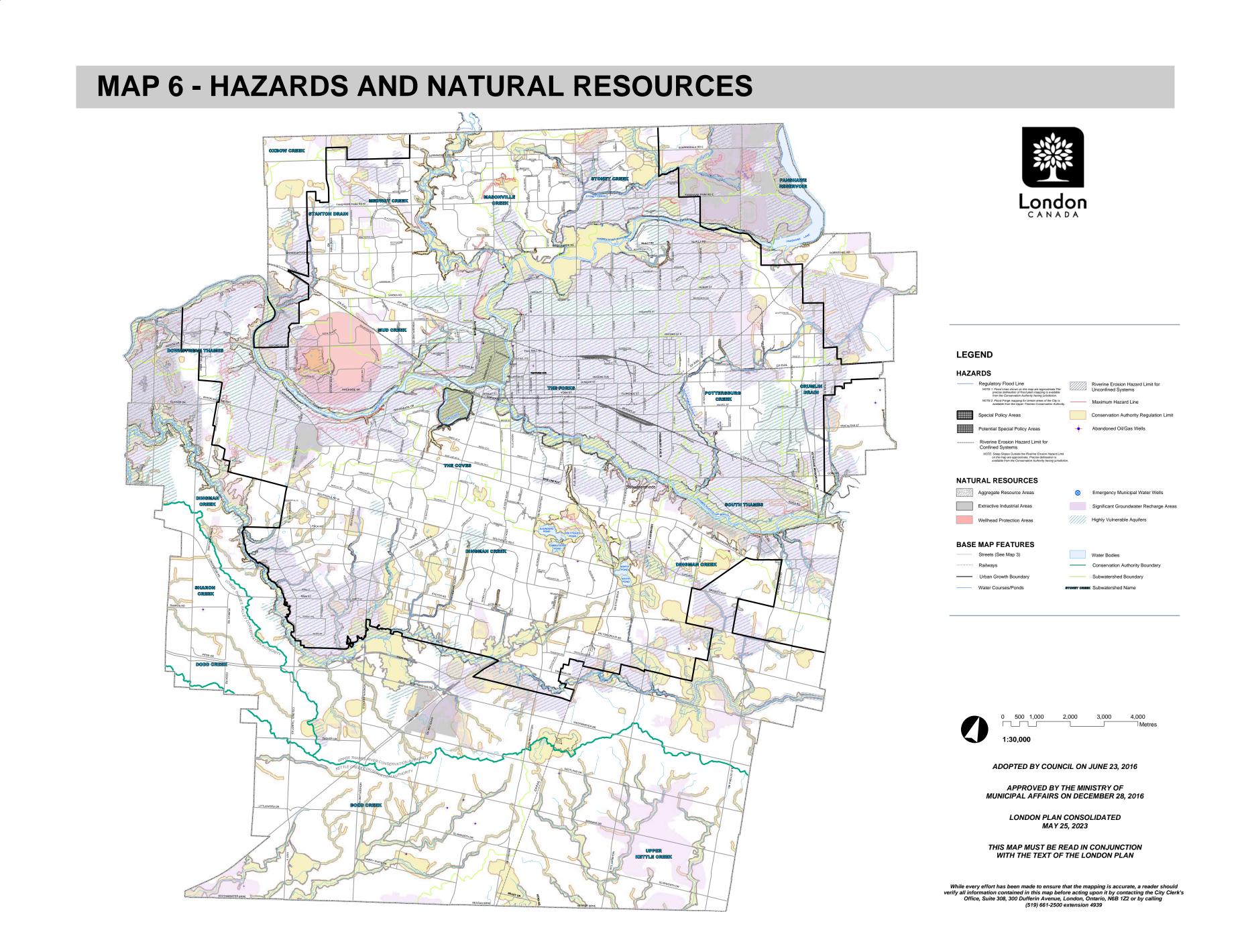
All by-laws and public works must conform with the official plan. Amendments can be made to the Official Plan/London Plan at any time, subject to a mandatory public meeting, and Council approval.



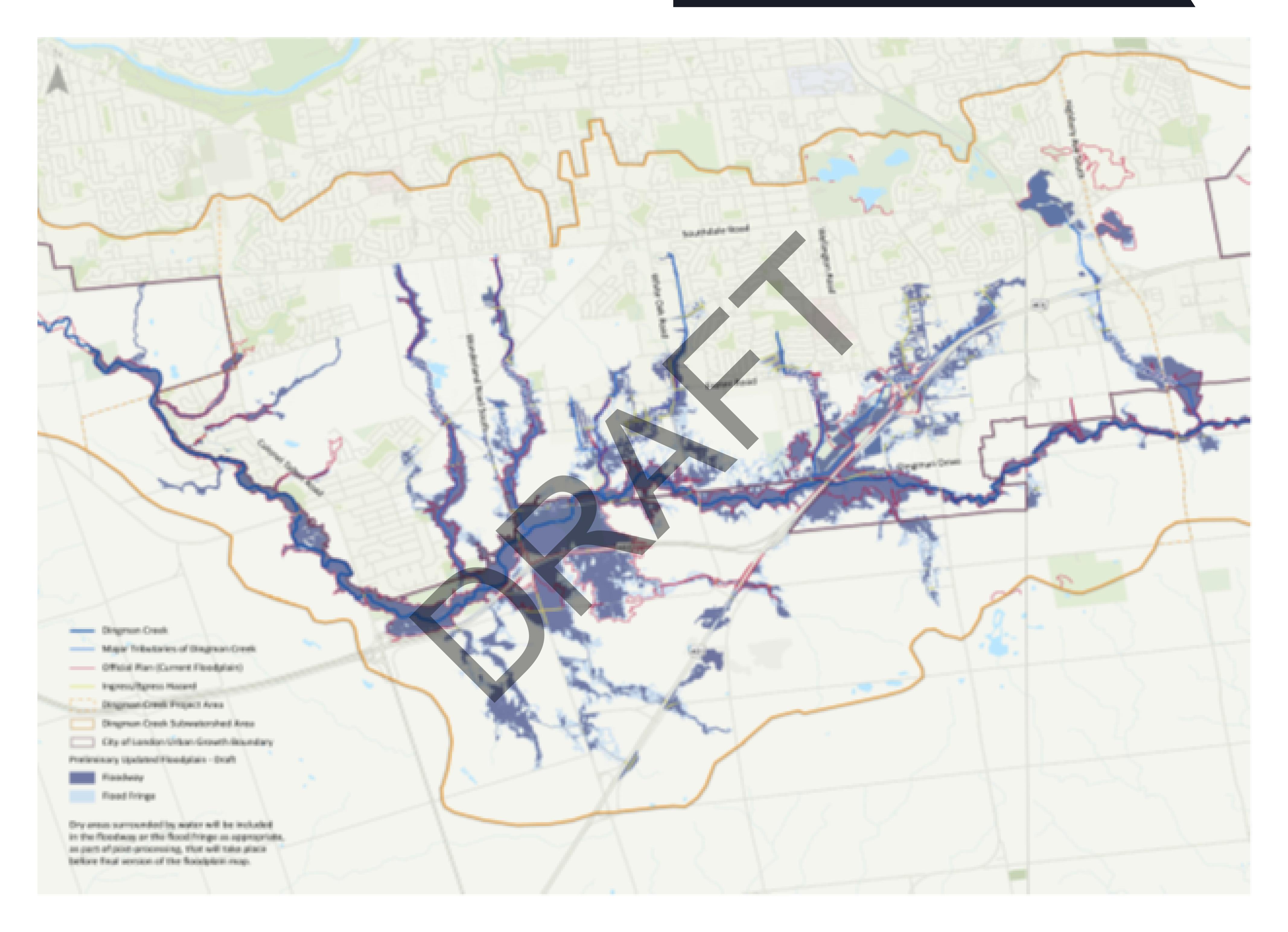


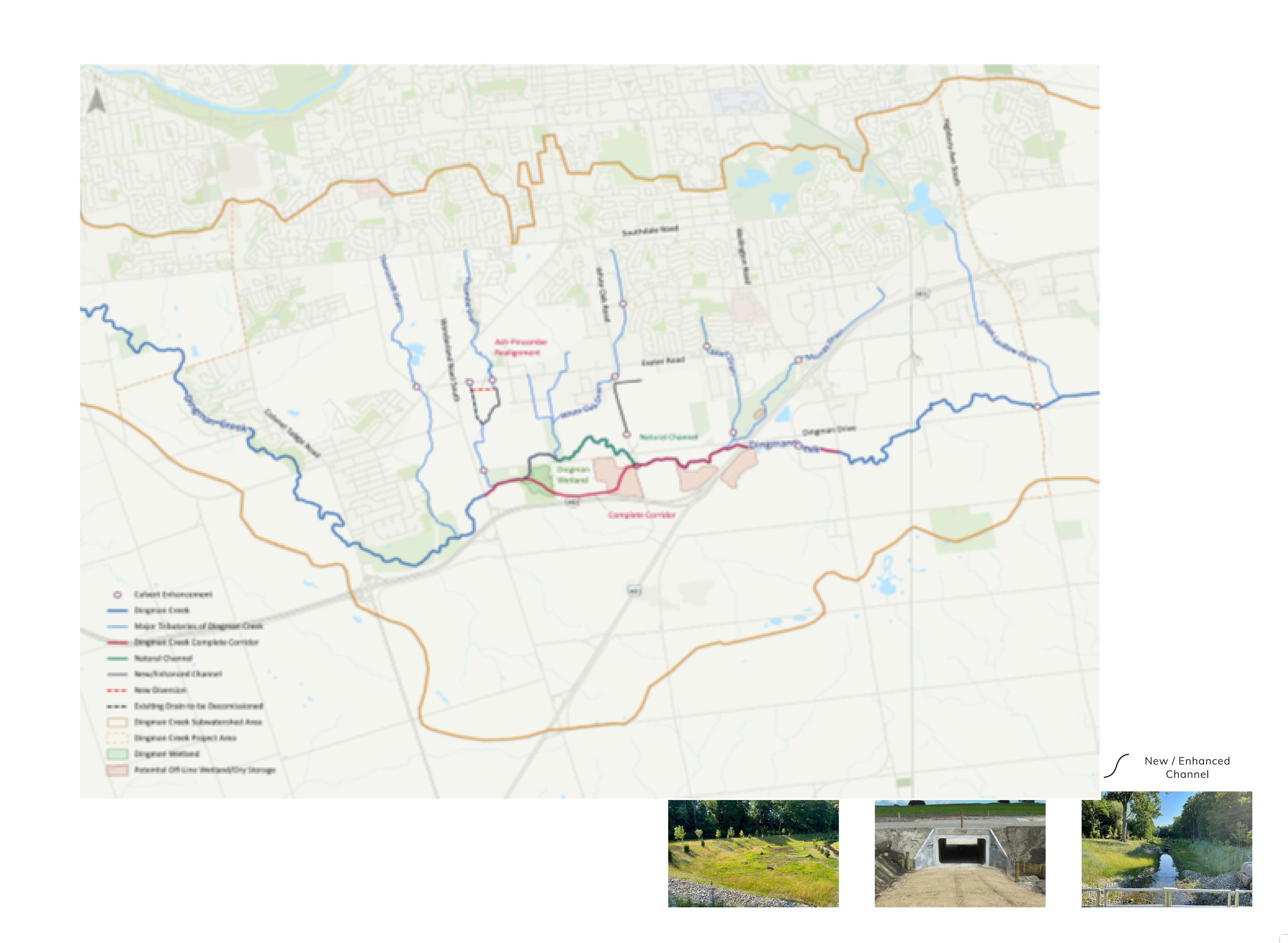
### OFFICIAL PLAN AMENDMENT PROCESS

- An Official Plan Amendment (OPA) will update Map 6 (Hazards and Natural Resources) based on updated existing conditions modeling i.e. new floodplain limits
- The OPA may update potential Place Types (land use designations) within the Dingman Creek floodplain
- The OPA may add criteria to permit certain types of development within the "flood fringe" of the Urban Growth Boundary
- As City-led mitigation measures are constructed, OPA's will be initiated to reflect revised floodplain mapping
- A future public meeting will present a draft
   Official Plan Amendment including policies on the 2-zone floodplain
- Any policy change will require Council approval and a statutory public meeting













# YOUR FEEDBACK IS IMPORTANT TO US!

# https://getinvolved.london.ca/dingmancreek

To provide comments, request additional information, or receive future correspondence related to the project, please contact a member of the project team below:

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Environmental Services Engineer
City of London
(519) 661-2489 ext.5593
asones@london.ca

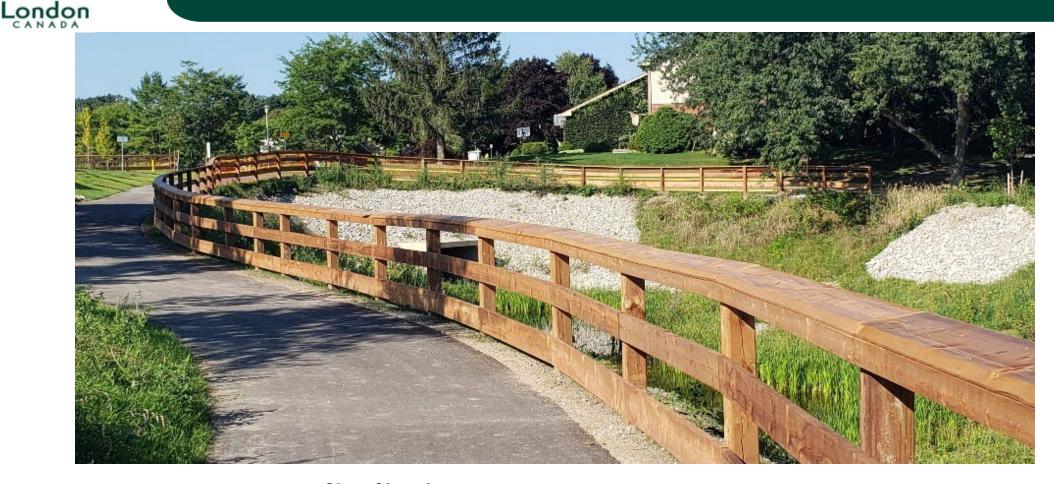
Fuad Curi, P.Eng.
Project Manager
KGS Group
(905) 848-7884 ext.516
fcuri@kgsgroup.com







# Natural Channel Design Solutions and Municipal Infrastructure: They Can Co-exist



ECAC Meeting London, ON November 16, 2023 City of London
Environment and Infrastructure

Adrienne Sones, P.Eng.

Environmental Services Engineer

Stormwater Engineering Division







https://youtu.be/Z3gEz8uU7-8





### Tributary 12/Southwinds Channel







# Existing and Proposed Flood Conditions







## New Culverts

Crossing	Existing Culvert	Proposed Culvert	Utilities	Drop in Invert
Colonel Talbot Road	1.75 m x 1.5 m box	Twin 2.4 m x 1.8 m box (future work by others)	150 mm sanitary pipe 600 mm watermain	0.7 m
Pedestrian Crossing	-	2.1 m x 1.8 m box		-
Isaac Drive	1.8 x 0.9 m box 1.8 x 1.25 m box	2.1 m circular	200 mm sanitary pipe 200 mm watermain	3.7 m
Malpass Road	2.6 x 1.9 m arch	2.7 m x 3.0 m box	200 mm watermain	1.0 m
West Graham Place	2.6 x 1.9 m arch	-	200 mm sanitary pipe.	-



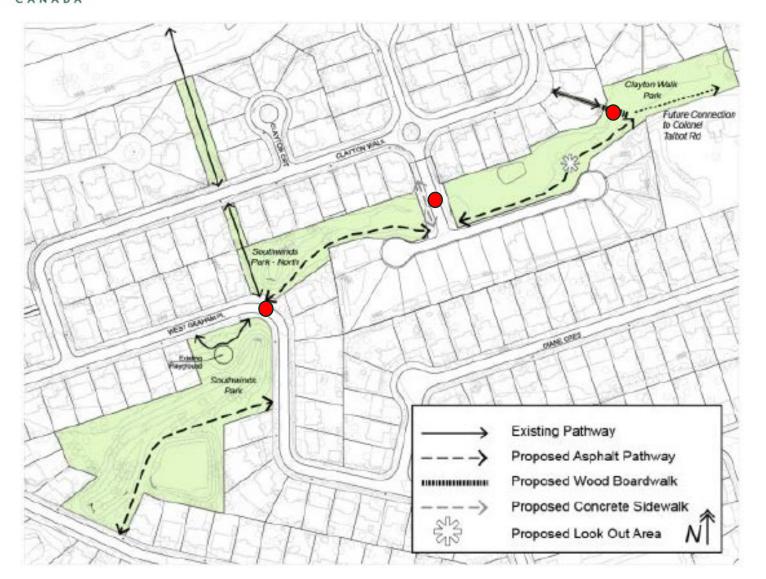








## Multiuse Pathway Integration









### **Engineered Design Elements**

- Side slopes
  - Armourstone wall
  - Rocky slopes
- Plunge pool
- Watermain support
- Pedestrian
  - Crossing
  - Trail













#### Permits

- Permits:
  - UTRCA
    - O. Reg 162/06
    - Section 28
  - MECP
    - Environmental Activity Sector Registration (EASR)
  - DFO
    - Request for Review
    - Letter of Advice

#### Construction:

- In-water work: July 1 March 31
- Migratory birds: Sept. 30 March 31
- Began: October 2021
- Completed: September 2022









## Natural Channel Design Elements

- Instream features
  - Riffle logs
  - Rootwads
  - Pools
  - Riffles
  - Bifurcated channel

- Corridor features
  - Pocket wetlands
  - Snake hibernaculum
  - Vegetation
  - Brush layers and rootwads

















#### **Future Considerations**

- Impetus was uncontrolled regulatory flow
  - Leads to oversized channel
  - Consider risk-based approach
  - Consider level of service
  - Cost-benefit
- Environmental impact
  - Climate change resilience
  - Groundwater seepage
  - Groundwater infiltration
  - Narrower creek corridor
  - Downstream impacts







#### Then and Now

Downstream of Colonel Talbot Road







Upstream of Isaac Drive/Ped bridge











## Then and Now (Cont.)

Upstream of Malpass Road





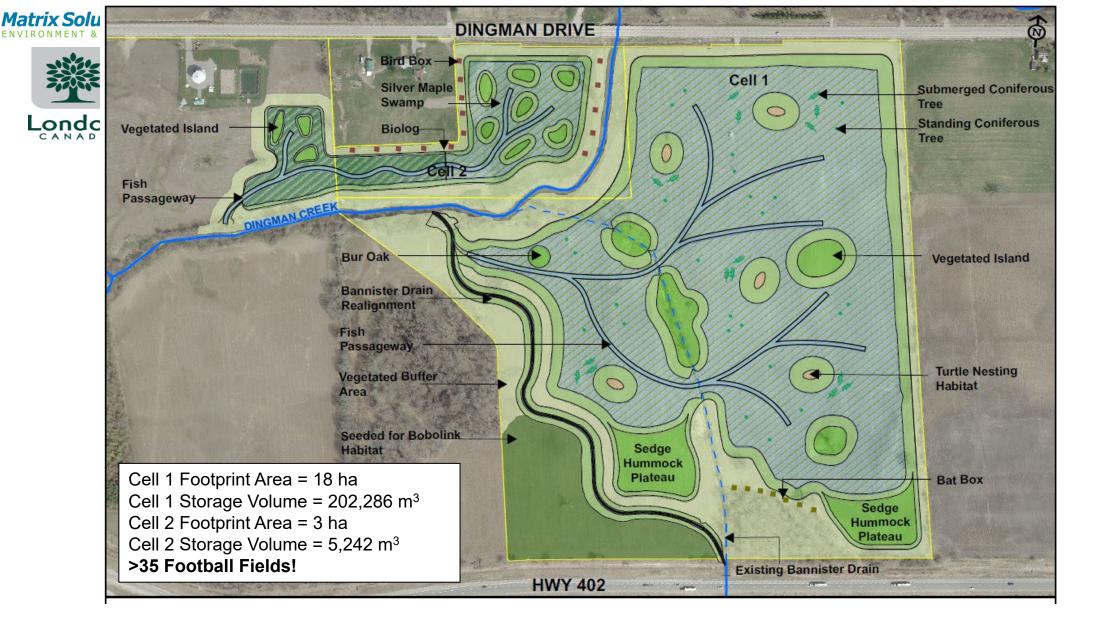


Downstream of Malpass Road







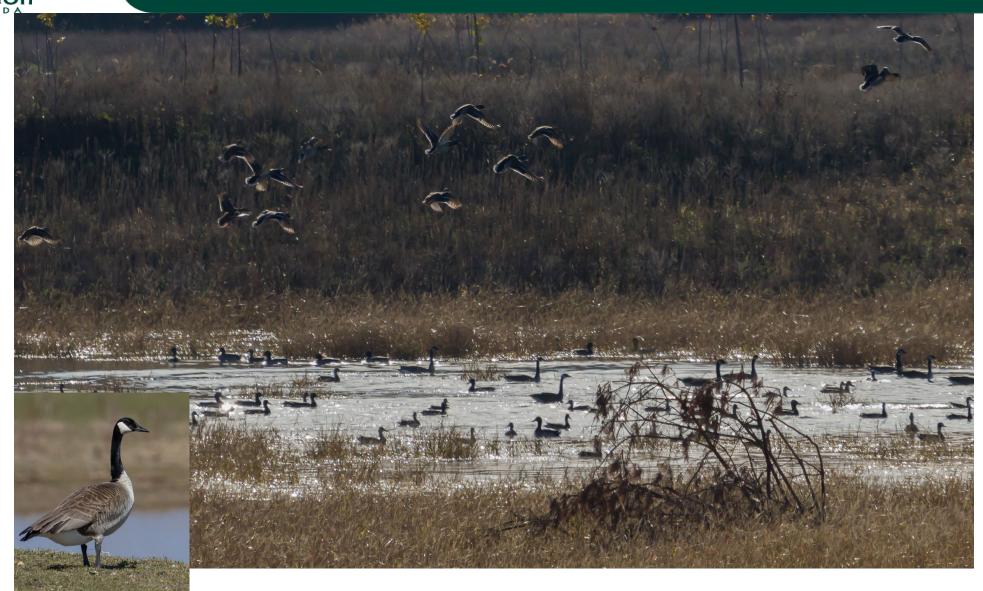


**Dingman ECW - Habitat Enhancements** 





## London's "En Route"







### Increasing Biodiversity

- New nesting site: Blue-Wing Teal Duck discovered by Environment Canada Biologist summer 2019
- Media release Feb 20, 2020: Four media outlets picked up the story...Blackburn, Global, CTV and CBC
- https://www.cbc.ca/news/canada/london/ dingman-creek-wetland-1.5475134



"Breeding [of the Blue-Wing Teal Duck] in Ontario is on the decline, and the fact that a successful brood was raised at the Dingman site, speaks to the quality of the habitat in there."

- Denby Sadler, Environment Canada Wildlife Biologist