ESAs: New and Old, Advances and Challenges

- London's **E**nvironmentally **S**ignificant **A**reas

A.Caveney

POLICY BACKGROUND

- Environmentally Significant Areas are NOT parks
- London’s Official Plan (section 15.4.1.3) and the London Plan include 7 criteria used for designating an ESA

THE STARTING POINT:

“A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

Aldo Leopold

From *Guidelines for Management Zones & Trails in Environmentally Significant Areas:*

The basic principle for trail planning and design is to protect the natural features and ecological functions for which the ESA has been identified. The ecological integrity and ecosystem health of the ESA shall have priority in any trail use or design-related decisions.

A Vulture's Perspective of London

Jeff Higgins

A.Caveney

BECOMING AN ESA:
WHAT DOES IT TAKE?

- Unusual landforms or uncommon natural communities
- High-quality natural landform-vegetation communities that are representative of pre-European settlement conditions and/or are classified as distinctive in Ontario.
- Large size – which provides habitat for sensitive species
- Its water flows into a bigger stream, or there are other hydrological characteristics (like Sifton Bog)
- Lots of biodiversity

BECOMING AN ESA: WHAT DOES IT TAKE?

- Provides important wildlife habitat or links wildlife habitats
- Provides significant habitat for rare, threatened or endangered indigenous species that are rare within the country, the province or county.

Note: Only two of the above seven criteria need to be met for an area to be designated an ESA.

LOTS OF BIODIVERSITY

- The Medway Valley Heritage Forest ESA (MVHF ESA) has a high diversity of plant species. 564 floral species (native and non-native) were documented in 2013.

MVHF ESA PROVIDES HABITAT FOR RARE, THREATENED OR ENDANGERED SPECIES

- The Medway contains a number of indigenous provincially significant floral species, such as Butternut (*Juglans cinerea*), Green Dragon (*Arisaema dracontium*) and a population of False Rue-anemone (*Enemion biternatum*).

Green Dragon

Arisaema dracontium

False Rue-anemone

Enemion biternatum

Northern Long-eared Bat

Myotis septentrionalis

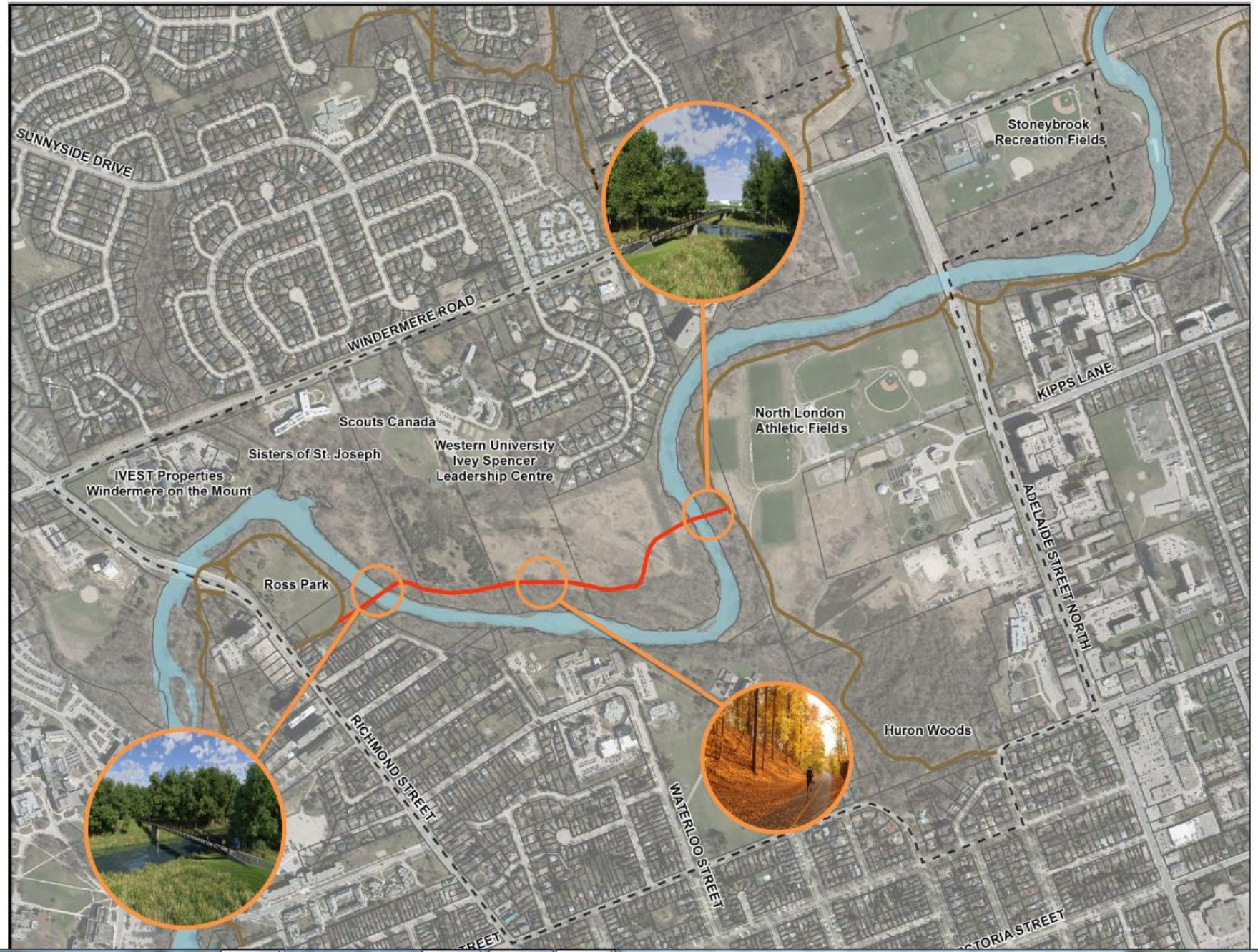
Queensnake

Regina septemvittata

ISSUES AND CHALLENGES

- Recreation vs Conservation
- Invasive Species
- Encroachment

TVP Preferred Route



Legend

- Study Area
- Route A
- Existing Thames Valley Parkway

Key Features and Design Refinements

- Bridge piers will be located on the bank, above the normal water level.
- Based on discussions with the Upper Thames River Conservation Authority, the bridge at Ross Park was shifted to the southeast edge of the park to protect sensitive habitat along the river
- Bridge at North London Athletic Fields shifted north to better align with existing Thames Valley Parkway and surrounding sport fields

INVASIVE SPECIES

GARLIC MUSTARD

Alliaria petiolata

BUCKTHORN

Common Buckthorn

Rhamnus cathartica

Glossy Buckthorn

Rhamnus frangula; Frangula alnus

JAPANESE KNOTWEED

Reynoutria japonica
var. japonica

DOG STRANGLING VINE

Cynanchum rossicum

PHRAGMITES

Phragmites australis subsp. australis

Encroachment

Arrow shows City's property boundary monument

Examples of ESA issues

Encroachment by neighbouring property into Warbler Woods ESA

Beaver-weakened tree at Kains Woods ESA

THE CORPORATION OF THE CITY OF LONDON

Guidelines for Management Zones & Trails in Environmentally Significant Areas

May 2016

London
CANADA

Examples of ESA trail structures

Barrier and hiking sign at closed trail

Boardwalk at Sifton Bog ESA

Viewing platforms and lookouts can be appropriate means to allow visitors to view sensitive areas and special features in a way that maintains suitable separation distances that protect the feature.

Sifton Bog ESA viewing platform at Redmond‟s Pond accessible from a boardwalk through the sensitive floating bog mat. Picture taken from off boardwalk during a vegetation monitoring study

Lookout from a barricade along the edge of a steep slipface in the Medway Valley Heritage Forest ESA

Accessible boardwalk and viewing platform to observe seasonal concentrations of waterfowl on Saunders Pond at Westminster Ponds ESA.

A small bench for a rest and a quiet view of South Pond in Westminster Ponds-Pond Mills ESA

Location of a possible lookout platform along the Kains Woods ESA hiking trail providing a view of the steep north facing slopes of the Thames River with White Pine and Eastern Hemlock

What is the City doing?

Many good things

MEDWAY VALLEY HERITAGE FOREST ENVIRONMENTALLY SIGNIFICANT AREA

City of London - Habitat Protection, Restoration & Stewardship Initiatives

1. Species at Risk (SAR) False Rue-anemone Protection and Goutweed Invasive-species Mitigation Project presented at the Ontario Invasive Plant Council's AGM in 2014 and 2015 with Dillon Consulting and UTRCA is successful in protecting SAR. The invasive species control, monitoring and restoration continues through 2017.

2. Federal grant for butternut inventory, health assessment and archive project, through the Habitat Stewardship Program - SAR Funding.

3. Invasive species including Phragmities, Japanese Knotweed, Buckthorn, Scots Pine, Goutweed, and Periwinkle are monitored and managed annually.

4. Tree-Azin Emerald Ash Borer, bi-annual injection Program, 74 Ash trees injected in 2012, 51 surviving Ash trees were injected in 2014 and 2016 – London is a leader in protecting Ash trees in natural areas.

5. Three groups have adopted portions of the ESA through City's Adopt an ESA program and are all active stewards of the ESA.

6. Public Buckthorn Busting education events held in 2013, 2014, and 2015.

7. Community tree and shrub planting and fish demonstration event held in spring 2016 sponsored by the City and Friends of Medway Creek Adopt an ESA.

8. A City-wide Invasive Plant Species Management Strategy is being developed with support from the Ontario Invasive Plant Council.

9. Turtle habitat nesting areas created in north with Scott Gillingwater of UTRCA as advisor. Habitat will be weeded by Adopt an ESA groups / Friends of Medway Creek going forward to protect sunny habitat required.

10. Natural Heritage Inventory and Evaluation Conservation Master Plan Phase 1 report is available online.

11. The wooden staircase near the Metamora access was repaired; new boardwalks installed and ecological restoration of the slope is planned for fall 2016.

12. The City of London was recognized by Ontario Nature with the 2015 Lee Symmes Municipal Award for its commitment to protecting Environmentally Significant Areas.

For more information on habitat protection, restoration and stewardship initiatives and opportunities, please contact the City of London Environmental & Parks Planning Section.

CONTACT
Ecologist, Linda McDougall
519-661-2500 ext. 6494
lmcdougal@london.ca

Visit our website: www.london.ca/ESA

UPPER THAMES RIVER CONSERVATION AUTHORITY

London CANADA

City of London's 2017 ESA Project List

2017 ESA Projects

Master Plans and Studies
- Medway (south) Phase I and II CMP
- Meadowlily Phase I and II CMP
- Update to Environmental Management Guidelines (Non ESA Capital Budget)

Invasive Species Management / Habitat Restoration:
- Killaly – Dog Strangling Vine management north and south of Thames River
- Kains – Buckthorn, Knotweed, Goutweed management
- WMP – Saunders Cabin / Tourism Building / Dearness Buckthorn Management & Ecological Restoration
- Medway - Fourth year of False-rue anemone THR SAR protection & Goutweed/Knotweed/restoration project
- Coves and WMP – Purple Loosestrife biological control releases with Donna Mackenzie of Ontario Beetles
- Coves – Buckthorn, Black Locust, Black Alder management (Elmwood Gateway slope/Euston Meadows)
- All ESAs – Phragmities monitoring and management
- All ESAs – Monitor using EDRR approach and touch ups of all 2015/2016 work under operational budget
- City Wide – Terrestrial Invasive Species Management Strategy (Not ESA Capital Budget)

Trail Improvements
- WMP – Saunders Cabin restoration, TAG trail micro-siting / CMP-TAG trail implementation
- Warbler – Trail links to new subdivision to the west in 2018 (Future TAG walk)
- Bog – Naomee Place trail update (Future TAG walk)

Stewardship / Education / Signs
- Green ESA signage with QR codes at more access points (in addition to over 70 existing)
- Update to the WMP Kiosk sign at the Tourism Building access point
- New signage for W.E. Saunders Cabin site
- Additional stay on marked trail signs, way-finding signs
- Friends of Medway Creek's City grant funded interpretative signs (Not from ESA Capital Budget)
- Interpretive sign for Redmonds Pond in the Bog
- Medway (north) Friends of Medway Creek / City - Spring Community Planting Day date TBD
- WMP Saunders Pond Community Education & Stewardship Event for Loosestrife beetle release

Dealing with
Purple Loosestrife
(*Lythrum salicaria)*
at the Coves ESA

Loosestrife Beetle Release

Biological control of invasive Purple Loosestrife in London's Environmentally Significant Areas (ESA)

All Welcome!

Where: 1 Cove Road (Then, we will proceed to Coves ESA, East Pond boardwalk)

When: 5 p.m. - 6:30 p.m.

Wed. June 7, 2017

Adopt an ESA
london.ca

Meet Donna MacKenzie M.Sc. of Ontario Beetles and participate in a beetle release. Donna will provide a short talk at the Coves ESA East Pond boardwalk. Optional walk to Coves ESA Elmwood Gateway trail after the event.

In 1992, the Canadian government approved the release of two European leaf-eating beetles, Neogalerucella calmariensis and N. pusilla. The beetles are natural enemies of purple loosestrife. This biological control of purple loosestrife can reduce populations by up to 90 per cent and allows native plants to re-establish. The beetles have successfully controlled Purple Loosestrife in London's ESAs and across North America.

For more information please contact
519-661-2500 x 6494 or email: lmcdouga@london.ca

London
CANADA

Alternative formats of this publication are available upon request. Contact accessibility@london.ca

Conservation Master Plan (CMP) Process

Vision

↓

Goal

↓

Guiding Principles

↓

Objectives

↓

Implementation

CONSERVATION MASTER PLANS

(10 YEAR LIFESPAN)

- **Sifton Bog — 2009**
- **Westminster Ponds/Pond Mills — 2005 (2015 modifications)**
- **Killaly Meadows — 1999**
- **Medway Valley Heritage Forest (southern portion) —1996 (“site plan”), update in progress**
- **Medway Valley (Heritage Forest (north portion) - none**
- **Meadowlily Woods — 1989. Update started in 2013; stalled at present.**
- **Warbler Woods — none**
- **Kains Woods — none**
- **The Coves — 2014**
- **Lower Dingman — none**
- **Pottersburg Valley — none**

SOME OUTCOMES FROM CONSERVATION MASTER PLANS

- Buckthorn removal from Sifton Bog ESA
- Restoration Project in Westminster Ponds ESA
- A variety of trails and boardwalks

CMP CURRENTLY UNDERWAY

Southern portion of the Medway Valley Heritage Forest ESA

Closed for Comment

Survey

1. Have you ever been to the Medway Valley Heritage Forest (MVHF) Environmentally Significant Area (ESA) south of Fanshawe Park Road West?

* (required)

- Yes
- No

If so, at what frequency?

- Once a year
- Every few months
- Once a week
- Daily

2. What do you like do do in the MVHF ESA (south)? (Select all that apply.)*

(required)

- [ ] Hike/walk
- [ ] Nature appreciation
- [ ] Bird watching
- [ ] Passing through to get somewhere else
- [ ] Walk dog on leash
- [ ] Educational opportunities
- [ ] Other

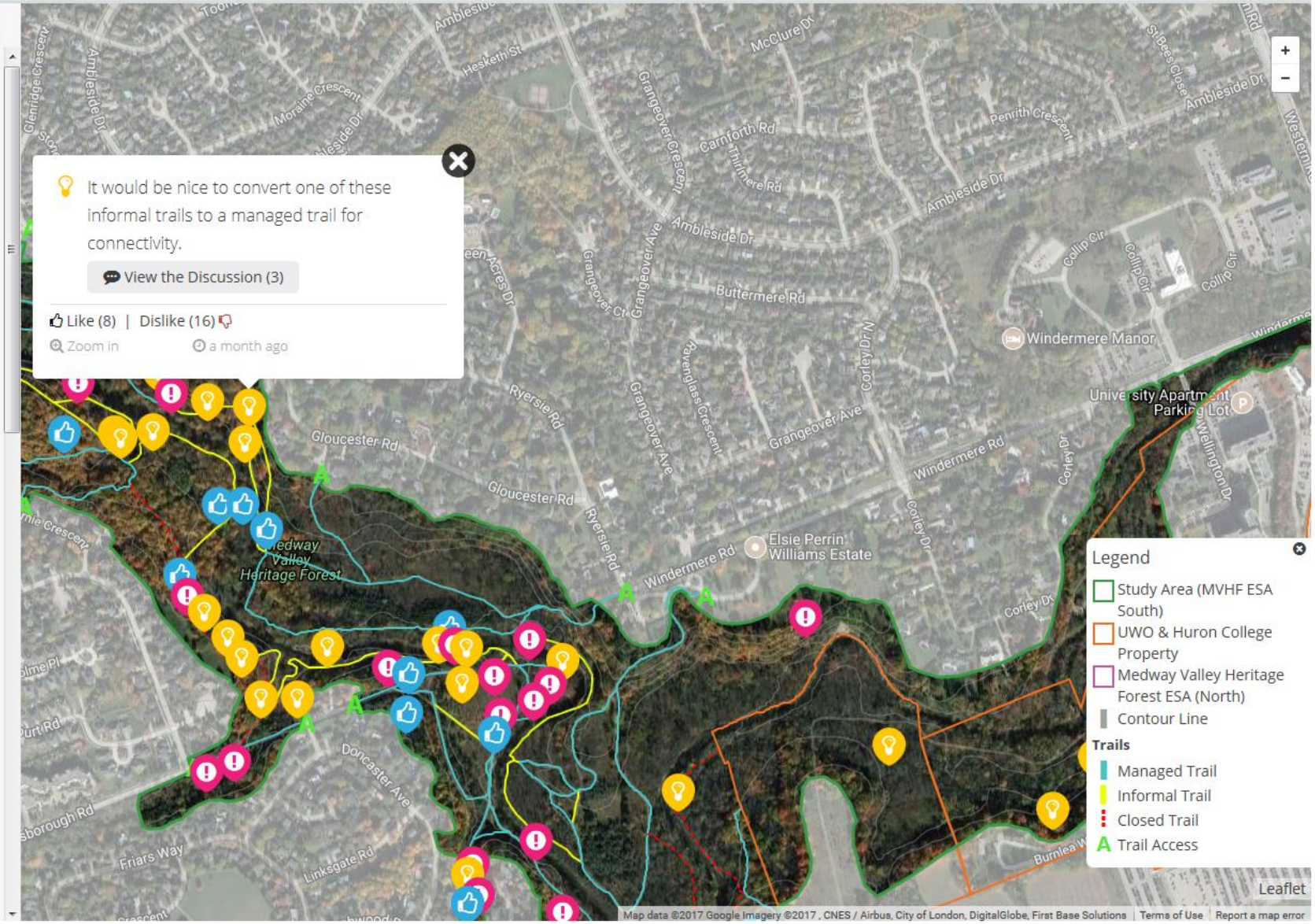
If you selected "other" in Q2, please describe what other activities you like to do.

3. What do you think could be improved in the MVHF ESA (south)? (Select all that apply.)

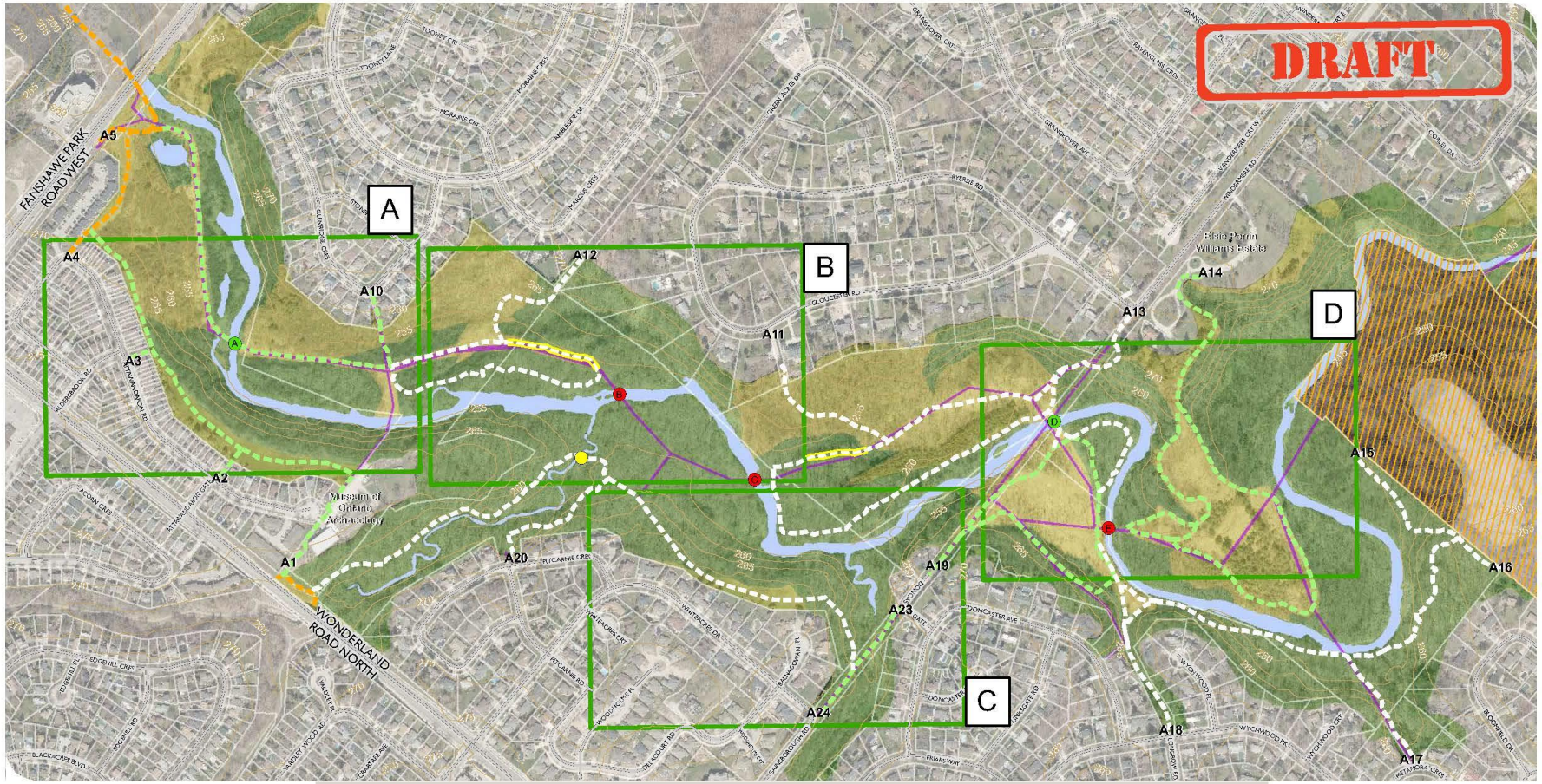
* (required)

- [ ] Interpretative Signage
- [ ] Planting of Native Species in the ESA
- [ ] Ecological Restoration
- [ ] Trail amenities like benches, railings
- [ ] Improved trail connections
- [ ] Other

If you selected "other" in Q3, please describe what other activities you like to do.



DRAFT “ENHANCED CONNECTIVITY”



CITY OF LONDON
CONSERVATION MASTER PLAN
MEDWAY VALLEY HERITAGE FOREST ESA (SOUTH)

FIGURE 5
DRAFT "ENHANCED CONNECTIVITY"
SUSTAINABLE TRAIL CONCEPT PLAN

- Trail Linkage (Medway Creek) (Does not comply with Guidelines)
- Trail Linkage (Medway Creek)
- Stepping Stones (Snake Creek)
- A# Access Point
- Level One Trail
- Level Two Trail
- Level Three Trail
- Improved Trail Surface
- Contour (5 metre Elevation)
- Property Boundaries
- Utility Overlay (4 m)
- Western/Huron Properties
- Watercourse (also Nature Reserve)

Management Zone
- Nature Reserve
- Natural Environment

DILLON CONSULTING

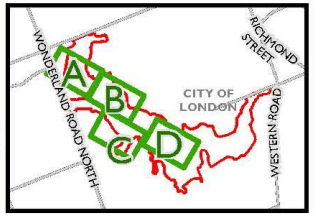
THE OPTIONS PRESENTED IN THIS DRAFT CONCEPT PLAN COMPLY WITH THE COUNCIL APPROVED GUIDELINES FOR MANAGEMENT ZONES AND TRAILS IN ESAS (2016) UNLESS OTHERWISE NOTED

MAP DRAWING INFORMATION: DATA PROVIDED BY MNRF (2017) & CITY OF LONDON (2016)
MAP CREATED BY: JWH
MAP CHECKED BY: JLP
MAP PROJECTION: NAD 1983 UTM Zone 17N

1:5,500
0 70 140 280 m

UNMANAGED EXISTING TRAILS HAVE BEEN REMOVED FROM MAPPING FOR THIS OPTION

PROJECT: 17-5428 STATUS: DRAFT DATE: 8/20/2017



FILE LOCATION: \\dillon.ca\DILLON_DFS\Toronto\Toronto GIS\137580 - Medway MVHF ESA\Mapping\Phase II\F5_EnhancedESA.mxd

MEDWAY VALLEY CMP
NEXT STEPS

5th and Last Meeting of Local Advisory Committee:

November 2, 2017

Open House on Final Draft of Conservation Master Plan:

November 15, 2017

HOW CAN YOU GET INVOLVED?

- Join the Conservation Action Committee
- Participate – keep your eyes open
- Read public notices in *The Londoner* and Public Notices section of the City's web page
- If you see something wrong in an ESA, let the City know
- Join or form an "Adopt an ESA" group to care for all or a portion of an ESA

ESA OBSERVATION REPORTING FORM

See Anita for a paper copy or visit
www.london.ca; or
www.thamesriver.on.ca; or
phone 519-661-4980

CITY OF LONDON ESA OBSERVATION FORM

The City of London, in partnership with the Upper Thames River Conservation Authority, manages eight publically owned environmentally significant areas (ESAs) in the City. This form is provided so that members of the public may record observations arising from time spent in ESAs. The City of London will review the information received and take steps to incorporate your suggestions into our ESA Management efforts, subject to existing policies, approved conservation master plans, budget and environmental considerations. Please respect the natural environment during your visit, be aware of permitted and prohibited activities defined on the signs at the trail head and stay on the managed trail system.

OBSERVATIONS PROVIDED BY:

CONTACT INFORMATION:

PLEASE IDENTIFY THE ENVIRONMENTALLY SIGNIFICANT AREA YOU ARE PROVIDING COMMENTS ON:

- ☐ Meadowlily Woods
- ☐ Westminster Ponds
- ☐ Warbler Woods
- ☐ Medway Valley Heritage Forest
- ☐ Kilally Meadows
- ☐ Coves
- ☐ Sifton Bog
- ☐ Kains Woods

EXPLAIN GENERAL LOCATION (AND/OR GPS POINTS) OF OBSERVATIONS:

COMMENTS RELATE TO THE FOLLOWING:

- ☐ Trails
- ☐ Signage
- ☐ Dogs Off Leash
- ☐ Encroachments/Garbage
- ☐ Invasive Species
- ☐ Monitoring Requirements
- ☐ Habitat Restoration
- ☐ Others

To be filled out by observer	To be filled out by City of London					
		Action			Status		
Observations/Date:	Recommendations:	s Action Req'd	ortine Maintnc.	pital Project	rget date	mpletion Date	le Number

FOR MORE INFORMATION

- TONIGHT — talk to Jack and Anita
- OR — contact Conservation Action Committee Chair, Sandy Levin, at s.levin@sympatico.ca or 519-472-9576

ENVIRO HERO AWARD

- Individuals, businesses or groups outside of Nature London
- A special one-time or continuing contribution to conservation
- Submit nominations to Conservation Action Committee

ENVIRO HERO AWARD

NATURE LONDON

Congratulates

Who Is An

Enviro Hero

For Your Special Contribution To Conservation
Of Our Shared Natural Heritage

Chair, Conservation Action Committee

Date

“To Preserve and Enjoy Nature”

D. Wake

We wish to thank

- Sandy Levin for assistance with slide topics and content;
- Stan Caveney for formatting help and slide projection; and
- The City of London for providing updates about ESA projects