

Trail Standard Comments to Date from EEPAC, Nature London and TVTA

Generally the comments on the Trail Standards to date have focussed on:

- Application of Management Zones (MZ) based on criterion in text and chart
- Determining Boundaries and Sizes of MZ
- Significant Wildlife Habitat, SAR
- Open Aquatic MZ / Provincially Significant Wetlands MZ
- MZ for S1-S3 Ranked Communities vs. S1- S3 Ranked Species

Collated List of Trail Standards Comments Received & Responses to Date:

Trails Advisory Group Summary and Update 2014 responses to EEPAC and TVTA Comments on MZs and Trails in Kains Woods Environmentally Significant Area

Request for Input from EEPAC, July 26, 2013

The *Kains Woods ESA Management Zone Map* is attached along with the *Kains Woods ESA Management Zone Map with Trail Review Locations* that identifies areas (Locations 1 – 12 inclusive) reviewed by the Trails Advisory Group (TAG) on April 25, 2013. Location 16 on the map is the ravine crossing reviewed by TAG on November 28, 2012. Location 14 and 15 were added to the map as the trail in these locations currently traverses a Nature Reserve Zone. Input from EEPAC for options for Locations 10 - 14 inclusive is needed as there are limited options (and in some cases no option) for re-routing the trail around the Nature Reserve Zone areas and the Planning and Design Standards for Trails in ESAs document does not permit trails in a Nature Reserve Zone.

Trail Location, Management Zone, Issues and Action Required

Location 1 and 2 – NA2 Zone - These two areas cross too closely to a significant gully and seepage area. It was agreed to reroute the trail about 3 m further inland to avoid the gully erosion and cross the seepage areas with a boardwalk.

Action: TAG recommended at location 1 - Installation of boardwalk, roughly 10 sections. Move a portion of trail to avoid erosion and water seepage. At location 2 – Reroute a portion of trail to avoid erosion, cover old trail with debris (5 metres of trail).

Location 3 – NA1 Zone - An area of a steep downhill that could benefit from a small section of handrail for stability and to avoid slippage.

Action: TAG recommended 14 feet of handrail, 2 sections, 3 posts – DONE Installed July 2013

Location 4 - NA1 Zone - This is an area of trail running close to the riverside with exposed tree roots, significant gravel deposit (Ingersoll Moraine exposure).

Action: TAG recommended using blazes and arrows to keep people to the left side of the trail; reroute a portion of trail to avoid erosion, cover old trail with debris (5metres of trail)

Location 5 – NA1 Zone - This was a section with a very steep uphill. Tom Friesen demonstrated the temporary “Thames Valley Handrail” method using a rope. All agreed that short sections of handrail could be installed.

Action: TAG recommended 14 or 21 feet of handrail, 2 or 3 sections –will be installed by early August 2013

Location 6 – NA1 Zone - This is a long sloped section near one of the golf course holes that can sometimes be slippery or hard to traverse. Potential for a handrail was discussed.

Action: TAG agreed that no action be taken at this time.

Location 7 – NA2 Zone - This was just past the 2nd bridge. It was identified as an area that requires closing and relocation as it is eroding and very unstable. Possibilities included a short section of boardwalk and stones cut into the side slope or possibly a crib wall step. Trail currently passes through a narrow Natural Area 2 Zone.

Action: TAG recommended Matt McCutcheon meet with Brad Glasman to discuss any bio-engineering options. Brad recommended crib wall steps.

Location 8 – NA2 Zone - An area of major erosion. TAG recommended that the seepage needs to be redirected down the existing ravine.

Action: TAG recommended Matt McCutcheon met with Brad Glasman to discuss any bio-engineering options. Brad recommended repairing the drainage system and adding dogwood fascines along the trail in wet areas.

Location 9 – NA1 Zone - The trail runs close to the head of a gully.

Action: TAG recommended installation of modified, narrow boardwalk, 2 sections to be installed.

Location 10 – NR Zone - This area is very wet and requires a boardwalk extension however, the trail currently traverses a Nature Reserve Zone and cannot continue east – west without crossing a NR zone. Options to be considered: 1. Trail closure, 2. Add a Special Feature Overlay to MZ Map (noting TAG recommended installation of boardwalk extension, roughly 6 or 7 sections to avoid wet area subject to review of management zones).

Action: Seek input from EEPAC

EEPAC RESPONSE A. Locations 10, 11, and 13 (west end of ESA)

PREFERRED OPTION

Explore feasibility of designating a trail on an easement on to the Sifton lands and close the trail from the storm sewer to roughly location 14.

There is an informal trail on the Sifton lands already that avoids the slope and seeps. We understand TAG did not walk on Sifton land but the path is well used by residents and hiking groups.

The exploration of this option should include consideration of what tree cutting and hazard tree management would be required.

ALTERNATIVE OPTIONS

i. A structure such as stairs to negotiate the slope from the storm sewer to the existing city trail (location 13).

ii. Additional boardwalk for the seeps along the existing trail as a Special Overlay (locations 10 and 11).

iii. Another way of avoiding the seep and slope at location 13 would be to extend the existing trail down the utility corridor to the river, to rejoin the riverside trail. There is likely a way to avoid whatever issue caused the trail to be routed through 13 in the first place. (This option does not avoid crossing locations 10 and 11.)

TVTA RESPONSE: The TVT was approved well before the ESA's so we will request that TVTA members be given grandfather status or licence to continue to use the main trail. Preferably, the Special Feature Overlay could be adopted for locations 10-14.

NR DESIGNATION REVIEW by LM 2014: Redfern Map does not identify significant/sensitive features here, Map 5 of the Sifton, Riverbend, Phase 2 Earth Tech EIS 2003 does not identify any features at location 10 or 11, the 2013 MZ draft map by BB identifies seeps and vernal pools in this area – not sure how these were identified and when they were recorded.

Location 11 – NR Zone - Additional boardwalk extension is not required here, however the trail currently traverses a Nature Reserve Zone and cannot continue east – west without crossing a NR zone. Options to be considered: 1. Trail closure, 2. Add a Special Feature Overlay to MZ Map

Action: Seek input from EEPAC (See responses/recommendations for Location 10)

NR DESIGNATION REVIEW by LM 2014: Redfern Map does not identify significant/sensitive features here, Map 5 of the Sifton, Riverbend, Phase 2 Earth Tech EIS 2003 identifies an intermittent watercourse roughly at location 10, the 2013 draft MZ map with notes by BB identifies seeps and vernal pools in this area.

Location 12– NR Zone - There is a rather steep entrance to the trail through the Hemlock stand. Trail traverses a Nature Reserve Zone. Options to be considered: 1. Trail closure, 2. Trail relocation (land acquisition or easement needed), 3. Add a Special Feature Overlay to MZ Map (noting TAG recommended adding a couple of erosion bars/water bars to serve as steps and direct the water off the trail subject to review of Management Zones).

Action: – Seek input from EEPAC

EEPAC RESPONSE LOCATION 12 (Hemlock stand and Ravine)

PREFERRED OPTION

Explore an easement on to the Sifton lands just west of the golf course pond through the pines. This appears to avoid the ravine and the side slope.

ALTERNATIVE OPTIONS

i. Build a bridge. We believe this would be expensive and difficult to construct

ii. Status quo – not desirable

NR DESIGNATION REVIEW by LM 2014: Redfern Map does identify the hemlock community as a Provincially Uncommon Community, Map 5 of the Sifton, Riverbend, Phase 2 Earth Tech EIS 2003 identifies a permanent watercourse roughly at location 12, the 2013 draft MZ map with notes by BB identifies the watercourse and the rare/unusual veg. in this area. Eastern Hemlock Slope Community is identified as Provincially Uncommon in the August 2000 Earth Tech Phase 1 Study.

NOTE: *The Trail Standards Document does allow “Uncommon natural communities” such as “Mixed Forests with Hemlocks” to be assigned a MZ of NR, NA1, or NA2. Perhaps the NA1 zone is more appropriate here than NR? The trail currently traverses the Hemlock stand and would not appear to particularly sensitive to the Level 1 trail in this location? The Eastern Hemlock Community is not ranked S1-S3.*

Location 13 – NR Zone -Trail traverses a Nature Reserve Zone. The trail is very confined at this point and crosses several seeps and cannot continue without crossing a NR zone. Options to be considered: 1. Trail closure, 2. Add a Special Feature Overlay to MZ Map in this location noting TAG recommended re-routing trail north- westward over a Special Feature Overlay closer to the river to connect with the nearby Utility Overlay Zone subject to review of Management Zones.

Action: **Seek input from EEPAC (See responses for Location 10)** (DONE Acquired land from Sifton re-routed trail and boardwalk moved in 2015)

Location 14 – NR Zone - Trail currently traverses a Nature Reserve Zone and cannot continue east – west without crossing a NR zone. Options to be considered: 1. Trail closure, 2. Add a Special Feature Overlay to MZ Map to permit trail.

Action: **Seek input from EEPAC, TVTA**

EEPAC Response: We were not completely sure which area this is. We believe it to be the watercourse crossing that currently has stepping stones. We were also unclear why there is a Natural Area 2 area to the east of this location.

PREFERRED OPTION

Expand the use of stepping stones as a low cost, low intrusion

ALTERNATIVE OPTIONS

i. Bridge the watercourse and create a special overlay zone through the NR.

ii. Leave stepping stones in place and construct a stepped boardwalk to the west of the stream.

NR DESIGNATION REVIEW by LM 2014: Redfern Map does identify a watercourse tributary here and potential sandy shoreline nesting areas for Spiny Softshell Turtles, Map 5 of the Sifton, Riverbend, Phase 2 Earth Tech EIS 2003 identifies an intermittent watercourse roughly at location 14, the 2013 draft MZ map with notes by BB identifies seeps and vernal pools in this area.

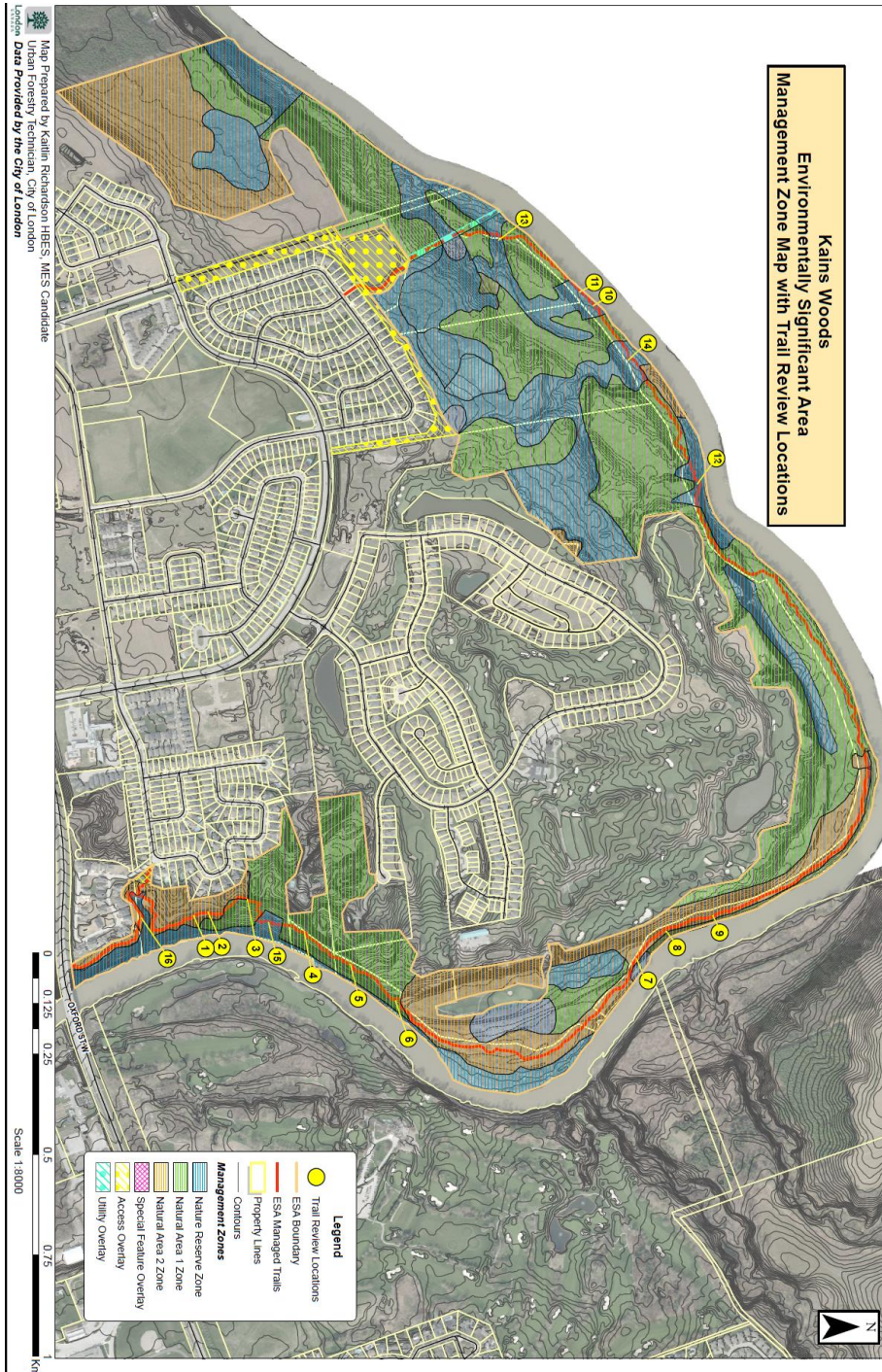
Location 15 – NR Zone - Trail currently traverses a Nature Reserve Zone and is adjacent to a Natural Area 1 Zone on City property.

Action – Re-route trail westwards through the Natural Area 1 Zone on City property.

Location 16 – NR Zone - The existing trail traverses the ravine through a narrow section of Nature Reserve Zone with Natural Area Zone 2 areas on either side. There is minimal construction access which is a constraint.

Action: TAG recommended a boardwalk span, with a few steps on both sides and bioengineering to stabilize the slopes. The boardwalk span will be shorter than the 18’ long span initially considered due cost and construction access issues.

NOTE: Page 38 of Planning and Design Standards for Trails in ESAs speaks to this situation / configuration where: “A steel span bridge may be permitted to cross a Nature Reserve Zone that separates two Natural Area Zones (e.g. the bridge across the ravine at Meadowlily— 3rd picture) provided the impact of the construction will have minimal negative impact on the Nature Reserve Zone. In such cases, the bridge design and location will also serve as a compelling landscape anchor with the purpose to draw people away from shortcutting through significant or sensitive areas.”



June 2014 - Responses by North South Environmental to the comments from the Environmental and Ecological Planning Advisory Committee (EEPAC) dated February 12th 2014 on the WMP ESA Community Connections Report and Management Zones. The responses follow the format of EEPAC's comments, with each heading (in bold) as it appeared in the review. (Excerpts below relate to the application of the Trail Standards)

Comment 1: Polygon 7 should be Nature Reserve

Response: Polygon 7 refers to several polygons that represent wetlands that are currently not part of the Provincially Significant Wetland (PSW). The vegetation within these wetlands is generally composed of non-native species. Even where amphibians were breeding, the breeding was not concentrated (it was generally scattered throughout areas of standing water). Thus, a classification of Nature Reserve (NR) was not considered warranted as the trail standards allow for a range from NR to NA2 under Criterion 6 on page 18.

Comment 2: Amphibian Breeding Sites are not Adequately Protected

Response: All amphibian ponds identified as amphibian breeding habitat in 2013 field surveys are protected as Nature Reserves – however, the boundary may not have been delineated accurately because the entire boundary is not always identifiable in aerial photographs, which were the basis for delineating boundaries. We propose to conduct further work to delineate the boundaries accurately in early summer of this year (2014).

Connections between breeding ponds and larger wetland areas will be identified where they occur. Most of the breeding ponds were isolated within woodlands and they were without connections to other wetland areas.

Comment 3: Boundary of Polygon 1a

Response: Eastern Meadowlark (and Bobolink, which were also found within this polygon) generally nest in open habitats away from forest edge. They may use edge habitats sometimes during foraging, displaying etc. but for these activities they are relatively flexible in their habitat needs. The most important consideration for the edge habitat is that it continues to contribute to the open patch as a whole, as Eastern Meadowlark are area-sensitive. As the adjacent forest begins to invade the edge of the meadow, the size of the meadow will be reduced, and there is a possibility that if the meadow becomes reduced in size, it will become less and less suitable as habitat for area-sensitive grassland birds.

The most important management concern to ensure that the habitat surrounding polygon 1a continues to contribute to habitat for grassland bird species is to ensure that these habitat areas be managed as generally open habitat. Succession to thicket or forest would degrade this adjacent habitat for grassland birds. The polygons shown as 1b need to be managed so that they continue to function to provide habitat for grassland birds in the broader sense. This will be addressed in the final report in the discussion of restoration overlays.

Boundaries around Nature Reserve Zones (e.g. Buffers and Habitat Zones around Wetlands)

Response: Criteria for delineating areas within management zones include only features. The trail standards determine the zoning that applies to the feature itself. However, the management zone designations themselves contain provisos for protecting sensitive and significant features and functions. For example, the Natural Area Zone 2 category contains as the primary goal the protection of significant features and functions for which an area has been identified. All trails, including Level 2 hiking trails, are only allowed where it can be demonstrated that the trail will not result in negative impact to the ecological features and functions of the ESA. Level 2 hiking trails would respect the features and functions of wetlands by using appropriate building

methods next to wetlands, and siting trails at a distance sufficient from wetlands to avoid impacts.

Management Zone Boundary Delineations

Response: Using the approach in the Trail Standards each polygon is assessed using the criteria and designated accordingly. In this case, the NR zoning for the open landfill polygon was designated as it is the most likely area for meadowlark nesting. The boundary between Polygon 1 and 1a was drawn where shrub density was greater than approximately 10% of the ground cover, as this is the definition of thicket in the Ecological Land Classification protocols. Similarly, the PSW boundaries form the Nature Reserve boundaries for polygon 3a.

The boundary of 3a is a relatively “hard” boundary: it corresponds with MNR wetland boundary mapping, which were identified using MNR protocols, and where development is prohibited by MNR. The study team did not feel it was necessary to join the two areas of NR zoning as the Trail Standards do not have minimum sizes or separations. Further, there is some flexibility on page 18 of the Trail Standards for PSWs as they can be designated as Nature Reserve or Natural Area 1 and if the polygon is not part of the mapped PSW the Natural Area 1 designation is more appropriate.

The Special Features overlay may be explored to identify areas that are expected to be more sensitive than the designated management zones, in order to guide trail design.

Recognizing Features / Ecosites Uncommon to the Subject Site

Response: The matrix for identifying and delineating ESA Management Zones is based on the 7 ESA Criteria in the Official Plan and includes a category for Criterion 2: High Quality or Distinctive vegetation communities. The rarity of vegetation communities is determined by the Natural Heritage Information Centre, which has developed status rankings for communities in Ontario. A rank of S1 to S3 is considered rare in Ontario. This category was found to apply only to certain communities within the Westminster Ponds: most notably the deciduous swamps and the fen/Buttonbush swamp around Spettigue’s Pond. The classification was applied without consideration for the abundant buckthorn in these communities, as the communities continue to be regarded as particularly sensitive despite the presence of invasive species.

The portions of the woodland community with low levels of buckthorn, though very high quality, were not classified as NR because these are not considered a provincially rare community, as determined by the Natural Heritage Information Centre. The invasive species management plan will address priority areas for early detection and rapid response and long term invasive species management.

Restoration Zones

Response: The Restoration zoning was not considered in this phase of the report as the revised Terms of Reference were focused only on identifying and describing the features and identifying zones to ensure sensitive features are recognized and protected. Restoration zoning needs to be reviewed and added to the map and the report. For the final report, the restoration zoning will be applied.

September 2014 - EEPAC’s Review of the Conservation Master Plan for the Coves ESA Prepared for the City of London Parks Planning & Design By North-South Environmental Inc. July 2014, did not include any comments that related to the application of the Trail Standards.

December 2014, EEPAC's Review of the Sifton Bog Management Zone Map Received at EEPAC's November 2014 meeting (Excerpts below relate to the application of the Trail Standards).

RECOMMENDATION 1: The city staff include in its capital budget sufficient funds for an EA like process for the boardwalk to the Pond prior to replacement of the end of life sections.

RECOMMENDATION 2: In the interim, a special access zone for the boardwalk is advisable.

RECOMMENDATION 3: The management zones be considered interim until:

a. EEPAC has reviewed the background material that lead to the zoning, and b. the completion of the upcoming vegetation monitoring update.

A large effort on the education component for the bog has already been implemented with the information kiosks and school trips. So, probably a good portion of London's community has been there, or at least, know about the pond/bog being there. If the boardwalk is removed, people will still go to the bog regardless and will make their own trail. Thus, the boardwalk needs to stay to be sure that damage will not be done. However, an EA like process should be carried out to determine if the present location is the best before a decision is made on the replacement of the boardwalk. In the interim, a special access zone for the boardwalk is acceptable. The EA process should consider options for location, height off the ground and the use of railings to discourage people from going off the boardwalk. The current route does cut across a wide section.

EEPAC members also observed a number of deer exclosures including in the Nature Reserve. These appear to have created trails off the boardwalk that may be encouraging people to go off the boardwalk onto the sphagnum mat. If the work on the deer population has ended, are the exclosures still required? If not, they should be removed.

RECOMMENDATION 4: If the deer exclosures are no longer needed, they be removed.

QUESTIONS REGARDING THE PROPOSED "ZONING"

SWT (swamp thicket) communities make up less than 7% of the vegetated communities in London. MAM (Meadow March) make up less than 6%. Yet, they are only considered NA1. Without a "justification table" for the zoning, it is unclear as to why NA1 was selected over NR (both of which are possible under the Trail Standards).

It is unclear as to why part of the FOD 1 community at the south end is in the NA2 zone and part in the NA1. Again, there is no clear guidance provided for EEPAC to evaluate the choices. Having walked the area near Havenwood, it is even less clear.

These concerns continue to reinforce our discomfort with the Standards being applied to all ESAs prior to any review of how they have been used.

Sifton Bog ESA Management Zone Map



Legend	
	ESA Managed Trails
	Property Lines
	Contours
	Nature Reserve Zone
	Natural Area Zone 1
	Natural Area Zone 2
	Access Overlay
	Utilities Overlay

Map Prepared by Sandra V. Munillo M., B.Arch, MES, BAA Candidate.
 Landscape Technologist, City of London
 Data Provided by the City of London



December 2014 – Dillon Consulting Inc. Addressing EEPAC Comments for the [Natural Heritage Inventory and Evaluation - Medway Valley Heritage Forest ESA, 2013](#), (Excerpts below relate to the application of the Trail Standards).

9. The listing of Natural Areas and Reserves in table 8 provides a substantial and valued attempt to rationalise the management recommendations. But it is difficult to read and interpret the table and cross reference the mapping. A good start would be to remove all “Doesn’t meet...” entries to allow focus on the substantive information. A descriptive title rather than numerical ordinal would more clearly identify the zone characteristics. It is not clear what “delineated by contours” means... topography or ELC boundaries? If the former, then how is this done? There is also no clear rationale for why an area was given a Nature Reserve Designation vs Natural Area 1. It appears to be by number of ESA criteria met, but this is not done consistently.

Recommendation 9: Make Table 8 “Defining Indicators for Management Zones” clearer and explain the rationale used for the classifications. Table 8 of the Report was reviewed and expanded, where appropriate, to provide a clearer rationale as to the designations of Nature Reserve and Natural Area 1.

Response: “Delineated by contours” refers to 5 m contour lines provided by the MNRF (topography). Rationale column was expanded to clearly state why each zone was designated NR, NA1 etc.

10. Utility corridors are a prevalent feature of the management plan. Their routing through Nature Reserves is highly regrettable in retrospect in breaking up interior forest. The nominal 12 m right of way mapped seems excessive. It could be much less in particularly sensitive zones. The NA1 restoration attributed to utility corridors seems arbitrary, and unlikely to be realised except by periodic clearances of saplings and scrub.

Recommendation 10: Utility corridor width and target ecology should be sensitive to the ecological and management setting

Response: Based on further discussions with City officials, the Utility Overlay described in Section 5.1.1 of the Report (p.52) and presented on Figure 16 (p.60), Figure 17 (p.63) and Figure 18 (p.67) has been revised to a width of 4 m. The above mentioned Section 5.1.1 and Figures have also been updated to reflect this revision.

December 2014 – Dillon Consulting Addressing Nature London Comments for the [Natural Heritage Inventory and Evaluation - Medway Valley Heritage Forest ESA, 2013](#), (Excerpts below relate to the application of the Trail Standards).

3. It is not clear how areas to be surveyed were determined by the City.

It is not clear how the “zones” were sized. In defining the size, was any consideration given to the work on Buffers and Critical Function Zones done by Beacon Environmental in 2012 (Ecological Buffer Guideline Review)?

Response: Public lands within the ESA south of Fanshawe Park Road West were studied while the north ESA only received supplementary surveys. If clarification is required on why the

specific locations or point counts were chosen for the various surveys, please refer to Section 2.1 of the Report which outlines the various methods followed.

The boundaries of management zones were determined by using a combination of ELC polygon boundaries, 5 m contours, Significant Wildlife Habitat boundaries, and habitat regulation criteria for Species at Risk. These zones are not buffers or critical function zones and they therefore followed the Management Zone criteria outlined in the Planning and Design Standards for Trails in ESAs (June 2012).

4. There are a number of high priority actions recommended particularly dealing with invasive species and protecting SAR species. Will staff begin to take action prior to the conclusion of the CMP process? It should. Examples include informal trails that have created bare areas devoid of vegetation in the vicinity of Cream Violet and American Gromwell (noted on p. 70). The City is committed to control of invasive species and protection of Species at Risk within the MVHF. In partnership with Dillon Consulting Limited and the UTRCA, activities are currently underway to control large pockets of Goutweed, European Common Reed and Japanese Knotweed that were noted in the Report. This work is being done to control the spread of those invasive species but also to protect significant populations of False Rue-anemone and Green Dragon; two Species at Risk.

Response: Please note Striped Cream Violet and American Gromwell are not listed as Species at Risk but are being considered during management activities within the ESA due to their rarity within Ontario and status as Species of Conservation Concern. While certain trails (formal and informal) create linear strips of bare ground within the ESA, in some cases these areas help prevent the spread of certain invasive species, such as Goutweed, by acting as buffers.

5. Insect Species at Risk (SAR) or Species of Conservation Concern (SCC): The habitat for food plants for larval species of three butterflies, Monarch (SAR), Giant Swallowtail (SCC), and Tawny Emperor (SCC) needs to be protected in appropriate management zones. These food plants include Common and Swamp milkweeds for the Monarch, Prickly Ash for the Giant Swallowtail, and Hackberry for the Tawny Emperor. Milkweed was recorded in ECL vegetation patches FOD, FOD7, and MAM. Prickly Ash was recorded in patch FOD. Hackberry was recorded in FOD and FOD7.

The aquatic breeding and feeding habitats for three Odonates (dragonflies) listed as rare or uncommon need protection in appropriate management zones. The Pronghorn Clubtail likes slow-moving streams and ponds; its nymphs prefer steep, clay banks and like to feed on aquatic vertebrate and invertebrate organisms. The Swamp Darner likes shady ponds and ditches bordering woods; its nymphs feed on aquatic vertebrate and invertebrate organisms. The Blue-tipped Dancer likes slow- or fast-moving rivers or streams, and rests low within vegetation in shady areas; it lays its eggs above the waterline; its nymphs feed on aquatic vertebrate and invertebrate organisms.

Response: We note that the entire ESA is protected and therefore the habitat and/or food sources for these species are protected. Management of trails within ESAs typically avoid vegetation removal or limit it to invasive species. Due to the scattered nature of the various food sources for the Lepidoptera species throughout the ESA, zones specifically targeting these plants is not in keeping with the Planning and Design Standards for Trails in ESAs (June 2012). Updated ELC information is now available for consideration during trail planning exercise and can assist in micro-siting trails to avoid important food plants for a variety of species.

Note: Giant Swallowtail is no longer considered a Species of Conservation Concern as the provincial ranking as been revised to S4 indicating that the population in Ontario is considered Apparently Secure.

6. Utility Overlay over sewer: Why is the utility overlay corridor 12 m wide in the MVHF ESA south of Fanshawe Park Road, whereas 3.2 m to 4 m wide is more than sufficient in the MVHF ESA section north of Fanshawe Park Road? Where is the justification for the 12 m width in the South portion of the ESA? This does not appear in any City document.

Response: Based on further discussions with City staff, the Utility Overlay described in Section 5.1.1 of the Report (p.52) and presented on Figure 16 (p.60), Figure 17 (p.63) and Figure 18 (p.67) will be revised to a width of 4 m. The above mentioned Section 5.1.1 and Figures have been updated to reflect this revision.

12. Rare and Sensitive Species

It is not clear from the mapping if the areas where rare and sensitive plants species exist will be Nature Reserve and how large the Nature Reserve Zone will be. An area for protection as well as opportunity for increased colonization must be provided for. As stated under Section 5.1.1 of the Report, Nature Reserve Zone can be areas that contain concentrations of Species at Risk. The rare and sensitive species (Species of Conservation Concern) that are mapped on Figure 8 are not designated as Species at Risk and therefore would only be included within a Nature Reserve Zone if there is also a Species at Risk present. If a Species of Conservation Concern is observed without a Species at Risk in close proximity, these populations were included as Natural Area 1.

Response: The size of each Nature Reserve Zone, Natural Area etc. and total amount of each zone have been added to Section 5.1.1 and under Table 8.

April 2015 - [Medway Valley Heritage Forest ESA, Phase 1, Conservation Master Plan Report by Dillon Consulting](#), Jan 2015. Responses to EEPAC's Comments of March 19, 2015 (Excerpts below relate to the application of the Trail Standards)

1. RECOMMENDATION: Staff provide rationale for changes in management zone designations and boundaries in its upcoming report on the CMP to Planning and Environment Committee.

Staff Response: The rationale was presented to EEPAC by Dillon's Biologists on January 15, 2015 and a Q&A session was provided. The changes are described in Dillon's Dec 1, 2014 response letters included on the December 2014 and January 2015 EEPAC agendas addressing EEPAC's and Nature London's comments, noting some Management Zone (MZ) changes were in response to those comments:

- Section 5.1.1 – Management Zones reassessed which resulted in the following:
- Removal of NRZ 9 & expansion of NA1 G, no SAR, no S1-S3 Communities, no seeps
- Reduction of NRZ 7 (was NRZ 6 in 2013); redefined as expanded area of NA1 F
- Addition of two NRZ areas (NRZ 4 & NRZ 13) seepage areas noted by public
- Addition of seven circular NRZ for Butternut SAR trees
- Removal of Cultural Heritage Zones

Dillon determined NRZ 9 (2013) should be part of NA1G (2015) as it meets Natural Area 1 (NA1) criteria but not Nature Reserve (NR) as no SAR, no S1-S3 Communities, no seeps are present. This also applied to a portion of NRZ 6 (2013) now part of NA1 F (2015) where the size of the NR zone was reduced to encompass the refined habitat area of SAR False rue-anemone habitat determined after targeted fieldwork in 2014 related to the City's protection of the species from invasive Goutweed. No change to report.

6. RECOMMENDATION: The proposed Management Zones be changed to be consistent with the Trail Standards.

Staff Response: The Management Zones are consistent with the Trail Standards. Sub-nationally ranked S1-S3 Species and S1-S3 Communities are tracked separately by NHIC. Provincially Rare Species and Provincially Rare Communities are not the same thing. The Trail Standards require Provincially Rare Communities ranked S1-S3 to be Nature Reserve, and Habitat Areas for Prov. Rare Species are protected inside the ESA in a (NA1) or NR zone as noted on page 19 of the Trail Standards document. No change to report.

7. RECOMMENDATION: As a Significant Wildlife Habitat, NA 1 A should be NR

Staff Response: Management zones were designated using the Matrix for Identifying and Delineating ESA Management Zones found in the City's Planning and Design Standards for Trails in Environmentally Significant Areas Document (2012). Some features or habitats listed under the Matrix that fall under multiple sensitivities and could be designated as Nature Reserve, Natural Area 1 or Natural Area 2. This includes seasonal wildlife concentration areas (i.e. amphibian breeding habitat) listed under Criterion 6. To provide consistency when applying the matrix to these types of features, designation of Nature Reserve was reserved for those highly sensitive areas containing Species at Risk and/or groundwater discharge or seepage zones. Species at Risk were not observed within the amphibian breeding habitat observed in NA1 A and therefore a designation of Nature Reserve was not applied.

8. RECOMMENDATION: An explanation for the NA2 zoning be provided in a table similar to the ones used for the NR and NA1 zones.

Staff Response: If a polygon did not meet the NR or NA1 Criterion Dillon assigned the Natural Area 2 (NA2) Management Zone by default. No additional analysis is warranted to assign an NA2 as there are no other zones to apply. This is consistent with the Trails Standards and the NA2 areas are protected inside the ESA. No change to report.

15. RECOMMENDATION - Wildlife trees are potential roosting or maternal colony habitat for the SAR bats. Therefore, a NR zone of 25 m from the drip line be applied to such trees noted in the record of snags. This zone could be changed after a cavity tree assessment.

Staff Response: Wildlife Trees are protected inside the ESA and the Tree Risk Management Procedure Manual for ESAs ensures that wildlife trees are retained in the ESA as wildlife habitat to the greatest extent possible. In the very unlikely event that a Wildlife Tree would need to be mitigated a cavity assessment is completed first. No change to report.

16. RECOMMENDATION: Appropriate zoning for this species based on sightings by the public be included.

Staff Response: The Trail Standards identify that the habitat areas for Species at Risk (SAR) be identified as NR. Staff has reviewed turtle habitat requirements with UTRCA and the habitat areas for SAR Turtles would include the area of the Medway Creek itself, and, the areas of the shoreline with appropriate substrates in sunny areas where they could nest or bask in the sun. The habitat areas would not include the wooded or vegetated shore areas, or areas with steep banks. Any areas with exposed mineral soils suitable for nesting were limited and those that were observed are generally covered by other NR zones. Dillon will add text to the report supporting the NR determination to include potential turtle nesting habitat, where applicable.

20. RECOMMENDATION: The NRZ 16 overlay on Figure 16 be shown in its entirety as the entire habitat is protected under the SAR Act.

Staff Response: The habitat is protected inside the ESA lands which are designated as Open Space on Schedule A, designated as ESA on Schedule B-1 and Zoned OS5, the most restrictive open space zone. Please note the SAR Act does not apply to these lands as they are not federal lands. The Ontario Endangered Species Act, 2007 applies. No change to report.

21. RECOMMENDATION: All of the Western and Huron lands be shown as an NR Zone until data collection is undertaken.

Staff Response: The habitat is protected inside the ESA lands which are designated as Open Space on Schedule A, designated as ESA on Schedule B-1 and Zoned OS5. No change to report.

25. RECOMMENDATION – A scoped EIS be required prior to any site alteration in the ESA.

Staff Response: This report is part of a Conservation Master Plan (CMP) process consistent with Official Plan Policy 15.3.8. and the Planning and Design Standards for Trails in ESAs document as developed with participation from EEPAC and endorsed by EEPAC and approved by Council in 2012. A CMP does not include or recommend activities that meet the definition of site alteration, development or infrastructure under the PPS and the Planning Act. Where warranted additional ecological inventories have been done ahead of implementing some CMP recommendations to ensure the protection of key ecological features and functions. No change to report.

33. RECOMMENDATION - The city avoid signage near to unique species assemblages, in particular, SAR species.

Staff Response: Staff will respect the level of data sensitivity recommended by NHIC. No change to report.

34. RECOMMENDATION: The proposed Special Feature Overlays be removed as this decision should be left to the LAC in its review of the entire ESA and its recommendations regarding the trail system.

Staff Response: Dillon's rationale for the Special Feature Overlays (SFO) is provided in the report. The LAC will review the use of SFO's in Phase 2. No change to report.

April 2015 - Staff and North South Env. (NSE) Responses to EEPAC Comments of November 2014 on the Westminster Ponds / Pond Mills ESA, Ecological Inventory and Management Zone Vol. 1 & 2 Reports, September 2014 by NSE. (Excerpts below relate to the application of the Trail Standards):

Recommendation 7: The Management Zoning be reviewed to ensure there are sufficient NR zones to protect the significant species that are sensitive to disturbance.

NSE Response: Sufficient NR zones have been identified. This was considered in detail in applying the management zones; additional rationale and explanation has been provided throughout the sections on zoning. It should be noted that the NR zoning is applied only to the most sensitive and most significant areas, where the presence of any trail would be inadvisable. For the most part, however, most significant features in the ESA would not need that level of protection. Though there are some areas of the ESA that are more sensitive than others, most of the significant fauna and flora features are found in urban settings and are frequently found in areas with existing trails denoting high tolerance of human presence.

Recommendation 8: Add a section to the report that summarizes lessons learned. What changes have occurred since the last Ecological Inventory, and why? Which management decisions have been effective and which have not? Of course answering all these questions may go beyond the scope of this report, but observations and management questions which arise from the inventories should at least be summarized.

NSE/Staff Response: The Trail Standards describes the adaptive management approach that the City uses for ESAs and there are limitations in drawing conclusions from limited data. Budget constraints limit additional work here as not part of TOR.

3.1.5 – ECOLOGICAL LAND CLASSIFICATION AND FLORA - P. 8

...primarily within woodland communities, with searches focused on spring ephemeral species that would die back after flowering and be undetectable in later surveys. During the summer surveys, more comprehensive species lists were obtained for each community. The surveys generally focused on obtaining species information that would inform vegetation quality assessments (per the RFP), rather than on finding significant species (EEPAC highlight). Soil samples were not conducted (except to determine if wetland communities were mineral or organic) as the focus was on refining boundaries and updating species diversity.

One final visit was conducted in 2014 to provide ELC for the area south of Bradley Avenue, as this area was initially omitted from the 2013 studies.

COMMENT

Since part of the determination of the management zones is “the presence of significant species (such as Criterion 7), this seems to be a glaring omission of data for the determination of the Management Zones.

NSE Response: we did not mean to imply we did not look for significant species: we certainly did, on every visit, whether this was the primary purpose or not. Additional text has been provided in the report as further explanation. We did not **focus** on finding significant species previously reported as this is very time consuming and was not the task required by the RFP. In addition, if an area was already deemed to be of the highest significance, we focused on other

areas; rather than continuing to acquire information. This was especially true of seepage and other wetland areas susceptible to trampling.

p. 15 Table 2

SWD4-1 is missing from the Table 2 on page 15. This community is South of Bradley and is highlighted as Nature Reserve as 5a. The entire area (Box F on Figure 10 of Volume 1) is also missing from the new ESA boundary.

All communities identified as having a high FQI over 30 (and in the case of two ELCs over 40) are only classified as NA1. The report highlights that this is unusual for habitat in urban landscapes and noted these as the most diverse communities in the study. Yet they are only classified as NA1.

NSE/Staff Response: The FQI in these communities was high relative to other areas in the ESA but it in most cases is not so high that it warrants NR zoning. As stated by the Environmental Management guidelines, zoning of NA1 or NR can be applied where Coefficients of Conservatism are 8-10. There are very few areas where plants with CCs this high are found, the exception being the fringe of swamp around the edge of Spettigue Pond and the seepage slopes to the pond (which have indeed been zoned NR). The mean CC even in this community, where it was highest in the Westminster Ponds, was 5.

It should be noted that the current and historical level of use and management in these polygons was effectively an NA1 zoning, allowing for or including managed or unmanaged natural surface trails and boardwalks. This level of use and protection has been effective in protecting these areas and maintaining these areas with a high FQI and the NA1 zoning is in keeping with the Trail Standards as the polygons do not meet the description of a "Nature Reserve Zone – For the protection of areas of highest sensitivity which sustain important ecological features and functions that meet the minimum standard of significance for one or more ESA criteria (O.P. 15.4.1.3.). The delineation of Nature Reserve Zones depends not only on the significance of the feature, but also on its sensitivity. Nature Reserve Zones include the most sensitive Species at Risk habitat; provincially rare communities; communities with unique species assemblages; critical wildlife habitat areas; areas of forest interior; special features within evaluated wetlands; groundwater discharge and seepage areas; areas of unique regional geology; aboriginal burial grounds or spiritual sites that are considered highly sensitive to disturbance in which access and recreational uses are not permitted."

Recommendation 9:

- ELC communities FOD5 (FQI 45), SWD3 (FQI 41) and SWD6 (FQI 37.9) be NR or a clearer explanation be given as to why they do not fit this higher level of protection.
- All locations of significant species as noted on page 16 of the report should have the NR management zone, it being noted that there are probably other significant species as the surveys did not focus on identifying them as noted on page 8 and 23 of the Report.
- Box 7 on Figure 10 be included in the ESA boundary. We assume it has been left out in error as it is included in Table 21 on page 97.

NSE Response: additional explanatory text added. The boundary has been revised to include this area south of Bradley Avenue, which was left out in error.

MANAGEMENT ZONE DETERMINATION (p. 74)

How were the boundary and uniformity of ecosites justified?

NSE Response: further explanation has been provided in the report. We have reviewed all management zones and made some revisions as can be seen in the March 2015 draft.

Table 19 provides the matrix of features that are used to determine which zones apply within an ESA as defined in the Planning and Design Standards for Trails in Environmentally Significant Areas (London 2012). The matrix provides a summary of significant features that contribute to zoning categories present within each of the numbered polygons shown on Figure 7 to assist in the determination of appropriate zoning.

It is the first time the Trail Standards have been applied to the entire site. The application of the Standards by North South highlights the need to review and refine the Standard so that using them is more uniform. EEPAC disagrees with a number of the zoning recommendations because of both misapplications and the lack of guidance in the Standards. The Standards have been used by two consultants to determine Management Zones (Dillon in the Medway and now North South in the Ponds). Both have used the Standards differently to determine the Zones. This is not defensible.

Staff Response: We would note that while an update will be made, the Trail Standards were developed with a great deal of involvement from EEPAC over a two-year period. As noted above, upon their adoption by Council in mid- 2012, Dean Sheppard, on behalf of the Environmental and Ecological Planning Advisory Committee (EEPAC) - advising “that EEPAC has been involved in this process for over two years; commending the Parks Planning staff for keeping this project moving forward; advising that this is an excellent best practice standard that Londoners can be proud of; advising that it clarifies and strengthens London's approach; advising that the new standards are more transparent and play an important role in keeping people engaged; expressing concern with respect to trail closures; and noting that some trails will be closed, some trails will be rerouted; however, there will always be trails in environmentally significant areas.”

Recommendation 10:

- EPP staff meet with the Trail Standards Group to develop a common approach to Zones so that a consistent approach is adopted for their use.
- Staff proceed in implementing the June 26 2012 Council resolution (see bold, below) regarding the Standards as shown below. The Coves Plan is done and the Meadowlily CMP is in development. Meanwhile, staff have used the Standards for both this study, the Medway CMP, Kain's Woods and Sifton Bog:

e. the Planning and Design Standards for Trails in Environmentally Significant Areas BE REVIEWED by the ESA Trails Advisory Group after further application in finalizing the Coves ESA Conservation Master Plan (CMP) and developing the Meadowlily CMP, in order to provide any technical changes that would result in greater clarity of intent and purpose of the Standards, it being noted that the Standards should conform to Provincial and National standards;

Staff Response: City Staff are implementing the Council Resolution, and would note that page 3 of the Council approved Planning and Design Standards for Trails in Environmentally Significant Areas identifies that: “This document relies on the City of London Official Plan and

the best practice guidelines for developing recreational facilities within national and provincial parks (Gray et. al. 2009). It is consistent with and generally exceeds best practices surveyed from other urban municipalities in Canada and the United States (see references)".

The Staff report presented to the Planning and Environment Committee on September 24, 2012 regarding the Implementation of New Trail Standards in ESAs advised Council (implementing Clause 13. f) of the Council Resolution) that the Trail Standards are being applied to current and proposed ESA planning projects including Medway (north), Coves, this study (Westminster Ponds), the Medway CMP, Kains Woods and Sifton Bog. Staff would note that the June 27, 2012 Council Resolution recommended a total of 8 actions labelled as Clauses 13. a) through h) and the first Clause 13. a) describes Council's direction to staff: "13. a) the Planning and Design Standards for Trails in Environmentally Significant Areas, dated June 4, 2012, as submitted by Parks Planning and Design with Schollen & Company Inc. and North-South Environmental, BE APPROVED as a planning and design tool for use in the development of trail master plans and/or Conservation Master Plans for ESAs; it being noted that the word "may" be amended to read "shall" on page 5 of the Standards relating to "Process - public consultation";

Sandy Levin the current Chair of EEPAC and Dean Sheppard the past Chair of EEPAC provided the following communications which were noted in the June 27, 2012 Council Resolution:

Sandy Levin, 59 Longbow Road - advising that not everyone was at the table which leads to some misinterpretation of the work the Civic Administration is proposing; indicating that work should be completed to protect environmentally significant areas and to avoid negative impacts and degradation; advising that it is a step in the right direction to protect the environmentally significant areas; noting that this approach is consistent with the Official Plan; enquiring as to what will happen when environmentally significant areas become public lands; recommending that the Civic Administration take the appropriate planning measures to ensure that inappropriate development does not occur; requesting that a part h) be added to the Civic Administration's recommendation, which would read "the Civic Administration be requested to bring back trail standards in five years"; and recommending the budgeting of sufficient funds for implementing signage, by-law enforcement, ongoing public consultation and monitoring.

Dean Sheppard, on behalf of the Environmental and Ecological Planning Advisory Committee (EEPAC) – advising that EEPAC has been involved in this process for over two years; commending the Parks Planning staff for keeping this project moving forward; advising that this is an excellent best practice standard that Londoners can be proud of; advising that it clarifies and strengthens London's approach; advising that the new standards are more transparent and play an important role in keeping people engaged; expressing concern with respect to trail closures; and noting that some trails will be closed, some trails will be rerouted; however, there will always be trails in environmentally significant areas.

SPECIFIC CONCERNS WITH THE APPLICATION OF THE STANDARDS IN THE NORTH SOUTH REPORT

There are a variety of confusing decisions in the study that will be noted below.

A. It is troubling to see that Open Water is not included in the Standards (for obvious reasons, walking on water is usually), however, the consultants in this work have used NA2. This is unacceptable.

NSE Response: the Trail Standards were used to assess the zoning for these open water areas, treating them as “communities” under the ELC. Information on fauna was also incorporated into the assessment. Additional text has been added to describe the rationale.

Recommendation 11: An Open Water Zone should be used for this ESA and added to the Trail Standards.

B. It is also troubling to see that in most cases, where the consultants had a choice to use NR or NA1, NA1 was used in almost all cases. For example, “Zone 5” under Criteria 2. The Standards allows for a PSW to be either a NR or NA1. The explanation of NA1 is not clear in document (see p. 79 where the words say NR, but then conclude NA1). According to the Standards, page 16-17, “Decisions to define the extent of each zone and to distinguish between Natural Area Zone 1 and 2 are made for each ESA based on ecological and scientifically supported decision making.

But, nowhere in the Standards does it provide guidance to distinguish between Nature Reserve and Natural Area 1. This is a deficit in the document. Until resolved, the default zone should be Nature Reserve over Natural Area 1.

EEPAC does not support the position put forth on page 84 that individual wetlands within the PSW (Polygon 5) should be zoned as NA1. The consultant has referenced page 21 of the Trail Standards as justification.

NSE/Staff Response: The wording on page 21 that describes Nature Reserves provides differentiation between the two. “Nature Reserve Zone – For the protection of areas of highest sensitivity which sustain important ecological features and functions that meet the minimum standard of significance for one or more ESA criteria” (O.P. 15.4.1.3.). Nature Reserve Zoning includes Species at Risk habitat; provincially rare communities; communities with unique species assemblages; critical wildlife habitat areas; areas of forest interior; special features within evaluated wetlands; groundwater discharge and seepage areas; areas of unique regional geology; aboriginal burial grounds or spiritual sites that are considered highly sensitive to disturbance in which access and recreational uses are not permitted.

Secondly the chart on page 18 and 19 should be consulted noting the features with a check mark only in Nature Reserve column provide the distinction. These would include: Areas more than 200 m from any edge or any area with documented F-I or A-S breeding birds, Groundwater discharge or seepage zones, Unique species assemblages: e.g. boreal, fen, bog, prairie, Carolinian, communities with rare plants abundant or dominant in one or more strata, Habitat areas for Species at Risk Federal or Provincial. However, other criteria need to be taken into consideration. For example, though Area 9 supported Wood Thrush and Eastern Wood-pewee, which have recently been designated species of Special Concern, this was only one criterion met – the other criteria indicated that Area 9 would be zoned NA1. The weight of the analysis of significance and sensitivity indicated that Area 9 should be zoned NA1. The rationale for this is that Wood Thrush and Eastern Wood-pewee are still extremely common birds in Ontario. Though populations have been documented in decline (hence the designation as Special Concern), this does not appear to be related to sensitivity to the presence of people, as these species occur in the appropriate woodland habitat in urban areas which people frequent. They would however be affected by development, for example in the form of housing.

Polygon 5 (PSW). It is recommended that individual wetlands within the PSW be given a zoning of Natural Area 1 unless they support features that make them unusually sensitive. Provincially

Significant Wetlands are evaluated in a provincially standardized evaluation process as the “best” in the province. They are recommended for primarily a Natural Area 1 zoning with areas of Nature Reserve applied based on the location of the special features in the evaluated wetlands, consistent with page 21 of the Trail Standards document which specifically describes this as the criterion for delineating Nature Reserve zones in evaluated wetlands.

There is nothing on page 21 of the Trail Standards that supports this conclusion. The wetlands are a Critical Function Zone.

NSE/Staff Response: Nature Reserve zoning is to be applied to “special features within evaluated wetlands” as described on page 21 of the trail standards. The evaluation of a wetland as a PSW does not necessarily mean that each wetland would qualify as a PSW on its own, but that all wetlands considered together are provincially significant. The hydrological, social, biological and special features that contribute to the wetland score do not necessarily occur in each wetland, though it is assumed that all wetlands perform a supporting function.

Recommendation 12: Assuming Zone 5 refers to the “zones” on Figure 7, this zone, it should be NR in order to better protect potential populations of salamanders.

NSE/Staff Response: NA1 zoning would permit boardwalks over wetlands which would protect salamanders.

C. Table 20 on page 82 of the document is an incorrect application of the Standards. Nowhere in the Standards does it say to count up the number of check marks in the Matrix (in this case, Table 19), to determine the zone to use. Three of the people involved in the development of the Standards agree that this was not an agreed to method of making zoning decisions. Management Zone determination was to be based on the Criteria and **not** the number of Indicators, just like the City’s Environmental Management Guidelines (EMG) are used for determining if an area meets the requirements for being designated an ESA.

For example, on p. 82, for Polygon 3, the consultants have done the following:

Number of Criteria Satisfied (Table 19)			Proposed Management Zone Polygon 3
Nature Reserve	Natural Area 1	Natural Area 2	
	2	3	NA2

EEPAC argues that just counting up the check marks is not how the Standards were meant to work. The more appropriate approach would be the following:

Criteria Satisfied (Table 19)			Proposed Management Zone Polygon 3
Nature Reserve	Natural Area 1	Natural Area 2	
	Criteria 1 Criteria 2	Criteria 6	NA1

The seven criteria in the Standards are taken from the EMG in place for determining if an area is ESA. An area is ESA when it meets two of the seven criteria NOT by counting up parts/indicators of a criteria. The same approach should be used in applying the Standards.

A scientific and ecologically argued case must be built for deciding between NA1 and NA2 as per the Standards and the consultants have not done so. Another example from p. 82 is for Polygon 2 where the consultants have concluded it is NA2 by “counting check marks”:

Number of Criteria Satisfied (Table 19)			Proposed Management Zone Polygon 2
Nature Reserve	Natural Area 1	Natural Area 2	
	1	3	NA2

EEPACs position is that the appropriate way to complete the table would be as follows:

Criteria Satisfied (Table 19)			Proposed Management Zone Polygon 2
Nature Reserve	Natural Area 1	Natural Area 2	
	Criteria 2	Criteria 6	To be determined with a scientific and ecologically argued case as per the Standards

Recommendation 13: The City use a consistent methodology to apply the Trail Standards.

NSE/Staff Response: The standards are being applied consistently by consultants and staff in that polygons are not assigned a management zone based on counting the number of checkmarks. Consultants weigh the science presented with the Trail Standards document and delineate management zones using the charts on page 18 &19 and text on pages 20 to 28 as a guideline. The check marks were an attempt to represent that weighting but the table has been revised to better reflect this process.

D. We also notice errors in transposing the information to Figure 7. In Table 20 on page 82, the consultants have shown Polygon 1a as Nature Reserve. However, in Figure 7, there is a large area of 1a in the Northwest part of the ESA shown as NA1. Is the error in the labelling of the Polygon (perhaps the consultants meant Polygon 1) or should the area be NR as per the Table? Polygon 6 is also missing from Figure 7.

NSE Response: The zoning has been revised to NR.

Recommendation 14: The consultants be asked to clarify the zoning of Polygon 1 and 1a.

NSE Response: Additional explanation has been provided in the text.

Recommendation 15: The Figures in the Report be reviewed to ensure all zoning information is shown correctly.

F. EEPAC believes that there are misapplications of the Standards starting on page 79 of the report.

F.1 Under Criterion 1, the consultants' state:

“Other provincially rare wetland communities (Buttonbush swamp at the north end of Saunders Pond and Gray Dogwood thicket swamp west of Saunders Pond) are zoned as Natural Area 1 as they are less sensitive. “

According to the Standards, Provincially rare (S1-S3) meets Criterion 1 and can only have an NR Zone.

Recommendation 16: The Provincially rare wetland communities as noted above must be zoned Nature Reserve.

NSE Response: Zoning has been changed to NR for these areas where NR zoning was not applied previously – Gray Dogwood thicket was already zoned NR.

Page 79 of the report also states for Criterion 1:

Two communities at the south end of Thompson Pond, classified as Black Walnut lowland forest (8a), are considered provincially rare. These are highly disturbed remnants of this community and they are recommended for Natural Area 1 zoning meeting the criterion for Natural Area 1. Although uncommon natural communities to the London area can be NA1 or even NA2, the Standards do not say disturbed provincially rare communities are zoned other than NR.

Recommendation 17: The 8a Communities be zoned NR in accordance with the Standards.

NSE Response: these two communities are very small and their origin is in question: Black Walnut is often planted and all other vegetation layers are non-native. We still feel that zoning these two communities would not serve a useful purpose as it would be unlikely they could be restored to native communities.

F.2 For Criterion 2, the report states on page 79:

Wetlands around Spettigue Pond (area 8), as well as other PSW communities (Area 5), are high quality, distinctive, and sensitive to disturbance. They are recommended for primarily a Natural Area 1 zoning with areas of Nature Reserve applied based on the location of the special features and seepage in the evaluated wetlands, as page 21 of the Trail Standards document specifically describe this as the criterion for delineating Nature Reserve zones in evaluated wetlands. Other wetlands (Polygon 7) are considered locally significant wetlands and are generally dominated by non-native species. They are also recommended for Natural Area 1 zoning in accordance with the Trail Standards.

It makes no sense to EEPAC that an area of high quality; that is distinctive and sensitive to disturbance can be deemed Natural Area 1. EEPAC also disagrees that page 21 of the Trail Standards in any way relates to the criteria for zoning. 'Area 5,' which according to the Report is a PSW and could be either NR or NA1 under Criterion 2 on page 18 of the Standards. As pointed out earlier, the Standards provide no guidance in reconciling between an NR and NA1 (while it does for NA1 and NA2).

NSE/Staff Response: The guidance is provided in terms of sensitivity. The Trail Standards text phrases it as follows: “Natural Area Zone 1 – For the protection of areas of moderate to high

sensitivity which sustain important ecological features and functions that meet the minimum standard of significance for one or more ESA criteria” while NR zones are described as follows: NR Zone: for the protection of areas of highest sensitivity which sustain important ecological features and functions...” While NSE agrees that areas zoned NA1 are significant, they are not so sensitive that a carefully-placed trail or boardwalk must be prohibited. It should be noted that the NR zone does extend throughout the most sensitive areas of Spettigue Pond, while NA1 zoning applies only to the higher slopes at a distance from the pond. This is the correct application of MZs based on page 21 of the Trail Standards. Application of this trail standard does make sense as, for example, boardwalks are permitted in PSWs in a NA1 zone, but only permitted in the NR portion of PSW if a Special Feature overlay is applied. This is consistent with how boardwalks are placed in National Parks, Provincial Parks to allow access and education in PSW wetlands in a sustainable way.

This same point of view applies to Polygons 6 and 9. They include PIC BCR 13 species of conservation concern. This could be NR yet the consultant decides, without explanation, to zone them NA 1. Further to Polygon 6, page 84 of the report indicates that it should be NR due to the presence of Eastern Flowering Dogwood (whereas the table and text on page 82 says NA1). In any case, as noted earlier, Polygon 6 appears to be missing from Figures 7 and 8. It is important to protect this part of the ESA as this is also where the Acadian Flycatcher was sighted. According to the MNR web site, the Acadian Flycatcher only spends about four months of the year in Canada. The rest of the time, it is migrating or wintering in the tropical forests of Central America and northern South America. It is typically found in mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees. Therefore, it is likely to be using other areas of the ESA as well.

NSE/Staff Response: Additional text has been provided to further explain the zoning in this area. It should be noted that all wetlands around Spettigue Pond are zoned NR. As noted previously, the species classified as Priority Landbirds in PIF 2008 are frequently found in southern Ontario in areas surrounded by urban development, so most areas would not require NR zoning to protect these species.

To reiterate the zoning criteria: Natural Area Zone 1 – For the protection of areas of moderate to high sensitivity which sustain important ecological features and functions that meet the minimum standard of significance for one or more ESA criteria (O.P. 15.4.1.3.). Natural Area Zones include natural terrestrial, wetland and aquatic landscapes and waterscapes with moderate to high sensitivity in which a minimum level of trail development is permitted in support of low-intensity nature-based recreation.

The following trails are permitted in NA1: p. 33 Level 1 Hiking Trail, Purpose: These are natural surface hiking trails (0.5 to 1.5 m wide) or narrow boardwalks that provide access to site features of natural or cultural significance. They are designed and managed for maximum protection of the natural setting and minimum maintenance to create and maintain the feeling of being in “the wilderness”.

The SAM1 and SWT3-4 that are also shown as a Polygon 7, should also be NR because it is completely surrounded by Polygon 8 which is NR.

NSE Response: SWT 3-4 is already zoned NR. We have used the trail standards to apply the zoning so the zoning for SAM1 is appropriate for this community.

Recommendation 18: Polygons 5, 6, and 9 be zoned NR in accordance with the Standards.

NSE Response: Portions of these communities have been reviewed and zoning has been changed.

Recommendation 19: The SAM1 and SWT3-4 communities that are shown as Polygon 7, with a NA1 zone must be NR.

EEPAC also disagrees with the consultant's position regarding Criterion 2 for Polygons 2, 3, and 4. These areas, on page 79, are noted for supporting PIF BCR 13 bird species. The options for this are only NR or NA1. The Standard does not distinguish between species that are or not sensitive to disturbance which is the Report's argument for a NA2 zone. Even by the "count the checkmarks" method used, the consultants picked NA2 for Polygon 4 over NA1, even though both had the same number of check marks.

In regards to Polygon 2, p. 83 provides no rationale at all for the decision. As noted earlier, using the "count the checkmarks" method, there is one check mark for Criterion 2 as NA1 and one check mark for Criterion 6 as NA2. This begs the question – "why was NA2 selected?" If the Standards do not provide direction, an ecological and scientifically supported rationale must be given (Trail Standards, page 17). There is no such explanation in the Report.

NSE/Staff Response: further explanation has been provided; some of the zoning has been reviewed and changed to reflect breeding areas for Priority Landbirds where appropriate. Other cultural communities have been left as NR2 because this fits directly with the description in the Trail Standards for NA2: "For the protection of supporting habitat areas such as shrub thickets, old fields, younger woodlands, and plantations that contribute to diversity, connectivity, internal linkages, visual and spatial buffers, restoration opportunities and ecological integrity of the whole ESA. In general, supporting habitat areas may be expected to have lower sensitivity than Nature Reserve or Natural Area Zone 1. Supporting habitat areas, when directly adjacent to an Access Zone may provide an opportunity for introduction of trails that permit use by persons with disabilities."

Recommendation 20: A budget be determined to carry out the restoration of Polygon 2 as recommended by the consultants on page 91.

Staff Response: Agree noting that invasive, Japanese Knotweed was managed in Polygon 2 in 2014, and will be monitored in 2015.

In regards to Polygon 3, p. 83 indicates that this Polygon should be split into three. One (3a) is NR for the coyote den. In the table on page 78, the report indicates that hawthorn species exist in 3b (meeting Criterion 7) and should be zoned NA1. However, the mapping in Figures 7 and 8 is NA2. This must be corrected.

EEPAC also disagrees with the decision regarding Polygon 4. There is no clear explanation for why NA2 was picked over NA1. Even using the count the checkmarks method, there was a "tie" in the table on page 82.

Recommendation 21: Polygons 2, 3b, and 4 be zoned NA1 as they meet criteria 2 and 6 and in the case of 3b, also Criterion 7.

NSE/Staff Response: Zoning has been revised where PIF Priority Landbirds are nesting, and further explanation has been provided. For the northern Polygon 3b, where Frosted Hawthorn

was noted, the zoning was left unchanged because the most recent Middlesex flora status update (Bowles 2002) did not list this species as rare. This zoning fits with the description in the Trail Standards for NA2: “For the protection of supporting habitat areas such as shrub thickets, old fields, younger woodlands, and plantations that contribute to diversity, connectivity, internal linkages, visual and spatial buffers, restoration opportunities and ecological integrity of the whole ESA.

F.3 – Criterion 3 (p. 80) It is troubling that the ESA size criteria of 40 ha or larger is used to segment the City’s largest ESA into smaller areas. The entire ESA meets this criteria. The criteria is large size OR presence of area sensitive or forest interior birds. It is not AND nor is it forest size only.

It is also incorrect at best to say: “Though the total area of forest is >40 ha, there are no areas of that size without gaps greater than 40 m (as required by this criterion)...” Nowhere in the Standards is this limitation included. It appears in the EMG as one of three tests (only one of three is required to meet this criterion for ESA designation (EMG, page 65).

NSE Response: the criterion reads as follows: “area of forest > 40 ha (not fragmented by gaps > 40 m wide)”.

There is also confusion and lack of clarity in the concluding paragraph of this section on Criterion 3 on page 80: “The landfill meadow (Area 1) and the forests and swamps around Spettigue Pond (5, 8 and 9) contained habitat more than 100 m from the edge, meeting the criterion for Natural Area 1. Area-sensitive species do occur within the landfill meadow; however, the criterion does not allow a ranking of Nature Reserve for non-forest species.” Criterion 3 requires NR for area sensitive species more than 200 m from any edge. It is not limited to forest species. We assume that is why the landfill meadow section called 1a is NR. The EMG state on page 65 that this ESA Criterion can be met if “there is confirmed presence of one or more “breeding birds” which are either forest-interior species or area-sensitive species.” This brings us to question what species were identified in Polygons 5, 8 and 9. Area 5a has been created around the heron nest. The report has recognized that the risk of disturbance is greater with larger birds (such as herons) that are generally less tolerant than songbirds (such as robins or sparrows). The Environment Canada Migratory Birds, Technical Information publication has suggestions for setbacks (see Appendix to this document) meaning Area 5a should be larger than shown on Figure 7

NSE Response: the landfill meadow is acknowledged as habitat for area-sensitive birds of meadow habitat so this contributes to the NR zoning of this area. This will be changed on the criteria table in the report.

Recommendation 22: Area 5a where the heron nests should be larger based on the information in the Environment Canada Migratory Birds, Technical Information document.

NSE Response: The guidelines for Ontario colonies (Bowman and Siderius 1984) note that all colonies which contribute significantly to regional populations of heron species should be given full protection, and managed, if necessary, to ensure their continuance, and to minimize disturbances. It further notes that larger, denser colonies tend to supply more young to the population than do smaller, less dense colonies. We have zoned the entire polygon where the heron nest was found as Nature Reserve (in accordance with the MNR direction to protect the entire ecosite supporting the colony) as well as the polygons to the west and east, but do not feel that zoning of additional habitat would be necessary. This colony is small (one nest) and

likely does not contribute significantly to regional populations. The swamp containing the heron nest is bounded by a road and an agricultural drain, which currently form barriers to the habitat. The nest site was partially shielded from the area to the west of the drain by a fringe of trees, and there is evidence of human presence in the forest to the west. Additional explanation has been provided in the report.

MEADOW HABITAT

London is fortunate to have a meadow habitat that is unlikely to change due to the cap on the former landfill. (EEPAC is therefore somewhat puzzled by the consultant's comments on page 86 regarding the need to remove woody species). The most important issue is determining the best way to protect the nesting Bobolink and Eastern Meadowlark habitat so that these SAR birds continue to return to this site.

NSE/Staff Response: Our comment referred to the fact that, should additional trees and shrubs colonize the landfill (which in our experience can happen over time despite the clay cap) the habitat will become less and less suitable for grassland birds. Invasive woody species are particularly likely to invade landfills (for example Black Locust and Common Buckthorn) but native species can also invade, such as Trembling Aspen. Invasive Japanese Knotweed was managed in this area in 2014, and will be monitored in 2015.

It is important to minimize disturbance of nesting birds. Consideration should be given to closing trails during nesting time. As these birds do not use the exact same site for nesting year over year, EEPAC is unclear if sufficient area has been identified as Nature Reserve in the landfill meadow. The MNR's General Habitat Description (GHD) for the Eastern Meadowlark identifies the area between 10 m and 100m of the nest or centre of the approximated defended territory as Category 2 and is considered to have moderate level of **tolerance to alteration** (10 m to 60 m for the Bobolink). According to the GHD, in order to maintain breeding habitat function for the Bobolink, the entire continuous grassy patch up to 300 m from the nest or approximated centre of the defended territory is important habitat for this species.

Unfortunately, the GHD for these birds does not indicate the distance for which there is a tolerance to **compatible uses** (hikers, joggers, non-motorized vehicles) where the birds are not harassed (dogs off leash for example). The difficulty is that while an occasional hiker, jogger or even biker would likely not disturb the nesting birds, we have no current information on how many people use the nearby trails nor an estimate of the increase in use if a more substantial path is created. Bobolinks might not even nest in the same field. They are very opportunistic. They are adapted to finding nesting sites that are ephemeral from year to year. Bobolinks in particular are considered to be area sensitive. That is, they prefer a minimum of about 40 ha of habitat. If there is plenty of habitat in the general area, some might use a 10 ha patch but they would not use an isolated 10 ha patch on a long term basis.

A greater area of the landfill meadow should be zoned as Nature Reserve. The rationale given for the NA1 Zone by North-South is not supported by EEPAC. It seems that the meadow near the hospital (east and not west as stated on page 83?), was not zoned NR because a long standing trail is there (p. 83). This is not one of the criteria in the Trail Standards. The consultants indicated that the Eastern Meadowlark was singing there and was a probable nester. As noted earlier, as their nests are hard to identify, more rather than less caution is necessary. We also note that this area is labeled 1a and the other 1a area to the east is NR.

NSE/Staff Response: it is unusual for Bobolinks to nest in this area but as long as it provides suitable grassland habitat it is reasonable to assume that they will nest, despite its small size. Polygon 2 has been re-zoned NA1, as shown by the revised map.

Eastern Meadowlark is relatively tolerant of disturbance – this can be seen at The Coves, for example, where Eastern Meadowlark raise broods on a landfill where many walkers use mowed trails throughout the landfill. The tolerance of meadowlarks to the presence of people is also borne out by the General Habitat Description for the Eastern Meadowlark published by MNR 2013, which states: "The area of continuous suitable habitat between 100 m and 300 m of a nest or centre of approximated defended territory is included in Category 3 and will be considered to have a high level of tolerance to alteration. Eastern Meadowlarks depend on this area for feeding, rearing of young, resting, dispersal and concealment from predators. This area also helps maintain the function of both Category 1 and 2 habitat. Suitable habitat for this species includes but is not limited to pastures, hayfields, old or abandoned fields, and native prairies and savannahs (McCracken et al. 2013)...."

Bobolink were noted only toward the south end of the landfill, and this area should remain as undisturbed as possible.

Activities in general habitat can continue as long as the function of these areas for the species is maintained and individuals of the species are not killed, harmed, or harassed. Generally compatible:

- Continuation of existing agricultural practices and planned management activities such as annual harvest, mowing, and rotational cattle grazing.
- Hiking and non-motorized vehicle use on existing recreational trails.
- General yard work such as lawn care and gardening.

It is certainly agreed that meadowlarks are sensitive to off-leash dogs and that dogs should remain on leash within this habitat in accordance with ESA rules and by-laws, as enforced by UTRCA staff.

Recommendation 23: The meadow to the east of the hospital be zoned NR as it is habitat for a SAR species. This is because it is unlikely the City will be able to effectively close the long standing trail for breeding season.

NSE/Staff Response: Agreed that this area should be zoned NR: see revised zoning map. The Western Counties Road is identified with a Utility Overlay as a water main runs underneath.

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