1ST REPORT OF THE ENVIRONMENTAL AND ECOLOGICAL PLANNING ADVISORY COMMITTEE

Meeting held on December 20, 2012, commencing at 5:10 p.m.

PRESENT: D. Sheppard (Chair), K. Delaney, R. Gupta, Dr. W.R. Maddeford, L. Nattagh, C. Peterson, S. Sanford, G. Sass, G. Vilk, A. Youssef and Dr. N. Zitani and H. Lysynski (Secretary).

ALSO PRESENT: B. Bergsma, B. Krichker, L. McDougall, H. McNeely and M. Snowsell.

REGRETS: C. Creighton, S. Levin.

YOUR COMMITTEE REPORTS:

The Coves ESA Natural Heritage Inventory and Conservation Strategy

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1. That the Environmental and Ecological Planning Advisory Committee (EEPAC) heard a verbal presentation and received copies of The Coves Environmentally Significant Area Natural Heritage Inventory and Conservation Strategy from B. Bergsma, Ecologist Planner. The EEPAC referred the documents to its Working Group to review and report back at a future meeting of the EEPAC.

Flood Hazards

2. That the Environmental and Ecological Planning Advisory Committee received the <u>attached</u> presentation from M. Snowsell, Land Use Regulations Officer, Upper Thames River Conservation Authority, with respect to flood hazards.

Sifton Properties Limited – 1400 and 1440 North Wenige Drive 3. (3) That the Environmental and Ecological Planning Advisory Committee (EEPAC) asked that the <u>attached</u> comments, prepared by the EEPAC Working Group, with respect to an application submitted by Sifton Properties Limited relating to the properties located at 1400 and 1440 North Wenige Drive, be forwarded to the Civic Administration for their review and consideration.

City of London
– 3841
Cheese
Factory Road
and 1605 Max
Brose Drive

4. (4) That the Environmental and Ecological Planning Advisory Committee (EEPAC) reviewed and received a Notice, dated November 22, 2012, from C. Smith, Planner II, with respect to an application submitted by the City of London relating to the properties located at 3841 Cheese Factory Road and 1605 Max Brose Drive. The EEPAC noted that the possible zoning amendment for 3841 Cheese Factory Road should be "significant" woodland.

PenEquity Realty Corporation – 3130 and 3260 Dingman Drive

5. (5) That the Environmental and Ecological Planning Advisory Committee (EEPAC) reviewed and received a Notice, dated November 16, 2012, from C. Smith, Planner II, with respect to an application submitted by PenEquity Realty Corporation relating to the properties located at 3130 and 3260 Dingman Drive. The EEPAC referred the document to its Working Group to review and report back at the next meeting of the EEPAC.

Environmental Impact Study Addendum – 130, 136, 146 and 164 Pond Mills Road & 925 Deveron Crescent 6. (6) That the Environmental and Ecological Planning Advisory Committee (EEPAC) reviewed and received a Memo, dated December 5, 2012, from L. Mottram Senior Planner, Development Services, with respect to the Environmental Impact Study Addendum for the properties located at 130, 136, 146 and 164 Pond Mills Road & 925 Deveron Crescent. The EEPAC referred the document to its Working Group to review and report back at the next meeting of the EEPAC.

Draft Case Study EIS Performance Monitoring Program

7. (7) That the Environmental and Ecological Planning Advisory Committee (EEPAC) reviewed and received a draft Report prepared by Beacon Environmental relating to the Case Study EIS Performance Monitoring Program. The EEPAC referred the document to its Working Group to review and report back at the next meeting of the EEPAC.

Boler Mountain 8. (11) That the Environmental and Ecological Planning Advisory Committee (EEPAC) asked that the <u>attached</u> comments and recommendations, prepared by the EEPAC Working Group, with respect to the Boler Status Land Report, be forwarded to the Civic Administration for their review and consideration.

Tree Conservation By-law 9. (12) That the Environmental and Ecological Planning Advisory Committee (EEPAC) asked that the <u>attached</u> comments, prepared by the EEPAC Working Group, with respect to proposed improvements to the Tree Conservation By-law, be forwarded to the Civic Administration for their review and consideration.

10. That the Environmental and Ecological Planning Advisory Committee (EEPAC) received and noted the following:

3rd Report of the EEPAC

(a) (1) the 3rd Report of the EEPAC from its meeting held on November 15, 2012;

4th Report of the ACE

(b) (2) the 4th Report of the Advisory Committee on the Environment from its meeting held on November 7, 2012;

Trails Advisory Group Minutes (c) (8) the Trails Advisory Group Minutes from its meetings held on November 19 and November 28, 2012;

Provincial Policy Statement 5 Year Review – City of London Response (d) (9) an information report, dated November 26, 2012, from the Managing Director, Planning and City Planner, with respect to the City of London response to the 5 Year Review of the Provincial Policy Statement;

Planning Division 18 Month Work Program

(c) (10) an information report, dated November 26, 2012, from the Managing Director, Planning and City Planner, with respect to the Planning Division 18 month Work Program;

Upper Thames River Conservation Authority – Watershed Report Cards (d) (13) a communication, dated November 13, 2012, from N. Pond, Office Manager, Upper Thames River Conservation Authority (UTRCA), with respect to the 2012 Upper Thames River Watershed Report Cards; and,

Environmental Assessment Projects (e) (14) a Municipal Council resolution adopted at its meeting held on July 26, 2010, with respect to Environmental Assessment projects that impact the natural heritage system and a list of environmental assessments and status, as of November, 2012.

Next Meeting

11. That the Environmental and Ecological Planning Advisory Committee will hold its next meeting on January 17, 2013.

The meeting adjourned at 7:29 p.m.



2.2.7 Specific Natural Hazard Areas

2.2.7.1 Riverine Flood Hazards

2.2.7.1.1 Description of Riverine Flood Hazards

In the case of riverine flood hazards, the Province has established the minimum Regulatory Flood Standard to be the 1:100 Year Flood. Although the 100 Year (1 % risk of occurrence in any given year) is established as the minimum, Conservation Authorities are encouraged to adopt a Regulatory Flood Standard for their area of jurisdiction which is in the 1:250 range (0.4 % risk of occurrence in any given year).

The Regulatory Flood Standard for the UTRCA is the 1937 Observed Flood. The UTRCA received approval from the Minister of Natural Resources to use this standard in an agreement dated 1989 (See Appendix 9.1.3). As previously indicated, the probability of occurrence of the Regulatory Flood is calculated to be approximately 1:250. The flood levels for the Regulatory Flood are calculated using mathematical models which consider historical stream flow, precipitation, climate, watershed conditions, watercourse and flood plain characteristics, and flood control systems across the watershed. These mathematical models include HEC II or HEC RAS Flood Plain Modeling.

The UTRCA considers the threshold for Provincial Interest *flooding* to be a 125 hectare drainage *area*. In this regard, the policies for Riverine Flood Hazards that are discussed in this manual are generally only applied to those cases where the *drainage area* of the *watershed* exceeds 125 hectares. *Flooding* from smaller *drainage areas* is generally considered to be local interest *flooding* and the management of these areas is left to the local municipalities. It should be noted that no minimum *drainage area* is applied to erosion hazards, watercourse hazards or *wetlands*.

The UTRCA provides technical assistance to municipalities in dealing with the management of local *flooding* issues. In those cases where the flood flows from a *drainage area* of less than 125 hectares are significant and affect multiple properties, the Authority, in cooperation with the municipality, may apply *flood plain* hazard approaches to those specific *drainage areas*.



2.2.7.1.2 Flood Hazard Management Approaches

The Authority implements various approaches for managing flood risk as follows:

1. One Zone Policy Approach whereby the Regulatory Flood Plain is considered to be one management unit - the Floodway. This approach is typically applied in rural areas and unserviced settlement areas. Development and site alteration in the Floodway is generally prohibited or restricted.

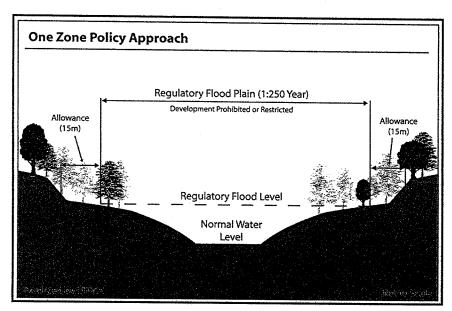


Figure 2-1

- 2. **Two Zone Policy Approach** is typically applied in serviced urban areas. It separates the *flood plain* into two main components:
 - a) The *Floodway*: The portion of the *flood plain* that is characterized by deeper, faster moving water in a flood event. The *floodway* is the more hazardous part of the *flood plain* and *development* and *site alteration* is generally not permitted.
 - b) The Flood Fringe: The portion of the flood plain that is characterized by shallower, slower moving water in a flood event. The flood fringe is a less hazardous part of the flood plain and development and site alteration may be permitted in this area subject to satisfying specific conditions.



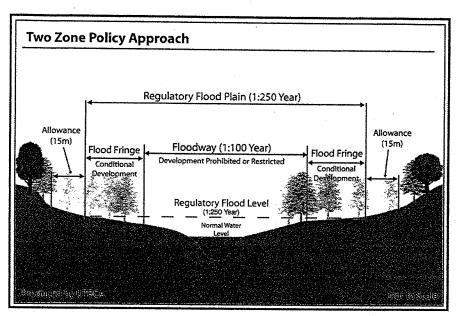


Figure 2-2

3. Special Policy Areas are specifically identified areas that are not protected to the minimum provincial standard. The area must be a viable community that feasibly cannot be protected from the risk of flooding. Through the implementation of a Special Policy Area, the Provincial government may permit certain activities that do not meet the minimum Provincial standards. Special Policy Areas must be supported by the Municipality and the Conservation Authority and must be approved by the Ministers of Natural Resources and Municipal Affairs and Housing. Specific policies and considerations that may be established for a Special Policy Area include:

no basements, floodproofing to the maximum no new severances - no new lots no intensification of use preference for residential conversion to commercial type uses no day cares, hospitals, nursing homes etc.



2.2.7.1.3 Riverine Flood Hazards - Determination of Limits

The following requirements are used to identify the limits of riverine flood hazard areas:

1. Regulatory Flood Plain – its limit must be delineated to the satisfaction of the UTRCA. The preferred method of delineation is based on detailed flood plain mapping calculations which incorporates site specific elevation data and catchment specific flow data and variables. In cases where detailed flood plain mapping is not available, the UTRCA reserves the right to require a proponent to determine the flood plain limits using a method that is acceptable to the UTRCA.

Detailed *flood plain* mapping has been completed for many areas of the Upper Thames River *watershed*. The mapping is generally available for urban areas, main branches of the watercourses and local areas where specific studies have been provided. For the remainder of the *watershed*, the UTRCA has prepared estimated flood lines in accordance with the methodologies documented in the Determination of *Regulation Limits*, UTRCA, March 2006 (Appendix 9.1.7). The estimated flood lines are to be used at a broad planning level and depending on the type of *development* or *site alteration* proposed, the Authority may require a detailed *flood plain* calculation to be undertaken.

- 2. The Floodway In those limited cases where a Two Zone Policy Approach is applied, the extent of the floodway may be determined using one of the following methods:
 - a) The land below the 1:100 Year Flood Plain elevation
 - b) A detailed hydraulic *floodway* analysis for a logical reach of the subject watercourse
- 3. Special Policy Areas In those limited cases where a Special Policy Area is applicable, the limits of the Special Policy Area and policies must be supported by the UTRCA and must be approved by the Municipality, the Ministry of Natural Resources and the Ministry of Municipal Affairs and Housing. In cooperation with the municipality, the UTRCA may identify potential Special Policy Areas and implement interim policy requirements for these areas while the formal Special Policy Area review and approval process is underway.

2.2.7.1.4 Riverine Flood Hazards - Allowance

A 15 metre Allowance is applied to Riverine Flood Hazards.



EEPAC Review

Review of: Ballymote - 1400 & 1440 North Wenige

as prepared by AGM; dated November 8, 2012

Reviewer: Gabor Sass

Water Balance

The proponent was asked to provide a water balance with respect to the water received by the wetland but none was given. The actions proposed do speak to the issue concerning the water balance but some numbers still need be put on the table. How much water is the wetland receiving from the subject site via surface and subsurface pathways? How will this change after development?

Recommendation 1: A water balance needs to be provided based on long-term precipitation, runoff coefficients estimated for the area before and after development.

Trench location

Given the soil pit information, the trench locations should be revised. None (or deeper) is necessary around Pit 1 but the trench should be continuous between Pits 3 and 7.

Recommendation 2: Infiltration trench location needs to be modified to reflect groundwater position. A continuous trench is needed one meter above groundwater table.

Stormceptor

It is not clear where Stormceptor outlet to wetland will be located. Are they going to discharge into infiltration trench? If so, trench may have to be resized to take in extra water. Also it is not clear whether model STC 300 or 750 will be installed. Modelling is done on 300 but report is saying 750 will be installed.

Recommendation 3: Show Stormceptor locations clearly on map. Locations should be above infiltration trench to provide recharge function. Resize trench to allow for extra water to infiltrate.

Recommendation 4: Model STC 750 or higher should be installed to guarantee at least 80% TSS removal.

Big picture

It is not clear how rest of development outside of subject lands, will discharge and recharge into wetlands. There is no indication given of how the runoff from the adjacent development parcels will be dealt with. Will they be channeled into the infiltration trench currently proposed? If so, it may have to be resized.

EEPAC Review

Ballymote - Hydrology

Recommendation 5: Provide some information on runoff from adjacent development parcels. They may impact the sizing of the infiltration trench.

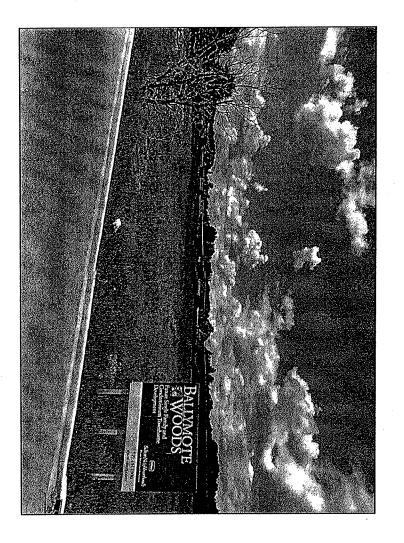
Other ways to keep natural hydrology intact

No mention of on-site alternatives to maintain hydrological processes intact. This could be done through maintaining, enhancing perviousness of roadways, parking lots, and yards.

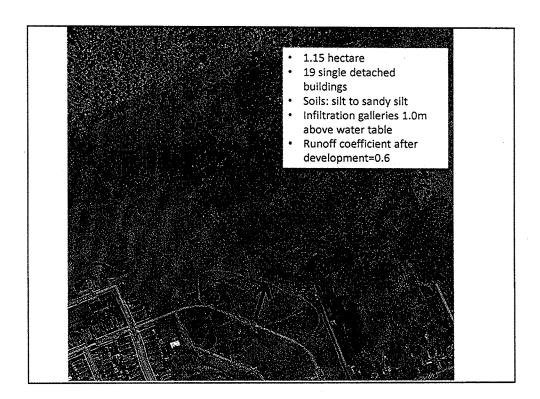
Recommendation 6: Development proponent (and their consultants) are well versed on the specific natural area(s) in or around which they are developing. Proponent should be required to create and develop educational brochure which covers matters related to the importance of hydrology and ways to maintain it by the private property owners on a voluntary basis. Proponent should also consider the installation of pervious surfaces.

/end





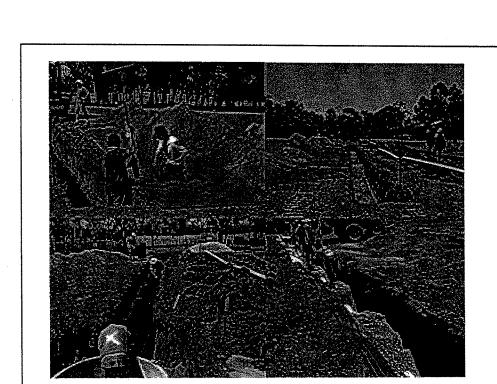
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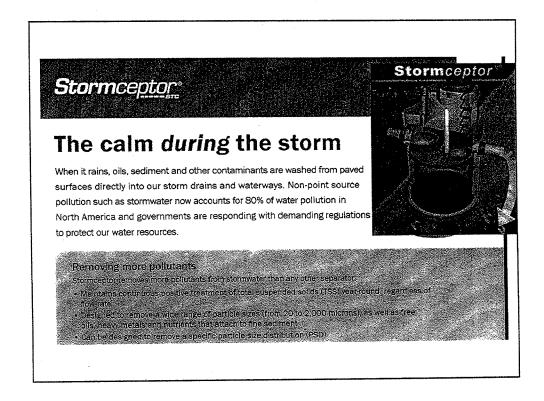


Issues

- Water balance
- Erosion and sediment control plan



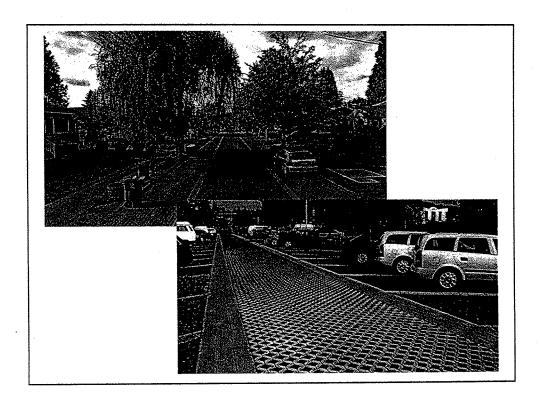




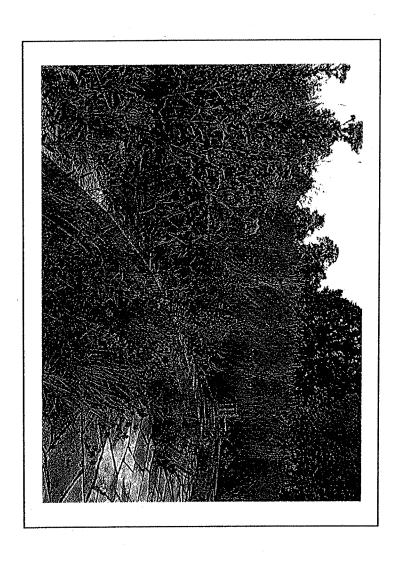
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EEPAC's comments

- Water balance is still not provided
 - How much water goes currently into wetland from subject lands (surface vs subsurface)
 - How much water is projected to go into wetland from subjects lands after development (surface vs. subsurface)
- Location of outlet of Stormceptor not clear
- Not clear which model of Stormceptor will be installed
- No mention of on-site vegetation, pervious surfaces







2012-12-21



BOLER STATUS LAND REPORT

Reviewed by: K. Delaney, S. Levin, L. Nettagh, C. Peterson G. Sass (review of fluvial geomorphology to follow)

1. Eastern Meadowlark (page 24)

Found off site. Question is how will habitat be protected as required under the Ontario Endangered Species Act when the adjacent land (west of Wickerson Road) develops as the city does not have a system for making notes on property?

Recommendation: Planning Division create a system for tracking these data for undeveloped properties. At a minimum, a note should be created in existing databases for the area.

2. <u>Page 31</u> – recommendation does not include in the ESA the FOD 5-1 or the adjacent FOD 5-3 community east of the present ski-hill. FOD 5-1 is noted as not having much Buckthorn and no buckthorn is mentioned in the write up of FOD 5-3.

The final paragraph on page 31 states

"Other woodlands located to the north of the proposed ESA boundary extension were not evaluated as significant woodlands due to existing and proposed development for active recreation, primarily downhill skiing"

This is inconsistent with the very thorough vegetative community studies found on pages 8-13 in the report where the woodlands in questions are clearly listed.

It is unclear as to why what appears to be a significant woodland is to be developed. Page 8 notes the amount of tree cover (> 60%) and understory vegetation (> 60% of the community) with only occasional occurrence of Buckthorn. According to the Boundary Delineation Guideline (# 3 and 9a), the FOD5-1 and FOD5-3 communities noted above should be part of the lands added to the ESA. They are clearly linked between the Dingman Creek ESA south of the road, the woodlands north of the road recommended for inclusion as ESA, and all of the significant woodlands in the central and east central parts of the study area, including Westwood Woods (page 26).

At the bottom of page 31, it appears North-South does not include these areas in the ESA because "of existing and proposed development for active recreation, primarily downhill skiing." It is unclear if such a use is permitted in the OS2 zone. However, it is clear from the data collected that these communities are significant woodlands and when the boundary delineation guidelines are applied, should be included as part of the ESA.

Recommendation: a. The FOD 5-1 and FOD 5-3 communities east of the present ski hill be included in the ESA. b. Alternatively, the City utilize its woodland acquisition fund to acquire this part of the ESA. The cost should be reasonably inexpensive given the present zoning (OS2).

Recommendation: There are no buffers shown for the proposed ESA or Significant Stream Corridor. as per the City Guidelines. EEPAC recommends that the appropriate ecological buffers be applied to these features and be shown on a map, as prescribed by the City Guidelines. EEPAC anticipates this buffer to be in the range of 10-30 meters.

3. <u>Bike trails</u> – there are a number of bike trails already in areas that have been identified as sensitive (woodland), although not added to the ESA. No protection measures are proposed. The problem seems largest in community FOD7-4 (page 10) but also appears to be in or near community FOD 6-2 which is listed by NHIC as a vulnerable vegetation community (page 9). To hope for protection, these areas need to become city owned and come under the management of the UTRCA. Otherwise, there will continue to be inappropriate uses in the ESA. As pointed out on page 31, despite the existence of managed bike trails on Boler Mountain property, the city owned lands south of the storm water pond and on the private lands located on the west side of the access road "are impacted by well used campfire rings, unregulated mountain bike trails and BMX bike jumps, forts constructed from scrap wood, etc."

BMX jumps and party spots – Figure 2 indicates that a BMX bike jump and a party spot were found in the forested vegetation community FOD6-2. On page 9 of the Land Status Report, FOD6-2 is described as vulnerable vegetation community. Page 31 describes the negative impacts that these and other activities have had on the understory and identifies the need for restorative efforts. However, there are no recommendations listed and no reference to who is responsible for carrying out and monitoring the restoration.

Question: Who will be responsible for the restoration and monitoring? What types of restorative measures will be implemented?

Page 31 of the report states that an "active restoration program is required" for areas that have been negatively impacted by unmonitored use.

Question: Where are the details of this restoration program and who will be responsible for implementation and monitoring?

Recommendation: Devise a restoration program and identify individuals who will be responsible for the implementation and monitoring.

4. Plans for proposed walking and cycling pathways are described in detail on page 32 of the report. However, the proposed pathways are not clearly marked on any of the accompanying maps. Hydrologic characteristics seem to be missing. These characteristics can help to explain the rationale for identifying and delineating ESA Management Zones. According to the Planning and Design Standards for Trailers in Environmentally Significant Areas, criterion 4 requires understanding of hydrologic characteristics.

Recommendation: Include the proposed pathways on one the maps, preferably one with the proposed ESA boundary and vegetative communities overlaid.

Recommendation: Use hydrologic characteristics to review the proposed Management Zones.

5. <u>Recommendation 6 on page 38</u> states that the Boler Mountain recreation area will continue its programming of compatible recreation use based on the environmental stewardship, protection and management of natural areas and this may include expansion in to areas recommended for restoration.

This is seems to be inconsistent with what was previously stated in the report. The areas of proposed restoration are in "vulnerable" areas that have already experienced negative impacts as a result of human interference. These areas don't even have restoration plans in place yet. How can they be used for recreation if they are in vulnerable areas that need restoration?

Recommendation: A. The Report to be revised to include a recommendation of who will close and remediate bike trails in areas proposed to be designated ESA. Or B. that Boler Mountain be required to prepare and implement such a plan as part of the approval to proceed with its plans.

Recommendation: Parks Planning staff add this portion of the Dingman Creek ESA to the management work done by the UTRCA to help maintain the restoration work undertaken in the previous recommendation.

6. Stream Reaches - Page 34

The report points out that determining an erosion threshold requires additional field investigation in reaches DCT-1 and DCT-4. These reaches are susceptible to changes in flow regime. This information is critical for future storm water management plans.

Recommendation: The data from this study be provided to the stormwater management group at City Hall for its use in the Environmental Assessment and detail design work for stormwater management that effects these reaches.

7. Requested Clarifications

page 2 indicates some areas were off limits to the study. There is no explanation why.

Recommendation: City staff determine what areas were not accessed and have the consultant add data from these areas as appropriate.

On page 18, the consultants seem to diminish the existence of two provincially rare floral species because they are presumed to be planted. Why does it make a difference that it is planted?

8. Missing elements in the SLR:

Breeding Bird Inventory (page 5) - only done at three points over two year period (May 24, 2012, July 1 and 12, 2011). City Guideline for EIS and Status Land report (page 44) says at least 4 survey points. Also is it unclear whether one day at each time is sufficient is unclear. The timing of the surveys suggest an under reporting of confirmed breeders (only 2 found out of 49) as possibly probable breeders (18 found) as the CWS recommends that breeding bird surveys be done between May 24 to June 10th. Only one survey was done in this time period, and only on the very first available date (the other two were done in July). Given the number of species noted (49) in such a short time frame, it seems clear this is a significant breeding bird area (although the SLR does not provide comment on whether or not this is or is not a large number for London).

Recommendation: Add fall migration survey

9. <u>Flora – page 16</u>

The report notes that 70% of the 342 species of vascular plants documented are native. This compares to the 73% found by Kaiser in 1983. Given the increase in non-natives over the past 30 years, we suspect that 70% is an exceptionally good result.

Recommendation: The report include a more recent comparator and city staff determine a more up to date comparator to be used and noted in future EIS and SLR work.

10. <u>Significant Steam Corridor</u>

It is unclear if the corridor is 30 m on each side of the watercourse that has been determined to be significant.

Recommendation: The significant stream corridor be identified on Schedule B-1 and be 30 m on each side.

11. Maps:

Should show the topography Official Plan designation Ownership

Use of similar colours and shapes makes it difficult to read the otherwise helpful map on page 15 Proposed pathway (page 32) should be shown on a map

Electronic copies should be provided in future to make review and comment easier. If not in electronic form, at least larger than $8\,1/2^{\prime\prime}\,x\,11^{\prime\prime}$



To: Chair and Members, EEPAC

Review of: Tree Conservation By-law dated July 25, 2011

Reviewers: S. Levin, D. Sheppard, G. Vilk, N. Zitani. December 8, 2012

PROPOSED IMPROVEMENTS TO BYLAW, PROCESS, AND ASSOCIATED FORMS:

<u>Fundamentally, EEPAC does not support tree cutting in Environmental Protection Areas.</u>
<u>This is an agricultural practice inappropriate in areas that are part of the City's Natural Heritage System.</u>

1) **Definitions** (italicized are proposed changes)

- a) "Person" defined as any individual, association, partnership, corporation, firm, agent or trustee and the heirs, executors or other legal representatives of a person to whom the context can apply according to law.
- b) "Critical root zone (CRZ)" is established as being 10 centimeters from the trunk of a tree for every centimeter of trunk DBH. The CRZ is calculated as DBH X 10 centimeters.
- c) "Tree" means.....including its root system determined by its critical root zone that has....
- d) Environmental Protection Area In recognition that not all natural heritage features are always properly
 reflected by way of zoning on Schedule A, the definition of Environmental
 Protection Area should include any natural heritage feature designated on
 Schedule B. Although all effort is made to ensure congruence between the
 Schedules A and B, total and full congruence has proven elusive and has
 resulted in the loss of woodlands. This situation can be avoided in this by-law
 by also referencing features on Schedule B.

2) Prohibition

- a) To further ensure no tree cutting activities are undertaken in the absence of a Permit, onus should be place on tree cutting companies (or persons) to verify that a Permit is in place before they begin to cut. This can be considered a level of professionalism and due diligence required of tree cutters.
- b) Bylaw should also specify that trees of specific size or species or age, regardless of their location across the City (i.e. outside EPAs) shall not be injured, destroyed or removed without a Permit. This would provide some level of protection for our most important, oldest and uncommon trees.
- c) City should have ability to deny issuance of a permit to persons who have contravened this bylaw.

3) Permit Application and Issuance

a) Application should include a list of materials to be submitted to the City in support of the application. Checklist format may be best format. This info is important for public perception and understanding as well



- b) Needs to clearly differentiate between the tree marked area and the area to be cut. The proposed cut area should be mapped using a Global Positioning System (GPS) and ground marked. The GPS coordinates corresponding to the propsed area to be cut should then be indicated on the issued Permit.
- c) The natural heritage designation of the land should be included in the application, eg. Environmentally Significant Area (no use of acronym ESA we know what it means, the public does not), Potential Environmentally Significant Area, Significant Woodland, etc.
- d) Zoning of the land should be specified and mapped if containing multiple zones.
- e) Mapping of proposed cut area should clearly delineate ELC classifications and possibly supply completed ELC sheets. This would provide more focus on the ecology of the area, rather than the sawlog inventory.
- f) Applicant should submit hard and digital copies of completed application and ancillary documents. Issuance of a Permit 6.1 (6)(d) Clarification should be made that water pollution can include an increase in water temperature.
- g) It is not clear what purpose the "Long Term Management Objectives" serves
- h) No permit should be issued without a management plan being submitted as part of the application.
- i) Many of the items listed in Schedule A should be mandatory for every application. Mandatory items should be differentiated from those required on site specific basis although the following should be required of all applications:
 - tree species composition and distribution across the site (Ecological Land Classification of treed communities);
 - tree condition (e.g. stem and crown quality, presence of insects or disease) coded as AGS or "acceptable growing stock" or UGS or "unacceptable growing stock";
 - tree age, diameter, size (DBH);
 - stand height, density, volume;
 - regeneration;
- j) Application should include reference to or information from previously issued permits. The City procedure must include reviewing previous applications, permits and restoration outcomes.

4) Harvest Plan and/or Conditions

a) Needs to consider the ecology of the site, not just the lumber potential. It is not sufficient that the tree cutting activities by in accordance with Good Forestry Practices. The Provincial document, Good Foresty Practices in Southern Ontario Forests (which is over 400 pages), is clear that the first principle of Good Forestry Practices is protection and maintenance (page 4 of the document). Section 3 talks about prescriptions and discourages clear cutting in Southern Ontario. The cutting activities should also be specifically required to be in accordance with the overall and/or specific management goals (or nature) of the area to be cut. For example, cutting within an ESA should have regard for the features of the area which qualified it as an ESA. Goals for ESAs may include preservation of habitat, minimizing human



disturbance, maintaining ecological diversity through maintaining tree age diversity, preserving specific seed producing specimens, etc.

- b) Must leave large old trees as seed source and not be prioritized for removal because of their lumber potential. Perhaps plan must specifically identify the largest and oldest trees and indicate that they are being retained.
- c) Vigorous pole size and smaller trees should be targeted for retention
- d) Plan needs to be segmented according to the on-site variation in vegetation communities
- e) How do we ensure no cutting is executed during breeding bird season and ensure cutting is done when the ground is frozen to minimize damage by heavy equipment? This is not mentioned in bylaw. Bylaw should include a basic list of conditions/expectations for timber cutting in EPAs. If not included in the bylaw, how do we ensure it is considered? A list would also help convey the City's basic expectations not only to applicants but also to members of the public. Specifying the fundamentals of Good Forestry Practice within the bylaw would help ensure that minimums are being met and would help avoid divergent interpretations of what comprises Good Forestry Practices.
- f) Plan must include use of scientific species names Using Kains Woods as an example, the application (and the permit) stated the name, "Hawthorn". Hawthorne is the common name for the genus "Crataegus" and there are 39 species in Ontario (Phipps and Muniyamma 1980). Some Hawthorn are invasives while others are native and threatened. Common names are acceptable as long as they are used in addition to, or secondarily to scientific names.
- g) The MNR has a Harvest Plan and Inventory Form it recommends at page 31 of this document:

 http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@forests/documents/document/mnr_e000231.pdf
- h) Page 28 and 29 of the above document also has wildlife inventories that would make sense to require for any tree cutting in an EPA.
- i) Harvest Plan should be clear as to the intended use of the lumber to be harvested since this informs what trees have what degree of value in a near death or dead condition, which in turn informs the best management practice scope of the current harvest.
- j) When harvesting EAB infected ash, the harvest plan should include the destination(s) of the harvest logs. Best practice would include ensuring that EAB infected ash is always sent to a geographical area of higher infestation than the harvest location and certainly not go to an area of lower infestation.
- k) One reason for limiting basal area removals is to protect remaining species from windthrow, sunscald, etc. This may include leaving some ash to fulfill this function.
- 1) Harvest plan must include identifying the ecosystem trajectory and include measures to achieve a stated goal of increasing biodiversity.



5) Permit

- a) Should indicate if Schedule C Security Agreement is in use for this permit.
- b) In redesigning and deciding content for the actual Permit, the singular focus should be realization that this is only piece of paper any workers on the site will likely see. If we want them to be aware of expectations and restrictions, then they all need to be stated on the permit, even if that means attaching a page to the permit. The same is actually true for the public. We should empower public with the same information. In Durham Region, for example, for applications that seek to Clear Cut an area of Woodland that is greater than 1 hectare in size, a public meeting before the Regional Planning Committee shall be required, and Regional Council approval shall be required before the Commissioner will be authorized to issue the Clear Cutting Permit.
- c) Where do the Conditions on the Permit come from? There seems to be no standard process for selecting these. Some of these are absolute by-law standard requirements (but not all by-law requirements are on the permit) and others seem to have no clear source. Permit Conditions should be differentiated into Standard and Site Specific.
- d) Current permit does not include reference to "Good Forestry Practices" being required.
- e) Permit should include where to find the Tree Conservation ByLaw. At end of document, provide the following information Good Forestry Practices Ministry of Natural Resources Ontario http://www.mnr.gov.on.ca/en/Business/Forests/2ColumnSubPage/241106.html Tree Conservation By-law C.P.-1466-249 http://www.london.ca/By-laws/PDFs/tree conservation.pdf
- g) GPS coordinates of the proposed cut area to be indicated on the posted permit.

6) Permit Validity and Renewal

a) Section 6.4 should be revised to clarify: A permit that is no longer......to have expired and all work must cease immediately until such time when the permit is renewed.

7) Stop Work or Cancel Permit

- a) City should have more ability to stop work or cancel permit including:
 - i) Incomplete application
 - ii) Information deemed to be incorrect (at any time)
 - iii) Permit issued in error
 - iv) Changed available information or circumstances
 - All above items are based on information from the City of Ottawa
- b) Section 10.1 should more clearly include that "all work must stop"

8) Remedial Work

- a) Section 12.1 (2) revised as: Costs include interest calculated at a rate of fifteen (15) per cent *compounded monthly*, calculated for the period......
- b) This section should explicitly include rehabilitation to watercourses both on site and downstream.



- c) Ecological function, diversity, net environmental gain, etc should be stated as objectives of the remediation (as opposed to simply replacing mature trees with the same number of saplings)
- d) The City should have the ability to levy additional payments from the owner in order to achieve environmental net gain. For example, a cut site may be replanted, restored, renaturalized to the greatest extent possible and this will still not come even close to replacing what was lost. The additional cash levy could be used for the City to ecologically enhance other areas so that a net environmental gain can be achieved.
- e) Ongoing site maintenance (weeding, removal of invasive alien species, etc) should be recognized as a part of remediation required by the General Manager. Also, provision must be made to avoid the situation where the site is replanted, renaturalized etc. and then after the passage of months or years, all the newly planted stock has died due to drought, grass mowers or snippers or whatever. It must be ensured that remediation efforts are ecologically successful.
- f) Ongoing monitoring and reporting of remediation success by the proponent should be required.

9) Restoration Plan

- a) Need requirement to ensure restoration plan is in place before permit is issued
- b) Needs to include clear consideration of the management objectives of the EPA
- c) Need set frequency measurement and reporting of restoration works
- d) All plantings should be required to be from local seed source.

10) Power to enforce Restoration Plan

- a) Past experience has shown that land owners can avoid completing restoration works by selling their property. The City then has no ability to enforce the restoration plan because i) offender cannot execute on lands he does not own and ii) new owner is not the offender. We believe EEPAC previously asked Legal to investigate the ability of the City to register the remediation order on title but we never heard a response. The City should register remedial and restoration work orders on title to ensure they accompany the land during any sale. Further, the sale price of the land would be appropriately affected by the order registered on title.
- b) Southwinds cutting is a good example of how slowly we are able to accomplish restoration. What lessons can we learn from that situation?

11) Penalties

- a) In addition to a penalty levied on the owner, a penalty should be levied on a tree cutting company and persons who have undertaken cutting activities without verifying they are doing so within the context of a valid Permit.
- b) In setting determining the applicable penalties, consideration should be given to the value of the timber which may be realized by the offender. Penalties should outweigh the value of the lumber.



- c) Any lumber harvested in contravention of this by-law should be confiscated by the City in order to avoid the situation wherein the money to be earned from the illegal harvest far outweighs any penalties, fees and remediation imposed by the City.
 - i) If confiscation is not legally possible, then the appraised value of the lumber should be added to the penalty imposed by the by-law.
 - ii) The lumber income can be used by the City for ecological enhancements at any site.
- d) Clarify Section 14.4 (b) ... considers appropriate, including ordering the person to rehabilitate at the person's expense the land or to plant or replant trees in such a manner....
- e) The maximum penalty should be raised to \$100K. Durham Region's by law states: Any person who contravenes any provision of this By-law is guilty of an offence and upon conviction is liable to a fine of not less than \$500 and not more than \$100,000.

12) Enhancing transparency and managing public expectations

- a) Is it possible to post all current Tree Cut Permits online? This would help public know if the cutting is legal and what conditions the cutting must be adhering to.
- b) Some other jurisdictions post notice of Tree Cut Permit Application for environmental areas in newspaper.
- c) In addition to the Permit being posted on site, a more permanent on-site sign should be required, like the Possible Land Use Change signs in use. This would be very helpful to neighbours and public.
- d) The City needs to clearly advertise how citizens can play their role in reporting possible by-law violations. After hours reporting procedure should be clearly advertised during the bylaw implementation and on an ongoing basis on the City website.
- e) All documents submitted as part of the application should be stated in bylaw as being part of the public record.
- f) Bylaw should also state that the Permit itself shall be available to the public.

13) Post Harvest Reporting

- a) Actual harvest inventory to compare to proposed. Also to check that appropriate permit fee was paid.
- b) Need to ensure that trees planned for retention were in fact retained.
- c) Schedule B item o) should not be an optional item

14) Wildlife Trees

a) We need a way of ensuring that not every dead or dying tree is removed. Can we link this to the Wildlife Tree 'objectives' from ESAs like WMP?

15) Invasive Alien Species

a) As invasive alien species are a constantly growing problem in our natural areas, every permit should include management of invasive alien species,



including removal, avoidance of new introductions, and avoidance and removal of regeneration.

16) General

- a) Bylaw should be designed and formatted to provide direct guidance, requirements and interpretation for each section of the Permit Application. This will help ensure applicants, issuers and the public all have easier and clearer understanding of what is required in a well completed application.
- b) Protection of Woodlands All woodlands greater than 1 ha should be protected by the tree cutting bylaw. The value of woodlands have been clearly established and it is counterproductive to introduce a tree cutting bylaw that does not protect all woodlands. This approach has already been implemented in other jurisdictions (e.g. York and Durham Regions). The City of London Significant Woodland Evaluation Guidelines also clearly recognize that woodlands less than 4 ha may be significant for multiple reasons.
- c) Inclusion of Trees Installed or Retained under Site Plan Approval Trees that have been installed or retained through the Site Plan process should also be subject to the permitting process. These trees have already been the subject of conscious decision and approval regarding their importance and the City should be informed if they are removed and should have the opportunity and power to implement prevention or mitigation measures.

17) Kains Woods issues

- a) From available documentation (e.g. Permit App and Permit Issued), it is not easily understandable exactly what area has been approved for cutting. This fuels public mistrust.
- b) Some docs infer an area near the wetland was not approved for cutting. This is also not clear in either Permit Conditions nor application/permit mapping.
- c) Background does infer that a condition of permit was to avoid spring and breeding bird season. Permit Conditions do not include this. There seems a weak link between staff discussions with applicant and the final legally enforceable permit conditions.
- d) It seems unlikely that the exact same cutting and management regime is appropriate to an entire 10 ha approved cut zone. Greater differentiation in techniques, end goals and restoration should have been required.
- e) The required basal herbicide application to buckthorn did not occur. Apparently, verbal (perhaps written) permission was given by staff to not complete this Permit Condition. The details of the reasoning for this change and its approval do not seem readily available, especially to public. Documentation requirements for any changes to the Permit need to be more robust not only for the sake of thoroughness, but also to manage public expectations since the public has access to Permit Conditions.
- f) Clearly the 1/3 basal area removal limit of the bylaw was not followed in this case as the section of the application form, "Total Basal area to be harvested" was left blank. Any exemptions of bylaw requirements should be specifically



identified and reasoned in the permit. The public expects bylaw conditions to be followed.

18) Schedule D - Permit fee

- a) In the face of large scale ash tree removals due to EAB, the complete fee exemption for diseased trees should be revised. The City still incurs costs associated with the permitting system, especially when the number of trees to be removed is significant. The \$0 fee should remain in place but only for 10 or less trees. Otherwise, regular fee schedule should apply.
- b) Inspection Fee for non-compliance should be increased. Staff time to prepare and defend any claim of non-compliance is far greater than \$250.
- c) Inspection Fee for Non-compliance It should be clarified that the inspection fee is applicable if either a Order to Discontinue or a Work Order is issued

19) Revisions to Schedule E1

a) Correct the intro sentence to state: "The following list includes those woody non-native species that are invasive alien species and may be removed without a fee for permit".

The following revisions are needed to the species information:

- b) "Leguminosae" is the old family name, change to "Fabaceae"
- c) Correct spelling: Simaroubaceae
- d) "Aceraceae" is the old family name, change to "Sapindaceae"; add "Aesculus hipppocastanum" horsechesnut T
- e) Under Elaeagnaceae add, "Elaeagnus umbellata", Autumn olive T/S
- f) Add the family: Adoxaceae and under it add, "Viburnum opulus" European highbush cranberry, S.
- g) Under Pinaceae, add "Picea abies" Norway spruce T.
- h) Under Oleaceae, add "Ligustrum obtusifolium", border/Japanese privet, S and "L. vulgare", common/European privet, S
- i) Under Caprifoliaceae, "Lonicera tatarica" complex ("L. maackii, L. morrowii, L. xbella")

20) Revisions to Schedule E2

- a) Intro sentence should read: "Native species not to be destroyed or injured"
- b) This list should put the scientific names under the plant family names, to be consistent with E1.
- c) Add "Celtis occidentalis" hackberry, S4
- d) Under "Gleditsia triacanthos" honey locust, it should be noted that many trees are thornless (lacking thorns on trunk and branches) cultivars, G. triacanthos var. inermis

References cited for Revisions to E1 and E2

J.B. Phipps and M. Muniyamma. 1980. A taxonomic revision of Crataegus (Rosaceae) in Ontario, Canadian Journal of Botany, 58(15): 1621-1699.

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http://nhic.mnr.gov.on.ca/MNR/nhic/elements/el_report.cfm?elid=47000#RANK

/end