

EIS Performance Monitoring Study (prepared by Beacon Environmental)

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EEPAC is very pleased that the City of London has undertaken this important review of the EIS process which is at the heart of environmental management. We have reviewed the report in detail and have organized our comments and recommendations into three sections, one dealing with (1) Big picture items to be considered by PEC and Council; (2) big picture items to be considered by staff; and (3) items to be considered by Beacon to improve the final report which hopefully will be very widely circulated amongst the different departments of the city.

I. Big picture items to be considered by PEC and Council

A. Cross-departmental collaboration and communication to support protection of Natural Heritage System

Protecting the environment requires cross-department communication and sharing of resources. For example, the Beacon report has highlighted some of the impacts of stormwater management facilities are having on the Natural Heritage System. However, the protection of the natural heritage system should not only be on the radar screen of Stormwater engineering but also development approvals, Urban forestry and Urban watershed management.

Recommendation 1: Given the importance of this study and the many links it highlights between planning, stormwater engineering, watershed management, and the natural heritage system, it is imperative that this report and its recommendations be widely circulated including Stormwater Engineering, Urban Forestry and Urban Watershed Management, and Development Approvals.

B. Monitoring

EEPAC believes this is an opportunity to indicate to council that the city is struggling to monitor, let alone adapt to and follow up its commitments to environmental issues identified in EISs. This seems to come down to three issues:

1. *Resourcing of monitoring:* staffing, tasking, field review. Based on information from Beacon report and other cases, it seems that follow-up has a low priority.

2. *Analysis*: even if routine or *ad hoc* information is available, the resourcing is not available to allow staff to consolidate an analysis into a coherent report or recommendation.
3. *Futility*: even if staff undertook the monitoring and analysis and generated a report, it is not clear that there is capacity to pursue corrective measures, except in simple remediation tasks.

One way to improve the city's effectiveness in monitoring and acting on the information that is the outcome of monitoring (without adding too much to the bureaucracy) is focusing the attention of staff on critical parts of the Natural Heritage System around the city.

Here are some possible elements that could be implemented in order to focus fairly rapidly on critical cases:

1. Natural Heritage System Sites are compiled into a spatial database with rating as to status and risk of default. (This sounds huge, but the city GIS and mapping is set up for this.)
2. Field crews are charged to report on such sites as to apparent status as and when they are in the area.
3. Some sort of reportage mechanism is needed whereby field crew comments can be recorded and emerging cases identified. (Something simple not pages of paperwork.)
4. All sites get a periodic casual review of some sort... to capture orphan sites.
5. Staff review such sites as resources and criticality allow. Their reports take precedence over *ad hoc* field reports.
6. Actions are planned based on criticality and resources.

Recommendation 2: Without increasing the bureaucracy, a reporting system must be developed that can take in the information collected by consultants as part of EISs as well as the observations taken by city staff (and perhaps by citizens) that gives the most up-to-date snapshot of critical (or recently impacted) part of the Natural Heritage System. EEPAC would be pleased to assist staff in the design of a reporting system.

C. Follow-up and implementation of EIS recommendations

The Beacon report gives indication that simple steps which we would all think are given in the EIS process (e.g. transferring all recommendations of an EIS to the subdivision agreement or follow-up monitoring that is mandated by the sub-division agreements) are actually not happening. This is of concern because taxpayers naturally assume the EIS provisions are sustained, relax their vigilance and are dismayed by apparent abandonment. These gaping holes in the process need to be filled, probably with not much more than a change in process and/or clear assignment of responsibilities for

checking off that EIS recommendations are actually included in Subdivision and/or Development Agreements.

Recommendation 3: Subdivision and/or Development Agreements must include the recommendations from approved EIS reports.

Recommendation 4: Staff to confirm the implementation of recommendations of an approved EIS prior to releasing security held by the city for the subdivision and/or development.

D. Involving the public

The Beacon report gives evidence to the fact that the public needs to be better educated on what it means to live next to, and to recreate in natural areas. This could be achieved by periodic circulation of educational brochures but it could also be done through community-based workshops offered by Western or Fanshawe or some other local school to educate on the importance of the Natural Heritage system, and how to live in close proximity to it. The public can also be a great asset in helping out with monitoring of natural heritage areas.

Recommendation 5: Increase opportunities for the education of public but also its involvement in monitoring our natural heritage system. Signage indicating reporting triggers and options might be placed at ESAs and at-risk natural areas.

Recommendation 6: Set up an anonymous reporting system (akin to Crime Stoppers).

II. Bigger picture items to be implemented now by Staff

The Beacon recommendations make a lot of sense and EEPAC supports all of them. Here we offer our suggestions as to which must be implemented immediately.

A. Policy and By-Laws

Recommendation 7: The new Official Plan should include a change to section 15.3.6 (Ecological Buffers) of the current Official Plan to identify the primary function of buffers as zones against encroachment. Wherever possible, buffers must lie outside of areas designated as significant in order to provide the needed protection from encroachment plus a critical function zone, that is ecologically required. (see page 63 last full paragraph of Beacon).

Recommendation 8: The new Official Plan should include a change to section 15.3.4 (Public Ownership/Acquisition) to include buffers as part of the acquisition process.

B. City's Environmental Management Guideline Document

Buffers:

Based on the report, one of the biggest problems is encroachment. Most of encroachment takes place in the first 10m of buffer (or in the case of no buffer, within the Natural Heritage feature itself). Taking this into consideration buffer guidelines should specify a minimum buffer of 10m on all Natural Heritage features. This would significantly reduce encroachments into the Natural Heritage system.

Recommendation 9: The section of the Ecological Management Guideline document that deals with conducting an Environmental Impact Study should be changed to set the buffer minimum that is required for any part of the Natural Heritage system to 10m to limit encroachment into the Natural Heritage System.

Beacon's study of 9 development areas adjacent to natural heritage features notes "the boundary of the buffer must be outside the rear lot lines. It was evident through this study, and has been verified through our experience in other municipalities, that expecting homeowners to voluntarily retain a portion of their rear yards as naturalized space continuous with the adjacent natural area is rarely effective, and created potential management headaches for the municipality." (p. 64)

Recommendation 10: The Guideline Document for Determining Setbacks and Ecological Buffers should be changed to state that buffers and components of the NHS must always lie outside of rear lot lines.

Recommendation 11: Beacon noted that a number of references in the Guideline document should be updated. EEPAC recommends that this be done as soon as possible.

C. Process

One of the disturbing things in the report is how few of the EIS recommendations were carried forward to be included in the final subdivision and/or development agreement.

The process can be improved by standardizing the required information in the EIS. For example, inclusion of tables that:

- summarize the type and date of inventory. (Beacon P.60)
- summarize policy compliance (Beacon, p.62)
- highlight all recommendations to carry through to site planning

Recommendation 12: In order to be accepted as complete, an EIS needs to contain key tables (on inventory dates, policy compliance, and recommendations to carry through to site planning).

Recommendation 13: Sub-division and development agreements must contain identical table of recommendations as in EIS and any changes noted as footnotes with proper rationale given for those changes.

D. Monitoring

“Long-term ecological monitoring that tries to assess changes in relation to development in a municipality is more complex, expensive and lengthy, but is the only type of monitoring that can (if properly designed and implemented) start to identify trends in relation to responses of biotic communities and species to changes in land use.” p. 53, Beacon report)

Monitoring can be onerous and if not reviewed and adaptive, ineffective. Strategic monitoring can be much more cost effective. The UTRCA Watershed Report Cards provide an example of some aspects of efficient monitoring; they use routinely collected data to provide longitudinal indicators of status and trends that allow a focus of effort.

1. This does not mean a full characterization of ecosystem conditions, instead targeting sensitive indicators of environmental health, often gathered in a reconnaissance sampling style. For example the presence or absence of garlic mustard or buckthorn can indicate deterioration of diversity without a full species assessment- less accurate, but a small fraction of the cost.
2. Efficient monitoring has to be well controlled such that short term factors do not skew the results. For example garlic mustard is a synchronous biennial and can appear absent at the seed stage.
3. The city might be more effective to focus on aspects of ecosystem health that are within their sphere of influence. For example, migratory birds are a key ecosystem component, but their populations are often influenced by factors outside the city’s control. It is not clear that such data can usefully guide practices, other than sometimes vague habitat preferences.
4. Snapshot (one time) monitoring is difficult to evaluate as there is often no baseline or reference standard. Longitudinal surveys can provide indications of trend that indicate the need for closer attention.
5. Ultimately, someone has to be compiling and analyzing the monitoring data, not only to identify deterioration, but also to review the effectiveness of the monitoring and mitigation measures and hopefully to celebrate successes.

Recommendation 14: City staff should consider the implementation of five year ESA report cards that utilize routine data to indicate the current status and trend for ecosystem health.

City-wide long-term monitoring of key areas of Natural Heritage can be performed by funds that come outside of city budget. Beacon report has suggested some sources. There is also funding from London Community Foundation. Developers could/should also contribute to a monitoring fund for looking at long-term changes.

Page 53 of the Beacon report notes that compliance monitoring would be beneficial. According to Beacon, the City of Guelph is trying to be more proactive about compliance monitoring. Beacon notes that the issue is not typically around the wording in the related guidance documents so much as the resources to actually oversee that the monitoring is done, and done properly.

Recommendation 15: Funds from outside of the city budget should be sought from foundations, the provincial government and the development community to underwrite long-term monitoring in the city.

Recommendation 16: Regardless of the source of funding, the City of London commit to being proactive about compliance monitoring to ensure conditions in sub-division and development agreements are met. Civic Administration be requested to liaise with appropriate departments at Western University and Fanshawe College for students to incorporate monitoring as part of a project (e.g., Honour's Thesis).

III. Specific Comments to Staff re: Beacon's report

PATHS/TRAILS and Standardizing for age of subdivision

As a tangent to its work, Beacon looked at paths/trails. There is a table on page 8 that warns (in the last cell of the last row), "The recreational impacts will focus on unauthorized activities, and will acknowledge but not assess impacts of trails that have been installed as part of an approved process." Despite this disclaimer, there are tentative "conclusions" about the impacts of trails on encroachment later in the report (page 46).

In examining the data collected, we are hard pressed to find how the data supports the tentative conclusion. Table 8-5 on page 37 lists the # of encroachments per 100 m segment. There is a path/trail in only 4 of the 9 areas studied. In addition, when the actual data are reviewed (page 37), you will find that some areas where the path/trail borders, have the HIGHEST number of encroachments. Where there was an opportunity to compare newer and older sections with and without a path/trail (Warbler Woods - Chestnut Hill vs Chestnut Place), no data were collected from the older subdivision. It also appears that as time goes on, the number of encroachments increases regardless (page 11-12). Therefore, the Beacon Report does not provide sufficient data on this matter. A more detail analysis by EEPAC is available upon request.

Recommendation 17: The Beacon report not be used to determine the efficacy of trails/paths on reducing encroachment.

IV. Comments to Beacon to improve final report:

A. Executive summary

The report needs an executive summary. It does not need to be more than a table of the recommendations. EEPAC believes the recommendations should be organized the following way:

- Policy & By-laws
- Management Guidelines
- Process
 - Subdivision agreements
 - Monitoring

B. Terminology

Use of the term - *Monitoring*.

Given the specific use of the term monitoring in environmental management, using it instead of the word analysis or evaluation might be confusing to some.

This report, EEPAC believes, will be a very important one and circulated widely so it should have a strong, well worded title. We would suggest the following title: "EIS Performance Evaluation for City of London".

Further, the types of performance evaluations should also be renamed, evaluation of baseline information, compliance, etc) Table 1 and rest of report.

Use of the term - *Compliance*.

This term is used in two contexts, compliance in terms of considering relevant policies and also as part of 'validation monitoring' where compliance monitoring is used in the context of complying with subdivision agreements (e.g. p 53). This sows confusion. We would suggest using terms that clearly distinguish to two contexts (e.g. policy compliance, etc).

C. Introduction.

What is the difference between no-net-loss and no-net-impact? There was a switch between paragraphs 2 and 3. Report should stick to using one or the other.

D. Effectiveness monitoring

An indicator on hydrology and erosion is missing.

This could have included a local assessment of hydrologic connectivity (bringing in some desk-top review possibly) or just a simple measure of wetting or drying. There was

anecdotal hydrologic evidence given but something more concrete should have been developed.

Hydrology is seldom a major consideration in EIS although it is a primary determinant of environmental conditions that can be directly impacted by development. This probably reflects the established practice of using vegetation as an integrated indicator of conditions and trends. Vegetation is also the immediately perceived environmental indicator and this social priority is backed up by techniques and legislation.

A full hydrological assessment and follow up would be prohibitively expensive. But relatively simple considerations of drainage and source area (as enshrined now in Source Water Protection) would allow rapid assessment of upstream threats, and site function.

MISCELLANEOUS EDITS (e.g. typos, grammar, etc)

- Page 8 – there is a subscript 1 in the last cell of the third row. There is no footnote on the page. Should there be?
- Page 13 – bottom of page, should read Table 4 and not Table 3
- Page 43 - There is a typo in the note for photo 15 on that page.
- Page 47 - bottom, the reference should be to Figure A-5
- Page 59 – Sunningdale Corlon – there is a homeowner brochure. Curiously, it doesn't mention that the developer installed fencing should remain with no gates.
- Page 66 – second paragraph hanging/
- Page 67 – Table number typo, should read Table 11.