# EEPAC Review of: Westminster Ponds ESA Ecological Inventory and Management Zone Report for Community Connections

January 2014

## Polygon 7 should be Nature Reserve

The dominant argument for not protecting polygon 7 as Nature Reserve seems to be it is "less sensitive than PSW wetlands." This is not consistent with the Trail Design Standards. Whether the vegetation in polygon 7 is more or less sensitive than a PSW is not relevant at all. Rather, the polygon is to be evaluated on its own characteristics. Any portions of polygon 7 which contain the already identified amphibian breeding pools (report p 30), should be delineated Nature Reserve.

Further, Table 5 shows that the polygon fulfills two criteria as Nature Reserve. Rationale should be provided as to why Nature Reserve zone is not being applied.

## Amphibian Breeding Sites are not adequately protected.

The report states "any additional ponds where amphibians breed should be identified accurately, and zoned Nature Reserve." This seems to clearly state that not all ponds are identified and therefore not all lands that should be Nature Reserve are protected as Nature Reserve.

The lands connecting the amphibian breeding pools to the larger wetland areas should be protected as Nature Reserve. The report rightly identifies that this connection is critical yet does not protect the areas from trail implementation.

Of the breeding areas which are delineated NR, there is no information or rationale provided to support the proposed size/boundary of these protected areas. It would be very undesirable to minimize these critical areas, so the areas delineated NR must be fully adequate to provide full and ongoing protection from future trail development.

## **Boundary of Polygon 1a**

Rightfully, the portion of the landfill meadow used for sensitive ground-nesting bird species is delineated as Nature Reserve. However, these species do need more habitat area to survive than their nesting areas alone. The report should provide assurance that these additional habitat areas are adequately protected.

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

It is recognized that this exercise is the first close scale application of the Management Zone Guidelines. It would be desirable to ensure that the most sensitive zones are being as fully protected as is appropriate and necessary. We can use other approved information like buffer setbacks from wetlands (30m) and habitat zones around wetlands (3:1 upland to wetland) as minimum areas that should be included in Nature Reserve zones.

All Nature Reserve delineations should explicitly demonstrate that these requirements are fulfilled by the proposed Nature Reserve boundaries.

#### **Management Zone Boundary Delineations**

Again, it is recognized that this exercise is the first close scale application of the Management Zone Guidelines. We appreciate the description, detail, supporting rationale for the designation of the different management zones using the Trail Planning Standards Criteria.

However, it is unclear for some polygons exactly how the delineations between zones were determined. How were boundaries delineated? Presumably some zones grade into each other and don't have "hard"

habitat or ecological transitions. How were these areas dealt with? What evidence supported the placement of zone boundaries? A more extensive explanation would be appreciated.

There are a couple examples on Figure 7 that are cause to question the close scale used to delineate the management zones. For example, a Natural Area 1 (polygon 1) bisects two identified Nature Reserve zones (polygon 1a and 3a). Intuitively, from the mapping, it seems more ecologically sensible to join the two identified NR zones for their mutual enhanced protection.

A second example is the CUT1 community completely surrounded by a Nature Reserve zone (polygon 5). The size of this exclusion is not clear but ecologically, it does seem more sensible to eliminate the exclusion.

## Recognizing Features/Ecosites Uncommon to the Subject Site

Given the prevalence of invasive buckthorn throughout the ESA is there precedent for classifying those ecosites with limited abundance or lack of buckthorn as higher protective level - for example the FOD5-8 polygon to the north of the study site (Figure 4). Perhaps it would be valuable to do so because native ecological structuring of a forest stand or site, unaltered by buckthorn invasion, is relatively rare within the Westminster Ponds ESA.

## **Restoration Zones**

Why is there no applicable or even discussion of the applicability of this zone? Surely there are areas which should be ecologically managed for specific outcomes, e.g. managing the encroachment of trees and shrubs on the grassland; invasive species removal in areas near to sensitive or rare species or areas of high diversity; restoration/management of lands disturbed from construction of railway or parking lot. The report is incomplete without due consideration of restoration objectives. Any proposed pathway cannot be located without knowing the restoration objectives of within the subject site.

## **Monitoring**

While not directly the purpose of the subject report, EEPAC would like to encourage the implementation of a monitoring program before during and after construction to assess and appropriately address any loss of ecological features or functions in a timely way. As a central and guiding principle of the Trail Planning and Design Standards the importance of appropriate monitoring and informed, adaptive management cannot be overstated.

#### **Pathway Construction**

During trail construction permeable pavements should be considered and the careful extraction, preservation, and reinstallation of topsoil "slabs" can minimize the impact of trail construction and preserve the natural seed-bed contained in the first few inches of soil substrate. This method of trail construction greatly enhances restoration efficiency and minimizing the chance of intrusion by invasive species into newly disturbed soils.

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