



July 27, 2009

Greg Pulham  
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Land Use and Environmental Planning Section  
Ministry of Natural Resources  
300 Water Street  
P.O. Box 7000  
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**RE: Updated (second edition) Natural Heritage Reference Manual: Natural Heritage Protection through the Provincial Policy Statement, 2005 (EBR #010-5853)**

Dear Mr. Pulham,

Thank you for the opportunity to comment on the Ministry of Natural Resources' Updated Natural Heritage Reference Manual, which was posted for public comment on the Environmental Registry (EBR #010-5853). Conservation Ontario represents Ontario's 36 Conservation Authorities.

The following comments are provided for your consideration based upon a review of the document by staff from the Toronto and Region Conservation Authority, Nottawasaga Valley Conservation Authority, Ganaraska Region Conservation Authority and Conservation Ontario.

#### General

The efforts of the team that developed the updated draft document are appreciated. This revised version of the manual is considered a great improvement over previous drafts, in particular because of the emphasis on natural heritage systems. The revised draft is also preferred because it promotes the watershed/subwatershed scale for natural heritage, and goes beyond the Provincial Policy Statement, 2005 (PPS) by advocating pre-consultation and expanded adjacent lands for more natural heritage features. The use of a consistent format for each of the sections assists in the flow and readability of the document. The effort to show how the existing significant features designations in the PPS, as well as zoning and policy, could be applied for protecting the system is also acknowledged and appreciated, as this has been a major gap.

It is also believed that there are opportunities to further strengthen the draft document and provide improved guidance for natural heritage management. Areas in which it is felt that the document could be improved upon and strengthened are outlined below and in the attachment, which focuses on comments pertaining to specific sections of the manual.

One opportunity for improvement includes addressing the roles and functions of Conservation Authorities (CAs) pertaining to natural heritage management. Many CA's provide natural heritage advice to municipalities and even have formal memoranda of understanding with their municipalities to review natural heritage with respect to the Provincial Policy Statement. As well, it is generally the CA that prepares Watershed Plans and Fisheries Management Plans. This document represents an ideal tool to clearly identify the roles of all decision makers and applicable agencies, and it is recommended that the information regarding the roles and responsibilities of CAs in natural heritage as mandated under the *Conservation Authorities Act* and Development, Interference and Alteration Regulations be expanded. It is noted that Section 12.7 (Other Considerations), states that "*Where conservation authorities exist, their regulations*

*under the Conservation Authorities Act (i.e., regulation of development, interference with wetlands and alteration to shorelines and watercourses) comprise another mechanism for the protection of wetlands and valleylands in particular".* However, as this information is the most fulsome about the *Conservation Authorities Act* and regulations provided in the manual, the level of detail is considered insufficient given the fact that they are intended to be complementary to the PPS, including the Section 2.1 Natural Heritage policies.

Section 8.3 (Identification) states that CAs (and the Ministry of Natural Resources) will act as advisors with regard to valleylands. It is questioned why this guidance isn't included in other sections that describe situations for which CAs act in a similar role. It is requested that similar wording be included throughout the document, to the effect that CAs should be contacted for advice regarding areas regulated under the *Conservation Authorities Act* including areas in and adjacent to river or stream valleys, Great Lakes and large inland lakes shorelines, watercourses, hazardous lands and wetlands.

In several places in the document the relationship between the manual and other pieces of legislation is explained, which is very helpful. The manual makes reference to the *Conservation Authorities Act* and regulations. Therefore, it is recommended that more information be included in the manual regarding the *Conservation Authorities Act* and the Development, Interference and Alteration Regulations for all Conservation Authorities (Ontario Regulations 42/06 and 146/06 to 182/06) consistent with Ontario Regulation 97/04 under Section 28 of the *Conservation Authorities Act*. It is suggested that this information either be included in an appendix, or under Section 12.7 (Other Considerations) in place of the information found there. The following is provided for your consideration:

**In 2006, the Minister of Natural Resources approved the Development, Interference and Alteration Regulations for all Conservation Authorities (Ontario Regulations 42/06 and 146/06 to 182/06) consistent with Ontario Regulation 97/04 under Section 28 of the Conservation Authorities Act. Through these regulations CAs are empowered to regulate development in river or stream valleys, wetlands, shorelines and hazardous lands and associated allowances; the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, watercourse or for changing or interfering in any way with a wetland. Activities proposed in regulated areas will require a permit from the local CA, where one exists. Proponents are encouraged to contact the local CA for advice regarding whether permits will be required as early in their planning process as possible.**

There are references to Watershed Plans and Fisheries Management Plans in several sections of the document. However, the manual does not give emphasis to the important role these plans can, and should play. It is important to remember that the Province has been advocating (and for the Oak Ridges Moraine, mandating) the development of these plans. Collectively, municipalities have spent millions of dollars in preparation of these plans. Hence the manual should be more emphatic in the use of these plans as a demonstration of compliance with the PPS. For example, where a Watershed Plan has identified a Natural Heritage System (NHS) this should be used by the municipality as the basis/starting point for the municipality's NHS. Similarly where approved Fisheries Management Plans exist they should be the primary information source for municipal planning direction and policies.

A key issue is how to ensure that natural heritage systems are functioning well. This is alluded to throughout the manual, but there are a couple points that deserve further emphasis. The first is the need to maintain and monitor the health of the NHS. It is easy for a municipality to define and "protect" the system based on the principles outlined in this and other documents or models, but it's important to know if the system is working well, and when there may need to be management. The reference manual does dwell on the need for management plans, but there could be more emphasis on the need to select indicators and how to monitor health. That might include the presence and control of invasive species, which have become a major issue for landowners. Second is the need for more emphasis on the impacts of roads and how to deal with them. The document could point out the need to assess movement function and identify barriers, such as roads. A mention of the benefits of ecopassages in this regard could be useful.

The manual should recognize that NHS planning is also a way to try and manage the incremental losses and cumulative impacts that have happened historically and are so difficult for municipalities to deal with on a site-by-site basis. Another important aspect of NHS planning (especially in very developed areas or within settlement areas) is to identify and prioritize areas that need improvement and/or expansion to support the function of the overall system, and it is felt that this should be reflected in the document.

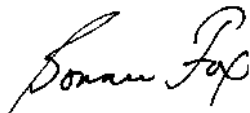
The chapter on Natural Heritage Systems (Chapter 3) is an important improvement over the last version of the manual. However, the focus is very much related to terrestrial systems. Aquatic systems are also a critical element of a NHS and are vulnerable to fragmentation and incremental losses just like the terrestrial system. We would recommend that the chapter be expanded to include the history of natural heritage systems, the work of Noss, the Florida NHS, perhaps the trans-European system, etc. It is also recommended that more references to aquatic systems be included.

Additionally, the following comments are submitted for consideration:

- Guidance should be included regarding how planning decisions are made as well as information that provides clarity on the relationship between the Ministry of Natural Resources (MNR) and the approval authority.
- Further details should be provided on natural heritage and settlement areas. The current draft may allow for natural heritage to be compromised in these areas unless there's political will otherwise.
- In general, the reference manual is quite permissive, and considering the planning direction of Ontario (e.g. Greenbelt, Oak Ridges Moraine, etc.), consistent natural heritage management should be encouraged.
- Every section discusses a need for greater protection beyond the PPS. The reference manual should further discuss what is meant by greater protection.
- It is recommended that MNR consider using the Toronto and Region Conservation Authority's NHS approach as one of the case studies presented in the manual.
- Please update the URL provided for Conservation Ontario's website to the current one, which is [www.conservationontario.ca](http://www.conservationontario.ca). References to Conservation Ontario's website are found on pages 120, 121, 126, 128, 131 and 134 of the draft.

Thank you again for the opportunity to provide comments on the updated (second edition) Natural Heritage Reference Manual: Natural Heritage Protection through the Provincial Policy Statement, 2005, and please see the attachment for additional comments specific to various sections of the draft. If you have any questions regarding these comments please contact myself at (905) 895-0716 ext. 223, Natasha Leahy at ext. 228, or Dena Lewis, Toronto and Region Conservation Authority, at (416) 661-6600 ext 5225.

Sincerely,



Bonnie Fox  
Manager, Policy and Planning

c.c. All Conservation Authorities, CAOs/GMs  
Gord Miller, Environmental Commissioner of Ontario

## ATTACHMENT

In addition to the general comments noted in the body of the letter, specific comments are noted below:

### Section 1 – Introduction

1. 1.1 (Purpose and Scope), page 2: This section identifies that natural heritage planning “can be” a community-based activity. While this concept is supported, the Ministry is advised that this may be weaker wording on the protection of natural heritage systems than that found in the previous manual.
2. 1.2 (Implementation of the Manual), page 2: The document encourages early consultation and the need for planning authorities to consider establishing a process to bring together appropriate technical experts. Guidance on how to accomplish this would be helpful for all involved parties.

### Section 2 – Provincial Policy Statement Implementation

3. 2.3 (Applying Other PPS Policies), page 7: It is suggested that this section include a discussion of “ecological goods and services” provided by the agricultural community, as well as a reference to the Ontario Ministry of Agriculture, Food and Rural Affairs.
4. 2.3 (Applying Other PPS Policies), page 8, 2<sup>nd</sup> paragraph: This section is unclear as to whether agriculture or natural heritage takes precedence in prime agricultural areas; MNR is asked to clarify their position on this matter in this section.
5. 2.6 (Provincial Plans), page 11: This section states that “*While criteria developed for these plans do not apply outside the plan area, municipalities may wish to apply the more restrictive criteria, provided they do not conflict with any other matter of provincial interest.*” While applying the more restrictive criteria from the Oak Ridges Moraine and Greenbelt Plans outside the plan areas is supported, it would be useful if MNR could provide more guidance in the manual as to how to apply the more restrictive criteria.
6. 2.7 (new section recommended): It is suggested that a new section be included here, as well as in Section 12, which outlines the roles and function of CAs. Opportunities to address CAs’ role as watershed-based natural resource managers would provide additional guidance to planning authorities who are responsible for implementing the Provincial Policy Statement. CAs, through their commenting role under the *Planning Act*, regulatory role under Section 28 of the *Conservation Authorities Act* and ability to enter into servicing agreements are well positioned to assist planning authorities in natural heritage management.

### Section 3 – Natural Heritage Systems

7. 3.4.2 (Natural Heritage System Components), page 20: One of the core area attributes of natural heritage systems that is noted in this section is “Potential to Persist”. In existing urban areas this might be used to try and discount areas that in reality represent the best that is left. The loss of something that is of low value itself could have a profound negative impact on other higher functioning areas in the system.
8. Table 4 (Natural Heritage System Linkage Attributes), page 21: One of the linkage attributes noted is “Ecological function”, and it is described in part as “*corresponds to known, frequently used wildlife movement corridors*”. However, it is noted that some, if not most, jurisdictions don’t have this knowledge.
9. Page 22, 2<sup>nd</sup> full paragraph: This section states “*availability of municipal-wide identification of significant woodlands or significant wildlife habitat.*” This (and other portions of the document) suggests that municipalities should be responsible for developing this information. It is recommended that greater guidance therefore be provided to the municipalities on this matter.
10. 3.4.3 (Considering Ecological Functions and Promoting Ecological Integrity), page 24): Table 5, Linkage/Corridor Attributes, part (d) Width, states that “*Noss (1992) suggests that long corridors...should be at least 1.6 km wide and that shorter corridors be at least 3 times the edge*”

*effect*". Clarity is sought from the Ministry as to the recommended distance that should be assigned to the edge effect.

11. 3.4.6 (Natural Heritage Systems in Settlement Areas), page 30: Regarding designated greenfield areas, this section suggests that natural heritage systems should be developed based on science and conservation principles but that these may become more concentrated based on other planning objectives. Conversely, the manual recommends that the ultimate natural heritage system be implemented with more prescriptive land use designations and zones compared to non-settlement areas. This approach will be helpful.
12. 3.4.6 (Natural Heritage Systems in Settlement Areas), page 31: While refinement of a NHS based on public input and community values may be necessary, the refinements still need to be tested back against the science used to define the original system to ensure that the objectives are not compromised. This should be clearly stated in the Manual.
13. 3.4.6 (Natural Heritage Systems in Settlement Areas), page 32: Support is expressed regarding the statement that "*it is suggested that the municipality place the entire natural heritage system in a single land use designation, with the actual features being identified as an overlay*".

#### **Section 4 – Natural Heritage Features and Areas**

14. 4.4 (Adjacent Lands), page 37: Under the heading "Increasing the Extent of Adjacent Lands" the poorly known habitat requirements of snake species is discussed and the black rat snake is cited as an example. It is noted that the name of this species was recently changed to Eastern Ratsnake (see [O.Reg 230/08, the Species at Risk in Ontario List Regulation](#) under the *Endangered Species Act, 2007*).
15. Table 7, page 38: Support is expressed regarding the general recommendations for adjacent lands widths being expanded from 50 metres (m) to 120 m from most features.
16. 4.5 (Relationship between Adjacent Lands and Buffers), page 40: The document states that "*...adjacent lands as potential areas that will be set aside (left in a natural vegetated state) to mitigate the predicted impacts...*" If the lands are already in a vegetated state it is questioned whether they would not be part of the feature.

#### **Section 5 – Significant Habitat of Endangered and Threatened Species**

17. 5.1.1 (Relationship with Endangered Species Act, 2007), page 43: It is recommended that the relationship between the NHRM and the *Endangered Species Act, 2009* (ESA) be further expanded upon, as currently there is a lot of confusion about the role of "planning authorities" and MNR when it comes to dealing with the ESA.
18. 5.3 (Identification), pp 44-48, Significant Habitat for Endangered/Threatened (ET) Species: The "one-window" approach is not mentioned in this section, and it is unclear whether this means that MNR would have to be involved as soon as the ET issue becomes evident rather than through the one window process. This section should also note that the planning authority and other partners (i.e. CAs) need to be fully aware of MNR/proponent discussion pertaining to ET significant habitat. This information is necessary in order to be properly informed of habitat issues so that "adjacent lands" discussions/negotiations are fully informed. We need to understand "Step 2" to assist with good decision-making.

#### **Section 6 – Significant Wetlands and Significant Coastal Wetlands**

19. As in other sections pertaining to areas regulated by CAs, it is recommended that this section include an overview of the roles and responsibilities of CAs for areas regulated under the CAA, and direct those working in or around water or wetlands to contact the local CA for advice as early as possible.
20. 6.1 (Policy Explanation): It is recommended that this section provide more clarity and guidance regarding situations where there are existing planning applications and/or approvals and the presence of wetlands. Additional guidance from the Province with respect to this policy would be appreciated.

21. 6.1.1 (Peat Extraction), page 51: As peat extraction takes place in areas regulated by CAs, it is recommended that this section encourage proponents to contact the local CA, where one exists, for advice prior to commencing work. It is also recommended that the *Conservation Authorities Act* and Development, Interference and Alteration Regulations be referenced here.
22. 6.1.2 (Relationship with PPS Water Policies), page 51: This is another section where the importance/relevance of watershed plans could be elaborated.
23. 6.3.1 (Significant Wetlands), page 53: This section states “*the planning authority should ensure that a wetland evaluation is undertaken*”. This appears to place the burden of wetland evaluations on the municipality and take MNR out of the equation aside from an approval role. Wetlands/complexes often go beyond the boundaries of a planning application and the question arises as to why proponents should evaluate the entire complex and how it is even possible (except on a coarse scale) if it is not on adjacent properties.
24. 6.4 (Adjacent Lands), pp 55-56: The concept of the surface and subsurface catchments for wetlands and the need for a features-based water balance should be included in this section.

### **Section 7 - Significant Woodlands**

25. In general, additional guidance on woodlands would be appreciated, similar to that provided in the Greenbelt or Oak Ridges Moraine Plans. It would also be helpful to see additional guidance on woodlands and past approvals, particularly in settlement areas.

### **Section 8 – Significant Valleylands**

26. 8.3 (Identification): The relationship of CA regulations in the identification and protection of valleylands should be discussed.

### **Section 9 – Significant Wildlife Habitat**

27. 9.3 (Identification), page 68: This section states that “*planning authorities are still encouraged to identify significant wildlife habitat on a comprehensive basis during the development/review of their official plans*”. More information is requested from the Ministry as to what the funding sources for these broad studies will be, as well as what will be the role/responsibility of MNR.
28. 9.3.1 (Significant Wildlife Habitat Technical Guide), page 69: Under the heading “Habitat of Species of Conservation Concern” it is recommended that COSEWIC ET/SC species that haven’t been formally reviewed by COSSARO be included.
29. 9.3.2 (Process Steps for Identifying and Confirming Significant Wildlife), page 70: More guidance is requested regarding how a proponent will know if the habitat is significant on a planning authority level if broader information is not available.
30. 9.3.2 (Process Steps for Identifying and Confirming Significant Wildlife), page 72: Under the heading “Identification Triggers”, please clarify whether this section means that there is no significant wildlife habitat in settlement areas.
31. Figure 7, Step 1 (page 72) – The identification of triggers speaks to lands beyond the boundary of a settlement area. The Ministry is asked to also consider lands within settlement areas, as the Growth Plan identifies urban growth centres where it is anticipated that there will be intensification and redevelopment. As well, redevelopment is regularly occurring in a number of older urban areas.

### **Section 11 – Fish Habitat**

32. 11.3.1 (Broadscale Fish Habitat Features Identification), page 85: The discussion on headwaters and intermittent streams is considered to be weak. In the Greater Toronto Area (and likely other jurisdictions in Southern Ontario) headwater streams are within agricultural landscapes. In these instances, the streams are often not shaded and may not be groundwater-fed. Many headwater streams are in very poor condition due to historic lack of recognition. The Toronto and Region and

Credit Valley Conservation Authorities have undertaken work on headwater drainage features and prepared an interim guideline for their identification, protection and management.

33. 11.3.3 (Fish Habitat Evaluation), Table 9, page 87: The table states that marginal habitat does “*not contribute directly to fish productivity*”. However, it is noted that marginal habitat can still support tolerant species (e.g. stickleback). Another category may be needed to address the differences between marginal direct and marginal indirect habitat.
34. 11.3.4 (Fish Species at Risk), page 87: This section is confusing with respect to the distinction between the federal and provincial interests. References to SAR should be consistently linked to either the federal or provincial acts.
35. 11.4 (Adjacent Lands), page 87: The inclusion of wording that provides for the ability to ask for the re-establishment of minimum riparian buffer through the development process is supported.
36. 11.4 (Adjacent Lands), page 89: Table 10 does not speak to the impacts associated with increasing impermeable areas that impact a creek’s natural flow regime, which is one of the greatest concerns with the draft.
37. Table 11, page 90: It is recommended that background discussion regarding the 20m riparian buffer from coolwater streams should be included in this section. Often these systems are below potential coldwater systems, currently stressed by land use, and would benefit from minimum 30m buffers.

## **Section 12 – How to Protect: Municipal Planning Techniques and Tools**

38. It is requested that wording be included in this section which clearly identifies that the local Conservation Authority may be a technical reviewer/advisor for the planning authority.
39. 12.2 (Early Consultation): Joint consultation with all the pertinent stakeholders is encouraged so the process does not become disjointed.
40. 12.3 (Official Plans), page 93: Under the heading “Identification and Protection” is found the statement that “...*the potential exists for natural area boundaries to change and new natural areas to develop...*” It is recommended that the term “develop” be replaced with “regenerate” to avoid confusion.
41. 12.7 (Other Considerations), page 98: The paragraph on CA’s should be expanded as outlined in preceding comments.

## **Section 13 – Addressing Impacts of Development and Site Alteration**

42. 13.1 (Introduction), page 102: Similar to the comment noted under Section 12, the Ministry is requested to include wording in this section which clearly identifies CAs as a technical reviewer/advisor for the planning authority.
43. Section 13.2.5 (Approaches to Mitigation), page 115: The discussion of water balance should stress the need for base line monitoring in order to calibrate the water balance model and compare post-development monitoring results.

## **Section 15 – Information Sources for Identification and Evaluation of Natural Heritage**

44. 15.1 (General Natural Heritage), page 120: The description of CAs as general information sources related to natural heritage should be expanded. As well as holding a vast amount of natural heritage information/data, some CA’s have identified/evaluated NH systems for their watersheds and prepared watershed/subwatershed plans and fisheries management plans. These data and plans should be used by municipalities, at least as the starting point for refinement.

### **B.5 (Fish Habitat)**

45. Table 17 (Legislation and Agency Responsibilities for Fisheries Management in Ontario), page 186: With regard to the information provided about the *Conservation Authorities Act*, it is recommended

that the second bullet be deleted and replaced with the following:

- **Through regulations under the Act, CAs are empowered to regulate development and activities in river or stream valleys, Great Lakes and large inland lakes shorelines, hazardous lands and wetlands. They also regulate the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, watercourse or for changing or interfering in any way with a wetland.**

46. B.5.1 (Fish Habitat Protection Roles and Responsibilities), page 186: This section provides an overview of the roles of MNR and Fisheries and Oceans Canada (DFO) with respect to fish habitat protection. It is recommended that an additional section be added here that explains the role of CAs in the review of project proposals for DFO under Section 35 of the *Fisheries Act* in more detail. The following wording is suggested:

**Conservation Authorities**

**Conservation Authorities (CAs) may have individual agreements with Fisheries and Oceans Canada (DFO) to review proposed work for its potential harmful alteration, disruption or destruction (HADD) of fish habitat pursuant to Section 35 of the federal *Fisheries Act*. Depending on the level of agreement in place, CAs may conduct the initial review of a project to identify any impacts to fish and fish habitat, determine how the proponent can mitigate any potential impacts to fish and fish habitat, issue letters of advice or work with the proponent and DFO to prepare a fish habitat compensation plan. CAs do not possess the authority to grant an authorization for a HADD of fish habitat. Applications requiring an authorization for a HADD are referred to DFO by the CA for final approval.**

**Works Cited**

47. Page 244: The correct date to be included in the reference for TRCA's Terrestrial Natural Heritage System Strategy is 2007 (as that is when it received approval).