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March 12, 2012

Re: Updated Ontario Wetland Evaluation System (OWES) Manuals (EBR# 011-1687)

Ms. Wright:

Thank you for the opportunity to provide comment on the "Updated Ontario Wetland Evaluation System (OWES) Manuals" dated August 10, 2010. This review will focus on the Southern Ontario manual which has not been updated since 2002.

#### General Comments

Overall, the document provides more details and clarity for carrying out a wetland evaluation. It appears that substantial consideration was given to including more direction in areas previously thought unclear as well as incorporating stronger wording based on current pressures affecting wetlands. The added details in the soil recharge potential section, as well as the addition of section 5.4 (Important Drinking Water Area) and 5.5 (Area of Wetland Restoration Potential) are supported. The updates to the manual to include the use of current technology, current mapping capabilities, as well as the updated definition for Provincially Significant Wetlands and Locally Important Wetlands is commendable.

Consideration should be given to editing the document to ensure that tables and figures follow the text that refers to them. For example in a number of locations a figure will be referenced however that figure will not be included for a number of pages, which makes them difficult to properly reference. References to unidentified appendices are still present in the document (i.e., Appendix X), section headings are missing and there tables are broken between pages, which could be rectified through editing. The specific comments below have attempted to capture where additional editing may be required.

Although there are multiple reasons why it may be acceptable to evaluate small wetlands (<0.5 ha) found throughout this document it is recommended that this manual do more to support the assessment of these important features. This is particularly important in urban settings as well as on certain topographic features, such as moraines, where small wetlands may make up a large portion of a wetland complex. Some MNR District offices have been using criteria as to when a small wetland should be complexed, but this was not

included in the manual. If these criteria are not acceptable for southern Ontario wide application, it is recommended that a new section be inserted to discuss when it is appropriate to evaluate small wetlands.

Clarification is also required as to when ponds and other anthropogenically altered areas should be considered wetland features. Conservation Ontario strongly supports that the revised manual allows wetlands to be assessed when sites have been recently disturbed with the intent to subvert the application of the evaluation system if the substrates are hydric however there are many cases where wetlands have historically been altered for aesthetic reasons. When these altered areas/ponds are no longer actively maintained, they begin to revert back to their natural state. Many of these altered areas/ponds still provide important wildlife habitat for wetland species (fish, amphibians, odonates, waterfowl) and are important stopover sites for other wetland and non-wetland dependant species. A section to provide guidance on these situations is requested.

The broadening of the soil moisture regime to include “near hydric” soils (MR=5) as a criteria for including a site within the wetland boundary is supported, however, it may not be congruent with the definition of “wetland” that this manual employs. It is recommended that the Ministry review its definition of “wetland” to ensure that it includes all of the possibilities included in the revised manual.

### Specific Comments

Please find in the table below specific comments on the revised Southern Ontario manual.

Page	Paragraph	Section Heading	Comment
2		Introduction to the Evaluation System	This section should note that the OWES can also be used to support the Conservation Land Tax Incentive Program.
7			Entire section "Definition of Wetland and Wetland Areas" seems out of place. Suggest relocating, possibly to the beginning. The "Agricultural Lands" paragraph might be better suited to a location discussing exceptions/additional guidelines for mapping.
8		The Wetland Evaluation File	Suggest remove #4 as it is likely captured under #3 (Catchment Basing Map).
8		The Wetland Evaluation File	The manual states that “several field visits to the wetland may be made at different times of the year.” Further clarification on how many visits are required to demonstrate that an appropriate level of assessment was undertaken as part of the evaluation. This would ensure that the proper effort is made by the party undertaking the evaluation to assess the entire wetland.
8		The Wetland Evaluation File	Continuing in this section, it is indicated that any change to the wetland boundaries after the evaluation has been approved must be documented in the file, however it has been the experience that different MNR District Offices have their own requested level of involvement when dealing with wetland stakings with the Conservation Authorities (CA). In some instances, CAs must delineate the boundary of PSWs for their own regulations and while MNR involvement would be appreciated it is not always necessary or available. Wording to clarify this process in light of CA involvement would be appreciated.
9		Sources of Information	Please add non-governmental organizations such as land trusts and the Nature Conservancy of Canada.
9	5		Appendix x should be Appendix 3.
11			Clearer direction should be provided for accessing private property. This direction should also be included in Appendix 2.

12	1	Timing of Field Visits	"Reference to section "1.1.3 below" should be removed since there is no such section
12	1	Timing of Field Visits	"Palustrine wetlands should be visited during the <b>low</b> water stage to determine surface inflow and outflow." Would flows be better determined under <b>high</b> water periods, especially since water often doesn't flow during the low water stage.
15		Wetland Boundaries	Further information on how the limits of a wetland will be delineated in the field when applying the primary criteria is requested, particularly around whether soil augers will be required for every site visit when only a confirmation of boundaries on an approved PSW are occurring. This is also raised on page 40 of the manual.
15			It is supported that the revised OWES manual now includes consideration of the determination of hydric soils as one of the primary criteria for establishing wetland boundaries. This is an effort to ensure some level of compatibility with the Ecological Land Classification System (ELC), as well as provide additional verification of wetland conditions, especially in those areas which appear to be ecotonal or transitional in nature between wetland and upland conditions.
16 & 17		Assessing the "50% Wetland Vegetation" Rule	The reference to "typical wetland species" is unclear as to whether it is referring to simply all "wetland species" or whether it refers to "wetland indicators". The term "typical wetland species" may be construed to mean a "wetland indicator". This requires clarification as to the intent of the meaning.
17		Substrate	Similar to the discussion for the 50% wetland vegetation rule on pg. 17, it would be helpful if additional guidance was provided on how substrate should be used to identify wetland boundaries.
18	2		Uhlig et al. 2007 is not in the reference list.
18	2		The 2nd paragraph discussing ELC substrate classification is vague and it is not clear how this fits into the wetland evaluation process, yet evaluators are asked to describe and record substrate using the ELC standards. It is recommended that the "ELC substrate standards and classes" be included as an Appendix to this manual for ease of use in the field.
18		Substrate Criteria for Identifying and Delineating Wetlands	The line under the section heading references "the new ELC (OMNR 2007)." This reference does not exist in the reference list.
18		Moisture Regime and Substrate Type	This new provision to verify the soil moisture regime is an extremely significant addition to the manual. This will assist in many circumstances in correctly delineating those complex circumstances such as those that the manual explains on page 18.
18		Substrate	"...there is not a strict requirement of having both "hydric substrates" and "50% wetland vegetation" does not appear to be consistent with the definition of wetlands.
18		Substrate Criteria for Identifying and Delineating Wetlands	#1 on pg 18 appears to contradict the preceding text (paragraph 3) by stating that hydric soils are "clear wetland indicators". Please clarify this statement.
18		Substrate Criteria for Identifying and Delineating	While this is an attempt to assist in delineating wetland boundaries that are complex and perhaps are in areas where the vegetation is ecotonal/transitional, there is concern that this may extend the range of wetland criteria considerations outside of the actual definition of a

		Wetlands	wetland, and may in fact result in the identification of some areas as wetland which may not function as wetlands, but which may only have the appearance based on this expansion of the criteria. It is recommended that this section be revisited to ensure that areas outside of the wetland are not delineated as wetlands.
18	#2	Substrate Criteria for Identifying and Delineating Wetlands	If the Ministry wishes this condition to be considered as qualification for identification as a wetland, then the definition should be revised to include the "near hydric" condition. If the definition is not amended, then areas which have "near hydric" soil conditions may be subject to legal challenge.
22, 24			The text after the substrate section indicates that plants are the only principal criterion for determining boundaries (eg. 1st paragraph on pages 22 and 24). This appears to contradict the guidance given on page 15 regarding primary criteria (ie. both vegetation and substrate) and the section on substrate. Please clarify this advice.
23		Wetland Edges Bordering on Lakes and Rivers	Page 23, bullet 5 provides reference to Figure 4, however Figure 3 appears to be more appropriate.
23, 24		Defining Wetland Boundaries	There is often a delay between receipt of development approvals and on-site development activity. The guidance provided in the Evaluation Manual does not take this delay into account which could result in unnecessary complications. This can be addressed by including a step to contact the municipality to confirm whether any development approvals have been received for land within/adjacent to the wetland boundary.
34	5		"see pages X-X for more information..." Please insert the correct page numbers.
42			The possibility of having wetlands smaller than 0.5 ha included as PSWs (depending upon the scale of mapping used or whether the wetland is a specialized community) is strongly supported.
43			The first line is missing heading "1.1.2 Wetland Type".
44		Fens	It would be useful if a list of criteria (similar to the one created for bogs above) was created to assist in distinguishing rich fens from swamps. Specifying a preferred number of fen indicators (number of species or percentage of community) would also be helpful.
49		Riverine wetlands	Please ensure that the difference between riverine and palustrine wetlands is clearly articulated.
60			In figure caption, Figure <b>xx</b> should have a figure number.
61			In figure caption, Figure <b>xx</b> should have a figure number.
73		2.1.3	Please provide a list of eligible baitfish to ensure consistency.
81		Ownership	Conservation Areas (land owned by Conservation Authorities) should also score FA x <b>10</b> .
98		Underneath table	Formatting: "3.3" should be moved in front of "Carbon Sink".
100	2		Figure <b>27</b> should read Figure <b>24</b> .
104		Special Features Component	The discussion of landscape connectivity within the manual is strongly supported, especially given that most wildlife will use various habitats throughout their life stages.

107		Rarity of Wetland Type	Site Region 6E-13, while shown on the map, is not labeled.
112		Reproductive Habitat for an Endangered or Threatened Species	Please update reference to 'endangered-regulated [END-R]' species.
115		Significant Features and Habitats	It is recommended that the draft Significant Wildlife Habitat Ecoregion Criteria Schedules (MNR 2009, working draft) also be included as a reference document for Significant Wildlife Habitat.
120	3, 4		Duplicate paragraphs. Please remove one of them.
129		Great Lakes Coastal Wetlands	A third type has been added to the definition of a coastal wetland to include wetlands within 2km of the 1:100 year floodline of one of the Great Lakes or their connecting channels. This would lead to the inclusion of wetlands that may not have any hydrologic or landscape connectivity to a Great Lake or their connecting channels. Many of the areas along the coast of the Great Lakes are highly developed, and as a result this development often separates wetlands within the 2km distance from the Great Lakes and removes connectivity. When these wetland pockets become isolated they no longer provide coastal wetland habitat however, they still may be important to protect. The third type of coastal wetland becomes an issue in the wetland attenuation calculation (section 3.1). More consideration needs to be given to the addition of this third type of coastal wetland as well as some rationale for its inclusion. The hydrologic connectivity of this type and the implications of that also need to be addressed.
131	27d		Wetland units 4 and 5 are not included in the coastal wetland although they lie "(wholly or in part) within 2km of the 1:100 year floodline of one of the Great Lakes or their connecting channels".
133	3	Vernal Pools	It is recommended that unvegetated vernal pools be afforded greater protection. These unvegetated vernal pools tend to host a large number of amphibians as well as wetland-obligate invertebrates. These vernal pools have hydric soils and provide essential habitat to wetland-dependent wildlife, yet are not considered to be wetland by OWES definition.
148			Under Vernal Pools definition: 2nd paragraph is already found on pg. 133. Suggest removing duplication.
151		Appendix 1	There is no reference to Appendix 1 in the text.
155			Remove underlining in the NRVIS text
		Appendix 8	The "Distribution and Status of the Vascular Plants of Central Region. Riley, J.L. 1989" reference is still being used however, it is understood that this reference was updated in 2000 and is entitled "Distribution and Status of the Vascular Plants of the Greater Toronto Area. OMNR, 2000"

Once again, thank you for the opportunity to comment on the “Updated Ontario Wetland Evaluation System (OWES) Manuals”. Should you have any questions about the above, please feel free to contact me at extension 228.

Sincerely,

A handwritten signature in black ink that reads "Leslie Rich". The signature is written in a cursive, flowing style.

Leslie Rich  
Policy and Planning Officer