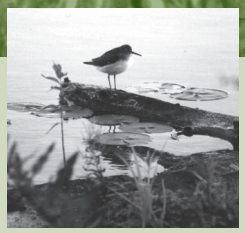

Significant Wetlands

and the Ontario Wetland Evaluation System

Provincially Significant Wetlands (PSWs) are those areas identified by the province as being the most valuable. They are determined by a science-based ranking system known as the Ontario Wetland Evaluation System (OWES). This Ministry of Natural Resources (MNR) framework provides a standardized method of assessing wetland functions and societal values, which enables the province to rank wetlands relative to one another. This information is provided to planning authorities to support the land use planning process.

A wetland that has been evaluated using the criteria outlined in the OWES is known as an "evaluated wetland" and will have a "wetland evaluation file".

Facts

- Wetlands are among the most productive and biologically diverse habitats on the planet.
- Ontario has an estimated 23 million to 29 million hectares of wetlands. This represents approximately 25% of Canada's wetlands, or about 6% of Earth's wetlands. Most of the Ontario's wetlands are found in the northern part of the province.
- Over 2300 of Ontario's wetlands have been evaluated. Most are located in southern Ontario. About 12% of them are Great Lakes coastal wetlands.
- By the 1980s, 68% of southern Ontario's wetlands had been converted to other uses.

Wetlands are dynamic – evaluation files are "open"

OWES recognizes wetlands as dynamic systems that can change over time (due to natural succession, changes in hydrology, etc) and thus the wetland evaluation files maintained by MNR District Offices are considered "open files". These files can be amended from time to time as new information becomes available. For example, changes to the status of species, confirmation of new species occurrences, wetland boundary modifications, and changes to the social values of the wetland would be recorded. As new science and technology becomes available, periodic revisions to the OWES itself may trigger the review and update of existing evaluated wetland files.

Evaluation criteria

The OWES identifies and measures wetland functions, and provides a means of evaluating the relative importance of individual wetlands based on perceived societal values. It generates a numerical ranking of wetland values or functions, which are grouped into four main categories:

1. Biological Component: recognizes that wetlands can differ in terms of productivity and habitat diversity
2. Social Component: measures some of the direct human uses of wetlands, including economically valuable products (such as wild rice, commercial fish and furbearers), recreational activities and educational uses
3. Hydrological Component: characterizes water-related values, such as the reduction of flood peaks and contributions to groundwater recharge and discharge, and water quality improvements
4. Special Features Component: addresses the geographic rarity of wetlands, the occurrence of rare species, ecosystem age, and habitat quality for wildlife, including fish

Wetland complexes

Wetland complexes occur where two or more wetlands (termed wetland "units") separated by a non-wetland area are functionally linked. Functional linkages include wildlife usage (e.g., migration corridors, forage areas), and surface water and groundwater connections. Most wetlands in Ontario are complexes. MNR is responsible for determining which wetlands and wetland complexes are provincially significant. Wetlands can also be identified and evaluated by other qualified individuals, provided they have been trained and use the approved OWES methodology. In these cases, MNR District Offices are responsible for reviewing and approving the evaluations. On occasion, MNR offers training courses in wetland evaluation.

Wetland boundary delineation

Wetland boundaries are often found in areas of gradual ecological change, which are known as "transition areas" or "Eco-tones." The wetland boundary is established where 50% of the plant community consists of upland plant species. Please note that this refers to the percentage of area covered by upland plant species, not to the number of different upland plant species. Topography (elevation and slope of the land) and soil data can help develop a clearer picture of where the wetland boundary should be drawn. Wetland boundary lines appearing on maps are not meant to be highly precise. On a 1:10,000 scale map, the width of the drawn wetland boundary line is equivalent to a 15 m zone on the landscape. On the ground, field visits to the wetland by trained biologists are required to accurately define the wetland boundary for "constraint mapping" and development purposes.

Provincially significant wetlands

Provincially Significant Wetlands are evaluated and scored using a point-based system outlined in the OWES. A Significant wetland is defined as any evaluated wetland that scores:

- a total of 600 or more points, or
- 200 or more points in either the Biological Component or the Special Features Component

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