

Biodiversity Conservation Strategy for the Essex Region.

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Since the time of European settlement in the 1830s, much of the original natural resources of the Essex region have either been totally destroyed or have become extremely degraded as a direct or indirect result of clearing and drainage for timber, agriculture, and urban development. The overall loss of approximately 97% of the original wetland area and 95% of the original forest area has resulted in a highly fragmented and degraded ecosystem. The remaining small, isolated remnants of natural habitats constitute the lowest percentage of any region in all of Ontario. Environment Canada, in partnership with other government agencies, has developed "A Framework for Guiding Habitat Rehabilitation in Great Lakes Areas of Concern" which provides a methodology to establish habitat restoration guidelines and priorities for degraded ecosystems utilizing geographical information systems (GIS) technology. The purpose of the Biodiversity Conservation Strategy is to produce a spatial database of all natural areas in the Essex region and, utilizing the Environment Canada framework, conduct an analysis of the terrestrial, wetland, and riparian habitats to identify the extent of existing natural vegetation and prioritize opportunities for habitat rehabilitation and enhancement. The objective is to increase the size, extent, and quality of key natural heritage features, natural corridors, and greenway linkages, thereby improving the ecosystem diversity and ecological functions of the Essex region. By applying the framework to the Detroit River and Wheatley Harbour Areas of Concern the Strategy will assist in addressing the delisting the impaired beneficial use - loss of fish and wildlife habitat, for these ongoing Remedial Action Plans. Current habitat conditions in all of the study areas examined to date, reveal that the remaining natural ecosystems of the Essex region are highly fragmented and degraded and hence, in need of extensive rehabilitation and restoration. Results from this report provide an overall framework to guide where habitat rehabilitation and restoration might be required before the individual sub-watershed ecosystems can be considered healthy and self-sustaining. The high priority restoration opportunity areas mapped in this report are to be used as a guide to concentrate future potential habitat restoration and enhancement works. Complete restoration of all high priority opportunity areas would lead to an "ideal" ecological condition for our remaining natural resources. It may be impractical to fulfil this optimal condition, due to the large expanse of land area, large number of private landowners involved, and lack of political will required to reach this goal. It is crucial to implement as much restoration as possible in the areas identified in this report, building upon those few remaining ecosystems remaining in the landscape. Every effort should be made to apply for funding for those landowners within the high priority areas who are willing to undertake some form of habitat restoration on their property. Only through this logical approach can we justify financial spending versus resulting ecological value.