Wetland loss in Ontario

Ontario is home to approximately 24% of Canada’s wetlands and 6% of the world’s wetlands. Estimates of wetland extent in Ontario range from 24 million to 29 million hectares, or 22-27% of the area of the province. Most of these wetlands are found in northern Ontario. It is estimated that prior to European settlement, there were about two million hectares of wetlands in southern Ontario.

By the early 1980s, about 68% of these southern wetlands had been destroyed. In parts of southwestern Ontario, over 90% of the area’s original wetlands are gone. These rates of loss are among the highest recorded anywhere on Earth.

In addition to protecting remaining wetland resources, governments and non-governmental organizations work to reverse trends of wetland loss through restoration.

Many successful wetland restoration projects are the result of stewardship initiatives undertaken by organizations that are part of the Stewardship Network of Ontario and/or the Ontario Eastern Habitat Joint Venture (OEHJV).

General guidelines for wetland restoration:

1. Understand wetland ecological and hydrologic principles (including historic conditions)
2. Design for function not for form (e.g., wetlands must be restored with the long-term goal of them being self-sustaining; wetlands that require constant intervention by human hands are not always ideal)
3. Give them time. Wetlands evolve over years, decades and centuries; successful restoration takes patience

Why restore wetlands?

- Improve water quality
- Enhance surface and groundwater storage
- Reduce damage from flooding
- Stabilize shorelines
- Improve discharge and recharge functions
- Provide fish and wildlife habitat
- Enhance/restore habitat for species at risk
- Restore biodiversity values
- Provide recreation and tourism opportunities
- Reverse trends of wetland loss
- Foster a spirit of co-operation
Wetland Drain Restoration Project

Low water conditions in southwestern Ontario at the turn of the century impacted crop yields, lowered water tables and depleted streams and aquifers. The Wetland Drain Restoration Project (WDRP) emerged as a strategy to improve the dependability of a clean, abundant water supply. The WDRP uses the Drainage Act as a means to restore wetlands, without impairing agricultural business objectives, by extending the hydro-period in previously ditched/drained wetlands. Through partnerships with landowners, municipalities and conservation partners, the WDRP has returned drained wetlands to a more natural state where the wetland can store water in the spring and release it later, during drier months of the year. In southwestern Ontario, the WDRP has proven successful with over 100 projects either completed or underway. The WDRP is applicable anywhere in Ontario where municipal drains exist for agricultural purposes. For more information call your local MNR office or Stewardship Coordinator.

Temperate Wetland Restoration Training Course

The Temperate Wetland Restoration Training Course (TWRTC) has been held annually since 1996 to introduce the principles, concepts and ideas behind successful wetland restoration. To date, over 250 resource professionals from several agencies in southern Ontario have taken the course. The week-long course is comprised of 20% classroom time and 80% field work. Using a watershed context, wetlands are visited to identify successes and failures in wetland restoration. This introductory course prepares participants to follow-up with the second-level course which involves undertaking wetland restoration projects. The second level course started in December 2005 on the Oak Ridges Moraine north of Toronto. Some graduates of the Level One TWRTC apply their skills in the Wetland Drain Restoration Project, which is currently focused on wetlands drained by agricultural drains in southwestern Ontario. Course tuition subsidies may be available for municipalities who want to encourage city engineers and planners to attend the Level One course.