



Habitat Restoration Project 2014 - Duffins Creek: Ajax, Ontario -

Brock Lands Pond Decommissioning

Habitat Project Lead: *Ontario Federation of Anglers and Hunters*
Habitat Project Funding: *TRCA, Great Lakes Guardian Community Fund (Ministry of the Environment and Climate Change) and TD FEF*

Date Completed: *September 29, 2014*

The project is located in Pickering, Ontario on the Greenwood Conservation Lands, Brock North portion. The OFAH, in partnership with the TRCA, first removed an 8,000m² online pond that is directly upstream of important habitat for young Atlantic Salmon. The pond was negatively affecting all coldwater fish species in Duffins Creek. In addition, we created a berm that separates the stream from the wetland. Online ponds are sources of thermal pollution (warming) in coldwater streams because they have a large surface area of slow moving water that is exposed to the heat of the sun. By removing this pond and creating a wetland, the cold groundwater outflows will be held in the ground and feed the main channel of Duffins Creek for a longer period of time. Improving the quantity and quality of coldwater flowing into Lake Ontario also benefits nearshore fish communities.



Figure 1: Red line outlines the location of the new channel that formed after decommissioning the pond on the Brock Lands.



Figure 2: The pond before decommissioning and creating a wetland.



Figure 3: Pond before decommissioning.



Figure 4: Drained pond and the berm (right) installed to separate the stream from the wetland.



Figure 5: New stream channel.