

Restoration of a Confined Urban System – Funding and Design

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The Silver Creek Restoration Design in the Coves Environmentally Significant Area in London, Ontario is an ecological restoration project on City property to protect and enhance habitat. The Friends of the Coves Subwatershed Inc (FOTCSI) initiated the process and raised the funds for the restoration design through an Ontario Trillium Foundation grant.

The headwaters of Silver Creek are an urban catchment with no stormwater controls, resulting in a flashy system with high flows and no bedload contributions. These contributing factors turned a watercourse that you used to be able to jump across into a deeply incised and over widened system with accelerated bank erosion causing tree loss and high sediment loading to downstream systems. A design using natural channel techniques will be implemented to stabilize the watercourse, improve fish habitat, reduce tree loss and log jam potential, and restore access to a floodplain. Many trees within the restoration channel will have to be cut, however, most of these trees would succumb to bank erosion in next 20 years in the absence of stream channel restoration. Native tree planting at a minimum 2:1 replacement ratio and associated ecological benefits of the stream channel restoration project will offset tree cutting in long term. Care was taken with the planting plan to consider edge effects and selected species that were suitable for establishing appropriate successional restoration growth.

The City of London and the Friends of the Coves Subwatershed Inc. and their President Thom McClenaghan are hoping to raise funds needed to complete the construction of the restored watercourse in the ESA. The restoration work will reduce bank erosion and sediment loading in the channel, re-establish a healthy riparian community, manage invasive species, and allow a pedestrian bridge to be established at a stable location consistent with the Coves ESA Conservation Master Plan.

Biography

Linda McDougall, MES, OALA, RPP is an Ecologist with the City of London in the Environmental and Parks Planning section. The City of London received the Lee Symmes Municipal Award from Ontario Nature, and, the Ontario Association of Landscape Architects Service to the Environment Award for their commitment to protecting Environmentally Significant Areas.