

# Fulton Creek Alteration

## Channel Design and Stream Restoration

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# Natural Channel Design

Natural Channel design can be used to achieve multiple goals:

- Create a stable channel form (vertical and lateral stability)
- Convey base and flood flows
- Create aquatic and riparian habitat

Incorporate physical and biological function and flood protection:

- Meander belt study
- Hydraulic modeling and analysis
- Native species planting plan







# Construction Methods

- Select contractor familiar with channel construction, retain experienced channel inspector
- Build new channel 'off-line' - keep existing creek active until new channel is complete
- Robust erosion and sediment controls to protect active channel on site
- Establish vegetation and stabilize channel bed and banks prior to introducing flows into new channel
- Preserve portion of existing channel and associated riparian vegetation

Tributary A, Milton, ON







# Creek Design and Restoration Examples

## Mill Creek Deepening (17 Street) Edmonton, AB







# Creek Design and Restoration Examples

Schneider Creek Restoration and Idlewood Creek Dam Removal, Kitchener, ON







# Creek Design and Restoration Examples

## Silverleaf Development, London, ON





# Thank you

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Henry Sturm Creek, Kitchener, ON

