

## Day One - Track Two

Wednesday, March 22<sup>nd</sup>, 2017

10:00 a.m. – 10:30 a.m.

## Improving Standards for Preserving and Restoring Healthy Soil – Construction Specifications for Implementing Compost Amended Topsoil in Ontario

**Presenter:** Chris Morrison, StormWaterForestry

### Biography



Chris provides urban forest and soil management consulting and workshops on best management practices for sustainable land development. He is an ISA Certified Arborist and a SOUL Certified Organic Land Care Professional. Chris has 3 decades of field experience in arboriculture, urban forestry and erosion and sediment control. He is an advocate for higher land development standards which aim to maximize the benefits of Living Green Infrastructure.

### Abstract

The way in which landscaped portions of urban environments are constructed and managed affects how absorbent they are to stormwater, in addition to the level of effort that will be required to re-establish and maintain healthy vegetation and the lifespan of the plantings. If best practices to preserve or restore healthy functioning soils in these areas are not applied during construction, changes to soil structure and organic matter content, and the effects of compaction can cause them to function more like impervious surfaces. Furthermore, poorer quality planting environments are produced that require more irrigation, fertilizer and effort to re-establish and maintain vegetation and urban tree canopy. Restoring a healthy depth of organically amended topsoil as a standard practice can improve the surface runoff and water retention characteristics of landscaped areas, and thereby improve the resiliency of our communities to the more intense rain and drought events that a changing climate will bring.

This presentation will outline recommended best practices and minimum standards for preserving and restoring healthy soil in landscaped areas during urban construction. Insights from on-going research on the effectiveness of topsoil stripping and storage best practices, and runoff and interflow

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from lawns constructed with compost amended topsoil will be highlighted. Recommended standard construction specifications for the installation of compost amended topsoil as the planting soil for landscaped areas will be presented as a tool to help facilitate widespread implementation of organically amended topsoil on construction sites across Ontario.

## Learning Objectives

1. Recognize how topsoil stripping, storage and spreading practices, and construction material specifications can affect the functional performance and maintenance needs of landscaped areas;
2. Summarize soil management best practices during construction that help to create healthier, more absorbent and easier to maintain urban landscapes; and
3. Identify recommended minimum standards for preserving and restoring healthy soil as part of landscaped area construction projects, and a template tool to help design professionals develop project-specific specifications for installing compost amended topsoil as the planting soil.