Conservation Halton

Areas of Focus

- Water Resources Management
- Forest Resources Management
- Education and Recreation

MScSM
Master of Science in Sustainability Management UofT
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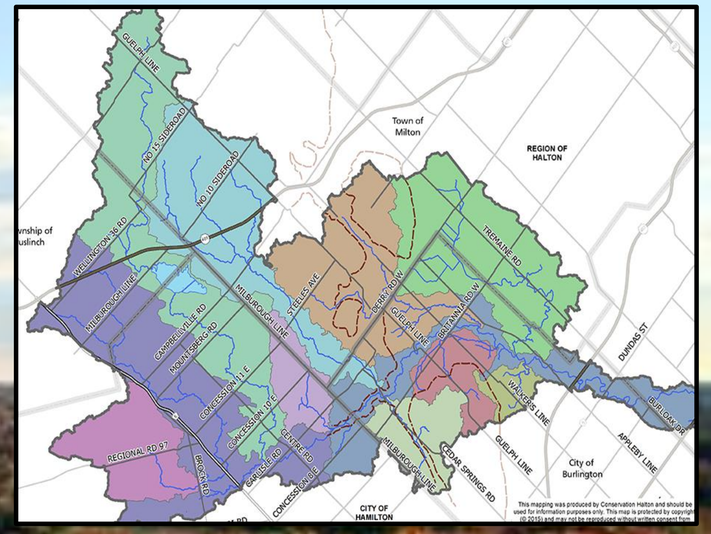
SMART PARKS PROJECT INNOVATION HUB

Long-Term Vision & Goals

- Sustain a healthy watershed comprised of clean streams, vigorous forests, and abundant green spaces
- Contribute to balanced population growth that results in strong, ecologically sustainable livable communities
- Create avenues for sustainable synergy between the natural environment and the 450,000 residents that make up the Conservation Halton watershed

About Conservation Halton

- Conservation Halton works to protect, restore, and manage natural resources throughout the watershed from lake to escarpment
- The Region of Halton spans approximately 1000 square kilometers, and includes:
  - 17 flowing creeks
  - 26 km of Lake Ontario shoreline
  - Extensive forest cover
  - 80 kilometers of the Niagara Escarpment
  - Numerous parks, green spaces, and facilities which are accessible to both members and the public for recreational use



Project 1 – Environmental Monitoring

- Identified key ecological parameters to be measured in order to determine the health of the natural environment
- Parameters:
  - Water Quality
  - Air Quality
  - Soil Quality
  - Rate of Photosynthesis (Canopy Health)

Goal: CH to set the standard/create the baseline for environmental health among Canadian conservation authorities/green spaces

Project 2 – Smart Parks – Reservation System, IoT Operations

- Smart Parks Project
  - Assisted in the implementation of an online reservation system which enabled Conservation Halton members and the general public to enjoy parks and green spaces with sufficient social distancing (COVID19). Reservation system created through a collaboration with ParkPass
- IoT Utilization
  - Used the Internet of Things in order to help streamline park operations as well as ensure sufficient social distancing (e.g. waste collection, visitor location/density)

Project 3 – Smart Ponds – A Superior Water Quality Monitoring Method

- Conducted extensive research into alternative water quality monitoring methods for streams, rivers, and lakes throughout the Halton region
- Identified a superior water quality monitoring method; the use of sensors which allow for real-time data collection and information transmission through the use of 5G data networks
- Worked diligently with subject matter experts such as ecologists and hydrogeologists in order to ensure quality and validity of monitoring method

Parks and Green Spaces

- Rattlesnake Point
- Mount Nemo
- Robert Edmondson
- Kelso
- Hilton Falls
- Crawford Lake
- Mountsberg
- Glen Eden

Personal Development

- Enhanced project management skills gained through collaborations with a small start-up not for profit organization (ParkPass)
- Improved interpersonal skills while working effectually alongside team members to produce key deliverables
- Ascertained an increased understanding of internal processes as well as how to better contribute to discussions within a non-for-profit organization/conservation authority

Conservation Halton PARKS
RESERVED VISITS

- Smart Devices
- Online Website
- Phone