



Natural Environment

Terrestrial ecosystems, the complex mix of vegetation, soil and animal life that covers the land, are a vital part of our life support system.

Plants boost our air quality and help us combat climate change by removing carbon dioxide from the air and replacing it with the oxygen that sustains life on earth. They also retain stormwater, provide shade from the sun and ultraviolet rays, reduce noise and provide habitat for a wide range

of wildlife. Soils filter pollutants, regulate how water moves, and cycle nutrients that sustain plant and animal life.

Efforts to recreate healthy ecosystems on the landscape of Greater Sudbury have been underway for over 30 years. Now that trees are growing on the formerly barren hills, we're setting our sights on creating healthy, self-sustaining forests that will nurture generations to come.

Goal: The restoration and preservation of complete terrestrial ecosystems in Greater Sudbury



What YOU can do

- Plant more native plants and trees in your yard or neighbourhood.



Threats

Poor plant coverage

Although natural recovery is taking place in some areas of Greater Sudbury, there are still thousands of hectares of land without adequate plant cover. In these areas, continued land reclamation and restoration is needed to begin the long-term healing and recovery of the ecosystem.

Low biodiversity

While thousands of hectares have been re-vegetated in Greater Sudbury, much of the reclaimed areas resemble pine forests with only half of the plant species present. This limits the diversity of habitat, which also limits the diversity of animal life present. In addition, low plant diversity means that the entire system may be more susceptible to major disruptions such as pest infestations and climate change.

Falling urban tree cover

In 2001, the City's Regreening Program noted that Greater Sudbury was losing about 500 street trees a year because of age, damage and disease. Healthy residential areas should have at least 25% tree canopy coverage, but the amount of tree canopy coverage in many Greater Sudbury neighbourhoods has fallen below this threshold.^{NE1}

Degradation of surface waters

The loss of vegetation in the Greater Sudbury area has caused soils to erode into watercourses, degrading our streams and rivers. This degradation continues today in areas that still have poor plant coverage.

Metal levels in soil

A comprehensive scientific study of metal levels in Greater Sudbury soils was completed in 2008. Carried out over a seven-year period, the Sudbury Soils Study was conducted to determine whether the levels of metals in the study area environment pose a risk to humans, plants, or animals. While no significant risk to humans or animals was identified, the study did find that terrestrial plant communities in the Greater Sudbury area have been and continue to be impacted by the presence of certain metals in soil.



Environmental Planning Initiatives - City of Greater Sudbury

Minnow Lake shoreline

What YOU can do

- Help implement Greater Sudbury's Biodiversity Action Plan.
- Prune trees that could eventually become a nuisance.



Objectives & Actions

OBJECTIVE

Increase and maintain urban tree and shrub cover.

ACTIONS

EarthCare Sudbury Partners will:

- Support the [Ugliest Schoolyard Contest](#)
- Initiate community and/or employee based tree planting projects
- Plant native shrubs and trees on their properties
- Reduce the loss of existing tree cover during new development

The City of Greater Sudbury will:

- Complete a beautification strategy that encompasses urban greening
- Review current landscaping requirements in developing a comprehensive Zoning By-Law for the municipality
- Update the municipality's urban tree policy
- Plant more trees as part of annual tree maintenance operations



Schoolyard greening

What YOU can do

- Avoid removing trees from your property unless they pose a serious safety hazard.



Objectives & Actions cont'd

OBJECTIVE

Expand Greater Sudbury's ecological recovery efforts.

ACTIONS

EarthCare Sudbury Partners will:

- Support the implementation of the [Biodiversity Action Plan](#) for Greater Sudbury
- Incorporate climate change adaptation strategies in ecological recovery efforts

The City of Greater Sudbury will:

- Develop a completion plan for Regreening efforts in Greater Sudbury that reflects the priorities of the Biodiversity Action Plan
- Hold an annual Biodiversity Forum



OBJECTIVE

Improve the quality of industry-affected soils.

ACTIONS

EarthCare Sudbury Partners will:

- Assist with remediating soils having elevated metal levels
- Support efforts to improve local biodiversity

What YOU Can Do:

- Apply lime to areas where the soil is acidic
- Do not use slag as fill or driveway material

[LEARN HOW](#)



McKim Street Hill 1981



McKim Street Hill 2008

What YOU can do

- Protect natural features on your property.
- Test the pH of soil on your property.



Objectives & Actions cont'd

OBJECTIVE

Protect significant natural heritage areas.

ACTIONS

EarthCare Sudbury Partners will:

- Support the development and implementation of a Greenspace Strategy for Greater Sudbury
- Continue to support the stream restoration efforts for Junction Creek
- Identify other priority creeks for rehabilitation
- Engage with First Nations communities around protecting natural heritage areas

The City of Greater Sudbury will:

- Lead the development of a Greenspace Strategy for Greater Sudbury
- Uphold the municipality's Natural Environment policies as stated in the Official Plan

OBJECTIVE

Improve the community's knowledge of local biodiversity, natural heritage, and native species.

ACTIONS

EarthCare Sudbury Partners will:

- Implement broader reaching education programs that extend to schools, special events and groups such as cottagers associations
- Provide the public with advice on planting trees and shrubs on private property



City of Greater Sudbury

What YOU can do

- Learn more about the natural resources on your property.
- Control non-native invasive plants that can quickly overtake beneficial native species.



References

NE1 City of Greater Sudbury. (2003). [The EarthCare Sudbury Local Action Plan](#). p. 23

NE2 VETAC. (2008). [Regreening Greater Sudbury Annual Report 2008](#). p. 2

Monitoring References

[The Regreening Program Annual Report](#)
[Greater Sudbury Soils Study](#)



What YOU can do

- Volunteer with a community group that is invested in protecting natural features and areas.