





2023 Partners

Regreening Program

City of Greater Sudbury

Collège Boréal

Natural Resources Canada

One Tree Planted

Sudbury earthdancers

Sudbury Integrated Nickel Operations, a Glencore Company

tentree

Tree Canada

Vale Canada Limited



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CELEBRATING 50 YEARS



2023 Highlights

The annual Regreening Program operated from the first week of May to the second week of October. The implementation of the 5 YEAR PLAN 2021-2025 continued in its third year resulting in 27 temporary employment opportunities. By seasons end, the crew limed 7 hectares (ha) of barren land in the Coniston area and planted over 140,000 tree, shrub, and understory tree seedlings throughout Greater Sudbury.

The large-scale forest floor transplant project proceeded again in 2023 with 32 forest floor plots established on six sites. The total area covered by forest floor transplants is 2.24 ha since 2010.

VETAC celebrated their 50th anniversary, and the highly anticipated release of the IMAX film “Jane Goodall – Reasons for Hope” featuring local regreening efforts was released for public viewing on June 2.

Regreening Component	2023	To Date (since 1978)
Tree Seedlings Planted	113,075	10,222,422
Shrubs and Understory Tree Seedlings Planted	27,880	565,166
Area Limed	7.0 ha	3,504 ha
Area Fertilized	5.0 ha	3,271 ha
Area Seeded	5.0 ha	3,199 ha
Forest Floor Transplants	0.051 ha	2.24 ha
Program Cost	\$1,038,182	\$37,443,513
Temporary Employment Opportunities	27	4,895
Awards	---	15
Number of Schoolyards Regreened	--	50
Volunteer Tree Planters	90	13,311
Trees Planted by Volunteers	1,465*	390,076
Trees Provided for Residential Plantings	400*	432,199

**Values are included in the Tree, Shrubs and Understory Tree Seedlings Planted. The Regreening Process*



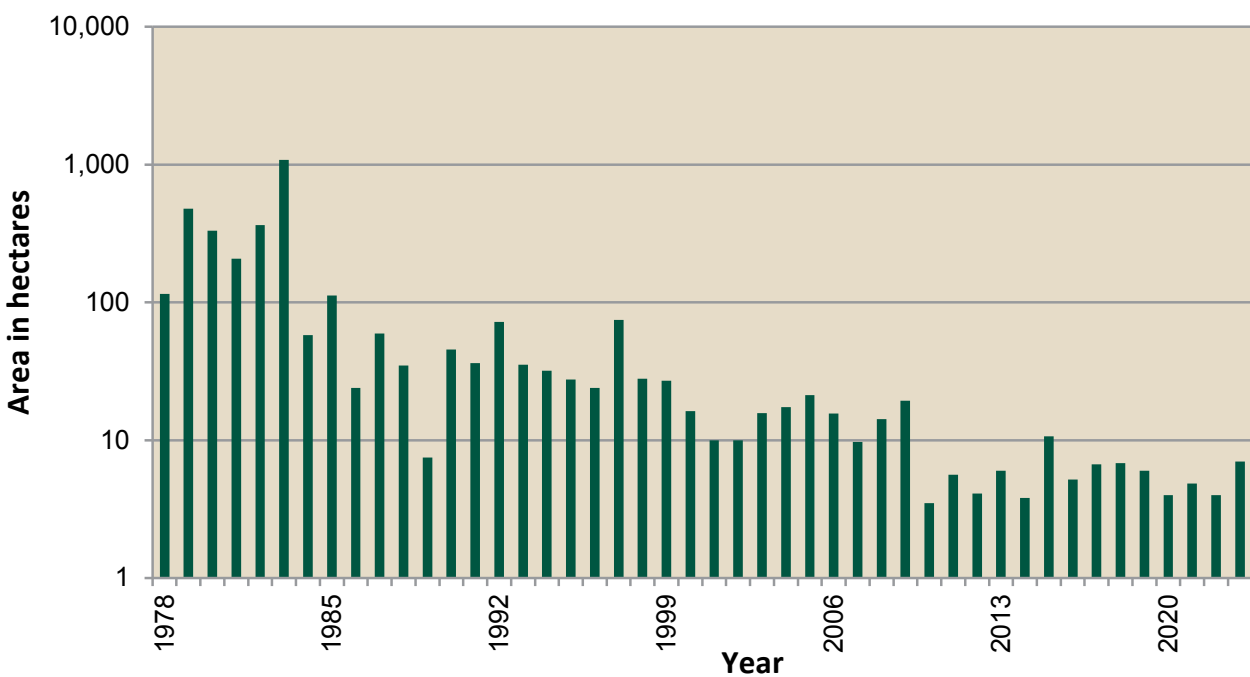
Crushed Limestone, Fertilizer and Seed

The manual application of crushed dolomitic limestone on barren land occurred in two locations this year. The first was an area west of Coniston which was a continuation of work performed over the past few years. A total of 4.4 ha was manually treated with agricultural limestone and about 2.6 ha of that area, plus the area treated in 2022, received the application of fertilizer and grass seed.

The second location treated was 2.6 ha east of the end of Lasalle Blvd. Liming is scheduled to continue in this area in 2024, at which time fertilizer and seed application will occur. Refer to the following page for a map of the location of liming activities. To date, the Program has manually treated 3,504 ha of barren land with crushed limestone.

Area Limed 1978 to 2023

The bar graph below indicates the area in hectares limed per year by the municipal Regreening Program since 1978 with a total of 3,504 ha limed to date.



Vale Aerial Seeding Program

Although not part of the municipal program, Vale aerially seeded approximately 100 ha of barren land east of Wahnapiatae using pelletized dolomitic limestone, fertilizer, and seed mixture.

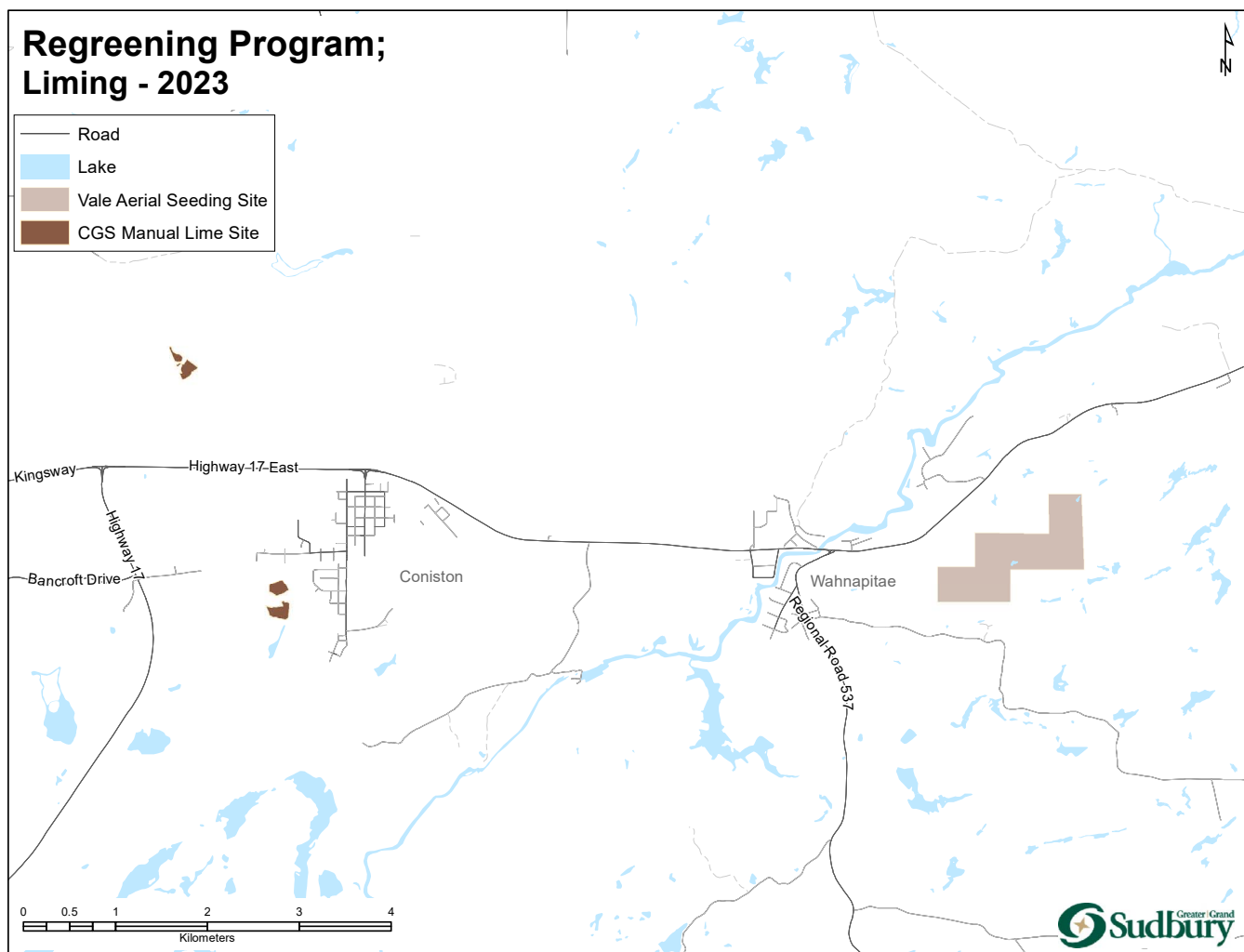
This activity is part of Vale's ongoing collaboration with the City of Greater Sudbury's Regreening Program.

Vale and the Regreening Program use the following seed mix:

- 40% fall rye (*Secale cereale*)
- 20% Canada wildrye (*Elymus canadensis*)
- 20% little bluestem (*Schizachyrium scoparium*)
- 10% slender wheatgrass (*Elymus trachycaulus*)
- 10% alsike clover (*Trifolium hybridum*)

The seeded area will be planted with tree/shrub seedlings in 2024. Refer to the below map of the location of the aerial seeding activities.

Map – Lime Site 2023



NOTE: Up-to-date mapping is available on the Regreening App.

Tree Planting

A total of 113,075 tree seedlings and 27,880 shrub/understory tree seedlings were planted at various locations in Greater Sudbury through the spring and fall. Since 1978, the Program has planted a total of 10,222,422 trees and 565,166 shrub/understory trees.

The success of this year's tree planting is attributed to sponsors and donations. Seedlings were provided by Vale (88,452). Funds for seedling purchases were supported by Tree Canada (\$70,175) and One Tree Planted (\$10,719). Labour and logistics for the planting of the seedlings were supported by the 2 Billion Tree program (\$50,000) and tentree (\$81,900). Costs for tree planting include the labour cost of tree planters and the costs of transportation, storage, watering, etc.

The 36,095 seedlings funded through Tree Canada were planted west of Coniston and the 10,000 seedlings funded through One Tree Planted were planted south of Wahnapiatae.

Barren land aerially seeded by Vale, located south of Wahnapiatae, was selected for the 2 Billion Tree program funding where trees were planted more densely in certain areas to achieve increased carbon sequestration capability. In all, 100,000 seedlings were planted consisting of the typical first phase planting mix of jack pine (*Pinus banksiana*), red pine (*Pinus resinosa*), white pine (*Pinus strobus*), red oak (*Quercus rubra*) and green alder (*Alnus viridis* ssp. *crispus*).

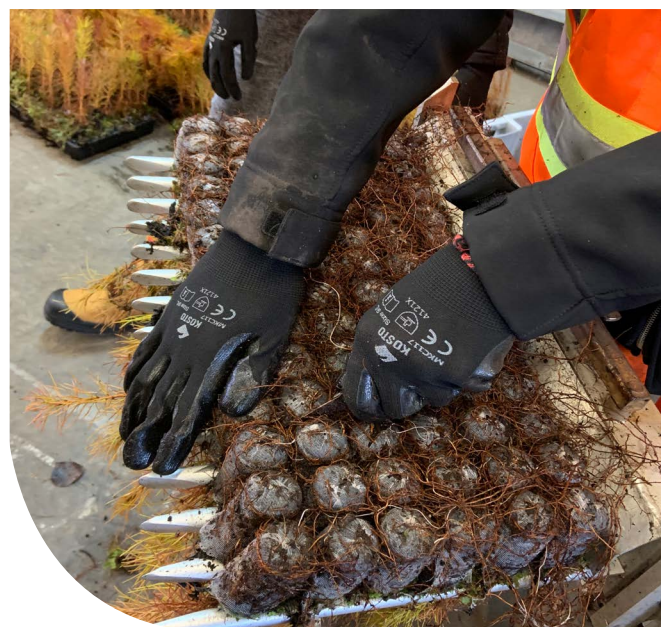
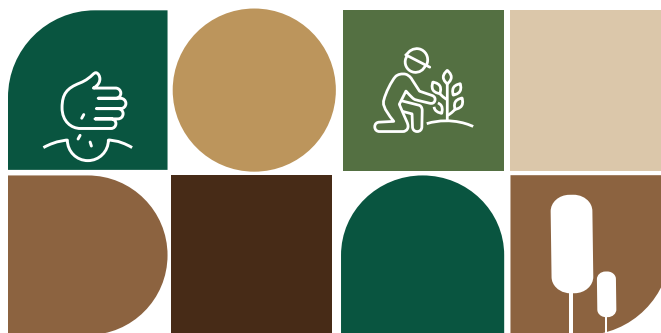
Vale's seedling contribution was instrumental in securing the 2 Billion Tree program funding.

Refer to the tree planting map on the next page for locations of the planting sites.

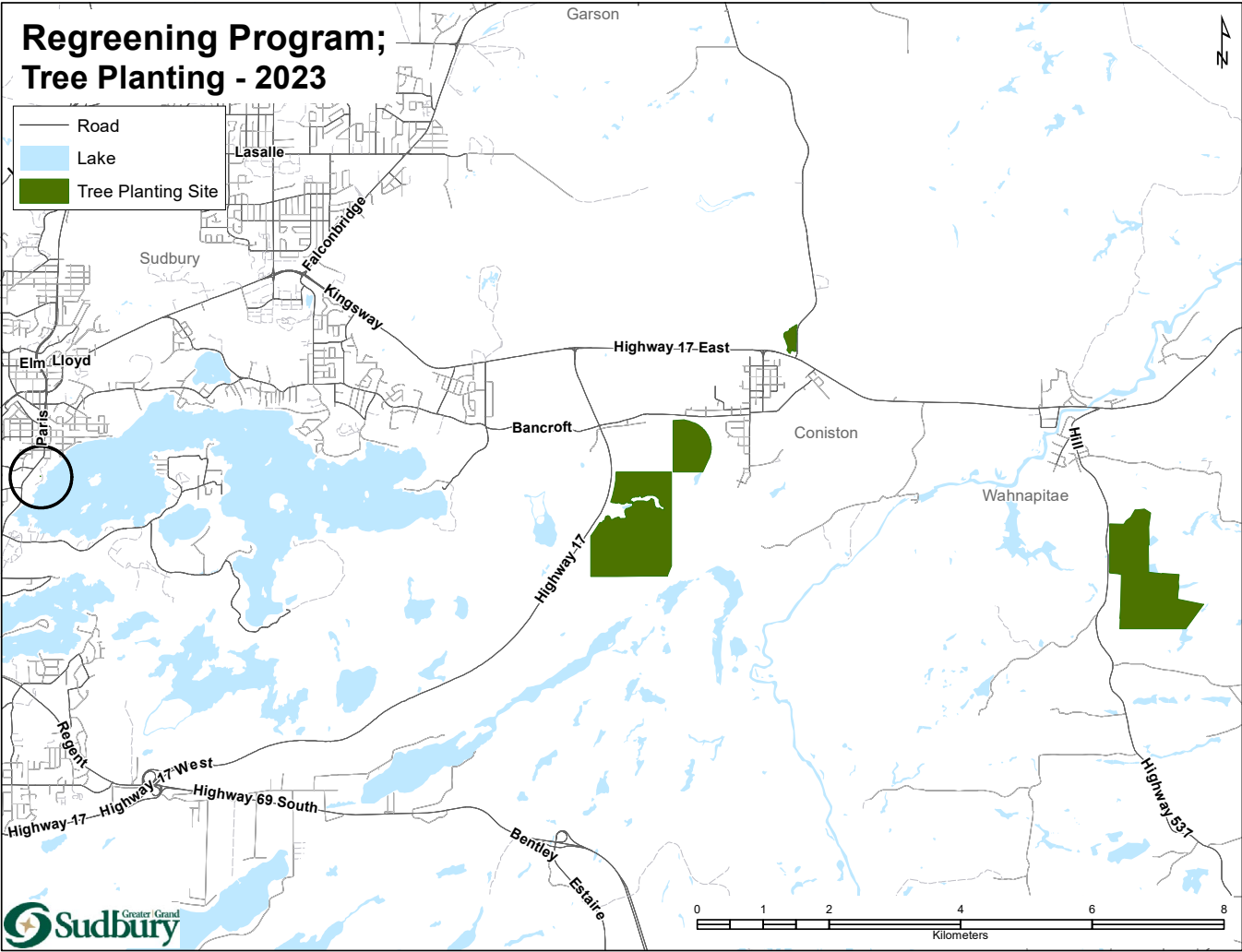
Six species of canopy tree (conifer and deciduous), six species of deciduous understory trees, and 16 shrub species were planted in 2023. Creeping juniper (*Juniperus horizontalis*) a new shrub this year was added as a trial in low quantity.

To date, 29 species of canopy trees (13 conifer and 16 deciduous), 11 species of understory trees and 43 species of shrubs have been planted. A total of 83 different tree and shrub species have been part of the Regreening 'recipe' to date.

Refer to page 9-10 for a complete list of species planted as part of the Regreening Program since 1979.



Map – Tree Planted Areas 2023



NOTE: Up-to-date mapping is available on the Regreening App.



Species List

The following tables outline the scientific and common names of the species of trees, understory trees and shrubs that have been planted by the Program. Those species with an * are non-native. Those species followed by a + were part of the 2023 planting mix.

Scientific Name	Common Name
Trees	
<i>Abies balsamea</i>	Balsam Fir
<i>Acer (rubrum, saccharinum, saccharum)</i>	Maples (Red, Silver, Sugar)
<i>Betula alleghaniensis+</i>	Yellow Birch+
<i>Carya cordiformis</i>	Bitternut Hickory
<i>Fagus grandifolia</i>	American Beech
<i>Fraxinus (americana, nigra, pennsylvanica)</i>	Ash (White, Black, Red)
<i>Larix (decidua*, kaempferi*)</i>	Larch (European*, Japanese*)
<i>Larix laricina</i>	Tamarack
<i>Ostrya virginiana</i>	Ironwood
<i>Picea (abies*, glauca+, mariana)</i>	Spruce (Norway*, White+, Black)
<i>Pinus (banksiana+, nigra*, resinosa+, strobus)</i>	Pines (Jack+, Austrian*, Red+, White)
<i>Quercus (alba, macrocarpa, rubra+, velutina)</i>	Oaks (White, Bur, Red+, Black)
<i>Robinia pseudoacacia*</i>	Black Locust*
<i>Thuja occidentalis</i>	Eastern White Cedar
<i>Tilia americana</i>	Basswood
<i>Tsuga canadensis</i>	Eastern Hemlock

Scientific Name	Common Name
Understory Trees	
<i>Acer (pensylvanicum+, spicatum)</i>	Maples (Striped+, Mountain)
<i>Alnus crispa+</i>	Green Alder+
<i>Amelanchier (laevis, sanguinea+)</i>	Serviceberry (Smooth, Roundleaf+)
<i>Cornus alternifolia+</i>	Alternate-leaf Dogwood+
<i>Prunus nigra</i>	Canada Plum
<i>Prunus pensylvanica</i>	Pincherry
<i>Sambucus anadensis</i>	Common Elderberry
<i>Sorbus (americana+, decora+)</i>	Mountain-ash (American+, Showy+)

Species List (Continued...)

Scientific Name	Common Name
Shrubs	
<i>Amelanchier (canadensis, spp., stolonifera)</i>	Serviceberry (Canadian, spp., Running)
<i>Arctostaphylos uva-ursi</i>	Bearberry
<i>Aronia (arbutifolia, melanocarpa+, melanocarpa "Viking")</i>	Chokeberry (Purple, Black+, "Viking")
<i>Caragana arborescens</i>	Siberian Peashrub
<i>Cephalanthus occidentalis</i>	Buttonbush
<i>Clematis virginiana</i>	Virgin's Bower
<i>Cornus (rugosa+, sericea+)</i>	Dogwood (Roundleaf+, Red Osier+)
<i>Corylus americana</i>	American Hazelnut
<i>Diervilla lonicera</i>	Northern Bush-honeysuckle
<i>Elaeagnus angustifolia*</i>	Russian Olive*
<i>Gaultheria procumbens</i>	Eastern Wintergreen
<i>Ilex (mucronata, verticillata+.)</i>	Holly (Mountain, Common Winterberry+)
<i>Juniperus (communis, horizontalis+)</i>	Juniper (Common, Creeping+)
<i>Lonicera canadensis+</i>	Fly Honeysuckle+
<i>Myrica gale+</i>	Sweetgale+
<i>Physocarpus opulifolius</i>	Ninebark
<i>Pinus mugo *</i>	Mugo Pine*
<i>Prunus (pumila, virginiana)</i>	Cherry (Dwarf Sand, Choke)
<i>Rhus typhina+</i>	Staghorn Sumac+
<i>Ribes hudsonianum</i>	Wild Black Currant
<i>Rosa (acicularis+, blanda+, palustris+)</i>	Roses (Prickly Wild+, Smooth Wild+, Swamp+)
<i>Rubus odoratus</i>	Flowering Raspberry
<i>Sambucus pubens+</i>	Red Elderberry+
<i>Shepherdia canadensis</i>	Canada Buffaloberry
<i>Spiraea (alba+, alba var. latifolia)</i>	Meadowsweet (White+, Broad-leaved)
<i>Spiraea tomentosa+</i>	Steeplebush+
<i>Symphoricarpos alba+</i>	Snowberry+
<i>Taxus canadensis</i>	Canada Yew
<i>Viburnum alnifolium</i>	Hobblebush
<i>Viburnum lentago</i>	Nannyberry
<i>Viburnum nudum var. cassinoides+</i>	Wild Raisin+
<i>Viburnum trilobum</i>	Highbush-cranberry

Quality & Survival Assessments

Tree Canada requires that funded plantations be evaluated for quality and survival. A certified assessor (Registered Professional Forester and professor at Collège Boréal) visited the planting crew on-site in the spring and again in the fall, evaluating the crew's quality at 97.5% and 95.0% respectively.

Survival assessment conducted on a first-year plantation averaged 91.3% for species including red oak, jack pine, American mountain-ash and bearberry.



Second year plantation average of various understory trees and tamarack was 83% survival. Fifth year survival assessments for balsam fir and white pine averaged 92%.

Volunteer Tree Planting Events

The Regreening Program offers seedlings, planting equipment and guidance to local groups wanting to participate in the regreening effort.

Volunteer participation provides an educational opportunity on environmental issues and information on the City's Regreening Program, tree planting experience as well as a sense of community pride and ownership of the natural environment.

Group planting activities were undertaken by Confederation Secondary School, Junction Creek Stewardship Committee, and local lakes groups with seedlings provided by the Regreening Program.

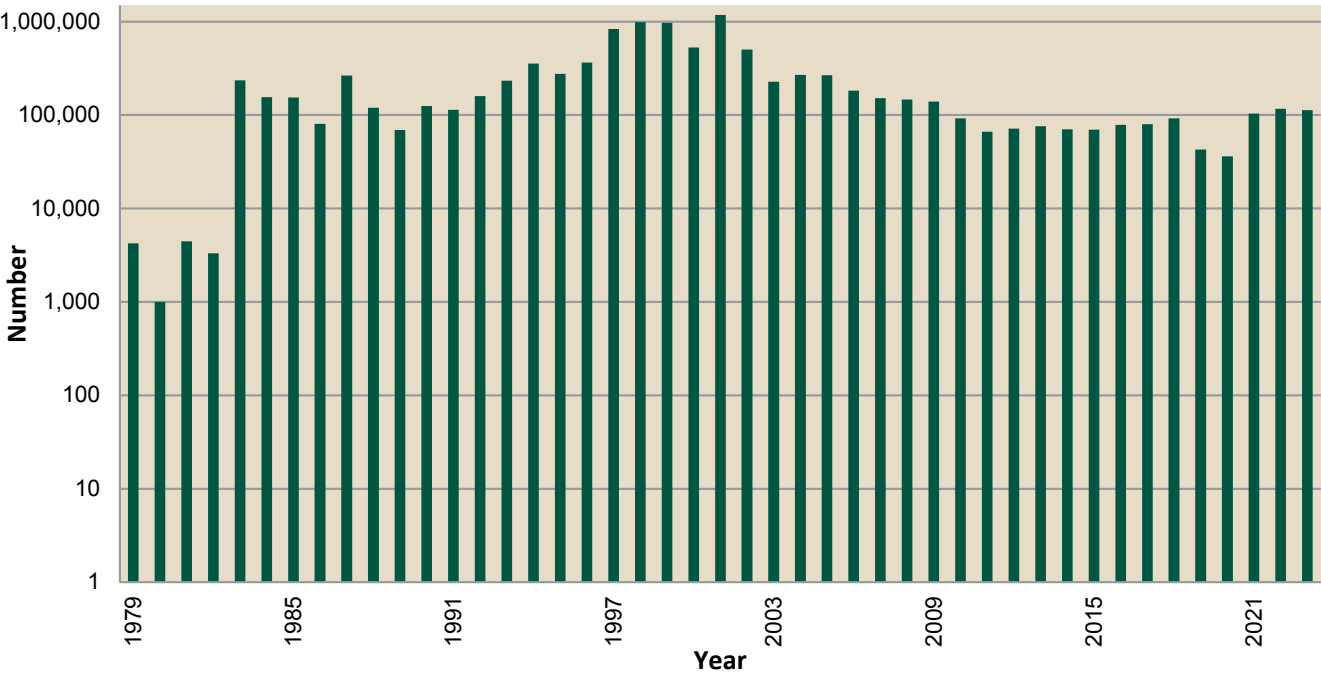
Tree Canada's National Tree Day funding supported the planning, purchase, and planting of 249 potted trees and shrubs at the Bell Park switchback near the 10 Millionth tree. About 50 grade nine students from Lockerby Composite School were instrumental in that planting activity.

Together, about 90 volunteers planted 1,465 seedlings this year. Since the volunteer program began, 13,311 volunteers have planted 390,076 seedlings.

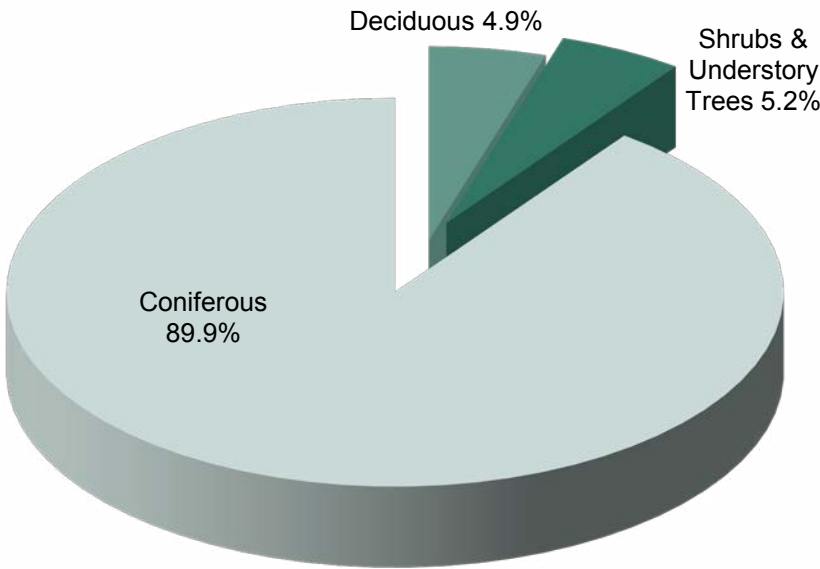


Number of Trees Planted 1979 to 2023

The bar graph below indicates the number of trees planted each year since 1979 totaling 10,227,597 trees.



Percent of Species Planted 1979 to 2023



The pie graph (left) illustrates the percentage of each type of species planted since 1979 totaling 10,787,088 plants.

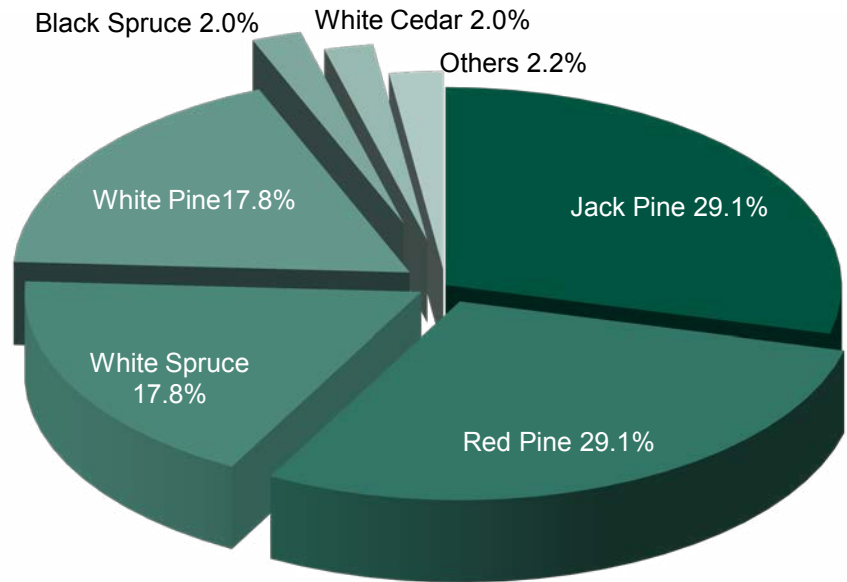


Percent Coniferous Species Planted 1979 to 2023

The pie graph (right) illustrates the percentage of each coniferous tree species planted since 1979 totaling 9,702,260 trees.

Others Include:

tamarack 1.4%, balsam fir 0.3%, Norway spruce 0.2%, larch 0.2%, hemlock 0.1%, and Austrian pine <0.05%.

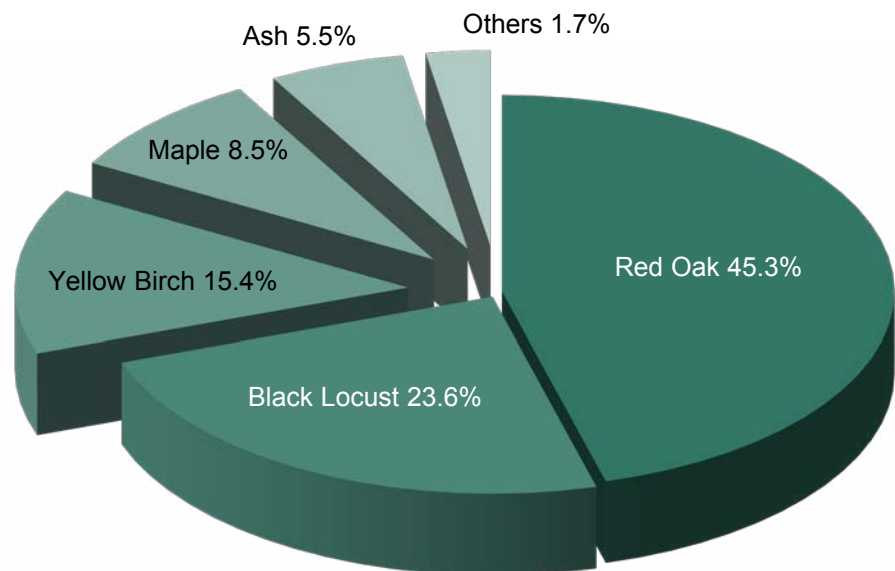


Percent Deciduous Species Planted 1979 to 2023

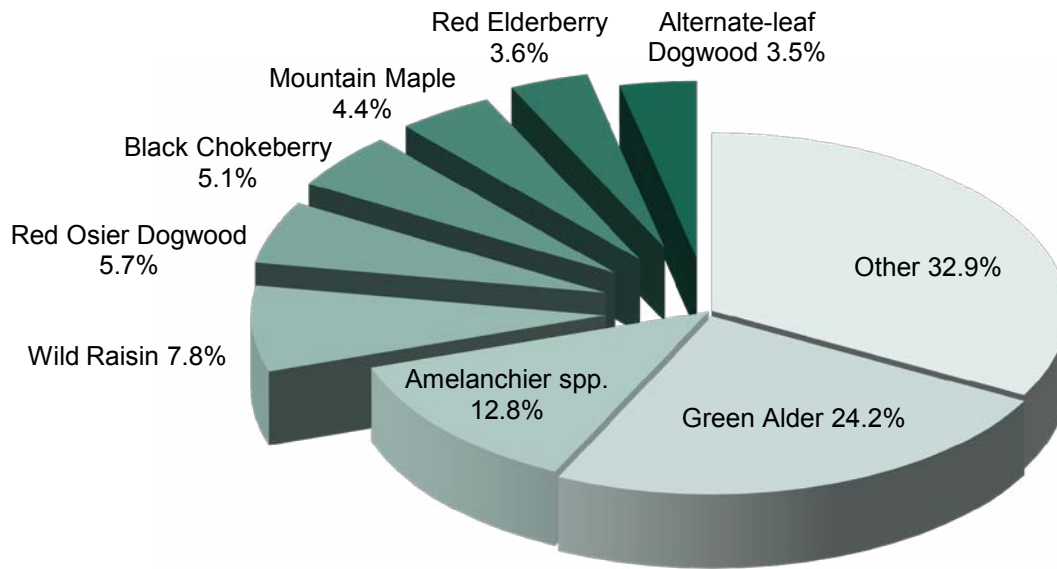
The pie graph (right) illustrates the percentage of each deciduous tree species planted since 1979 totaling 525,337 trees.

Others Include:

bur oak 0.7%, ironwood 0.6%, American beech 0.1%, basswood <0.1%, bittersweet hickory <0.1%, white oak <0.1% and black oak <0.1%.



Percent Shrubs and Understory Trees Planted 1979 to 2023



The pie graph (left) illustrates the percentage of each type of shrub or understory tree species planted since 1979 totaling 559,491 plants.

Others include:

Common Elderberry	3.2%	Showy Mountain-Ash.....	0.6%
Striped Maple	3.2%	Virgin's Bower	0.5%
Roundleaf Dogwood.....	2.7%	White Meadowsweet	0.4%
Staghorn Sumac	2.2%	Snowberry	0.4%
Mountain-Holly	2.1%	Mugo Pine	0.3%
Bearberry	1.8%	Nannyberry 0.3%Canada Yew.....	0.2%
Steeplebush.....	1.6%	Broad-Leaved Meadowsweet	0.2%
Common Winterberry	1.5%	Hobblebush	0.2%
American Mountain-Ash	1.4%	Buttonbush	0.1%
Siberian Pea Shrub	1.3%	Pincherry	0.1%
Smooth Wild Rose	1.2%	Wild Black Currant	0.1%
Northern Bush-Honeysuckle.....	1.1%	Black Chokeberry 'Viking'	0.1%
Russian Olive	0.9%	Flowering Raspberry	0.1%
Swamp Rose	0.8%	Sweet Gale	0.1%
Ninebark	0.7%	Canada Plum	<0.05%
Canada Buffaloberry	0.6%	Fly Honeysuckle	<0.05%
Common Juniper	0.7%	Eastern Wintergreen	<0.05%
High-Bush Cranberry.....	0.6%	Purple Chokeberry	<0.05%
Chokecherry	0.6%	American Hazelnut	<0.05%
Prickly Wild Rose	0.6%	Dwarf Sand Cherry	<0.05%

Seed Collecting

Crew and staff collected propagules (seeds, berries, nuts) of 19 species that were subsequently shipped to a contract nursery to grow for future stock. The propagules collected resulted in over 5.2 kilograms of clean seed. See the table (below right) for species and quantity of clean seeds collected in grams.

Additionally, 27 kg of acorns were collected and delivered to Collège Boréal to grow for the 2023 season and have potential yield of 5,000 red oak.

The crew also collected 450 L of uncleaned (including stems) poverty oat grass seed, thanks to Hanmer business OCL Trucking and Custom Crushing, which permitted the crews access to their property. Seeds for these native grasses are not readily available commercially and therefore are collected manually from local sources. Seeds were sown directly on several sites within the manual lime site in the fall.



Species	Clean Seed (in grams)
Mountain Maple	670
Green Alder	772
Bartram's Serviceberry	25
Smooth Serviceberry	100
Running Serviceberry	106
Bearberry	95
Black Chokeberry	39
Black Chokeberry 'Viking'	5
Alternate-leaf Dogwood	2480
Roundleaf Dogwood	97
Common Juniper	34
Fly Honeysuckle	74
Prickly Wild Rose	54
Smooth Wild Rose	51
Red Elderberry	75
American Mountain-ash	17
Snowberry	46
Wild Raisin	442
Hobblebush	24

Biodiversity

According to The Convention on Biological Diversity's website (<https://www.cbd.int/>), "Ecosystems and their biodiversity underpin economic growth, sustainable development and human wellbeing. Yet the loss of biodiversity continues, resulting in serious reductions in ecosystem goods and services, negatively impacting economic prosperity and environmental sustainability."

Thanks to the efforts of VETAC over the past 50 years, coupled with reclamation activities through the City's Regreening Program and the creation and implementation of the local Biodiversity Action Plan 2009, this trend has been reversed in the Greater Sudbury area. Biodiversity is actually increasing.

Forest Floor Transplants

The practice of transplanting forest floor plants has occurred yearly since 2010 as a technique for re-introducing species, improving habitat, creating a seed bank and increasing the diversity of older reclamation sites. Forest floor from Crown land north of Capreol was harvested from mid-June to August.

The Regreening crews hand dug the top 10 cm of soil containing plants, seeds, microorganisms, and invertebrates from the donor site. The vegetation was watered overnight and transported to regreened (receptor) sites in Greater Sudbury for transplanting. The focus this year was to introduce shade tolerant species in appropriately shaded sites.

Criteria for selecting receptor sites for the understory transplants include the following: adequate canopy cover, low understory species diversity, sufficient soil depth and organic layer (>5cm) and surrounding

areas that are large enough to allow the species to spread. This year, 1,600 trays of plant material were transplanted covering an area of approximately 0.0512 ha. There were 6 sites in all, representing 32 plots (each plot measures approximately 4m x 4m) and over 30 species re-introduced to the regreening sites.

Over the 14 years of this initiative, 1,482 plots have received understory transplants covering a total area of approximately 2.060 ha, 140 plots received exposed transplants covering an area of just over 0.186 ha and approximately 188 different species have been introduced. The area covered by forest floor (2.246 ha) is now the equivalent to approximately 2.5 football fields or about 1.5 baseball fields in size.

NOTE: Up-to-date mapping is available on the Regreening App.



Long-Term Monitoring

Monitoring Plots

Adding a variety of shrubs and understory trees to recovering landscapes has many benefits from enhancing habitat to increasing the resistance and recovery from effects of natural disturbances such as climate change, disease, or insect infestations. To gauge the success of these species, monitoring plots are established to test their survivability and suitability through compiling long-term monitoring data.

This year five species were monitored in established plots. Canada yew planted the previous year had an 80% survival rate and 4 specimens were observed in fruit.

Fly honeysuckle planted the previous year in two separate locations had over 90% survival. Green alder was observed at over 70% survival after one year and both black chokeberry and black oak were observed at over 90% survival in two-year plots.

Currently there are 34 species represented in monitoring plots, 20 have only one replicate while 14 have multiple replicates. Work will continue to add replicates and new species as they become available. Monitoring has taken place over the past 12 years and after assessing 34 species in past monitoring plots, 21 species showed relatively high survival rate (>80%).

Pink Lady's Slipper Monitoring

Monitoring efforts continue in plots of pink lady's slipper (*Cypripedium acaule*) established early in the forest floor mat transplant exercise. The largest native orchid in the area, this species is typical of dry upland conifer mixedwood stands. The presence of multiple pink lady's slipper individuals 13 years after transplant indicates that this species is surviving and thriving. Of note, it generally takes 10 years from germination to flowering stage.

There currently appears to be some stabilization of flowering individuals after the initial decline experienced shortly after transplanting.

Observations this year indicate they are surviving well in both barren and semi-barren sites. All four sites located within the semi-barrens showed significant decline in flowering individuals whereas in the previous year, there was a significant increase. Three of those sites contained the most flowering individuals ever recorded in past monitoring efforts. Individuals were found to have spread 2 to 3.5 meters away from the original plots at the Coniston Hydro Road site and Jane Goodall site.

Whip-poor-will (*Antrostomus vociferus*) Overall Benefit Area

During the 2023 field season, suitable locations were scouted to establish 10 long-term photograph sites within the overall benefit area. Sites selected capture ground level vegetation, the background vegetation, and the overall area. These photograph sites will facilitate tracking changes over time in the vegetation dynamics.

Mapping software was initially used to determine the highest elevation using the topographic map feature. At each site selected, three photographs were taken using cardinal directions and included major landmarks where possible. Sites were marked with white spray paint for ease in finding in future monitoring years although GPS coordinates were also recorded.





Labour

Program staff included a foreperson, four crew leaders, 10 workers and nine students involved in regular greening activities with two Biodiversity Research Assistants engaged in monitoring activities associated with greening work. In total, 27 temporary positions were created in 2023.

The table below outlines the temporary positions created and the number of weeks worked, with 27 positions created in 2023.

Position Title	# Positions	# Weeks	Activity
Foreperson	1	31	Supervision
Crew Leader	1	28	Supervision
	3	26	
	1	10	
Regreening Worker	10	24	Tree planting, liming, transplanting, fertilizing, seeding, seed collection
Student	9	18	
Biodiversity Research Assistant	1	31	Field data collection and analysis, seed collection
	1	25	
Total Positions	27		

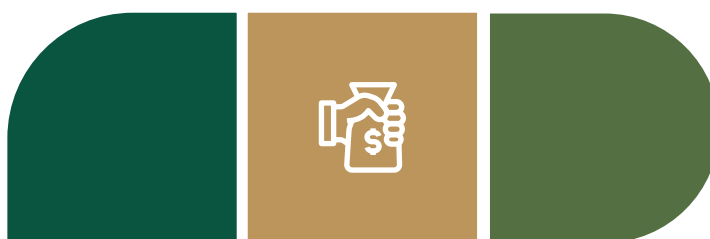
Funding

The Regreening Program relies on donations to operate the yearly Program. Many successful partnerships have been developed over time and new opportunities are always being sought. Funding from Natural Resources Canada for the 2 Billion Tree Campaign was granted again this year.

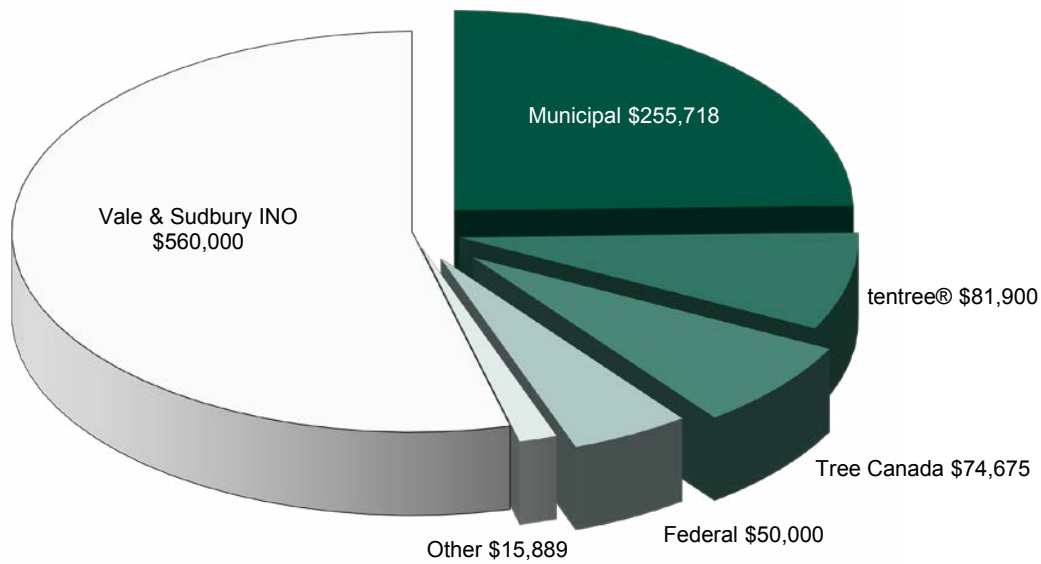
Vale and Sudbury INO continued with their significant support of all aspects of the Program.

The table below outlines the program contributors and the dollar amount associated with their contributions in 2023 for a total of \$1,038,182.

Program Contributor	Description	Source	Amount
Labour			
tentree	Financial support to have 91,000 seedlings planted	Private	\$81,900
Cash			
Sudbury earthdancers	Financial contribution	Private	\$5,170
Natural Resources Canada	2 Billion Tree Campaign	Federal	\$50,000
Vale	Financial contribution	Mining Co.	\$250,000
Sudbury INO	Financial contribution	Mining Co.	\$285,000
Materials			
Tree Canada	Funding to purchase 36,095 seedlings	Private	\$70,175
Tree Canada	Funding to purchase and plant 249 potted trees/ shrubs	Private	\$4,500
One Tree Planted	Funding to purchase 10,000 seedlings	Private	\$10,719
Vale	Donation of 88,452 seedlings	Mining Co.	\$25,000
Subtotal	Sum of external funding sources	Various	\$782,464
City of Greater Sudbury	Financial contribution	Municipal	\$255,718
Grand Total	Sum of all funding sources	Various	\$1,038,182



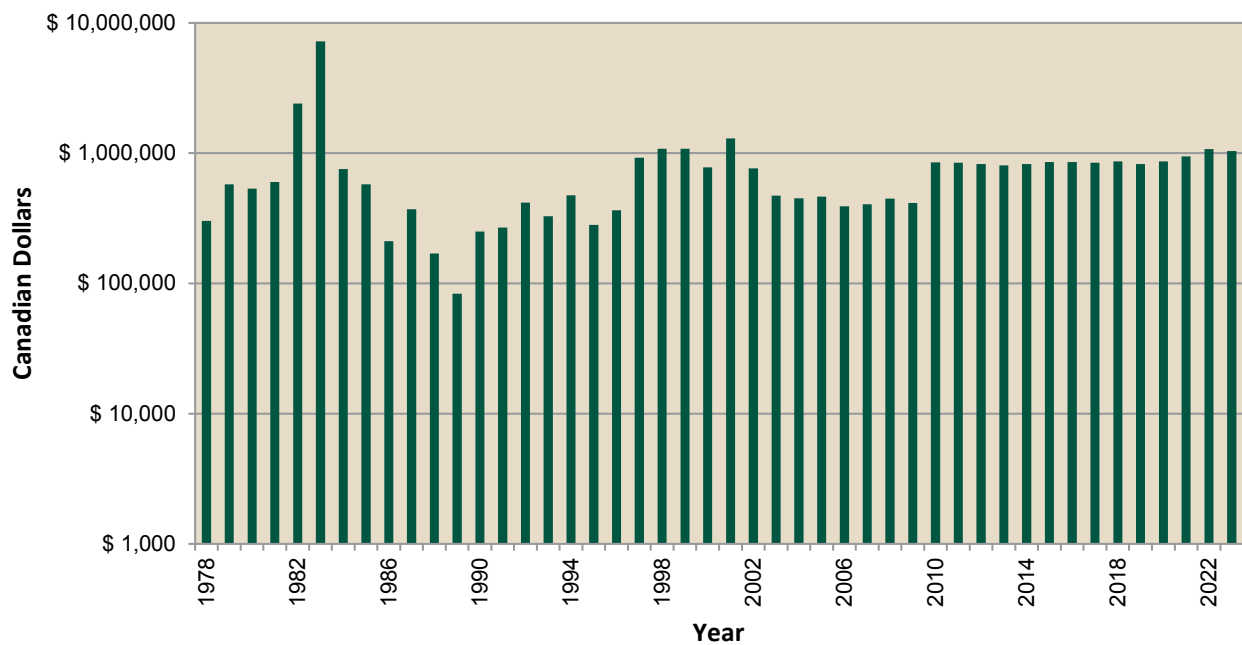
Funding Contributions by Source 2023



The graph (left) illustrates 2023 funding contributions by source.

Yearly Program Costs 1978 to 2023

The bar graph below indicates yearly program costs from 1978 to 2023 with a grand total of \$37,443,513

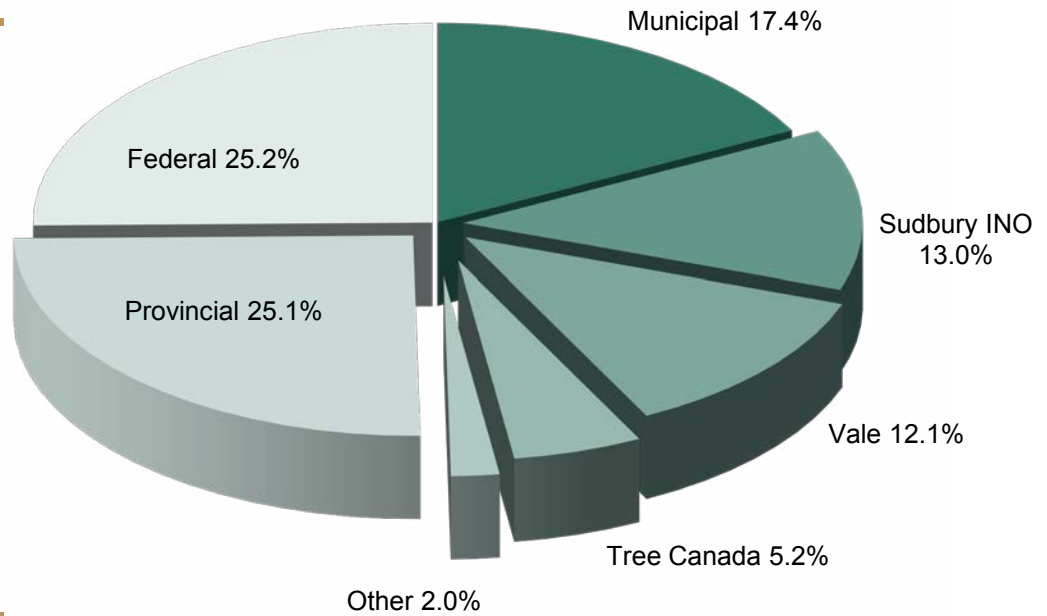


Percent Funding Contributions by Source 1978 to 2023

The graph (right) illustrates funding contributions in percentages by source from 1978 to 2023.

Since 1978, the City's contribution to the Program has averaged 17.4% of the total costs with 82.6% coming from external sources.

To date, the program costs exceed \$37.4 million.



Community Engagement

Tree Giveaway

The Sudbury Horticultural Society partnered with the Sudbury Market to set up booths on Saturday, May 7, 2023, at Science North as part of a gardening themed event where VETAC also held its annual Tree Giveaway. At the event, VETAC provided 200 smooth wild rose and 200 black chokeberry seedlings to local citizens to encourage gardening with native species.

50th Anniversary Video Loop

A video loop (5:27 minutes) was developed to visually tell the story of the transformation of the Sudbury landscape from bleak barren hilltops to thriving greenspaces. This video is available on the [website](https://www.greatersudbury.ca/live/environment-and-sustainability1/regreening-program/the-sudbury-story/).

(<https://www.greatersudbury.ca/live/environment-and-sustainability1/regreening-program/the-sudbury-story/>)

The video has been playing regularly at Tom Davies Square in the foyer since summer. The video is an excellent educational tool as the youth of today are growing up in a much-improved environment compared with that of their parents and lack the firsthand experience of the blackened hilltops. The video loop highlights many different barren landscapes that existed as little as 50 years ago, then transitions into the work of many to treat the land before moving into the tree planting phase of the program. It ends with some distinctive before and after images.

Facebook Posts

Throughout the year, several Facebook posts were featured on the City's website to help communicate regreening efforts to the public. The posts were a good way to remind the public of the efforts taking place and included posts on the history of the Sudbury landscape, importance of partnerships, forest floor mats, the Regreening App, importance of trees, and VETAC's role in the process.

Garden Bed

The Parks Department at the City installed a garden bed to commemorate the 50th year since VETAC formed and regreening efforts were developed. It was visible from Paris at York Street for both residents and visitors over the summer season.

50th Anniversary Walking Tour

On September 10 from 1:30 to 4:00 p.m. Rainbow Routes Association hosted "Regreening – A 50th Celebration Hike" held in conjunction with VETAC to celebrate the anniversary. More than 50 participants took part in the trek from James Jerome Sports Complex to the York Street parking lot to see the 50th Anniversary garden bed then it was off to the Bell Park switchback to see the 10 Millionth tree.

The tour then navigated down residential streets and neighbourhood pathways back to the starting point.

The tour was led by Dr. Peter Beckett and Paul Haynes who were able to provide a history of regreening and development over time.



Community Engagement (continued...)

Glencore Open House

Glencore hosted a Community Open House on September 14 at Levack Public School where Regreening staff hosted a booth providing information and SWAG to mainly students and parents. A Family Day was held September 16 at the Glencore Smelter in Falconbridge for mainly Glencore staff and their families. Several members of VETAC hosted a booth at this location where a laptop showed the regreening [loop](https://www.greatersudbury.ca/live/environment-and-sustainability1/regreening-program/the-sudbury-story/).

(<https://www.greatersudbury.ca/live/environment-and-sustainability1/regreening-program/the-sudbury-story/>)

Other print materials and SWAG were available for distribution.

Children's Water Festival

On September 20 and 21, the Sudbury Children's Water Festival was held at Terry Fox Complex. Aside from assisting with logistics, the Regreening staff hosted several booths including a tree planting/regreening booth. Several VETAC members also hosted booths at the event.

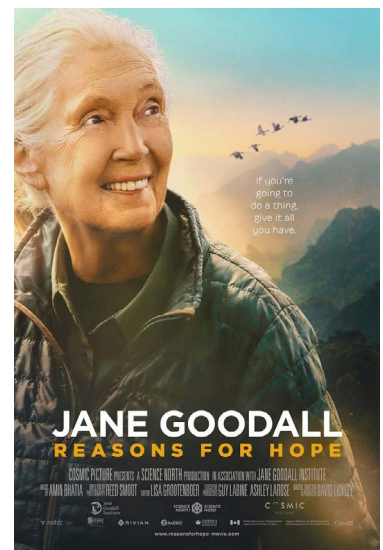
Events

IMAX Film Release and Gala

On May 30, Science North hosted a Gala event to release the latest IMAX film *Jane Goodall – Reasons for Hope* which features Sudbury's regreening efforts and based on filming that took place the previous year. The packed event was by invitation only and was attended by Jane Goodall herself. The film was available for public viewing beginning June 2. The film is and will be playing in IMAX®, giant screen and digital cinemas in museums, science centres, and other cultural institutions worldwide.

The film is currently being shown mainly in Canada and the USA, but also in Europe and Asia. For more information on the film and to locate a theatre, <https://reasonsforhope-movie.com/> as the list changes often.

More recently, *Jane Goodall: Reasons for Hope* film was screened at COP 28 on December 6, 2023, at the Sustainability Science Hub.



Tours and Presentations

March 15

Tina McCaffrey presented the Regreening Story to eight delegates from Sweden which was organized by the City's Business Development group.

March 21

Dr. Peter Beckett gave a presentation at Cambrian College on 50 years of Healing the Sudbury Landscape to 30 students from the College's Environmental Monitoring and Impact Assessment Program and Environmental Technician Programs.

March 23

Dr. Peter Beckett provided a ZOOM presentation that was organized by the Federal Government for a mining group from Chile who are interested in Sudbury's Regreening story.

June 5

Tina McCaffrey provided a brief informal chat to Vale's Community Gardens group at their kickoff event as the guest speaker.

June 9 -11

During the Ontario Nature Annual Gathering, June 9-11, at Collège Boréal in Sudbury, Dr. Peter Beckett delivered an invited plenary address to 140 delegates, entitled "The Long-Standing Landscape Regreening Program in Sudbury, Canada – 50 years of Healing and Creating Biodiversity on a Smelter-Impacted Landscape". In his final talk on Regreening Sudbury at the finale of the event on the evening of June 10, Dr. Beckett received a standing ovation. On Sunday, June 11 Dr. Beckett then hosted a field trip where 20 conference delegates toured the Kelly Lake Hill, Dynamic Earth and Copper cliff areas of Sudbury.

June 15

Tina McCaffrey was the Invited Restoration Plenary Speaker at the R3 Reclaim, Restore, Rewild Conference in Quebec City to about 500 attendees. The presentation "From Moonscape to Living

Landscape" was well received and sparked several questions and interest. Immediately afterwards, there was a special symposium on Emerging Perspectives on the World's Largest Regreening Project: A 50-Year Retrospective, co-organized and chaired by Dr. Peter Beckett who also presented on "Outcomes from 45 years of the Landscape Regreening Program in Sudbury, Ontario, Canada: A Synopsis". This complemented the Plenary presentation delivered by Tina McCaffrey.

June 20

Dr. Peter Beckett participated in a discussion and regreening tour with Dr. Pete Whitbread-Abrutat (Futureterrains), from England, for a second edition of his bestselling book "101-Things To Do With A Hole In The Ground".

June 21

As part of the Ontario Architects Association (OAA) Conference in Sudbury Dr. Peter Beckett led a workshop with 45 participants on 50 years of the Landscape Regreening Program in Sudbury.

June 22

Dr. Peter Beckett was joined by 35 participants from the OAA conference in a Regreening tour in Copper Cliff, Dynamic Earth and Lake Laurentian Conservation Areas.

September 10

51 Citizens and visitors to Sudbury marked the 50 years of VETAC and Regreening in Sudbury with a special tour in conjunction with the Rainbow Routes Association. Led by Dr. Peter Beckett and Tina McCaffrey the group toured older regreened sites in the south end of the city.

Tours and Presentations (continued...)

September 12-13

The Regional Public Works Commissioners of Ontario (RPWCO) Urban Forestry Sub-committee held their meeting in Sudbury where Tina McCaffrey and Dr. Stephen Monet hosted a day long field trip of regreening sites. The following day during their general meeting, Tina provided a brief presentation on regreening efforts to those in attendance in person and via MS Teams.

September 13-14

The CLRA Annual Symposium was held over two days where Katie Benkovich and Quentin Smith hosted field trips showcasing reclamation activities on mining lands and discussed regreening beyond their gates. On the second day, the symposium was held at Bryston's on the Park with Quentin Smith updating the attendees on reclamation activities at Vale operations in Sudbury.

October 17

A small delegation from Peru were given a regreening presentation and tour by Dr. Peter Beckett.

October 19 – 22

Students and professors from the Masters of Landscape and Urban Design Program at the Université de Montréal visited Sudbury and while here, heard from Dr. Peter Beckett about 50 years of urban regreening followed by a field visit to regreened sites.

October 26

Over 200 webinar participants listened to Dr. Peter Beckett discuss 50 years of regreening the Sudbury landscape as part of the 'Highlights of Sudbury, recapping the Ontario Association of Architects conference in Sudbury'.

October 30

Dr. Peter Beckett led a tour at Kelly Lake Hill and Copper Cliff for 24 students of the Sir Sandford Fleming and Trent University Restoration Program

November 24

During a northern Ontario touring workshop by the Sustainable Institute as part of the session Sustainable Resource Management and Environmental Stewardship related to Sudbury's Industrial landscape Dr. Peter Beckett talked to the 15 Mongolian delegates (including the Mongolian Ministry of Environment) on the 50 years of change of the Sudbury landscape. The indoor session was followed by a tour of regreened areas.

December 7

Dr. Graeme Spiers attended a special discussion on how to use the 'Sudbury Experience' with a small group of trainers from the Universidad Catolica de Santa Maria in Arequipa, Peru. This discussion was preceded by an awards ceremony where about 50 High School Teachers received diplomas for completing a course in setting up environmental awareness exercise for their students.



May to December

Dr. Graeme Spiers was on sabbatical in Peru assisting with local issues by communicating the successes and lessons learned in Sudbury. Here is a summary of the notable talks he provided:

1. From Black to Green. Nearly Fifty Years of Regreening in Sudbury, Ontario. Presented by ZOOM from Canadian Light Source, Saskatoon, SK, to Environmental Engineering Classes at Universidad Nacional de Moquegua, Cuidad Jardin, Ilo, Peru. May 2023.
2. From Black to Green. Nearly Fifty Years of Regreening in Sudbury, Ontario. Public Community Annual Meeting on Mining Impacts. Torata, Peru. July 2023.
3. From Black to Green. Nearly Fifty Years of Regreening in Sudbury, Ontario. Universidad de Jorge Basadre Grohman, Ph.D. International ZOOM Symposium. Tacna, Peru, July 2023.
4. An Overview of Community Regreening in Sudbury, Ontario. Presented to the Governor of Tacna Province, Tacna, Peru, July 2023., Peru.
5. From Black to Green. Nearly Fifty Years of Regreening in Sudbury, Ontario. High School Teachers, Universidad a Moquegua, Cuidad Jardin, Ilo , Peru. August 2023.
6. From Black to Green. Nearly Fifty Years of Regreening in Sudbury, Ontario. Instituto del Mar de Peru (IMARPE), Ilo, Peru. September 2023.
7. From Black to Green. Nearly Fifty Years of Regreening in Sudbury, Ontario. Presented at the Annual Science Week Special Symposium, Universidad Catolica de Santa Maria, Arequipa, Peru. September 21, 2023.



Papers Presented at Scientific Conferences

May 24 - 29, 2023

Lakenan, M., Anderson, J., Beckett, P.J. and Spiers, G.A. 2023. What lichen can tell us about the Sudbury smelter emissions – a story of reductions with a new focus on critical minerals. The Joint Annual Meeting of the Geological Association of Canada, Mineralogical Association of Canada, and Society for Geology Applied to Mineral Deposits (GAC-MAC-SGA), Sudbury.

June 11-15, 2023

Lakenan, M., Anderson, J., Beckett, P.J., Caron, F. and Spiers, G.A. 2023. Are lichen an effective tool to reliably monitor emission reductions from Sudbury smelters? RE 3, Quebec City Conference Centre, Quebec City.

July, 2023

Caron, F., J. Anderson, P.J. Beckett, and G.A. Spiers. 2023. Tracking metal aerosols and natural radioactivity in Northern Ontario, Canada: tales told by lichens. Goldschmidt Conference, Lyons, France.

August 2 -4, 2023

Beckett, P., Miller, T. and Wainio, S. 2023. The importance and abundance of lichens and mosses on the restored landscape in the nickel-copper city of Sudbury, Ontario, Canada. Life of Mine International Conference, Brisbane, Australia (140 delegates).

September 26-30, 2023

Beckett, P. 2023. Blending mineral and organic residuals to aid restoration of industrially damaged lands in Sudbury, Ontario, Canada. Society for Ecological Restoration 2023 (SER2023) - 10th World Conference on Ecological Restoration, Darwin, Australia, (170 delegates).



Communication

Publications

May 17, 2023

["Diversified forest taking shape on vacant land near Coniston"](#), by Jim Moody, The Sudbury Star

April 27, 2023

["Jane Goodall returning to Sudbury to open a new IMAX film"](#), The Sudbury Star

Web News

January 3, 2023

["LU students, prof share Sudbury regreening story at COP15"](#), by staff, The Sudbury Star

May 4, 2023

["More trees to be planted in B.C. with a focus on restoration: Nespresso Canada and Tree Canada"](#), Niche.com

February 9, 2023

["Nature Reclaimed bookmark campaign celebrates Sudbury's regreening success – New bookmark campaign shows off species that have returned to Greater Sudbury and are thriving as a result of world-renowned regreening program"](#), by Mary Katherine Keown, The Sudbury Star

May 8, 2023

["Groups come together to plant 40k trees in Sudbury"](#), CTV Northern Ontario

May 18, 2023

["Diversified forest taking shape on vacant land near Coniston"](#), by Jim Moodie, The Sudbury Star

March 17, 2023

["Sudbury's regreening expertise taking root in Peru"](#), by staff, northernontariobusiness.com

October 23, 2023

["Regreening Sudbury: VETAC at 50 – work still to be done"](#), by Hugh Kruzel, The Sudbury Star

April 24, 2023

["Jane Goodall coming back to Sudbury May 30"](#), Sudbury.com



Communication (continued...)

Facebook Posts

July 20, 2023

City of Greater Sudbury: [*Celebrating 50 years!*](#)

July 22, 2023

Conservation Sudbury: [*Did you know that the lake Laurentian Conservation Area, and other conservation areas have been made more biodiverse through the City of Greater Sudbury's Regreening Program?*](#)

July 27, 2023

City of Greater Sudbury: [*Good Things Come in Trees*](#)

August 3, 2023

City of Greater Sudbury: [*Your Neck of the Woods*](#)

August 10, 2023

City of Greater Sudbury: [*Did you know?*](#)

August 17, 2023

City of Greater Sudbury: [*Partnerships*](#)

August 24, 2023

City of Greater Sudbury: [*The Regreening Story*](#)

September 8, 2023

City of Greater Sudbury: [*School's In*](#)

September 14, 2023

City of Greater Sudbury: [*The Regreening Process*](#)

Television Reports

May 8, 2023

[*"Groups come together to plant 40K trees in Sudbury"*](#), CTV News Northern Ontario with Ashley Bacon

July 27, 2023

[*"After 50 years of regreening efforts, 'Sudbury is vibrant and alive'"*](#), CTV News Northern Ontario with Alana Everson

Radio Interviews

August 2, 2023

Dr. Stephen Monet interviewed by Radio-Canada regarding the 50th Anniversary VETAC/Regreening.

August 8, 2023

Tina McCaffrey Interviewed by CBC Radio with Clement Goh regarding the Regreening App post on social media.

November 15, 2023

[*"The legacy of re-greening of Sudbury is being felt around the world"*](#), CBC Morning North with Marcus Schwabe



VETAC Members 2023

Chair

Dr. Peter Beckett Laurentian University

Co-Vice Chairs

John Negusanti..... Citizen

Sarah Woods..... Conservation Sudbury

Members

Katherine Benkovich..... Sudbury Integrated Nickel Operations, a Glencore Company

Jaimée Bergeron Conservation Sudbury

Jennifer Braun Blue Heron Environmental

Julie Coffin..... Sudbury Integrated Nickel Operations, a Glencore Company

Tony Fasciano Citizen

Vanessa Felix Pioneer Construction

Enzo Floreani Citizen

Jenny Fortier..... Northern Wildflowers

Marc Hébert..... Collège Boréal

Wayne Hugli Sudbury Horticultural Society

Bill Lautenbach..... Citizen

Sara Lehman..... Wahnapiatae First Nation

Tim Lehman..... Citizen

Derrick Luetchford Ministry of Natural Resources and Forestry

Franco Mariotti..... Citizen

Tina McCaffrey City of Greater Sudbury, Regreening Program

Samantha McGarry Sudbury Integrated Nickel Operations, a Glencore Company

Dr. Stephen Monet..... City of Greater Sudbury, Strategic and Environmental Planning

Robert Paishegwon Whitefish Lake First Nation

Mike Peters..... Citizen

Quentin Smith..... Vale Canada Limited

Dr. Graeme Spiers..... Laurentian University

Ben Vaanholt Futurescape Landscaping





For further information, please contact:

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Accessible version available upon request.



CELEBRATING **50 YEARS**

