

## | Regreening | Program









2021 Annual Report

# **Regreening Program**

## 2021 Partners

#### **Regreening Program**

City of Greater Sudbury

Collège Boréal

**Conservation Sudbury** 

Sudbury Integrated Nickel Operations, a Glencore Company

tentree

Tree Canada

Vale

#### **Ugliest Schoolyard Contest**

Corporate Sponsor: Sudbury Integrated Nickel Operations, a Glencore Company

Azilda Greenhouses Brown's Concrete Products Ltd. Dixon Contracting Futurescape Landscaping Jetty's Landscaping Supplies Pioneer Construction Sudbury Horticultural Society Southview Greenhouse Growers

Vale





## Table of Contents

2021 Partners2
Regreening Program
Ugliest Schoolyard Contest 2
Table of Contents
2021 Highlights4
The Regreening Process5
Crushed Limestone, Fertilizer and Seed5
Area Limed 1978 to 20215
Vale Aerial Seeding Program6
Map – Lime Site 2021
Tree Planting7
Map – Tree Planted Areas 20218
Quality & Survival Assessments9
Volunteer Tree Planting Events 9
Number of Trees Planted 1979 to 20219
Percent of Species Planted 1979 to 2021 10
Percent Coniferous Species Planted
1979 to 202110
Percent Deciduous Species Planted
1979 to 2021
Percent Shrubs and Understory Trees
Planted 1979 to 202112
Seed Collecting13
Biodiversity14
Forest Floor Transplants

Swamp Milkweed14
Black Oak14
Ugliest Schoolyard Contest
Labour
Funding
Funding Contributions by Source 202118
Yearly Program Costs 1978 to 2021 18
Percent Funding Contributions by
Source 1978 to 2021
Community Engagement
Award
Event
United Nations Decade on Ecosystem
Restoration 2021-2030
Restoration Trail Opening21
Laurentian hosted UN Kick-off Event 21
VETAC Field Trips
Tours and Presentations
Communication
Publications / Web News
Radio Interviews 24
VETAC Members 2021





## 2021 Highlights

Regreening operations, deemed an essential City service, continued through a second season of the COVID-19 pandemic. Operations were still impacted by the pandemic but experience with new protocols made for a more manageable undertaking. The program operated through its normal period from the first week of May to the second week of October. Staffing was slightly more robust than the previous year and included some new hires and a few more positions. The new <u>5 YEAR PLAN 2021-2025</u> was implemented early in the year and guided the work schedule.

The Regreening Program created 21 temporary employment opportunities, limed nearly 5 hectares (ha) of barren land in the St. Charles Lake area and planted over 138,000 tree, shrub, and understory tree seedlings throughout Greater Sudbury.

Regreening Component	2021	To Date (since 1978)	
Tree Seedlings Planted	103,467	9,998,074	
Shrubs and Understory Tree Seedlings Planted	35,325	497,313	
Area Limed (ha)	4.9	3,493	
Area Fertilized (ha)	4.5 3,266		
Area Seeded (ha)	4.9 3,194		
Forest Floor Transplants (ha)	0.11	2.12	
Program Cost	\$945,249	\$35,333,141	
Temporary Employment Opportunities	21	4,844	
Awards		15	
Number of Schoolyards Regreened	3	50	
Volunteer Tree Planters	75	13,011	
Trees Planted by Volunteers	3,058*	385,561	
Trees Provided for Residential Plantings	*	431,399	

\*Values are included in the Tree, Shrubs and Understory Tree Seedlings Planted.

The 17th annual "Ugliest Schoolyard Contest" hosted by VETAC continued with two winning schools receiving an outdoor classroom arrangement of trees and one school receiving a runner-up package. Several local businesses, corporations and special interest groups provided funding, materials and offered services to complete the schoolyard maintenance projects. Corporate funding of \$20,000 from Sudbury Integrated Nickel Operations, a Glencore Company (Sudbury INO), enabled these schools to offer greener, more engaging environments for students. Schoolyard regreening efforts occurred in late August.

The large-scale forest floor transplant project proceeded again in 2021 with another 11 sites containing 68 plots receiving forest floor mats contributing to the total area of 2.12 ha of transplanted forest floor since 2010.





## The Regreening Process

#### **Crushed Limestone, Fertilizer and Seed**

The liming activity focused on an area of barren land west of St. Charles Lake. Nearly 5 ha of barren land received the manual application of crushed dolomitic limestone. Fertilizer and seed application occurred in early September.

The seed mix, consisting of agricultural and native species, contained:

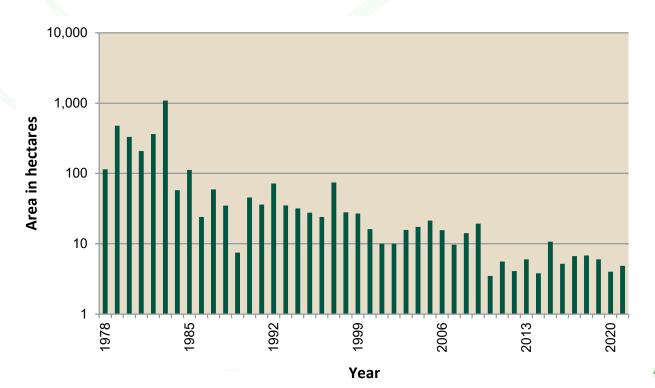
- 40% fall rye (Secale cereale)
- 20% Canada wildrye (Elymus canadensis)
- 20% little bluestem (*Schizachyrium scoparium*)
- 10% slender wheatgrass (*Elymus trachycaulus*)
- 10% alsike clover (Trifolium hybridum)

The shoreline portion of the site, covering an area of 0.4 ha, did not receive the fertilizer treatment but did receive the application of lime and hand-collected poverty oat grass seed (about 5 kg). A handful of blue flag iris seed was also planted in select areas to add diversity and buffering capacity to the shoreline. Refer to the following page for a map of the location of liming activities.

To date, the City's Regreening Program has treated 3,493 ha of barren land with crushed limestone.

#### Area Limed 1978 to 2021

The bar graph below indicates the area in hectares limed per year by the municipal Regreening Program since 1978 with a grand total of 3,493 ha limed to date.

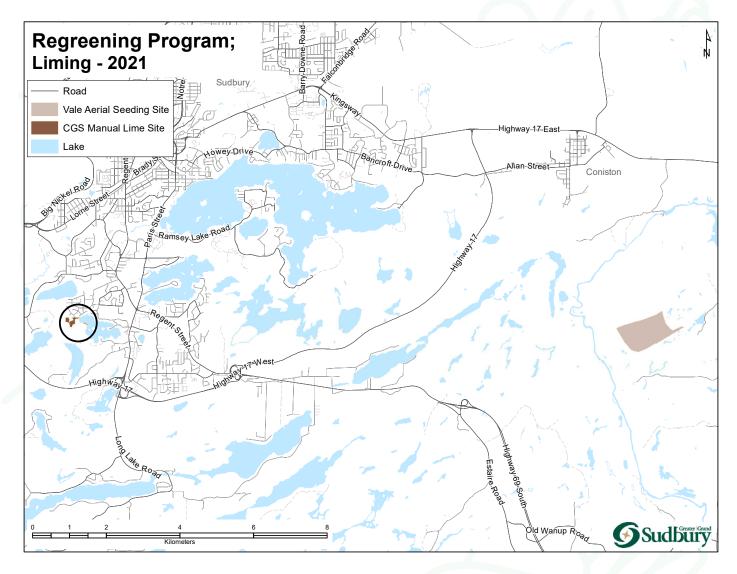




#### Vale Aerial Seeding Program

As part of its ongoing collaboration with the City's Regreening Program, Vale aerially seeded approximately 100 ha of barren land south of Wahnapitae using pelletized dolomitic limestone, fertilizer, and the same agricultural/native seed mixture as the Regreening Program. This area will be planted with tree/shrub seedlings in 2022 and is located adjacent to the area treated the previous year.

#### Map - Lime Site 2021



NOTE: Up-to-date mapping is available on the <u>Regreening App</u>.





#### **Tree Planting**

A total of 103,467 tree seedlings and 35,325 shrub/ understory tree seedlings were planted throughout Greater Sudbury through the spring and fall. Since 1978, the Program has planted a total of 9,998,074 trees and 497,313 shrub/understory trees.

The success of this year's tree planting was assisted by sponsors and donations. Seedlings were provided by Vale (96,417) and funds for seedling purchases (38,000) by Tree Canada with the remainder covered by the City. Labour and logistics for the planting of the seedlings were supported by the 2 Billion Tree program (50,000 seedlings) and tentree (125,000 seedlings). Costs for tree planting are not limited to just the labour cost of tree planters but also the costs of transportation, storage, and watering, etc.

Seven species of deciduous understory trees, 15 shrub species and nine canopy tree (conifer and deciduous) species were planted in 2021. See adjacent table.

To date, 30 species of canopy trees (13 conifer and 17 deciduous), 11 species of understory trees and 40 species of shrubs have been planted. A total of 81 different tree and shrub species have been part of the Regreening 'recipe' to date.

The barren land that Vale aerially seeded, located south of Wahnapitae, 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, red pine, white pine, white spruce and green alder. Vale's contribution, nearly double their yearly seedling donation, was instrumental in securing the 2 Billion Tree program funding.

The 38,000 seedlings funded through Tree Canada were planted within the Maley Conservation Area. Additional planting occurred at several smaller sites including urban/ neighbourhood sites.

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

#### **Canopy Trees**

Tamarack Ironwood White Spruce Red Oak Black Oak\* Jack Pine White Pine Red Pine Eastern Hemlock

#### **Understory Trees**



Mountain Maple Green Alder Smooth Serviceberry Alternate Leaf Dogwood Common Elderberry American Mountain-ash

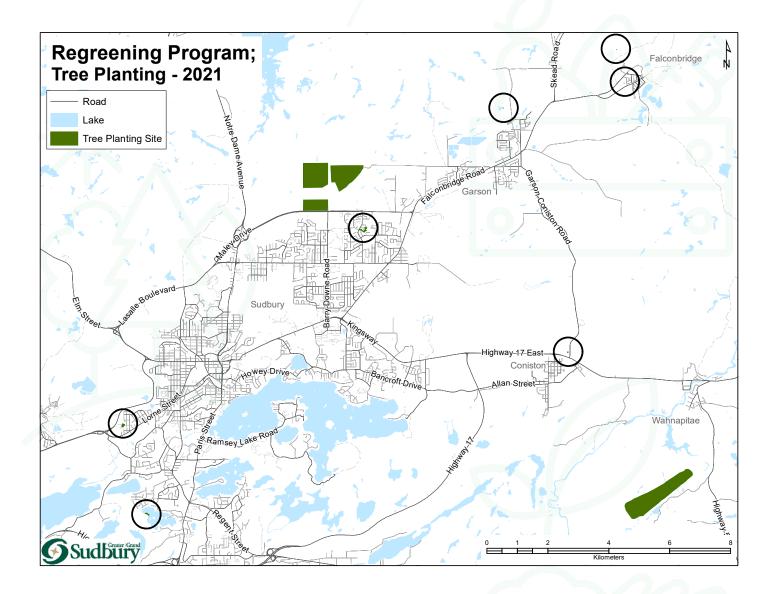
#### Shrubs

Bearberry Running Serviceberry Black Chokeberry Round Leaf Dogwood Red Osier Dogwood Mountain-holly Winterberry Holly Common Juniper Staghorn Sumac Smooth Wild Rose Red Elderberry Buffaloberry Steeplebush Snowberry Wild Raisin \*New trial species





#### Map – Tree Planting Areas 2021



NOTE: Up-to-date mapping is available on the <u>Regreening App</u>.



#### **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 in the fall. Overall, the crew's quality was evaluated at 94% for spring trees and 93% for fall trees. Survival assessments were also conducted. There was an average of 89.5% survival in first year plantation, 93.5% survival in second year plantation and 76% survival in fifth year plantation. Pine and red oak trees tended to have the greatest survival (90%) with lower scores for dogwood, yellow birch, and hemlock (75%).

#### **Volunteer Tree Planting Events**

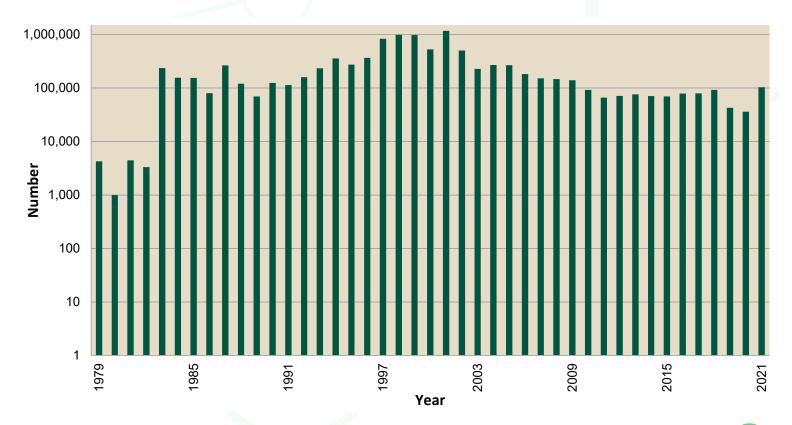
The Regreening Program can offer seedlings, planting equipment and guidance to local groups wanting to participate in the regreening effort. Volunteer participation provides an educational opportunity on environmental issues and information on the City's Regreening Program, tree planting experience as well as a sense of community pride and ownership of the natural environment. This year there was limited participation due to continued COVID-19 restrictions.

Group planting activities were undertaken by Capreol Ski Club, Laurentian University, Lo-Ellen Park Secondary School, Idylwylde Golf Club and Lockerby Composite School. Together, about 75 volunteers planted 3,058 seedlings this year.

Since the volunteer program began, 13,011 volunteers have planted 385,561 seedlings.

#### Number of Trees Planted 1979 to 2021



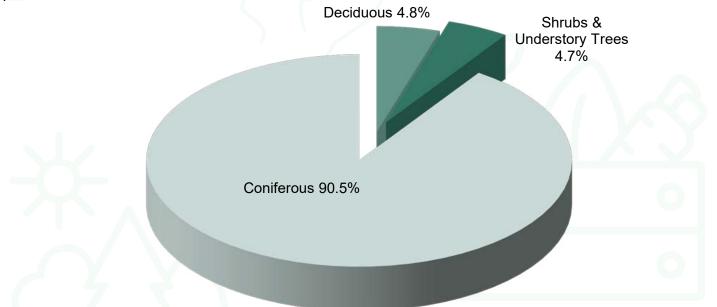






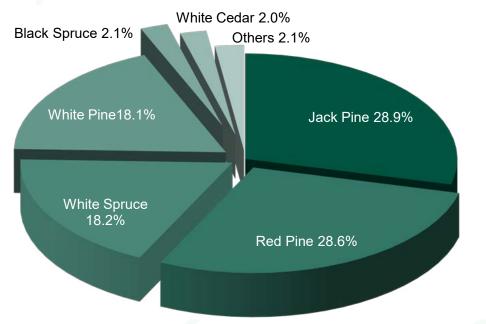
#### Percent of Species Planted 1979 to 2021

The pie graph below illustrates the percentage of each type of species planted since 1979 totaling 10,495,387 plants.



#### Percent Coniferous Species Planted 1979 to 2021

The pie graph below illustrates the percentage of each coniferous tree species planted since 1979 totaling 9,498,431 trees.



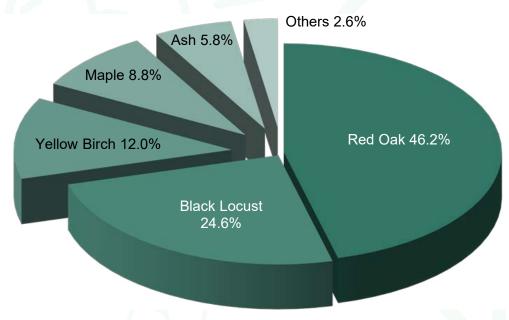
Others Include: tamarack 1.4%, balsam fir 0.3%, Norway spruce 0.2%, larch 0.1%, hemlock 0.1%, and Austrian pine <0.05%.





#### Percent Deciduous Species Planted 1979 to 2021

The pie graph below illustrates the percentage of each deciduous tree species planted since 1979 totaling 499,643 trees.



**Others Include:** Russian olive 1.0%, bur oak 0.7%, ironwood 0.5%, American beech 0.1%, basswood 0.1%, bitternut hickory <0.1%, white oak <0.1% and black oak <0.1%.

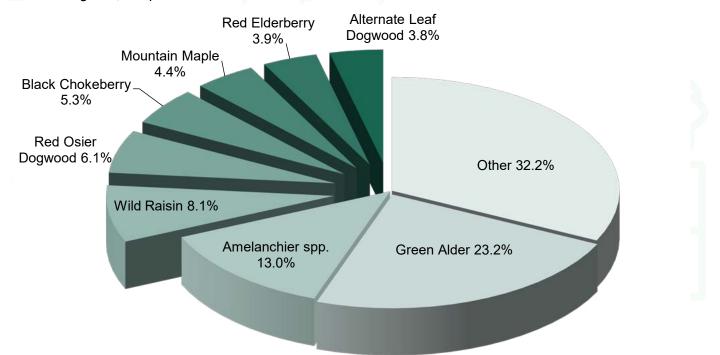






#### Percent Shrubs and Understory Trees Planted 1979 to 2021

The pie graph below illustrates the percentage of each type of shrub or understory tree species planted since 1979 totaling 497,313 plants.



**Others include:** common elderberry 3.6%, striped maple 3.1%, round leaf dogwood 3.0%, mountain-holly 2.3%, staghorn sumac 2.0%, bearberry 2.0%, caragana/Siberian pea shrub 1.5%, winterberry holly 1.3%, smooth wild rose 1.3%, bush honeysuckle 1.3%, American mountain-ash 1.1%, hardhack 1.1%, swamp rose 0.8%, ninebark 0.8%, buffalo berry 0.7%, high-bush cranberry 0.7%, common juniper 0.7%, choke cherry 0.6%, clematis 0.5%, prickly wild rose 0.5%, showy mountain-ash 0.4%, white meadowsweet 0.4%, mugho pine 0.3%, snowberry 0.3%, nannyberry 0.3%, broad-leaved meadowsweet <0.2%, hobblebush <0.2%, buttonbush <0.2%, pin cherry <0.2%, Canada yew <0.2%, black chokeberry 'Viking' <0.2%, wild black currant 0.1%, flowering raspberry 0.1%, sweet gale <0.1%, wintergreen <0.1%, red chokeberry <0.05%, American hazel <0.05%, sandcherry <0.05%, and Canada plum <0.05%.





#### Seed Collecting

Crew and staff collected propagules (seeds, berries, nuts) of 22 species that were subsequently shipped to the nursery to grow for future stock. Almost 85 L of propagules were collected resulting in over 5 kg of clean seed. See the table below for species and quantity of clean seeds collected in grams.

Additionally, acorns were collected and delivered to Collège Boréal to grow for the 2022 season and have potential yield of 6,000 red oak and 400 bur oak.

The crew also collected about 5 kg of uncleaned poverty oat grass seed, thanks to two Hanmer businesses, K. J. Beamish Construction Co. Ltd. and OCL Trucking and Custom Crushing, which permitted the crews access to their site. Seeds for these native grasses are not readily available commercially and therefore are collected manually from local sources. Seeds were sown directly on the manual lime site in the fall.

Species	Clean Seed (in grams)
Alternate leaf dogwood	2,298
Striped maple	500
Mountain-holly	460
Staghorn sumac	392
Mountain maple	344
Green alder	290
Winterberry holly	213
Wild raisin	210
Red elderberry	103
Eastern hemlock	90
Ironwood	78
Black chokeberry	40
Common elderberry	36
Bearberry	31
Showy mountain-ash	28
Prickly wild rose	25
Red-twigged serviceberry	18
Common juniper	14
Fly honeysuckle	8
Smooth serviceberry	6
Large cranberry	1
Snowberry	1



## 21 | Regreening AR | Program

## **Biodiversity**

#### **Forest Floor Transplants**

The practice of transplanting forest floor plants has occurred yearly since 2010 as a technique for reintroducing species, improving habitat, creating a seed bank and increasing the diversity of older reclamation sites. Forest floor from Crown land north of Capreol and private land in St. Charles were harvested from mid-June to September, providing a greater variety of species represented in the mats recovered.

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, but several exposed mats for shade intolerant species were also transplanted to various 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, 3,453 trays of plant material were transplanted covering an area of approximately 0.11 ha. Of these, 889 trays were placed in exposed sites and the remaining 2,564 trays were placed in understory sites. There were 11 sites in all, 68 plots (each plot measures approximately 4m x 4m) and over 50 species re-introduced to the regreening sites.

Over the 12 years of this initiative, 1,414 plots have received understory transplants covering a total area of approximately 1.95 ha, 276 plots received exposed transplants covering an area of just under 0.18 ha and at least 184 different species have been introduced. The area covered by forest floor (2.12 ha) is now the equivalent to two international rugby fields or about 1.5 baseball fields in size.

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

#### Swamp Milkweed

Seeds of a native milkweed, *Asclepias incarnata* (swamp milkweed), were collected in the fall of 2020 and grown at the Collège Boréal greenhouse resulting in almost 100 plants. These perennials were planted in a wetland area at the Jane Goodall Reclamation Trial to add to plant diversity and assist in the survival of species at risk, the Monarch butterfly.

#### **Black Oak**

A new species to the Regreening Program, black oak (*Quercus velutina*), was used in low numbers as a trial species this year to test suitability to the area as a regreening species. This southern Ontario native oak species is generally found in concentrated populations around Lake Erie and Lake Ontario and is unique in its ability to survive very dry, exposed areas. Its intolerance for competition may make it a good colonizer of bare, exposed areas on the Sudbury landscape. Further study will reveal the success and suitability to the Sudbury landscape





## **Ugliest Schoolyard Contest**

Local schools continued to be regreened this year thanks to VETAC's 17th annual Ugliest Schoolyard Contest. A generous grant of \$20,000 from Sudbury Integrated Nickel Operations (INO), a Glencore Company, and numerous sponsors providing material/supplies, services, and financial support, enabled schoolyard transformations at two schools; Lockerby Composite School and Valley View Public School. Additionally, a runner-up package was provided to Montessori School of Sudbury.

Due to continued Covid-19 restrictions and schools resorting to virtual learning again in the spring, new applications were not requested. Winning schools were selected from applications received the previous year (2020) before the call for applications was cancelled due to concerns around the new pandemic announcement.

In addition to the Sudbury INO funding, schools also received a voucher for the purchase of concrete materials from Brown's Concrete Supplies, and topsoil donated by Vale. Other in-kind donations from Azilda Greenhouses, Dixon Contracting, Futurescape Landscaping Supplies, Jetty's Landscape Supplies, Pioneer Construction, Southview Greenhouse Growers and Sudbury Horticultural Society ensured the projects were a great success.

Both winning schools received five large caliper trees in stone planters for shade and added seating in an outdoor classroom arrangement. The runner-up received a gift certificate to purchase shrubs, perennials, and mulch as well as materials from Pioneer Construction.

Sudbury Horticultural Society photographer Lisa Robinson helped to document the projects with her extensive collection of photos used to create SMUGMUG photo galleries. All photos can be accessed through the website greatersudbury.ca/VETAC.

On November 20, a newspaper advertisement was published in The Sudbury Star to thank and recognize all sponsors of the contest. This information also appeared on the City's social media sites. Without the on-going support of the Contest from all the sponsors, these important regreening projects would not be possible.

The Canadian Biodiversity Institute and Earth Day Ottawa initiated the first Ugliest Schoolyard Contest in Ottawa in 1998. Based on this example, VETAC's local version of the Contest launched in 2005 and has seen 50 local schoolyards regreened through the generous support of dozens of local businesses and organizations. Thousands of local students are benefitting every day from the improved schoolyard environments.





### Labour

Program staff included one foreperson, four crew leaders, and 14 workers involved in regular regreening activities with two Biodiversity Research Assistants engaged in monitoring activities associated with regreening work. In total, 21 temporary positions were created in 2021. The size and structure of the crew continued in a modified state relative to previous years due to operational constraints related to COVID-19 restrictions. Six worker positions were partially funded through Canada Summer Jobs for an eight-week period resulting in \$17,959 in wage recovery.

The table below outlines the temporary positions created and the number of weeks worked, with 21 positions created in 2021.

Position Title	# Positions	# Weeks	Activity
Foreperson	1	30	Supervision
Crew Leader	1	28	Supervision
	3	26	Supervision
Worker	4	18	Tree planting, liming, transplanting,
	10	24	fertilizing, seeding, seed collection
Biodiversity Research	2	31	Field data collection and analysis, seed collection
Total Positions	21		





## 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. New funding from Natural Resources Canada for the 2 Billion Tree Campaign was granted this year.

The table below outlines the program contributors and the dollar amount associated with their contributions in 2021 for a total of \$945,249.

Program Contributor	Description	Source	Amount
Labour			
Employment & Service Development Canada	Wage subsidy for 6 positions over an 8-week period	Federal	\$17,960
tentree	Financial support to have 125,000 seedlings planted	Private	\$12,500
Cash			
Natural Resources Canada	2 Billion Tree Campaign	Federal	\$50,000
Vale	Financial contribution	Mining Co.	\$250,000
Sudbury INO	Financial contribution	Mining Co.	\$265,000
Materials			
Tree Canada	Funding to purchase 38,000 seedlings	Private	\$57,000
Vale	Donation of 96,417 seedlings	Mining Co.	\$25,000
Ugliest Schoolyard Contest *			
Sudbury INO	Financial contribution	Mining Co.	\$20,000
Vale	Financial contribution	Mining Co.	\$2,000
Subtotal	Sum of external funding sources	Various	\$699,460
City of Greater Sudbury	Financial contribution	Municipal	\$245,789
Grand Total	Sum of all funding sources	Various	\$945,249

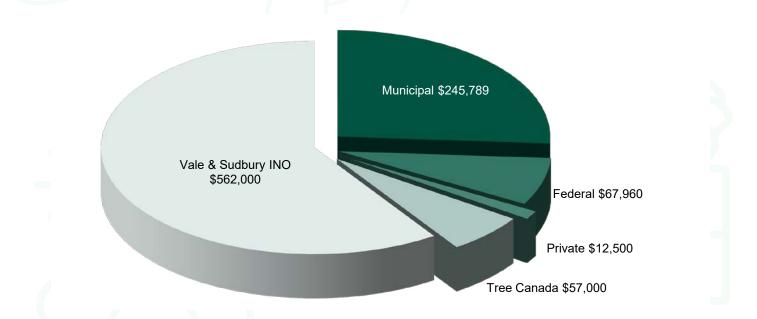
\*does not include material and in-kind donations provided by sponsors





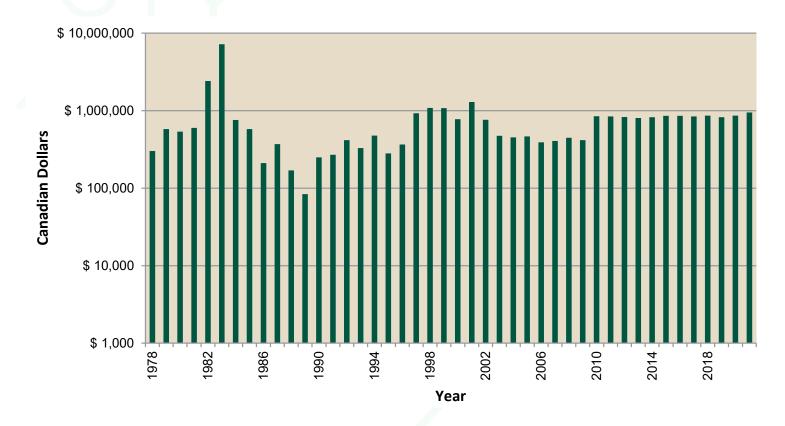
#### **Funding Contributions by Source 2021**

The graph below illustrates 2021 funding contributions by source.



#### Yearly Program Costs 1978 to 2021

The bar graph below indicates yearly program costs from 1978 to 2021 with a grand total of \$35,333,141.

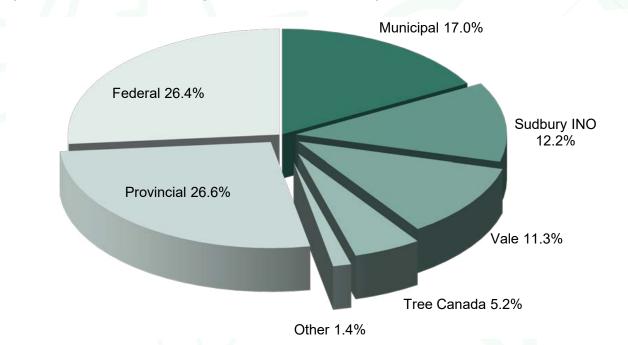






#### Percent Funding Contributions by Source 1978 to 2021

The graph below illustrates funding contributions in percentages by source from 1978 to 2021.



Since 1978, the City's contribution to the Program has averaged 17.0% of the total costs with 83.0% coming from external sources. To date, the Program costs exceed \$35.3 million.



## **Community Engagement**



#### **Regreening Classroom Presentations**

In the first week of January, the City's Facebook and Twitter accounts promoted the <u>Regreening Classroom</u> <u>Presentation</u> videos since students were learning from home again for the week. EarthCare Sudbury reposted it on their Facebook page and emailed the information directly to their teacher contacts. The Rainbow Board did have the information posted on an internal FYI bulletin board. After two months of regular in-class learning, students were sent home again March 11 to continue with online learning until the end of the school year. Over the course of the year, viewership of these online resources increased overall by 49.5% for English and 26% for French resources.

#### **Favourite Tree Photo Contest**

In celebration of the UN Decade on Ecosystem Restoration and of Greater Sudbury's regreening success, VETAC encouraged residents to participate in the "Favourite Tree Photo Contest". Working with EarthCare Sudbury and Village Media, a tree photo contest was initiated through sudbury.com and later hosted on the EarthCare Facebook page. From July 8 to September 30, the public was invited to submit photos of their favourite tree. Winning photos were selected at random, and the winner received a copy of the hardcover book "HEALING THE LANDSCAPE — CELEBRATING SUDBURY'S RECLAMATION SUCCESS", which showcases Greater Sudbury's remarkable regreening story. Over 50 residents participated with a total of 70 photo submissions and 11 weekly winners, one of whom took home the grand prize package which included a rain barrel.

#### Award

#### CLRA National 2020 Dr. Jack Winch Early Career Award

The Dr. Jack Winch Early Career Award honours the principal founder and inaugural president of the Canadian Land Reclamation Association (CLRA) and acknowledge the efforts of reclamation professionals in their early years. On January 19, it was announced that the recipient of the CLRA National 2020 Dr. Jack Winch Early Career Award was Samantha McGarry. Sam is currently the site rehabilitation specialist at Sudbury Integrated Nickel Operations, a Glencore Company, but started her environmental work early on with a fourth-year thesis and Master's work focused on growing energy crops on mine tailings. Outcomes from that study have been incorporated into Glencore's long-term reclamation strategies and Sam has since ensured Glencore's environmental compliance, was lead on the development of ISO 14001 Environment Management Systems and is responsible for the development and execution of closure plans. Sam joined VETAC in 2012 and is valued for her dedication to furthering regreening efforts, including promoting research and fostering student education.





#### **United Nations Decade on Ecosystem Restoration 2021-2030**

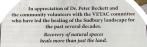
The UN has declared the period from 2021 to 2030 as the Decade on Ecosystem Restoration, "which aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. It can help to end poverty, combat climate change and prevent a mass extinction. It will only succeed if everyone plays a part." The Greater Sudbury community knows a thing or two about playing a part – municipal regreening efforts involving thousands of workers and volunteers have been ongoing since 1978. June 5 marked the official launch of the <u>UN Decade on Ecosystem Restoration</u>.

#### **Restoration Trail Opening**

Laurentian University Student Association held a ceremony on October 21 to launch the Decade on Ecosystem Restoration which included special video messages by <u>Dr. Jane Goodall</u> and Canada's Ambassador to the United Nations, <u>Bob Rae</u>. Students officially opened a restoration trail created on campus, recognizing the longstanding work with the regreening program by both Peter Beckett and Tina McCaffrey.

#### Laurentian Hosted UN Kick-off Event

On October 21, the Goodman School of Mines (GSM) and the Vale Living with Lakes Centre co-hosted a celebratory meeting to commemorate the success and legacy of the Sudbury Story, as well as highlight Laurentian University's important educational initiatives such as the Environmental Remediation course and the new Mineral Resources Industry Leadership Certificate (MRILC) program. This celebration was attended by Viviane Lapointe, MP; Jamie West, MPP; and Mayor Bigger. Recapping the Student Association event earlier in the day, Dr. John Gunn made a point to recognize VETAC's accomplishments and thanked the many VETAC members for their participation in the online restoration course and showed several video clips.



En reconnaissance du travail accompli au Comité VETAC par le Pr Peter Beckett et les bénévoles de la communauté qui dirigent la renaissance du paysage de Sudbury depuis plusieurs décennies. La réhabilitation des espaces naturels





## **VETAC Field Trips**

Due to ongoing COVID restrictions and difficulty meeting as a group, staff initiated an internal bi-weekly newsletter that was sent to all VETAC members. This fun and engaging way of communication kept VETAC informed from an operational standpoint from May to August. Only one field trip was held on August 23 where committee members were invited to tour Lockerby Composite school, one of the 2021 Ugliest Schoolyard Contest winners. The group proceeded to visit the crew at the manual lime site near St. Charles Lake and later attended at a vegetation transplant site near Moonlight Beach. VETAC members were able to see the crew in action and participate in good discussion.

## **Tours and Presentations**

January 29 – Franco Mariotti provided a 25 minute <u>Sudbury Regreening Presentation</u> to schoolchildren Grades 1 through 7 via Zoom. The students were on the Toronto based website '<u>Exploring by the Seat of Your Pants</u>' hosted by Jesse Hildebrand, and schools from southern Ontario, the United States and British Colombia participated. Other schools joined live through <u>YouTube</u>. On March 4, there was a repeat performance of the story to more schools from the southern United States to western Canada with over 150 students in attendance.

January 30 – Lorraine Johnson provided a presentation to the Horticultural Society entitled "Wild about Bees" on via Zoom and mentioned the Regreening Program success and Ugliest Schoolyard Contest throughout the presentation. Attendees included local residents as well as people across Canada, a couple from England and a couple from the United States.

April 22 – Peter Beckett provided a presentation to the Cooperative Freshwater Ecology Unit Virtual Zoom AGM and Subsequent Earth Day show at Science North on Connecting the Sudbury Regreening Program to the UN Decade of Ecosystem Restoration.

June 2 – Peter Beckett presented Sudbury's regreening history via Zoom at a meeting in Prague, Czechia as part of the <u>3rd International Conference on Forest and Landscape Restoration of Post-mining Sites</u>.

June 4 – Franco Mariotti provided a virtual talk, "Telling of Sudbury's Story", as part of reThink Green's Earth Festival. The presentation focused on the Sudbury Regreening Program, including what Sudbury used to look like, growing up in Copper Cliff and a section on why our regreening program has been so successful. Franco also focused on what other communities can emulate from our regreening story. The last slide reaffirmed the UN Decade on Ecosystem Restoration.

August 4 – Peter Beckett and Graeme Spiers delivered a talk on the Regreening of Sudbury to Grade 12 Earth and Space Science class at the Canadian Ecology Centre, Mattawa.





August 17 – Peter Beckett and Graeme Spiers presented via ZOOM on "Over 40 years of healing and creating novel functional ecosystems on a smelter-impacted landscape of Sudbury, Ontario, Canada" at the Mine Closure Conference in Mongolia.

August 26 – Peter Beckett and Graeme Spiers delivered a talk on the Regreening of Sudbury to participants of the Mine Life Cycle Tour at the Canadian Ecology Centre, Mattawa.

October 16-19 – Peter Beckett discussed the Sudbury Regreening Program via ZOOM during a workshop at the 3rd International Symposium on Land Reclamation and Ecological Restoration, in Xuzhou, Jiangsu Province, China.

October 21 – Peter Beckett hosted a tour of Regreening sites, including the Jane Goodall Reclamation Trail, to visiting professor, Dr. Line Rochefort from Laval University.

October 25-26 – Peter Beckett and Graeme Spiers were invited presenters at the Conference on Bioremediation of the Arctic Coastline, held in Moscow and organized by the Arctic Council. Their presentation was entitled "Restoration of Urban Forests in a Smelter-Emissions Impacted Landscapes Enhances Biodiversity and Carbon Sequestration to Mitigate Today's Climate Emergency".

October 28 – Peter Beckett led a discussion on the link between the UN Decade on Ecological Restoration and Sudbury's Regreening Program to the Science Communication Program at Laurentian University. A similar talk was given to the Sudbury Naturalists on November 9.

October 31 – Kryslan Mohan and Shanelle Lacasse, from Sudbury Shared Harvest who were hired as leaders in the Youth Agricultural Mentors Program, provided a presentation to the Sudbury Horticultural Society via Zoom. The presentation entitled "<u>Creation of a Food Forest at École Secondaire Hanmer</u>" was an extension of the Ugliest Schoolyard Contest project that began at that school in 2012.

November 24 – Graeme Spiers delivered a ZOOM presentation on the Regreening Program in the Remediation of Degraded Zones and Landscapes Session at Agromin2021, Peru.

December 15 – Peter Beckett talked about "Potential use of restoring urban forests for carbon sequestration in today's climate emergency" to 100 delegates at the British Ecological Society Annual Meeting in Liverpool, England.





## Communication

#### **Publications / Web News**

January 19	CLRA National 2020 Dr. Jack Winch Early Career Award Recipient: Samantha McGarry, clra.ca.	
February 11	Sudbury is a city primed for change, by Jim Moodie, The Sudbury Star.	
April 30	Footprints Erased: Sudbury's Story of Environmental Hope, This is Mining.	
June 4	Two-day virtual Earth Festival kicks off this afternoon, Sudbury.com.	
June 10	Sudbury regreening efforts 'halfway' there, professor says. CBC.	
July 8	Regreening work continues, Sudbury Star.	
July 8	Moonscape to greenscape: A pic of your favourite tree can win you a prize, Sudbury Star.	
August 12	Planting Trees in Greater Sudbury as Part of Two Billion Trees, Government of Canada, Canada.ca.	
August 25	What mining, oil and gas industries can learn from Sudbury, the city that went from major polluter to thriving environment, Nadia Mykytczuk, The Conversation	
October 22	Sudbury Accent: LU researcher tackles 'the next frontier' of Sudbury's regreening program; Jonathan Lavigne looks at improving soil for the reclamation of the region's most damaged landscapes, Romaniuk, The Sudbury Star.	
October 23	Laurentian students team up to celebrate the grand opening of the UN Recovery Garden and Restoration Trail, Sudbury.com.	
November 10	Memory Lane: It takes a community to plant a forest, Vicki Gilhula, Sudbury.com	
November 25	Memory Lane: Sudburians recall how they came together to heal the city's broken landscape, Vicki Gilhula, Sudbury.com.	
November 25	Letter: I've helped with regreening Sudbury for 20 years and it is still jaw-dropping, Sudbury.com.	
Radio Interviews		
June 10	Regreening Sudbury – how well are we doing? hosted by Markus Schwabe; guest: Peter Beckett	

October 14 School yard quality, CBC's Up North with Jonathan Pinto





## VETAC Members 2021

#### Chair

Dr. Peter Beckett, Laurentian University

#### **Co-Vice Chairs**

John Negusanti, Citizen Sarah Woods, Conservation Sudbury

#### Members

Nathan Basiliko Laurentian University

Katherine Benkovich Sudbury Integrated Nickel Operations

Jennifer Braun Blue Heron Environmental

Tony Fasciano Citizen

Vanessa Felix Pioneer Construction

Enzo Floreani Citizen

Jenny Fortier Northern Wildflowers

Marc Hébert Collège Boréal

Wayne Hugli Sudbury Horticultural Society

Jim Ilnitski Citizen

Bill Lautenbach Citizen

Sara Lehman Wahnapitae 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

Stephen Monet City of Greater Sudbury, Environmental Planning Initiatives

Robert Paishegwon Whitefish Lake First Nation

Mike Peters Citizen

Quentin Smith Vale

Graeme Spiers Laurentian University













For further information, please contact:

Regreening Program Strategic & Environmental Planning City of Greater Sudbury P.O. Box 5000, Station A 200 Brady Street Sudbury, ON P3A 5P3

Tel. 705-674-4455, ext. 4605 Fax 705-673-2200

E-mail: <u>regreening@greatersudbury.ca</u> Website: <u>greatersudbury.ca/regreening</u>

Accessible version available upon request.