

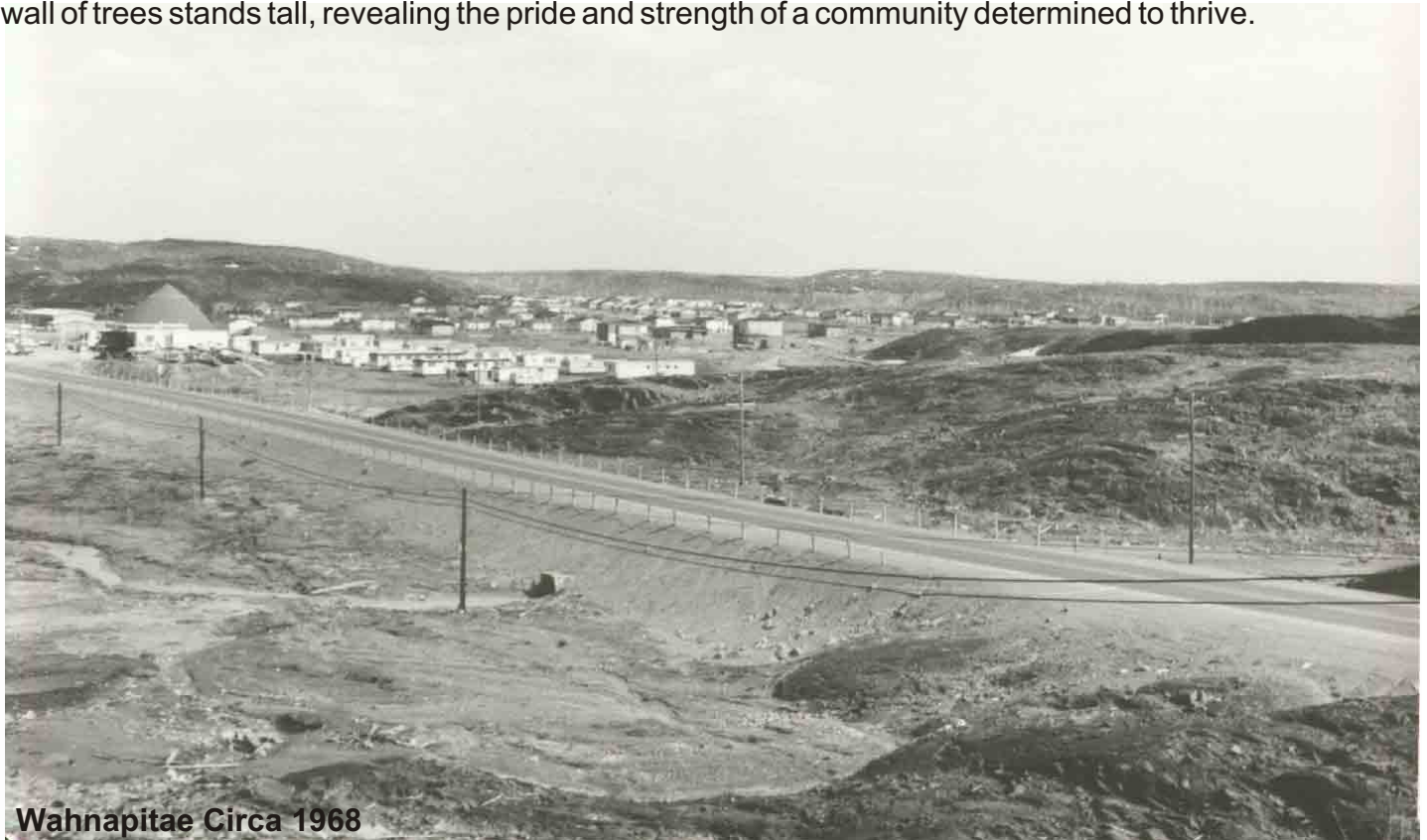
Land Reclamation Program

2003 Annual Report

December 2003

Celebrating 25 years of Successful Reclamation

It all began along the Highway 17 East corridor between Wahnapiatae and Coniston in the summer of 1978 where 90 hectares of barren land were limed, fertilized and seeded by summer students. Today, a wall of trees stands tall, revealing the pride and strength of a community determined to thrive.



Wahnapiatae Circa 1968



Wahnapiatae 2003

Get the Facts...Quick Summary

Current Year Program Summary 2003

- 228,564 tree seedlings were planted throughout Greater Sudbury
- 15.7 ha or 37.7 acres of land was limed within the Frood Branch sub-watershed and at Falconbridge Limited
- Over 100 individuals participated in the Program through Ontario Works
- Almost 500 volunteers participated in the year's Program, planting over 9,000 trees throughout the City
- Over 4,000 tree seedlings were distributed to residents of the City of Greater Sudbury
- Hosted a three-day Land Reclamation experience to delegates from the National Heritage Fair
- Several celebrations were held to commemorate 25 years of Land Reclamation in the Sudbury community which included local school groups participating in events throughout the season

Funding Partners Included:

Ontario Works (OW)
 City of Greater Sudbury (CGS)
 INCO Ltd.
 Falconbridge Ltd.
 Summer Job Service / YMCA Employment Services
 FedNor
 DOMTAR / Nickel District Conservation Authority (NDCA)
 Sudbury earthdancers
 Canadian Forestry Service
 Falconbridge Beautification Committee

Partnerships Created with:

Junction Creek Stewardship Committee
 Sudbury Community Foundation
 EARTHCARE Sudbury

The Past 25 Years Program Summary

- 7,960,013 tree seedlings have been planted throughout the City of Greater Sudbury as a part of the Land Reclamation Program
- 3,328 hectares of barren lands have been treated with crushed agricultural limestone, of which 3,063 hectares have been grassed
- 35,570 shrubs planted
- Total Program cost \$22,565,438
- 396,966 tree seedlings provided to the community as part of the Towards a Greener Sudbury Show
- 258,317 tree seedlings planted by 5,857 volunteers involved in groups and organized clubs as part of the Land Reclamation Program
- 4,317 temporary employment opportunities created
- Published "Healing the Landscape", a photographic book celebrating Sudbury's reclamation story
- 116,411 tree seedlings planted in the Tom Davies Commemorative Forest
- A dozen awards have been won by the Program for various aspects of the reclamation work undertaken
- The Jane Goodall Reclamation Trail was developed and finally opened to the public
- Numerous articles have been published on the work of the Program
- Celebrations for the one, two, three and five millionth trees were held



Land Reclamation Program 2003

1) Operations

Tree Planting Activities

In spring, 95,392 trees were planted (May 6th to 28th). Planting sites were focussed in the Ramsey Lake watershed and on the site aerially limed by INCO Ltd. in 2002 between Coniston and Wahnapiatae.

An additional 133,172 trees were planted in the fall (September 2nd to October 30th). Fall planting sites included the Lake Laurentian Conservation Area, the South West Bypass and the Frood Branch sub-watershed of Junction Creek.

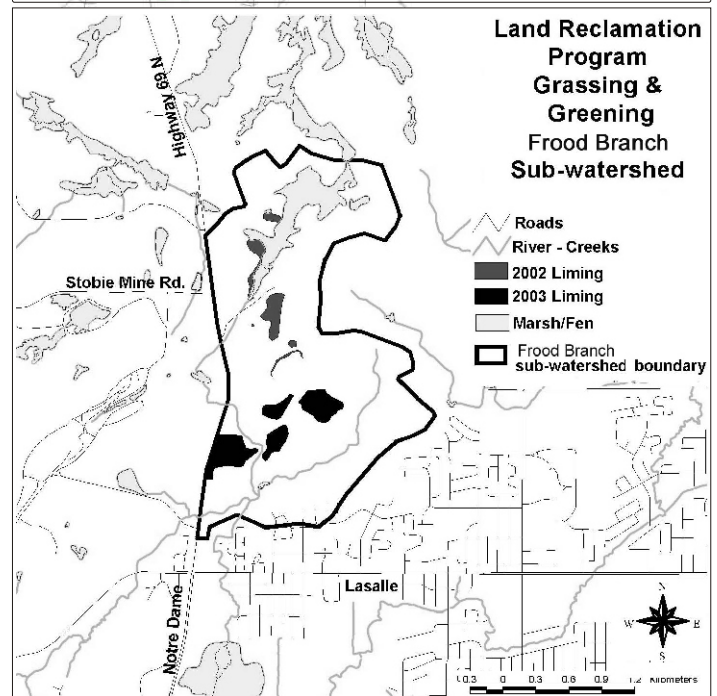
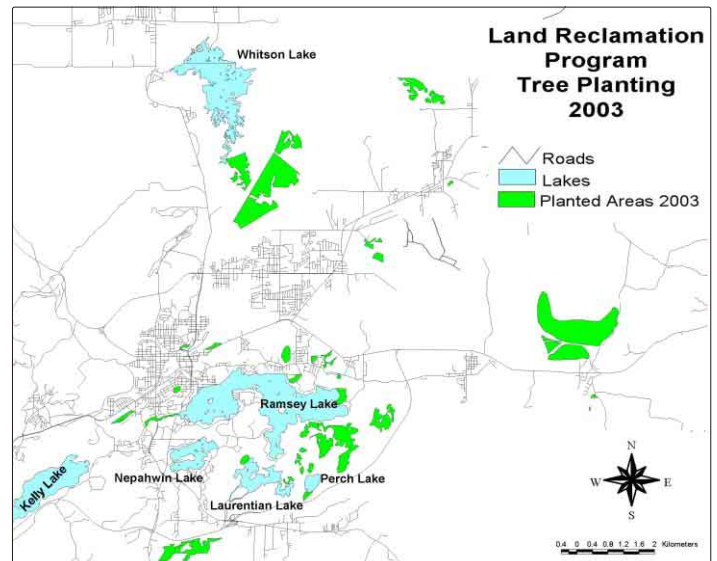
A total of 228,564 trees were planted at over 50 strategic locations within the City of Greater Sudbury.

Grassing and Greening Activities

We continued our partnership with the Junction Creek Stewardship Committee (JCSC) to restore the highly impaired Frood Branch sub-watershed. This year we limed an additional 13.2 hectares in this sub-watershed for a total of 16 hectares since last year. We also added 6,000 seedlings this year to the 3,000 seedlings planted by the JCSC last year. Partnerships work!

Falconbridge Limited contracted us to lime, fertilize and seed 2.2 hectares of barren land near the smelter complex. Our manual reclamation technique was the only option available for treating the steep slopes on this site.

Our Land Reclamation crew also helped with regreening at Dynamic Earth, Sudbury's latest attraction, by liming, fertilizing, seeding and planting tree seedlings adjacent to the parking area. Regreening of this site will help make this facility even more attractive and will eventually help reduce stormwater runoff from the site.



Above: Grass has germinated well at the Dynamic Earth site, hiding the soil/slag base upon which it was planted.

Right: Crews work hard to lime the gravel slopes in Falconbridge.



2) Labour

The field activities for the Land Reclamation Program require a sizable labour force for planting trees and spreading limestone manually. Ontario Works provided the labour force this year while the Program provided the supervisory and operational staff required for the Program to function.



The field season ran from May 5th to October 30th, two weeks longer than originally scheduled. Our crew persevered despite black flies, heat waves and freezing temperatures. Our workers are the backbone of the Land Reclamation Program.

Participants of the Program gained valuable marketing tools for their resumes, including current job experience/work history, letter of reference, certified Workplace Hazardous Materials Information System (WHMIS) training as well as job search skills.

Additional funding was received through the YMCA summer student program which provided wage subsidies for three students over a 17 week period. All sources of funding for labour are greatly appreciated as this component represents 48% of this years Program contributions.

LABOUR STRUCTURE - 2003 Land Reclamation Program

Program	Number of Positions	Cost to City	Activity
City of Greater Sudbury Temporary/Summer Students	3	84%	Tree planting, liming
City of Greater Sudbury Temporary Employees	3	100%	Foreperson (2), Crew Foreperson (1)
FedNor	1	20%	Marketing and Development Intern
Ontario Works	25	NIL	Tree planting, liming
TOTAL	32		



Volunteers

Over 9,000 tree seedlings were planted by almost 500 volunteers who assisted the Program this year. These volunteers were involved in a variety of organized groups or clubs. The volunteer program provides educational opportunities on environmental issues, information on the City's Land Reclamation Program, as well as tree planting experience.

St. Benedict School's Environmental Club participated in planting over 1,000 red and white pine seedlings in the undeveloped property surrounding their school grounds. The 20 students in the club were able to get great publicity with MCTV, Sudbury Star and media relations personnel from the School Board.

Thirty grade 5/6 students from St. Paul the Apostle took part in a guided tour of the Jane Goodall Reclamation Trail and planted over 500 white spruce at Lookout 1 along the trail. The students enjoyed their Land Reclamation experience so much, that some of the students returned later in the day to show their parents where they had planted trees. The class also took the time to make thank-you cards for their tour guides and outlined their favourite part of the tour.

3) Events

Many events that took place during this 25th year of the Land Reclamation Program. Media coverage for all events gave good exposure to the Program and scheduled events. Several articles were published in the Northern Life, the Sudbury Star and le Voyageur, other coverage included a segment on Studio 2, MCTV, The Box and radio programs on Q92 and CBC radio.



Left: Mayor Jim Gordon reads the Silver Anniversary Proclamation.

Below: Flower Bed on the corner of Notre Dame and St. Anne's Road



Sudbury 2003, Mining and the Environment Conference

The Sudbury 2003 Mining and the Environment Conference was held from May 25th-28th at Laurentian University. In attendance were delegates representing: Australia, Bolivia, Botswana, Canada, Finland, Great Britain, Indonesia, Iran, South Africa, Sweden, USA and Zambia.

During the event, the Canadian Land Reclamation Association (CLRA) presented Bill Lautenbach of the City of Greater Sudbury with the Dr. Edward M. Watkin Award. This award is presented by the CLRA in recognition of major contributions to land reclamation.

On May 26th, Dr. Graeme Spiers, Sudbury 2003 Committee Chair also awarded a Certificate of Recognition to the Vegetation Enhancement Technical Advisory Committee for 25 years of enhancing and sustaining a healthy environment for residents of the City of Greater Sudbury through the restoration and protection of our air, land and water.

Dr. Peter Beckett also provided a Silver Anniversary Tour to any delegates wishing to participate. Site visits included the old windmill site on Coniston-Hydro Road and a tour of the Jane Goodall Reclamation Trail at the Coniston Welcome Centre on the corner of Garson-Coniston Road and Highway 17 East.



Left: Presentation of the Dr. Edward M. Watkin Award to Bill Lautenbach by Dr. Peter Beckett.

Right: World Youth Day Plaque unveiling.



The Main Event

An event to celebrate the Silver Anniversary of the Program was held on September 11th at the Coniston Welcome Centre, home of the Jane Goodall Reclamation Trail. School classes from both St. Paul the Apostle in Coniston and George Vanier P.S. in Lively were among those in attendance. Recognition was given to the immense efforts

given to the re-greening of Sudbury over the past 25 years And to the equally immense challenges that remain.

Invited speakers and dignitaries inspired the young people present to help continue the important work of re-greening. Students were treated to guided tours of the Jane Goodall Reclamation Trail and established a small 'nucleus of biodiversity' by planting native forest species that will eventually spread throughout the site.



The Thin Green Line Contest

A contest was open to the citizens of Sudbury to design a logo and catch phrase around the theme of 'The Thin Green Line'. This theme title is a reflection of the rather fragile relationship between the greening hillsides and the state of the soil, the air and the water in the City. 'The Thin Green Line' also conveys the idea that much work is still required to ensure that diverse, self-sustaining ecosystems replace barren land throughout Greater Sudbury.

Over 30 entries were received, four winners were chosen. Some winning entries as well as others are displayed throughout this report.



Towards a Greener Sudbury

This annual show was held at the New Sudbury Shopping Centre on September 13th, with over 4,000 tree seedlings distributed to the community. Falconbridge Limited was on hand to conduct pH testing for anyone with soil samples. Supporters donated \$911.69 this year to continue Sudbury's re-greening efforts. The Sudbury earthdancers also provided a dance number to entertain and inspire the crowds.

4) Communications

The Land Reclamation Program's communications are continually improving. Ongoing seminars include the Roots and Shoots Conference and the Regional Heritage Fair where young students are introduced to the history of Sudbury's degraded environment and the community effort behind its success. Returning for a second year, Restoration Ecology students from the University of Guelph were also involved in tree planting activities.

New on the agenda this year was a seminar and tour delivered to the Ontario Vegetation Management Association (OVMA), and students from Ryerson University. The National Heritage Fair was held in Sudbury this year and many young people experienced land reclamation...Sudbury style.



As of November 2003, all remaining copies of the book were sold. This Millennium Project saw the donation of over \$50,000 to the Sudbury Community Foundation Tree Fund.

National Heritage Fair

Delegates from the National Heritage Fair took part in a Land Reclamation field trip on July 9th, 10th and 11th with 80 individuals participating each day. Activities included a presentation on the Land Reclamation Program, a tour of the Jane Goodall Reclamation Trail, a liming activity and a tree planting activity.

The day began with an interactive presentation where delegates engaged in touching and smelling various plants while learning to identify important native species in the Sudbury area.

The day was enlightened by musical interludes including the Land Reclamation version of "The Black Fly Song" by Wade Hemsworth. Everyone was in for a special treat at the days end when there was a sing off between each of the two buses.



After a picnic lunch at the Coniston Welcome Centre, the group was divided into teams and set out on a guided tour of the Jane Goodall Reclamation Trail. Along the trail delegates identified different species of trees and learned about animals, plants, rocks and glacial activity in the Sudbury area.

One of the highlights along the trail was catching grasshoppers and comparing who's was the biggest. Lookout 2 proved to be a show stopper as the delegates got a taste of what Sudbury looked like more than 25 years ago.



One delegate from each province and territory then raced to get a golden shovel and assisted in planting and watering a Ninebark shrub near the end of the trail.

After hearing the theory behind the Land Reclamation technique and seeing the results along the trail, delegates were able to get right into the spirit of things as they carried and spread lime over the hills onto the barren land.



Once they neutralized the soil, they engaged in planting hundreds of red pine seedlings and eating blueberries, of course!



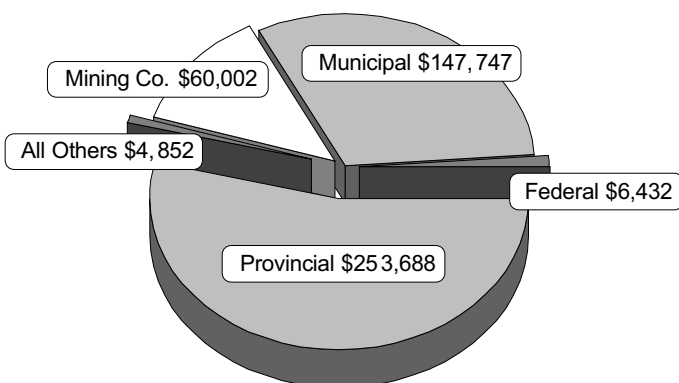
5) Financial Summary

The Land Reclamation Program was very fortunate to receive funding and material from outside “partners”. The cost of the year’s Program was \$472,721 with \$147,747 (31%) contributed by the City of Greater Sudbury. The chart below summarizes the financial contributions, including “in-kind” contributions of labour and material.

Other partnerships have been established in an effort to share resources, educate the public, and simply to work together for common goals in reclamation. This year’s partnerships included the Junction Creek Stewardship Committee and the Sudbury Community Foundation.

Program Contributors	Weeks	Number	Source	Amount
LABOUR				
Ontario Works Program	700	50	Provincial	\$220,688.00
Summer Job Service YMCA	51	3	Provincial	\$3,000.00
FedNor	6.5	1	Federal	\$2,772.00
TOTAL LABOUR				\$226,460.00
CASH				
CGS-Health and Social Services			Provincial	\$30,000.00
INCO Ltd.			Mining Co.	\$25,000.00
Falconbridge Limited			Mining Co.	\$23,578.37
Canadian Forestry Service			Federal	\$3,660.00
Sudbury earthdancers			Private	\$1,300.00
Falconbridge Beautification Committee			Private	\$500.00
TOTAL CASH				\$84,038.37
MATERIALS (Trees)				
INCO Ltd.	38,080		Mining Co.	\$11,424.00
NDCA	10,172		Private	\$3,051.60
TOTAL MATERIALS				\$14,475.60
Sub-Total				\$324,973.97
City of Greater Sudbury Contribution				\$147,747.00
GRAND TOTAL				\$472,720.97

FUNDING SOURCES 2003

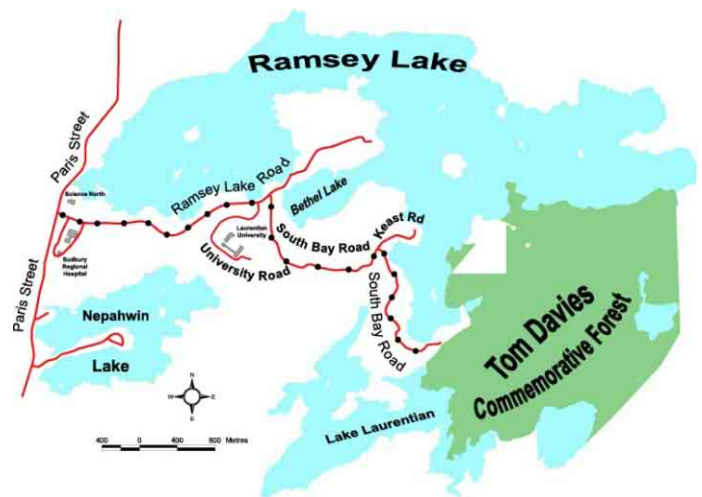


Sudbury Community Foundation - Tree Fund

A Gift that Grows Campaign

This campaign has enjoyed another successful year with more than 20 people donating to the Sudbury Community Foundation - Tree Fund, generating \$760.00. This program helps to celebrate an event or commemorate a memorial, by planting a tree seedling in dedication to someone special. These trees are planted in the Tom Davies Commemorative Forest, located within the Lake Laurentian Conservation Area. The fund contributes a variety of trees to this forest such as White Pine, Red Pine, Jack Pine, White Cedar, Tamarack, Red Oak and White Spruce.

Location of the Tom Davies Commemorative Forest



‘Healing the Landscape’ Revenues

In a presentation delivered to the Sudbury Community Foundation in November of 2001, the Land Reclamation Program hoped that donations to the Tree Fund from the sales of the book would generate between \$40,000 and \$45,000. With all books being sold as of November 2003, the total amount of revenue generated from the sales of books was \$53,563.59. Below is a chart that illustrates revenues generated yearly and donated to the Tree Fund:

Revenues from the sale of ‘Healing the Landscape’

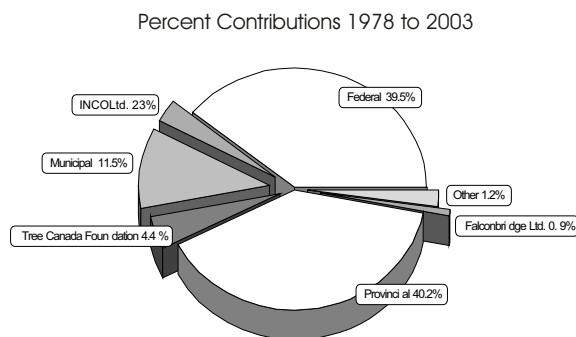
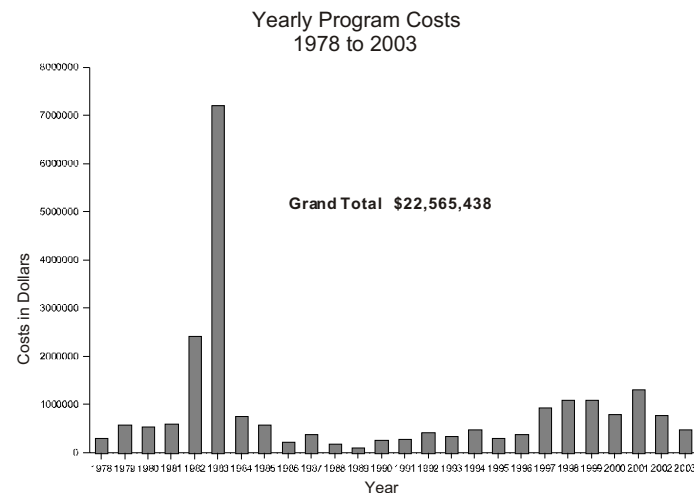
YEAR	REVENUE
2001	\$12,335.00
2002	\$20,471.23
2003	\$20,757.36
Total revenue generated:	\$53,563.59

6) Silver Anniversary Report

Celebrating 25 years of the Land Reclamation Program is something to be proud of. Original members of the VETAC Committee never envisioned reaching this milestone (see pgs.11-12 for full members list). As the operational Land Reclamation Program was born out of the Economic Development and Planning Department, an underlying motive for the Land Reclamation Program was the temporary employment opportunities it would generate. Over 4,000 temporary positions were created over the 25 years. A dozen awards have been won by not only the Program, but the people involved in making the Program work (see pg. 13 for list of awards).

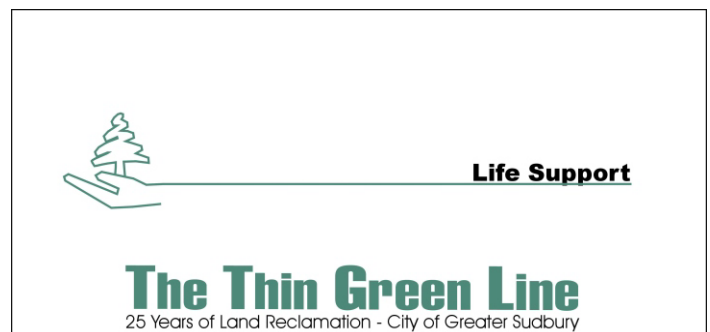
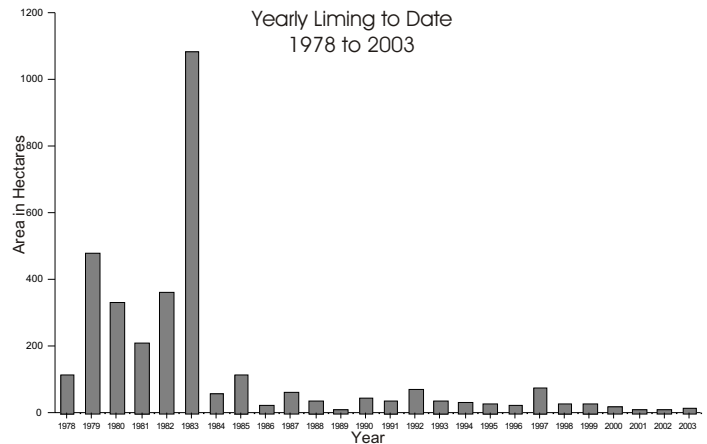
Finances

The Land Reclamation Program has been very fortunate to receive an average of 88.5% of its total budget over the last 25 years from outside agencies. Yearly contributions from the City have ranged from as low as 0.8% to as high as 51.9% due to varying annual funding. Outside funding is made possible by the City of Greater Sudbury's annual contribution to the Program. Below is a bar graph representing total funding by year. The bottom pie chart represents the percentage of contributions from the Program's major sponsors since 1978.



Liming

The Program's first priority was liming. In order to get anything to grow, the land first had to be neutralized. The graph below depicts the massive liming effort in the first six years of operation, which coincide with the large funding contributions. To date, 3,328 hectares of the most barren and have been treated with lime. Refer to page 9 for a map of the limed areas.

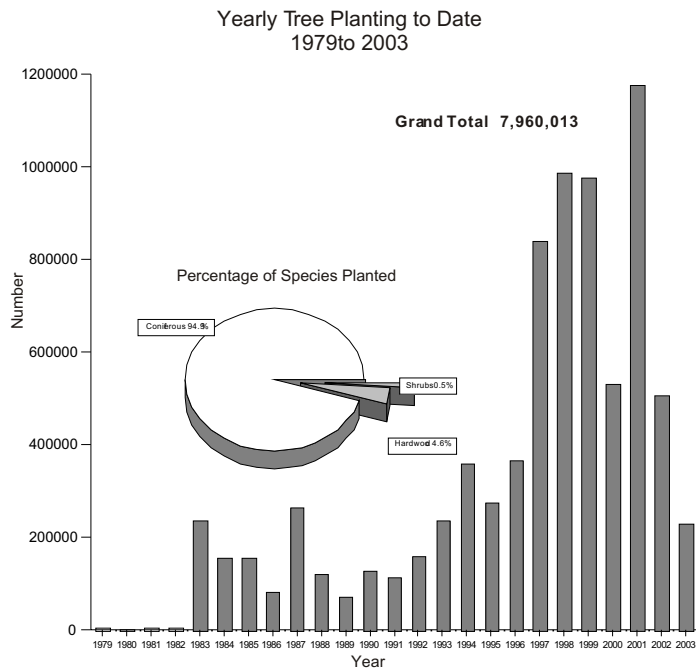


Tree Planting

Trees would not survive in Sudbury unless the land was treated first, that is why the tree planting efforts did not really get a start until later. Although over a dozen tree species have been planted, the majority are jack, red, and white pine. These pines are adapted to harshness of the barren sites and reflect the original species that were logged out of the region over a century ago.



The bar graph below illustrates the number of trees planted each year of the Program operation. To date, 7,960,013 tree seedlings have been planted throughout Greater Sudbury. In addition, 35,570 native shrubs have been planted. Refer to page 10 for a map of tree planted areas.



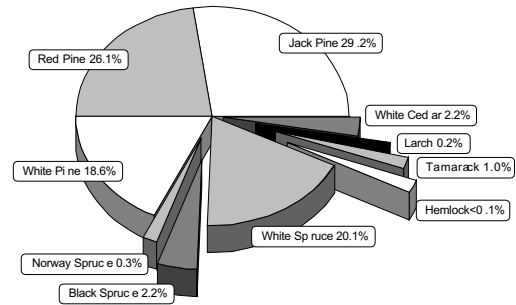
A Growing Tradition

The Thin Green Line

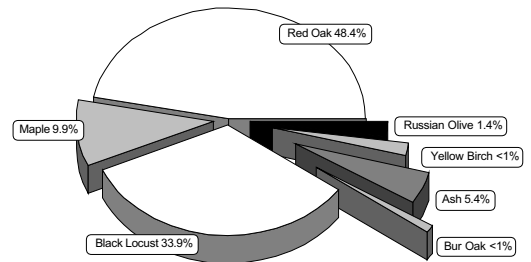
25 Years of Land Reclamation - City of Greater Sudbury

The pie charts below represent the percentage of each species planted. The coniferous species make up 94.9% of all species planted.

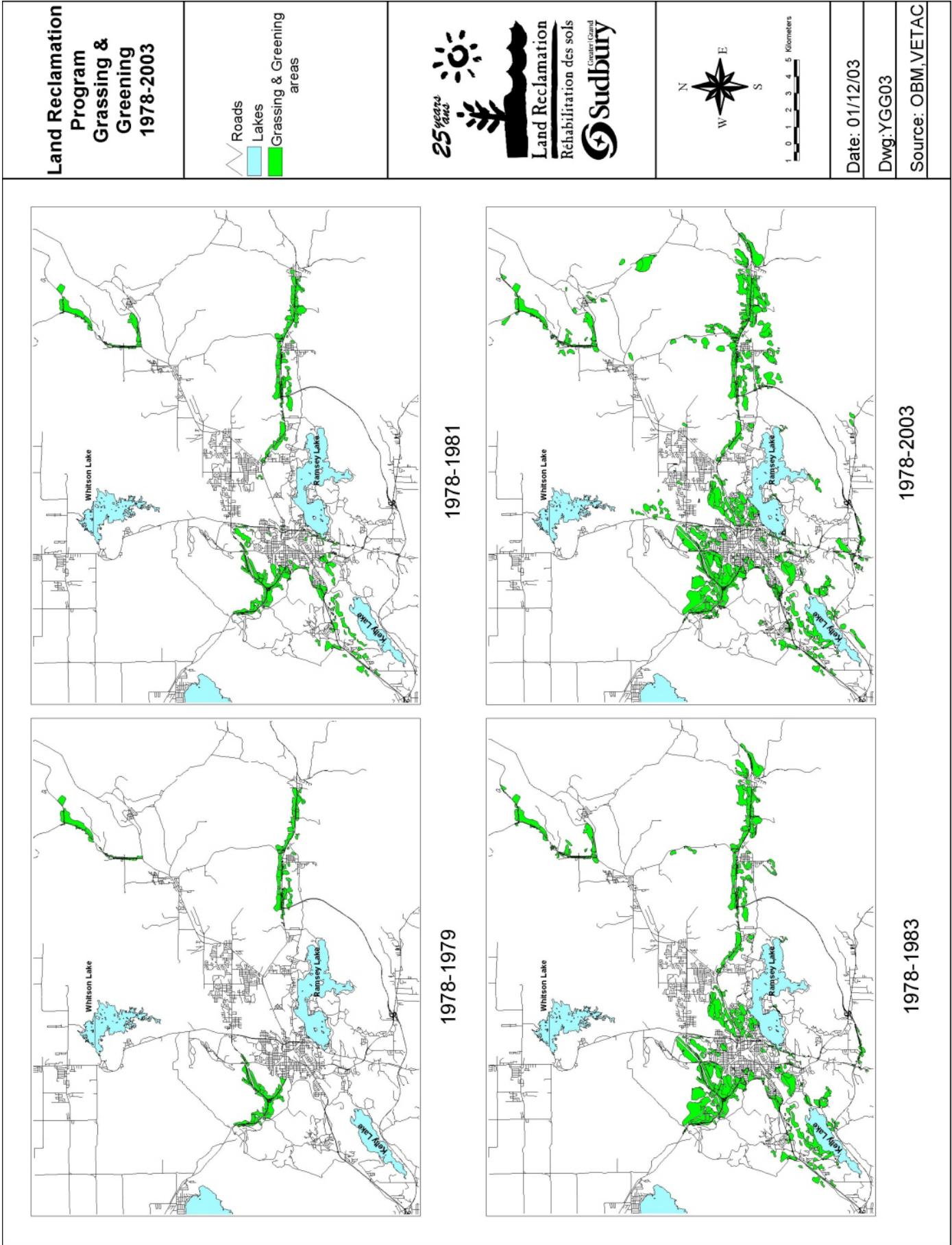
Percentage Coniferous Species Planted
1979 to 2003

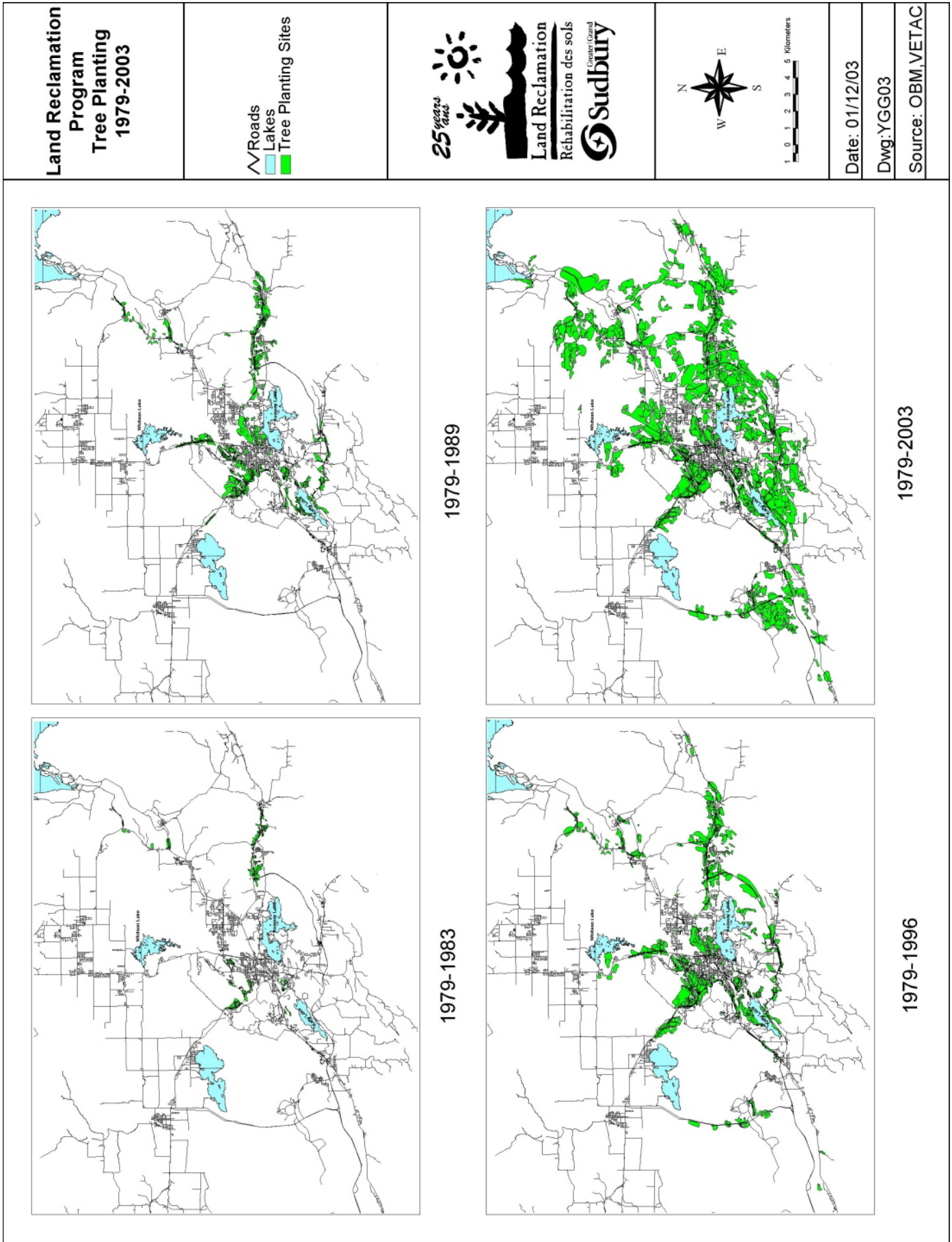


Percentage Hardwood Species Planted
1979 to 2003



Above: As part of the 25th Anniversary Celebrations, this stump was placed in centre court at Tom Davies Square for the duration of The Thin Green Line Contest. Now it rests at the Jane Goodall Reclamation Trail as a reminder of the past.





VETAC Members 1973 to 2003

Name	Agency	Active Period	Name	Agency	Active Period
K. Aubry	Collège Boreal	2001-02	D. Forrester	Parks and Recreation, City of Sudbury	1993-97
D. Balsillie	Ontario Ministry of Environment	1978-79	R. Frank	Drafting Dept., R.M.S.	1978-82
N. Barnett	Planning & Development Dept., R.M.S.	1973-80	B. Fryer	Parks & Recreation Dept., City of Sudbury	1973-75
D. Barrett	Planning & Development Dept., R.M.S.	1999-2000	J. Gardner	Parks & Recreation Dept., City of Sudbury	1974-75
P. Barry	Sudbury District Fish & Game Protective Assoc.	1973-79	R. Gardner	Parks & Recreation Dept., City of Sudbury	1989-2000
P. Baskcomb	Planning Services, C.G.S.	2002-present	G. Gionet	Planning Services, C.G.S.	2001-02
P. Beckett	Laurentian University (Committee Chair 1998-2003)	1978-present	D. Gougeon	INCO Ltd.	1973-75
D. Beirnes	Planning & Development Dept., R.M.S.	1978-79	R. Gregory	Mayor's Greening Committee	1994-2001
L. Bigger	Parks & Recreation Dept., City of Sudbury	1978; 84-93	S. Grillanda	Cambrian College	1983
D. Bird	Poupore Lumber	1985-94	J. Gunn	Co-operative Freshwater Ecology Unit	1990-2002
D. Bolton	INCO Ltd.	1992-97	R. Guy	Cambrian College	1994-2000
P. Bonhomme	Councillor, Town of Nickel Centre	1989-91	B. Hett	Parks & Recreation Dept., City of Sudbury	1978-82
A. Bonnis	Nickel District Conservation Authority	1978-79	M. Hickmott	Planning & Development Dept., R.M.S.	1978-81
C. Brankley	Sudbury 2001	1978-80	P. Hobbs	Canada Employment Development Branch	1978-79
S. Brierley	Private Citizen	1996-present	J. Hone	Ontario Ministry of Northern Affairs	1978-84
D. Burke	Landscape Architect	1984-89	S. Hotti	Regional Clerks Dept., R.M.S.	1993-96; 2000-01
R. Burt	Sudbury Hydro	1996-2000	D. Hughes	Planning & Development Dept., R.M.S.	1981
M. Butler	Falconbridge Ltd.	2001-02	J. Hughes	Planning & Development Dept., R.M.S.	1980
M. Carmichael	Sudbury Hydro	1987-95	G. Hunt	Private Citizen	1996-97
J. Carruthers	Planning & Development Dept., R.M.S.	1978	J. Ilitski	Councillor, City of Sudbury/Private Citizen	1992-present
S. Cheykova	Private Citizen	1996-99	R. Jeffkins	Sudbury Horticultural Society	1992-93; 95
J.H. Christiansen	Falconbridge Limited	1973-76	T. Kaliczak	Falconbridge Limited	1990-99
G.M. Courtin	Laurentian University	1973-76	W. Ketchabaw	Ontario Hydro	1994-95
D. Crawford	Ontario Hydro	1984-93	W. Kienapple	Councillor, Town of Valley East	1974-75
R. Demore	Operations & Maintenance, R.M.S.	1974-75	S. Korpela	Councillor, City of Sudbury	1979-80
B. Dreisinger	INCO Ltd.	1985	E. Kraker	Ontario Ministry of Natural Resources	1973-74
R. Dutrisac	Engineer, Town of Valley East	1980-83	D. Lake	Cambrian College	1978-79
B. Edwards	ICG Utilities/Centra Gas Ontario Ltd.	1987-97	T. Latreille	Sudbury Horticultural Society	1975
M. Elliott	Mark Elliott and Associates	1996-2002	B. Lautenbach	Planning Services., C.G.S.	1978; 82-present
T. Fasciano	Planning & Development Dept., R.M.S./ Private Citizen	1974-present	D. Liske	Marchland Holdings, City Centre	1975-77
D. Faubert	Building Controls Dept., R.M.S.	1978-79	T. Lloyd	Poupore Lumber Limited	1973-74
N. Fawcett	Councillor, Town of Capreol	1980	M. Luoma	Metro Centre Management Board	1978-80
A. Fex	Councillor, Town of Walden	1978	L. Mackey	Master Gardner Program	1989-90
G. Fievoli	Councillor, Town of Walden	1983	S. Makela	Sudbury Horticultural Society/Private Citizen	1985-present
E. Floreani	Master Gardner Program	1990-present	J. MacLellan	Private Citizen	2000
G. Foley	Councillor, Town of Nickel Centre	1981-82; 86-88	P. Martin	Martin's Potatoes Inc.	1976-78

VETAC Members 1973 to 2003 Continued

Name	Agency	Active Period	Name	Agency	Active Period
T. McCaffrey	Planning Services, C.G.S.	1998-present			
J. McCready	Ontario Ministry of Natural Resources	1977-78		Sudbury Metro Centre	1992-93
P. McCubbin	Ontario Ministry of the Environment	1986-88	N. Snajdr	Private Citizen	2000-02
J. McDonald	Councillor, Town of Nickel Centre	1984-85	G. Spiers	Centre for Environmental Monitoring, MIIRCO	2003
K. McDonald	Ontario Ministry of the Environment/ Science North	1995-2002	D. Spires	Ministry of Northern Development and Mines	1994
D.E. McHale	Ontario Ministry of Natural Resources	1973-75	B. Squirrell	Councillor, Town of Walden	1973; 80-81
W.D. McIlveen	Sudbury Horticultural Society/Ontario Ministry of the Environment	1978-85	A. St. Onge	Councillor, Town of Rayside-Balfour	1981
L. McIntosh	Ontario Hydro	1993	J. Storbeck	Falconbridge Ltd.	2000
G.J. Michalak	Parks & Recreation Dept., Town of Rayside-Balfour	1975	A.R. Thompson	Ontario Hydro	1996
R. Michelutti	Falconbridge Limited/Private Citizen	1978-present	M. R. Todd	Falconbridge Ltd.	2002-present
J. Miller	Land Reclamation Coordinator, R.M.S.	1980-2000	L. Tucur	Cambrian College/Planning Services, C.G.S./ Private Citizen	1988-95; 2001-present
S. Monet	Planning Services, C.G.S.	2002-present	A. van Drunen	Hollandia Nursery Sod	1998-2002
D. Napier	Planning and Development, R.M.S.	1992-2002	J. Vining	Ontario Ministry of Natural Resources	1978-2001
J. Negusanti	Ontario Ministry of Natural Resources/Ontario Ministry of the Environment	1978-present	D. Walters	Ministry of Northern Development and Mines	1993
M. Nellis	Cambrian College	1994	D. Welsh	Canada Employment Development Branch	1979
S. O'Brien	Nickel District Conservation Authority	1976-78	C. Whitelaw	Sudbury Ornithological Society	1988
L. Pearson	Private Citizen	1993	K. Winterhalder	Laurentian University (Committee Chair, 1973-97)	1973-2001
M. Peters	INCO Ltd.	2000-present	M. Wiseman	Falconbridge Limited	1987-89
T. Peters	INCO Ltd./Private Citizen	1973-present	P. Yearwood	Decommissioning and Reclamation, INCO Ltd.	1998-2002
H. Poulin	Councillor, Town of Rayside-Balfour	1973	D. Young	Agricultural Dept., INCO	1974-75
H. Proudley	Engineering Dept., City of Sudbury	1978	J.D. Yuill	Nickel District Conservation Authority	1973-74
M. Racine	Canada Employment Development Branch	1979-80			
N. Roberge	Rayside-Balfour Beautification Committee	1974-75			
J. Robinson	The Sudbury Trail Plan Association	1992-94			
M. Rosset	Rosset Landscaping	1993-97			
J. Rule	Planning and Development Dept., R.M.S.	1990-91			
P. Sajatovic	Nickel District Conservation Authority	1981-present			
C. Sanders	Sanders Greenhouses Inc.	1994-99			
J. Savage	INCO Ltd./Private Citizen	1977-present			
S. Schillemore	Nickel District Conservation Authority	1979-81			
A. Shannon	Private Citizen	1993; 1995			

Land Reclamation Program -Awards-

Date	Award	Presented by...	Presented to...
1986	Community Improvement Award	Ontario Horticultural Association, Sudbury	Regional Municipality of Sudbury Land Reclamation Program
1989	For Hosting the 25 th O.S.T.C. Annual Meeting	Ontario Shade Tree Council	Regional Municipality of Sudbury
1990	Aboriginal Award of Merit	International Society of Aborigines Ontario Inc., Sudbury	Regional Municipality of Sudbury Land Reclamation Program
1990	Lieutenant Governor's Conservation Award	Lieutenant Governor, Lincoln Alexander from the Conservation Council of Ontario, Toronto	Regional Municipality of Sudbury Land Reclamation Program
1990	The Government of Canada Environmental Achievement Award 1990	Governor General, Ray Hnatyshyn, Ottawa	Regional Municipality of Sudbury Land Reclamation Program
1992	The United States 1992 Chevron Conservation Award	Washington, D.C.	Regional Municipality of Sudbury Land Reclamation Program
1992	United Nations Local Government Honors Award	Rio de Janeiro	Regional Municipality of Sudbury Tom Davies/Bill Lautenbach Land Reclamation Program
1995	Model Project Award	The Society for Ecological Restoration	Regional Municipality of Sudbury Land Reclamation Program
1997	Community Achievement, Elaine Burke Memorial Award	Active Living	Regional Municipality of Sudbury Land Reclamation Program
2001	Finalist Award Certificate for Bremen Partnership Award in the area of Global Responsibilities Through Local Action	Henning Scherf, Mayor of Bremen, Germany	City of Greater Sudbury Land Reclamation Program
2002	Peggy Thompson Publication Award	Alberta Society of Professional Biologists	Nicola Ross, writer of "Healing the Landscape"
2003	Dr. Edward M. Watkin Award	Canadian Land Reclamation Association	Bill Lautenbach City of Greater Sudbury

7) What Does the Future Have in Store?

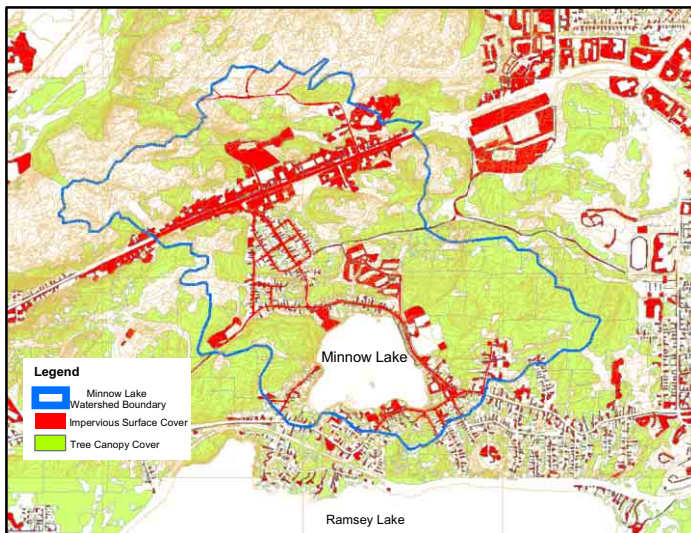
The scope of the Land Reclamation Program is expanding to include two broad conceptual frameworks: watersheds and biodiversity.

Watershed Improvement

First, the Program is adopting a watershed focus. The premise is simple: if you improve the land that is draining into streams and lakes then their water quality will improve. Adopting this new approach means that future decisions about where to reclaim land and plant trees will need to consider relative watershed health.

This year, the Environmental Initiatives Group began a project to map two indicators of watershed health: tree canopy cover and impervious surface cover (roads, driveways, rooftops, etc.). Increasing the tree canopy cover helps to decrease problems associated with stormwater runoff whereas the opposite holds for impervious surface cover. These indicators are being mapped in all built areas in the City. Once completed, these indicators will allow different watersheds in urban areas to be compared as to relative health based on the two indicators.

The map below is an example of this mapping exercise for the Minnow Lake watershed.



This year the Land Reclamation Program, through liming, has improved another 13 hectares of land in the Frood Branch sub-watershed that drains into Junction Creek. This improvement was done in cooperation with the Junction Creek Stewardship Committee. Next year, we hope to focus on the Silver Lake watershed to bring improvements to the water quality of this environmentally compromised lake.

The photo to the right was taken from the southern hill top overlooking Silver Lake.

Increase in Biodiversity

Biological diversity or 'biodiversity' can be simply defined as the 'variety of life in all its forms and processes'. Notwithstanding the species that now comprise the greening hills, the diversity of plant species is very low. It may take centuries for natural colonization to increase plant diversity to levels found in forests outside of the impacted zone. Poor plant diversity means poor habitat diversity and, hence, poor animal diversity as well. Impoverished plant and animal communities can have dire consequences for ecosystem processes. The low number of plant species growing on Sudbury's hillsides also may render the entire system more susceptible to major disruption by pest outbreaks, such as gypsy moth and spruce budworm.

Over the next few years we will attempt to secure sources of locally adapted plants that currently are not being planted by the Land Reclamation Program. Such plants include trees like sugar maple and yellow birch and shrubs like wild raisin, mountain maple, beaked hazel, and elderberry. New techniques will be used to complement existing regreening operations to diversify emergent vegetation communities (e.g., direct seeding under canopies after several years of tree growth, use of compost for organic matter, etc).

