



FORESTRY FUTURES TRUST ONTARIO

Forestry Futures Trust

2023/24 Annual Committee Report

Forestry Futures Trust Committee

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FFTC Forest Observations - 2024

Forest genetics and growth and yield on the Ontario forest estate

The tenets of a growth and yield (G&Y) program in respect to a landowner's forest estate are under laid by careful attention to the management of its forest genetic material. Through measures such as conservation, breeding, and seed transfer (among other things), a landowner can enhance, both through time and quality, the improvement of the forest.

Back at the turn of the millennium, the Province of Ontario had an active and efficient G&Y and genetics programs that supported management of its extensive forest estate. It had enlisted industry support in the endeavor and established three industry-government, partnership-driven, non-profit corporations to manage the operational end of tree improvement. By 2007, those Associations were working toward development of second-generation orchards for the production of improved seed, specifically, jack pine, white pine, and black spruce. The intention of developing improved seed was to eventually produce better quality trees in a shorter timeframe.

However, by about 2012, the Province made the decision to terminate active participation in the genetics growth and yield function, removed its staff from membership in the non-profit corporations, and redirected genetics dollars to other forest priorities. Unfortunately, by 2015, it had become generally apparent that without some landowner support, decades of investment in Ontario's genetics infrastructure (in particular clonal and seed orchards) would be lost.

To counter that, the Minister provided some support dollars to be made available through the Forest Futures Trust Committee (FFTC) and directed toward maintenance of existing genetics (now referenced as Forest Genetic Resource Management (FGRM)) infrastructure via the non-profit Associations that were, by then, driven by industry-public cooperation, rather than industry-government. Funding was increased in 2017 and in 2022 the program was directed to continue until at least 2027. But unfortunately, continued corporate lack of interest by MNR in FGRM at the strategic program level saw Ontario miss out in Federal genetics-focused transfer dollars, which were snapped up by competing jurisdictions.

Over the same time frame and driven by an anticipated warming climate, Ontario made one far-sighted concession to strategic FGRM by developing and approving a new forest seed transfer policy. More recently FFTC and the Associations cooperated on the development of an interim Forest Genetic Resource Strategic Plan to guide the annual allocation of funds for Ontario genetics infrastructure maintenance; that document can be accessed on our website; it will be withdrawn at such time as MNR develops a new provincial strategic program policy for Forest Genetic Resource Management as a formal program in support of the enhancement of the Ontario Forest Estate appears to be in a holding pattern. Bottom line is that without some timely and directed attention and leadership to FGRM by MNR, the future of the Ontario forest estate will continue to be shortchanged.

R. A. Riley

FFTC Chair

WHO WE ARE & WHAT WE DO

Forestry Futures Trust

The Forestry Futures Trust (FFT) was established under the authority of the *Crown Forest Sustainability Act (1994)*, Part V. Section 51 of this Act states that the Minister may appoint a Forestry Futures Trust Committee to provide advice on the following matters:

1. *The funding of silvicultural expenses in Crown forests where forest resources have been killed or damaged by fire or natural causes.*
2. *The funding of silvicultural expenses on land that is subject to a forest resource license, if the licensee becomes insolvent.*
3. *The funding of intensive stand management and pest control in respect of forest resources in Crown forests.*
4. *Such other purposes as may be specified by the Minister.*

(Source: Crown Forest Sustainability Act, Part V, Section 51(3))

Other purposes specified by the Minister for which the Trust fund is currently used include:

- Independent Forest Audit Program
- Forest Tenure Modernization
 - Enhanced Sustainable Forest License - design and development
 - Local Forest Management Corporation – design, development and transition
 - Forest Management Component – forestry on forests returned to the Crown
- Enhanced Forest Resource Inventory production and delivery
- Forest Genetic Resource Management Program
- Treaty Settlement Transition Program
- Incremental Tree Planting Program

The Trust fund is managed by RBC Investor Services Trust. Funds are allocated to successful applicants under the direction of the Forestry Futures Trust Committee Chair, supported by decisions made through consensus by the Forestry Futures Trust Committee. The Committee members are appointed by the Minister for up to a three-year term, which may be renewed at the discretion of the Minister. The Trust is funded by harvest volume charges on Crown timber.

Forestry Futures Trust Committee

CHAIR



R.A. (Ray) Riley, R.P.F. (Hon) (member since February 2016). Ray holds degrees in geology from Acadia and Queens and was a member of the Professional

Engineers Ontario for over 40 years. He comes to the FFTC after 30 years with the Ontario government culminating as Assistant Deputy Minister of Operations for Ontario's Ministry of Natural Resources. Subsequent to his career in government, he was active as a consultant for some 21 years focusing on natural resource management.

MEMBERS



Mike Barker, (member since 1999) enjoyed a 32-year career in natural resource management, holding positions such as District Manager within the Ministry of

Natural Resources, and Assistant Deputy Minister for the Ministry of Northern Development and Mines.



W.D. (Bill) Baker, (member since February 2016) had a 30-plus year career in natural resource management primarily as a senior manager

with the Ontario Ministry of Natural Resources. Bill has worked throughout Ontario in a variety of capacities but has spent much of his career in northwestern Ontario and Thunder Bay.



James Harrison, (member since February 2016) holds a Forestry Degree (1975) from Lakehead University. His 39-

year career with industry included positions with Kimberly-Clark of Canada and Greenmantle Forest Inc. James sits as the FFTC representative on the Provincial Forest Inventory Advisory Committee.



Dr. Sandy M Smith, (member since January 2017) is a Professor in Forestry at the University of Toronto, having served as Dean of the Faculty of

Forestry (2010-2012), published 140+ papers, supervised 65+ graduate students. She specializes in forest health and urban forests, specifically natural controls to manage invasive species. She is a Fellow of the Royal Entomological Society (UK), Minjiang Scholar (China), Past President of the Entomological Societies of Canada and Ontario, and currently serves on the Boards of Trees Canada and the Ontario Invasive Plant Council. She has been an Associate Editor of the Can J of Forest Research and participated on national NSERC grant review panels as well as Federal and Provincial invasive species science panels (ALHB, EAB, *Sirex*, Hemlock Woolly Adelgid).



George Gretes, (member since August 2023). George Gretes is co-founder and Partner of Harrington Place Advisors. He brings over 10 years of

experience in developing engagement strategies and due diligence for some of Canada's largest projects. Most recently, he worked to deliver a net-new international port on the Great Lakes, worked directly for the CEO and President of Metrolinx, helped guide the relocations of communities across Toronto and worked for a publicly-traded CPG, leading investor relations for one of Canada's largest mergers in 2021. George holds a Hons. BA from the University of Toronto and is currently completing the CFA and CBV.

Our Support Team

Assisting the Committee is a small team reporting to the Chair:

- Peter Street, R.P.F., Independent Forest Audit and Treaty Settlement Transition Coordinator
- Shelley Vescio, R.P.F., Silviculture, Genetics and FRI Program Coordinator
- Anastasia Frisby, R.P.F., Office Administrator, Forest Tenure Programs Coordinator

FFT Secretariat – Ministry of Natural Resources and Forestry

Since its inception in 1995, the FFTC has enjoyed a productive working relationship with the Ministry of Natural Resources (MNR) staff. As the Committee's mandate expanded over the decade, the lines of communication and the number of Ministry contacts correspondingly increased. In this regard, the Secretariat functions are provided by Director Peter Henry, and Rhonda Hancherow of Forest Guides and Silviculture Section, and Cathy Hamor of Forest Tenure and Economics Branch. Key staff are listed below by program area.

- *Independent Forest Audit Program* –Linda Touzin, R.P.F. (retired), Ngairé Roubal, R.P.F. (resigned); and Ernie Demuth and Erin Buckley
- *Forest Resource Inventory Program*- Trisha Westman, Michelle Colley, Ian Sinclair, R.P.F. and Geordie Robere-McGugan, R.P.F.
- *Tenure Modernization*- John Harvey R.P.F., Marcel Rizzo and Andy Lemmetty R.P.F.
- *Treaty Settlement Transition Component*: Jennifer Card
- *Incremental Tree Planting Program (2Billion Trees)* Mike Briennesse RPF and Rachel Hill

The MNR's FFT Secretariat continues to fulfil its role while honouring the principle of committee independence on all matters related to funding allocations for projects. The FFTC thanks the Directors and staff of Crown Forests and Lands Policy Branch, Operations Branch, Forest Tenure and Economic Branch, Integration, Science and Research Branch (including FRI and Growth and Yield) and Business Development Branches for their continued support.

State of the Trust

The Forestry Futures Trust fund is in a healthy position and has fully recovered from the economic difficulties that previously affected the sector through the 2007-2010 economic downturn. The fiscal financials, which provide the details, are available through our website, www.forestryfutures.ca.



Forestry Futures Trust Committee 2024

Committee Operations Budget 2023/24

Available Funds	
Received from the <i>Forestry Futures Trust Fund</i> accounts	\$511,523.72
2022/23 unspent balance	\$21,976.28
TOTAL Funds Available	\$533,500.00
Expenditures	
Meetings/Travel	\$41,579.27
Committee Honorariums	\$76,800.00
Professional /Administrative/Contract Staff	\$230,090.88
Supplies (Communication/Consumables)	\$12,980.80
Equipment / Signage	\$2,526.86
Overhead	\$53,500.93
TOTAL Expenses	\$417,478.12

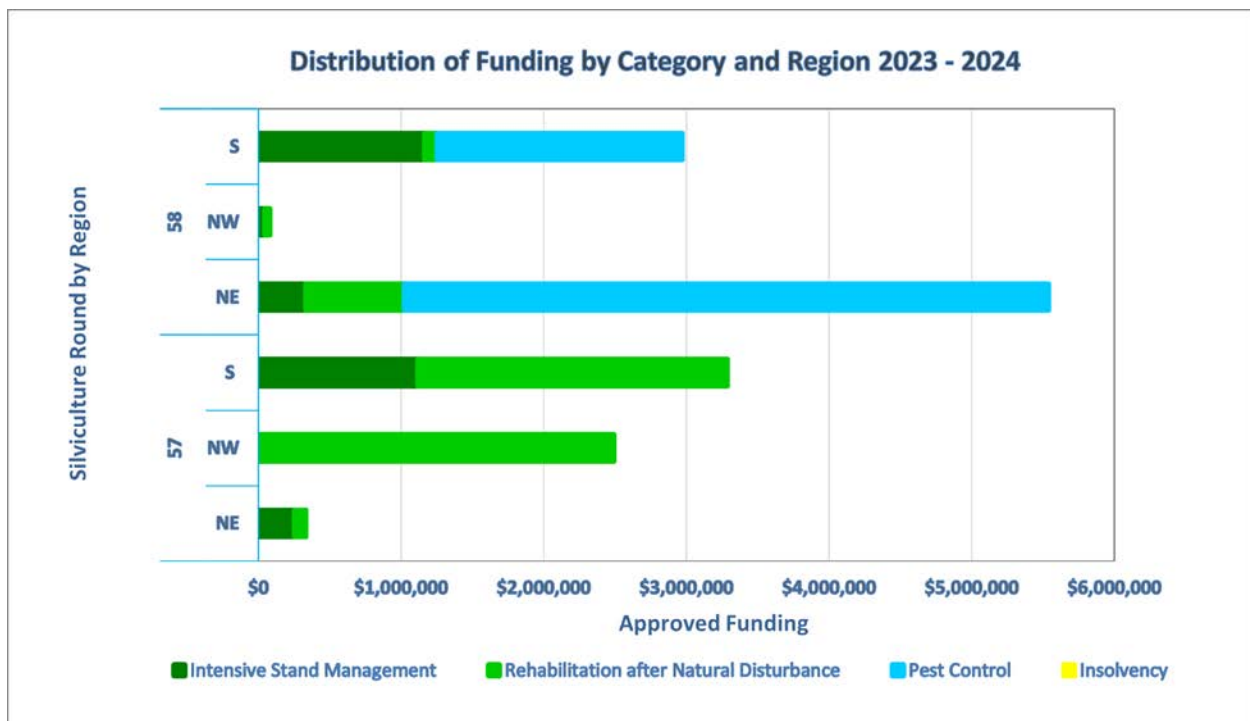
OUR PROGRAMS

Silviculture Program

In September and January of each fiscal year, the Committee extends invitations to Sustainable Forest License holders to submit applications for funding of silviculture projects that meet eligibility requirements under the categories of Intensive Stand Management, Rehabilitation after Natural Disturbances, Pest Control and Insolvency. Information about these categories is described in the FFTC Silviculture Project Application Guide that can be found under the Forms and Reports menu tab on our website. In 2023-24, successful applications for Rounds 57 and 58 resulted in a capital commitment of \$14,700,000, with \$6,100,000 allotted to Round 57 and \$8,600,000 to Round 58. Making up for more than half of the budget for Round 58, the MNR Northeast Spruce Budworm Insect Pest Management Program represented the fifth such project partially funded through the FFT and for which a total of nearly \$28,500,000 has been contributed from the FFT since 2019.

The chart below illustrates the amount of funding approved under each of Rounds 57 and 58 and is displayed by silviculture category and region (South, Northwest, Northeast). Among regions, 43% of the funding was awarded to the South, 17% to the Northwest and 40% to the Northeast. Among categories, 12 Intensive Stand Management projects received 20% of approved funds, nine projects categorized as Rehabilitation after Natural Disturbances received 38% and three Pest Control projects were awarded 42% of the total budget.

Note: Lists of New, Ongoing and Completed FFT Silviculture Program projects can be found on the FFTC website www.forestryfutures.ca



In 2021-22, the FFTC began collecting and reporting on the number of employment days that were generated from its silviculture projects. In 2023-24, 47 projects gave rise to approximately 10,938 days (based on an 8-hour day) and 16 projects could not be initiated and reported zero days of operations. This represents a decrease of about 22% from last year's data for which 46 projects reported 17,358 employment days and 4 projects reported zero. There were a variety of reasons for this apparent reduced employment levels but a shortage of available and experienced silviculture contractors was a major reason, along with poor hardwood markets that rendered stand improvement operations as economically unfeasible to conduct.



1173-2-R56 - Lofty Davies Stand
Remediation on the Lakehead Forest

Forest Genetic Resource Management Program

The Forest Genetic Resource Management (FGRM) Program is a specific purpose of the Forestry Futures Trust. The funding of FGRM via the FFT provides support for maintaining Ontario's forest genetic assets, for ensuring that genes are conserved and for developing trees that are adapted for future growing environments. FGRM is a valuable resource for forest management in Ontario and contributes to the Crown Forest Sustainability Act (CFSA) purpose of providing for the sustainability of Ontario's Crown forests. The program supports tree improvement, provides a viable and reliable source of genetically improved seed, conserves existing genetic diversity, and supports adaptation to a changing environment.

Ontario's three Regional Genetic Associations, i.e., Superior Woods Tree Improvement Association (SWTIA), Northeast Seed Management Association (NeSMA), and the Forest Gene Conservation Association (FGCA), are partners with Sustainable Forest Licensees and others in implementing a forest genetics program that benefits Ontario's

Crown forests. In addition to providing funding through the FFT, Ontario Ministry of Natural Resources researchers study forest genetics and tree improvement to support Provincial policy and operational programs in collaboration with partners, such as the Associations and universities.

The FGRM annual budget is \$675,000 from which \$375,000 is allotted to core funding for the three Associations and \$300,000 is available for project-based activities. The 2022-2027 FGRM Directive Extension secured funding for five fiscal years ending March 31, 2027.

Listed below are categories under which FGRM project-based activities are eligible for funding.

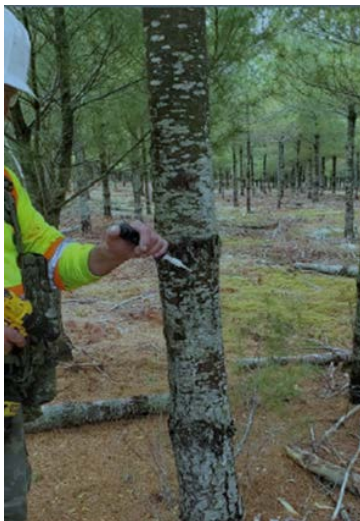
FGRM Approved Funding Categories		Examples
1	Contribution to achievement of goals of the 1987 Provincial Tree Improvement Master Plan or MNR FGRM policies or plans	Maintenance of existing tree improvement and tree breeding programs
2	Information management supporting forest genetic resources	Forecasting models, analysis approaches, database development/management
3	Establishment and maintenance of genetic rests or archives	Provenance trials, assisted migration trials
4	Forest gene conservation projects	In-situ and ex-situ conservation activities
5	Forest genetic research	Climate-change adaptations, pest resistance

While individual projects may incorporate facets of more than one category, in 2023-2024, the Associations broadly directed 57% of their funding toward activities that *Contributed to the Achievement of the Province’s Tree Improvement Master Plan Goals or its FGRM Policies or Plans*, 23% to *Information Management*, 7% to the *Establishment and Maintenance of Genetic Tests or Archives*, 13% to *Forest Gene Conservation Projects* and 0% to *Forest Genetic Research*.

FFTC and the Associations collaboratively developed an interim 10-Year Strategic Plan for the FGRM Program. The strategic plan was designed to provide direction for the FFTC in their role as the FGRM program administrator and to its applicants. Eligible applicants include SWTIA, NeSMA and FGCA. This strategic plan was

developed to further FFTC’s capacity to ensure its instructed allocation of funds for the FGRM Program purpose was done with sufficient oversight and to demonstrate how funding is being used to support important current strategic priorities.

Applicants are required to demonstrate how project proposals support strategic priorities described in this document. The strategic plan is designed as an interim document pending any updated strategic policy direction that Ontario may develop for the FGRM Program. The strategic plan will be pilot tested during the 2024-25 application process for FGRM Core and Project-Based Activities and then updated accordingly to improve its effectiveness.



Injection of GA 4/7 in Gurd Orchard, photo provided by NeSMA



Black Ash Seed, photo provided by FGCA



Measuring Tree height, photo provided by SWTIA

FGRM 2023-24 Projects		
Association Project #	FGRM Category	Project Name
SWTIA 2023-1	1	Grafting for the Lake Nipigon East Black Spruce, 2nd-Generation Clonal Orchard
SWTIA 2023-2	2	Measure the Rainy Lake Black Spruce, 2nd-Generation Open-Pollinated Tests
SWTIA 2023-3	2	Analyze Rainy Lake Black Spruce, 2nd-Generation Open-Pollinated Test Data
SWTIA 2023-4	1	Maintain and Protect High-Value Tree-Improvement Sites
SWTIA 2023-5	2	Measure Lakehead University Long-Term Provenance Tests
NeSMA 2023-1	1	Jack Pine Deployment Trials – Assessments and Tending
NeSMA 2023-2	1	White Spruce Deployment Trials – Seed procurement - <i>Withdrawn</i>
NeSMA 2023-3	1	White Pine Seed Production
FGCA 2023-1	1	White Pine Renewal Under Climate Change - A Strategy
FGCA 2023-2	3	Genetic Installations
FGCA 2023-3	4	Seed Collection Areas Network
FGCA 2023-4	4	Clonal White Pine Seed Orchard Collections
FGCA 2023-5	2	White Pine Seed Orchard Database

Independent Forest Audit Program

The Forestry Futures Trust Committee (FFTC) has traditionally implemented the annual Independent Forest Audit (IFA) Program for the MNR. FFTC responsibilities include: the allocation of funds to cover the cost of the audits; contract management, communication with the audit firms and key audit participants; attending audit meetings and field examinations. The FFTC ensures the audit program is implemented according to the IFA Process and Protocol (IFAPP). The Committee reviews all draft reports and ensures the final reports are of the highest quality. The Committee also provides recommendations to MNR concerning revisions to the audit program and the IFAPP, coordinates auditor and auditee training sessions with MNR, and makes recommendations to the Minister of Natural Resources and Forestry as required or appropriate.

Four (4) Independent Forest Audits (IFAs) were completed in 2023 using the 2022 IFAPP.

While there were no additional requirements in the 2022 Independent Forest Audit Process and Protocol (IFAPP) over the 2021 IFAPP, there were changes to improve the clarity of the wording, updates to responsibilities and/or alignment of responsibilities with the Forest Management Planning Manual (FMPM) and Freedom of Information and Protection of Privacy Act (FIPPA) requirements. Examples of changes include:

- Changed Silviculture Effectiveness Monitoring to Silviculture Monitoring.
- Added establishment assessments (not only previous FTG but also establishment assessment).
- Approval of MNR and Forestry Futures Committee is required prior to any changes to the schedule.
- Added an e.g., for the use of helicopter to clarify it may be most cost-efficient means for assessing establishment of areas.

- Added wording related to succinctness of text to address non-conformities without repeating information.
- Added wording to address Accessibility for Ontarians with Disabilities Act (AODA) posting needs for Ontario.ca.
- Connected reporting deadline and process requirements from text to template to ensure the actions are reported as completed by the deadline date indicated by Regional Director approved action plan.
- Clarified what is mandatory in Appendix A.

The four (4) 2022 audits included:

- Timiskaming Forest – managed by the Timiskaming Forest Alliance under Sustainable Forest Licence 542391.
- Spanish Forest – managed by EACOM Timber Corporation (Interfor East Ltd.) under Sustainable Forest Licence #542621.
- Kenogami Forest – managed by Ogwiidachhiwaning Forest Management Inc. under Sustainable Forest License # 554576.
- Gordon Cosens Forest – managed by GreenFirst Forest Products Inc., under Sustainable Forest License # 550039.

On two (2) of the four (4) audits (Gordon Cosens & Spanish Forests), the auditors found that the management was generally in compliance with the legislation, regulations, and policies that were in effect during the term covered by the audit, and the Forests were being managed in compliance with the terms and conditions of their Sustainable Forest licenses.

On two (2) of the four (4) audits (Kenogami & Timiskaming Forests), the auditors found that the management, with a number of exceptions, was generally in compliance with the legislation, regulations, and policies that

were in effect during the term covered by the audit, and the Forests were being managed in compliance with the terms and conditions of their Sustainable Forest Licenses.

As shown in Table 1, the process identified a number of findings in all four (4) audits. All four (4) reports have now been accepted by the Ministry. Detailed action plans to address the findings presented in the audit reports are being prepared and will be posted on the Ontario government website alongside the audit reports.



2023 Kenogami Forest IFA field portion



2023 Spanish Forest IFA field portion

Table 1. Summary of the 2023 Audit Findings and Best Practices for all four audits with respect to the eight IFA Principles *Rounded to the nearest whole number.

IFA Principles	# Findings	Percentage %*	Best Practice
1 Commitment	0	0	
2 Public consultation and Aboriginal involvement	3	10	
3 Forest Management Planning	5	16	
4 Plan assessment and implementation	6	19	1
5 System support	0	0	
6 Monitoring	13	42	1
7 Achievement of management objectives and forest sustainability	2	6	
8 Contractual Obligations	2	6	
Total	32	100	2

The four (4) audits were awarded at a total cost of \$330,683.20 (including HST), or on average \$82,670.20 per audit (as compared to 2022 which averaged out to \$75,323.54 (including HST)). The increase in the average cost per audit can be attributed to the complexities of these particular four forests, and the increased scope of the audits which averaged 7.25 years compared to 6.5 years in 2022.



Common Findings

While most of the findings from the 2023 audits were unique to the Forest being audited, there were a few findings that were common to all the reports. These Findings identified deficiencies in the Forest Operations Inspection Program (FOIP) either by the SFL or the District or both parties (Principle 6 Monitoring). Examples include:

- Spanish Forest – gaps in the Lessard bridges were letting road material to enter watercourses, and compliance plans not prepared in accordance with the Compliance Handbook.
- Kenogami Forest – aggregate pits out of compliance, and water crossings not being maintained.
- Gordon Cosens – issues with both the SFL’s and MNR’s compliance program were identified.
- Timiskaming Forest – water crossing installations did not always meet the requirements.

Tenure Modernization Programs

Forest Management Component Program

When Sustainable Forest Licenses (SFLs) are returned to the Crown due to bankruptcy or insolvency, MNF assumes responsibility for all forest management activities on that management unit. Forest management expenditures incurred by the Crown to do this work are funded from additional revenue paid to the Forestry Futures Trust from the Crown stumpage system. The additional funds are generated by a management fee charged for each cubic metre of wood harvested in the area. This has been termed the Forest Management Component (FMC).

FMC accounts are open for Pic, Kenogami, Wabadowgang Noopming (formerly Armstrong), Whiskey Jack, Missinaibi (formally Magpie Forest now amalgamated with Martel), Pic River, Ogoki, and Sapawe Forests.

Enhanced Sustainable Forest License

The Enhanced Sustainable Forest License (eSFL) program was established in late 2011, as an outcome of the Ministry's tenure modernization initiative, with an allocation of the remaining funds (\$1.8 M) from the SFL Conversion program. In 2012, the Committee developed an application process and the first application was submitted in April of 2013.

There are no current eSFL projects.

Most of Team FFTC, at the
May 2023 Auditor
Orientation

Local Forest Management Corporation Conversion Program

In August 2012, the MNR added funding of the Local Forest Management Corporation (LFMC) Conversion Program to the Forestry Futures Trust Fund. The purpose is to provide financial support to the establishment and start-up of Ontario LFMCs. The Trust serves as an interim mechanism to capture redirected Crown stumpage charges required for forest management activities on the proposed LFMC land area until such time as the Sustainable Forest Licenses are issued to the LFMC.

The first LFMC, Nawiinginokiima Forest Management Corporation (NFMFC), was established in May 2012. NFMFC has been issued the SFLs for Pic, White River and Pic River Forests.

The government approved the establishment of the Temagami Forest Management Corporation (TFMC) December 2020. TFMC has been issued the SFL for Temagami Forest. For more information follow the links on their website: <https://www.temagamiforest.com>

For more information follow the links on the MNR website: www.ontario.ca/page/forest-tenure-modernization or visit the NFMFC website: <https://nfmforestry.ca>



Forest Resource Inventory Program

The Forest Resources Inventory (FRI) program is designed to develop a forest resource inventory for the managed forest area of Ontario using current technologies. Funds for this program come from harvest volume charges paid by sustainable forest licensees on Crown timber. These funds are administered from a dedicated Forestry Futures Trust (FFT) account.

The FFTC administers the FRI program funding in partnership with the Ministry of Natural Resources. The FRI is a ministry-designed program with components of the work contracted to qualified firms through the government procurement process. The FFTC leads the design of and co-delivers the knowledge transfer and tool (KTTD) component of the program.

The 2023–24 fiscal was the 17th year of the FRI program that builds on an earlier forest inventory program. Program accomplishments for 2023–24 include:

1. Acquired nearly 81,000 km² of LiDAR imagery in support of forest inventory development. By the end of 2023–24, about 84% of the 455,000 km² planned for LiDAR imagery and 90% of the 100,000 km² planned for optical imagery had been acquired. The remaining imagery is planned for acquisition in 2024.

2. Used the Vegetation Sampling Network (VSN) protocol as an integrated approach to field data collection for calibrating LiDAR models and monitoring forest resources. Data from almost 1000 field plots was collected across 8 forests: Black Spruce (95), English River (200), Dryden/ Wabigoon (200), Gordon Cosens (207), Hearst (75), Lake Nipigon South (65), Ogoki (50), and Temagami (66). By the end of 2023–24, field data collection was complete on 16 forests and in progress on 4 more.

3. Made substantial progress in developing and testing aspects of the long-term cloud-based data management and exchange solution for FRI in collaboration with the Land and Resources Cluster and its Microsoft vendor.

4. In addition to the FRI, foundational provincial geospatial imagery and elevation data are being made available as they become available for viewing and general use by a broad public via Ontario Web Image Services and for downloading via Ontario GeoHub,. In 2023–24, these services were continued via a centralized landing page (<https://geohub.lio.gov.on.ca/pages/forest-resources-inventory>), with data products being added as they are processed.

5. To ensure that field data collection complied with the VSN protocol, a quality assurance/quality control program was undertaken by the ministry. More than 100 plots were visited across 7 forest units: Black Spruce, English River, Dryden/Wabigoon, Gordon Cosens, Lake Nipigon, Ogoki, and Pic River.

Knowledge Transfer and Tool Development (KTTD) Component of FRI

The goal of the KTTD program is to support advancement of the Provincial FRI Program’s mandate by facilitating development of open-source tools and research that addresses identified FRI needs and transferring that knowledge back to government, industry, academia, and the forestry community. Rounds are called every three years with \$1,500,000 (excluding HST) budgets allotted per round. Round 1 was held in 2015, Round 2 in 2018, Round 3 in 2021 and Round 4 announced in December 2023.

KTTD Round 3 Projects Status and Webinar Series

In 2023-24, 13 of the 15 projects approved for Round 3 were completed and the remaining two were provided with extensions to 2023-24.

Links to deliverables for all Round 3 projects are posted on the FFT website under <https://www.forestryfutures.ca/forest-resource-inventory>.

To facilitate transfer of the knowledge acquired from each of the Round 3 projects, an eight-week webinar series of one hour broadcasts was held in the fall of 2023. These sessions were well-attended and received positive feedback. Recordings for those presentations (as shown below) can be found at <https://www.forestryfutures.ca/workshops>.

KTTD Round 4

The December 2023 selection process for Round 4 resulted in the approval of 13 projects that will begin in 2024-25. The allocation of \$1,500,000 for the Program was consistent with that of previous years but budget ceilings for each of the small and large-scale project categories were increased by \$10,000.

The following table lists the projects that were successfully funded; more information for each may be found at <https://www.forestryfutures.ca/forest-resource-inventory>.



Photo provided by Red Lake Forest Management Company Ltd.

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Researcher/Institution	Project Title
Small-Scale Project Category: up to \$35,000 and one-year duration	
Grant McCartney, Forsite Consultants Ltd.	Automation of Polygon Delineation for Forested Landscapes
Donald Robinson, ESSA Technologies Ltd.	Linking FRI data to FVS-Ontario – Phase 2
Dr. Baoxin Hu, York University	Lichen mapping facilitated by Single Photon LiDAR (SPL)
Large-Scale Project Category: greater than \$35,000 and two-year duration	
Dr. Margaret Penner, Forest Analysis Ltd.	Field Plot Measurement using Mobile LiDAR Scanning
Dr. Nicholas Coops, University of British Columbia	Implementing Structurally Guided Sampling (SGS) approaches to guide FRI plot placement and prioritization
Dr. Nicholas Coops, University of British Columbia	Deep Learning to Estimate Species Proportions using SPL data
Dr. Alexandre Morin-Bernard, Université Laval	Refining Species, Disturbance and Age information within eFRI Inventories
Dr. Alexis Achim Université Laval	Automated Road Extraction and Integration Across Forest Management Units
Natasha Machado, Canadian Institute of Forestry	Use of RPAS and AI technologies to classify managed forest stands by silviculture intensity
Dr. Doug Reid, Ministry of Natural Resources and Forestry	Stand density for evaluating silvicultural opportunities and future yields
Dr. Ben DeVries, University of Guelph	Tree Classification and Monitoring Using UAV Technologies
Dr. Mathieu Fortin, Natural Resources Canada	A climate-sensitive growth simulator for Ontario
Drs. Jiaxin Chen, Stephen J. Mayor, and Muhammad Waseem Ashiq, Ministry of Natural Resources and Forestry	Towards a Living Forest Inventory with Forest Dynamics Modelling

Treaty Settlement Transition Component

This program enables the Forestry Futures Trust Committee to provide funding to certain Indigenous communities in the Algonquin Land Claim Area for capacity building and economic development related to forestry on proposed treaty settlement lands.

The revenue for this initiative results from redirecting Crown dues charges on timber harvested from proposed settlement lands to a fund administered by FFTC.

The Ministry of Natural Resources (MNR) and the Forestry Futures Trust Committee worked with the Algonquins of Ontario (AOO) to establish the specifics of how the funding would be accessed. Eligible activities, funding eligibility criteria, the application (including evaluation and approval criteria) and the disbursement process have now been defined and there was an announcement of the opening for applications spread throughout the Algonquin Communities in the spring. The Committee received two project proposals. One was approved and involves the training of members of the Kijicho Manito Madaouskarina Algonquin First Nation in a chain saw safety course conducted by Loyalist College. In the first year of this two-year project, 12 members of the Community received the two days of training, a power saw and the required personal protective safety equipment. Training for another 8 Community Members is planned for the second year of the project.

Incremental Tree Planting Program

On November 8, 2023 the Minister of Natural Resources and Forestry specified the following as a new purpose for the Trust: The partial funding of costs for activities in the Ontario Crown managed forest eligible for funding under Government of Canada's 2-Billion Trees program, to be referred to as "Ontario's Incremental Tree Planting (ITP) Program".

On March 19, 2024, the FFTC extended the inaugural Invitation of this 50-50 cost sharing program between Ontario and the Federal government. "Incremental" for the purposes of this program is defined requires project proponent (i.e., forest manager) to undertake planting that does not relate to actions required legally by an Forest Management Plan, Forest Resource License or Forestry Agreement to establish trees, regardless of regeneration method. The committee is collecting additional information on its regular silviculture program that will be used to evaluate projects, prioritize funding allocations and fulfill federal reporting requirements, including: values to forecast net carbon benefit, clearly defined biodiversity co-benefits, and the amount of afforestation to be generated. Results from the inaugural invitation will be reported in the 2024-25 Annual Report.



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