



FORESTRY FUTURES TRUST ONTARIO

Forestry Futures Trust Committee

2018/19 Annual Report

Forestry Futures Trust Committee

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FFTC FOREST OBSERVATIONS - 2019

On the Matter of Ensuring a Rejuvenated Growth and Yield Strategy for Ontario Forests:

In 2018, through a project undertaken under the auspices of FFTC's Knowledge Transfer and Tool Development (KTTD) Program, a series of four workshops, involving some 130 MNRF and Industry participants, were held across Ontario to review the current status of Growth and Yield (G&Y) data collection and management in Ontario. The undertaking was facilitated by Dr. Margaret Penner and Dr. Doug Pitt, both recognized as Canadian leaders in their field of Growth and Yield research and implementation. Their final report was accepted by FFTC and turned over to MNRF's Director of Science and Research in early June 2019 for their review and consideration.

The final report made a number of pertinent observations:

- G&Y data and tools are critical to the sustainability of Ontario forests by predicting forest resources into the future so that Ontario can take appropriate action to ensure the ongoing health of its forest capital.
- G&Y is a legal requirement mandated via Condition 49 of the Declaration Order MNR-75 as generated via Ontario's Forest Management Class Environmental Assessment and upon which MNRF is required to report every five years.
- Much of the direction for G&Y set out in the 1993 G&Y masterplan continues to be viable; however, target achievement is often inadequate (e.g., delivery shortfalls in the complex GLSL forest), or require reassessment to meet changes in the state of Ontario's forests themselves (e.g., the expanding mixed-wood forests of the Boreal).
- G&Y in Ontario is encumbered by an apparent lack of strategic commitment, insufficient resources, and poor communication both internal and external to MNRF.
- MNRF's conversion to a proposed integrated management framework and to a LiDAR-based inventory system make this the perfect time to rejuvenate the Ontario G&Y program.

In respect to the last point the Minister in an August 1, 2019 letter to the Chair, FFTC, confirmed that LiDAR will be incorporated as a key part of the Ministry's enhanced Forest Resource Inventory program.

On the Matter of FFTC's Involvement in the 2019 Northwestern Ontario Jackpine Budworm Spray Program

Signs of a widespread jackpine budworm infestation became evident in Ontario's far northwest in 2017 via MNRF's regular annual forest health monitoring program; by 2018 the size of the footprint of the infestation and its intensity had increased significantly. During the winter of 2018-2019 MNRF analyzed the infestation and drew up an Integrated Pest Management Plan to action the potential negative outcomes of the jackpine budworm invasion. That plan was subjected to extensive public consultation, in particular with affected First Nations, and eventually approved by the Regional Director, MNRF, in late May. In early June an aerial spray program commenced using *Bacillus thuringiensis* (Bt), a budworm-specific species of bacteria that lives in soil. The program targeted some 100,000 ha of jackpine forest primarily centered on the area north of Red Lake. In spite of some conflicts with active forest fire operations, program delivery was successfully completed by MNRF the last week of June.

Jackpine budworm, a less lethal cousin to the spruce budworm, is a normal component of Ontario's boreal forest and the forest has successfully co-existed with the pest for millennia. When compared to the spruce budworm, its jackpine cousin is more erratic in both persistence in the environment and its

spread. In the Committees' opinion something less than a consensus exists among forest practitioners about the efficacy of actioning the cyclic pest with expensive aerial spray programs. Follow-up on the last jackpine budworm outbreak aerial spray program in the Northwest region (2009) indicated the spray increased needle retention by about 50% compared to adjacent control block; however, tree mortality was assessed not to be a significant ongoing concern and the spray was not repeated in 2010. The cost of the 2019 aerial spray initiative is anticipated to be in the range of \$5MM. The efficacy of the 2019 program will be evaluated later in the summer and those results coupled with budworm overwintering surveys will inform the nature of any 2020 investment.

On the Matter of the Capacity of Ontario's Metis Community to Participate in Matters Forestry

The greater Metis community in northern Ontario is increasingly being asked to participate in forestry matters across the north (e.g., eSFL negotiations, IFAs, LCCs, FMP development); this can only be regarded as a positive circumstance! However, at the same time it has been brought to the attention of FFTC that that same Metis community lacks the capacity in both skilled manpower and operational funding to meet the expectations that are being placed on its participation. Although outside the mandate of FFTC, the matter needs strategic attention at the Provincial level if the forest sector, including both government and Industry, is to avoid a repetition of some of the detrimental participation issues that plagued the sector back in the 1970s and 1980s.

On the Matter of Continued Auditor Availability for Ontario's Independent Forest Audit (IFA) Program

As part of its ongoing delivery of sustainable forestry in Ontario, the Province is legally required, under both the Crown Forest Sustainability Act, 1994, and the applicable Declaration Order under the Environmental Assessment Act, 1990, to audit each managed Crown forest every 5 to 7 years. In the period 1996 to 2016 much effort went into the recruitment, training, and maintenance of the pool of experienced audit firms/auditors critical to ensuring the Ontario program contains the competency, and the variety of viewpoints/audit styles that would facilitate the necessary robust assessment process of forest management activities. From its operational vantage point within the audit program FFTC has become increasingly concerned about the current trend to award audit contracts with a prime focus on cost alone. In 2018 contracts (4) were awarded to a single firm, and in 2019 again a single firm was awarded 4 contracts, with the 2018 contractor picking up the 5th contract. The remaining three approved contractors have remained on the sidelines for the past two years and must be deemed to be getting 'rusty'. IFA's are not a 'cash cow' for the audit firms, in fact a bit of a hiccup in process can readily turn an IFA contract into a liability. So, while IFA contracts are deemed 'nice' to have, they are not deemed 'necessary', and FFTC senses the interest therein may be on the wane! The regulated nature of Ontario's IFA program demands that audits be carried out on a regular basis by competent auditors. A failure in appropriately tending the Province's auditor cadre can only lead down the road to a more expensive program with an at best mediocre capacity to meet the mandate appropriately. Such should not be the way of forestry in Ontario.

R. A. Riley
August, 2019

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 (FFTC) 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 – FMC – forestry on forests returned to the Crown
- Enhanced Forest Resource Inventory production and delivery
- Forest Genetic Resource Management 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 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



Ray Riley, P Eng., R.P.F. (Hon) (member since February 2016). Ray holds degrees in geology from Acadia and Queens and has been 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 for the Forest Industry, First Nations, Ontario, and Canada.

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. He now runs his own consulting firm.



Herb Bax, R.P.F. (member since 2012) is a forestry consultant with over 35 years of experience. He is past president of the OPFA and has served on numerous international committees and

boards. Herb's work as an environmental and forest auditor across Canada and the US brings an international perspective to the Committee.



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).

Our Support Team

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

- Peter Street, R.P.F., Independent Forest Audit Coordinator
- Shelley Vescio, R.P.F., Silviculture, Genetics and eFRI Program Coordinator
- Anastasia Frisby, 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 Ministry of Natural Resources and Forestry (MNRF) 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 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., Nic Baggs, R.P.F.
- *Enhanced Forest Resource Inventory Program* Michelle Colley, Derek Landry, Ian Sinclair, R.P.F. and Geordie Robere-McGugan, R.P.F.
- *Forest Management Component* – Betty Vankerhof, R.P.F.
- *Tenure Modernization*– Kevin Coombs, R.P.F. and Chad Anderson, R.P.F. Andy Lemmetty R.P.F.
- *Forest Genetic Resource Management* - Betty Vankerhof, R.P.F. and Ken Elliott, R.P.F.

The MNRF'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 Forest Tenure and Economics Branch; Integration Branch; Science and Research Branch; and Business Development Branch, 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. The fiscal financials, which provide the details, are available through our website, www.forestryfutures.ca once tabled in the Provincial Legislature.



Forestry Futures Trust Committee 2018

Committee Operations Budget 2018/19

Available Funds	
Received from the <i>Forestry Futures Trust Fund</i>	\$344,126.00
2016/17 unspent balance	\$224,442.24
TOTAL Funds Available	\$568,568.24
Expenditures	
Meetings/Travel	\$68,842.93
Committee Honorariums	\$92,325
Professional Fees/Contract Staff	\$129,629.88
Administration and Support	\$68,842.93
Supplies (Communication/Consumables)	\$13,115.87
Equipment / Signage	\$2,236.78
Overhead	\$51,119.75
TOTAL Expenses	\$436,999.30



770-1-R30: Intensive Stand Management of Pine and Spruce Plantations, Temagami Forest, 2011

OUR PROGRAMS

Silviculture Program

The Silviculture Program funds silviculture needs resulting from forces of natural depletion such as fire, wind, insects, disease, and flooding, as well as remediation of the forest land base due to historic harvesting practices. Funding requests are received in five categories: 1. Intensive Stand Management; 2. Rehabilitation after Natural Disturbances; 3. Pest Control; 4. Insolvency; and 5. Other, as designated by the Minister. Details on each category can be found on the FFTC website.

The Committee extended invitations to apply for project funding for Rounds 47 and 48 of the FFT Silviculture Program. In 2018/19, \$12 million were approved in project funding, with \$4.4 M and \$7.6 M allotted to Rounds 47 and 48, respectively. With this Program, funds are distributed as reimbursements only after work has been completed.

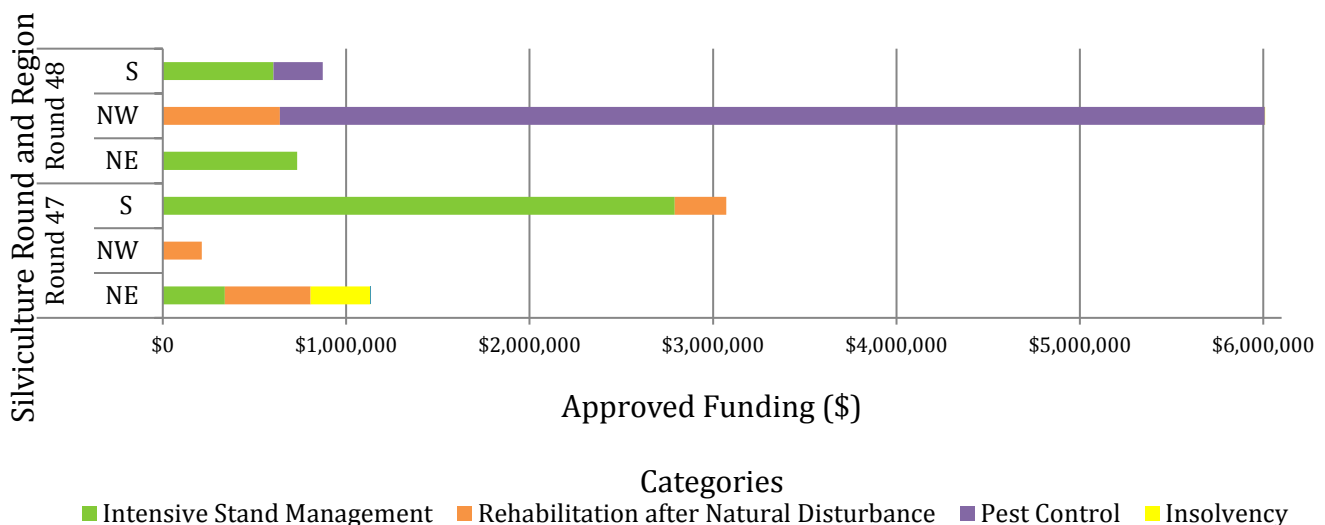
The chart below illustrates the amount of funding approved under each round for projects submitted under the four active silviculture categories for each of the South, Northwest and Northeast regions in 2018/19.

Among regions, 33% of the funding was awarded to the South, 52% to the Northwest, and 15% to the Northeast. Among categories, 16 Intensive Stand Management projects received 37% of approved funds, 10 Rehabilitation after Natural Disturbance projects were awarded 13%, two Pest Control projects acquired 47%, and two Insolvency projects received 3% of the funding. Three applications were rejected for not meeting eligibility criteria, two were put on hold pending receipt of additional information and one was approved with conditions but withdrawn by the applicant.



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

FFT Silviculture Funding Approved for Distribution 2018/19



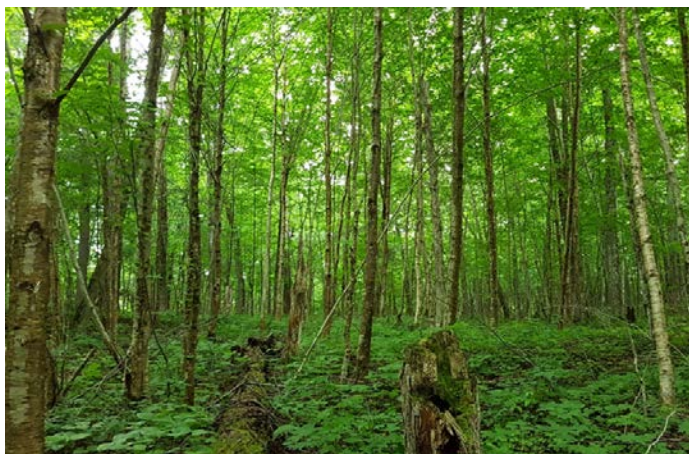
FFT Silviculture Field Visits



203-1-R5: Red Pine Plantation Thinning, Nipissing Forest, 1997-1999. Pre-commercial thinning project, using brush saws and power saws, to mitigate future fibre shortfalls for local sawmills. Many of the stands that that were pre-commercially thinned, have since had at least one commercial thinning (such as this one). The next thinning in 5-10 years will yield saw logs and poles.



441-1-R15: MNR/Temagami First Nation Manual Tending, Temagami Forest, 2002-2005. Manual tending of young pine and spruce plantations, using brushsaws both with and without herbicide applicators, to provide release from competing vegetation.



416-1-R14: Tolerant Hardwood Stand Improvement, Nipissing Forest, 2001-2004. Stand improvement through the selection system was conducted in forests within the Loring Deeryard area to increase forest health, productivity and quality while achieving deer habitat management objectives. This young stand of yellow birch will receive a commercial thinning again in about 15-20 years.



548-1-R20: Manual Cleaning and Spacing, Temagami Forest, 2005-2008. Manual tending and spacing of young conifer plantations using brushsaws, brushsaws with herbicide applicators and backpack broadcast herbicide sprayers

Forest Genetic Resource Management Program

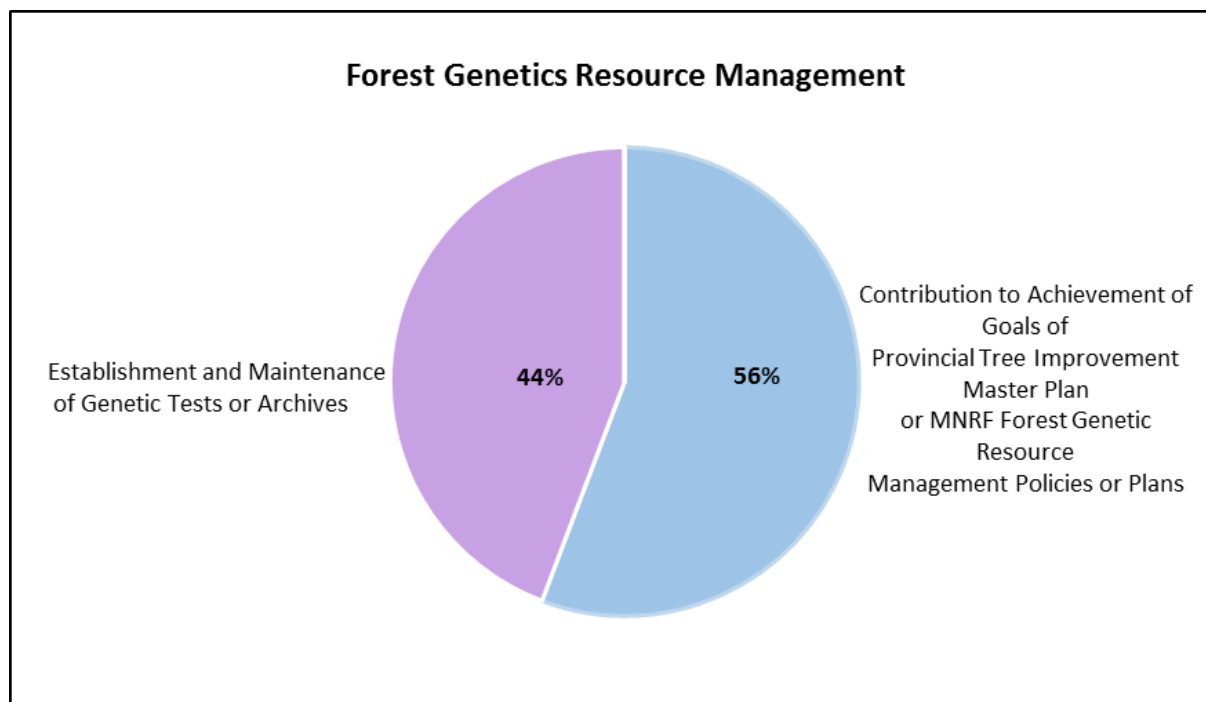
On January 26, 2017, the Minister specified a renewed five-year purpose for the Forestry Futures Trust by funding the Forest Genetic Resource Management (FGRM) Program. Funding of activities within this Program benefit Crown forests.

Annual funding for this purpose is not to exceed \$675,000 per annum, providing the three provincial associations with \$375,000 in core funding and eligibility for \$300,000 in project funding (through competitive project submissions) for five fiscal years ending March 31, 2022. The FGRM program is financed from the Forestry Futures Trust base charge.

The three provincial associations directed the majority of funding (56%) towards activities that contributed to the achievement of the Province's Tree Improvement Master Plan goals or toward those of its FGRM policies or plans. The establishment and maintenance of

FGRM Approved Categories	
1	Contribution to achievement of goals of the Provincial Tree Improvement Master Plan or MNRF forest genetic resource management policies or plans
2	Information Management supporting forest genetic resources
3	Establishment and maintenance of genetic tests or archives
4	Forest gene conservation projects
5	Forest genetic research

genetic tests or archives accounted for the remainder or 44% of association spending. In 2018/19, no funding was applied to information management, forest gene conservation projects or forest genetic research.



Independent Forest Audit Program

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

Four (4) Independent Forest Audits were completed in 2018. All four audits used a “Risk-Based Approach” to identify optional protocols that needed to be further investigated. In general, this process worked well and there were no additional funding requests made to cover the costs of investigating the optional protocols. Changes to the 2018 IFAPP over the 2017 IFAPP included:

- Ministry of Natural Resources and Forestry (MNRF) Integration Branch and Ontario Shared Services assuming responsibility for the IFA procurement process,
- Auditors providing a conclusion on auditee compliance with the licence terms and conditions rather than a recommendation on licence extension, and

- The inclusion of applicable phase-in provisions of the 2017 Forest Management Planning Manual (FMPM), Forest Information Manual (FIM), Forest Operations and Silviculture Manual, and Scaling Manual

All the Audits were assigned to Arborvitae Environmental Services Ltd. The four (4) forests audited included the Dryden, Kenora, Ottawa Valley and Whitefeather Forests

The four (4) audits were awarded at a total cost of \$376,835.78, including HST.

The final reports of the 2018 Independent Forest Audits have not yet been tabled in the Ontario Legislature and as such remain confidential. Therefore, we are unable to report the specific findings. The results of the audits are similar to previous years in that they identify areas for improvement but also best practices that are taking place across the forest audited landscape. The details of these audits will be publically available on <https://www.ontario.ca/page/independent-forest-audits> once tabled in the Legislature.



Ottawa Valley Forest IFA field portion 2018

Tenure Modernization Programs

Forest Management Component Program

When Sustainable Forest Licenses (SFLs) are returned to the Crown due to bankruptcy or insolvency, MNRF 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 on the area. This has been termed the Forest Management Component (FMC).

FMC accounts are open for the Big Pic, Kenogami, Armstrong, Whiskey Jack, Magpie, 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.

The original Kenogami Forest project (ESFL-001-2013) was received and reapplication anticipated early in 2019/20

Active projects in 2018-19:

- ESFL 004-2014: Northeast Superior (Martel and Magpie) Forest
- ESFL 007-2018: Crossroute and Sapawe Forest

The French-Severn Forest (ESFL005-2014) remained open, however, no progress was reported in the 2018-2019 fiscal year.



*Kenora Forest –
IFA field portion 2018*



*Whitefeather Forest –
IFA field portion 2018*



*Dryden Forest –
IFA field portion 2018*

Local Forest Management Corporation Conversion Program

In August 2012, the MNRF 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 start-up and the establishment of Ontario LFMCs. The Trust serves as an interim mechanism to capture redirected Crown stumpage charges to fund start-up and establishment costs including required 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 was issued the SFLs for Big Pic and Pic River forests in June 2017 and White River Forest in January 2018.

For more information follow the links on the MNRF website: www.ontario.ca/page/forest-tenure-modernization or visit the NFMFC website: www.nfmcforestry.ca



Dryden Forest IFA field portion 2018



IFA Auditor Orientation Workshop 2018

Enhanced Forest Resource Inventory Program

The Enhanced Forest Resources Inventory (eFRI) Program is designed to develop a new Forest Resource Inventory utilizing current technologies within the provincial “Area of the Undertaking” as defined by the Timber Class Environmental Assessment. Funds for this program come from harvest volume charges paid by the Sustainable Forest Licensees for Crown timber. These funds are administered from a separate account within the Forestry Futures Trust.

The FFTC administers the eFRI program funding, in partnership with the MNRF. The eFRI is a MNRF-designed program with work contracted to qualified firms through the government procurement process. The FFTC has the lead on designing and co-delivering the knowledge transfer and tool development (KTTD) component of the eFRI.

The 2018/19 fiscal was the 12th year of the eFRI program that built on an earlier forest inventory program. MNRF program accomplishments for 2018/19 are outlined in the table below.

Forest	# Plots Installed and Measured	Approximate Area Interpreted in 2018-19 (km ²)
Far North Central	0	100 (complete)
Far North West	0	12,380 (complete)
Moose Cree Forest	0	4,417 (complete)
Ottawa Valley Forest	0	21 (complete)
Woodland Caribou Provincial Park	2	761 (complete)

Knowledge Transfer and Tool Development (KTTD) Component of eFRI

The objective of the KTTD program is to support the Provincial eFRI program in advancing its mandate by facilitating research that addresses identified needs and transferring that knowledge back to government, industry, academia, and the forestry community.

Round 2 of the KTTD program was implemented in 2018; a \$1.7 M budget was approved for the funding of 17 projects (listed below). Of the seven small-scale projects that received up to \$25,000, one was withdrawn, three have been completed, and the others will be wrapped up in 2020. Of the 10 large-scale projects

that received greater than \$25,000, two have been concluded and the others will be finished in 2020.

These projects span across the four-theme project areas targeted by the KTTD program, namely, Tools and Products to Enhance the Production of the eFRI, Tools and Products for Clients and Stakeholders, LiDAR (single photon) application, and Integrated Monitoring Framework. Deliverables for completed projects can be found at www.forestryfutures.ca under Programs/eForest Resource Inventory – eFRI and KTTD.

