COMBATING CLIMATE CHANGE

THROUGH SUSTAINABLE FOREST MANAGEMENT

DARREN SLEEP
SENIOR DIRECTOR, CONSERVATION SCIENCE & STRATEGIES
SUSTAINABLE FORESTRY INITIATIVE

MARCH 30, 2022

SUSTAINABLE FORESTRY INITIATIVE
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SFI Vision:
A world that values and benefits from sustainably managed forests.
SFI Mission:
To advance sustainability through forest-focused collaboration.
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CERTIFICATION GLOBALLY

11%

OF THE WORLD'S FORESTS ARE CERTIFIED

DELIVERING

29%

OF GLOBAL ROUNDWOOD PRODUCTION

PEFC™
PEFC/29-1-1
Promoting Sustainable Forest Management
www.pefc.org

and nearly

40%

of PEFC certifications worldwide

SUSTAINABLE FORESTRY INITIATIVE STANDARDS

SFI ADVANCES SUSTAINABILITY THROUGH FOREST-FOCUSED COLLABORATION

SUSTAINABLE FORESTRY INITIATIVE STANDARDS

SUSTAINABLE FORESTRY INITIATIVE CONSERVATION

SUSTAINABLE FORESTRY INITIATIVE EDUCATION

SUSTAINABLE FORESTRY INITIATIVE COMMUNITY

SCALING FOR IMPACT

SUSTAINABLE FORESTRY INITIATIVE
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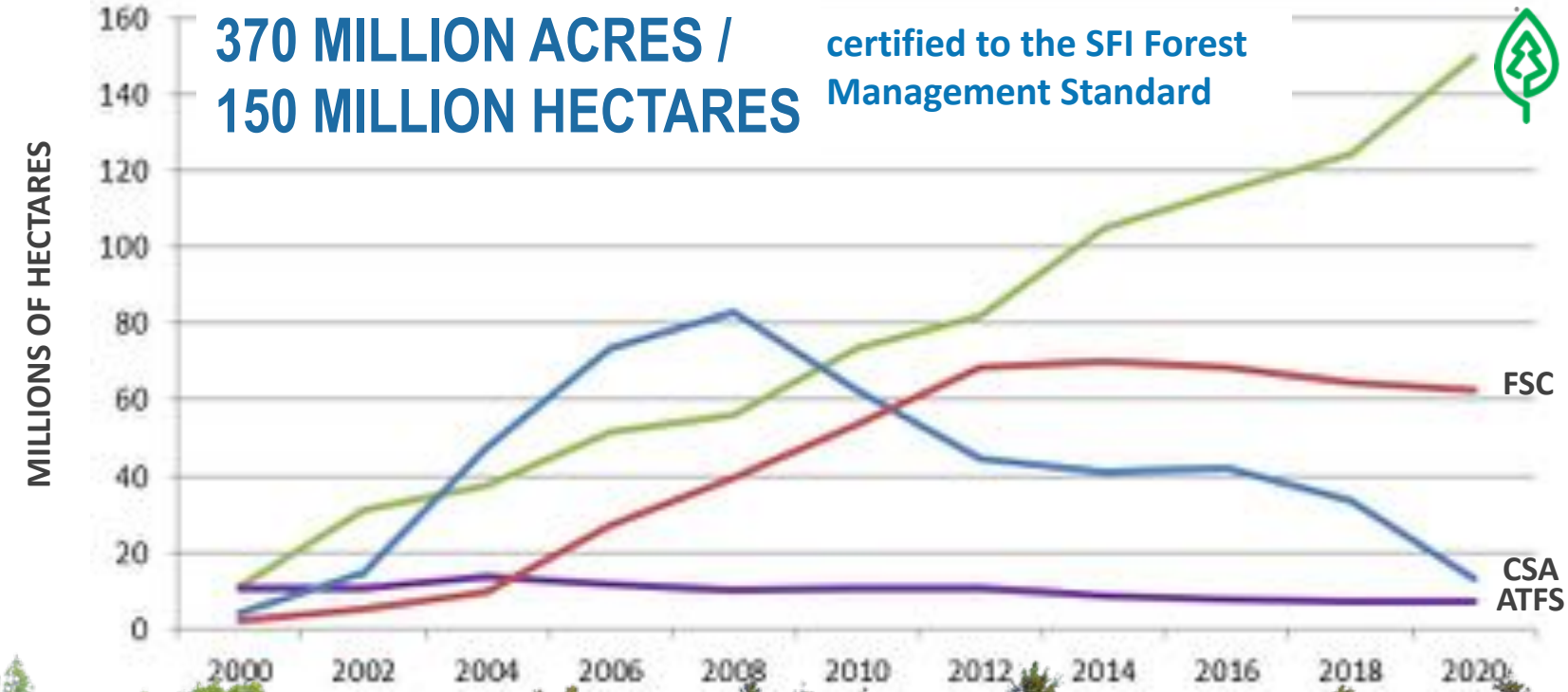
370 MILLION ACRES / 150 MILLION HECTARES

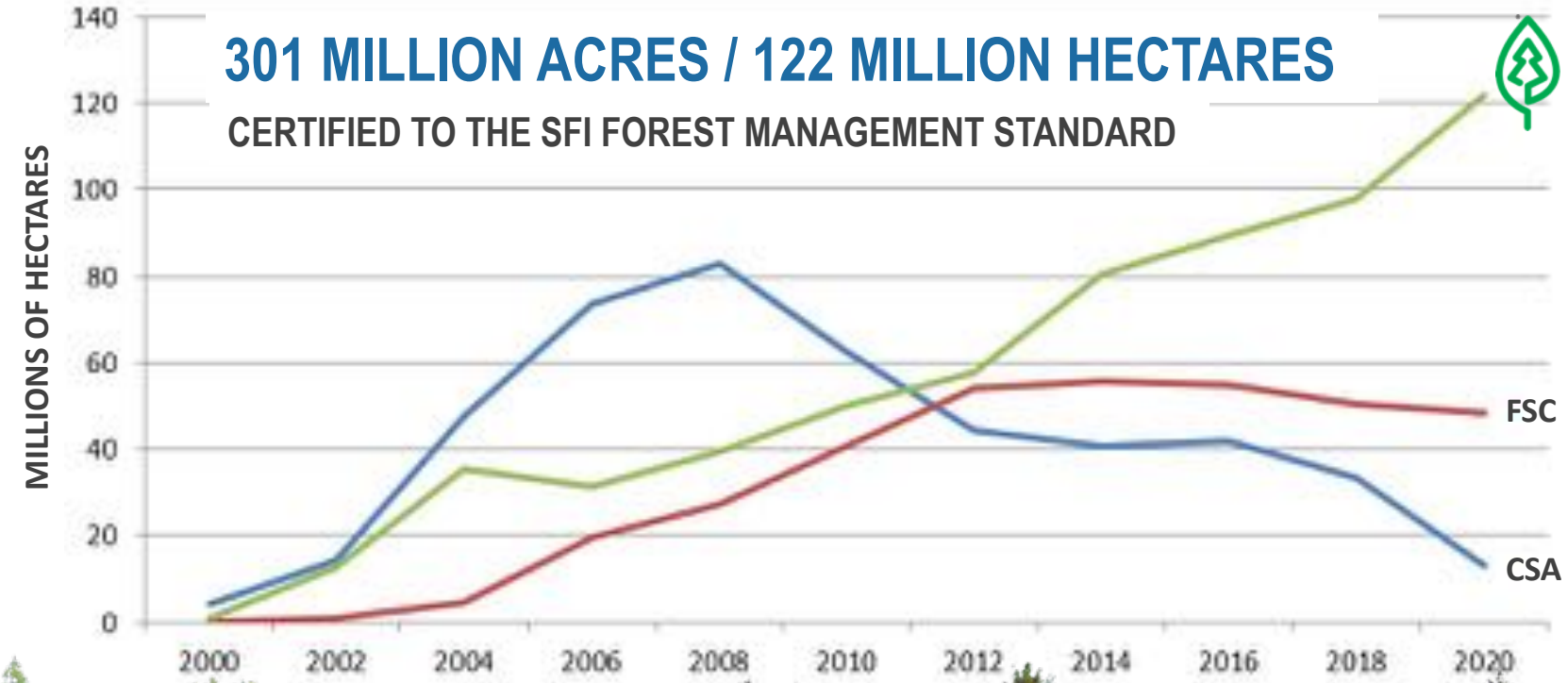
certified to the SFI Forest Management Standard



SFI FOREST AREA IN CANADA

301 MILLION ACRES / 122 MILLION HECTARES

CERTIFIED TO THE SFI FOREST MANAGEMENT STANDARD



CLIMATE CHANGE

SUSTAINABLY MANAGED FORESTS CAPTURE CARBON FASTER THAN UNMANAGED FORESTS,

BECAUSE YOUNGER TREES—PLANTED AND TENDED AFTER OLDER TREES ARE HARVESTED—

CAPTURE CARBON FASTER THAN OLDER TREES AS THEY GROW.

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THERE IS MORE

CARBON STORED

WITHIN THE SFI FOOTPRINT

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THAN WOULD BE EMITTED BY

30 BILLION CARS IN A YEAR

MORE THAN

21 TIMES THE NUMBER OF CARS IN THE WORLD IN 2018

NCASI
IMPACT. SCIENCE. SOLUTIONS.

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CARBON ASSESSMENT OF THE SFI U.S. FOOTPRINT

SFI is collaborating with the National Council for Air and Stream Improvement, Inc. (NCASI) to develop a tool that will estimate and display forest carbon stocks, and forest carbon stock changes, across the SFI footprint in the U.S.

Dr. Steve Prisley

SFI CONSERVATION GRANT

CANADIAN FOREST CARBON ASSESSMENT: PHASE 1

WHAT IS IT: A retrospective analyses (1990 to present) of carbon stocks and fluxes on (certified) lands in five regions of Canada

WHY IT MATTERS – Reliably estimating carbon stocks and fluxes across SFI's footprint allows for long-term planning and management

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Canada
Natural Resources Canada
Canadian Forest Service

SRC SASKATCHEWAN RESEARCH COUNCIL

FPAC APFC

SUSTAINABLE FORESTRY INITIATIVE CONSERVATION

"*Climate Smart Forestry [CFS] aims to connect mitigationaims to connect mitigation with adaption measures, enhance the resilience of forest resources and ecosystem services, and meet the needs of a growing population and expanding middle class*."

Elements of CSF:

- Increasing carbon storage in forests and wood products, while maintaining other ecosystem services.
- Enhancing forest health and resilience through adaptive forest management. Using wood resources sustainably to substitute for non-renewable, carbon-intensive materials.

NCASI
IMPACT. SCIENCE. SOLUTIONS.

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SFI-certified area (acres) 0 3,414,236

SFI-certified area for All owners: 66,127,085 acres

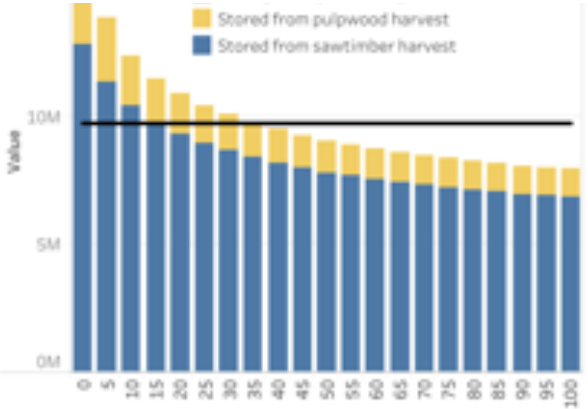
Forest Carbon Pools

Above Ground Trees	1,566,364,550
Below Ground Trees	333,354,052
Standing Dead Trees	57,792,850
Downed Dead Trees	222,511,510
Understory	78,889,105
Forest Floor	523,996,040
Soil	2,782,617,223
Total Forest Carbon	5,565,525,330

(The carbon stock measured most reliably in forest inventory is the aboveground live tree carbon; most other forest carbon pools are based on models or limited measurements).

Annual changes to aboveground live tree carbon stocks *

Growth: 64,193,867 (removed from atmosphere)
Mortality: 16,261,913 (transferred into dead carbon pools)
Removals: 34,282,752 (transferred to HWP and residues)
Net change: 13,649,202 (net stock increase or decrease)



https://forests.org/carbon-tool/

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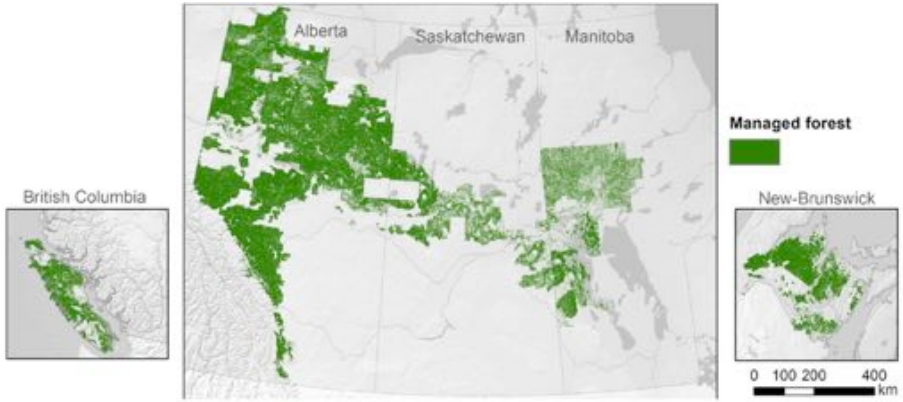
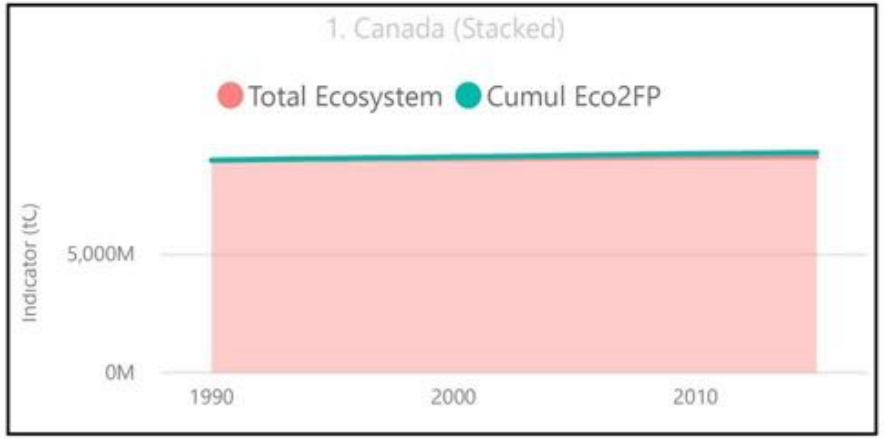
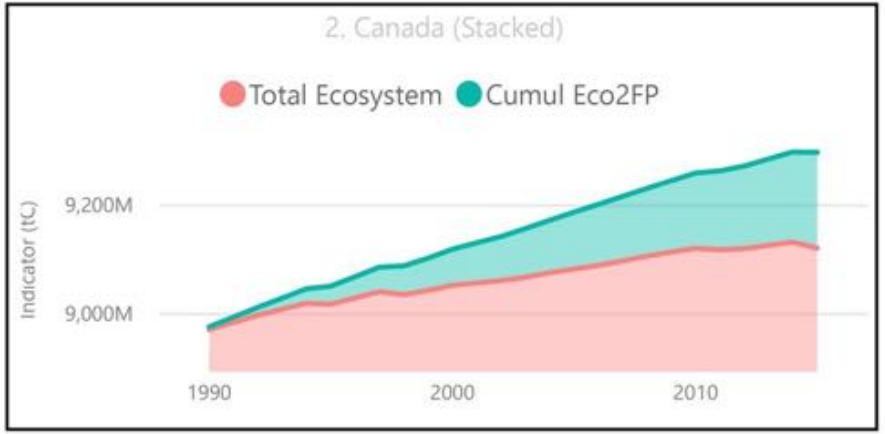
SUSTAINABLE FORESTRY INITIATIVE CONSERVATION







- Canada's GCBM
- 18.3% of SFI certified forests in Canada modeled
- 4.5 million tonnes of CO2e sequestered annually (above ground pools)
- ~24.4 million across Canada**

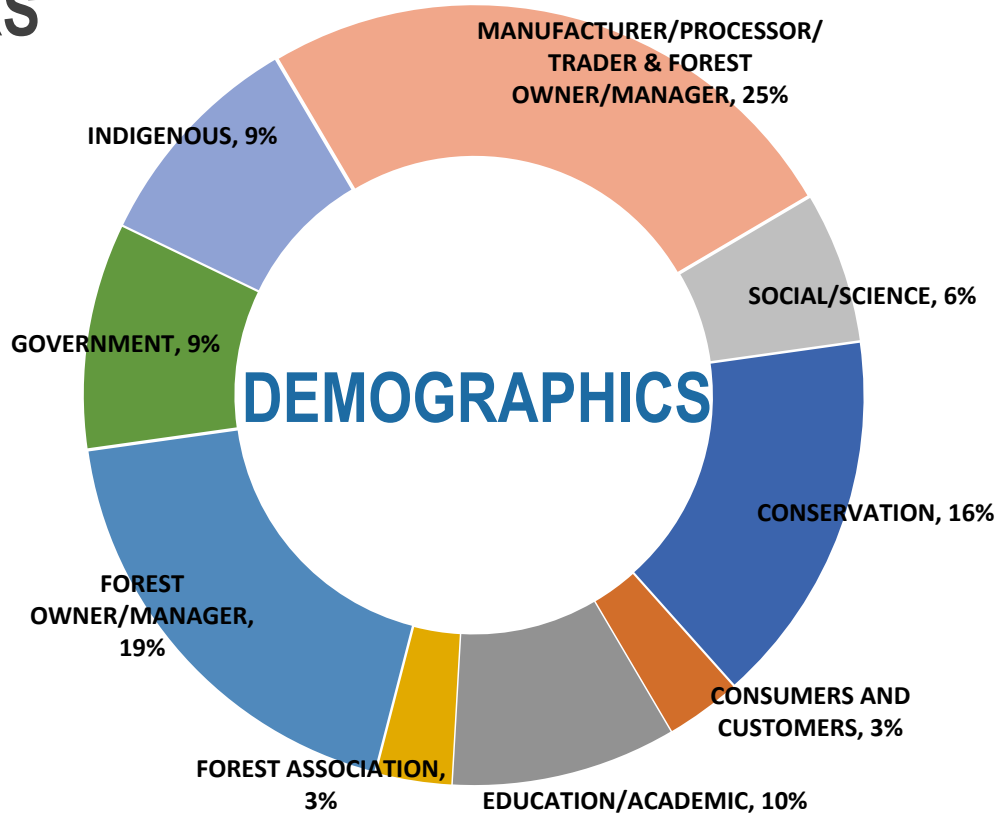
STANDARDS REVISION TIMELINE

MAY & JUNE 2020	SEP & OCT 2020	JAN & FEB 2021	APRIL 2021	APR – NOV 2021	JAN 2022
SECOND COMMENT PERIOD	TASK GROUP MEETINGS	SFI RESOURCES COMMITTEE REVIEW	BOARD APPROVAL	PEFC ENDORSEMENT PROCESS	RELEASE OF NEW STANDARDS

SFI FOREST MANAGEMENT TASK GROUP

32 TASK GROUP MEMBERS

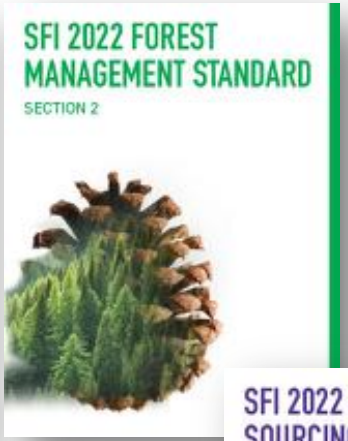
Chair: Kathryn Fernholz, Dovetail Partners



NOTE: CURRENT APRIL 2020 Info

SFI 2022 STANDARDS OFFICALLY LAUNCHED

JANUARY 24, 2022



SUSTAINABLE FORESTRY INITIATIVE STANDARDS

SFI 2022 FOREST MANAGEMENT STANDARD OBJECTIVES

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OBJECTIVE 1. FOREST MANAGEMENT PLANNING

OBJECTIVE 2. FOREST HEALTH AND PRODUCTIVITY

OBJECTIVE 3. PROTECTION AND MAINTENANCE OF WATER RESOURCES

OBJECTIVE 4. CONSERVATION OF BIOLOGICAL DIVERSITY

OBJECTIVE 5. MANAGEMENT OF VISUAL QUALITY AND RECREATIONAL BENEFITS

OBJECTIVE 6. PROTECTION OF SPECIAL SITES

OBJECTIVE 7. EFFICIENT USE OF FIBER SOURCES

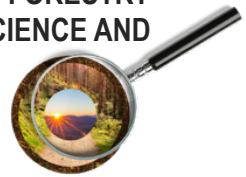
OBJECTIVE 8. RECOGNIZE AND RESPECT INDIGENOUS PEOPLE'S RIGHTS

OBJECTIVE 9. CLIMATE SMART FORESTRY

OBJECTIVE 10. FIRE RESILIENCE AND AWARENESS

OBJECTIVE 11. LEGAL AND REGULATORY COMPLIANCE

OBJECTIVE 12. FORESTRY RESEARCH, SCIENCE AND TECHNOLOGY



OBJECTIVE 13. TRAINING AND EDUCATION

OBJECTIVE 14. COMMUNITY INVOLVEMENT AND LANDOWNER OUTREACH

OBJECTIVE 15. PUBLIC LAND MANAGEMENT RESPONSIBILITIES

OBJECTIVE 16. COMMUNICATIONS AND PUBLIC REPORTING

OBJECTIVE 17. MANAGEMENT REVIEW AND CONTINUAL IMPROVEMENT

CLIMATE SMART FORESTRY

WHY IT MATTERS

- Forests play a critical role in addressing climate change and storing carbon.
- Increasing global focus on climate and increased understanding about forests gives SFI an opportunity to play an important role.
- Elements of the standard already aid in addressing climate through resiliency, reforestation, and forest health.
- SFI developed a **new objective** focused on climate change mitigation and adaptation.

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CLIMATE SMART FORESTRY

SFI STANDARD REQUIREMENTS:

- **Identify and address climate change risks** to forest and forest operations and the development of adaptation objectives and strategies.
- **Identify and address opportunities** to mitigate effects associated with its forest operations on climate change.

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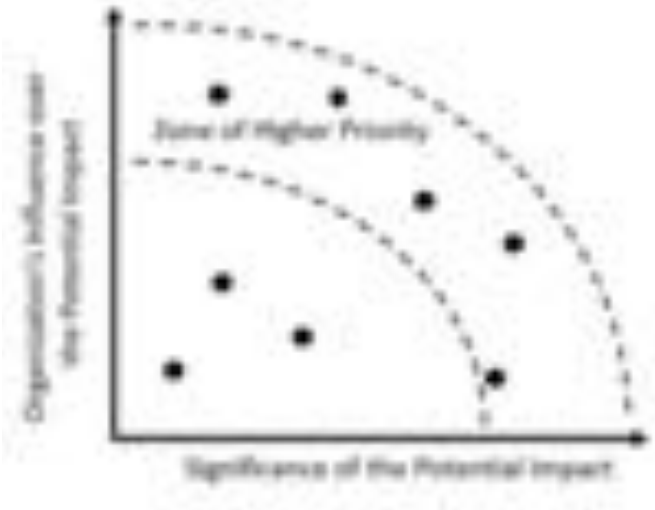
CLIMATE SMART FORESTRY

Guidance: Indicator 9.1.1 - Prioritization of Risks and Vulnerabilities

- Determining climate-related material risks (environmental, social and economic climate-related risks and vulnerabilities).
- Develop a short-list of topics that inform forest management strategies, targets, operations and reporting.
- Considering the nature of the impacts – positive or negative, actual or potential, direct or indirect, short-term or long-term, or intended or unintended.
- Consideration of the significance of the potential impact and the level to which the impact can be influenced.



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FIRE RESILIENCE AND AWARNESS

WHY IT MATTERS

- The link between wildfires and climate is well-documented.
- The planet is warming with many regions experiencing increased incidence of wildfire and the undesirable impacts that are the result (e.g., threaten public safety, human health, property, carbon emissions).

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FIRE SMART FORESTRY

SFI STANDARD REQUIREMENTS:

ON LANDS OWNED OR MANAGED

- Limit susceptibility to undesirable impacts of wildfire
- Promote healthy and resilient forest conditions
- Support restoration of forests following wildfire damage.
- Stand and landscape level management techniques to promote forest health and resilience (e.g., prescribed fire, cultural burning, thinning, hazardous fuel reduction)
- Promote restoration and future forest resilience.

COMMUNITY ENGAGEMENT EFFORTS

- Engage individually and/or through cooperative efforts to raise awareness of and act towards benefits of fire management
- Minimize undesirable impacts of wildfire to values such as carbon emissions, water quality and quantity, air quality, species habitat, public safety, and human health.

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FOREST RESILIENCE

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manomet
Soaring Solutions. Grounded Science.

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THE FOREST CLIMATE RESILIENCY PROJECT

- Provided SFI Program Participants with an approach to establish baseline conditions.
- Useful for assessing resilience to climate change, and monitoring its effects over time.

Project Partners: Manomet, Hancock Timber Resource Group, Lyme Timber Company, Maine SFI Implementation Committee, Resource Management Service, LLC

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SFI'S SCALE

PROVIDES A STEADY SUPPLY OF CERTIFIED FOREST PRODUCTS AND A POWERFUL NETWORK IN SUPPORT OF NATURE-BASED SOLUTIONS

BETTER SOILS FROM BETTER FOREST MANAGEMENT KEY TO A BETTER CLIMATE FUTURE

Used Forest soils to informed SFI objectives related to soil productivity, carbon storage, and conservation.

Project Partners: University of Maine, Cooperative Forestry Research Unit, Center for Research on Sustainable Forests, Northeastern Soil Monitoring Cooperative, University of Toronto

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AMERICAN FORESTS

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FOREST SOILS ASSESSMENT TOOLS

- Developed an approach for including soils in forest carbon calculations.
- Useful for increasing understanding of whole-ecosystem carbon dynamics, as well as the impacts of forest management on the entire forest carbon pool.

Project Partners: American Forests, Sustainable Forestry Initiative, University of Michigan, Northern Institute of Applied Climate Science, Maryland Department of Natural Resources, Weyerhaeuser

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USING PRACTICES
NEW OBJECTIVES 9 & 10
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APPLYING PRACTICES

ADAPTATION

- Stand diversity management (increase diversity)
- Assisted migration – seed selection better suited to conditions
- Thinning – increased water availability
- Thinning – reducing fuel loads
- Thinning – improved stand health, reduces risk from forest pests.
- Increased culvert sizes – improved sediment control and design for 100-year events
- Road design/location – planning for wildfire management

MITIGATION

- Seed selection/enhancement for increased vigour
- Thinning – increased water/nutrient/sunlight availability
- Thinning – reducing fuel loads
- Soil protection to maintain/conserve soil carbon
- Slash distribution – maintain/increase soil carbon
- Fertilization – improved establishment success and growth rates.

SUSTAINABLY MANAGED FORESTS FIGHT CLIMATE CHANGE

Through:

- Broad-scale requirements for climate adaptation, mitigation, fire event reduction (new certification requirements)
- Reduction in carbon-intense product use
- Application of climate-smart forest management practices with documented benefits
- Increased research to find new methods and practices

Forest Management for Carbon Sequestration and Climate Adaptation

Ontl et al 2020: *Journal of Forestry; Practitioner's Menu of Adaptation Strategies and Approaches for Forest Carbon Management.*

TRANSITION TO THE SFI 2022 STANDARDS & RULES

JANUARY 2022

- RELEASE OF NEW STANDARDS
- ALL NEW CERTIFICATES ISSUED TO 2022 STANDARDS

APRIL 2022

- ALL RE-CERTIFICATIONS ISSUED TO NEW STANDARDS
- ALL SURVEILLANCE AUDITS TO THE 2022 OR 2015-2019 STANDARDS

JANUARY 2023

- ALL CERTIFICATES TRANSITIONED
- SFI 2022 STANDARDS & RULES REPLACE 2015-2021 STANDARDS & RULES

TRANSITION TO THE SFI 2022 STANDARDS & RULES

SUSTAINABLE FORESTRY INITIATIVE

Changes adopted by the SFI Inc. Board of Directors to the SFI Standards must be incorporated into a SFI-certified organization's policies, plans, and management activities within one year of adoption and publication. Similarly, changes to certification procedures and qualifications for certification bodies must be accomplished within one year of adoption and publication.

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JANUARY 2023

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ADDITIONAL GUIDANCE

- It is the SFI-certified organization's responsibility to work with the certification body to establish a surveillance audit schedule.
- Nonconformities to SFI 2022 Standards will not adversely affect certification status until December 2022.
- Audits to the new standards will include an assessment of action plans to fully transition to new standards by January 2023.

JOIN US

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PROJECT LEARNING TREE

COLLABORATING

FOR COMMUNITIES AND FORESTS

2022 SFI/PLT ANNUAL CONFERENCE

JUNE 14-17, 2022 | MADISON, **WISCONSIN**


SAVE THE DATE
VANCOUVER
SUSTAINABLE FORESTRY INITIATIVE
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2023
MAY 15-19
SFI ANNUAL CONFERENCE
WESTIN BAYSHORE, VANCOUVER
BRITISH COLUMBIA, CANADA


THANK YOU
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