

Nova Scotia Landowners and Forest Fibre Producers Association

STANDARD OPERATING PROCEDURES

For

Group Members Certified to the Forest Stewardship Council Maritimes Standard, Small and Low
Intensity Managed Forests (SLIMF)

Introduction

The Association is committed to management by its certified group members to the Forest Stewardship Council Principles and Criteria (FSC P&C)

The following Standard Operating Procedures are guidelines of our management approach to the spirit and intent of the Forest Stewardship Council Principles and Criteria.

Management Guidelines

The Standard Operating Procedures (SOPs) are organized according to FSC Principles. They are guidelines. Each woodlot is different and each woodlot owner may have differing objectives.

Each SOP does not have to be followed as written although each guideline must be addressed and the spirit of the SOP must be met.

Performance and related documentation must provide evidence of the implementation of these SOPs. Auditors will look for this evidence of compliance.

SOPs are dependent on each other and should not stand alone without considering all others that are applicable. All must be considered in operational planning and implementation.

For example, areas of high conservation value must be continually sought and addressed in all phases of forest management. Water quality must be of concern whenever watercourses are present.

Forest operators may have other SOPs or work instructions. They must demonstrate, however, that they adhere to the intent of these SOPs.

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Principle 1: Compliance with Laws and FSC Principles

The NFLFFPA and members in the certified pool will comply with local, provincial, and federal forestry, wildlife, water quality and labor laws. Adhere to identified or applicable international treaties.

1. The association will have access to a list of all such regulations through government websites
2. Landowners will undergo inspections and a certification assessment as proof of commitment and compliance with the FSC P&C.
3. The association will issue non-conformance corrective action requests to address identified deficiencies

1.5.1 Procedures for preventing wood theft, trespassing and other illegal activities.

1. Mark your boundary limits correctly and visibly using proper blazing techniques. An official survey is highly recommended.
2. Walk your boundary lines with your neighbours to clarify boundary limits.
3. Establish a written contract with any forest workers which clarifies respecting boundary limits.
4. Visit your woodlot regularly and check for any changes

and clues of trespassing; thieves are attracted to "absentee lots".

5. Maintain regular communication with neighbours to be aware of any forestry activity in the area.

1.5.2 Procedures for reporting wood theft and successful prosecution

1. Have a forest management plan which documents stand compositions, boundaries and associated wood volumes.

2. Maintain official survey records and *document* all communication with neighbours and forest workers regarding boundary line establishment / identification.

3. Take pictures of any suspect activity, harvested areas.

4. On private land, report wood theft / illegal activities to local police or RCMP and NS Landowners and Forest Fibre Producers Association. Suspected Crown land infractions are to be reported to local DNR office.

5. Maintain all documented evidence, contact a lawyer and / or others who have been through the process. Follow through on the prosecution process. It will take a long time and a lot of effort with little expected gain.

6. In the case of 'accidental' or inadvertent theft, it may be worthwhile to attempt to settle out of court depending on the willingness of both parties.

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Principle 2: Tenure & Use Rights & Responsibilities

The Association will be notified if any member in the certified pool is involved in any land claim dispute. Otherwise, the Federal and provincial governments will deal with comprehensive land claims or treaty negotiations.

1. The members of the certified pool must demonstrate legal documentation of land title and rights of ways.
2. Landowners will respect traditional or other established use rights of the land.
3. Landowners may protect their lands from unauthorized use through the use of gates, security patrols or other suitable means of monitoring.

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PRINCIPLE 3. Indigenous Peoples' Rights

1. If areas of archeological significance are identified on a woodlot, experts must be contacted to conduct archeological surveys and if verified sites are recorded and protected by equipment exclusion zones.
2. Any areas of cultural significance brought to the Association or its members will be documented along with how it is being addressed
3. Follow all laws and treaties regarding rights and protections of indigenous peoples.

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PRINCIPLE 4. Community Relations and Workers Rights

1. Inform interested and affected parties about upcoming forest management operations including at least 30 days advance notice of harvesting operations within 30 meters of a property line and 100 meters of a dwelling. Document notification.
2. Consider potential impacts on neighbors and the general public when planning forest management activities.
3. Where there are public roads or nearby residences, retain a higher tree density to ameliorate wind-throw potential on other properties and maintain aesthetic character of surroundings.
4. Workers are free to collectively bargain.
5. Favor local contractors for logging and planting on condition of performance and cost.
6. Favor local small mills when selling logs on condition of performance and prices.

7. Follow all laws related to employment and safety. **Provincial regulations are governed by the NS Occupational Health and Safety Act, 1996**
http://nslegislature.ca/legc/statutes/occp_h_s.htm
and the Workers Compensation Act
<http://nslegislature.ca/legc/statutes/workers.htm>
- Contractors are required to follow all regulations and rules in regards to safety when working on woodlots.
 - Woodlot owners who do their own work or hire individuals to work on their woodlots are required to have the following personal protective equipment
 - CSA-Approved hard hat
 - Hearing protectors
 - Face screen and or safety glasses or goggles.
 - Cutting pants (if using a power saw)
 - CSA Grade 1 boots (chain saw boots recommended if using power saw)
 - A pressure bandage (first aid kit recommended)
 - Hazard assessment forms available at www.fss.ns.ca_sw include: chainsaw use, working in extreme cold / heat,

refueling machines, safe machine use,
first aid kit requirements and work alone
procedures.

- For further information on safe working
in the woods you can download the pdf
“The Forest Professional” at the
following website

[http://www.gov.ns.ca/lwd/healthandsa
fety/docs/ForestProfessional.pdf](http://www.gov.ns.ca/lwd/healthandsafety/docs/ForestProfessional.pdf)

8. A work alone policy with appropriate
communications and emergency response plan
must be in place for any individual, either
employed or self-employed, working alone
within the FMU.
9. Individuals have the right to refuse unsafe
work.

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PRINCIPLE 5. Benefits from the Forest

1. Recognize that long-term forest stewardship is
closely linked to economic viability.
2. Be prudent in determining harvest schedules
and setting resource goals to optimize

economic value.

3. Avoid forest management practices that could undermine the economic feasibility of the operation.
4. Maintain sustainable yield: The forest inventory is "principal" and the growth is "interest" earned on the principal. A sustainable forest allows the perpetual harvest of interest without depleting the principal.
5. Forest products will be handled to minimize losses due to mechanical damage, insects, or other losses.
6. To improve economic viability in the long term, the woodlot owner is encouraged to use fuel efficient machinery. New machinery should be considered for fuel efficiency as well as its environmental impact on the woodlot.

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PRINCIPLE 6. Environmental Impact

1. Preplanning and Assessment
 - a. Assess the potential for environmental impacts before harvesting.
 - b. Design measures to mitigate potential

environmental impacts.

- c. Preplan and mark in the field the harvesting and road-building layout.
- d. Take into consideration the cumulative impacts of the proposed management activities.
- e. Consult existing databases for locations of sensitive species.

2. Watercourses

- a. Construct Stream Crossings with Dept. of Labor and Environment requirements (and Department of Fisheries and Oceans if applicable).
- b. Where possible minimize the number of crossings
- c. Where possible avoid soils prone to erosion
- d. Retain adequate trees within the stream zones to protect essential riparian functions such as: shade, large woody debris input, bank stability, nutrient input, and sediment trapping.
- e. During harvest operations, flag stream

protection zones, crossings, and other equipment activity areas.

- f. Provide adequate filter capacity between streams and potential sediment sources. Size culverts for 100-year storm event (at least); No heavy equipment operations in saturated ground conditions.
- g. Utilize variable-width stream zones with variation based on slope, class of stream, stream bank configuration, ground and canopy cover. (Meet indicators and criteria of 6.5)
- h. Do not conduct any operations that could cause sedimentation to nearby stream channels. Do not remove large downed material within stream channels.
- i. Use slash, mulch, or grass-seed on exposed soil in riparian areas.
- j. Seed landings, secondary roads and other bare areas.
- k. Re-shape stream crossings to their original slope and use seed and straw

on bare approaches.

3. Silviculture

- a. Maintain a variety of ages and size classes and promote structural diversity.
- b. Where possible, manage a portion of each property to maintain or restore late serial forest structure (defined as a stand with multi-storied canopy, at least 60% canopy cover, numerous large diameter trees).
- c. Where possible, manage a portion of each property as forest preserve, and others for intensive forest production.
- d. Cut less than growth if stands are under stocked.
- e. Move the stand through time toward larger size classes.
- f. Based on the stand's inherent capability, achieve a maximum annual growth rate in stands where the goal is timber production.
- g. Achieve maximum stocking through inter-planting or natural seeding.

- h. Maintain tree species diversity by retaining a component of all species found on a property.
- i. Marking guidelines in order of consideration:
 - Remove low quality trees (except to recruit or preserve wildlife trees), and retain thrifty trees of all size classes and species.
 - Adjust spacing to maximize growth.
 - Within formerly high-graded stands retain largest and straightest trees to promote future saw log production, at the same time retaining trees of varying qualities for diversity of wildlife.
 - No cutting of rare (both property-wide or regionally) tree species.

The above objectives typically cannot be accomplished in one or two entries and may require multiple entries to reach these goals.

4. Forest Roads and landings

- a. Road construction and upgrades will be identified on the Management plan if known at the time of plan construction.
- b. Access plan to consider all identified forest values
- c. Do not construct landings in riparian zones or buffer areas
- d. Ensure new road access is legal. Determine if permission is required from neighboring landowners
- e. Flag new roads to ensure access plan is followed
- f. Roads shall be built so as not to impede natural drainage
- g. Design roads and landings to accommodate safe processing of products, piling, and movement and of

workers and equipment

- h. Significant damage to roads or landings will be repaired

5. Harvesting Methods

- a. Choose harvesting systems that best protect soil and water resources.
- b. Utilize cable-yarding systems, wherever possible, on steep slopes.
- c. Utilize directional felling to minimize damage to remaining stand.
- d. Use existing roads, landings, and trails, and do not move soil unnecessarily.
- e. Maintain erosion control measures, build roads with minimum grades on contour, use under 15% grade, and narrow road surface.
- f. Where possible reduce road density.
- g. Improve road drainage and repair erosion problems.
- h. No new road building in stream zones, except for crossings.
- i. Flag constructed skid trails, landings, and roads.

- j. Slash. Where possible, crush and spread landing slash on adjacent skid trails and where other erosion control measures are inadequate.
- k. Harvesting on slide zones must be decided on a site-specific basis.

6. Wildlife

- a. Retain nest and den trees. Leave large downed material.
- b. Retain some poorly formed trees for snag/nest/den recruitment.
- c. Retain all snags unless a hazard to safety.
- d. Identify snag and down woody recruitment.

7. Threatened and endangered species

- a. The woodlot owner will make the Program Forester aware of any known rare, threatened, and endangered species
- b. The Program Forester will search the

provincial significant habitat and wetlands database for species that DNR has identified to exist on a woodlot

- c. The Program Forester will also contact the Local Wildlife Biologist to verify if there are any known occurrences of threatened, and endangered species
- d. The Forest Manager will observe and be aware of any rare, threatened, and endangered species while collecting stand data
- e. To address any known rare, threatened, and endangered species on the site the forest manager and landowner will follow scientifically developed rare, threatened and endangered species protection protocols.
- f. Query appropriate local, state, and national databases as appropriate (e.g., Natural Heritage and NaturServ)

8. Pesticides

- a. Use pesticides as little as possible. Consider alternatives to pesticide use. Examine alternatives to the elimination of pesticides.

- b. An appropriate registered and classified pesticide may only be used in catastrophic situations. An example is severe insect infestation or where degraded agriculture fields grew up in white spruce.
- c. Establish a decision-making protocol for justifying the need for using pesticides and for the selection of the chemical to be used.
- d. Implement an Integrated pest management strategy.
- e. Only pesticides registered by Health Canada's Pest Management Regulatory Agency and Pest Control Products Act and approved for use by the NSDNR may be used.
- f. Use a licensed pest management company who follow all regulations and application instructions.
- g. Applicators are to provide adequate training in usage and decision-making.
- h. Chemical containers must be stored and disposed of when empty in an environmentally appropriate manner

9. Integrated Pest Management

The NSLFFPA is committed to implementing an integrated pest management program (IPM) which ensures all members are committed under our Small Low Intensity Managed Forests (SLIMF) standard to:

- a) Attain pesticide free forest management.
- b) Eliminate the use of chemical pesticides/herbicides by Dec. 31, 2016.
- c) Develop effective IPM strategies as alternatives to the use of chemical pesticides/herbicides.
- d) Identify where chemical pesticides/herbicides are currently used by members and develop targets and objectives for the reduction of any identified use.

The IPM plan is included in the management plan under Appendix XV

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PRINCIPLE 7. Management Plan

Covered under the Management Plan template.

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PRINCIPLE 8. Monitoring and Assessment

Chain of Custody (COC)

- a. Products shipped to the mill must be shipped under the appropriate certified PID#.
- b. At the end of the year (December 31st of that year) if timber has been harvested the Harvest Volume Report must be filled out and sent to the Association.
- c. Follow all requirements of purchaser requesting COC for forest products

Monitoring and Inspections are carried out by a designated individual(s) set out by the Association. Copies of inspections and monitoring will be given to the woodlot owner. Results of the inspections and monitoring will be made public if so asked.

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PRINCIPLE 9. Maintenance of HIGH Conservation Value Forests (HCVF)

1. Assessments and stakeholder consultation are done to determine the presence of High Conservation Value Forests.
1. HCVF are mapped.
2. Retain legacy trees (unique qualities, such as age, species, and location).
3. Retain unique habitats and geophysical features.
4. HCVF attributes are monitored and maintained.

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PRINCIPLE 10: Plantations

Note: Planting trees does not necessarily result in a plantation. Plantations are plantings where a single species is planted and all other tree species are suppressed or removed (monoculture). Plantings where there are other tree species typical to the area are found growing in sufficient quantity/quality that eventually will lead to a natural type forest.

1. Forest Renewal is a priority and where possible the promotion of natural regeneration will be a

encouraged by selecting appropriate
treatments

2. The design of plantations will promote the protection, restoration and conservation of adjacent natural forests
3. Encourage replanting with species native to the area
4. The plantation promotes the conservation of natural forests.
5. The plantation provides socioeconomic benefits for the community.
6. Tree species are adapted to the area.
7. GMOs are not used.
8. Natural forests are not converted to plantations.

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Forest Fire & Emergency Spill Kit Information

The following is according to the NS Forest Fire Act.
 Any person operating within the woods or within 1000 feet should have the following; depending on the number of people they have working in the woods.

Crew size Persons	Water tank 200 gal. or bag with hand pump	Motor pump ⁺⁺	Shovels	Pails	Axes or equivalent ⁺	Grub hoes or equivalent ⁺
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1-2	-	-	1	-	-	-
3-5	1	-	2	1	1	1
6-10	2	-	4	2	2	1
11-20	3	1	8	4	4	2

⁺⁺Motor pump* & 1000' (305 m) 1.5 in. (38 mm) hose & nozzle^{**} or motor pump, portable (910 L) tank & 200' (61 m) of 1.5 in. (38 mm) hose & nozzle^{***}

*Minimum 40 gal (180 L) per minute @ 100 psi (690 kPa).

**Minimum 1000' (305 m). Sufficient hose must be available to reach from an acceptable water source to all areas of the work site.

***Minimum 50 psi (345 kPa) shutoff pressure capable of reaching all areas of the work site.

+ A pulaski tool = axe + grubhoe

In case of oil spills one should have a spill kit on site. The following is the type of materials that should be in a small and large oil spill kit.

Small Oil Spill Kit

- 2 – absorbent socks (booms)
- 1- 8 litre absorbent particulate
- 6- absorbent pads (pillows)
- 1- drain sealer
- 2-disposal bags

Large Oil Spill Kit

- 2 – absorbent socks (booms)
- 1-30 litre absorbent particulate
- 8- absorbent pads (pillows)
- 1- drain sealer
- 2-disposal bags

Further information can be found in the NFA BMP Manual on page 51 under Fuel and Oil Storage and Handling.