

Northeast Master Logger Certification Program



Goals

Harvest Responsibilities

Performance Standards

In order to provide logging companies with a definitive, measurable means of achieving certification, NEMLC developed nine goals, the end to which all efforts of harvesting are directed. The goals are further defined by harvest responsibilities, each with its' own set of performance standards. These standards, when met, enable a company to achieve the nine goals and earn NEMLC certification.

Goal One: Document Harvest Operations Planning

Harvest Responsibility #1: Discuss any existing forest management plans with the landowner/forester.

Performance Standards:

- 1.1 a. Logger certifies, through due diligence and contract sign-offs, that the landowner carries adequate insurance and has clear title to the land that will be harvested; no title, lease, or easement disputes pending, and no outstanding property taxes.
- 1.1 b. Pre-harvest meeting conducted with the landowner/forester to determine if a current forest management plan is available and to set harvest goals and objectives. Timeline and equipment choices are communicated to the landowner.
- 1.1 c. If a forest management plan exists and is available, applicable elements are incorporated into the harvest plan.
- 1.1 d. Landowner/forester agrees to harvest levels that enable long-term fulfillment of the forest management plan. If the landowner objectives differ from the forest management plan, an addendum is attached to the harvest plan and initialed.
- 1.1 e. A timber sale agreement and/or any contract specifies job responsibilities, such as skid trail maintenance and close-out, are signed by all parties involved and secured.
- 1.1 f. A copy of the management plan or written or written harvest plan is kept on site for reference during the harvest operation.

Harvest Responsibility #2: If no forest management plan exists, the harvest company creates a harvest operation plan based upon landowner objectives and in compliance with all federal, state, and local laws.

Performance Standards:

- 1.2 a. Harvest operations plans based on landowner objectives are in writing (Harvest Integrity System (HIS) may be utilized by NEMLC Company) and are adequately communicated to all crew members.
- 1.2 b. All harvest operations plans are consistent with NEMLC Goals 2, 3, 4 & 5.
- 1.2 c. Harvest plan documents current condition of the parcel, including special areas, BMP needs, abutters, and close-out procedures.
- 1.2 d. Property boundaries and limits of the harvest area are clearly marked and shown on the harvest operations plan.
- 1.2 e. Any amendments to the harvest operations plan are noted and initialed by all parties.
- 1.2 f. Ways in which water moves in and around the harvest site during all seasons is fully understood and informs the harvest operations timeline.



Harvest Responsibility #3: Conduct a pre-harvest inspection and post-harvest assessment of the site.

Performance Standards:

- 1.3 a. NEMLC pre-harvest check sheet documents current condition of the parcel including special areas, BMP needs, property boundaries, harvest area boundaries, abutters, and close out procedures.
- 1.3 b. Impact of previous harvest operations (i.e. old roads, log landings, skid trails, rutting, and residual stand damage) is documented on the pre-harvest checklist.
- 1.3 c. Implementation and closeout of the various components of the harvest operations plan are documented on the post-harvest check sheet.

Harvest Responsibility #4: Comply with all relevant laws and regulations and ensure that all necessary permits are obtained in accordance with federal, state, and local laws.

Performance Standards:

- 1.4 a. National Environmental Policy Act (NEPA) and Clean Water Act (CWA) standards are met.
- 1.4 b. State Water Quality standards, guidelines and recommendations are met.
- 1.4 c. Endangered Species Act (ESA) is met.
- 1.4 d. All required land use, cutting practices, wetlands, and municipal permits are obtained.
- 1.4 e. All company harvesters and foresters have licenses, where required.

Goal Two: Protect Water

Harvest Responsibility #1: Organized and plan road construction and access to harvest location in a manner that prevents soil erosion and does not impede water flow.

Performance Standards:

- 2.1 a. Field reconnaissance and planning occurs prior to commencement of road construction.
- 2.1 b. Truck road construction is minimized.
- 2.1 c. Roads are kept from streams and from lakes.
- 2.1 d. Cut/fill banks are stabilized outside roadbed near water.
- 2.1 e. Drainage ditches are adequate to divert water out from road.
- 2.1 f. Road grades are broken prior to stream crossings to manage water flow into filter strips.
- 2.1 g. Road surfaces are out-sloped, in-sloped, or crowned as appropriate to the situation.



- 2.1 h. Culverts are setback from junction and placed to sufficiently manage water flow.
- 2.1 i. Culverts are installed so that subsequent road maintenance does not result in damage to culverts.
- 2.1 j. Culverts are installed in a manner not to impede fish passage.
- 2.1 k. Culverts are sized for periods of high-volume water flow.

Harvest Responsibility #2: Prepare skid trails in a manner that does not reduce soil absorbency.

Performance Standards:

- 2.2 a. Field reconnaissance and planning for skid trails occurs prior to commencement of the harvest.
- 2.2 b. Steep trails are stabilized with vegetation or brush.
- 2.2 c. Sensitive areas are harvested when the ground is frozen or dry.
- 2.2 d. Water turnouts/bars are used to divert surface runoff.
- 2.2 e. Topography is considered in the skid trail layout to avoid wet areas.
- 2.2 f. Layout of skid trails considers the predominant lean of the stand where chainsaw felling is used.

Harvest Responsibility #3: Attend to stream management zones in a manner that does not divert or concentrate water flows.

Performance Standards:

- 2.3 a. All stream management zones are identified prior to harvest and necessary permits are obtained and followed.
- 2.3 b. Stream channel integrity is maintained.
- 2.3 c. Harvest operations are timed for appropriate weather conditions.
- 2.3 d. Adequate shade is retained over perennial, intermittent, and first order streams.
- 2.3 e. Extra caution is used in stream management zones to protect banks, edges, and water quality of streams, ponds, and lakes.
- 2.3 f. Streamside vegetation is protected/maintained and not diminished.

Harvest Responsibility #4: Manage Stream Crossings During Harvest and Road Building.

Performance Standards:

- 2.4 a. Stream and stream approach characteristics are considered when locating stream crossings.
- 2.4 b. Number of stream crossings is minimized through the planning process prior to harvest.
- 2.4 c. Permanent or portable bridges are used to cross streams when necessary.



- 2.4 d. Stream crossings are placed at right angles to the stream.
- 2.4 e. Stream crossing devices are installed in a manner not to inhibit fish passage.
- 2.4 f. Fill is compacted as appropriate during culvert installation.
- 2.4 g. Integrity of stream channel is maintained during installation and removal of stream crossing devices.
- 2.4 h. Stream banks are left intact after removal of temporary stream crossing devices.
- 2.4 i. Soils of stream banks and skid trail/truck road approaches are stabilized during the harvest and following closeout.
- 2.4 j. Exposed soil areas are stabilized to reduce erosion and prevent introducing sediment into streams and water bodies.
- 2.4 k. Woody material is not added to streams, and existing material is not disturbed.

Harvest Responsibility #5: Establish logging yards at the proper distance from streams, ponds, lakes, marshes, steep slopes, and wetlands so as to maintain the benefits of vegetation next to water bodies.

Performance Standards:

- 2.5 a. Yard and landing placement is pre-planned and retired post-harvest.
- 2.5 b. Water draining in and out of landings is managed in relation to nearby water bodies.
- 2.5 c. Disturbance to the forest floor is minimized by using controlled yarding.
- 2.5 d. Logging yards are established at the proper distance from streams, ponds, lakes, marshes, vernal pools and wetlands.
- 2.5 e. Exposed soil areas are seeded post-harvest.

Harvest Responsibility #6: Monitor all regulations and obtain necessary permits in accordance with federal, state, and local laws.

Performance Standards:

- 2.6 a. National Environmental Policy Act (NEPA) and Clean Water Act standards are met.
- 2.6 b. State Water Quality standards are met.
- 2.6 c. Endangered Species Act (ESA) as it relates to waterways is met.
- 2.6 d. Land Use Regulatory Commission, Department of Environmental Protection, as they are titled by state, and any municipal permits are obtained.
- 2.6 e. Department of Inland Fisheries and Wildlife, and other state specific departments, significant and essential habitat is noted on the harvest plan.



- 2.6 f. Harvest site is reviewed after the first winter to determine the effectiveness of erosion control, stream protection, etc., and corrective action is taken as necessary.
- 2.6 g. Rare, threatened, and endangered plants and/or unusual or exemplary natural communities are noted by state specific Natural Areas Programs.

Goal Three: Maintain Soil Productivity

Harvest Responsibility #1: Assure future forest soil productivity by harvest planning and on-the-ground layout.

Performance Standards:

- 3.1 a. Disruption of soil organic layers is limited during all harvest operations.
- 3.1 b. Soil condition is considered when matching equipment to the harvest.
- 3.1 c. Sensitive sites are harvested when dry or frozen.
- 3.1 d. Slash is placed in skid trails to reduce compaction and mixing of soils.
- 3.1 e. Number of skid trails/truck roads/landings is minimized through field reconnaissance and pre-harvest planning.
- 3.1 f. Best management practices are applied and documented to minimize erosion and soil loss.

Harvest Responsibility #2: Minimize and stabilize exposed soil

Performance Standards:

- 3.2 a. Filter areas (forest areas bordering water bodies) are identified on the harvest plan.
- 3.2 b. The capacity of filter areas to absorb and filter runoff from roads, landings, and skid trails is maintained.
- 3.2 c. Materials are available to implement multiple strategies for addressing exposed soil.

Harvest Responsibility #3: Close out the harvest site, complete the post-harvest check sheet, and follow-up as necessary.

Performance Standards:

- 3.3 a. All roads, landings and trails are stabilized through the use of appropriate best management practices, applied to minimize erosion and soil loss.



- 3.3 b. Sites without forester involvement are checked by the harvesting company one year later (post mud season) for erosion, sedimentation, or other issues unless other arrangements have been made with the landowner.

Goal Four: Sustain Forest Ecosystems

Harvest Responsibility #1: Determine if the forest management plan has delineated current wildlife habitat to remain undisturbed. If no forest management plan exists, wildlife habitat should be delineated in the harvest plan.

Performance Standards:

- 4.1 a. Trees with cavities, standing dead trees, downed logs, large super canopy trees, and longer-lived tree species are favored and retained in a creative and safe manner in compliance with OSHA hazard tree regulations.
- 4.1 b. Width and development of riparian zones are documented.
- 4.1 c. Vernal pools are marked and left undisturbed year-round, and disturbance to soils surrounding pools is minimized.
- 4.1 d. Plan documents any significant and essential wildlife habitats identified by the Department of Inland Fisheries and Wildlife, as titled by state, and specifies how they will be treated.
- 4.1 e. Harvest supports overall biodiversity.
- 4.1 f. Endangered Species Act (ESA) as it relates to terrestrial habitats is met.
- 4.1 g. Harvesting is consistent with recommended practices for biodiversity conservation.

Harvest Responsibility #2: Check all special or unique sites and clearly mark boundaries per harvest plan.

Performance Standards:

- 4.2 a. Species specific habitat is protected as marked (based upon Maine Natural Areas Program).
- 4.2 b. Areas being managed for biodiversity are marked.
- 4.2 c. Harvest plan is consistent with MLC standards for Goal Two (Protect Water Quality), Goal Three (Maintain Soil Productivity), Goal Four (Sustain Forest Ecosystems), and Goal Five (Forest Aesthetics).
- 4.2 d. State Natural Heritage or Natural Areas Programs, biodiversity assessments in unorganized territories, and Habitat Maps of organized towns are consulted for the presence of unique or critical habitat when creating the harvest plan. Significant or essential rare, threatened and endangered species habitat is identified and noted on the harvest plan.



4.2 e. Important natural communities and wildlife habitats are supported by the harvest planning process.

Harvest Responsibility #3: Discuss with the landowner/forester the need for attention to preserving native biological diversity.

Performance Standards:

4.3 a. Harvests maintain natural species diversity and regeneration appropriate to the site.

4.3 b. Harvests leave downed, woody material in the forest and redistribute when appropriate.

4.3 c. Wildlife and plant diversity is noted on the harvest plan (see Natural Areas Program designations – further instructions by state in NEMLC Standards Guidance document).

Harvest Responsibility #4: Delineate any understory/overstory areas landowner/forester wants preserved due to unique flora or fauna.

Performance Standards:

4.4 a. Areas to be avoided are clearly marked on the harvest management plan and in the field.

4.4 b. Deer wintering areas are harvested during late winter months to provide tops for feed and skid trails for deer travel.

4.4 c. Special treatment areas such as legacy areas, forest openings, and wildlife trees are clearly marked on the harvest management plan.

Harvest Responsibility #5: Ensure that post-harvest stands are left in good condition for future forest growth and regeneration.

Performance Standards:

4.5 a. Except for super canopy trees, wildlife snags, legacy patches, and other special situations outlined in the harvest plan, all trees in clear cuts are felled and removed, and the site is ready for regeneration or planting.

4.5 b. Harvests avoid water yet leave adequate amounts of course, woody debris for nutrient capital and habitat.

4.5 c. Adequate, good quality regeneration of the desired species is left undamaged, especially if advance regeneration is relied upon for the next generation of trees.

4.5 d. Adequate numbers of good quality crop trees are left for future growth.

4.5 e. Damage to roots, boles, and crowns of trees in the residual stand is minimized during the harvest and extraction process.

2.6 g. Rare, threatened, and endangered plants and/or unusual or exemplary natural communities are noted by state specific Natural Areas Programs.



Goal Five: Manage Forest Aesthetics

Harvest Responsibility #1: Discuss the aesthetic considerations of the harvest with the landowner/forester.

Performance Standards:

- 5.1 a. Pre-harvest aesthetic conditions are documented and reviewed with landowner/forester.
- 5.1 b. Landowner/forester understands the harvest plan and resulting post-harvest aesthetic, and harvest area boundaries are marked on the plan.
- 5.1 c. Landowner/forester informs abutting landowners of changing forest aesthetic due to harvest and negotiates any suggestions/conflicts.
- 5.1 d. Cultural features of historic and/or archeological value (i.e. stone walls, cellar holes) are marked and protected.

Harvest Responsibility #2: Exhibit an aesthetic sensitivity in areas that adjoin roads and highways, known recreation trails, landing areas, vistas, and other areas of local community value.

Performance Standards:

- 5.2 a. Harvest plan documents any geologic, archeological, historical, cultural, ecological, or aesthetic special areas to be preserved.
- 5.2 b. Guidelines for protecting local community value areas are made clear to all employees of the harvesting company.
- 5.2 c. Land boundary markers are not damaged during operations.
- 5.2 d. Rock and geologic structures are avoided during the harvest.
- 5.2 e. Harvest and trail access is situated around natural boundaries whenever possible.
- 5.2 f. Buffer zone around areas to be preserved by the landowner/agent/forester is clearly marked and understood.

Harvest Responsibility #3: Communicate with employees to ensure the removal of all unnecessary debris from the harvest site and seed landing areas when prescribed.

Performance Standards:

- 5.3 a. Post-harvest supervision includes inspections of all key areas for debris removal and the quality of seeding in disturbed areas.
- 5.3 b. When markets do not exist, excess woody debris is removed from the landing and distributed throughout the site.
- 5.3 c. Edges are feathered adjacent to clearcuts in a riparian zone.



Harvest Responsibility #4: Cultural features of historic value (e.g. stone walls, wells, cemeteries, cellar holes, etc.) are protected during logging operations.

Performance Standards:

- 5.4 a. The landowner is consulted about the location of historic or cultural resources.
- 5.4 b. Significant sites are identified on the harvest plan and marked on the ground.
- 5.4 c. Employees are directed to avoid or protect areas of significant or historical value.
- 5.4 d. Damage to stone walls is minimized by utilizing bridges or bar ways, where possible. Damaged walls are repaired following harvest.

Harvest Responsibility #5: Property boundaries are respected.

Performance Standards:

- 5.5 a. Property boundaries in the vicinity of the harvest area are known to the operator and clearly marked.
- 5.5 b. Limits of the harvest area are known and can be clearly identified by the operator are clearly marked.
- 5.5 c. Operator checks with landowner to ensure that there are no conservation easements on the property that will affect the harvest operation.
- 5.5 d. Operator minimizes disruption to abutting landowners' access to their property.

Goal Six: Ensure Workplace Safety

Harvest Responsibility #1: Track compliance with all OSHA rules for safety awareness, personal protective equipment, machine operation and maintenance, hand tool safety, harvesting and felling, sharpening of blades, notching, yarding, limbing, and handling flammable or combustible liquids.

Performance Standards:

- 6.1 a. OSHA regulations are known by supervisors and employees.
- 6.1 b. Monthly audits of OSHA safety requirements are conducted and documented as part of a larger safety program.
- 6.1 c. Company's written safety plan is on file for OSHA regulated companies and sole proprietors.
- 6.1 d. Harvesting companies, including sole proprietors, must have current logger safety training and field certification.

In Maine, completion of SFI SIC approved training program and up-to-date continuing education for key personnel is required.



Harvest Responsibility #2: Document OSHA compliant safety and health plan that includes a hazard communication program, lockout/tagout program, blood borne pathogens, etc.

Performance Standards:

- 6.2 a. Twice monthly training requirements for employees are documented.
- 6.2 b. All employees have a current CPR certification and additional opportunities for first responder rescue are provided and documented.
- 6.2 c. All employees have a strategy for making their whereabouts known to others at prescribed times each day, and this is verified as a daily procedure when in the woods.
- 6.2 d. Daily, weekly, and monthly safety checks of all equipment is conducted and a proper lockout/tagout program is evident.
- 6.2 e. Employees are trained in blood borne pathogens and safety gloves are present in First Aid kits.
- 6.2 f. Spill kits are located on each machine and operators are familiar with their use.

Harvest Responsibility #3: Initiate Superior Management Practices (SMPs) that exceed minimum expectations of federal and state safety laws.

Performance Standards:

- 6.3 a. Worksite liabilities are clarified with landowner/forester.
- 6.3 b. Deep woods rescue and other advanced safety training is provided by the harvest company.
- 6.3 c. Management provides for employee supervision at each landing.
- 6.3 d. Company has a policy outlining the storage of hazardous materials. Chemicals and containers of liquid or solid non-organic wastes are disposed of in an environmentally appropriate manner at off-site locations.
- 6.3 e. Employees are prepared for all emergencies, and emergency phone numbers are posted in each piece of equipment.

Goal Seven: Demonstrate Continuous Improvement

Harvest Responsibility #1: Develop and implement Superior Management Practices (SMPs).

Performance Standards:

- 7.1 a. Employees are trained to use MLC Vision and Principles as definitive guidelines when faced with non-regulated scenarios.
- 7.1 b. A continuous improvement approach is utilized to solve problems and correct mistakes.



- 7.1 c. Promising research is translated and utilized in the field.
- 7.1 d. Harvest Company monitors forest inventory data provided by the state or federal government to stay abreast of forest conditions and trends.
- 7.1 e. Harvest Company develops a documentation process with landowners or uses the Harvest Integrity System (see NEMLC Standards Guidance Document).

Harvest Responsibility #2: Incorporate advanced and emerging harvest technologies.

Performance Standards:

- 7.2 a. Internet resources are utilized to monitor emerging harvest technologies.
- 7.2 b. Communication systems are continually upgraded with the goal of linking loggers in the woods.

Harvest Responsibility #3: Maintain accurate production data.

Performance Standards:

- 7.3 a. Source origination of the forest product is tracked within each company through the Harvest Integrity System (HIS).
- 7.3 b. Harvest planning, implementation, and extraction costs are tracked and evaluated with consideration given to variables such as weather, equipment breakdown, subcontractor delays, etc.
- 7.3 c. Company keeps harvest records including owner, location, acreage, and volume by 7 species/product through the Harvest Integrity System (HIS).
- 7.3 d. Any remediations to the harvest plan are documented.

Goal Eight: Ensure Business Viability

Harvest Responsibility #1: Provide technical and training support to company employees and abide by all federal and state labor laws.

Performance Standards:

- 8.1 a. Livable wages and adequate benefits are provided to all employees and sole proprietors.
- 8.1 b. Training programs on safety, harvesting practices, and labor laws are available to employees.
- 8.1 c. Professional attitude of management, employees, and subcontractors is consistently evident in interactions with other wood harvesters and the public.
- 8.1 d. Company has a clear, written dispute resolution process in place.



Harvest Responsibility #2: Utilize technology to improve planning and decision making.

Performance Standards:

- 8.2 a. Company business plan is updated.
- 8.2 b. Company institutes computerized cost tracking, inventory, and accounting systems.
- 8.2 c. Company uses internet resources for planning and decision making.

Harvest Responsibility #3: Actively participate in the logging industry on local, state, regional, and national levels.

Performance Standards:

- 8.3 a. Access to diverse markets is established through professional contacts.
- 8.3 b. Master Logger Certification designation is marketed and promoted to end users and consumers in local and state markets.
- 8.3 c. Membership in professional and trade associations is maintained.
- 8.3 d. Mentoring opportunities are developed for young men and women interested in the wood harvesting industry.

Goal Nine: Uphold Certificate Integrity

Harvest Responsibility #1: Protect NEMLC Codes

Performance Standards:

- 9.1 a. Earned NEMLC certificate numbers are not shared with non-NEMLC companies for use in the sale or transport of non-NEMLC harvested wood.
- 9.1 b. NEMLC companies will not buy wood harvested by a non-NEMLC certified harvester and sell, or otherwise represent it, as Master Logger wood using their certification code.
- 9.1 c. Fraudulent use of an NEMLC certificate code will be reported to the Executive Director of The Trust to Conserve Northeast Forestlands.

Harvest Responsibility #2: Submitting Annual Data to the Trust to Conserve Northeast Forestlands.

Performance Standards:

- 9.2 a. **For Chain of Custody group members:** A signed consent/acknowledgement form regarding obligations and responsibilities of group membership is submitted to the Trust to Conserve Northeast Forestlands.



- 9.2 b. Annual harvest data, as requested by TCNEF (“Annual Survey”), is submitted in a timely fashion and is required for retaining active certification each year.

Harvest Responsibility #3: Maintaining CoC Certification Files (For Chain of Custody Group Members).

Performance Standards:

- 9.3 a. **For Chain of Custody group members:** Each NEMLC company enrolled in the TCNF’s CoC group certificate, appoints a site manager to maintain files relevant to the company’s group CoC membership.
- 9.3 b. The site manager maintains an up-to-date file of required certification information, including the SmartWood CoC guidelines and standards, training/orientation materials, the certification number, and annual auditing procedures.

