

Report to the 129th Legislature's
Agriculture, Conservation and Forestry Committee
on
Outcome Based Forestry
Submitted pursuant to 12 M.R.S. §8869(§3-B)

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Introduction

The practice of forestry is a science. Laws that regulate forestry activities do not necessarily promote the use of science-based forest management. The 120th Legislature enacted the Outcome Based Forestry (OBF) law to address aspects of the Forest Practices Act (FPA) that prevented the wise use of scientific forestry in the best interests of the people of Maine and private and public landowners. While the FPA was intended to curtail the creation of large, rolling clearcuts and assure their regeneration, OBF addresses these issues and many more issues of public concern. The only law directly impacted by OBF is the FPA.

The OBF statute was adopted by the 120th Legislature in 2001 in response to the forest policy debates of the 1990s. The OBF statute had a sunset provision until 2012 when the 126th Legislature removed the provision. Until the sunset clause was removed, no OBF agreements were achieved due to landowner uncertainty over the law's future. In 2012, shortly after the sunset clause was removed, two landowners signed an agreement with the state (through the signature of the Director of the Bureau of Forestry, aka Maine Forest Service (MFS)). See Appendix B (page 9) for a statutory summary.

The Governor appointed a technical review panel (panel) as required by law (Appendix C, page 12). Each panel member is chosen for their technical expertise relative to OBF's principles. The panel works with the MFS Director to implement, monitor and assess OBF agreements. To participate in an OBF project, the landowner, director, and panel must develop agreed-upon desired outcomes, and develop a method for determining if the outcomes have been attained and a system for reporting results to the public. The panel assesses whether the practices applied on areas subject to an OBF agreement provide at least the equivalent forest and environmental protection as provided by rules and regulations otherwise applicable to that area.

The statute clearly states that a participating landowner must manage their holdings in a way that provides a defined suite of public benefits (Appendix A, page 7) in return for departing from certain requirements of the FPA. Compliance is monitored by multiple panel meetings, field observations, and observance and review of certification audits.

This report documents progress to date on OBF regarding agreements with Irving Woodlands, Katahdin Forest Management, Seven Islands Land Company, and the Bureau of Parks and Lands.

Progress to date

Four agreements have been signed: The Bureau of Parks and Lands (BPL - signed 2012, renewed 2018), Irving Woodlands (Irving - signed 2012, renewed 2018), Katahdin Forest Management (KFM - signed 2015), and Seven Islands Land Company (SILC - signed 2017). All four agreements are of a landscape proportion covering the landowners' entire Maine ownerships of 600,000 acres (BPL), 1.25 million acres (Irving), 300,000 acres (Katahdin), and 768,000 acres (Seven Islands) for a total of just over 2.9 million acres.

The objectives agreed upon between the forest landowners, panel, and Bureau Director are part of the agreements and found as an appendix to each agreement.¹

The panel has conducted several site visits on participating lands and reviewed landowner operation plans prior to their implementation. Several harvest sites on Irving land were visited multiple times. Visits of a similar intensity took place during negotiations with KFM and SILC. The panel plans two annual visits to each participating landowner, once in early winter to review the previous year's operations and planned operations for the coming year, and once in late summer to review year-to-date progress.

Since 2013, panel field inspections have been augmented with systematic, regular reviews of harvest operations (pre-harvest, during harvest, and post-harvest) by Foresters of MFS's Forest Policy and Management Division (see Appendix D, page 13 and Appendix E, page 15).

The Legislature's Agriculture, Conservation and Forestry Committee provides oversight of the panel's work on behalf of the public. The committee visited Irving Woodlands' operations in September 2014 and again in the summer of 2015. MFS and the panel look forward to future visits to active OBF projects by the committee.

Examples of public benefits of OBF

- Assurances that the goals and outcomes of soil and water quality protection and biodiversity are being met;
- Pre-harvest planning to address aesthetic impacts of timber harvesting;
- Investment of \$37 million in construction of an 80 million board foot spruce/fir sawmill in Nashville Plantation (Irving) that employs 60 people and provides a market for small diameter balsam fir and spruce in northern Maine;²
- Increased negotiated payment rates to contractors and woods operators;
- Access to the scientific rationale for each harvest in an OBF agreement;
- Knowledge of harvest levels by species/products;
- Tracking of types of harvests, including clearcuts, for trends;
- Better implementation of science-based silvicultural practices, e.g., beech bark disease management and managing density of white pine stands for quality growth; and,
- Reduction of inspections by Forest Rangers, freeing up their time for forest protection duties.
- District Foresters can pass on some of the new silvicultural techniques and harvesting regimes that OBF has allowed participants to observe on to family woodland owners for their benefit.
- OBF has freed up District Forester time to allow them to help family woodland owners better manage their holdings.

¹ Agreements and a great deal of supporting and background material are posted to the MFS website, https://www.maine.gov/dacf/mfs/policy_management/outcome_based_forestry.html.

² Such markets are important for managing balsam fir-dominated stands in anticipation of the impending spruce budworm outbreak. Irving has since expanded production and employment at the mill.

Examples of forest landowner benefits from OBF

- Application of optimal silvicultural practices to the land base;
- Reduced administrative time devoted to adhering to FPA numerical limits, e.g. 450 trees/acre of regeneration, 250-foot separation zones, etc.;
- Construction of an 80 million board foot spruce/fir sawmill in Nashville Plantation (Irving) that will improve utilization of smaller diameter balsam fir from Irving's and many adjacent landowners' properties;
- Reduced costs of trucking, road building and maintenance by applying scientific management to harvest areas; and,
- Greater incentive to invest in tree planting and the thinning of young spruce/fir stands.

Panel evaluation of participant performance

The technical review panel reviews each participant's annual operating plans, both *a priori* and retrospectively and harvest operations (in progress and retrospectively); observed and analyzed the participants' independent, third-party certification audits; and, considered the reports of field monitoring conducted by MFS Foresters.

Based on field observations and consideration of the various data and information obtained from multiple sources, the panel finds that the four participating landowners: Irving Woodlands, Katahdin Forest Management, Seven Islands Land Company, and the Bureau of Parks and Lands, have all attained compliance with the state's forest sustainability goals (Appendix A).

All participating landowners have:

- Maintained their certification to one or more independent, third-party standards (Forest Stewardship Council and/or Sustainable Forestry Initiative). If a certification audit has revealed any observations or non-conformances, they have been minor and quickly corrected by the landowner. Panel members have had the opportunity to observe the landowners' certification audits and to review certification audit reports.
- Management plans prepared by Maine licensed foresters. Foresters oversee all timber harvesting and other forest management operations.
- Policies and procedures in place that exceed state regulatory requirements regarding timber harvesting operations in riparian areas, including the effective implementation of state Best Management Practices for protecting water quality.
- Policies and procedures in place to address other forest resources and values, such as wildlife habitat and aesthetics.

Panel members can participate in any landowner advisory committee meetings. Panel members believe that they have had ample opportunity to review certification audit reports, records, discuss practices and policies, and to observe field operations. Their expectations and needs for explanations and answers to questions were satisfied. Field operations provided effective illustrative support of the Panel's findings.

MFS monitoring evaluation of participant performance

MFS has assigned a Regional Enforcement Coordinator and District Foresters from the Forest Policy and Management Division to periodically monitor Irving, KFM, and SILC harvest operations to document conformance to the terms of the participants' agreements. See Appendixes D and E for examples of field monitoring forms. MFS Foresters conducted 39 inspections of participant properties. Some harvests are visited before the harvest begins; others while the harvest is in progress; and others post-harvest. Some harvests are visited at various stages for purposes of continuity in monitoring. The Foresters report that in nearly all instances, the participants are operating in conformance with policies that exceed the minimum regulatory requirements, particularly with respect to the protection of water quality. The Foresters have found no significant issues during their visits. Minor issues have been resolved promptly (see further discussion below).

Issues identified during 2019

Water quality

During 2019, MFS responded to several complaints of sediment flows from forest management roads into water bodies across the state. Two of these complaints originated on two different OBF landowners. The investigation of those complaints resulted in enforcement action on one landowner (in progress).³ The other complaint was the responsibility of another landowner conducting road maintenance operations on a participant's land. This issue was resolved through an intervention and corrective action. MFS field monitoring revealed some minor issues which were promptly resolved on site. Issues on OBF landowners were reported to the panel and the certification auditors.

The water quality complaints across all ownerships (not just OBF landowners) beyond the average appear to be the result of a combination of factors: a new generation of grader operators (several of the problems reported were due to improper grading); frequent heavy rainstorms that overwhelmed the capacity of ditches and other water management structures; and, higher awareness of outside parties that recognized and reported water quality issues.

MFS and the forest industry have collaborated to increase awareness of the general nature of the issues and methods to reduce and respond to such situations. The number of complaints has decreased sharply since late summer. The Sustainable Forestry Initiative has initiated a series of grader workshops and is working with MFS and others to develop an enhanced series of workshops targeted at Best Management Practices to protect water quality which will be rolled out in 2020.

³ The result of this enforcement action will be reported once it is resolved.

Silvicultural plans

MFS field monitoring revealed some minor shortcomings in one OBF landowner's harvest planning template. The landowner promptly updated the template to address MFS's concerns. The panel concurred with MFS's actions.

Pesticide use

The public has frequently expressed concern regarding the use of pesticides for both agricultural and forestry activities. In the first session of the 129th Legislature, the introduction of a bill that proposed to ban the aerial application of herbicides was transformed into a study of aerial herbicide use in northern Maine. That study, conducted by an independent, third-party auditor, found that, "The State of Maine regulatory framework, within which aerial application of herbicides in forest operations takes place, is functioning as designed. Further: within the context of forest landowners' silvicultural decisions and the decision to aerially apply herbicides to control (for a targeted period of time) but not eliminate vegetation that competes with forest stand establishment and early stand development, we observed a consistent and genuine effort on the part of forest managers and pesticide applicators/suppliers to minimize reliance on and use of herbicides, principally through thorough planning and integrated pest management."⁴

Over the years, the panel has focused some of its field time on reviewing the use of pesticides by participating landowners, particularly the use of herbicides to prepare sites for planting and control competition with desired tree regeneration. Two panel members have significant academic training and experience in pesticide use; three are licensed pesticide applicators. During field visits, the panel frequently asks participating landowners to explain the rationale and timing for when they applied herbicides. Discussions have been frank and constructive. The panel has not found any situation that deviates from the auditor's opinion quoted in the previous paragraph.

Natural Areas

MFS learned of a concern about one landowner's identification of natural areas, including late successional and high conservation value forests. A discussion of this matter is ongoing as of the development of this report.

Concluding remarks

To accommodate the possibility of increased interest in OBF, and recognizing the significant commitment that panel members make, the MFS Director has made recommendations for additional panel members. The regular, systematic reviews of harvest operations by Foresters of MFS's Forest Policy and Management Division have facilitated the panel's work. The ability of MFS and the panel to observe certification audits and review the auditors' detailed reports also improve our understanding of participating landowners' achievement of the full suite of sustainability goals.

⁴ Letter from Nancy McBrady, Director, Bureau of Agriculture, Food and Rural Resources to the Joint Standing Committee on Agriculture, Conservation and Forestry, 29 January 2020.

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Other states have shown interest in Maine's OBF policy, as it offers a path for them to follow where scientific forestry is preferred over restrictive and costly regulations. In Canada, British Columbia has had a "results-based forestry" regime in place on its Crown Forests for over a decade. New Brunswick recently adopted a "results-based forestry" strategy for its Crown Forests as well. Maine remains the only state in the U.S. to offer outcome based forestry as an option for regulatory compliance.

MFS and the panel conclude that OBF is working well as a policy tool across the four participating landowners' holdings. Any issues discovered over the course of the past year are being addressed. Participating landowners are fulfilling their responsibilities and demonstrating the value of practicing sound silviculture, protecting important public values, all under the regular oversight of MFS staff and a panel of experts.

Appendix A. State Forest Sustainability Goals

1. Criterion 1: Soil productivity
 - a. Goal: Maintain site productivity.
 - b. Outcomes: Site productivity will be maintained or improved, and the area in roads and yards will be minimized.
2. Criterion 2: Water quality, wetlands and riparian zones
 - a. Goal: Maintain or improve the chemical, physical, and biological integrity of aquatic systems in forested areas and riparian forests.
 - b. Outcomes: Forest management in shoreland areas protects water quality and aquatic and riparian forest biodiversity.
3. Criterion 3: Timber supply and quality
 - a. Goal: Improve the quantity and quality of future timber supply when appropriate.
 - b. Outcome: The management strategy and harvest levels for the lands will increase the quality and quantity of the forest resource as appropriate in the medium and long term (20 - 50 years).
4. Criterion 4: Aesthetic impacts of timber harvesting
 - a. Goal: Minimize adverse visual impacts of timber harvesting.
 - b. Outcomes:
 1. The landowner will minimize visual impacts of harvests, roads, landings and other management activities.
 2. The landowner's planning staff are trained in and apply principles of visual quality management.
 3. The landowner identifies areas with high and moderate visual sensitivity and takes appropriate measures to avoid significant visual impacts whenever necessary.
5. Criterion 5: Biological diversity
 - a. Goal: Maintain biological diversity with healthy populations of native flora and fauna, forest communities and ecosystems.
 - b. Outcomes:
 1. Management addresses the habitat needs of the full range of species present.
 2. Maintain or manage for acreage in the late successional (LS) condition through management and protection.
 3. Maintain a reasonable component of standing dead trees, live cull trees, and down logs across the landscape (not necessarily on every acre).
 4. High Conservation Value Forests are properly identified, and values are protected on the ownership.
 5. Rare, threatened and endangered species habitats are properly identified, and the land is managed to protect the habitats and occurrences of rare, threatened and endangered species.
 6. Important plant communities are properly identified, and the land is managed to protect important plant communities.

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7. Deer wintering areas are properly identified and managed to maintain or improve their value as winter cover for deer.
6. Criterion 6: Public accountability
 - a. Goal: Demonstrate sustainable forestry and build public confidence that forest management is protecting public values for the long-term.
 - b. Outcomes:
 1. The landowner will maintain independent 3rd party certification with a nationally recognized sustainable forest management certification system without major, unresolved non-conformances on managed lands.
 2. A Licensed Forester within the company will review and approve the landowner's Forest Management Plan.
 3. The landowner will employ Licensed Foresters who are actively involved in the management, planning and supervision of operations on the land.
 4. All timber harvesting contractors will employ at least one person possessing Certified Logging Professional or Qualified Logging Professional certifications or the equivalent.
7. Criterion 7: Economic considerations
 - a. Goal: Optimize benefits to the local and regional economy while also achieving the goals specified for the other criteria, to the extent allowed by market conditions.
 - b. Outcomes: The landowner's management activities support as vibrant and diverse a forest products industry as is practicable, including loggers, truckers, and production facilities.
8. Criterion 8: Social considerations
 - a. Goal: The landowner supports the communities surrounding their lands and operations, and except where special circumstances dictate otherwise, the landowner continues to provide historic and traditional recreational opportunities that do not conflict with the landowner's objectives or values.
 - b. Outcomes: The landowner provides opportunities for appropriate historic and traditional recreational uses that do not conflict with the landowner's values or objectives.
9. Criterion 9: Forest Health
 - a. Goal: The forest is healthy and vigorous with no serious insect infestations or disease outbreaks.
 - b. Outcomes: The landowner does what is prudent and practicable to monitor for and prevent and control insects, disease, and fire, consistent with good practice in the industry and assists MFS in forest health monitoring programs on the ownership.

Appendix B. Key statutory provisions of Outcome Based Forestry

12 M.R.S., §8003 (3)(Q)

Q. The director, in cooperation with public and private landowners, shall actively pursue creating areas on public and private land where the principles and applicability of outcome-based forest policy, as defined in section 8868, subsection 2-B, can be applied and tested. No more than 6 such areas may be designated. The director shall seek to designate areas of various sizes owned by different landowners. The designated areas must represent differing forest types and conditions and different geographic regions of the State. Prior to entering into an outcome-based forestry agreement, the director and the panel of technical experts under section 8869, subsection 3-A shall conduct a comprehensive review of the proposed outcome-based forestry agreement. The term of initial agreements may not exceed 5 years. The director may renew an agreement if requirements under this section and section 8869, subsection 3-A are met. The term of a subsequent agreement may not exceed 5 years.

12 M.R.S., §8868 (2-B)

2-B. Outcome-based forest policy. "Outcome-based forest policy" means a science-based, voluntary process to achieve agreed-upon economic, environmental and social outcomes in the State's forests, as an alternative to prescriptive regulation, demonstrating measurable progress towards achieving statewide sustainability goals and allowing landowners to use creativity and flexibility to achieve objectives, while providing for the conservation of public trust resources and the public values of forests.

12 M.R.S. §8869 (3-A)

3-A. Plans for outcome-based forestry areas. Practices applied on an area created pursuant to section 8003, subsection 3, paragraph Q must provide at least the equivalent forest and environmental protection as provided by existing rules and any applicable local regulations. At a minimum, tests of outcome-based forestry principles must address:

- A. Soil productivity;
- B. Water quality, wetlands and riparian zones;
- C. Timber supply and quality;
- D. Aesthetic impacts of timber harvesting;
- E. Biological diversity;
- F. Public accountability;
- G. Economic considerations;
- H. Social considerations; and
- I. Forest health.

The Governor shall appoint a panel of at least 6 technical experts to work with the director to implement, monitor and assess tests of outcome-based forestry principles. The panel of technical experts must have expertise in all of the principles listed in paragraphs A to I. In order to participate in an outcome-based forestry project, the landowner, director and technical panel must develop agreed-upon desired outcomes for the outcome-based forestry area and develop a method for determining if the outcomes have been attained and a system for reporting results to the public. The technical panel shall assess whether the practices applied on the outcome-

based forestry area provide at least the equivalent forest and environmental protection as provided by rules and regulations otherwise applicable to that outcome-based forestry area. The technical panel may not delegate this assessment to any other person, except that the technical panel may consider information provided by the bureau, the landowner or a 3rd-party forest certification program auditor.

12 M.R.S. §8869 (3-B)

3-B. Reporting and notification; outcome-based forestry projects. The director, in consultation with the technical panel under subsection 3-A, shall report to the joint standing committee of the Legislature having jurisdiction over forestry matters as follows.

A. Beginning March 1, 2015 and annually thereafter, the director shall submit a report detailing the progress on each outcome-based forestry agreement under section 8003, subsection 3, paragraph Q. The report must include an assessment of the landowner's progress toward attaining the outcomes under subsection 3-A. The report must be presented to the joint standing committee of the Legislature having jurisdiction over forestry matters at a public meeting no sooner than 30 days after submission of the report to the committee.

B. When an initial outcome-based forestry agreement is approved by the director as provided by section 8003, subsection 3, paragraph Q, the director shall notify the joint standing committee of the Legislature having jurisdiction over forestry matters within 15 days. In the notification, the director shall address how the proposed agreement will provide at least the equivalent forest and environmental protection as provided by rules and regulations that otherwise would apply to that outcome-based forestry area.

C. When an outcome-based forestry agreement under this section is renewed as provided by section 8003, subsection 3, paragraph Q, the director shall notify the joint standing committee of the Legislature having jurisdiction over forestry matters no later than 15 days after the agreement is renewed.

A report, notification or any information concerning outcome-based forestry projects under this subsection must be placed on the Department of Agriculture, Conservation and Forestry's publicly accessible website.

12 M.R.S. §8869 (7-A)

7-A. Exemption for outcome-based forestry areas. An outcome-based forestry area designated under section 8003, subsection 3, paragraph Q is exempt from the requirements of this section if specifically exempted in the agreement establishing the outcome-based forestry area.

12 M.R.S. §8869 (13)

13. Confidential information. Information provided to the bureau voluntarily or to fulfill reporting requirements for the purposes of establishing and monitoring outcome-based forestry areas, as created pursuant to section 8003, subsection 3, paragraph Q, is public unless the person to whom the information belongs or pertains requests that it be designated as confidential and the bureau has determined it contains proprietary information. For the purposes of this subsection, "proprietary information" means information that is a trade secret or production, commercial or financial information the disclosure of which would impair the competitive position of the person submitting the information and would make available information not otherwise publicly

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available. The bureau, working with the landowner and the panel of technical experts appointed under subsection 3-A, may publish reports as long as those reports do not reveal confidential information.

12 M.R.S. §8879 (1)

1. Content. The report must describe the condition of the State's forests based on historical information and information collected and analyzed by the bureau for the 5-year period. The report must provide an assessment at the state level of progress in achieving the standards developed pursuant to section 8876-A, including an assessment of designated outcome-based forestry projects authorized under section 8003, subsection 3, paragraph Q, including a recommendation to continue, change or discontinue the outcome-based forestry projects. The director shall also provide observations on differences in achieving standards by landowner class. The report must summarize importing and exporting of forest products for foreign and interstate activities. The director shall obtain public input during the preparation of the report through appropriate methods.

Appendix C. Biographies of OBF panel members

Kyle Burdick is the Woodlands Manager for Baskahegan Company. He received his BS in Forest Management from the University of Maine and is a Licensed Forester and Certified Forester. For the last 10 years he has managed lands in eastern Maine for industrial, conservation, and family woodland owners. Prior to that he worked on industrial forest land in the Adirondacks. Kyle is a member of SAF, the Maine Tree Farm Committee, Project SHARE, Maine Woodland Owners, and the Forest Stewards Guild. He lives in Pembroke.

Barry Burgason received a BS in wildlife management from Cornell University and a MS in wildlife management from the University of Maine. He is a Certified Wildlife Biologist and a member of The Wildlife Society. Barry has been involved with forestry/wildlife interactions since beginning his thesis on wildlife use of clearcuts in the Moosehead region. He then worked as the assistant regional wildlife biologist for the Department of Inland Fisheries and Wildlife for 17 years. From 1995 to 2017, he was the wildlife biologist for Huber Resources Corporation. As part of Huber's management team, he participated in SFI and FSC certification audits. Barry has chaired the Maine Forest Products Council's wildlife committee and participated in a variety of forestry/wildlife panels and publications.

Mike Dann is a retired forester from Dixmont. He earned a BS in Forest Management from the University of Maine and is a Licensed Forester. He has 40 years' experience in natural resource management; 36 years with Seven Islands Land Company and 4 years with SWOAM. He is a member of SWOAM, Maine Forest Products Council, Forest Resources Association, and the Society of American Foresters. He also is a Tree Farmer. He is an FSC forest management and chain of custody auditor.

Keith Kanoti has over 20 years' experience working in various aspects of forestry, including forest management, policy and education. He currently is the University Forest Manager at the University of Maine, where he is responsible for managing all forestland of the University of Maine System and the University of Maine Foundation. Prior to this he worked for the Maine Forest Service where he oversaw the statewide forestry water quality program. Keith has a B.S. in Forestry from the University of New Hampshire and a M.S. in Forestry from the University of Maine. He is a Maine Licensed Forester.

Maxwell McCormack, Jr. is a retired professor of silviculture from the Maine School of Forestry and a Research Professor Emeritus of Forest Resources at the University of Maine. He currently is a consultant from his home in Unity. He is a member of many professional organizations including the Society of American Foresters, the Weed Society of America, the Northeastern Weed Science Society, Maine Forest Products Council, Maine Christmas Tree Association, The Nature Conservancy, SAM and many more. He received numerous honors throughout his distinguished career. Dr. McCormack is a graduate of the University of Maine with a BS in Forestry, earned both an MF and DF in Silviculture from Duke University. He is a licensed forester.

David Struble retired as the Director of the Maine Forest Service's Forest Health and Monitoring Division, and State Entomologist. His 40-plus year career with the MFS focused on monitoring and evaluating forest health and sustainability, and developing pest management options for Maine's forest and shade tree owners. He serves on a number of regional and national task forces and US Forest Service program oversight/management committees. Mr. Struble is a graduate of the University of Maine with a BS in Forestry and an MS in Entomology. He is a licensed forester.

Peter Triandafilou is from Orono and is the current Vice President of Woodlands for Huber Resources Corp. He is a member of the Maine Forest Products Council, the North Maine Woods and the Society of American Foresters. He is a licensed forester and has participated on numerous public boards including outcome based forestry, LURC reform, sustainable forestry, wood supply and statewide water quality rules. He currently serves on the Maine Development Foundation Board of Directors and formerly served on the Maine Technology Institute Board of Directors.

Appendix D. OBF Field Inspection Form

Outcome Based Forestry Inspection Form - [Landowner Name]

General Information

Landowner: _____ Date: _____
 Inspector: _____ Township: _____
 FON: _____ Block Number: _____
 GPS Coordinates: _____

Harvest Information

Inspection Type: 1-Pre-Harvest 2-Active Harvest 3-Post Harvest
 Harvest in Non-Expired Separation: 1-Yes 2-No
 Harvest in Riparian Area: 1-Yes 2-No 3-NA
 Prescription Type: 1-CC 2-OSR 3-Shelterwood 4-Sel 5-CT 6-Seed Tree
 Prescription Followed: 1-Yes 2-No 3-NA
 BMP protocol: 1-Yes 2-No

State of Maine Criteria (applicable at operation level)

SOM Criterion	1-Yes	2-No	3-NA
C1: Soil Productivity			
C2: Water Quality			
C3: Timber Supply and Quality			
C4: Aesthetic Impacts			
C5: Biological Diversity			
C8: Social Considerations			
C9: Forest Health			

*****Criteria Goals and Indicators on Back*****

Notes:

Instructions for State Criteria Section

Criteria Goal Underlined and Indicator Follows

C1: Site Productivity Maintained?

*Rutting cannot exceed 12-inch depth for greater than 30 feet

C2: Water Quality Protected?

No evidence of sediment in the water attributed to harvest operation

C3: Timber Supply and Quality Improved?

*Trail spacing >60 feet whole tree and >45 feet CTL

*Trail width <15 feet

Bumper trees used to protect residual trees

C4: Adverse Visual Impacts Minimized?

Yard free of trash and lower visual impact near water bodies

C5: Biological Diversity Maintained?

TE and MNAP habitats identified and protected

*Snag policy met at four per acre (future and current snags retained)

C8: Traditional Recreational Uses Maintained?

Trails and access not permanently impacted/ still usable after harvest

C9: The Forest is Healthy?

Mature fir and diseased beech harvested

The SOM Criteria goals and indicators were derived from the following documents:

1. Outcome Based Forestry Agreement with [Landowner Name]
2. Report to the ACF Committee Regarding a New Outcome Based Forestry Agreement with [Landowner Name]
3. [Landowner Name] Operations Inspection Definitions and Associated Guidelines

*From [Landowner Name] policy document

Appendix E. OBF Riparian Monitoring Form

Riparian Assessment

Sediment (number of locations)	
Sediment Volume (cu ft)	
Ruts (number >50% through buffer)	
Natural Woody Debris >4" (number)	
Woody Debris >4" from Harvest (number)	
Gouges in Bank from Harvest (number)	
Slash Volume in Channel (cu ft)	

Plot Data

	1	2	3	4
BA sq ft				
Crown Closure %				
Largest DBH				