



The Bureau of Parks and Lands Department of Conservation, State of Maine

Sustainable Forestry Initiative Program

***Independent Third-party Report on Verification Procedures
and Declaration of Conformance***

July 15, 2001

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Declaration of Conformance to the Sustainable Forestry Initiative Standard

Declaration of Conformance to the Sustainable Forestry Initiative Standard

To Tom Morrison, Director
Ralph Knoll, Manager of Land Planning and Acquisition
Bureau of Parks and Lands, Department of Conservation, State of Maine

We have performed the procedures included in the American Forest & Paper Association's Sustainable Forestry Initiative Verification Process – 2001 Edition and enumerated below, which were agreed to by The State of Maine (the Program Participant), solely to assist the specified parties in evaluating The Bureau of Parks and Lands' conformance with the American Forest & Paper Association's Sustainable Forestry Initiative Standard – 2001 Edition (SFIS), as of June 13, 2001.

We have examined management's assertion included in the accompanying Statement of Sustainable Forestry Initiative Conformance that The Bureau of Parks and Lands is in conformance with the American Forest & Paper Association's Sustainable Forestry Initiative Standard – 2001 Edition, as of June 13, 2001. Management is responsible for the Program Participant maintaining conformance with the SFIS. Our responsibility is to express an opinion on management's assertion that the Program Participant is in conformance based on our examination.

Our examination was conducted in accordance with procedures enumerated in the American Forest & Paper Association's Sustainable Forestry Initiative Verification Process – 2001 Edition, and accordingly, included examining, on a test basis, evidence about the conformance of the Bureau's SFI program, and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion, based on criteria established by the American Forest & Paper Association's Sustainable Forestry Initiative Program.

Interforest, LLC
Branford, CT
July 24, 2001

Executive Summary

Project objective

The objective of the Andersen/Interforest third-party verification was to determine conformance of the Bureau of Parks and Lands' (BP&L) SFI program with the requirements of the 2001 Edition of the Sustainable Forestry Initiative Standards (SFIS). The third-party verification included a determination of conformance of BP&L's management system and on-the-ground activities with the SFIS objectives, performance measures, and core indicators. Voluntary Indicators developed by the BP&L were also considered in cases where their investigation was necessary to support conclusions about Performance Measures.

Scope

The scope of the verification includes approximately 485,000 acres of public reserved and non-reserved forest (fee) lands minus the Coastal Islands managed by the Maine State Department of Conservation, Bureau of Parks and Lands as of February 6, 2001.

Objectives

The objective of this third-party verification is to determine the conformance of BP&L's SFI program with the requirements of the 2001 Edition of the Sustainable Forestry Initiative Standards (SFIS). The third-party certification includes a determination of conformance of the BP&L's management system and on-the-ground activities with the SFIS Objectives, Performance Measures and Core Indicators.

Work performed

The Andersen/Interforest verification team completed all agreed-upon verification procedures outlined in the verification plan provided in advance of fieldwork to the management of BP&L. The verification procedures were completed by: on-ground visual verification of randomly selected timber harvest plans and specialty sites, conducting interviews with various members of the Company's management team and external parties, and reviewing and validating forestry operations, management reporting and training documentation. The

Results

The Audit team found that the Bureau of Parks and Lands' SFI Program is in conformance with the American Forest & Paper Association's Sustainable Forestry Initiative Standard – 2001 Edition (SFIS), as of June 13, 2001. The audit found that the program exceeded the standard in providing recreation and education opportunities for the public as part of forest management objectives, in its policies for habitat diversity and in its management of the visual impact of harvesting and other forest operations. Minor non-conformances were found involving implementation of Best Management Practices (BMPs) for erosion and sedimentation control, and working with the SFI Maine State Implementation Committee to promote sustainable forestry and to deal with reports of forestry practices that are inconsistent with the SFI Standard. The BP&L has a plan in place to remedy these concerns.

Independent Third-Party Report on Verification Procedures

Sustainable Forestry Initiative Verification Process – 2001 Edition Requirements

Procedure #1

The BP&L and Andersen/Interforest must decide on the scope and extent of the verification.

Finding #1

The scope of the verification includes approximately 485,000 acres of public reserved and non-reserved forestlands managed by the Maine State Department of Conservation, Bureau of Parks and Lands as of February 6, 2001.

Several performance measures were determined to be outside the scope of BP&L's activities as listed below:

- 4.1.2.1.6 The BP&L of the State of Maine has not conducted, and has no plans to conduct, artificial regeneration of its forestlands following harvest. Thus, this SFI Performance Measure addressing genetically improved seedlings and biotechnology is outside the scope of its activities, and the SFI Certification audit. No artificial reforestation is currently planned. Should artificial reforestation be required (see Integrated Resource Policy page 73), the agency would outline how it would follow appropriate procedures, regulations, and protocols.
- 4.2.1.1.1 The BP&L is the designated forest resource management agency of the State of Maine, while its sister agency, the Forest Service, is specifically charged by the State Legislature with responsibility for landowner assistance programs. Consistent with this division of responsibility and authority, the BP&L does not have procurement foresters and provides only limited information to landowners regarding the benefits of reforestation and BMPs. This SFI Performance Measure appears to be beyond the scope of the agency's legislatively assigned authorities, and it therefore appears to be outside the scope of the audit.
- 4.2.1.1.4 Because BP&L does not procure wood or have a landowner assistance program, this Performance Measure and associated Core Indicators are outside of the scope of its activities and the SFIS Certification Audit. AF&PA will be issuing an Interpretations Report clarifying the language in Core Indicators #1 and 2 so that it clearly does not apply to Program Participants that only manage land and do not procure wood.

Independent Third-Party Report on Verification Procedures

- 4.2.1.1.5 The BP&L does not appear to be the Maine agency with responsibility for encouraging landowners to utilize the services of qualified resource and logging professionals.
- 4.2.1.1.8 The BP&L is a land management agency only, and does not procure wood or supply its own mills with wood. As such, the agency is not in a position to influence mill inventories. Consequently, this SFI Performance Measure does not apply.

In addition, one clarification of the Standard was obtained from the Sustainable Forestry Initiative's AF&PA staff as follows:

- 4.1.3.1.4 Core indicator #2 and its reference to requiring and documenting BMP training for employees "and/or contractors" are unclear. AF&PA staff confirmed that the language of the Performance Measure, that Program Participants shall encourage training for forest management and harvesting contractors, is controlling. Thus, BP&L only needs to encourage training of such contractors, not require such training.

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Procedure #2

Personnel conducting the verification must have appropriate expertise, meet the qualifications outlined in the Sustainable Forestry Initiative Qualification Criteria for Verifiers (SFI – 2002), the abilities to work with the type of forestry organization being verified, and have no conflicts of interest with BP&L.

Finding #2

The verification team consisted of specialists and experts in wildlife biology, soils and productivity, operations, silviculture, Maine forestry regulations, and forestry management systems. All members of the verification team met the requirements of SFI-2002 and had no conflicts of interest with the BP&L that would impact their objectivity.

Anderson / Interforest Verification Team:

- Mr. Mike Ferrucci, Anderson/Interforest SFI Team Lead Verifier, had lead SFI project management and technical responsibilities.
- Dr. Bob Seymour, had responsibility for issues relating to silviculture and forest management.
- Mr. Mike Thompson, SCS consulting ecologist had responsibility for issues relating to wildlife, biodiversity, and the management and protection of special sites.
- Mr. Peter Bobkowski, Anderson/Interforest SFI Team Auditor, had primary responsibility for the completion of appropriate audit methodologies.
- Dr. John Gordon, Anderson/Interforest SFI Team had responsibility for issues in silviculture, harvesting, BMP, roads, and nutrient/productivity issues.
- Mr. Michael Morgan, Anderson/Interforest SFI Team Quality Review Partner, had oversight and quality review responsibilities.
- Scott Berg, Anderson/Interforest SFI Team, expert in SFI forestry standards, provided services in the assessment of verification indicators and the determination of scope.

Procedure #3

Independent Third-Party Report on Verification Procedures

The management of the BP&L is to provide the verification team with a final version of their Sustainable Forestry Initiative Program that describes in complete detail the verification indicators to be assessed by the verification team to determine the company's conformance with the SFIS objectives and performance measures.

Finding #3

A complete, final copy of the BP&L's Sustainable Forestry Initiative Program was provided to Andersen/Interforest and was used as the basis to complete our risk analysis and verification plan and verification procedures. A copy of our risk analysis and verification plan has been provided to the Program Participant and retained in our working papers.

Procedure #4

A full and factual determination of findings is to be completed after an adequate amount of evidence has been gathered. This evidence may be compiled in a number of ways, including examination of operating procedures, study of materials relating to forestry practices, and through meetings with employees and contractors.

Finding #4

The Andersen / Interforest verification team completed all agreed-upon verification procedures outlined in the verification plan provided to the management of BP&L. The supporting findings from the completion of the specific verification procedures are documented in the "Findings and Supporting Evidence" section of this report. The verification procedures were completed by: on-ground visual verification of randomly selected Timber Harvest Plans and specialty sites, conducting interviews with various members of the Company's management team and external parties, and reviewing and validating forestry operations, management reporting and training documentation.

A summary of the key findings supporting BP&L's conformance to the SFIS is documented below. These high level findings are further detailed in the accompanying "Findings and Supporting Evidence" section. Our findings indicated that BP&L's management's assertion of conformance to the SFIS is supported by:

- Extensive documentation of forestry management policies and plans, including the Integrated Resource Policy, which we view as a politically intelligible strategic document to guide the Bureau in its management program.
- Baseline appreciation and acceptance by the entire BP&L staff of the need to manage the land base for ecological values.

Independent Third-Party Report on Verification Procedures

- The presence of a wildlife biologist who is effectively utilized throughout the agency for land acquisition, management planning, and implementation of timber harvests.
- The positive, opportunistic approach shown for many silvicultural activities, demonstrating a degree of patience and willingness to nurture stands that occasionally rises to the level of restoration.
- The use of adaptive management approach (try, monitor, adjust, repeat) for selected high profile or difficult issues (deer wintering area, beech bark disease).
- Demonstrated in-depth knowledge and expertise of the critical operational, social, and environmental issues affecting this land base by the BP&L's staff.

Procedure #5

The verification team shall issue a final third-party verification report that contains all findings and relevant supporting materials from the completion of verification procedures. The verifying organization shall issue a formal certificate of conformance to the SFIS.

Finding #5

This report provides the summary and detailed conclusions to each of the BP&L's Sustainable Forestry Initiative Program performance measurements and objectives. A formal "Declaration of Conformance to the Sustainable Forestry Initiative Standard – 2001 Edition" is found on page 3.

Findings and Supporting Evidence

Specific Findings and Supporting Evidence

Our findings and supporting evidence for the Bureau of Parks and Lands' conformance with American Forest & Paper Association's Sustainable Forestry Initiative Standard – 2001 Edition are outlined in the following matrix. This matrix contains the eleven objectives along with the supporting performance measures required by the SFIS. The verification team's conclusion on BP&L's conformance with each objective and performance measure is indicated in the matrix along with the verification team's assessment of supporting evidence (indicators).

Objective 1. Broaden the practice of sustainable forestry by employing an array of scientifically, environmentally, and economically sound practices in the growth, harvest, and use of forests.	Objective 1 has been met by the Bureau of Parks and Lands. Three of four Performance Measures were met, one Performance Measure was exceeded, and all Core Indicators have been met.
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Performance Measure	Indicator(s)
4.1.1.1.1 - Program Participants shall have policies, programs, and plans to implement and achieve the Sustainable Forestry Standard Principles and Objectives.	<p>All Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The BP&L 's Forest Certification Manual, which details the SFI program; ▪ Our observations, on many occasions, of BP&L's SFI Implementation team charged with implementing the SFI program; ▪ The use of a comprehensive and extremely well integrated management policy document, the "Integrated Resource Policy for Public Reserved and Nonreserved Lands, State Parks, and State Historic Sites, December 18,2000" (the IRP, revised from 1985 version); ▪ The use of a systematic compartment exam and prescription process; and ▪ The demonstrated in-depth knowledge and expertise of the critical operational, social, and environmental issues affecting this land base by the BP&L's staff.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
4.1.1.1.2. Program participants shall (individually, through cooperative efforts, or through AF&PA) provide funding for forest research to improve the health, productivity, and management of all forests, as well as to better understand the role of managed forests in sequestering carbon.	<p>The Core Indicator was met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ Evidence of substantial funding to the Cooperative Forest Research Unit of the University of Maine, College of Natural Resources; and ▪ Silviculture advisory Committee provides a useful link between research community and BP&L which serves to strengthen the value of the research produced through this funding.
4.1.1.1.3. Program participants shall provide recreation and education opportunities for the public where consistent with their forest management objectives.	<p>The Core Indicator was exceeded, and several voluntary indicators were also met or exceeded. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The rigorous policy and planning program for providing public access for recreation and education; ▪ The availability of specialized expertise in recreation and education; ▪ Numerous examples of the development, expansion, and management of high-quality recreational sites; ▪ The use of site-specific brochures and other mechanisms for providing information about recreation opportunities and about the BP&L's multiple-use land management programs; and ▪ The aggressive program for acquiring lands with significant recreational potential in conjunction with the expansion of the land base of managed forests.
4.1.1.1.4. Program participants shall ensure that long-term harvest levels are sustainable and consistent with appropriate growth and yield models and written plans.	<p>The Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The calculated allowable annual cut is quite conservative relative to regional, long-term growth rates and is set below that of many other landowners; ▪ Documented harvest levels at the state level have consistently been below the calculated allowable annual cut; and ▪ The recent comprehensive inventory for all lands in the timber management base.

Findings and Supporting Evidence

Objective 2. Ensure long-term forest productivity and conservation of forest resources through prompt reforestation, soil conservation, afforestation, and other measures.	Objective 2 has been met by the Bureau of Parks and Lands. Four out of five Performance Measures have been met (one was outside the scope). A minor non-conformance was found for one Core Indicator and the corresponding Performance Measure.
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Performance Measure	Indicator(s)
4.1.2.1.1. Program participants shall reforest after final harvest by planting or direct seeding within two years, or by planned natural regeneration methods within five years.	All Core Indicators were met, and a voluntary indicator was also met. The Performance Measure has been met by the BP&L because of these key reasons: <ul style="list-style-type: none"> ▪ IRP and silvicultural policies favor natural regeneration and multi-aged management; and ▪ Observations of over 40 recent or ongoing harvest sites did not show any regeneration failures or issues; and ▪ Evidence that foresters understand regeneration and are successfully regenerating all sites where this is a goal.
4.1.2.1.2. Program participants shall promote state-level reporting of the overall rates of reforestation success and afforestation.	The Core Indicator was met. The Performance Measure has been met by the BP&L because of these key reasons: <ul style="list-style-type: none"> ▪ State-level reporting is a Bureau requirement; and ▪ The BP&L 's Forest Certification Manual, which details the SFI program responsibilities.
4.1.2.1.3. Program participants shall use forest chemicals prudently (follow all applicable label requirements, Best Management Practices (BMPs), and meet or exceed laws and regulations concerning the use of fertilizers, herbicides, and other forest chemicals) to improve forest health and productivity, while protecting employees, neighbors, the public, and the forest environment.	All Core Indicators were met or exceeded, and several voluntary indicators were also met or exceeded. The Performance Measure has been exceeded by the BP&L because of these key reasons: <ul style="list-style-type: none"> ▪ The BP&L employs herbicides rarely (in conjunction with management of special habitat); ▪ Staff responsible for pesticide use are trained and licensed; and ▪ Regulations and laws are available at all appropriate locations.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
<p>4.1.2.1.4. Program participants shall implement management practices to protect and maintain forest and soil productivity.</p>	<p>Two of three Core Indicators were met, but a minor non-conformance relating to the effective use of Best Management Practices (BMPs) was determined for Core Indicator 3: “Utilize Erosion Control Measures to minimize the loss of soil and site productivity”. There is a minor non-conformance for the Performance Measure overall.</p> <p>The Performance Measure has been generally met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ Demonstrated reuse of existing skid trails and logging roads; ▪ The BP&L generally uses winter logging, and soil and watercourse/wetland impacts are extremely limited; ▪ The compartment exam procedure includes designation of sensitive sites, facilitates the protection of these sites in project design and allows the selection of low-impact logging equipment; ▪ Most BMPs for timber harvest and road design and implementation are utilized; and ▪ All BP&L staff has recently received BMP training, and all harvests are under the jurisdiction of experienced, licensed professional foresters. <p>The team found a minor non-conformance relating to the effective use of Best Management Practices (BMPs) which falls under Core Indicator 3 “Utilize Erosion Control Measures to minimize the loss of soil and site productivity”. BP&L staff did not contest the Audit Team’s assertion that BMP compliance could be improved, particularly waterbars and other measures to drain water from skid roads, skid trails, and winter haul roads. As a result, we observed soil loss and sedimentation in several post-harvest locations in our sample where BMPs are not being fully implemented.</p> <p>The BP&L has begun work on resolving this minor-non-conformance, and the following steps will be taken by June 1, 2002:</p> <ul style="list-style-type: none"> ▪ Develop post-harvest monitoring plan; ▪ Conduct Level 2 BMP training for appropriate staff; ▪ Maine’s BMP Coordinator (an employee of the Maine Forest Service) will review and revise guidelines for winter roads on public lands; and ▪ Require pertinent BMPs be followed by contractors as referenced in standard timber sale contract.
<p>4.1.2.1.5. Program participants shall manage so as to protect forests from damaging agents such as wildfire, pests, and diseases to maintain and improve long-term forest health and productivity.</p>	<p>All Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The Integrated Resource Policy provides direction to manage so as to minimize forest health risks; ▪ Lands are managed to reduce the risk from future spruce budworm attacks by favoring resistant species; ▪ All field personnel carry fire tools in their vehicles; and ▪ There is a cooperative fire protection agreement with the Maine Forest Service.
<p>4.1.2.1.6. Program participants that utilize genetically improved seedlings, including those derived through biotechnology, shall use sound scientific methods and follow all appropriate federal and state regulations and other internationally applicable</p>	<p>This Performance Measure was determined to be outside the scope of the audit because The BP&L of the State of Maine has not conducted, and has no plans to conduct, artificial regeneration of its forestlands following harvest. Thus, this SFI Performance Measure addressing genetically improved seedlings and biotechnology is outside the scope of its activities, and the SFI Certification audit.</p>

Findings and Supporting Evidence

Performance Measure	Indicator(s)
protocols.	

Findings and Supporting Evidence

Objective 3. Protect the water quality in streams, lakes, and other waterbodies by implementing riparian protection measures based on soil type, terrain, vegetation, and other applicable factors.	Objective 3 has been met by the Bureau of Parks and Lands. All four Performance met requirements, and all Core Indicators have been met or exceeded.
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Performance Measure	Indicator(s)
4.1.3.1.1. Program participants shall use BMPs developed under Environmental Protection Agency (EPA) approved state water quality programs and meet or exceed all applicable state water quality laws and regulations and the requirements of the federal Clean Water Act.	<p>All Core Indicators were met, and the Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ Policies and plans incorporate principles of BMPs in a well-integrated fashion; ▪ Timber sale contracts include BMP provisions relating to erosion and sediment control and avoidance of impacts to soil and water quality; and ▪ All BP&L staff have recently received BMP training, and all harvests are under the jurisdiction of experienced, licensed professional foresters.
4.1.3.1.2. Program participant shall develop (where they do not currently exist), implement, and document riparian protection measures for all perennial streams and lakes and involve experts at the state level to help identify goals and objectives for riparian protection	<p>All Core Indicators were met, but one voluntary indicator was not fully met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ IRP elevates water quality protection to an extremely high priority throughout its entire land management program; ▪ Streams and other riparian features on ownership are well mapped and documented in plans, compartment exams, and prescriptions; ▪ Rigorously implemented riparian protection, including stream protection buffer widths and strong reliance on winter harvesting, substantially exceeds all state and federal requirements. <p>Field evidence was good for most provisions of Voluntary Indicator 3 “ Appropriate practices in or adjacent to riparian zones may include: a) sediment filters such as straw bales, filter fences, and sediment catchment basins, b) use of temporary stream crossings and skidder bridges, c) upgrading of substandard culverts, d) seeding roadsides and other exposed soil areas”. Sediment filters were lacking in several locations where their use would have captured sediments close to their sources on logging roads. This lack was generally associated with winter logging roads on slopes greater than 2%.</p>
4.1.3.1.3. Program participants shall, individually, through cooperative efforts or through AF&PA, provide funding for water quality research.	<p>The Core Indicator was met and the Performance Measure has been met by the BP&L because of this reason:</p> <ul style="list-style-type: none"> ▪ Evidence of the provision of substantial funding to the Cooperative Forest Research Unit of the University of Maine, College of Natural Resources, including research on “Effects of Buffer and Filter Strips on Water Quality”.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
<p>4.1.3.1.4. Program participants shall require BMP training for employees in woodland management and wood procurement operations, and shall encourage training for forest management and harvesting contractors.</p>	<p>All Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ All BP&L staff have recently received BMP training, and all harvests are under the jurisdiction of experienced, licensed professional foresters, ▪ Certified Logging Professional programs are held on Program Participant's lands, and ▪ Informal on-the-job training and review of general and site-specific BMP before and during each timber harvest.

Findings and Supporting Evidence

<p>Objective 4. Manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity by developing and implementing stand- and landscape-level measures that promote habitat diversity and the conservation of forest plants and animals.</p>	<p>Objective 4 has been met by the Bureau of Parks and Lands. Two of three Performance Measures were met and one was exceeded. In addition all Core Indicators and numerous Voluntary Indicators have been met or exceeded.</p>
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Performance Measure	Indicator(s)
<p>4.1.4.1.1. Program participants shall have policies, programs, and plans to promote habitat diversity at stand and landscape levels.</p>	<p>All Core Indicators were met or exceeded, and several voluntary indicators were also met. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The Integrated Resource Policy, IRP, “Wildlife Guidelines for the Public Reserve Lands”, Unit Plans; compartment exams, and prescriptions combine to promote habitat diversity at stand and landscape levels, ▪ This overall harvest planning strategy effectively incorporates diversity goals for indigenous flora and fauna through ecological reserves based on a landscape analysis and the retention of significant minor community components including less common overstory species (e.g. cedar) and unique understory species, all ensuring the retention over time of a diverse array of natural communities; ▪ Wildlife guidelines and riparian buffers were generally met and often exceeded, with some foresters going beyond existing standards for the protection of important habitat areas (deer yards, hawk nests); ▪ Policies and programs serve to protect federally and state listed threatened and endangered species; and ▪ The use of the Maine Natural Areas Program to screen lands for unique natural communities.
<p>4.1.4.1.2. Program participants shall, individually, through cooperative efforts, or through AF&PA, provide funding for research to improve the science and understanding of wildlife management at stand or landscape levels, ecosystem functions, and the conservation of biological diversity.</p>	<p>The Core Indicator was met, and the Performance Measure has been met by the BP&L because of this key reason:</p> <ul style="list-style-type: none"> ▪ Evidence of substantial funding to the Cooperative Forest Research Unit of the University of Maine, College of Natural Resources, including research on habitat diversity and the conservation of forest plants and animals.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
<p>4.1.4.1.3. Program participants shall apply knowledge gained through research, science, technology, and field experience to manage wildlife habitat and contribute to the conservation of biological diversity.</p>	<p>All Core Indicators and several voluntary indicators that were investigated were also met. (Note: The audit protocol does not include auditing all voluntary indicators.) The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The use of an ecological reserve evaluation process based on objective landscape analysis by trained ecologists; ▪ The Silviculture Advisory Committee serves to bring new research and techniques to BP&L staff's attention; ▪ Cooperative agreements to ensure protection of fisheries and wildlife resources and T&E species provide avenues for application of new knowledge; ▪ Foresters apply techniques to diversify stand structure; ▪ Annual staff training programs are utilized to provide new information and techniques ▪ Long-term commitment to, and implementation of, an internal program that utilizes an experienced, dedicated wildlife biologist; and ▪ Exceptional and very unusual degree of interagency cooperation between IFW & BP&L maintains a wildlife biologist in both organizations, making for extremely effective implementation of both agencies wildlife management mandates.

Findings and Supporting Evidence

Objective 5. Manage the visual impact of harvesting and other forest operations.	Objective 5 has been exceeded by the Bureau of Parks and Lands. Three of four Performance Measures were exceeded, the fourth was met, all Core Indicators have been met, several Core Indicators were exceeded, and several Voluntary Indicators were also met.
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Performance Measure	Indicator(s)
4.1.5.1.1. Program participants shall have policies, programs, and plans to manage the impact of harvesting on visual quality.	<p>The Core Indicators were met, and three of four additional Voluntary Indicators were also met. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The Integrated Resource Policy (IRP), Unit Plans, compartment exams, and prescriptions combine to provide a comprehensive planning framework for effectively managing the impact of harvesting on visual quality; ▪ Specialized expertise is utilized in the review of plans and harvests as appropriate; ▪ All staff are trained in forest management aesthetics; and ▪ The resource allocation system, the silvicultural strategies, and the nature of this landscape combine to minimize the impact of harvesting on visual quality, which was extensively confirmed during the field audit by observing much of the ownership while traveling between sample sites. <p>Voluntary Indicator 5 “A landscape design system to recognize visually sensitive situations...” was not fully met because of the lack of a computerized system for simulation or analysis. However, this lack has not affected performance, which was assessed as being excellent with respect to visual management. The BP&L is still in the process of developing its implementation programs for policies relating to the visual impact of harvesting activities.</p>
4.1.5.1.2. The Bureau shall develop and adopt appropriate policies for managing the size, shape, and placement of clearcut harvests. Clearcut harvests will be no larger than 20 acres, unless a documented need exists for reasons consistent with those specified for clearcuts larger than 20 acres in Maine’s Forest Practices Act.	<p>The Core Indicators were met. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The 20 acre maximum clearcut standard far exceeds SFI standard for 120 acres; ▪ IRP and state law and regulations also restrain clearcut size and placement; and ▪ The Bureau achieves desired, natural regeneration through extensive use of the shelterwood regeneration method.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
<p>4.1.5.1.3. Program participants shall adopt a “green up” requirement under which past clear-cut harvest areas must have trees at least three years old or five feet high at the desired level of stocking before adjacent areas may be clear-cut; or companies may adopt other, more comprehensive methods that provide age, habitat, and aesthetic diversity.</p>	<p>The Core Indicators were met. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The extensive use of the shelterwood regeneration method, including irregular or extended shelterwood variants that develop large areas of young trees larger than three feet tall before overstory trees are cut, effectively far surpasses the performance measure on most of the ownership; ▪ Compartment exam and prescription process and associated record-keeping ensures green-up adjacency requirements are met; and ▪ The IRP combined with state law and regulatory requirements dictate performance beyond the SFI requirements.
<p>4.1.5.1.4. Program participants shall use harvest methods, age classes, and judicious placement of harvest units to promote diversity across the forest landscape.</p>	<p>The Core Indicator and the Voluntary Indicator were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The BP&L implements a comprehensive Unit Planning and compartment planning process which requires spatial and temporal planning for harvest units, ensuring diversity of forest cover types on most of the ownership; and ▪ Harvest records, maps, and GIS delineate past and proposed harvest units, and can be used by planners to assess landscape visual diversity.

Findings and Supporting Evidence

<p>Objective 6. Manage program participant lands of ecologic, geologic, or historic significance in a manner that recognizes their special qualities.</p>	<p>Objective 6 has been exceeded by the Bureau of Parks and Lands. The Performance Measure and one Voluntary Indicator have been exceeded, and the Core Indicators and two additional Voluntary Indicators were met.</p>
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Performance Measure	Indicator(s)
<p>4.1.6.1.1. Program participants shall identify special sites and manage them in a manner appropriate to their unique features. Program participants are encouraged to cooperate with organizations having expertise in protecting special sites to advise on how these lands can best be managed to maintain their unique character.</p>	<p>The Core Indicators were met, and several voluntary indicators were also met or exceeded. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ Policy and procedures for identifying and mapping special sites are well developed, and utilize data and advice from outside sources including the Maine Natural Areas Program; ▪ The resource allocation system contained in the IRP assigns the highest degree of protection to natural areas, historic/cultural areas, and ecological reserves; ▪ The recently established reserve system is based on objective landscape analysis with input from advisory committee; ▪ Unit plans are developed using a process that allows substantial outside review and comment; ▪ Small-scale special sites are noted by field foresters during compartment exams or sale layout and are protected as appropriate; and ▪ Objective monitoring protocols are being developed with input from knowledgeable scientists.

Findings and Supporting Evidence

Objective 7. Promote the efficient use of forest resources.	Objective 7 has been met by the Bureau of Parks and Lands. The Performance Measure and both Core Indicators were met.
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Performance Measure	Indicator(s)
4.1.7.1.1. Program participants shall employ appropriate forest harvesting technology, “in-woods” manufacturing processes, and practices to minimize waste and ensure efficient utilization of trees harvested, where consistent with other SFIS objectives.	<p>Both Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The BP&L has written utilization guidelines and contract provisions specifying wood utilization requirements; ▪ Foresters check in the woods and log yard to ensure that contractors comply with all utilization standards; ▪ The contractor evaluation process and crew evaluation process include utilization reviews; and ▪ Many harvest landings and treated forests where wood utilization was excellent were observed.

Findings and Supporting Evidence

<p>Objective 8. Broaden the practice of sustainable forestry by cooperating with forest landowners, wood producers, consulting foresters, and program participants' employees who have responsibility in wood procurement and landowner assistance programs.</p>	<p>Objective 8 has been met by the Bureau of Parks and Lands. All applicable Performance Measures and Core Indicators have been met or exceeded.</p>
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Performance Measure	Indicator(s)
<p>4.2.1.1.1. Program participants shall encourage landowners to reforest following harvest and to use best management practices by providing information on the environmental and economic advantages of these practices.</p>	<p>The BP&L is the designated forest resource management agency of the State of Maine, while its sister agency, the Forest Service, is specifically charged by the State Legislature with responsibility for landowner assistance programs. Consistent with this division of responsibility and authority, the BP&L does not have procurement foresters and provides only limited information to landowners regarding the benefits of reforestation and BMPs. This SFI Performance Measure is beyond the scope of the agency's legislatively assigned authorities, and is therefore is outside the scope of the audit.</p>
<p>4.2.1.1.2. Program participants shall work closely with state logging and/or state forestry associations, appropriate agencies, and others in the forestry community to further improve the professionalism of wood producers by establishing state groups (where none exist) and by cooperating with existing state groups to promote the training and education of wood producers in: Awareness of sustainable forestry principles; Using best management practices, including road construction and retirement, site preparation, streamside management, etc.; Regeneration, forest resource conservation, and aesthetics; Awareness of responsibilities under the Endangered Species Act and other measures to protect wildlife habitat; Logging safety; OSHA and wage and hour rules; Transportation; Business management; and Public policy and outreach.</p>	<p>All Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The Forest Certification Manual provides a policy statement of intention to actively participate in the SIC (the BP&L very recently joined the SFI Program and its involvement is still ramping up); ▪ The BP&L has a representative on the Maine SIC; and ▪ The BP&L has hosted logger-training workshops on its lands.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
<p>4.2.1.1.3. Program participants shall support and promote efforts of state groups to sponsor training and education programs for wood producers, employees involved in procurement and landowner assistance, and contractors.</p>	<p>All Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The Forest Certification Manual provides a policy statement of intention to actively participate in the SIC (the BP&L very recently joined the SFI Program and its involvement is still ramping up); ▪ The BP&L has a representative on the Maine SIC; and ▪ The BP&L has hosted logger-training workshops on its lands, including the Certified Logging Professional program.
<p>4.2.1.1.4. Program participants shall annually report:</p> <ul style="list-style-type: none"> ▪ the number of landowners who receive information about the SFI program, forest regeneration, BMPs, and wildlife habitat management from contractors, company employees, and others; ▪ the percentage of wood delivered by qualified logging professionals. 	<p>Because BP&L does not procure wood or have a landowner assistance program, this Performance Measure and associated Core Indicators are outside of the scope of its activities and the SFIS Certification Audit. AF&PA will be issuing an Interpretations Report clarifying the language in Core Indicators #1 and 2 so that it clearly does not apply to Program Participants that only manage land and do not procure wood.</p>
<p>4.2.1.1.5. Program participants shall encourage landowners to utilize the services of qualified resource professionals and qualified logging professionals in applying principles of sustainable forest management on their lands.</p>	<p>The BP&L is not the Maine agency with responsibility for encouraging landowners to utilize the services of qualified resource and logging professionals. The BP&L is the designated forest resource management agency of the State of Maine, while its sister agency, the Maine Forest Service, is specifically charged by the State Legislature with responsibility for landowner assistance programs. Consistent with this division of responsibility and authority, the BP&L does not have procurement foresters and provides only limited information to landowners regarding the benefits of reforestation and BMPs. This SFI Performance Measure is beyond the scope of the agency's legislatively assigned authorities, and is therefore outside the scope of the audit.</p>
<p>4.2.1.1.6. Program participants shall ensure that their commitment to the SFIS principles is communicated throughout their organizations — particularly to mill and woodland managers, wood procurement operations, and field foresters.</p>	<p>All Core Indicators were met. The Performance Measure has been exceeded by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ All staff encountered, know of and are very involved in the BP&L's commitment to the SFI; and ▪ The Forest Certification Manual clearly states this participation.
<p>4.2.1.1.7. Program participants shall support and promote efforts by consulting foresters, state and federal agencies, state groups, and programs like the American</p>	<p>The Core Indicator was met, and several voluntary indicators were also met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The BP&L staff actively participate in professional organizations such as the SAF and Tree Farm; and ▪ The BP&L has a representative on the Maine SIC.

Findings and Supporting Evidence

Performance Measure	Indicator(s)
<p>Tree Farm System®, educate and assist forest landowners, and encourage them to apply principles of sustainable forest management.</p>	
<p>4.2.1.1.8. Program participants shall clearly define and implement their own policies, programs, and plans to ensure that mill inventories and procurement practices do not compromise adherence to the principles of sustainable forestry.</p>	<p>The BP&L is a land management agency only, and does not procure wood or supply mills with wood. As such, the agency is not in a position to influence mill inventories. Consequently, this SFI Performance Measure does not apply.</p>

Findings and Supporting Evidence

Objective 9. Publicly report program participants' progress in fulfilling their commitment to sustainable forestry.	Objective 9 has been met by the Bureau of Parks and Lands. The Performance Measure and all Core Indicators have been met or exceeded.
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Performance Measure	Indicator(s)
4.3.1.1.1. Program participants shall report annually to the SFI program on their conformance with the SFIS.	<p>All Core Indicators were met or exceeded. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ A procedure exists to accumulate the necessary information and report it, with participation at senior levels in the organization, based on similar requirements for reporting to state agencies and oversight groups; and ▪ The BP&L very recently joined the SFI Program and no reporting deadlines have yet occurred.

Findings and Supporting Evidence

Objective 10. Provide opportunities for the public and the forestry community to participate in the commitment to sustainable forestry.	Objective 10 has been met by the Bureau of Parks and Lands. One Performance Measure was met, one Performance Measure has a minor non-conformance, and several Voluntary Indicators were met.
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Performance Measure	Indicator(s)
4.3.2.1.1. Program participants shall support and promote, at the state or other appropriate levels, mechanisms for public outreach, education, and involvement related to forest management such as: 800 numbers; environmental education; and/or private and public sector technical assistance programs.	<p>The Core Indicator was found to have a minor non-conformance, and numerous voluntary indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The BP&L supports the “Forest Education Program at Yankee Woodlot” and conducts joint resource management projects with external groups such as the Maine Appalachian Trail Club “Care” Committee; ▪ The BP&L produces brochures addressing its recreation programs and activities in which it covers its wildlife, forestry, watershed, and other activities related to the environment; ▪ The BP&L has a representative on the Maine SIC. <p>The minor nonconformance relates to the specific requirement to provide support for the SIC’s efforts in public outreach. Although the BP&L does public outreach, one Core Indicator requires involvement at the SIC level.</p> <p>The BP&L has begun work on resolving this minor-non-conformance. The following steps will be taken by June 1, 2002</p> <ul style="list-style-type: none"> • BP&L staff will attend the next Maine SIC meeting • BP&L staff will meet with Maine SIC coordinator Pat Sirois
4.3.2.1.2. Program participants shall establish, at the state or other appropriate levels, procedures to address concerns raised by loggers, consulting foresters, employees, the public or program participants regarding practices that appear to be inconsistent with the SFIS principles and objectives.	<p>A minor non-conformance was found for the Core Indicator and the Performance Measure because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The BP&L has a representative on the Maine SIC, very recently joined the SFI Program, and is ramping up its involvement; and ▪ No specific involvement in the development or implementation of the inconsistent practices process has occurred beyond learning how the program works. <p>The BP&L has begun work on resolving this minor-non-conformance. The following steps will be taken by June 1,, 2002</p> <ul style="list-style-type: none"> • BP&L staff will attend the next Maine SIC meeting • BP&L staff will meet with Maine SIC coordinator Pat Sirois

Findings and Supporting Evidence

Objective 11. Promote continual improvement in the practice of sustainable forestry and monitor, measure, and report performance in achieving the commitment to sustainable forestry.	Objective 11 has been met by the Bureau of Parks and Lands. The Performance Measure and all Core Indicators have been met or exceeded.
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Performance Measure	Indicator(s)
4.4.4.1.1 Program participants shall establish a management review system to examine findings and progress in implementing the SFI program and policies, to make appropriate improvements in policies and plans, and to inform their employees of changes.	<p>The Core Indicators were met. The Performance Measure has been met by the BP&L because of these key reasons:</p> <ul style="list-style-type: none"> ▪ The commitment to the SFI Program and its implementation are generated at the highest levels of the organization; ▪ Staff, including foresters, specialists, and technicians actively participate in the SFI program and have demonstrated commitment to improve all practices and the overall forestry knowledge base; ▪ Regular SFI Program meetings have occurred, and are planned for the future; and ▪ The rapid decision at an early stage to implement the 2001 Edition of the SFI Standard, despite the right to use the 2000 Edition.

Suggestions for Improvement

Project overview

The Andersen/Interforest verification team performed an independent third party verification of the American Forest & Paper Association's Sustainable Forestry Initiative Standard – 2001 Edition (SFIS) and determined the objectives were met by The Bureau of Parks and Lands (BP&L) in all material respects. In addition, BP&L exceeded the standard in three areas: providing recreation and education opportunities, ecological and historical land management, and managing the visual impact of harvesting. This portion of the SFI report indicates both the strengths of BP&L's SFI program as well as opportunities for improvement for BP&L to consider.

Overall assessment

The Andersen/Interforest SFI verification team was consistently impressed with the level of commitment and professionalism of BP&L natural resources staff charged with managing the public's forests. Although a few areas could be improved, it is clear that the staff is striving to implement an innovative and well-crafted Integrated Resource Policy (IRP), and clearly, they are succeeding in most aspects of implementation. Further, the commitment of the staff to continuous improvement in its forestry program is outstanding.

High-level strengths of the current program:

- The Integrated Resource Policy, which we view as a politically intelligible strategic document to guide the Bureau in its management program;
- The baseline appreciation and acceptance by entire staff of the need to manage the land base for ecological values;
- The presence of a wildlife biologist who is effectively utilized throughout the agency for land acquisition, management planning, and implementation of timber harvests, a recreation specialist and a historic site specialist who have on-the-ground responsibilities for land management;
- The high quality of the site-specific visual management;
- The positive, opportunistic approach shown for many silvicultural activities, demonstrating a degree of patience and willingness to nurture stands that occasionally raises to the level of restoration;
- The use of adaptive management approach (try, monitor, adjust, repeat) for selected high profile or difficult issues (deer management, beech bark disease);
- The positive approach to the audit, with resource professionals being open, receptive, and well organized;
- Policies in the newly adopted IRP emphasize substantial retention of vertical structure on most areas (over 80% of the managed strata) using selection and shelterwood-with-reserves prescriptions;

Suggestions for Improvement

- All prescriptions follow a rigorous pre-harvest survey and prescription process, which is peer-reviewed in-house to varying degrees depending on the public sensitivity of the proposed operation;
- Over 70% if all timber sales are marked under direction of professional staff; this level of personal attention to prescription details is far above that most of the region's large landowners, most of whom mark few or no harvests, and
- Recognition by the BP&L that there is a need for additional staff and an effort underway to begin to meet this need.

High-level process and control improvement opportunities:

- Specialized staff (available to all regions) are needed for silviculture/mensuration/modeling, landscape-level analysis and management, and roads to enhance the management program and to meet the increasing public expectations for state-of-the-art land stewardship;
- Additional regional staff will be required to address administrative burdens of ever-increasing public demand for recreational use, including hunting, snowmobiling, camping, fishing, and non-traditional activities;
- A review of demands placed on regional managers (who appear to be currently over committed administratively, preventing them from being more involved in on-the-ground activities) is warranted;
- Internal auditing, monitoring, and exchange of ideas and information across regions need to be developed or enhanced;
- Management needs to develop a rigorous process to translate policies into action on the ground, particularly policies introduced in the new IRP; and
- Greater emphasis should be placed on timely implementation of recent scientific advances in management of forests for ecological values and for the maintenance of biological diversity. Additional training for BP&L staff and involving other resource professionals from other agencies within state government will be helpful in this area.

Suggestions for Improvement

Inventory, Analysis and Planning

Overall assessment

The BP&L carries out its inventory, analysis and planning functions in an exceptionally integrated way. Although no single, formal, computer based "landscape analysis system" is in place, the BP&L does sophisticated planning and analysis at the landscape level by using an informal but effective "expert system" that gathers pertinent information from all available sources and focuses it through a unit examination process. This works particularly well where dedicated staff specialists are available (e.g. wildlife biology and recreation planning and management). This effectiveness is evidenced by, for example, careful attention to deer wintering areas and critical viewsheds, both of which are defined and managed at the landscape scale.

Areas for improvement

Objective 1. Broaden the practice of sustainable forestry

- Planning and aspects of implementation would benefit from a system that can perform spatially based computer analysis.
- There is a need to analyze and develop more a sophisticated Allowable Annual Cut analysis incorporating computer simulation methods, especially at Sustainable Harvest Unit levels.
- The forest typing system appears to be relatively crude and thus lacks utility at the field prescription level. Staff should be strongly encouraged to refine typing as they do compartment exams and implement prescriptions..

4.1.1.1.1, 4.1.1.1.4.

Suggestions for Improvement

Sustaining the Productive Capacity of the Site, Including Best Management Practices, and Soil Conservation

Overall Assessment

The approach taken to soil and water protection and maintenance of soil and site productivity was found to be generally quite good. Harvest design and layout, the use of winter logging on sensitive sites, and careful attention to details during project implementation have resulted in generally good performance in this area. Post harvest site stabilization could be improved, particularly water management immediately following harvest and before seeding and natural revegetation have occurred.

Areas for improvement

Objectives 2 and 3: Ensure long-term forest productivity and conservation of forest resources...Protect the water quality in streams, lakes, and other waterbodies.

- Develop a plan and schedule for resolution of identified issues and problems relating to inadequate use of BMPs.
- Develop procedures to ensure systematic compliance with BMPs, including internal audits.
- Enhance communications within the Bureau for sharing methods dealing with difficult issues such as stabilizing winter logging roads.
- Develop training methods for harvesting and road-building personnel (employees of contractors who may not have individually received comprehensive CLP or similar training).
- Explore alternatives to winter roads where needed to minimize erosion potential.

4.1.2.1.4, 4.1.3.1.1, and 4.1.3.1.2

Suggestions for Improvement

Silviculture and Regeneration

Overall Assessment

The silvicultural systems used by BP&L are reasonably sophisticated and quite contemporary relative to typical practice on similar-sized land bases in the Acadian region of northeastern North America. Systems focus exclusively on natural regeneration, which is virtually always dependable and abundant. Policies in the newly adopted IRP emphasize substantial retention of vertical structure on most areas (over 80% of the managed strata) using selection and shelterwood-with-reserves prescriptions. All prescriptions follow a rigorous pre-harvest survey and prescription process, which is peer-reviewed in-house to varying degrees depending on the public sensitivity of the proposed operation. Over 70% of all timber sales are marked under direction of professional staff; this level of personal attention to prescription details is far above that most of the region's large landowners, most of whom mark few or no harvests.

Areas for improvement

Objective 2: Ensure long-term forest productivity ... through prompt reforestation... afforestation, and other measures

- The BP&L has opportunities to enhance future yields and improve species composition in sapling-size stands, which it is generally not exploiting on as many acres as could be considered. There is opportunity to commit more time and resources to precommercial investments.
- Although prescriptions are usually well conceived and prescribed, outcomes may not always be optimal. Problems occasionally result from the emphasis on stumpage sales and the need to select high-bid contractors who must be supervised closely and frequently. Typically in the region, large landowners develop long-term contractual relationships with harvesting contractors for logging services, thereby obviating many of these difficulties. Existing State of Maine purchasing policies and regulations preclude the adoption of this approach at this time. The BP&L should work with responsible agencies to increase the flexibility in the process of developing and implementing timber sale contracts to better achieve goals and objectives for state lands.
- Although adequate regeneration was observed in every field site visited, there is a need to document the process for judging adequate regeneration.

4.1.2.1.1, 4.1.2.1.6

Suggestions for Improvement

Management for Biodiversity at Stand and Landscape Levels

Overall Assessment

The BP&L's management for biodiversity at the stand and landscape levels is guided by several key planning documents, including a recently revised Integrated Resource Policy (IRP), Wildlife Guidelines for the Public Reserve Lands, and Unit Plans. BP&L foresters consider these documents as they develop and implement harvest prescriptions. Foresters can also rely on the assistance of the Department of Inland Fish and Wildlife's (DIFW) Certified Wildlife Biologist assigned for full-time duty to the BP&L when developing prescriptions, during harvest, and in post-harvest monitoring.

At the stand level, BP&L foresters readily accept the responsibility of conserving such features as downed woody debris, cavity trees, hawk nests, and vernal pools. Conservation of these features contributes greatly to stand level biodiversity. At the landscape level, the BP&L does not emphasize habitat-altering prescriptions such as clearcuts and overstory removal associated with shelterwood harvesting. This approach tends to conserve biodiversity at the landscape level. In addition, the BP&L has recently created an ecological reserve system that includes reserves on most of the larger parcels. These areas, which will be excluded from timber harvest, will undoubtedly serve as important reserves of plant and animal species.

BP&L should consider providing additional training to foresters in wildlife habitat ecology and management (see: <http://www-unix.oit.umass.edu/~wfcon564/> as an example of the type of information that could be covered). Such training should allow the foresters and technicians to better understand policies in the IRP and to become involved in implementing them.

Areas for improvement

Objective 4: Manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity.

- Work with IFW on BMPs for brook trout passage through culverts.
- Update programs for wildlife habitat management to incorporate landscape level biodiversity. Provide support for the implementation of IRP's biodiversity requirements for unit plans and harvest prescriptions.

Suggestions for Improvement

- Clarify policies on the retention and regeneration of somewhat uncommon species such as white pine (locally), red oak, hemlock (locally) and ash. Update wildlife habitat management guidelines and incorporate “Biodiversity in the Forests of Maine”. Provide training in how to use guidelines and clearer direction for their implementation.
- Clarify which resources require buffers, including training in buffer application while considering the quality and ecological context of the resource.
- The BP&L should develop specific objectives relating to the distribution of stand types and age classes by management unit or sustainable harvest unit and should relate these to the perceived natural distribution of stand types and age classes. The BP&L should utilize existing information regarding natural forest communities to guide its decisions regarding stand management decisions. This analysis should ideally occur at the landscape scale, with some consideration given to both existing forest communities and the likely effects of planned activities on lands not controlled by the state. Of course, BP&L’s forest managers must balance other objectives for state lands against landscape level diversity goals based on natural forest types when developing plans and prescriptions. Because the MNAP has expertise in defining the natural forests of Maine it should be included in this landscape level planning effort.
- Work with MDIFW biologist to develop plans to inventory BP&L lands for rare, threatened and endangered (RTE) animal species. Develop a list of priority species/habitats for each region.
- Provide additional RTE species training for all staff. This should include training from the Maine Natural Areas Program (MNAP) on how to recognize rare/rich natural communities as well as sites with potential to harbor rare plants.
- With next inventory, at a minimum, change mixed wood type to Hardwood-softwood and Softwood-hardwood.
- All future forest inventory/mapping should cross-reference MNAP Natural Communities and forest types. Additional training for foresters and forest technicians in how to recognize/map sites with high biodiversity values.
- Utilize finer scale mapping DWA, ecological reserves, and unique natural communities.
- Determine and implement training needs for foresters and forest techs, including additional specific SFI training.
- Develop transition plans for when senior staff retire. .
- Conduct internal reviews of completed harvests to evaluate compliance with policies, programs and plans, particularly silvicultural and ecological guidelines. Include monitoring of implementation of stand-level management of habitat diversity through post-harvest monitoring.

4.1.4.1.1, 4.1.4.1.3

Objective 5: Manage the visual impact of harvesting and other forest operations.

Suggestions for Improvement

- Formalize model of desired forest condition. Compare existing forests (at specific locations where there are visual concerns) to desired forest condition. Provide guidelines for foresters developing prescriptions to close the gap between existing and desired forest conditions.

4.1.5.1.1

Objective 6: Manage Program Participant lands of ecologic, geologic, or historical significance.

- Prepare management plans for all special sites, including a monitoring component.
- Maintain a commitment to cooperate in baseline studies and monitoring for ecological reserves (monitoring work has been delegated to the Maine Biodiversity Committee.) Encourage the committee to prioritize research uses of reserves and to provide a summary of the reserve system to other forest landowners.
- Foresters identify and protect small special sites in the field (small vernal pools, old growth stands), which are not consistently mapped or formally delineated. These should be mapped and otherwise recorded on GIS to ensure continuity across foresters and regions.

4.1.6.1.1

Suggestions for Improvement

Working in Cooperation with the Broad Forest Management Community to Promote Sustainable Forest Management, including Participation with the State Implementation Committee and Implementation of the SFI Program

SFI Program - Policies, Training, Education and Reporting

Overall assessment

The BP&L is working very diligently in training and educating their employees regarding the SFI Program. The majority of the employees encountered in the regional offices were aware of the SFI Program and its attributes. However improvement in the training of contracted loggers is needed. The BP&L has recently started to work towards the requirement of the SFI Program regarding the participation with the State Implementation Committee.

The BP&L is making advances in many aspects of its forest land management programs. Future versions of the SFI standard will require proof of continuous improvement, both in terms of process and results. Scientists and managers should be aware of the need to continuously improve and to document such improvements.

Areas for improvement

Objective 2: Ensure long-term forest productivity through ... other measures.

- Require CLP, Qualified Logging Professional (Southern Aroostook County Vo-Ag) or similar training for all contractors.

4.1.2.1.2, 4.1.2.1.3, 4.1.2.1.7.

Objective 8: Broaden the practice of sustainable forestry by cooperating with forest landowners, wood producers...

- Require CLP license for all contractors.

Suggestions for Improvement

- Assess opportunities for increased involvement or additional personnel to participate on the Maine SFI State Implementation Committee.

4.2.1.1.6, 4.2.1.1.2, 4.2.1.1.4, 4.3.2.1.1.

Objective 9 and 10: Publicly report progress and provide opportunities for the public and the forestry community to participate.

- Annual progress reports – seek guidance from SIC and other landowners.
- Work closely with SIC for SFI public reporting expectations.
- Review Maine SIC's inconsistent practices process and some sample reports of inconsistent practices and consider ways to support the program.

4.3.1.1.1, 4.3.2.1.1, 4.3.2.1.2

Objectives 8 and 11: Broaden the practice of sustainable forestry through cooperation and continual improvement.

- BP&L audit review team to work on reporting requirements and how to integrate with management.
- Implement the management review system for the SFI Program, as designed, while considering a more comprehensive environmental management system approach. ISO 14001 provides one model that can easily be linked to the SFI standard or broadened to include all environmental aspects of BP&L's operations.
- Additional specific SFI training throughout regions.

4.2.1.1.1, 4.4.1.1.