

Introduction:

This report summarizes the comments of the panel of technical experts appointed by the Governor to review and advise the Maine Forest Service (MFS) and the Bureau of Parks and Lands (BPL) on the outcome based forestry agreement executed between the two parties in May 2012. The comments pertain to the annual report required by the agreement, and which was provided to MFS in April 2014.

Panel of technical experts reviewing BPL's report:

1. Mike Dann, forester and forest certification auditor;
2. Gary Donovan, Certified Wildlife Biologist;
3. Maxwell L. McCormack, Jr., Research Professor Emeritus of Forest Resources, University of Maine;
4. Dave Struble, State Entomologist and Director, Forest Health & Monitoring, Maine Forest Service;
5. Peter Triandafillou VP Woodlands, Huber Resources; and,
6. Robert G. Wagner, Director, University of Maine, School of Forest Resources, and Henry W. Saunders Distinguished Professor in Forestry.

Desired outcomes of Outcome Based Forestry:

1. Compliance with the state's forest sustainability goals and outcomes for soil productivity; water quality; wetlands and riparian zones; timber supply and quality; aesthetic impacts of timber harvesting; biological diversity; public accountability; economic and social considerations; and, forest health (see Appendix, p. 6).

Findings: BPL has attained compliance with the state's forest sustainability goals.

Although the certification audit report contains insufficient data to make findings as regards "economic considerations" and "forest health," BPL staff provided additional information to support a positive finding in these two areas.

2. Continued certification to the standards of a recognized certification system, for example, American Tree Farm System, Forest Stewardship Council (FSC) and/or Sustainable Forestry Initiative (SFI), support a finding that BPL has achieved compliance with the state's sustainability goals and outcomes. Certification is a continuous process that involves regular surveillance audits and periodic recertification audits; therefore, any departures from the standards will be discovered and rectified in a timely manner. BPL is currently enrolled in both SFI and FSC and uses the former for benchmarking compliance with the state's Sustainability Standards.

Findings: BPL has maintained its certification. It received two minor nonconformances in its most recent certification audit; however, these nonconformances are administrative in nature and do not materially affect BPL's operations or participation in OBF. Two major nonconformances from the previous audit have been closed out.

3. Enhance deer wintering areas by accelerating the progression of young softwoods into winter cover status, increasing the availability of hardwood browse in close proximity to winter cover, and providing additional edge habitat.

Findings: It is too soon to evaluate this element. Only a small area of thinning has been done in the young mixed wood stands. This area is now dominated by softwoods but needs to close canopy in order to serve as winter cover. This may take ten years or so, but that would still be sooner and surer than without thinning. With only a single growing season since the seed-tree harvests, browse has not yet become available.

4. Ensure successful establishment of forest regeneration of high value species, especially yellow birch, sugar maple, and white pine, and increase growth rates and/or timber quality on site specific areas, using a variety of forest management techniques that may include but are not limited to varying intensity of timber harvest, vegetation management, matching species to site, tree improvement techniques, pre-commercial and commercial thinning, etc.

Findings: It is too soon to evaluate this element in its entirety; however, BPL reports that on the Tunk-Donnell Unit, "Ten circular fixed-area plots of 0.1 acre were established in 2012 and a total of 81 trees measured for DBH, total height, and height to live crown in November of that year. The first remeasurement was done in October, 2013. None of the crop trees on the plots had been lost, and the diameter increase averaged 3.75%, which translates to 0.28" diameter increment and 1.9 square feet of basal area per acre increase." This indicates progress toward achieving desired outcomes.

5. Conduct harvests with consideration for visual aesthetics.

Findings: BPL pays close attention to aesthetic concerns as regards all of its harvesting. For example, the SFI auditor found that BPL considered visual impacts when harvesting near Eagle Lake and had no issues.

Participant commitments: The participant agrees to and commits to the following as good faith demonstrations of its commitment to practice forestry in a manner that provides at least the equivalent forest and environmental protection as provided by existing rules and any applicable local regulations:

1. BPL shall maintain its current Forest Stewardship Council and/or Sustainable Forestry Initiative certifications (FSC: BV-FM/COC-017429; SFI: BV-SFISUS004629- 1).
 - A. BPL shall act promptly to satisfactorily address any Corrective Action Request or Nonconformance associated with its FSC and/or SFI certifications.
 - B. A member of the panel or a mutually agreeable designee shall be permitted to participate in the forest management certification audit field visits, and to provide input to the third party lead auditor on behalf of the panel.
 - C. BPL shall invite one member of the panel or a mutually agreeable designee to attend meetings of and provide input to BPL's Silvicultural Advisory Committee.

Findings: BPL has maintained its certification to the SFI standard. It closed out two major nonconformances from its previous audit report. BPL received two minor nonconformances in its most recent certification audit; however, these nonconformances are administrative in nature and do not materially affect BPL's operations or participation in OBF. BPL received a minor nonconformance for not providing publicly available summaries of its audits for

2011 and 2012. These summaries have now been sent to SFI, and the 2011 summary has been posted on the SFI web page. BPL unintentionally neglected to invite a panel member to the 2013 certification audit. A former panel member was on the Silvicultural Advisory Committee; however, BPL unintentionally neglected to invite another panel member to participate when the former panel member resigned. Both of these omissions will be corrected. Notwithstanding these omissions, panel members believe that they had ample opportunity to review records, discuss practices and policies, and to observe field operations. Their expectations and needs for explanations and answers to questions were satisfied.

2. BPL shall document and periodically provide results of its efforts to improve measurably the quantity and/or quality of its timber resource on those areas included in this application. In addition to documentation of compliance with applicable certification standards, BPL shall periodically provide evidence of attainment of the desired outcomes described in the agreement through the use of metrics outlined below”
 1. Estimates of harvest acreage for the entire projects summarized for the coming five year period by silvicultural prescription; overstory removal, commercial thinning, shelterwood, clearcut, etc.
 2. More specific annual harvesting plan which shows the planned acreage for harvest for the upcoming year (mapped and numerical count) by prescription, and with clearcuts exceeding 60 acres individually identified.
 3. Annual harvest summary, provided within 60 days of year end, showing the areas harvested over the previous year by prescription (actual versus plan). Information will be made available for sites visited by the panel. BPL will continue to provide information on acres harvested by harvest type, by township as required on the "Confidential Report of Timber Harvest." BPL will report on how its management activities are influencing white pine growth and the progression of thinned softwood (fir-dominated) stands into conforming deer winter cover.
 4. Regeneration targets and success for natural stands. Where available, information will be provided by site at the time the panel conducts field verifications.

North Region

1. Semi-commercial thinning: BPL should visit harvest areas semi-annually to track their progression to secondary and/or primary deer cover, with evidence of deer use also recorded. BPL should establish permanent growth plots along with some controls in areas not thinned. These latter could be in areas where proximity to the Allagash Wilderness Waterway make extensive harvests less practical.
2. Early successional habitat: At the same time the semi-commercial harvests are monitored, BPL should visit these hardwood/alder patch cuts to check on resprouting. BPL also should conduct spring visits to check for potential woodcock use.
3. Hardwood seed-tree harvests: BPL should conduct an initial visit at harvest plus two years to evaluate the clearcuts for regeneration species and stocking. However, the success of yellow birch and sugar maple regeneration will not be

fully apparent before year five or later, as trees grow up through the inevitable *Rubus*. Results from elsewhere give confidence that desirable regeneration will be present in sufficient numbers to produce a high value stand dominated with yellow birch and sugar maple, with some healthier appearing beech also retained to ensure mast production.

West Region

1. BPL will remeasure the 18 existing growth plots at intervals of two or three years. BPL may need to establish additional plots, both in the low-density pine management acres and in the first-entry low thinnings. In the latter these should mostly be within the DWA, assuming that the residual stand there is similar to that outside the zoned P-FW. In the low-density area, existing plots should be augmented as necessary to have at least five each in the high pine and medium pine areas.
2. BPL should monitor deer use within the Mosquito Brook deeryard on a continuing basis, though it need not be done too frequently (perhaps biannually) until that use becomes significant. Once that occurs, monitoring should include comparisons of treated and untreated acres within and proximate to the P-FW.

East Region

1. Summer/Fall 2015- Monitor growth and survival of crop trees (start a five year rotation of monitoring).

Findings: It is too soon to evaluate this element in its entirety; however, BPL reports that on the Tunk-Donnell Unit, "Ten circular fixed-area plots of 0.1 acre were established in 2012 and a total of 81 trees measured for DBH, total height, and height to live crown in November of that year. The first remeasurement was done in October, 2013. None of the crop trees on the plots had been lost and the diameter increase averaged 3.75%, which translates to approximately 0.28" diameter increment and 1.9 square feet of basal area increase." This indicates good progress toward achieving desired outcomes.

3. BPL shall report to MFS its harvest management and silvicultural metrics for the selected areas included in this application including, but not limited to:
 - A. Estimates of harvest acreage for the entire projects summarized for the coming five year period by silvicultural prescription; overstory removal, commercial thinning, shelterwood, clearcut, etc. This was provided - back pages of agreement.
 - B. More specific annual harvesting plan which shows the planned acreage for harvest for the upcoming year (mapped and numerical count) by prescription, and with clearcuts exceeding 60 acres individually identified. This was provided.
 - C. Annual harvest summary, provided within 60 days of year end, showing the areas harvested over the previous year by prescription (actual versus plan.) Information will be made available for sites visited by the panel. BPL will continue to provide information on acres harvested by harvest type, by township as required on the "Confidential Report of Timber Harvest." BPL will report on how its management activities are influencing white pine growth and the progression of thinned softwood (fir-dominated) stands into conforming deer winter cover. This was provided.

D. Regeneration targets and success for natural stands. Where available, information will be provided by site at the time the panel conducts field verifications. This was provided.

Findings: BPL provided all of the information requested above.

4. A Maine Licensed Forester within the Bureau shall review and approve BPL's Forest Management Plan.

Findings: BPL's regional managers - all Licensed Foresters - reviewed and approved BPL's Forest management and harvest plans.

5. Harvests will be laid out with consideration of visual aesthetics in areas of moderate and higher visual sensitivity. BPL's forest management staff will be proficient in managing for visual aesthetics.

Findings: BPL pays close attention to aesthetic concerns as regards all of its harvesting. This was noted in the audit report.

6. BPL will accommodate other reasonable requests for information made by MFS and the panel as mutually agreed upon.

Findings: BPL willingly provides any additional information requested by the panel.

All panel members have reviewed and approved this report.

Report submitted 03 June 2014.

APPENDIX. State of Maine Criteria, Goals, and Outcomes of Forest Sustainability.

1. Criterion 1: Soil productivity

- a. Goal: Maintain site productivity.
- b. Outcome: The landowner will maintain or improve site productivity and minimize the area in roads and yards.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

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.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

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).

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

4. Criterion 4: Aesthetic impacts of timber harvesting

- a. Goal: Minimize adverse visual impacts of timber harvesting.
- b. Outcomes:
 - 1. The landowner minimizes 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.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

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.
7. Deer wintering areas are properly identified and managed to maintain or improve their value as winter cover for deer.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

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 maintains independent 3rd party certification with a nationally recognized sustainable forestry management certification system without major, unresolved non-conformances on managed lands.
2. A Licensed Forester within the company reviews and approves the landowner's Forest Management Plan.
3. The landowner employs Licensed Foresters who are actively involved in the management, planning and supervision of operations on the land.
4. All timber harvesting contractors employ at least one person possessing Certified Logging Professional or Qualified Logging Professional certifications or the equivalent.

Finding: BPL received a minor nonconformance for not providing publicly available summaries of its audits for 2011 and 2012. These summaries have now been sent to SFI, and the 2011 summary has been posted on the SFI web

page. Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

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. Outcome: The landowner's management activities support as vibrant and diverse a forest products industry as is practicable, including loggers, truckers, and production facilities.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

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. Outcome: The landowner provides opportunities for appropriate historic and traditional recreational uses that do not conflict with the landowner's values or objectives.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.

9. Criterion 9: Forest Health

- a. Goal: The forest is healthy and vigorous with no serious insect infestations or disease outbreaks.
- b. Outcome: 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.

Finding: Based on panel and MFS staff field visits, and as corroborated by the results of BPL's certification audit, the panel concludes that BPL is achieving the outcomes for this criterion.