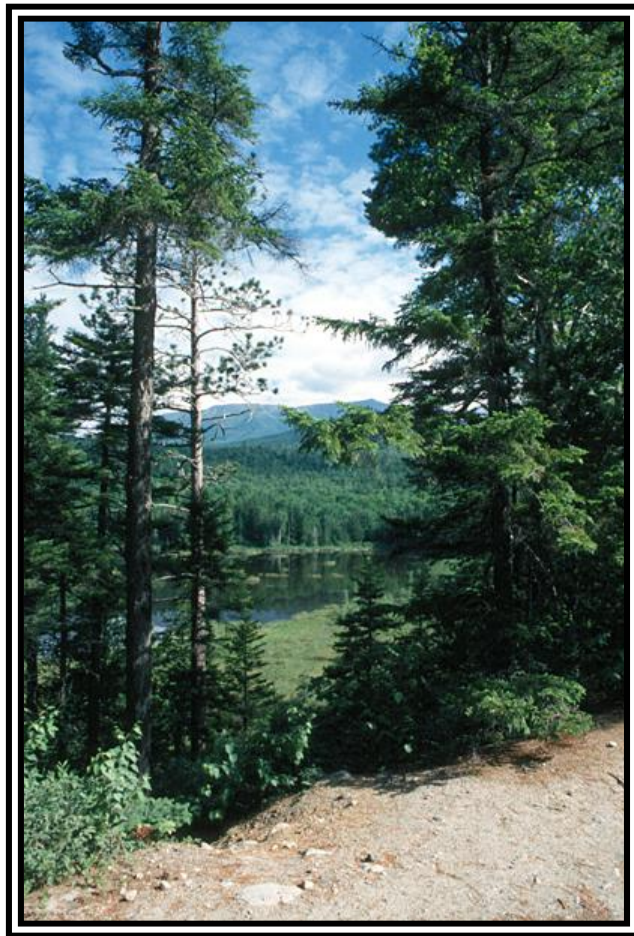


Maine Forest Service

WHERE WE ARE AND WHERE WE ARE GOING



September 8, 2006

Prepared for the Cooperative Management Review with the USDA Forest Service

Introduction

This is a summary of information on:

- The condition of Maine's forests;
- The programs of the Maine Forest Service aimed at maintaining or improving these conditions;
- The challenges that the Maine Forest Service and Maine's forests confront; and
- The actions that we plan on undertaking to address these challenges.

As the most heavily forested state in the nation, a state with a long history of active management of our forest resources, a place where outdoor recreation is enjoyed by a great many of Maine's residence and visitors, and an economy which includes 10 billion dollars and approximately 20 thousand jobs derived from the forest products industry, Maine's forests holds an especially important place in the hearts and minds of Maine's people. Established in 1891 to report on the condition of Maine's forests and control fires, the Maine Forest Service's responsibilities have become more numerous and complex over time. Forestry in Maine and the Maine Forest Service have been the source of numerous innovations - for example: the first fire tower in the United States was erected on Big Moose Mountain near Greenville, Maine; Forestry tools such as the Peavey and the Lombard Log Hauler were invented in Maine; More recently, Maine pioneered the efforts to establish the Northeast Forest Fire Compact, and annual forest inventories. Further, loggers in Maine banded together to form the Master Logger Program (an innovative 3rd party certification program for logging practices). In addition, Maine leads the nation in the proportion of its forest land which has been third party certified. The Maine Forest Service takes pride in the condition of the forest resource, our programs, and intends to continue Maine's tradition of innovation in improving the stewardship of our forest resources.

Virtually all of the efforts reported on here are result from collaboration between the Maine Forest Service and the USDA Forest Service. Many are jointly funded by the Maine Legislature and the USDA Forest Service; others such as the Federal Excess Property Program and the Forest Inventory and Analysis Program include shared responsibilities as well as shared funding between the two agencies. This is truly a collaborative effort which would not be possible without both partners participating.

Natural Resource Context

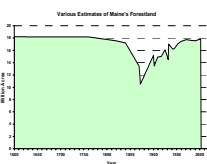
The 2005 State of the Forest Report is a keystone of the Maine Forest Service's efforts to inform Maine citizens about the condition of and trends in Maine's forests and forest economy. Pursuant to legislative direction, the report covers a number of issues including forest sustainability benchmarking, forest land ownership changes, and forest condition. This is a very brief summary of the information included in that report as it relates to the conditions of Maine's forest and the Forest Products Industry. Even more detailed information on the condition of Maine's forests and its subregions is available in 'The Forests of Maine: 2003' Resource Bulletin NE-164 September 2005. Longer summaries and the full text of both reports available at www.fs.fed.us/ne.

The Significance of Maine's Forests

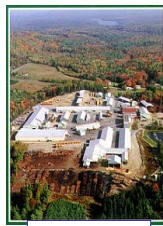
Several factors distinguish Maine's forests from others in the eastern U.S. Individually, these features are significant. In combination, they make Maine's forests unique.

- **The resilience of our forest ecosystems:** Maine's forests have been harvested for wood products for over 200 years, yet 90% of the state remains forested - the highest percentage in the country. Analysis of historical records indicates that Maine has approximately 2/3 of the stocking that it did at the time when commercial harvesting began. Further, Maine has largely maintained its forest biodiversity, with a few exceptions (e.g., caribou).
- **The dominance of private ownership of forestland:** 95% of Maine's forests are privately owned, one of the highest percentages in the country.
- **The diversity and significance of our forest resources:** In addition to a diverse timber resource, Maine's forests support many public resources, including 6,000 lakes and ponds and 32,000 miles of rivers and streams and abundant fish and wildlife resources.
- **Maine has the largest contiguous block of undeveloped forestland east of the Mississippi:** This includes approximately 10.5 million acres of unorganized territory which remain largely undeveloped forestland, most of which is actively managed for timber production.
- **The strength and diversity of Maine's forest products industry:** Maine's forest products industry accounts for approximately half of the output of the four-state region of northern New England and New York. Maine's forest landowners have markets – somewhere – for every stick of wood they harvest.
- **A long history of multiple-use management on private land and a tradition of free public access to private land:** This tradition dates to colonial times and is established in Maine common law for access to Great Ponds, navigable waters, and the coast.
- **The special connection Maine citizens have with our forests:** This heritage includes traditions of both consumptive and nonconsumptive use. Maine people care about the forests and how they are managed.

Maine's Forest are Fundamentally Important



Brook Trout



Robbins Lumber



Maine Moose. Photo Courtesy of Wit Kosinski, Brewer, Maine.



Maine Black Bear

Forests Define Maine

- 90% of Maine is forested
 - 17.7 million acres of forested lands
 - \$6.5 billion forest-based industry
 - 40.5% of all Maine's manufacturing sales -- employs over 30,000 people
 - Clean water, wildlife, fisheries
-
- We tend to take them for granted
 - They are richer and more diverse than forests in southern New England

Forest Condition

- Maine's forest inventory (Fig. 1) has stabilized over the last several years at 275 million cords – 87% more than the 1950s.
- Harvesting has stabilized at just over 500,000 acres per year, with a total harvest of just over 6 million cords per year. Harvest and growth are currently in balance at around 0.35 cords per acre per year; however, Maine's forests have the potential to grow 0.5 cords per acre per year under improved management, and some intensively managed lands can and do produce more.
- Partial harvest methods dominate forest management, accounting for just under 60% of harvest acreage. Shelterwood harvesting accounts for 36% of harvest acreage. Clearcutting now accounts for less than 5% of harvest acreage, a significant decline over the last 15 years.
- The composition of Maine's forest stands is approximately 1/3 softwood and 2/3 hardwood, while the underlying habitats are 2/3 softwood and 1/3 hardwood. This difference between habitat type and stand type is a legacy of the last spruce budworm epidemic and harvesting.
- Maine's forest stands are roughly evenly divided between sawtimber, poletimber and seedlings/sapling size stands (Fig. 2).
- With the exception of spruce and fir, sawtimber volumes of major species have steadily increased over the years (Fig. 3).
- MFS continues to monitor the development of young stands resulting from the combined impacts of the 1970 – 1990 Spruce Budworm Epidemic and extensive harvesting. Efforts to predict the timing and initial merchantability of these young stands is underway. Over the last 5 years of data collection under the new annualized inventory design (1999 – 2003), annual estimates of ingrowth (new merchantable trees since 1995) have improved from 1.53 million cords in 1999 to 1.86 million cords in 2003. If current trends continue, ingrowth is expected to increase to 2.2 to 2.3 million cords per year in 2010.

Figure 1

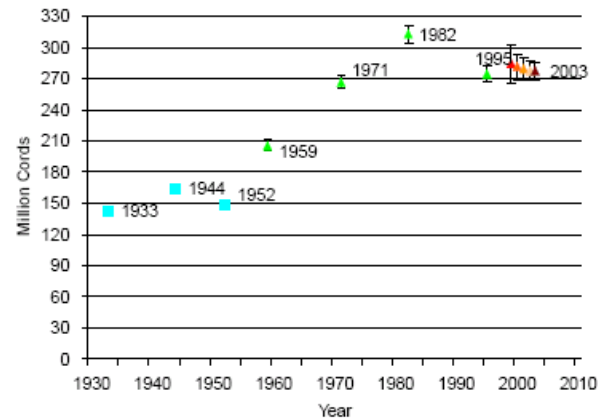


Figure 2

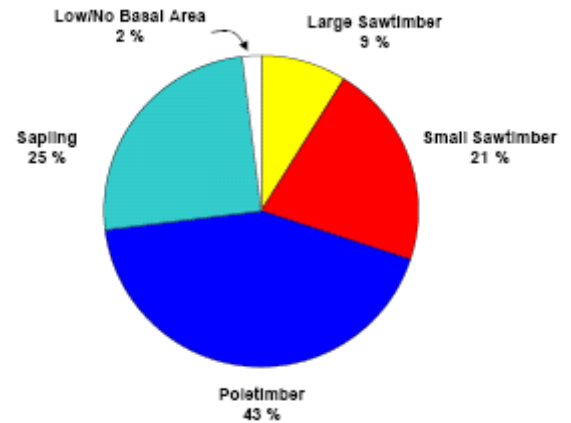
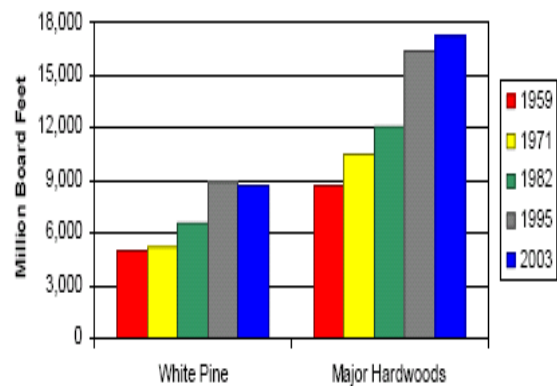


Figure 3



Forest Economy

- Maine has a highly diverse forest industry “cluster” (a mix of mutually supportive manufacturing facilities). Maine’s forest products cluster provides markets for waste products from manufacturing facilities, as well as high-grade material. Landowners have markets for everything they harvest, from the lowest grades of wood that go to biomass generation to dimension lumber and high end furniture products.
- Despite a very challenging global situation, Maine is still the #2 paper producing state in the U.S.; further, Maine’s lumber production from over 200 sawmills has more than doubled since the mid-1970’s.
- The forest products industry is still a key player in the state’s economy. Its direct annual contributions amount to \$6.2 billion; with indirect contributions, the industry’s total impact is \$10.2 billion. The industry provides over 18,000 jobs for Maine people. Forest products represent 36% of the state’s total manufacturing output.
- Maine is also a major player in the regional forest products industry. Maine produces over ½ of the wood output of the four-state region that includes New Hampshire, Vermont, and New York. Our forest products industry accounts for 40% of the value of shipments in this same region.
- Employment in the forest products industry has declined steadily (following table), as mills and harvesting technology become more efficient. While employment is down, worker productivity, average wage, capital expenditures have all increased. This is the natural evolution of a mature industry going through transition and taking steps to remain competitive in the global marketplace.

	1997	2002	% Change
Employees	23,430	18,130	-23%
Payroll (\$1,000)	\$ 900,957	\$ 838,552	-7%
Value Added (\$1,000)	\$ 2,563,869	\$ 2,526,752	-1%
Value of Shipments (\$1,000)	\$ 5,552,376	\$ 5,263,591	-5%
Capital Expenditures (\$1,000)	\$ 296,965	\$ 368,454	24%
Productivity (\$ shipments / employee)	\$ 236,977	\$ 290,325	23%
Average wage	\$ 38,453	\$ 46,252	20%

Existing Programs and Accomplishments

Enabling Statutes: 12 MRSA, Chapters 801, 803, 805, 807, 809

The Maine Forest Service is the largest, in terms of budget, or second largest, in terms of number of people employed, of the four bureaus within the Maine Department of Conservation.

The mission of the Maine Forest Service as follows:

"The key to Maine's past, present, and future quality of life and economic prosperity for its citizens is permanently linked to the condition of the State's forest resources.

The Maine Forest Service works to ensure that the trees and forestlands of Maine will continue to provide these benefits for present and future generations of Maine people.

The MFS does this by:

1. *Developing, advocating for, and promoting activities that encourage the sound long term management of the forest resources.*
2. *Protecting the forest resource from the effects of fire, insect, disease and misuse.*
3. *Providing accurate, relevant, and timely information about the forest resource.”*

The Maine Forest Service has responsibilities for a broad array of forestry issues statewide. Key programs include: forest inventory and assessment, forest fire protection and suppression, forest insects and disease monitoring and control, forestry education and training, promoting forest stewardship by assisting Maine’s forest landowners and communities, policy analysis, and the development and enforcement of forest practices regulations, as directed by the legislature.

The Maine Forest Service has a budget of approximately \$15 million, employs 130 full-time permanent staff and consists of the three major divisions described below.

Programs:

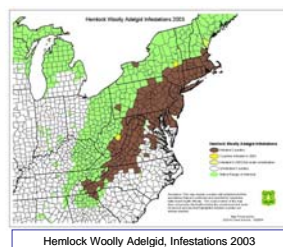
Forest Health & Monitoring Division (formerly the Insect & Disease Management Division)

The Forest Health & Monitoring Division is charged with protecting the forest, shade and ornamental tree resources of the state from significant insect and disease damage, and providing pest management and damage prevention for homeowners, municipalities, and forest landowners and managers; to thereby preserve the overall health of Maine's forest resources. To accomplish its mission, the Division of Forest Health & Monitoring gathers, analyzes, and reports pest levels and trends and similar information regarding forest condition/forest response; evaluates actual and potential impacts of such forest pests; and develops integrated pest management techniques. Additional responsibilities include providing technical assistance, implementing control actions when justified, and administering state and federal laws pertaining to insect and disease quarantine.

Forest health



Hemlock Woolly Adelgid



Hemlock Woolly Adelgid, Infestations 2003

Forest health

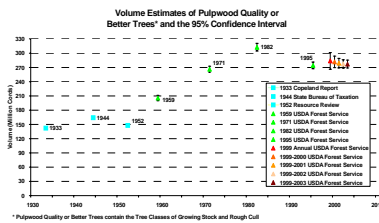
- **Insect and disease monitoring and control**
 - Hemlock Woolly Adelgid
 - Balsam Woolly Adelgid
 - Emerald Ash Borer
 - Sudden Oak Death
 - Spruce Budworm

The division accomplishes these mandates working with a broad range of cooperators. The division has formal agreements with the USDA Forest Service and Animal & Plant Health Inspection Service (APHIS) which underwrite a significant portion of the costs of cooperative projects. It also cooperates with a network of local agencies (e.g., Maine Department of Agriculture, University of Maine) to provide service to shared clientele.

The responsibilities of the division were expanded by action of the 118th Legislature to incorporate conducting a permanent inventory of Maine's forest resources on a 5-year annualized

cycle. Every year, that portion of inventory plots needed to reach a statistically reliable conclusion regarding conditions statewide and in each major region of this state are remeasured; with the entire resurvey completed every 5 years. This mandate is conducted as a federally underwritten cooperative project with the USDA Forest Service.

Information on Maine's forest resources



Information on Maine's forest resources

- **Forest inventory and analysis**
 - Completed 5th year annual inventory
 - First full remeasurement
- **State of the Forest**
- **Benchmarks of sustainability**
- **Silvicultural activity**
- **Primary wood processor**

Forest Policy and Management Division

The Forest Policy and Management (FPM) Division provides technical assistance, information and educational services to the public, forest landowners, forest products processors and marketers, municipalities and other constituencies. The division also implements the Forest Practices Act, providing outreach services to inform landowners and land managers about the Act's requirements, and conducting enforcement activities in conjunction with the rangers of the Protection Division. The division anticipates and responds to forest policy issues and reports to the public on the state of the forest resource. The division provides technical assistance through educational workshops, field demonstrations, media presentations, and one-on-one contact between field foresters and landowners. Statute and bureau policy place limits on technical assistance to individual landowners to ensure that service foresters reach a wide landowner audience and to avoid competition with the private sector. The bureau offers limited cost-share assistance to landowners to develop forest stewardship plans and to implement practices to improve forest management, e.g., erosion control and timber stand improvement. Cost-share funds are provided through the USDA Forest Service.

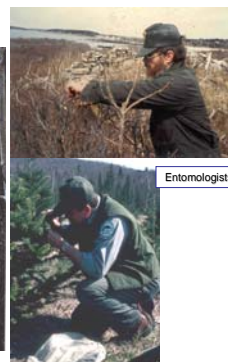
Technical and financial assistance to landowners



Maine Forest Rangers



District Forester



Entomologists

Technical and financial assistance to landowners

- **Forest visits**
- **Cost sharing**
 - Management plans
 - Conservation practices

The division's principal objective is to promote informed decisions by landowners, land managers, policy makers, and all other forest stakeholders, including the general public, about the forests of today and tomorrow. Division staff accomplish this objective through multiple delivery systems and in concert with numerous partner agencies and groups.

The division's signature works include its "Be Woods Wise" landowner assistance program, "The Woods in Your Back Yard" for suburban landowners, Project Canopy (community forestry) for towns, and "What do Trees Have to do With it?" for town planners.

Assistance to communities



Dick Bradbury assisting ...



Federal excess property



Check this guy out --- one picture is surely worth a thousand words! The great thing about Project Canopy is that work is involved, but return on investment multiplies exponentially.

Assistance to communities

- **Fire**
 - **Suppression & control**
 - **Federal Excess Property**
- **Insects and disease**
- **Project Canopy grants**
 - **Forest management**
 - **Urban trees**

Forest Protection Division (formally the Forest Fire Control Division)

The purpose of the Forest Protection Division is to protect public and private forest land as well as other property from forest fires and to provide forest resource protection through enforcement of the state's natural resource laws.

MRSA Title 12 places the responsibility for the control of forest fires within the Forest Protection Division. In addition to forest fire suppression, the division prepares and maintains facilities, staffing and equipment necessary to detect and prevent wildland fires, and enforces forest fire laws. It also enforces the state's other laws associated with the forest resource. These laws include the Forest Practices Act, Land Use Regulation Commission Act and Standards, timber theft and timber trespass laws, as well as laws regarding recreational vehicles, Christmas trees, and litter. More recently, the division has assisted in enforcing water quality laws on behalf of DEP and LURC. As in all the bureau's activities relating to improving compliance with legal requirements, the emphasis is on education and working with constituents to improve voluntary compliance.

The objectives of the Protection Division are to:

- Keep acreage losses due to forest fires to less than 3500 acres/year.
- Keep forest fire occurrence to less than 1000 fires per year.
- Keep forest fire damages and losses to an absolute minimum.
- Control all forest fires within the first burning period (before 10 a.m. the following day).
- Maintain the state's forest fire equipment in fire ready condition at all times, including a rapid response aviation operation.
- Maintain a good resource base of fire fighters and heavy equipment to be able to respond in any geographic area.

- Train and maintain an Incident Management Team for forest fire control anywhere in the state.
- Investigate and prosecute violations of the state's forest fire and forest protection laws.
- Maintain a highly skilled, competent and professional work-force to protect the forest resources.

Foster fire preparedness at the local level. by administering federal cost share programs to provide technical assistance to municipal and volunteer fire departments.

Law enforcement



Law enforcement

- **Forest Practices Act**
- **Fire prevention**
 - Spark Arresters
- **Slash laws**
- **Timber theft & trespass**
 - Tipping
- **Rangers inspect over 60% of all active timber harvest sites**

Accomplishments:

Notable accomplishments of Maine Forest Service over the last several years include, in no particular order, the following:

1. ACF - Successful completion of the Maine Legislature's Program Review in 2006. This includes a full report on the activities of the Maine Forest Service to the Agriculture Conservation Forestry Committee of the Maine Legislature
2. BMP - In cooperation with the USDA Forest Service and other states, publication of the 2005 Best Management Practices protocol
3. CARBON - With funding from the USDA Forest Service, developing a report on effects of different management regimes on carbon storage and emissions in Maine's forests. Maine has also worked to define the elements which should be included in forestry carbon offset projects
4. CERTIFICATION - Preparation of Certification Advisory Committee report and implementation of its recommendations
5. CLIMATE - Active participation with the Maine Department of Environmental Protection and other interests in developing a greenhouse gas plan for Maine
6. FFE - Lead role in development of Future Forest Economy report and implementation matrix and Governors Sustainability Council report
7. FHM - Preparation of Forest Health and Monitoring conditions report
8. FIA - Collaboration with the USDA Forest Service in publication of the 2005 Forest Inventory and Analysis report based on the first full remeasurement of CFI plots in Maine since annual inventories were undertaken

9. HELICOPTER - Preparation of Helicopter fleet diversification report and implementation of the first phases of that report
10. LIQUIDATION - Enactment of an enabling statute and adoption of rules to substantially eliminate Liquidation Harvesting
11. LOGGER EDUCATION - Collaboration with other agencies and interests in developing a logger education program to assist loggers in qualifying for bank loans
12. LSOG - Development of reliable information on the status of the late successional old growth components of Maine's forest stands
13. MOBILIZATION - Training and mobilization of IMT to all risk incidents nationwide
14. NASF - Active participant in National Association of State Foresters/Society of American Foresters efforts to articulate the national interest in sustainable forestry
15. NASF - Lead role in efforts of National Association of State Foresters regarding reinvention of Economic Action Program
16. NEFA - Active participant with the Northeast Forest Center in preparing a development strategy for the northern forest. This is a four state, stakeholder process to prepare an economic development strategy for the northern forest that both conserves and makes productive use of the regions forest resources. This was the number one recommendation of the 10th Anniversary Forum referred to above
17. NEFA - One of the principal participants in preparation of the report from the Northern Forest Lands 10th anniversary forum which included four fundamental recommendations for advancing sustainable forestry in the region
18. NRCS - Development of a Memorandum of Understanding with the NRCS regarding delivery of forestry assistance to landowners
19. ROADLESS - Active on the Governor's behalf on Roadless areas issues on the White Mountain National Forest
20. SOF - Publication of the 2005 SOF report
21. WATER - Development of statewide standards for timber harvesting in shoreland areas
22. WUI - Development of an active program to deal with Wildland Urban Interface issues related to forest fires

Challenges and Opportunities

Challenges

Maine's forests, its landowners, and its industry all face significant challenges as we look to the future. MFS has identified several critical and interrelated issues that are key to the future of our forests:

- Maintaining a sustainably managed, economically viable working forest land base. This is critical to maintaining the many public values provided by Maine's privately-held forests. For example, the habitat for many wildlife species is dependent upon active management.

- Parcelization and conversion of forest land to development. Parcelization makes good forest management less likely and more difficult, even if the land remains forested. Parcelization and forest land conversion are significant issues particularly in southern and central Maine.
- Inadequate returns from long term forest management. The financial returns on long term forest management do not justify either retaining forest land, if other uses (e.g., development) are possible, or practicing long-term silviculture. Research at the Penobscot Experimental Forest indicates that the present value of stands managed for long-term value is about half that of stands subjected to diameter limit cutting, even though this latter practice diminishes the long-term productivity of the land.
- Maintaining markets that allow sustainable forestry by improving the viability of the forest based economy. The state has faced the loss of mills, declining industry employment, fewer loggers, and consequent impacts on forest-based communities. At the same time, Maine excels in some sectors, and the industry has significant opportunities. The industry not only fuels Maine's economy and provides jobs, but it also provides markets that allow sustainable forestry to be practiced. Limited markets encourage high grading – cutting where only the best trees are removed this reducing the productivity and value of the future stand.
- Insect and disease threats. A number of exotic insects and diseases, some established, some not yet here, threaten significant components of Maine's forests. Existing threats include beech bark disease, balsam woolly adelgid, browntail moth, and hemlock woolly adelgid. Potential threats include sudden oak death and emerald ash borer.

A number of the challenges Maine's forest face are influenced by regional, national and global trends. For example, retaining markets which allow sustainable forest management is influenced by global economic conditions, which are currently encouraging investments in forest product manufacturing over seas. Further, a number of insect and diseases which threaten Maine's forests are exotic pests that are arriving from other parts of the country and the world. In addition to these challenges, Maine's forests confront challenges which are completely exogenous to the state. For example: climate change and atmosphere deposition both threaten Maine's forest or aspects of Maine's forest. The state lacks authority to control these latter impacts by itself but rather must work with other interests, agencies and authorities to see that they are addressed.

Opportunities

Maine's forest landowners and the forest products industry also have a number of significant opportunities. These include:

- Conserving large areas of Maine's forests in perpetuity by capitalizing on the interest of investors to maximize their returns and purchasing conservation easements that ensure retention of undeveloped forest lands, public access, and sustainable management.
- Capitalizing on Maine's reputation for sustainable management to distinguish Maine's forest products industry in the global marketplace. In addition to demonstrated evidence that Maine's forests are sustainably managed, Maine has the largest percentage of certified land and possibly the largest percentage of certified harvests conducted of any state in the nation. These facts can be used to create a special niche for Maine's forest products among consumers who value sustainability – demand for such products is growing. This will require Maine to remain a leader in certification and addressing forest environmental issues, such as maintaining forest biodiversity.

- Increasing productivity. With improved management, Maine’s forests have the potential to produce considerably more timber per acre while maintaining other forest values. On average, it should be possible to increase the productivity of Maine’s forestland by approximately half over current levels.
- Diversifying Maine’s forest products industry to be a leader in new products such as biofuels and those from biorefinery technology. With increases in fossil fuel prices, the opportunity exists to replace traditional sources of fuels and chemical feedstocks with wood and wood wastes.

Ownership Changes

Changes in ownership present both opportunities and challenges. Maine has experienced significant changes in who owns the forest since the mid-1990’s. Most of Maine’s large industrial forest landowners have sold their land, and have been replaced by a mix of corporate structures collectively known as timberland investment management organizations, or TIMO’s. In general, these investors seek to maximize returns and generally plan on holding the land for 10-15 years.

Investor-owners now hold at least 3.75 million acres in Maine. This presents opportunities for unprecedented large-scale land conservation efforts, but there are also public concerns about the future of these large blocks of forest land; that is, will they remain as large unfragmented ownerships, will they remain undeveloped, will they be actively managed, and will they continue to be available for traditional public access?

Our Plan to Meet These Challenges

To address these issues effectively the Maine Forest Service needs to:

1. Maintain and improve our existing programs – in some cases this involves rebuilding the institutions capacity;
2. Continue to improve the information available on Maine’s forest resources;
3. Maintain existing and create new markets that make sustainable forestry possible;
4. Maintain a vibrant logging community;
5. Improve on existing policies and programs to keep forests as forests and encourage sustainable forestry; and
6. Work to address forest impacts originating outside of Maine (eg: climate change)

More on what we are doing in each of these areas follows:

- **Maintaining and Improving Our Existing Programs** – the Maine Forest Service fully intends to maintain the existing programs described earlier and wherever possibly, improve upon them to increase their effectiveness. Specific challenges in this regard include:
 - Refining efforts to encourage stewardship on small ownerships – as part of the Be Woods Wise program, staff from the Division of Forest Policy and Management has worked over the last year to make significant refinements in the bureau’s stewardship program, which assists small private forest landowners in Maine in improving their forest management. These refinements include making the state’s standards for stewardship plans more

comprehensive and explicit. Maine's standards now meet or exceed the requirements of all three forest certification programs active in Maine.

- Rebuilding the capacity of the Maine Forest Service – successfully addressing the challenges that Maine's forests confront will require an agency which has the capacity to respond effectively. Areas that need attention include:
 - Upgrading and diversifying our fire protection aircraft – one of the keys to minimizing the damage from forest fires is getting to them quickly and thus keeping them small. The Maine Forest Service currently relies for its first strike capabilities, on its fleet of federally-owned Huey helicopters which are 30 – 40 years old. These aircraft are nearing the end of their useful life and are becoming increasingly expensive to maintain. The air fleet needs to be upgraded and diversified if it's to perform its mission effectively.
 - Rebuilding the capacity of our Forest Health Division – the Maine Forest Service currently has only 6 employees working on forest health issues in the state. This number is inadequate to meet the threats posed by insects and diseases already present in Maine and new diseases and insect pests likely to reach the state within the foreseeable future.
 - Maintaining markets that allow sustainable forestry – currently the Maine Forest Service does not have a single position allocated to business retention and attraction. There are no resources specifically dedicated to monitoring the Forest Products Industry in the state, identifying likely problem areas before they reach crisis proportions, and or to identifying opportunities to strengthen the industry by addressing policy issues.
 - Improving the enforcement of Maine's forestry laws – during recent budget cuts, Maine lost a Regional Enforcement Coordinator for the Downeast Region and nine forest rangers. This has hampered efforts to effectively enforce Maine's forestry laws.
 - Staffing for Maine's Certification Initiative – the Maine Forest Service also lacks staffing to be as effective as it can be in assisting the Forest Products Industry to participate in the green markets, which are growing, by capitalizing on Maine's leadership in Forest Certification. We hope to add a program directors position to head up Maine's Certification efforts.
- **Improve Our Understanding Of Forest Conditions In Maine** –
 - National efforts:
 - Forest Inventory and Analysis – Maine is an active participant and chairs a committee on Forest Inventory Analysis issues for the Northeast (**true?**)
 - Regional efforts:
 - NAASF – Maine is working through NAASF in concert with the Northeast Area of the USDA Forest Service (NA) to monitor and report on conditions within the 20 state area that makes up the Northeast. Most recently, NA issued a report on criteria and indicators for the Northeast area and what they indicated for sustainability of the forest resource within the region.

- Northeast State Foresters Association (NEFA) – regularly develops and publishes reports on condition of the forests, the Forest Products Industry, and wood flows within the first state northern forest region. Maine is an active participation in these efforts.
- State efforts:
 - Continuation of annual FIA survey efforts and the production of reports based on this information.
 - Specific analyses undertaking to understand particular aspects of Maine’s forest resource based on FIA and other data.
 - Multi resource harvest assessment – Maine is initiating a multi resource harvest assessment aimed at improving our understanding of how current harvesting practices are impacting the full range of values Maine’s forest provide. An important part of this analysis will be assessing how current harvesting practices are positioning Maine stands for future productivity.
 - Improving our capacity to predict future timber volumes – the Maine Forest Service in conjunction with the USDA Forest Service and potentially the University of Maine, need to improve our ability to predict future timber volumes. Existing growth and yield curves used in making such projections are not based on the most recent information and hence the projections observes from these are not reliable.
- **Maintaining Existing and Creating New Markets** – diverse and robust markets are important as they allow sustainable forestry to be practiced by providing outlets for low quality as well as high quality materials. Further, they are what allow private landowners to practice forestry at all and to retain their forest lands as forests because they are a working and profitable asset.
- National efforts
 - Reinvention of the Economic Action Program – Maine Forest Service has been active in the efforts to identify how economic action programs administered by the USDA Forest Service could be reinvented to attract support from the administration and appropriators. A proposal for a program has been developed and the USDA Forest Service has agreed to provide NASF with funding to develop a pilot program effort in 2006 – 2007.
 - Biomass/biofuels – through NASF’s committee on markets, Maine Forest Service is active in efforts at the national level to promote increased use of biomass and work necessary to make commercial production of biofuels and biochemicals possible.
- Regional efforts
 - Regional Greenhouse Gas Initiative (RGGI) – Maine Forest Service has been an active participant in the RGGI process to develop markets for forestry carbon offset projects. In this regard, the Maine Forest Service has worked with the Pinchot Institute on the elements which should be included in a comprehensive protocol for forestry carbon offset projects
 - Northern Forest Center’s economic strategy project – the Maine Forest Service is active in participating with the Northern Forest Center in the development of an

economic strategy for the Northern forest area. This project is intended to strengthen conservation of the forest in the Northern forest area as well as the sustainable use of the region's wood resources.

- Regional biomass efforts – participating with the Northern Forest Center and other interests in the effort to promote increased use of biomass to meet the energy needs of the Northern forest region
- State efforts
 - The Future Forest Economy and Governors Sustainability Council projects – Maine Forest Service with funding from the USDA Forest Service and Maine Technology Institute has been a key participant in developing 2 reports on the states Forest Products Industry, its current status, the challenges it confronts, and recommendation for how Maine can have the most diverse and robust forest products industry possible. The state has, through legislative action, implemented the number one recommendation of these efforts, that was to eliminate the personal property tax on business equipment. The elimination of this tax levels the interstate playing field for investments by the Forest Products Industry in Maine. Implementation of a number of the other recommendations of these reports is also under way and a more comprehensive campaign to implement all the recommendation is planned.
 - Maine Certification Initiative – at the Governors direction the Maine Forest Service is working with the Forest Products Industry in Maine in an effort to distinguish the States manufactures based on the condition of Maine's forests and the fact that Maine leads the nation on forest certification. A variety of efforts are under way in this regard including: outreach to landowners; a television ad campaign designed to promote the use of wood as an environmental responsible choice, and the purchase of Maine wood certified by third party certification programs. In addition, trade missions, the first one being to New York City, are in the planning stage.
 - Biofuels – the Maine Forest Service is actively involved in state efforts to encourage the commercialization of technologies for producing biofuels and biochemicals from wood.
 - Carbon markets – the Maine Forest Service is actively involved with funding from the USDA Forest Service in modeling how rates of carbon sequestration in Maine's forests can be affected by different management regimes. This effort was undertaking to understand the role that Maine's forests could play in reducing Maine's contribution to green house gas levels and also to provide the basis for Maine landowners marketing carbon friendly management. A report documenting the result of this extensive modeling effort is being prepared.
- Addressing the Needs of the Logging Community – the logging community is a critical component of the Forest Products Industry in Maine. In the recent past, the capacity of the logging community to meet the wood needs of the Forest Products Industry has been strained. Maine has undertaken a number of efforts to assist Maine's logging community, increase its profitability and expand its capacity.
- State efforts
 - Support of logging programs – the Maine Forest Service and other state agencies support the work of a number of logging organizations in the state. These include the

Certified Logger Program (CLP), the Quality Logging Program (QLP), the Master Logger Program and others. This support has taken the form of both technical and financial assistance.

- Reducing Maine's dependence on Canadian loggers – a number of regions in Maine, particularly the North and West have traditionally relied on Canadian loggers to meet a portion of the logging needs of the Forest Products Industry. Through the U.S. and Maine Department of Labor, efforts are underway to update the workings of the program which allows Canadian loggers to work in Maine. This effort is aimed at leveling the playing field between Maine Loggers and their Canadian counterparts – it is the Baldacci Administration's goal to provide every opportunity for Maine loggers to harvest the wood which is cut in Maine.
- Logger business planning programs – the Maine Forest Service had worked with the Department of Economic of Community Development, the Small Business Development Council and the US Small Business Administration to develop a program aimed at improving the business skills of loggers to facilitate their efforts to obtain financing for logging equipment are facilitated. This program will be offered to loggers later this fall and winter provided that there is significant interest
- **Improving Existing Policies and Programs to Maintain Forests as Forests and Encourage Sustainable Forestry** – Its clear that Maine and the nations forests face unprecedented challenges. For example, our forests face unprecedented challenges from exotic insects and diseases, forest fires, invasive plants and other sources. At the same time, changes in forest ownership raises questions about the long term future of forest management on these lands.
 - National efforts
 - NASF/SAF – Efforts to articulate the national interest in sustainable forestry – The Maine Forest Service is an active participant with the National Association of State Foresters and the Society of American Foresters in their efforts to articulate the national interest in sustainable forestry and in building a broad coalition to support programs and funding to this end. This includes work with the NASF on Farm Bill reauthorization issues.
 - Regional efforts
 - NAASF – Efforts to promote sustainable forestry – the Maine Forest Service is an active participant with the NASSF in defining programs and funding needed to achieve sustainable forestry in the northeast area.
 - Northeast State Foresters Association (NEFA) – the Maine Forest Service is an active participant in all the efforts of NEFA to promote sustainable forestry. Most notably, in the last 2 years, NEFA spearheaded an effort to develop recommendations to follow up on the Northern Forest Lands Council's efforts 10 years previous. The rebutting report outlined four recommendations for activities that needed to be undertaken within the region to build on the work of the Northern Forest Lands Council and deal with issues which remain unresolved 10 years later.

- State efforts
 - Liquidation harvesting – at the urging of Governor Baldacci, the Legislature adopted a statute to substantially eliminate Liquidation Harvesting. Pursuant to the statute, the Maine Forest Service adopted rules pursuant to accomplish that end. These rules call for persons buying, cutting and selling a piece of property within 5 years to either leave 50% of the timber in place after the cutting operation or to follow a harvesting plan, including a silvicultural justification, for the removal of more than 50%.
 - Outcome based forestry – the Maine Forest Service continues to pursue with Irving Corporation the development of the first agreement on outcome based forestry. As the name implies, outcome based forestry is intended to replace prescriptive rules with an agreement on “outcomes” that will be achieved.
 - Benchmarks of sustainability – the Maine Forest Service has also made considerable progress in developing benchmarks of sustainability aimed at specifying the metrics to be used in accessing whether or not Maine’s forests as a whole are being sustainably managed. All of the benchmarks called for by the Legislature have been developed, however, a number of them need to be refined and updated in light of new information, and the entire package needs to be streamlined to make it implementable with the resources currently available.
 - Statewide standards for timber harvesting – the Maine Forest Service worked with the Maine Department of Environmental Protection and a stakeholders group to develop statewide standards for timber harvesting. If adopted by “critical mass” of Maine’s municipalities, the statewide standards will replace shoreland zoning and zoning by the Land Use Regulation Commission in those portions of the state. Decisions on whether or not to adopt this approach, is an issue which is before Maine’s cities and towns for their consideration. If a “critical mass” does adopt the standards, the rules will be administered and enforced by the Maine Forest Service.
 - Making long term silviculture pay – the Maine Forest Service has developed a proposal to evaluate what changes in policies and programs will be needed to make the returns from long term silviculture equivalent to the returns from cutting commercially valuable timber from the short term without regard for its long term consequences in terms of productivity or the quality of the residual stand. Research at the Penobscot Experimental Forest with harvest prescriptions applied continuously over a period of 50 years, demonstrate that the returns from short term timber cutting are approximately double the return reduced from long term silviculture. In our view this represents a problem in achieving sustainable forestry as if we are going to be effective in encouraging landowners to undertake long term silviculture, it seems reasonable that the returns from it at least need to equal the returns from short term cutting
- **Working on Forest Impact Originating Outside Maine** – a number of issues discussed above are impacted in part by conditions outside the state of Maine. A few impacts result entirely from factors outside of Maine. The Maine Forest Service, along with other state agencies, works to address issues such as climate change and atmosphere deposition on Maine’s Forest through regional and national efforts. For example, as part of the commitment of New England Governors and Eastern Canadian Premiers to deal with climate change, Maine has developed a greenhouse gas plan to reduce Maine’s greenhouse gas

emissions. Maine Forest Service was an active participant in the elements of this which involve the forest. Maine is also participating in the effort to understand the impact of atmospheric deposition on our forests and is engaged in the effort to map areas of the state which are more sensitive than others to acid rain.

Conclusion

While Maine's forests are generally in good condition relative to other timber producing areas and have over the last several decades, either been improving, or holding their own, in important regards; they face new challenges in the years ahead. The Maine Forest Service intends to address these issues effectively and be vigilant to detect future changes that may affect Maine's forests as well.

Maintaining the productive partnership between Maine and the USDA Forest Service is critical to our continued success.