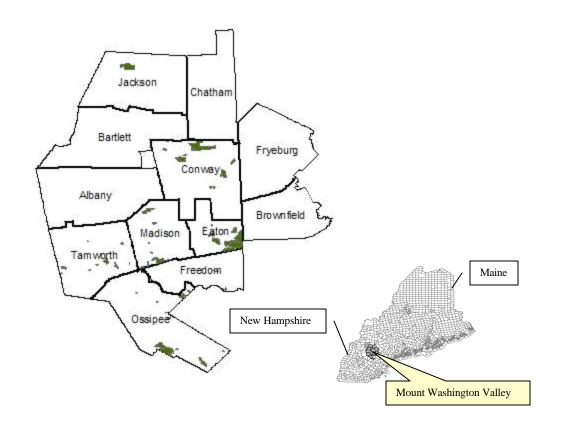
# Valuing Forests as Community Assets in the Mount Washington Valley: A study of the economic, environmental, and social contributions of public and private forests and their potential role as a component of a regional economic development strategy



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August, 2003

Support for the study provided by grants from the Quebec-Labrador Foundation/Atlantic Center for the Environment, the Merck Family Fund, the French Foundation, the Edna Bailey Sussman Foundation and the Carpenter/Sperry Fund

"...from their genesis, well before the mid-seventeenth century, New England towns and villages have creatively worked...forests and woodlots to public benefit."

-Robert McCullough, The Landscape of Community

#### **SUMMARY**

The Mt. Washington Valley Economic Council recognizes that forests are important economic, environmental and community assets that can play a significant role in a regional economic development strategy.

The forests of the Mt. Washington Valley represent 85% of the region's land cover and have historically provided a suite of benefits to the region. Forests have provided the raw materials for a once-vigorous timber industry, offer a pristine environment for an outdoor recreation oriented tourist industry, secure an abundant and high-quality water supply, and support ecological and biological diversity.

The goals of this study are to highlight the economic value and public benefit of forest land in the Mount Washington Valley, to analyze the value of town ownership and management of forest land, and to assess the potential of town forests and their role as a component of a regional economic development strategy in the Mt. Washington Valley. Findings from the research show that:

- All twelve towns receive economic returns from management of public and private forest land within the town;
- Forests contributed \$3.6 million dollars over a five-year period to towns in the Mt. Washington Valley in the form of the normal yield tax (New Hampshire), land use change taxes, state and federal payments in lieu of taxes, and state and federal forest land reimbursement;
- Ten of the twelve towns own forest land (Bartlett, Chatham, Conway, Eaton, Freedom, Jackson, Madison, Ossipee, Tamworth, Fryeburg)
- For towns that own and manage forest land, the forests either pay their way or produce revenue for towns. In all cases, town ownership/management resulted in no net cost to the towns.
- Town-owned forest land provides a complex suite of both monetary and nonmonetary benefits to the town ranging from water supply and quality, recreation, wildlife habitat, open space, support for other community priorities including social services and education, and building community capacity and social capital.

• Communities could play a larger role in a regional economic development strategy that includes conservation of the productive forest land base and redevelopment of the value-added sector of a forest-based economy

#### **INTRODUCTION:**

"The forests of northern New England are an important source of natural capital and a vital asset in the economy and culture of many of its communities. Ownership of and access to the region's forests is and will continue to be a significant factor in the wellbeing of its communities."

-Janet Maughan for the Ford Foundation's Northern New England Sustainable Communities Project

For over a century, industrial landownership has been a stabilizing influence for communities in northern New England. Much of the land has been owned by paper companies, many of the communities have been supported directly or indirectly by those companies, and the land has been available for use as the region's principal recreational resource.

This web of relationships among the region's forests, economy and communities has begun to unravel with accelerating speed. Paper companies, no longer locally controlled, are concluding that they do not need to own land in northern New England, and that their capital should be invested elsewhere. Many of the region's mills are no longer competitive, and paper companies operate with far fewer employees than in the past. With millions of acres of paper company land having been sold, and more sales anticipated, the era of the industrial forest has ended.

This change presents both risks and opportunities to the communities of northern New England. As the paper industry is de-emphasized, local economies could be strengthened in the long run. In coordination with the objectives of the new large landowners, more diverse, entrepreneurial organizations could orient themselves around processing hardwood saw timber, which is the region's most globally competitive product. Adding value to this resource locally may ensure a better future than paper companies ever could. Additionally, community involvement in the ownership and/or management of local resources will ensure that management objectives are more compatible with community priorities.

The forests of the Mt. Washington Valley have long been recognized as important assets. Visionary citizens and leaders helped protect these resources with forests as large as the White Mountain National Forest and as small as the many town forests scattered across the valley. The latter represent a strong historical tradition dating back to early settlement of New England and remain, for some towns, an important cultural, environmental and economic legacy.

Approximately 1.3% (nearly 6,000 acres) of land in the Mt. Washington Valley is owned and managed by towns, including forestland and land managed as parks and scenic areas (See map in Appendix 1). About 4,500 acres is actually designated as town forest, with parcels ranging from under 50 acres to over 900 acres. These forests and lands are managed to varying degrees, with some towns having comprehensive management plans for all their lands, some towns having informal management plans and some having none at all.

#### BACKGROUND

The Mount Washington Valley Economic Council (MWVEC) is a public/private partnership created in 1990 to address the need for long range economic planning in the region. The organizing mission of the Council was to *improve and diversify the economic vitality in the Mt. Washington Valley Region with a commitment to the communities and the natural environment*.

The Council recognized that forests represent an asset that can create economic opportunities for the region that are compatible with its natural and ecological systems, consistent with the history and culture of its communities, and that will improve the well-being of people living in and visiting the region. In 1999 the Council appointed a Forestry Task Force to identify priority issues relevant to redeveloping the forest-based economy in the Mount Washington Valley. The Task Force identified two critical factors that influence the capacity of the region's forests to play a significant role in a regional economic development strategy:

- 1) The region's productive forest land base is being severely eroded as a result of intensifying fragmentation of ownership and changing attitudes towards forest land management; and,
- The value-added capacity of the region has been significantly diminished to the point where most forest products now leave the Mount Washington Valley for processing outside the region.

As a result, the Forestry Task Force's priority has been to develop an organization of forest landowners (including private, non-profit, and public) in the region to secure the productive forest land base of the region and to provide a long-term sustainably managed supply of forest products to a series of pilot projects that demonstrate the viability of investing in the redevelopment of a value added forest products industry.

Two years ago, the Task Force conducted an inventory and survey of landowners in the Mount Washington Valley region to determine the feasibility of a landowner organization. As a result of the inventory, the Task Force learned that many towns in the region own and manage forest land. There was little research, however, on what value those forests provided to communities, and no analysis of the contribution of ownership and management of forest land by communities to local and regional economies. The close of the industrial forest, with the accompanying transfers in ownership of large tracts of forest land, presents challenges to both communities and regions whose cultural and economic legacies are based in the forest. Productive inquiry to analyze the potential role

of town ownership/management of forest land in this region is both timely and relevant. This study was designed to offer an initial inquiry into the issues of valuing productive forest land for communities in the Mt. Washington Valley region.

#### **STUDY AREA:**

The study area in this report is referred to as the Mount Washington Valley. The area is defined as the 12 towns that make up the service area of the Mount Washington Valley Economic Council: Albany, Bartlett, Chatham, Conway, Eaton, Freedom, Jackson, Madison Ossipee and Tamworth – all in New Hampshire – and Brownfield and Fryeburg in Maine.

The Mount Washington Valley lies in the Saco River Watershed and spans two US Forest Service-defined ecoregions: The White Mountain Ecoregion and the Southern New England Coastal Hills and Plain Ecoregion. It is a broad glacial valley containing the Saco River, many lakes and smaller river systems, and is defined by the eastern slope of the White Mountains on the west and the Ossipee Ring Dike and aquifer at its southern end. The Valley is over 85% forested with agricultural lands in the river valleys and flood plains. The forests are characterized primarily as a northern hardwood-hemlock-pine type. Several unique natural communities are found in the Valley, including a heath bog, the northernmost example of the white cedar swamp, and the pitch pine-scrub oak forest type, New Hampshire's rarest.

The 2000 population of the region was almost 28,000, a 15% increase over the 1990 population. Eight of the towns had growth rates above this average over that same period. All of the New Hampshire Towns are in Carroll County, the fastest growing county in the state<sup>1</sup>. Estimates from the Office of State Planning show that Carroll County will continue to be the fastest growing county through 2010.

Socio-economically, the region is characterized by a mix of incomes, with several towns classified as low-income. Six towns in the area contain or are contained by census tracts designated as low-income according to criteria determined by the U.S. Treasury Department.<sup>2</sup> Further inquiry into the wage structure of the local economy would shed light on this pattern. Such a pattern is not surprising, however, since the two top industries (i.e., tourism and forest products), in spite of their large contribution to the local and state economy, typically do not provide high-paying jobs.

While the forest products industry once represented the principal component of the regional economy, currently the two principal engines of the economy in the Mt.

<sup>&</sup>lt;sup>1</sup> New Hampshire's Changing Landscape: Population Growth, Land Use Conversion, and Resource Fragmentation in the Granite State, Society for the Protection of New Hampshire Forests, October 1999

<sup>&</sup>lt;sup>2</sup> U.S. Treasury Department Census

Washington Valley are tourism and the retail and service industry. <sup>3</sup> In spite of their importance, there is a significant gap in data and analysis on the role of forests in the regional economy. Additional research in the following areas would provide valuable information for long term economic development planning:

- 1) Data that quantifies the relationship between the region's forests and the tourist industry;
- 2) Data that quantifies the contribution of the forest products industry to the region's economy;
- 3) Data that quantifies the loss to the regional economy of raw logs being taken out of the region for processing and brought back as finished products for sale.

#### **METHODOLOGY:**

This report is a compilation of information collected through a survey, informal interviews, primary research, and analysis of publicly available data. In 2001, the Forestry Task Force conducted an inventory of forest landowners in the twelve towns from which towns were identified that owned forestland. During the summer of 2003, a graduate student intern from the Yale School of Forestry & Environmental Studies worked with the Forestry Task Force to develop an interview instrument (see Appendix 2); conducted interviews with town officials and natural resource professionals; conducted primary research at town offices to confirm data on acreage and review town documents relating to natural resource management and conservation in the towns; researched income to towns from public and private landowners (see Appendix 3) to verify costs and revenues from town forest land; and compiled information on relevant state statutes and local ordinances (see Appendix 4)

The research presented in this report represents a coarse-grained study of town forests and lands in the Mt. Washington Valley. (see Appendix 5) Within the towns that own and manage forest land, there is a range from those that are unaware that the town owns forest land to towns that have comprehensive forest management plans and closely track revenues and expenses associated with town forests and lands. As such, the information in this report represents the low-hanging fruit of available data.

#### OVERVIEW OF TOWN FORESTS IN THE MWV

Towns in the region recognize the value of maintaining land (including forest land) as open space and, to varying degrees, own and manage forest land for a complex suite of values including economic, recreation, water supply protection, wildlife habitat, education and social services. While the sources of revenues to towns from forest land are irregular by nature, they represent a large financial contribution of over \$3.6 million to towns in the Mt. Washington Valley over a five-year period.

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<sup>&</sup>lt;sup>3</sup> Telephone interview with Jac Cuddy, Executive Director of the Mt. Washington Valley Economic Council

Comprehensive data on the actual income and expenses accrued to towns from forests do not exist. Forest land generates revenue for the towns in a variety of forms including municipal and state taxes on timber sales on private lands, land-use change taxes or penalties, payment in lieu of taxes (e.g., conservation land owned by non-profits, national forest and state-owned land), state and federal funding for management activities, non-timber forest product revenues, and actual timber harvests on town-owned land. Some revenue data are readily available, such as timber yield tax data in New Hampshire or tree growth reimbursement data in Maine. Information on revenues generated from infrequent timber sales is more difficult to find. For this we are left to speculate based on publicly available data in the form of the timber yield tax. Only one town (See profile of Eaton, New Hampshire) keeps detailed records showing comparisons between what is spent and what is earned from specific town-owned lands. Acquiring this information from more towns in the future would be a useful addition to this research.

Cost data was even more difficult to collect. While there are some records on land acquisition costs and sources of funding, there are few records (with the exception of Eaton and Conway) that account for expenses such as survey work, trail work, and management plans.

Even more difficult to quantify is the flow of the monetary value of forest land both within the towns and the region. In some towns, there is a direct allocation of funds from the management of town forests either to support other town priorities (e.g., education or social services). More often, however, revenues simply are allocated to the general fund and absorbed into the town's operating budget.

In spite of these gaps in the data, forests are earning their own way. Most town forest management in the study area is paid for with federal or state grants and most land acquisition is done with similar funds or with donations. Most forest management funds recently have come from the Federal Ice Storm Fund. In Eaton's case, the town used these funds to develop a comprehensive management plan for all town-owned lands. Increasingly, towns finance land acquisition for conservation projects (including town forests) through the use of bonds.

#### **TOWN PROFILES**

Both New Hampshire and Maine have enabling statutes for the purposes of creating and maintaining town forests. In New Hampshire, RSA Section 31:110 states that "The legislative body of any city or town may vote to establish by purchase, lease, grant, tax collector's deed, transfer, bequest or other devise, a city or town forest." In Maine, Title 30-A, Part 2, Chapter 155, §3201, state law indicates that "Under its home rule authority, a municipality may acquire lands for the purpose of forestation or for reclaiming and planting forest trees on such lands."

These profiles emerged from research and data from town records and personal and phone interviews based on the accompanying survey and site visits.

**Brownfield, Maine:** Brownfield, a heavily forested town, does not have a town forest. The state owns several thousand acres of land that make up the Brownfield Bog Wildlife Management Area, The Nature Conservancy owns 300 acres of the Saco River Floodplain, and the Oxford County Soil and Water Conservation District owns 165 acres. Brownfield received \$179,465 in revenue from 1998 to 2002 from the Tree Growth Reimbursement Tax.

The legacy of the "Fire of '47", a catastrophic fire that destroyed Brownfield and hundreds of thousands of acres of forest land across the state of Maine, is apparent in the forest and land-use in the town today. One interviewee suggested that the town never recovered from the fire and that it led to a prevailing perception of Brownfield as a wasteland, even among residents, an attitude that is manifested in a perceived lack of enforcement of basic environmental regulations. In spite of this, interviewees shared their pride in the town and its incredible natural beauty, which is clear to anyone passing through this quiet border town.

Public forest management activity is minimal. The 165 acres of land owned by the Oxford County Soil and Water Conservation District has primarily red and white pine forests, with stands dating back to the 1940's. The District, as of this writing, is preparing to do a marking for a cut. Representatives from the District have indicated an interest in joining an association of forest landowners in the Mt. Washington Valley region for the purposes of marketing timber to a local value-added forest products market.

*Fryeburg, Maine:* Fryeburg owns several parcels of land, one of which is designated as a "Town Forest". This 48.5 acre parcel is 90% forested and is managed for multiple uses. The forest was cut about 10 years ago and the former tree warden thinks that it can probably produce enough timber to sustain the costs of management and its use as an educational site for local students, but not much more. The town received \$ 399,434 over a five year period from 1998 to 2002 from the Tree Growth Reimbursement Tax.

The town created a natural resource management plan for the forest in 2001, which was designed "to help improve timber, wildlife, water quality, recreational, and aesthetic values on the property". The management plan recommends that wood harvested from the forest be used for the needs of the forest and other town lands. The revenues from any surplus wood sold, it recommends, can go into "a designated fund for management of town lands, possible future acquisition of land, and used for teaching forestry to students".

The plan is notable for its acknowledgement of the multiple benefits provided by townowned lands. The plan concludes with the following: The Town of Fryeburg would like to keep the land in a healthy state and increase the diversity of its property. This is a welcome open space for the town with great potential. It can provide a source of income for its residents, as well as a multiuse recreational area. This is a great asset to the community historically, culturally, aesthetically, and economically. Through education and use of the Town Forest, the community can appreciate the importance of open spaces. Spaces such as the Town Forest help provide a sense of identity for the community that makes Fryeburg unique and memorable from all other towns.

Fryeburg is an example of a town where non-economic benefits of forest land are more significant than economic benefits. The relatively small acreage cannot produce significant income through timber management but offers many other valuable services. Further, new activity with respect to the town forest is uncertain primarily because the town's Conservation Commission, which has management responsibility for the town forest, has not met for over four years, but also because there is a new Tree Warden whose track record has not yet been established. In spite of a progressive town open space plan and a town forest natural resource management plan, implementation of these plans is uncertain.

Albany, New Hampshire: Albany does not own or manage any conservation or forest land. Over 80% of the town lies in the White Mountain National Forest, which is managed by the United States Forest Service. The town received over a five year period from 1998-2002 a total of \$131,388 from Yield Taxes; \$113,282 from the federal government and payments in lieu of taxes; and \$4,090 from the land use change tax.

In an informal study by a former selectman, from the mid-1950's to 1978, monetary returns from the USFS from payment in lieu of taxes, % of receipts from WMNF campgrounds and yield taxes from timber harvesting contributed 15% of the town budget's income. Currently, however, the USFS contracts management of WMNF campgrounds to private contractors with no payment to the town of a percentage of the receipts, so that the payment in lieu of taxes and the timber tax provide minimal contributions to an annual town budget of approximately \$1.7 million. While there is recognition that the WMNF is a valuable asset for the town, primarily by keeping land in open space, there is also concern about the financial costs to the town in terms of road maintenance, emergency services and welfare costs that are not adequately compensated for by the USFS. There have been at least two town warrant articles in recent years that have called for no more addition of land within the town of Albany to the WMNF.

*Bartlett, New Hampshire:* Bartlett owns 3 tracts of forest land: a 50 A piece, a 20 A piece and a 5-10 A piece. The land is not managed or used as a town resource. State or federal ownership (White Mountain National Forest) comprises 64% of the town's land area. Bartlett received over a five year period from 1998-2002 a total of \$67,952 from Yield Taxes; \$145,801 from payments in lieu of taxes; and \$158,910 from the land use change tax.

The town's updated 2002 Master Plan recognizes the importance of timber harvesting to the local economy and notes that it remains a source of income to private landowners and provides tax revenues to the town in the form of the Yield Tax. Private landowners own nearly 10,000 acres of undeveloped forest land, much of which, the Plan points out, may be suitable for timber management. The Plan goes on to say that nearly 5,700 acres of this is comprised of lots larger than 50 acres, the minimum size that a recent report<sup>4</sup> - by the Society for the Protection of New Hampshire Forests - indicates makes long-term forest management economically feasible.

The Plan details the role of the Conservation Commission and its responsibility for protection of natural resources not managed by the state or federal government. The Plan also indicates that future conservation of natural resources and open space must not constrain opportunities for commercial and residential development.

Finally, the Plan makes several recommendations to balance ecological and economic interests. For example, it recommends working with public and private organizations and institutions "to promote conservation and proper management of privately-owned agricultural and forest lands".

The principal value of forestland to the town is perceived to be the open space. It represents land that does not "cost" the town anything by not requiring town services. There is no initiative within the town to acquire more forest land. The town's current priority is to secure public access for town residents to the Saco River. The town recently approved the establishment of a small fund to purchase land or easements for public access to the Saco River.

*Chatham, New Hampshire:* Approximately 80% of Chatham's land base lies within the White Mountain National Forest. The town received over a five year period from 1998-2002, \$56,590 from the Yield Tax; \$85,328 from payments in lieu of taxes; and \$2,881 from the land use change tax. The town owns two pieces of land, including a 30-acre woodlot adjacent to the WMNF and the Town Beach on Kimball Lake.

The 1997 Town Plan indicates that most land outside the WMNF is overgrown pasture and suitable mainly for residential and recreational use. This plan is currently being updated, but the 1997 plan notes that land outside the WMNF will see "expanded residential development along the main thoroughfare as well as other town roads…"

The Town voted in 1988 to establish a Conservation Commission, however, the Town Plan states that "There is valid concern that such organizations are not in the town's best interest because of the management, liability, and lost tax revenue for which the town will have to be responsible..." The Plan recognizes that historic and scenic places are being destroyed or altered and that the town needs to find ways to preserve such areas "without penalizing or overburdening our limited resources". It also recommends that individuals

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<sup>&</sup>lt;sup>4</sup> New Hampshire's Vanishing Forests: Conversion, Fragmentation and Parcelization of Forests in the Granite State. Report by the Society for the Protection of New Hampshire Forests of the Forest Land Base Study. October 2000.

place conservation easements on their own property with requirements to preserve the historic and natural features of the property.

Conway, New Hampshire: The Town of Conway owns over 1,600 acres of land, much of which is forested and most of which is managed with formal management plans and under the oversight of the Conservation Commission. The town received over a five year period from 1998-2002, \$232,874 in revenues from the Yield Tax; \$15,611 from payments in lieu of taxes; and \$6,146 from the land use change tax. The town has a master plan, a forest management plan and retains the service of a consulting forester.

In 2003, the Conway Conservation Commission completed an analysis of forestry work On town lands. Detailed tables from the analysis are attached as Appendixes 6 and 7 at the back of this report. In summary, the town of Conway managed 1,840.41 acres over a period from 1978-2003 with net revenues to the town of \$81, 171.48.

The largest parcel of land is a 908 acre area known as the Common Lands. According to an informational report created for the town selectmen by the Assessing Department, the Conway Common Lands date back to colonial times and eventually became *de facto* "Town Commons" available for use by those townspeople who were, "through economic misfortune, in need of firewood". This parcel is part of a larger area of forest owned by The Nature Conservancy, the State of New Hampshire, and the White Mountain National Forest.

In 1999 Forest Land Improvement, a local forestry consulting firm, wrote the first forest management plan for the land using grant monies from the New Hampshire Ice Storm Community Forestry Fund. The plan seeks to develop not only the timber resource of the land but also the recreational, aesthetic, wildlife, and water resources.

In July 2000, the state harvested 320 acres of these lands. The purpose of the harvest was to salvage trees damaged in the 1998 ice storm. Proceeds of the timber sale reportedly generated more than \$30,000 in revenue. The Town invested \$4,000 to prepare the timber management plan and to secure the \$16,000 grant from the state's ice storm fund.

Revenues from timber sales on town forests go into a land acquisition fund. These sales generate a timber yield tax, which goes to the town. The cost of managing the town forests is part of the budgetary process, which includes the cost of the conservation commission doing business. The commission funds its own operations and typically generates more income than it has in expenses.

Whitaker Woods, a 114-acre parcel that is widely used as a recreation area and by school sports teams, is a good example of a true multi-use town forest. As one interviewee noted, Whitaker Woods is testament to the fact that a very visible and highly utilized town forest - used for a host of recreational and competitive school sports - can support a variety of revenue generating timber sales without arousing noticeable public opposition to the harvesting of trees. This is a testament not only to the long history of town-owned forests in the town but also to the dedicated work of the town's conservation commission.

Eaton, New Hampshire: Eaton owns approximately 2,000 acres of conservation land, most of which is forested and all of which is under the oversight of the Conservation Commission. Most of the land has been acquired over the last 30 years and all of these lands are managed, with varying intensity and quality. The town received over a five year period from 1998-2002 \$56,632 in revenue from the Yield Tax; and \$13,450 in revenues from the land use change tax. Town lands are also used extensively for recreation, with a network of hiking and interpretive trails and educational programs.

In 1999 the town used an ice storm grant to develop its first comprehensive management plan for town lands. This included a complete inventory and digital mapping of the lands. The town forests are managed for forest products and four timber sales are scheduled for the summer of 2003. Some of the lands are not forested and are maintained as blueberry fields. The town actively manages these fields and contracts with a Maine company to harvest and sell the blueberries they produce. The conservation commission receives income from one of the fields in alternate years. In years when the conservation commission does not receive income, revenue from a separate field goes into the Town's general fund.

The Town of Eaton has kept the most detailed records of any towns in the Mount Washington Valley on the income and expenses of town-owned land. Table XX shows

the expenses and revenues accrued to townowned land for the past 10 years. In Eaton, revenues come from both town-owned blueberry fields and forests. Blueberries are harvested annually in two separate fields, with each field harvested every other year. Timber sales are more infrequent and represent much of the larger revenue figures. Expenses are based on survey work, trail work, and development of management plans. Over the long-term, Eaton is a good example of the positive, if modest, contribution of townowned forests and lands. These figures do not include revenue from the yield tax or land use change tax, which are both based on the existence of forests and other open space.

Table 1

	Expenses	Revenues
1993	\$ -	\$ 30,565
1994	\$ 2,575	\$ 1,165
1995	\$ 2,230	\$ 3,354
1996	\$ 1,850	\$ 1,700
1997	\$ 2,606	\$ 155
1998	\$ 5,105	\$ 1,140
1999	\$ 430	\$ 19,791
2000	\$ 8,787	\$ 1,350
2001	\$ 35,000	\$ 3,435
2002	NA	NA
TOTAL	\$ 58,583	\$ 62,655

The town has not decided how much of its land will be managed for forest products. A rough estimate is that 1/3 of the land would be subject to severe restrictions or no active management at all. The conservation commission is also in the process of developing criteria for reserve areas to be left as they are. These might include areas with ecological significance, steep slopes, streams, etc. One goal of the conservation commission is to determine if any large blocks of land are valuable and should be kept as reserves. These would need to exhibit a certain number of ecological values. In this process, Eaton's

conservation commission is working cooperatively with the neighboring town of Madison.

The current focus of the conservation commission with respect to land conservation is to preserve land with scenic importance to the town. This means that rather than buying forested parcels, the focus might be more on buying parcels that contribute to significant "viewsheds" within the town.

Eaton's conservation commission manages four separate funds that give it an array of tools for forest conservation and management, including a new fund created in March 2003, upon voter approval at Town Meeting. This newest fund was created to acquire lands of significant ecological value through purchase of easements. The town appropriated \$25,000 as seed money for this purpose. The town also voted to direct 50% of revenue from the current use penalty into this fund. Other funds are used to send local children to a conservation camp in the area. In 2002, the Conservation Commission sponsored seven Eaton children to attend various camp sessions offered by the Tin Mountain Conservation Center.

Freedom, New Hampshire: Freedom owns 96 acres of land, very little of it forested. Most public lands in the town are for the protection of water supplies. These include almost 72 acres of quasi-municipal land owned and managed by the water commission, as opposed to the town. These lands are managed for water rather than timber and proceeds (approx. \$40,000) from a recent timber sale on the lands were used to upgrade water-related infrastructure. Since water is plentiful, the management goal on these lands is for water quality rather than quantity. The town's 1992 Master Plan acknowledges the importance of the town's natural resources and states that "Freedom's natural features and water resources should be a major factor to consider when developing the town's future land use map and regulations." Freedom received over a five year period from 1998-2002 \$100,423 in revenues from the Yield Tax; \$92 in revenues from payments in lieu of taxes; and \$23,186 in revenues from the land use change tax.

A local group is working to preserve 2,000 acres of land that would become a town forest. Residents and local conservation groups are trying to buy the parcel known locally as "Trout Pond". The deal is stalled because the current owners took it off the market to explore the potential for water extraction on the site. Part of the parcel is underlain by the Ossipee aquifer, a source of drinking water for the area. Voters, at the 2003 Freedom town meeting, approved the concept of acquiring the land as town forest. The local citizens group plans to raise money locally and possibly ask the town for a bond to cover some portion of the cost. The group would also look to the New Hampshire Land and Community Heritage Investment Program and the federal Forest Legacy program as sources of funds. The Trout Pond land is the largest tract of unfragmented land in Freedom. Protecting a contiguous piece of property of this size is important in Freedom. A perceived problem in the area is liquidation logging whereby loggers approach landowners and offer to log their land. Typically these are cut and run operations. Sometimes the land is bought, logged, parceled and sold.

*Jackson, New Hampshire*: Jackson, like many surrounding towns, is dominated by the White Mountain National Forest, which makes up about 72% of the town. The town owns approximately 452 acres of forest land and is just developing its first forest management plan. The Town received over a five year period from 1998-2002 \$23,688 in revenue from the Yield Tax; \$145,123in revenues from the federal government for payments in lieu of taxes; and \$91,936 in revenues from the land use change tax.

The town is updating its Master Plan. The most recent Master Plan, adopted in 2003, demonstrates a thorough understanding of the value of natural resources to the town. It states that "Forested land preserves the rural and historic character of Jackson and provides recreational and economic opportunities." It shows that the town understands the significant challenges it will face with regard to its natural resources. It states that "The challenge facing Jackson and the region as a whole is to maintain a strong economic base without jeopardizing the structure and vitality of the community or sacrificing the natural resources which make Jackson such an attractive place."

Jackson does not have any designated land conservation funds. Revenues from timber sales on the town forest go into the general fund. The town forest was last cut in the 1970s and a local forester noted that it was cut very hard at that time.

*Madison, New Hampshire:* The Madison Conservation Commission and/or the Town Forest Committee have jurisdiction over approximately 1,200 acres of town conservation and forest lands. Approximately 700 acres of this land is actually designated as 'town forest'. The town received over a five year period from 1998-2002, \$122,358 in revenues from the Yield Tax and \$29,856 in revenues from the land use change tax.

Revenue from timber sales on these properties goes into a forest fund managed by the town conservation commission, however, no sales occurred in the last 10 years. The commission also may receive 25% of funds from the land use change tax. The town-owned forest lands do not provide a big economic return and their primary benefits are for recreation and open space. The commission is concerned about the loss of forest land and open space. The town is home to one of the biggest forestry operations in the area, the International Paper white pine mill, whose planer mill recently burnt. There is wide speculation as to whether or not the planer mill will be rebuilt, with concerns expressed about its uncertain future.

Funds from timber sales on town lands go into a "Forest Fund" managed by the conservation commission. This is very small with approximately \$5,000 at any given time. These funds are used for management of the forests. The conservation commission also manages a trust fund set aside for land acquisition.

The Town of Madison is very active in the management and conservation of its natural resources. Madison's 2002 Master Plan recognizes the town's role in maintaining its rural character and the amenities that open space offers. The Plan states that "Without a comprehensive community plan with well-defined open space goals and without the support of Town government, we will lose the Town's rural character, due to the

pressures of rapid and excess building development, chaotic deforestation, and reckless neglect of our water resource."

Several entities in the town work together towards the town's conservation goals including the Conservation Commission and the Town Forest Committee. The Conservation Commission secures and preserves natural areas in Town and oversees its parks and forests. The Town Forest Committee manages the Town Forest "for income to the Town and for sustainable production of forest products". The Conservation Commission encourages best forest management practices for Town and private lands. The Commission reviews intent-to-cut permit applications and encourages preservation of historic features such as stone walls during timber harvests. The Master Plan states that the Commission continues to be concerned about liquidation harvests.

The Master Plan outlines the tools used for conservation. These include donations, purchases, easements, zoning and subdivision regulations, current use assessment practices, state and national conservation programs, scenic roads designations, educational and promotional programs, and matching funds and grants.

Although the Master Plan notes that the Town Forest Committee manages the town forest for income and production of forest products, the main benefits of Madison's town lands appears to be recreation and open space.

Ossipee, New Hampshire: Ossipee is seen by some interviewees as the center of forestry operations in the Mount Washington Valley in spite of the fact that the major forestry operations (e.g., white pine mill, biomass power plant) are in neighboring towns. The town owns several parcels of forest land, which are managed informally, without written management plans. The town received over a five year period from 1998-2002, \$195,435 in revenues from the Yield Tax; \$20,904 in revenues from state and federal payments in lieu of taxes; and \$10,717 in revenues from the land use change tax.

The historical legacy of the town forests is evident in contemporary policies. Profits from logging on town forestland go into a general town fund, and some of these harvesting profits are available to provide money for people to buy fuel for heating. Although the funds are used infrequently, this policy is maintained and the funds are available as needed. This arrangement occurred because the town forests were originally open for people to harvest wood for their personal use as fuel. Since most people no longer burn wood, the policy changed to make funds from timber harvests on town lands available for the purchase of other fuels.

Interviews indicate that the town wants to maintain its rural character. There is a perceived fear for the loss of this character to residential development, but also a cautious approach to conservation. This tension is based, it seems, on a desire to maintain enough developable land for both commercial and residential development. The town has considered adding various large parcels to its ownership recently but is constrained by the high cost of such pieces of land.

The conservation commission manages its own bank account - which can be used for land acquisition - and oversees most of the town-owned conservation lands. It receives the revenues from any timber harvested on lands it manages. The commission is considering creating a capital reserve trust fund for the purposes of future land acquisition. Revenue from lands managed by the town goes directly into the general fund.

Tamworth, New Hampshire: Tamworth is heavily forested and has an active conservation commission and an active community of private landowners, many of whom manage their forests for timber. Since the 1960s, approximately 262 acres have been preserved by the town, primarily through donations and mainly to protect wetlands and other natural areas. These lands are under the oversight of the conservation commission. None of these lands has a formal management plan. Water protection is the primary objective of the conservation commission, but it is also trying to convince the town about the importance of open space protection. The town received over a five year period from 1998-2002, \$240,135 in revenues from the Yield Tax; \$913,750 in revenues from state and federal payments in lieu of taxes; and \$40,429 in revenues from the land use change tax.

The conservation commission receives some funds (up to \$5,000 per year) from the land use change tax, which go into a conservation fund set aside for land acquisition. In 2002 \$5,000 of these funds were deposited in the fund.

The conservation commission has approached the town about adding more forest land to its ownership, however, the town is not interested in owning and managing forest land. There are many private landowners already managing their land for timber. The conservation commission is exploring the possibility of transferring an 80-acre piece of land from the town's control to its own. In 2002 the conservation commission began updating its 30-year-old Conservation Plan, including a natural resource inventory.

#### **OBSERVATIONS:**

\* Forests offer a complex suite of benefits in the region and specifically to towns that own and manage forest land

In addition to monetary returns from taxes and timber harvesting, forests provide recreational opportunities, wildlife habitat, and contribute to biological diversity and increasingly valuable open space. Further, benefits to communities that own and manage forest land include the value of local tenure, increased community capacity and social capital. Cooperation is needed to identify parcels, acquire funding and determine management strategies. Networks within the community and between the community and outside resources are required to support a town forest project. Town institutions are formed or reinforced to own and manage forest land and the complex community interests and priorities for the land. And, finally, town forests promote linkages between a variety of sectors including economic development, education, social services and conservation. In some cases, revenue from town forests can be and is used to support other community priorities (see Eaton and Ossipee).

\* The opportunities and benefits from town ownership and management of forest land are not fully realized in the Mt. Washington Valley

While most towns recognize, in a general sense the value of forest land, two towns do not own forest land; several towns own land, but either don't manage it or use it, and only three actively manage forest land to support other community priorities (education, water supplies, social services, monetary support of town budget). Providing information to towns on the opportunities and benefits of ownership and management may stimulate interest, primarily if linked initially to issues related to cost of development and value of open space.

\* Concerns exist about the ability and advisability of town ownership and management of forest land

A variety of concerns were expressed during the course of the study related to town ownership and management of forest land including the following:

the ability of towns to develop the infrastructure/capacity to own and manage land; the absence of conservation restrictions on some town owned lands; and the sometimes contentious debates that arise from conflicting and competing priorities for use of town-owned land. None of these issues, however, in this initial study emerged as persistent concerns.

\* Town ownership and management of forest land merits further attention as a part of a forest-based component of a regional economic development strategy. As large tracts of forest land come on the market, acquisition by towns offers another mechanism for arresting fragmentation of the region's productive forest land base. Additionally, management of town-owned land could provide a sustainable supply of raw material to a redeveloped regional value-added forest products industry.

#### **RECOMMENDATIONS:**

## EXPAND THE ROLE OF COMMUNITIES IN OWNING AND MANAGING FOREST LAND IN THE MT. WASHINGTON VALLEY

• Present report to each of the 12 communities within the Mt. Washington Valley region;

Presentations will be arranged and presented by the following: the town representative to the MWVEC Board, MWVEC staff and a member of the Forestry Task Force

• Identify specific communities that have interest in acquiring or expanding ownership of town forest land and provide information, technical assistance, resources and incentives in the acquisition, planning and management of townowned forest land;

Members of the Forestry Committee in conjunction with outside resources(e.g. National Community Forestry Center, Cooperative Extension, Society for the Protection of NH Forests)

- Conduct research on the following issues:
  - 1) Cost and benefits of town ownership of forest land;
  - 2) Non-monetary benefits to communities and the region of town ownership and management of forest land as a community asset;
  - 3) Model accounting systems for town forest management.
  - 4) Conduct Cost of Services analysis for target towns in the Mt. Washington Valley region.

Research projects will be incorporated into Forestry Task Force Work Plan and carried out based on ability to secure outside resources (grants) and assistance(research assistance) with approval from the MWVEC Board

• Based on research and findings, prepare factual basis for promoting town forests as examples of long-term, well-managed forests that are sustainable both economically and ecologically.

Forestry Task Force to prepare a white paper based on the findings from the research

### INCORPORATE FOREST CONSERVATION AND EXPANDING THE VALUE-ADDED SECTOR OF THE FOREST PRODUCTS INDUSTRY AS A COMPONENT OF A REGIONAL ECONOMIC DEVELOPMENT STRATEGY FOR THE MT. WASHINGTON VALLEY

- Establish a quantitative data base on forests and the regional economy:

  Collaborate with UNH, DRED, and the Office of State Planning to research the contribution of forests to the regional economy, trends in forest land use and in the forest products industry in the region; and challenges to securing the productive forest land base and redevelopment of the value-added sector of the region's forest products industry.

  Initial conversations with collaborators by members of Forestry Task Force,
  - Initial conversations with collaborators by members of Forestry Task Force, MWVEC staff and other interested Board members. Specific projects to be determined based on availability of resources both within the MWVEC and through UNH, DRED and OSP.
- Attract or develop GIS and other information systems capacity related to the region's forests and forest products industry within the HiTech Village:

  Create or expand existing information systems to track the location, ownership, and management of the region's productive forest land base; the demand and flow of timber products both within the region and from this region to others, and the needs/demand of local forest products industries (particularly value-added ones). Initial conversations and planning would be through the Forestry Task Force in conjunction with the landowner association. However, long-term, the enterprise could be organized, planned and funded through micro-enterprise development or rural enterprise development programs.
- Invest in the infrastructure of the regional forest-based economy:
   1) Establish a fund for communities that want to acquire or expand town forest land. The fund (based on grant, low-interest state bond system and/or revolving

loan fund models) would provide support for pre-acquisition and acquisition costs, as well as costs associated with planning, and management of the forest land. Forestry Task Force and MWVEC Board and staff

- 2) Work with natural-resource based businesses, including both timber and non-timber forest products to determine potential markets, resource supply and financing needs. *Forestry Task Force*
- 3) Create an association of forest land-owners that includes towns to share information, to provide long-term supplies of sustainably-managed forest products to local forest products industries; and to share planning and management costs. *Forestry Task Force and MWVEC Board and staff*