The patterns of public land ownership are very similar throughout the Northwoods of the upper Great Lakes. This section will examine the policy issues for National Forests region wide, followed by a look at state forests in the three upper Great Lakes states. Following that a more in-depth analysis of the policies in Michigan will allow an examination of the policy issues of the upper part of the lower peninsula in great detail.

Overall, public forest lands constitute nearly 35 percent of the 50 million acres of this region's forest land (Minnesota 50%, Michigan 38%, and Wisconsin 28%). These public lands are divided among seven National Forests, and over 100 state, county and municipal forests. National Parks and Lakeshores, and Fish and Wildlife Service refuges, as well as other state and local public lands are also important for protecting forest biodiversity. A significant acreage of land is dedicated to other public facilities, such as military bases or university research stations.

Both the federal government and the states own mineral rights throughout the region, under their own lands as well as under private lands. Federal mineral rights are managed by the Bureau of Land Management, while states manage their own mineral rights. In addition, some mineral rights under public lands are privately held.

With few exceptions throughout the three states, federal and state forest ownerships are extremely fragmented. Federal and state land holdings are interspersed in some areas, while private inholdings occur within the boundaries of virtually every unit of public land. The Huron-Manistee National Forest, for example, owns less than half of the land encompassed in its dedicated boundaries. Other public lands, especially parks, are experiencing extensive development in private lands on their borders, isolating them increasingly from potential linkages with other public lands.
Not all public land is managed with a common goal. Mandates for management explicitly stated in laws and regulations or de facto mandates developed through a history of incremental decision making describe the fundamental direction behind public lands management for each category. Within the upper Great Lakes forests, many different units of public land under varying management are found in landscapes which might be grouped together for coordinated biodiversity protection efforts. The current contribution of those lands to protection efforts depends in large part on which agency oversees their management.

Forest Ownership in the Lake States

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County &amp; Municipal</td>
<td>10%</td>
</tr>
<tr>
<td>Forestry Industry</td>
<td>9%</td>
</tr>
<tr>
<td>Indian</td>
<td>2%</td>
</tr>
<tr>
<td>Federal</td>
<td>13%</td>
</tr>
<tr>
<td>State</td>
<td>15%</td>
</tr>
<tr>
<td>Farmer</td>
<td>22%</td>
</tr>
<tr>
<td>Misc. Private</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Lake States Forestry Alliance

State and National Forest Mandates

The three state forest systems and the National Forests are managed under mandates which are built on the concept of "multiple use management." Despite years of definition and application, the interpretation of multiple use and its application as policy to public forest lands continues to be an issue surrounded with controversy. Multiple use is generally defined as meaning that these lands will provide a wide range of public benefits, from developed and rustic recreation, to commodity timber production and mineral extraction, to protection of native species and communities and wilderness. Like a Rorschach test, however, interpretation and application of multiple use principles seems to have more to do with the characteristics of those applying the concept than with inherent legal constructs within the laws or policies.
Multiple use policies, by their nature, delegate tremendous flexibility to public officials responsible for forest management. Not surprisingly, the broad mandate of "multiple use" has led to conflicts among both managers and interest groups who grapple with the fundamental question of what types of uses are appropriate, and in what combination and quantities. One particular area of conflict is over the question of whether multiple use mandates require that every type of activity be allowed to occur in every area of a forest. Some constituencies, particularly those interested in intensive uses, and some agencies advocate for this interpretation. At both state and federal levels, legislation and regulation have been used in an attempt to further shape and constrain the broad authority given to agencies under multiple use mandates.

The Forest Service

To a large extent, the policy evolution of the U.S. Forest Service since its founding in 1897 could be described as a continuing struggle to strike a balance among competing interests. Numerous authors have exhaustively catalogued and analyzed the evolution of the Forest Service over the decades, so this discussion will simply highlight a few specific elements of policy history.

The 1897 Organic Administration Act created what later became the Forest Service and contained broad goals for protecting forests, providing timber and assuring favorable flows of water. As the agency's role and the public's interest in that role expanded dramatically through the middle of this century, imetus came about for legislation to express clearer congressional intent regarding the proper management of these lands.

The Multiple Use Sustained Yield Act of 1960 defined and affirmed the mandate of multiple use with regard to the renewable resources of the forests, as well as mandating management to assure the non-diminishing provision of those renewable resources. In 1964, in response to public concerns, the Wilderness Act was created to assure that permanent designations could be established by Congress for federal lands meeting wilderness criteria.

As the 1960's closed, Congressional concern about the management of forests and other resources were expressed in two significant laws. The National Environmental Policy Act (NEPA), enacted in 1969, created requirements for review and consideration of the potential environmental impacts of actions by federal agencies. A year later, the Endangered Species Act (ESA) focused in on the need to require proactive efforts to
identify, protect and, on federal lands, restore species facing extinction. Despite the flaws in each of these laws, they set a crucial course by establishing the obligation for federal agencies to analyze and seek public input into the actions proposed on their lands which might have adverse environmental consequences.

Even more specific and comprehensive planning direction for the Forest Service came from Congress in the form of the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, and two years later the National Forest Management Act (NFMA). NFMA created the legal framework within which the Forest Service has developed plans for all of the National Forests, with the requirements of NEPA providing guidance for the content of the environmental analyses accompanying these plans. In addition, NFMA contains language which requires the Forest Service planning process to “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet the overall multiple-use objectives.” This language and subsequent interpretations and court rulings have been viewed as providing tremendous impetus for steering the agency toward management for biological diversity.

Both NEPA and NFMA provide strong direction regarding the development of required documents and providing public review. NEPA requires that alternative plans be considered, including a no-action alternative, in the course of developing each National Forest Land and Resources Management Plan (Plan) and accompanying Environmental Impact Statement (EIS). Public comment on both the Plan and the EIS’s are provided for, as are provisions allowing administrative challenges to agency decisions on part or all of the documents. Since the mid-1980’s when Plans and EIS’s began to be issued in draft form, the attention of interest groups with a stake in National Forest management has been focused heavily on the Plans and the planning process. Through comments, negotiations, appeals and litigation, issues concerning the full range of multiple uses on National Forests have been debated and contested. NFMA sets the goal of periodic planning revisions or updates, and the process of preparing the next round of plans is already underway.

The Reality

This thumbnail sketch of the statutes masks areas of extensive controversy over the obligation of the Forest Service to address and protect biological diversity. Interpretation of the laws as well as management choices made by the Forest Service have led to disputes about National Forest planning
nationwide. Despite a highly structured set of regulations for management and planning within the National Forests, the unique political, social and ecological circumstances affecting each National Forest dramatically influences the direction its Plan will take. In spite of the actions of Congress over the years, the Forest Service has succeeded in maintaining extensive flexibility in its management of National Forests, outside of clearly articulated federal mandates such as the ESA.

This flexibility has been generally supported by the courts. In 1982, the Supreme Court concluded that NEPA “did not require agencies to elevate environmental concerns over other appropriate considerations. Rather, it required only that the agency take a ‘hard look’ at the environmental consequences before taking a major action.” The Forest Service has used this interpretation of the law to argue repeatedly that its duties are fulfilled merely by taking a “hard look,” but that there is no obligation actually to choose the most environmentally sound option.

In addition, the enormous number of laws applying to the National Forests has created what one federal judge described as “a crazy quilt of apparently mutually incompatible statutory directives [which] are enough to drive any Secretary of Agriculture interested in discharging his lawful duties to drink. Congress can, of course, lead a Secretary to booze, but Congress cannot force the Secretary to drink. Thus the Secretary, by nature of his rule-making powers has the opportunity to bring order out of chaos.” Ironically, the net effect of Congressional efforts to assure greater control over the direction of management of the National Forests has been interpreted by at least one judge as vesting greater discretion within the agency.

While reserving overall flexibility to itself, the Forest Service is by nature a rigid, hierarchical organization, in which ongoing decision making procedures are extremely formalized. The Forest Service has evolved a multi-layered planning process, starting with formal direction from the President and Congress through both the appropriations process and a formal Statement of Policy by the President. Under RPA, five year plans are prepared by the Chief of the Forest Service to establish broad objectives for the National Forest system as a whole. Regional guides are developed by each of the Forest Service Regions to provide general standards and guidelines to each of the National Forests within that Region. From there, each National Forest, working under the direction of its Forest Supervisor, develops Plans and EIS’s. Finally, the most important step in the entire process happens when the implementation of the Plans begins to be pursued through specific project approvals and actions.
The ultimate outcome of the highly formalized planning and implementation process within a mandate which has tremendous flexibility is not all that surprising. There is an astounding diversity among Plans, even within the same state, as the personalities, political circumstances and unique physical and biological features of the National Forest shape each one. Numerical goals set at the national or regional level for timber outputs or budget levels set parameters which constrain the decision making, and have been increasingly targeted by environmental organizations concerned about the environmental consequences of these goals. During the 1980’s national timber sale goals were expanded well beyond the sustainable levels mandated by Congress, leading to the depletion of old growth forests in the Pacific Northwest and the subsequent battle over protection of the remnants of those forests.

In most National Forests, however, a remarkable amount of flexibility exists even within these constraints. Questions about where to place timber sales and roads, how to manage recreational demands, or where to place wilderness and other protected areas are initially answered within the individual forest based on the unique circumstances of that area. Disagreements with those decisions must work their way up the administrative hierarchy. From the standpoint of biodiversity protection efforts, these types of decisions at the level of the forest supervisor and below are often critical. Given the complexity of the issues confronting native ecosystem protection efforts in a land managed for multiple uses, the tremendous flexibility given the managers can be either an asset or a significant burden.

Opportunities for public input are provided at every level of this complex process. Most of the decisions made by the Forest Service within these various planning and implementation levels have provided for comment periods, responses from the agency to those comments, and some opportunities for appeal up the hierarchy and to the courts if disagreements persist. While the sufficiency of public input into National Forest planning has been heavily criticized by virtually all interest groups, the net effect of this process has been to create an organizational structure that is well understood by its constituency. But it should not be assumed that awareness and knowledge alone somehow counter the extraordinary discretion of the managers. Instead, the agency provides opportunities for members of the public to exercise influence within each Forest and Region, but does not guarantee success.

Two stories within the upper Great Lakes National Forests provide examples of the unique nature of each Forest. The Huron-Manistee National Forest in Michigan issued its final Plan in 1986 amidst signifi-
cant controversy. Environmental organizations had submitted extensive comments on the draft Plan, but found that the final Plan fell far short of desired changes. Among the desired changes were alterations to the allowable sale quantity (the maximum amount of timber which might be sold in the ten year planning period), insufficient semi-primitive area designation and a dearth of old growth. The groups, including Sierra Club and the Wilderness Society, submitted an extensive appeal of the Plan. A coalition of logging interests, hunters and the Michigan Department of Natural Resources filed a counter appeal of the Plan, claiming that the projected harvest levels were too low.

Following on the experience of the Hiawatha National Forest in the eastern Upper Peninsula, where the first negotiated settlement of Plan appeals in the nation occurred, the Huron Manistee supervisor initiated negotiations with the appellants. During the course of numerous meetings, an overall set of agreements for settling the appeals was reached. At the heart of the agreement was the concept that because the Plan was subject to revision in 10 to 15 years many of the issues at stake did not need to be resolved immediately. The agreement also called for interim research and information collection to facilitate better decision making in the next planning period. Since the settlement, the Huron-Manistee has developed an Ecological Classification System and has identified 170,000 acres for designation as old growth.

The agreement also established the Friends of the Forest, an on-going forum for consultation by the Forest Service staff with the appellants and other interests involved in the forest. This forum has provided a sounding board for all manner of controversy, although the group has no actual authority over management decisions. As a result, when a 1993 proposal was floated with support from Michigan’s Governor to dramatically increase the harvest levels on the Forest to above the allowable sale quantity, opposition by the Friends of the Forest went a long way toward quelling efforts to undermine the terms of the Plan agreement. Although the consensus which brought about the 1987 Plan settlement has begun to fray, the history on the Huron Manistee has laid the ground work for future negotiation of the Plan revisions.

By contrast, the experience with regard to the Nicolet and Chequamenon Forests in Wisconsin highlights the other end of the spectrum. Unlike
primarily reactive efforts by environmentalists in most National Forest Planning efforts, in Wisconsin a group of botanists and environmental activists proposed an alternative approach to management of the two forests based on principles of conservation biology. Though a complete discussion of this matter is not possible here, a brief overview will be provided. Wild Forests: Conservation Biology and Public Policy, authored by three of the principals on the environmental side, William S. Alverson, Walter Kuhlmann, and Donald M. Waller, provides an in-depth analysis of the Wisconsin experience from the environmentalists' perspective.

The Conservationists' Alternatives offered in the Chequamenon and the Nicolet National Forests challenged both procedural failures under NEPA within the planning process and failures to abide by clear language within NFMA directing management of National Forests for biological diversity. The appeals amounted to a call for a complete reordering of the manner in which National Forests planning and plan implementation would occur — a "new, affirmative diversity policy for our National Forests."

In a classic clash of culture, the Forest Service adamantly refused to accept the arguments put forward, pointing to its alternate interpretations of NEPA and NFMA and, more importantly, arguing that its multiple-use mandate would preclude adopting this new approach. The agency rejected the scientific arguments raised because it considered them to be outside the mainstream of science. They also argued a different interpretation of the diversity provisions of NFMA, maintaining that their efforts were appropriate to meet the intent of the law. Plan appeals were filed in the mid-1980's, with ultimate rejection of the appeal arguments by the Chief of the Forest Service in 1990. Lawsuits in both cases were filed in 1990, with decisions having been issued in Federal District Court this year. In both cases, the judges found against the environmental litigants, again acquiescing to the Forest Service contention that they have tremendous leeway in fulfilling their duties for management of the National Forests. The lawsuits have been appealed, and hearings were held in October 1994.

As this matter is examined, it is important to understand that the efforts in both the Huron-Manistee and Wisconsin National Forests, combined with many different efforts around the country to require ecologically sound management of the National Forests, are having an effect on the agency as a whole. Shortly after the decisions by the judges in the litigation in Wisconsin, a representative of the Forest Service Region IX office in Milwaukee commented at a regional training session that the only people who would have cheered this decision have either died or left the agency. In the Federal Circuit Court of Appeals hearing on this case the
Department of Justice attorneys representing the Forest Service finally conceded that the scientific arguments raised by the Conservationists’ Alternatives were now shown to be valid.9

Though criticized as being superficial or too small, recent efforts by the Forest Service have begun to give credence to the very ideas put forward by the appellants in Wisconsin, and to a lesser extent applied in the Huron Manistee. In a form of poetic justice, on the Chequamenon National Forest the forest ecologist has initiated a project which contains a number of elements of the proposals put forth by the botanists a decade before.10

In addition, the rhetoric within the agency has begun to change to adopt the language of biological diversity. Ecosystem Management was declared to be the policy of the agency in 1992, as Chief Dale Robertson issued a broad but vague policy to that effect. Changes in personnel and the continuing pressure from the scientific community are giving hope that a permanent change is underway. The Association of Forest Service Employees for Environmental Ethics (AFSEE), a group dedicated to holding their own agency accountable to the laws and the intent the laws governing the agency, has bolstered sincere Forest Service staff in efforts to manage the forests well. A new Chief of the Forest Service, Jack Ward Thomas, selected over the objections of the agency’s own hierarchy and bringing a strong background in biodiversity advocacy, gave tremendous hope for change when he took over the agency a year ago.

However, all is far from rosy for advocates of a reformed Forest Service. Many environmentalists reject the Forest Service Ecosystem Management initiative as merely a new definition for business as usual,11 citing the ill-defined nature of the initiative and the use of the title for projects which involve intensive management and recreational development. The controversy over the old growth forests of the Pacific Northwest has reinforced the political nature of the agency, and its vulnerability to pressure. And for many, Jack Ward Thomas has fallen short of the extremely high expectations that were held for him. Of most concern, while any progress can be seen as justification to hope permanent progress is being made regardless of how slowly, the fundamental mandate of the agency still leaves open the potential for a dramatic reversal at some time in the future.
State and County Forests

While state and county forests have a similar policy base in multiple use management, in none of the three states has the level of policy development and planning reached the detail of the National Forests. Both Minnesota and Wisconsin have significant state and county forests. Wisconsin has close to one-half million acres of state forest lands, and more than two million acres of county and municipal forests. In Minnesota over three million acres are in state forests, while 2.5 million are county owned. Michigan has just under four million acres of state forest lands, and less than 200,000 acres of county forests.

Each state has vested primary authority over the management of state forest lands in their respective Departments of Natural Resources. In Minnesota and Wisconsin statutes articulate the purposes for state forest ownership, while vesting significant authority in the agencies to manage those lands. In Michigan, no fundamental statute exists to establish the purposes of state forest management.

Minnesota established state forests in statute with the first purpose listed as being for “growing, managing and harvesting timber crops.” Additional purposes include recreational areas development, watershed protection, “and the preservation and development of rare and distinctive species of flora and fauna native to such areas.” The DNR Commissioner is directed to manage state forest lands “according to the principles of multiple use and sustained yield.” The statute defines multiple use management as “the principle of forest management by which forest resources are utilized in the combinations that will best meet the needs of the people of the state; including the harmonious and coordinated management of the forest resources, each with the other, without impairment of the productivity of the land and with consideration of the relative values of the resources, and not necessarily the combination of uses resulting in the greatest economic return on unit output.” Minnesota also includes sustained yield in its definition, explaining that fluctuations in intensity of management might occur to “enhance the current or anticipated output of one or more of the resources.” While the primary emphasis of the statute is on managing forest lands for timber production, aspects of the Minnesota law provide handles for assuring at least some consideration of elements which affect biological diversity.

In Wisconsin, the law pays significantly greater attention to the county forests, which are four times larger than the state forests. The statutory purposes for county forests are surprisingly different from those for state forests. The statutory authority establishing state forests expressly states
that "the primary use of forests is silviculture and the growing of recurring forest crops, with scenic values, outdoor recreation, public hunting and stabilization of stream flow as extra benefits." The law defines state forests as essential to meeting the economic demands of the forest products industry, but also provides guidance that multiple use principles apply, "including designation of special use tracts ranging from natural areas receiving a high degree of protection to recreation areas with appropriate facilities."

County forests in Wisconsin have a somewhat more balanced purposes section, providing more even footing between timber management and management for non-commodity outputs. A fundamental goal of county forests management, however, is to "provide a reasonable revenue to the towns in which such lands lie." In practice, the experience in Wisconsin is one of timber primacy on county forest lands, driven in large part by dependence on a revenue stream for funding schools and a close working relationship with the timber industry. Proposals currently under consideration to alter the statutory mandate for Wisconsin state forests have been met with concern by both the industry and county forest representatives, who have lobbied as a block on this matter.

Wisconsin and Minnesota also have statutory direction for planning activities on periodic bases for the management of the forest lands under state control. The statutes provide guidance on what kinds of issues should be addressed in the plans, including reforestation and the level of timber harvesting to be allowed during the period of the plan. Wisconsin also provides for planning on county lands on a periodic basis. Michigan statutes, by contrast, provide no guidance for planning at all. Planning on public forest lands in the three states seems to follow directly from Forest Service efforts in the early 1980's to encourage states to develop their own forest planning processes. Through the State and Private Forestry program of the Forest Service, grants and technical support for planning provided incentives for state agencies to move toward developing long-term management plans. Federal funds for these programs dried up in the mid-1980's, creating a bind for these states which were already suffering from severe budget problems during this period. Nonetheless, the seeds of planning processes were planted and began to take hold in state policy frameworks.

In each state rules, regulations, policies and procedures for implementation and adequate funding of programs has affected the implementation of laws. This report is limited in its ability to examine this issue for each state, so will focus attention on the Michigan situation to highlight the challenges.
Parks and Wildlife Refuges

Park lands are usually defined by narrower mandates than are public forests. National Parks are directed to provide for both natural heritage protection and recreational experiences, and state parks often echo this mandate. Even these narrower concerns routinely come into conflict, particularly as public interest in visiting park lands has grown. The problem of visitors "loving" parks to death has been particularly acute in the most popular parks, and has sometimes led to management decisions which trade off the ecological integrity of a park in order to allow for access for interested members of the public.

Wildlife refuges and preserves also have a narrower charge than do the public forests. While possibly providing for both timber management and recreational opportunities, generally the primary purpose behind land owned by the U.S. Fish and Wildlife Service (USFWS) or state wildlife agencies are to provide habitat for specific species. Such a clear focus defines a unique role within the management spectrum, but may actually be a hindrance for achieving biodiversity objectives. In particular, preserves designed to promote management for overabundant game species can be directly contrary to ecologically sound strategies across the landscape.

The role of the USFWS goes beyond just management of its own lands, however. A number of federal statutes give authority to the agency to oversee a range of wildlife concerns, from migratory wildfowl to endangered species. Through both USFWS refuges and the oversight of endangered species listing and recovery plans, this agency influences the protection of biological diversity extensively. Within the upper Great Lakes, USFWS plans and coordination with other public agencies have been instrumental in the ongoing recovery of both the Kirtland's Warbler and the gray wolf. However, 1991 analysis by the Keystone Policy Dialogue on Biological Diversity on Federal Lands points to a number of deficiencies within the USFWS mandate which undermine its key role in biodiversity protection efforts. Primary among those concerns is that the agency mandate tends to focus on management for promotion of single species without clear direction to work for biological diversity.20