PEMIGEWASSET WILD AND SCENIC RIVER STUDY

DRAFT REPORT

MARCH 1996
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The Pemigewasset Wild and Scenic River Study Draft Report was edited by Jamie Fosburgh and designed by Victoria Bass, National Park Service.
SUMMARY
federal laws and regulations, public and private land ownership for conservation purposes, and physical constraints to additional shoreland development. However, two of the seven towns would need to upgrade elements of their zoning ordinances in order for their segments to be suitable for designation.

Critical indicators of public opinion regarding river designation were 1993 Town Meeting votes for the Valley segment, and the position of the New Hampshire Department of Resources and Economic Development for the Franconia Notch segment. After an extremely contentious community debate over the effects of designation, Town Meeting voters in six of the seven towns in the Valley segment voted against supporting designation for their portion of the river. Subsequently, the Commissioner of NH DRED decided against supporting the Notch as a stand-alone designation.

Alternatives and Recommendations
Five alternatives for river management are considered, four of which contemplate full or partial wild and scenic designation of the study area. The fifth alternative calls for continuation of the status quo, and is the National Park Service recommended alternative. Because the National Park Service made a commitment to local choice, no alternative calling for designation of any part of the Pemigewasset River is recommended at this time. However, should local opinion change, as evidenced by new town votes, or should the state reverse its position, the Service would reconsider its position. Should the towns of Thornton and Bridgewater support designation in the future, they would need to upgrade their zoning ordinances before the National Park Service would recommend designation of their segments.
This chapter provides an introduction to the Wild and Scenic Rivers Act and the Pemigewasset River Study. It includes a review of the project's history, the study process and strategy, the principal participants, and the major study products and accomplishments.

1. A NATIONAL WILD AND SCENIC RIVERS ACT

The Wild and Scenic Rivers Act (Public Law 90-542) was passed by Congress in 1968 to protect certain free-flowing rivers for the use and enjoyment of present and future generations. The Act was intended to balance the nation's long-standing water resource development policies with a river conservation policy. Federal agencies are prohibited from participating through loan, grant, license or otherwise in water resource development projects which would alter the rivers' free-flowing condition or have a direct and adverse effect on outstanding resources. The Federal Energy Regulatory Commission is prohibited from licensing new construction for hydroelectric projects. Rivers are also afforded this protection during Congressionally authorized wild and scenic studies and for as long as three years after the completion of the study.

Congress envisioned the National System as a cooperative effort relying on the actions of all levels of government. The Act provides a framework for participatory decision-making that calls for development of a sensible conservation strategy for rivers and their related lands. Communities are left with authority to protect their river corridors while remaining sensitive to local needs and concerns.

Rivers may be designated into the National System either through an act of Congress (by amending the Wild and Scenic Rivers Act) or through an administrative action by the Secretary of the Interior upon application by the governor of the state through which the river flows.

As of December 1994, the National System included 150 rivers comprising 10,734 river miles, with another two dozen rivers under Congressionally authorized study for possible designation. The majority of designated rivers are in the western states, but four are located in New England: the Farmington in Connecticut; the Allagash in Maine; the Wildcat in New Hampshire; and the Westfield in Massachusetts.  

1. B STUDY BACKGROUND

Local interest in a federal wild and scenic study of the Pemigewasset River began in 1986 following the initiation of a similar effort on the Merrimack River, into which the Pemigewasset River flows. Local concerns had arisen over rapidly escalating development along the river. In March of 1987, many of the towns along the Pemigewasset adopted a river conservation overlay zone restricting riverside development. The Pemigewasset River Council (PRC), a group of citizens and civic leaders from nine towns along the river, was the prime force behind creation and adoption of the overlay zones as well as subsequent river conservation efforts along the Pemigewasset. Interest in a wild and scenic river study and potential designation was heightened when efforts to dam the Pemigewasset at Livermore Falls in Campton for hydropower production were renewed.

Later in 1987, the PRC met with representatives of the National Park Service to discuss the wild and scenic process. Subsequent to this meeting, the Boards of Selectmen of nine towns along the river (Thornton, Campton, Plymouth, Holderness, Ashland, Bridgewater, New Hampton, Bristol and Sanbornton) wrote letters to the New Hampshire Congressional delegation supporting study legislation. The towns of Thornton and Campton expressed further support in the form of a Selectmen's resolution (Thornton)
and a Town Meeting vote (Campton). Support for a study was also expressed to the delegation by conservation groups and riverfront landowners. Legislation was introduced into both Houses of Congress in August of 1989, and on August 10, 1990, Public Law 101-357 authorizing a study of segments of the Pemigewasset River in New Hampshire for potential inclusion in the National Wild and Scenic Rivers System was signed into law.

Two river segments were included in the study: a 6-mile headwater reach (included in the Nationwide Rivers Inventory) through Franconia Notch State Park from Profile Lake to the park's southern boundary (the "Franconia Notch segment"); and a 26.5-mile reach extending through seven municipalities from the north Thornton town line to the backwaters of the Ayers Island dam (the "Valley segment").

1.C STUDY PROCESS

The study process was developed to fulfill two main goals: 1) determine the eligibility and suitability of the Pemigewasset River study segments for inclusion in the National System; and 2) develop a locally-supported conservation plan for the river that could be implemented regardless of designation.

Consultations were held early on with a group of "technical cooperators" to ensure the federal study would interface smoothly with existing programs and initiatives. Representatives of state agencies, environmental groups, and regional planning commissions participated in this process.

Public Involvement

Because the river corridor is primarily in private ownership, a strong emphasis was placed upon public involvement during the study. An extensive public involvement program was developed to ensure that the concerns of the many diverse groups and individuals interested in the management of the Pemigewasset River were considered, and that their active participation in the process was encouraged.

Multiple means were used to keep various interests informed about study progress and to elicit public involvement, including: newsletters; direct mailings to a list of interested parties; surveys of riverside landowners and the general public; meetings with town boards, interest groups and affected individuals; public meetings; media releases; and river outings. The New Hampshire Congressional delegation was kept fully informed throughout the study process to ensure their concerns were being met. The National Park Service established a local field office in Plymouth, New Hampshire to facilitate local interactions.

Study Committee

The cornerstone of the public involvement process consisted of conducting the study in close cooperation with a broad-based local advisory committee - the Pemigewasset Wild and Scenic River Study Committee. The National Park Service provided staff support for the committee.

The Study Committee was composed of 21 members and 16 alternates representing everyone with a stake in river management: the seven towns included in the Valley segment; the State Department of Resources and Economic Development (DRED); riparian landowners; business and tourism interests; farmers; sportsmen and recreationists; Pemigewasset River Council; New Hampshire Rivers Campaign; New Hampshire Landowners Alliance; New Hampshire Association of Conservation Commissioners; Lakes Region Planning Commission; and Plymouth State College.

The purpose of conducting the study with a broad-based advisory committee was to facilitate the active involvement of divergent groups in the study process, and to help ensure that the river conservation plan developed during the study would be widely supported.

Specific roles of the Study Committee included: providing information about the river and surrounding communities; identifying issues and defining conservation goals; reviewing technical analyses and evaluations; developing
river conservation plans; and assisting in determining the river's suitability for designation.

**Partnership Study Approach**

The National Park Service developed partnerships with regional agencies and organizations to tap their expertise and assistance with key aspects of the study. These cooperators have a long-term interest in furthering conservation efforts in the Pemigewasset River valley and will continue to work toward this end beyond the completion of the study. They each contributed substantial resources of their own to cooperative work elements.

The four main cooperators and their specific involvement is as follows:

- **Office of State Planning** - to create a GIS information base and produce maps of the river corridor;
- **Lakes Region Planning Commission and North Country Council** - to develop lists of riparian landowners and provide technical planning assistance;
- **Society for the Protection of New Hampshire Forests** - to develop and implement a conservation easement donation program;
- **Merrimack River Watershed Council** - to assist with public involvement efforts.

**Management Plan Development**

While the Wild and Scenic Rivers Act calls for comprehensive management plans to be developed within three years of a river’s inclusion in the national system, there are significant benefits to developing conservation/management plans during a river study.

On a river flowing predominantly through private lands like the Pemigewasset, people are very concerned about the management implications of wild and scenic designation, and are reluctant to support an effort with unknown consequences to them personally and to their community. Developing a management plan during the study allows people to know what they can expect from wild and scenic designation. Cost effectiveness is another benefit to developing a plan during the study. Wild and scenic river studies are expensive; they can be made much more productive if a popular, implementable conservation plan is developed in the process. Studies conducted merely to determine a designation recommendation risk a significant commitment of time and effort for uncertain gain.

A river management plan was produced for the Pemigewasset River through the Study Committee process (see appendix B). The plan will guide management of the Pemigewasset River, if designated, serving as the “comprehensive river management plan” required by the law. While the plan was written to satisfy the requirements of the Wild and Scenic Rivers Act, it can easily be modified for use in the event that the river is not designated into the national system.

**Goals and Objectives**

Early in the study, a series of workshops were held at which the Study Committee and members of the public identified a series of goals and objectives for river management. These goals and objectives were sorted into five themes:

- instream and shoreline resources
- upland resources
- community development
- recreation
- public education

The Study Committee then developed and prioritized a set of actions to accomplish each objective within these five themes. This work provided the nucleus of the Pemigewasset River Management Plan.
Guiding Principles

Based upon previous experiences with wild and scenic river studies of privately owned river corridors, the National Park Service established several principles to guide development of the management plan for the Pemigewasset River:

Local Control of River Management

Significant concern was expressed about the need to maintain local control of river corridor management. Senator Gordon Humphrey, speaking for himself and Senator Warren Rudman, addressed this concern when introducing the Pemigewasset River Study Bill to the Senate on August 3, 1989, stating that “... it is our intention that the National Park Service pursue a strategy which emphasizes a Federal State Local government and private landowner partnership to protect the integrity of the river.”

Management responsibilities should remain essentially unchanged from the current situation, with town boards retaining control over land use and state agencies retaining their existing authorities. The National Park Service’s role, should the river be designated, would be limited to reviewing federal water resource projects and providing technical and financial assistance.

The National Park Service’s commitment to local control was reflected in the agency’s promise to recommend to Congress that the river be included in the national system only if there was local support expressed for designation in each of the affected communities.

Reliance Upon Existing River Protection Mechanisms

To fulfill the purposes of the Wild and Scenic Rivers Act on private land rivers, it is most effective to recognize and coordinate the use of existing local, state and federal laws and programs and private conservation actions to conserve river resources. These mechanisms are capable of providing good protection for important river resources, and should be relied upon as the primary river management tools. The management plan should specify ways in which these mechanisms can be made more effective and augmented with voluntary actions.

No Federal Land Acquisition or Management

The Wild and Scenic Rivers Act authorizes federal acquisition of land and easements for use as a river management tool. However, there is often opposition to wild and scenic designations on private land rivers due largely to fear of federal agency loss of condemnation authority. To a lesser extent, people also voice concerns over the effects of willing-buyer purchases on local tax bases.

Federal land acquisition and management should be clearly prohibited in the Pemigewasset River management plan, which should be referenced by any designation legislation as the document on which it is based. The acquisition authority of the generic Wild and Scenic Rivers Act would be superseded by this legislation, thereby prohibiting acquisition by law.

Recognition of Need for Economic Growth

It is understood that a healthy river environment and a stable economy are mutually dependent, and that the corridor landscape will continue to change as communities experience growth over time. The intent of the river management plan should be to ensure that future development is sensitive to river values. The plan should integrate conservation concerns with community growth goals in order to maintain the social and economic vitality of the area.

Protection of Private Property Rights

As the primary stewards of river corridor lands, the willing cooperation of landowners is critical to success of the river conservation effort. The rights of landowners should be respected and traditional uses of the corridor should be maintained while simultaneously protecting important resource values.

1.6 Study Products

The Pemigewasset Wild and Scenic River Study resulted in several products which will be of continuing benefit to the study communities and the state of New Hampshire. These include:

GIS Maps

A series of maps of the Valley segment corridor were created through a cooperative agreement with the New Hampshire Office of State Planning. Information about corridor resources and characteristics was digitized and entered into a Geographic Information System (GIS). Maps were then produced depicting local zoning, land cover, public land areas, and sensitive areas such as steep slopes and wetlands. These maps were used to assist in river resource assessment, evaluation of existing protection and river management.
planning as well as for public presentation purposes. The maps were distributed to the seven communities of the Valley segment and will serve to facilitate town planning efforts in the years to come. The state will also benefit from the expanded data base.

Plymouth/Holderness Riverfront Restoration Project

Based upon community desire to make better use of the riverfront area, the services of a landscape architecture class from the University of Massachusetts were enlisted to develop a series of design solutions for the Plymouth Village waterfront and an adjacent park in Holderness. Following several site visits and meetings with community leaders and the general public, conceptual plans were produced with ideas ranging from the visionary to the immediately implementable; rendered drawings and multiple copies of a project publication were distributed to the towns of Plymouth and Holderness. Plymouth has followed up on this project by using Land and Water Conservation Fund grant monies for site improvements in the floodplain forest along the river. Holderness is also moving forward with plans to improve their park area.

River Resource Assessment

A thorough assessment of river resources was conducted, leading to production of the Draft Eligibility and Classification Report (see appendix C), which found the Pemigewasset River eligible for inclusion in the national system. Existing information was compiled from all available sources, and new information on some resources was produced via comparative analyses conducted by teams of resource experts assembled for the purpose. The resource assessment provides excellent baseline information on Pemigewasset River corridor resources that can assist with a number of ongoing efforts at the state and local level.

Evaluation of Existing Protection

River-related local, state and federal regulations, corridor ownership patterns and physical constraints to development were all evaluated to assess how well river resources are currently protected in the study corridor. Results are presented on a town-by-town basis in Chapter 3, and are also displayed in a matrix to allow comparisons between towns. This comprehensive evaluation provides towns with a useful planning tool, showing the strengths and weaknesses of river protection in each community and indicating where protection could be improved. The evaluation provided the basis for development of many of the recommended actions in the river management plan.

River Management Plan

A plan for future conservation and management of the Pemigewasset River was developed by the Study Committee, based mostly upon existing conservation mechanisms and voluntary measures. While the plan was written to serve as the “comprehensive management plan” required by the Wild and Scenic Rivers Act to guide management of designated rivers, it can be easily modified for community use if the river is not designated. The plan will serve as a strong departure point for the local advisory committee (to be formed under the state Rivers Management and Protection Program) in their upcoming effort to develop a management plan for the state-designated reach of the Pemigewasset River.
This chapter describes National Park Service findings relative to: 1) the "outstandingly remarkable" natural and cultural resource values associated with the Pemigewasset River study segments; the "free-flowing character" of study segments; and 3) appropriate "classifications" if the river is ever designated. These findings are based on the "Draft Eligibility and Classification Report" published separately during the study, and which is reproduced in its entirety as Appendix C to this report.

2. A ELIGIBILITY AND CLASSIFICATION CRITERIA

The subsections below describe the eligibility and classification criteria as set forth in the Wild and Scenic Rivers Act as amplified in the USDA/USDI Interagency Guidelines for Eligibility, Classification, and Management of River Areas as published in the Federal Register on September 7, 1982.

Outstandingly Remarkable Values

To be eligible for inclusion in the National Wild and Scenic Rivers System a river segment, together with its adjacent lands, must support one or more "outstandingly remarkable" natural, cultural, or recreational resource values. Such resource values must be directly related to, or dependant upon, the river. The "outstandingly remarkable" threshold within the Act is designed to be interpreted through the professional judgement of the study team.

The descriptions below provide examples to help interpret this "outstandingly remarkable" eligibility requirement.

Nationally Significant Resource Values

Resource values which are nationally significant are considered to meet the "outstandingly remarkable" threshold. A nationally significant resource would be rare or exemplary at a national scale. For example, a recreational boating experience which draws visitors from all over the nation would qualify as a nationally significant recreational resource.

Regionally Significant Resource Values

Based upon the desirability of protecting a regional diversity of rivers through the national system, a river segment may qualify based on regionally rare or exemplary resource values. For example, a river segment which supports wildlife populations rare or endangered within a given region (New England or New Hampshire in this case) can qualify even if that population may not have clear "national" significance.

Resource Values Significant in Aggregate

A river may qualify for a given resource value based upon an aggregate of important values, no one of which would confer eligibility standing alone. For example, a series of unusual and distinctive river-related geologic features may together qualify a segment as exhibiting an "outstandingly remarkable geologic resource value" even though no one element meets the criteria alone.

Free-flowing

The Wild and Scenic Rivers System is designed to protect only "free-flowing" rivers and streams that support qualifying resource value(s). The Act's definition of "free-flowing" varies somewhat depending upon the potential classification of the river area under consideration. Potential "Wild" and "Scenic" river segments must exhibit essentially natural stream channels and may not be dammed or impounded. "Recreational" river segments may be more impacted by channel alterations and may include "some existing impoundments, diversions, and other modifications of the waterway," as long as the river remains "generally natural and riverine in appearance."
Classification Criteria

The Wild and Scenic Rivers Act requires that all designated river segments be classified as Wild, Scenic, or Recreational. These classifications are based solely on the amount of human impact present at the time of classification. The Act defines them as follows.

Wild river areas - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The character of the two study segments is markedly different. The Pemigewasset's gradient through Franconia Notch is very steep as the river tumbles and cascades over and past exposed bedrock, often fully wooded by riparian trees. The scenery is spectacular, including sweeping vistas of mountains, sheer cliffs, granitic outcroppings, forests and lakes, as well as foreground views of fascinating geologic and hydrologic features. The state owns all the land within the corridor and manages it as a state park; developments are limited to recreational facilities and a parkway.

South of the park boundary, the river's gradient slackens and its volume doubles as it flows into the Valley segment. Along the length of this segment, the character of the river transitions from lively, shallow and braided to broad, deep and slow-moving, with several areas of boulder-strewn riffles. Livermore Falls punctuates the segment with a 12-foot waterfall and accompanying rapids set within a deep gorge at the site of an historic mill.

The Valley segment corridor consists primarily of forest interspersed with agricultural lands, idle fields and sparse development. Development is usually set back off the river because of floodplains or steep slopes, though some residential and industrial structures are located near the banks. Plymouth's village center is located adjacent to the river, buffered by a floodplain forest. The corridor is primarily in private ownership, with some state and municipal holdings.

The seven towns through which the Valley segment flows have a combined total population of over 15,000 year-round residents, augmented during the summer months by seasonal residents who maintain second homes in the area. The Town of Plymouth is a hub of activity in the area due to its larger size, professional, financial and commercial base, and the presence of Plymouth State College.

Economically, the region is heavily based on seasonal recreation and tourism-related industries. Restaurants, motels, sporting goods stores, campgrounds, antique stores, and similar businesses cater to the visitors attracted each year by the area's proximity to the White Mountains and the Lakes Region. Other sectors of the economy include manufacturing, forest-related occupations, service industry jobs, professional positions, sand and gravel mining, and some residual farming. The construction industry contributed significantly to the Pemigewasset River valley's economy during the 1980s, but construction activity during the

2.8 STUDY AREA DESCRIPTION

Originating high in the White Mountains of north-central New Hampshire, the Pemigewasset River flows south for 62 miles from its headwaters in Franconia Notch State Park to the confluence with the Winnipesaukee River in the town of Franklin, where it gives rise to the Merrimack River. The Franconia Notch segment consists of the upper 6 miles of the river. The Valley segment begins 10 miles below the Franconia Notch segment at the north Thornton town line and ends 26.5 miles downstream at the backwaters of the Ayers Island impoundment in Bridgewater/New Hampton.
The recession of the late 80s and early 90s has been almost nonexistent.

The Pemigewasset River valley serves as a major regional north/south transportation corridor. From Franconia Notch to Bristol, Interstate 93, U.S. Route 3, state and town-owned roads and a rail line parallel and often bridge the river. From the water, the sight and sounds of roads and bridges are often the most obvious signs of development.

2.1 OUTSTANDING RESOURCE VALUES: FRANCONIA NOTCH SEGMENT

Outstanding resources of the Franconia Notch segment include geology, recreation, scenery, and rare plants and wildlife.

Geology
The Pemigewasset River in Franconia Notch State Park flows through, over, and past some of the most significant geological features in the State of New Hampshire, some of which are noteworthy regionally and even nationally. Features such as the Basin, the Pool and the Flume, and the Old Man of the Mountain, Cannon Cliffs and Talus slope lead state authorities to consider Franconia Notch the most unique geological area in the State of New Hampshire. The area was designated a National Natural Landmark in 1971 as "a prime example of a deep glaciated mountain pass that is almost without equal in the Northeastern United States".

Recreation
Franconia Notch State Park, located within a day's drive of over 62 million people, offers a myriad of recreation opportunities to its many visitors. These opportunities range from automobile sightseeing to climbing the sheer face of Cannon Cliffs, and include almost everything in between. Picnicking, camping, boating, fishing, swimming, hiking, and mountain biking are enjoyed during the warmer months, while winter brings cross country skiing and snowmobiling. Many of these activities occur in or alongside the Pemigewasset River and Profile Lake; others are enhanced by the river's presence.

Visited by 1.75 million people annually, Franconia Notch State Park is by far the most heavily used park in the state, accounting for 40% of New Hampshire's annual state park income. Scenic grandeur, interesting geologic/hydrologic features, unparalleled recreational opportunities, and ease of access via Interstate 93 combine to make Franconia Notch State Park the cornerstone of New Hampshire's park system, and a national attraction.

Scenery
Franconia Notch State Park boasts tremendous scenic variety, including spectacular views of and from the Pemigewasset River valley. Sweeping vistas of mountains, sheer cliffs, granitic outcroppings such as the Old Man of the Mountain, forests, lakes and waterways can be seen by recreationists in the river valley as well as by motorists driving on the Parkway paralleling the river. Automobile sightseeing is in fact the most popular activity within the Park. Even more spectacular are views of the river corridor in its undeveloped setting as seen from the surrounding mountain peaks and high altitude hiking trails. High quality views of this scope and character are rare in the northeastern United States. In addition, trails which parallel or bridge the Pemigewasset offer foreground views of fascinating geologic/hydrologic features and a continuously cascading river character.
Rare Plants and Wildlife

There are ten occurrences of rare native plant and animal species and exemplary natural communities in the Franconia Notch study corridor; all are listed on the New Hampshire Natural Heritage Inventory. Most of the plants and plant communities are found on the Cannon Cliffs and Talus. One plant is endangered in the state, the rest are threatened. Another threatened plant as well as an animal of concern (rock vole) were recorded near Profile Lake. Few places in the state have such an aggregate of rare species within a small area.

2.5 OUTSTANDING RESOURCE VALUES: VALLEY SEGMENT

Outstanding resources of the Valley segment include resident and anadromous fisheries, flatwater canoeing, and geology.

Anadromous Fishery

The Pemigewasset River is critical to the success of the ongoing effort to restore viable runs of Atlantic salmon to the Merrimack basin. Twenty-five million dollars has been spent to date on this effort - one of the three largest programs in New England to re-establish historic salmon runs. Three fourths of the Merrimack basin's Atlantic salmon nursery habitat and the vast majority of its spawning habitat is found within the Pemigewasset River and its tributaries. The mainstem of the Pemigewasset is particularly important because many of its tributaries are now blocked by dams. The goal of the program is to have 3000 adult Atlantic salmon returning to the Merrimack basin each year, many of which will complete their life cycle in the waters of the Pemigewasset.

Resident Fishery

The reach of the Pemigewasset from the East Branch to the Baker River is considered among the top five New Hampshire coldwater fisheries. Cool, clean and well-oxygenated waters with numerous riffles, rapids and pools provide very good habitat for brook trout, rainbow trout and brown trout. The results of a comparative evaluation completed by fisheries experts from state and federal agencies and private sportsman's clubs rated this reach of the Pemigewasset as one of the best in the state for habitat quality, diversity and value of species, aesthetic experience, and recreational importance. The reach rated better than average for numbers of fish, natural reproduction, size and vigor, and access. The river from Sawhegenit Falls to the downstream end of the study segment is part of a very popular bass fishery, adding to the segment's value.

Flatwater Canoeing

A comparative evaluation was conducted to determine the relative significance of canoeing on the Pemigewasset. A team of boating experts evaluated flatwater/quickwater/Class I rivers at least 7 miles long, runnable for an extended season (longer than spring high water), and located within 2 hours of Concord. Of the 25 rivers evaluated, the reach of the Pemigewasset between Thornton and Blair Bridge in Campton rated among the top three. High scores were given for character of the run, scenery, and associated opportunities such as fishing and swimming. Camping opportunities also contributed to the high rating. Canoeing use was described as light to moderate. The reach from Plymouth to the downstream end of the segment was not as well known and was regarded less highly, but still scored better than average boating values overall. Of particular significance to boaters was the length of the Pemigewasset existing in a free-flowing state; many other segments evaluated included dams, necessitating portages.

Geology/Hydrology

The Pemigewasset River at Livermore Falls drops through a steep-sided gorge, cascading 12 feet into a splash pool at the site of an old mill. The area is unique in that no other waterfall in the region has as much water falling from as great a height. While there are many waterfalls in the area, all are located on smaller tributary streams. Livermore Falls has other geologic features which make it notable, including bedrock crosscut by numerous dikes,
quartz veins and deposits of black mica; potholes 1 to 5 feet in diameter cut into the river's bedrock floor; and a very rare igneous rock first found here and named Camptonite in honor of the location. The technical clarity of the geologic morphology at Livermore Falls offers great regional value for geologic interpretation and appreciation; the area is a field trip destination for geology and geography classes given at Plymouth State College.

2. Proposed classifications

The Wild and Scenic Rivers Act specifies that designated study segments must be classified as "wild," "scenic," or "recreational" based on their level of development as outlined above. The classification terms themselves tend to be misleading; river segments designated as "scenic" needn't be outstanding aesthetically nor be managed to retain scenic values; "recreational" rivers needn't offer any recreational value nor be managed to enhance recreation. Regardless of classification, river management should be geared toward protecting the river's outstanding values.

According to the National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas (Federal Register, 1982), classification should be based upon four criteria: water resources development (development in the waterway), shoreline development (development in the study corridor), accessibility and water quality.

Franconia Notch Segment

- Profile Lake to southern park boundary (6 miles): Scenic. There are no waterway modifications, corridor developments are limited to the I-93 Parkway and recreation-related development, and river access is limited to hiking trails and five roadside parking areas. Water quality is Class B, suitable for primary contact recreation.
Valley Segment

- Woodstock/Thornton town line to Thornton railroad bridge (7 miles): Scenic. The reach is free of impoundments, with small areas of riprap. Forest, idle fields and agricultural lands predominate. Houses are located along two roads travelling the length of the corridor, as well as a few areas of more concentrated development (small subdivisions, condominium developments) located closer to the river. Only a handful of houses and one condominium development are evident from the waterway. U.S. Route 3 parallels the river at some distance, approaching the bank to provide public access at only one point. Other access is provided at the Merrill Access Road bridge and a railroad bridge at the southern end of the reach. Water quality is Class B.

- Thornton railroad bridge to Bridgewater/Bristol town line (19.5 miles): Recreational. Several areas of riprap occur, and a large berm was constructed on the east river bank in Ashland to deflect flood waters from a golf course. Remnants of a breached log crib dam remain at Livermore Falls. From Sawhegenit Falls to the southern end of the segment, river flow is affected by the Ayers Island impoundment.

The corridor is forested with one large area of floodplain/wetland/agricultural fields. There is substantial evidence of human activity, including Interstate Highway 93 (which parallels the river, sometimes in close proximity, bridging it three times), the Plymouth Village center, commercial establishments located along main corridor roads, a few industrial facilities, condominium developments, campgrounds and scattered houses. Yet due to floodplains, steep slopes and riparian vegetation, the corridor as perceived from the waterway appears rural.

Several roads parallel the river, though only occasionally in close proximity, providing public access in Campton, Plymouth and Bridgewater. Other access points include Livermore Falls state park, the Plymouth Village riverfront, Sawhegenit Falls town park in Bridgewater, and the nine road and railroad bridges in the reach. Water quality is Class B.
CHAPTER 2: ELIGIBILITY AND CLASSIFICATION

Franconia Notch segment

Pemigewasset River
Wild and Scenic Classification

- Classified "Scenic"
- Classified "Recreational"

SCALE: 1 in. = 6 mi.

NEW HAMPSHIRE
CHAPTER 3

SUITABILITY
This chapter states the study findings relative to Section 4(a) of the Wild and Scenic Rivers Act that requires the study report to detail the river's suitability or non-suitability for national designation.

3. A PRINCIPAL FACTORS OF SUITABILITY

For a river to be included in the National Wild and Scenic Rivers System, long-term protection must be provided for the river's outstanding resources. Section 10(a) of the Wild and Scenic Rivers Act states:

Each component of the national wild and scenic rivers system shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values.

For rivers such as the Pemigewasset that flow through predominantly private lands the National Park Service has identified several factors upon which the suitability decision should be made:

1. the adequacy of existing protection measures to conserve the river's outstanding resources without the need for federal land acquisition or federal land management;
2. whether there is an existing or proposed management framework that will bring the key river interests together to work toward the ongoing protection of the river;
3. the strength of local support for river protection and national designation; and
4. the effects of designation on uses of the land, water base, and resources associated with the river, the neighboring communities, etc.

3.B EVALUATION OF EXISTING PROTECTION: FRANCONIA NOTCH SEGMENT

The entire corridor of the Franconia Notch segment falls within the Franconia Notch State Park, owned by the state of New Hampshire and managed by the Division of Parks and Recreation within the Department of Resources and Economic Development (DRED). The flagship of New Hampshire's state park system, Franconia Notch is managed for recreation and resource protection. All project proposals receive close agency review and public scrutiny to ensure consistency with park goals, including maintaining the highly valued natural character of the area.

Corridor developments are limited to the I-93 Parkway and recreation-related facilities such as the Flume Visitor Center, Lafayette Campground, parking areas and trails. Any new construction in the park would be limited to facilities designed to accommodate recreation activities or facilitate resource protection. The only potential exception might be some future modification of the I-93 Parkway. The Parkway was constructed only after decades of planning, review
and political debate; it is the only example in the nation where interstate highway construction standards were relaxed to preserve environmental character. Should modifications be proposed in the future, their impacts to the character and resources of the Notch would be closely analyzed.

State ownership provides excellent protection for the outstanding resources of the Franconia Notch corridor.

3.C EVALUATION OF EXISTING PROTECTIONS: VALLEY SEGMENT

Three primary mechanisms provide a significant contribution to resource protection along the Pemigewasset River:

1) local, state and federal laws and regulations;
2) public and private land ownership for conservation purposes; and
3) physical constraints to additional shoreland development.

These three mechanisms work cumulatively to protect river resources. Zoning restrictions which appear relatively weak may be sufficient to protect river resources when supplemented with the protection provided by the presence of floodways, excessively steep slopes, and publicly-owned conservation lands.

LAWS AND REGULATIONS

Local ordinances, and state and federal laws, regulations and programs all contribute to resource protection.

Local Ordinances

For each of the seven towns in the Valley segment, zoning ordinances, subdivision regulations, site plan review and floodplain ordinances were reviewed. Elements of these ordinances of particular importance include allowable uses, lot specifications, and streambank and floodplain protection provisions.

Allowable Uses

For most of the river corridor, land uses are limited to residential and agricultural. New Hampton is more restrictive in precluding residential development within their flood hazard area. Plymouth, Campton and Thornton have commercial zones along the west bank of the river, and Ashland and Bridgewater each have a small industrial zone. Thornton has 2 large industrial zones, but they are set back off the river, coming within close proximity in only a few locations. In some towns, additional uses are allowed by special exception.

Lot Specifications

Five of the seven towns in the Valley segment have adopted river conservation overlay zones. These overlay zones provide the primary mechanism for river conservation at the local regulatory level. The width and restrictions of each were designed to meet the specific local environmental conditions and planning constraints. The overlay zones address how development may occur along the river; e.g.: by specifying minimum lot sizes, frontage requirements, septic and building setbacks, and restrictions on terrain alterations. Some overlay zones also specify prohibited uses.

In all seven towns, minimum lot sizes are based upon site characteristics; areas of steep slopes and poor soils will enlarge the minimum lot size required. The minimum in Holderness, Ashland and New Hampton is two acres. The other four towns have a one acre minimum; however, Thornton has no minimum lot size for commercial development.

The septic setback from the river is 125 feet in Campton, Holderness, Ashland and New Hampton. The state minimum 75 foot septic setback applies in the other three towns. The building setback is 200 feet in Holderness, Ashland and New Hampton. Plymouth has a 75 foot setback, and Bridgewater has a 50 foot setback. Thornton does
## Table 1: Town River Conservation Regulations

<table>
<thead>
<tr>
<th>River corridor protection zone</th>
<th>Thornton</th>
<th>Campton</th>
<th>Plymouth</th>
<th>Holderness</th>
<th>Ashland</th>
<th>Bridgewater</th>
<th>New Hmt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum lot size near river (per dwelling unit)</td>
<td>1 ac. (except lots of record and comm. zone, formula for ind. zone)</td>
<td>1 ac. +</td>
<td>0-1 ac. for ex. lots of record; 1 ac. + for subdivisions</td>
<td>2 ac. +</td>
<td>2 ac. +</td>
<td>1 ac. +</td>
<td>2 ac. +</td>
</tr>
<tr>
<td>Building setback from river</td>
<td>None</td>
<td>50' residential</td>
<td>75'</td>
<td>200'</td>
<td>200'</td>
<td>50'</td>
<td>200'</td>
</tr>
<tr>
<td>Minimum river frontage (front unit)</td>
<td>100'</td>
<td>200'</td>
<td>150'</td>
<td>200'</td>
<td>200'</td>
<td>150'</td>
<td>200'</td>
</tr>
<tr>
<td>Septic setback from river</td>
<td>75' (state)</td>
<td>125'</td>
<td>75' (state)</td>
<td>125'</td>
<td>125'</td>
<td>75' (state)</td>
<td>125'</td>
</tr>
<tr>
<td>Maximum building height</td>
<td>35'</td>
<td>35'</td>
<td>35'</td>
<td>35'</td>
<td>35'</td>
<td>35'</td>
<td>35'</td>
</tr>
<tr>
<td>Vegetative cutting</td>
<td>Due regard</td>
<td>50%/10 yrs. in RCP zone</td>
<td>Retain &amp; protect when feasible</td>
<td>50%/15 years in 50' buffer</td>
<td>Due regard</td>
<td>No reference</td>
<td>75' buffer of natural vegetation</td>
</tr>
<tr>
<td>Erosion control</td>
<td>No reference</td>
<td>No reference</td>
<td>Specified control measures</td>
<td>Plot req. on 15% slope or 100' of river</td>
<td>Sediment traps req.</td>
<td>General statement</td>
<td>Plot req. w/ specified provisions</td>
</tr>
<tr>
<td>Steep slope construction</td>
<td>OK (increase min. lot size)</td>
<td>OK (increase min. lot size)</td>
<td>OK (increase min. lot size)</td>
<td>25% max. slope</td>
<td>13% max. in RCP; 25% elsewhere</td>
<td>OK (increase min. lot size)</td>
<td>15% max. in RCP; 25% elsewhere</td>
</tr>
<tr>
<td>Stormwater control</td>
<td>Thornton</td>
<td>Campton</td>
<td>Plymouth</td>
<td>Holderness</td>
<td>Ashland</td>
<td>Bridgewater</td>
<td>New Hutt.</td>
</tr>
<tr>
<td>-------------------</td>
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<td>------------</td>
<td>---------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Plans req.; design for 25-yr. storm</td>
<td>No reference</td>
<td>Leave natural drainage open</td>
<td>Plan may be req. to contain inc. runoff</td>
<td>No reference</td>
<td>No reference</td>
<td>Plan req.; no increase during 50-yr. storm</td>
<td></td>
</tr>
<tr>
<td>Floodplain management</td>
<td>FEMA</td>
<td>FEMA</td>
<td>FEMA</td>
<td>FEMA</td>
<td>FEMA</td>
<td>FEMA</td>
<td>Restrictive floodplain protection zone; FEMA</td>
</tr>
<tr>
<td>Earth excavation allowed near river (state 75' excavation setback applies to all towns)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Public open space required</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>5% of subdivisions &gt;25 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
not specify a building setback from the river. Frontages vary from 200 feet in Campton, Holderness, Ashland and New Hampton, to 150 feet in Plymouth and Bridgewater and 100 feet in Thornton. Maximum building height is 35 feet in all seven towns.

Streambank and floodplain protection provisions - Cutting of riparian vegetation is directly addressed in three towns. Campton limits tree harvest in their overlay zone to 50% of the basal area in 10 years. Holderness has a similar restriction for a narrower 50 foot buffer, and New Hampton has a 75 foot buffer with no cutting allowed. Other towns call for “due regard” for vegetation.

Four towns require erosion control plans, or require specific erosion control measures, and three towns require stormwater control plans. All seven towns have adopted FEMA zoning language; the floodway has only been delineated in Plymouth and Holderness. New Hampton has a very restrictive flood hazard zone overlay. Earth excavation is prohibited in the river overlay zone in four of the seven towns.

Table 1 summarizes key parameters of land use control in each of the seven towns. A more detailed description of town regulations pertaining to river conservation is provided in appendix C.

State Laws, Regulations and Programs
Several state laws, regulations and programs offer some protection for the Pemigewasset River. The more significant state level controls include:

New Hampshire Rivers Management and Protection Program - Segments of the Pemigewasset, including the wild and scenic study segments, were designated into the state program in 1991. The rivers program provides state protection for designated rivers by requiring establishment of a minimum instream flow, prohibiting interbasin transfers, precluding construction of new dams on certain rivers in the system, and restricting bank alterations. No significant adverse impacts are allowed to water quality or water uses, and boar speeds are restricted to headway speed. Land use restrictions are limited to placement of landfills, waste treatment facilities and solid waste. Local Advisory Committees are formed to develop management plans and to advise the state Commissioner and towns on river issues.

Fill and Dredge in Wetlands
Permits are required to dredge, fill, or build structures in or on a wetland, river or riverbank. Residential structures may not extend beyond the shoreline. The NH Wetlands Board evaluates permits based on need and impact; it can deny or condition permits, and can require remedial measures. The comments of town conservation commissions on permit applications must be considered. Towns can also designate prime wetlands which are subject to additional protection.

Water Pollution and Waste Disposal
Establishes a surface water quality classification system [the Pemigewasset is class B] and defines water quality standards and a non-degradation policy for all surface waters of the state. Waste discharge permits are required for discharges into surface or ground waters, and design and construction standards are provided for sewage treatment facilities. Septic layout plans must be submitted and approved to subdivide land or to construct a sewage system. Minimum lot sizes for residential housing subdivisions are based on slopes and soils, and a minimum septic setback of 75 feet from surface water is required. The law also calls for a continuing program of sampling and analysis of surface waters to reveal long-term trends.
Cutting of Timber ("Basal Area Law")

Limits cutting of trees in any given year to a maximum of 50% of the basal area within 150 feet of a navigable river and within 50 feet of any other perennial stream, leaving a well-distributed stand of healthy growing trees. The law pertains only to land managed as forest land; tree cutting for purposes of conversion to any other purpose is exempt. Enforcement is up to the towns.

Terrain Alteration

Protects surface water quality from degradation from activities such as dredging, excavating, and timber harvesting. Permits are required for earth moving operations larger than 100,000 sq. ft., timber harvesting operations (except for personal use), and activities of any size in or on the border of surface waters (joint permitting with the Wetlands Board). A site plan is required for excavation and road construction; detailed development plans are required for other activities, including erosion and stormwater control measures.

Excavation Regulations

Requires permits for excavating sand, gravel, rock, soil, or other construction aggregate produced by quarrying, crushing or mining. Permit applications must include site plan, elevation of water table within or adjacent the site, and a reclamation plan; minimum reclamation standards apply.

Excavations must be set back at least 75 feet from navigable rivers, and 25 feet from other water bodies, prime wetlands, and wetlands larger than 5 acres. The program is locally administered by town planning boards; towns may adopt stricter local regulations.

Current Use Taxation

Lands in the program are assessed based upon their income-producing capability, rather than their real estate market value. Three categories of land qualify: farm land, forest land, and unproductive land. Granting free public recreational access year-round reduces assessment by an additional 20%. Land removed from the program is subject to a land use change tax of 10% of the fair market value of the land. Many acres in the corridor are protected by landowners under this program. Although it does not guarantee long-term protection, the program does provide considerable incentive to conserve river-related lands and thus supplements other conservation mechanisms.

Shoreland Protection Act

Statewide land use regulations applicable to streams of 4th order and larger (such as the Valley segment of the Pemigewasset) include: establishment of a 150 foot natural woodland river buffer; prohibition of salt storage sheds, hazardous waste yards, and residential pesticides within 250 feet of the river; and minimum building setbacks and front-
CHAPTER 3: SUITABILITY

ages. Currently, the law does not apply to rivers in the state river protection program, such as the Pemigewasset, unless towns fail to adopt river corridor protection plans.

Other state laws that provide some protection to Pemigewasset River resources include the Groundwater Protection Act, the Endangered Species Protection Act, the Native Plant Conservation Act, Pesticide Control and Mining and Reclamation regulations. In addition, the state legislature is actively investigating establishment of a statewide system for regulating water withdrawals.

Federal Laws

Federal statutes and programs with the greatest applicability to protection of river resources are summarized below:

**Clean Water Act**

In a collaborative effort between the U.S. Environmental Protection Agency and the states, point source discharges into rivers are controlled through a regulatory permitting process. Non-point source pollution is addressed through a variety of initiatives, including requiring development of state/local non-point source pollutant control programs. Section 404 of the Act governs dredge and fill in rivers, lakes and wetlands, and is the statute by which federal wetlands regulation is administered. Projects are evaluated based upon effects on aquatic resources and ability to serve the public interest.

**National Flood Insurance Program**

The program makes flood insurance available in communities which adopt floodplain building guidelines meeting or exceeding federal standards as established by the Federal Emergency Management Agency. These guidelines direct that all building in the floodplain must be floodproofed through one of a variety of means. The focus is upon preventing flood damage to homes, rather than protection of the floodplain’s natural function.

**National Environmental Policy Act (NEPA)**

Requires assessment of the environmental impacts of proposed federal or federally-assisted projects. An Environmental Impact Statement including interdisciplinary environmental review is required for all major federal actions significantly affecting the quality of the environment. The law does not mandate the least environmentally damaging course of action.

**Anadromous Fish Conservation Act**

Establishes a national goal of conserving and restoring anadromous fish runs. This is the law under which the Merrimack River anadromous fish restoration program is being funded and administered (see Eligibility and Classification Report).

**National Wild and Scenic Rivers Act**

Establishes a national system for preserving rivers with "outstandingly remarkable" values in their free-flowing state. Prohibits FERC projects and any other federally-assisted water resource projects that could adversely affect the river’s free-flowing condition or outstanding resources. A moratorium on these projects is in place for the duration of the Pemigewasset Wild and Scenic River Study and for three years after the final study report is submitted to Congress.

CONSERVATION OWNERSHIP

The Valley segment is largely in private ownership. Several parcels along the river, however, are owned by public agencies, including key parcels such as Livermore Falls. The state of New Hampshire owns about 460 acres of the 12,800 acres in the study corridor, which it manages for conservation purposes. Towns and water and sewer districts own another 200 acres, and Plymouth State College and the Holderness School own about 100 acres. Much of this land serves as town parks, athletic fields, and open space. Of the 53 miles of riverfront (both sides of the river) in the Valley segment, 8.3 miles, or 16%, is in public ownership, most of which is used for conservation purposes.
In addition, small conservation or scenic easements have been donated or sold on a few riverfront properties.

**Physical Constraints to Development**

Physical limitations to additional development which could degrade the Pemigewasset River's resources include floodways, steep slopes, poor soils, barriers such as roads and railroads, and areas of existing development. Floodway. Characterized as having a “flashy” watershed, the Pemigewasset River floods frequently, particularly during spring snowmelt and occasionally during rain events at other times of the year. Flooding is often exacerbated in the spring by ice jams, which form in the same places each year. Except for areas where steep slopes abut the river, most shorelands in the corridor are subject to some flooding, but the broad floodplains in south Plymouth and Holderness are particularly noteworthy.

The Regulatory Floodway

The area that can be expected to flood an on annual basis - has been mapped in Plymouth and Holderness, and is as wide as 1000 feet in the “intervale” area (bottom land below the confluence of the Pemigewasset and Baker Rivers). While FEMA has yet to map the other towns, an analysis could reveal significant floodways in parts of Thornton, north Campton, Ashland, Bridgewater and New Hampton. Many frequently flooded areas are used for agriculture, or are idle fields. The disincentive created by the physical and economic hazards of building in these riverside areas is supplemented by restrictions imposed by town floodplain ordinances. While these ordinances don’t prevent development in the floodplain (New Hampton is a notable exception), they all but preclude development in the regulatory floodway. Steep slopes. Narrow bands of slopes in excess of 25% border the river for significant lengths in Holderness, Ashland and Bridgewater, effectively precluding riverside development in these areas. Steep slopes also protect shorter sections of river in the other towns. In places, these slopes isolate otherwise buildable parcels along the river, blocking access and greatly escalating construction costs. Steep slopes (the definition varies by town from 15% to 35%) are excluded from town minimum lot size calculations.

**Poor Soils**

Wetlands are common along the river for the length of the corridor, but are particularly prevalent in Thornton, north Campton, and the intervale area of Plymouth/Holderness/Ashland. These wet areas are difficult and expensive to develop, and often preclude on-site septic systems. Regulatory restrictions on wetland development further protect these areas. Shallow or excessively sandy soils restrict development by forcing larger minimum lot sizes under town and state regulations for septic approval.

**Barriers**

Additional protection for the Pemigewasset River is provided by the location of state-owned railroad tracks and Interstate 93, both of which parallel the river at varying distances. These corridors isolate some riverside parcels, making development impossible, or at least contingent upon state approval for a railway crossing. In some locations, the state right-of-way extends to the river, which results in creation of a vegetative buffer along the shoreline.

**Existing Development**

Some corridor parcels are already developed to the limit under the law and are in no danger of additional adverse development. Examples include riverside residential pockets such as River Street in Holderness, clustered condominium developments and their attendant open space, and the Ashland industrial zone. In addition, approximately 10% of the corridor is in roads, railroads and rights-of-way.
3. D PUBLIC SUPPORT FOR RIVER CONSERVATION

The NH DRED manages the Franconia Notch State Park, including the Franconia segment of the Pemigewasset River, for recreation and resource protection. Management goals balance conservation of river resources with the provision of appropriate non-intensive recreation opportunities.

Support for conservation of the river through the Valley segment was demonstrated in 1987 and 1988 by the creation of river conservation overlay zones in the towns of Campton, Plymouth, Holderness, Ashland and New Hampton. As discussed above, these overlay zones restrict development along the Pemigewasset in order to conserve river resources valuable to the communities. Creation of these overlay zones required the support of town planning boards as well as a majority vote of Town Meeting voters, thus indicating strong support for river conservation.

To help ascertain attitudes about river conservation in the Pemigewasset valley today, two surveys were conducted targeting different groups of people. First, in the spring and summer of 1992, all known riverfront landowners in the Valley segment were mailed a three-page questionnaire asking for information about recreational use and access, conservation of river resources, land management along the river, and property characteristics and uses. A second and similar questionnaire was distributed later that summer to the general public via a local newspaper (the Record Citizen) and town offices to find out from other local residents and area visitors how they felt about these same issues. No questions were asked about wild and scenic designation since the issue had yet to receive much public discussion.

The surveys were designed by members of the Pemigewasset River Wild and Scenic River Study Committee. Results were tabulated by the Merrimack River Watershed Council, and independently verified by a Plymouth State College student under the auspices of the Geography Department. The survey of riverfront landowners was completed by 95 individuals, for a 24% response rate. The general public survey was completed by 140 respondents, 83% of whom were permanent local residents.

Survey respondents were very supportive of river conservation. Most respondents felt it was important to protect each of the 12 river resources listed. The top riverfront land uses they felt should be encouraged were open space/wildlife habitat, forestry and recreational uses. The uses they felt should not be encouraged were commercial and industrial development, industrial water withdrawal, municipal/industrial waste water discharge, and sand and gravel extraction. The complete survey results are displayed in appendix E.

The survey results depict a rural river valley where land use patterns are not changing rapidly and where residents want to maintain the present non-commercial, non-industrial character. Pemigewasset valley residents appreciate and value the physical, social and aesthetic attributes that a scenic river brings to their communities and want future land uses to fit well with existing land uses and to be compatible with river conservation.

3. E PUBLIC SUPPORT FOR WILD AND SCENIC DESIGNATION

The National Park Service made a commitment early in the study to make a favorable recommendation on wild and scenic designation contingent upon the support of:

- the Commissioner of NH DRED for the Franconia Notch segment; and
- each town in the Valley segment for the portion of river flowing through that town.

The Study Committee and Park Service jointly agreed that town support should be assessed through Town Meeting votes. The New Hampshire Congressional Delegation, in written statements to the press, promised to introduce legislation for the Valley segment only if supported by Town Meeting votes (see appendix F).
Six of the seven towns in the Valley segment voted against supporting wild and scenic designation at 1993 Town Meetings. Subsequent to Town Meeting votes, the Commissioner of NH DRED decided against supporting the Franconia Notch segment as a stand-alone designation.

**Organized Opposition**

The wild and scenic river study was conducted during a time when New Hampshire was experiencing many new environmental initiatives. During the two-year study:

- the New Hampshire legislature designated the river into the state Rivers Management and Protection Program, amidst a good deal of controversy;
- the state enacted the Shoreland Protection Act, calling for land use controls along rivers and lakes;
- the Northern Forest Lands Study and New Hampshire Heritage Trail effort were both underway;
- the state developed a public access plan for lakes and rivers;
- the state legislature began investigating the establishment of a water withdrawal permitting system;
- two new federal wildlife refuges were established in New Hampshire.

These concurrent environmental initiatives contributed to an atmosphere in which the commencement of the federal wild and scenic river study was perceived by some as less than welcome.

Just before the river study began, a local environmental backlash group called the New Hampshire Landowner’s Alliance formed. Their initial motivation was to help clear the way for approval of the Livermore Falls hydropower project. Toward this end, their first task was to attempt to prevent inclusion of the Pemigewasset River in the New Hampshire Rivers Management and Protection Program. Having failed in this task, they turned their focus upon the federal wild and scenic river study.

The fledgling NHLA quickly hooked into the national “Wise Use” network; the President of the NHLA was elected Secretary of the newly formed Alliance for America, a consortium of hundreds of property rights groups from across the country. Very quickly, the discussion over designation of the Pemigewasset River became a local forum for national "Wise Use" principles. The focus shifted from conservation of river resources to the credibility of the National Park Service.

Refusing to believe that wild and scenic designations can be and have been tailored to fit the specific circumstances of each river, the group took the position that designation must in all cases lead to the result of rigid and heavy-handed federal control over river corridor management. With this vision in mind, the NHLA aggressively opposed wild and scenic designation.

They were effective in generating local press based on the controversial nature of their claims about the Park Service, study participants and the effects of designation. They hosted local conventions of “Wise Use” leaders from across the country, encouraged landowners to post their land, and engaged in a variety of other tactics which had the effect of hampering study projects, intimidating study participants, and diverting attention away from issues of resource protection and management.

Towards the end of the study, another small group of people concerned about river regulations and the role of the federal government entered the fray, using many of the same tactics and adding to a media barrage which had kept the river study in the public eye for more than a year. In the
end, these efforts had a significant effect in swaying public opinion against wild and scenic designation.

**DESIGNATION ISSUES**

Several issues arose during the river study which specifically concerned federal wild and scenic designation of the river. Some of these concerns were raised solely by the opposition groups; others were more generally felt by a populace interested in local control.

**Distrust of the federal government**

The entire New Hampshire Congressional Delegation made a written commitment that local control would be maintained if the river were designated. The following excerpt is from a letter written to the editors of local and regional newspapers on March 2, 1993 and signed by both Senators and both Congressmen in the delegation:

We are unified regarding the terms of (designation) legislation: federal land acquisition and management will be prohibited; local government will continue to control land use; and the designated river segments will not become a National Park or a component of the federal government. These conditions are specified in the locally-developed river management plan and would be given the force of law by an amendment to the Wild and Scenic Rivers Act ... We have jointly vowed that should any attempt be made to remove or alter the provisions of the legislation, we will withdraw our support for the bill.

Despite this commitment, concerns were raised that the legislation would be modified in Congress, that the New Hampshire delegation would not be able to stop its passage, and that the river would be designated into the national system with acquisition authority vested in the Park Service. The corollary fear was that the Park Service would then renege on its commitment against use of acquisition, and would use the authority indiscriminately to the detriment of landowners and local tax bases. This concern was compounded by a general mistrust of government, and by instances in the past when land acquisition was used by the Park Service as a primary management tool on National Park system units elsewhere in the country.

**Fear of increased land use regulation**

Concern was expressed that wild and scenic designation would lead to further restrictions on landowners' rights and curtailment of community development. While the river management plan envisions an integration of conservation concerns with community growth goals, and calls for very few additional land use restrictions, there was concern that the plan might be modified in the future. Using the "slippery slope" argument, some felt that a national designation was "a foot in the door", and that more regulation was sure to follow.

**Lack of a clear and present threat to the river**

The study was authorized at a time when a hydropower proposal was active, which would have resulted in a dam at Livermore Falls, by far the most exceptional natural feature in the Valley segment. However, in September of 1991, the Federal Energy Regulatory Commission dismissed the hydropower application, and on August 1992, the property was purchased by the state for conservation purposes. Today, few see a future hydropower threat at this site; indeed, some residents see hydropower as an acceptable use of the river and part of the New England heritage.

There had also been a proposal by the Army Corps of Engineers in 1967 to build a high dam at Livermore Falls. The dam would have measured 200' tall and 3000' long, flooding 7800 acres in Campton and Thornton and creating a 15 mile lake - the communities were united in their opposition to this project when it was proposed. Designation advocates made the point that this type of project may well be proposed again in the future, and that wild and scenic des-
ignation is the only guaranteed protection. To many, however, the Corps proposal seemed ancient history, and an unlikely future threat.

Need for wild and scenic designation
In the absence of a clear and direct threat to the river, such as a dam, the advantages of national designation are: control over lesser-impact federal water projects (such as bank modification); national recognition; and technical and financial assistance with river management. Some felt that federal water project consistency was a valuable conservation tool, that national recognition would enhance the area’s tourism-based economy, and that financial assistance with river management was an attractive added bonus. Others felt that existing federal, state, and local regulations and programs, including the state Rivers Management and Protection Program, were wholly sufficient to protect the river, and feared over-reliance upon tourism.

Increased recreational use of the river
Some residents welcomed the possibility of increased recreational use of the river and the attendant boost to the local tourism-based economy. Others feared that a national designation would attract hordes of recreationists, with attendant impacts upon riverfront landowners and river resources such as water quality and riparian vegetation.

Expressions of support
By early 1993, the issue of wild and scenic river designation had become so controversial that many people were unwilling to state their opinion publicly for fear of angering friends or losing customers. With rare exception, town boards and community groups chose not to take a position. Most decided to defer to the results of the upcoming Town Meeting votes in March.

Not surprisingly, controversy over designation was focused upon the privately owned corridor of the Valley segment. Little if anything was ever said about the Franconia Notch segment. To many, wild and scenic designation of the state-owned segment seemed fitting, or at least of little consequence. Some regarded designation of the Notch as all but a foregone conclusion.

Town Meeting votes
In discussing how best to assess each town’s position regarding wild and scenic designation, the Study Committee voted unanimously to include a question on the official ballot during each town’s 1993 general election in order to reach the broadest audience. It was discovered, however, that state law limited what could be included on the official town ballot to zoning issues and election of officials. Other town business must be conducted during the more poorly attended Town Meetings. As a second choice, the committee and Park Service agreed to use Town Meeting votes as the indicator of town opinion.

A uniform warrant article was drawn up and submitted to each town to be voted upon at March Town Meetings. The article was written to address people’s concerns about the federal role in management should the river be designated.

The text read as follows:

To see if the Town of _____ will vote to petition the United States Congress to designate the Pemigewasset River as a Wild and Scenic River, providing that such designation will be based on the locally developed river management plan, that there will be no federal land acquisition nor federal land management associated with the designation, and that the river area will not become a component of the National Park system nor be subject to the federal regulations governing lands in the system.

As mentioned previously, the entire New Hampshire Congressional Delegation had expressed their written commitment to include these same provisions in any legislation that they introduced in Congress.

Each town voted solely on the question of designation of that part of the river flowing through its town. (The towns did not vote on designation of the Franconia Notch segment.) It was commonly asked what the National Park Service would recommend if towns voted in a checkerboard pattern, for instance if towns on opposite sides of the river voted differently. The response was that there had to be enough towns voting in favor of designation to create a section of river long enough to be manageable as a component of the national system. Since all towns did not vote on the same day, it is possible that earlier votes influenced the outcome in later-voting towns.

Six of the seven towns voted by secret ballot; Thornton had a voice vote. The results of the six secret ballot votes are presented here, along with the number of registered voters.
TABLE 2: RESULTS OF TOWN MEETING VOTES ON DESIGNATION

<table>
<thead>
<tr>
<th>Town</th>
<th>Registered Voters</th>
<th>Official Ballot</th>
<th>Town Meeting Voters</th>
<th>Favor Wild &amp; Scenic</th>
<th>Oppose Wild &amp; Scenic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campton</td>
<td>1,440</td>
<td>535</td>
<td>284</td>
<td>122</td>
<td>162</td>
</tr>
<tr>
<td>Plymouth</td>
<td>3,143</td>
<td>659</td>
<td>336</td>
<td>149</td>
<td>187</td>
</tr>
<tr>
<td>Holderness</td>
<td>1,211</td>
<td>303</td>
<td>203</td>
<td>89</td>
<td>114</td>
</tr>
<tr>
<td>Ashland</td>
<td>963</td>
<td>393</td>
<td>170</td>
<td>57</td>
<td>113</td>
</tr>
<tr>
<td>Bridgewater</td>
<td>575</td>
<td>170</td>
<td>149</td>
<td>74</td>
<td>75</td>
</tr>
<tr>
<td>New Hampton</td>
<td>1,025</td>
<td>265</td>
<td>126</td>
<td>72</td>
<td>54</td>
</tr>
<tr>
<td>Totals</td>
<td>8,357</td>
<td>2,325</td>
<td>1,268</td>
<td>570</td>
<td>708</td>
</tr>
</tbody>
</table>

* Percent of registered voters voting on wild and scenic designation: 15.2%
* Percent of Town Meeting voters favoring designation: 44.4%
* Percent of Town Meeting voters opposing designation: 55.6%
* Margin of difference, all six towns: 142 votes

in each town and the number who voted on the 1993 official ballot. Thornton voters opposed designation.

New Hampshire Department of Resources and Economic Development

The Commissioner of DRED wrote a letter dated February 24, 1993 to the Director of the North Atlantic Region of the National Park Service, expressing DRED's support for designation of the Franconia Notch segment as a national wild and scenic river (see appendix E). He went on to state that the Pemigewasset River as a whole is deserving of state and federal protection, and that the department would support the decisions of the communities along the Valley segment regarding river conservation actions.

In light of the results of Town Meeting votes, the DRED subsequently decided against supporting the Franconia Notch segment as a stand-alone designation, feeling that designation of the Notch only made sense as a component of a larger package.

Pemigewasset Wild and Scenic River Study Committee Votes

Committee members were individually responsible for choosing the criteria that would guide their decision regarding support for wild and scenic designation. Members considered many factors, including the wishes of their constituencies, Town Meeting votes, attitudes of town boards, knowledge of the river corridor and residents, and their own personal perspective on the matter. The committee voted upon each segment. Results are on the following page.

Survey of Franconia Notch Campers

DRED administered a survey to visitors to Lafayette camp­ground in Franconia Notch State Park during fall foliage season, 1992. The survey asked whether people supported designation of the Notch segment as a national wild and scenic river (see appendix D). Results were overwhelmingly positive, with 125 people supporting designation, and 4 opposing it.
**TABLE 3: RESULTS OF STUDY COMMITTEE VOTES ON DESIGNATION**

<table>
<thead>
<tr>
<th></th>
<th>Favor</th>
<th>Oppose</th>
<th>Abstain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franconia Notch segment</td>
<td>15</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Valley segment</td>
<td>11</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

**Phone Poll of Registered Voters**

The Vote Yes for the Pemi Committee formed late in the study to advocate for wild and scenic designation. It conducted a phone poll of registered Republican, Independent and Democratic voters during the weeks of February 22nd and March 1st, 1993. Names were obtained from official town records of voters participating in the 1992 general election. Nine hundred eleven people in six towns (residents of New Hampton were not called) were contacted, using the following script: "Hi, this is ____. I'm calling to alert you to the fact that there is a very important vote coming up that concerns the Pemigewasset River. Do you mind me asking, do you plan to support the wild and scenic designation?" Results as of 2 weeks prior to Town Meetings showed 415 favored designation, 141 opposed it, and 355 were undecided.

**Organizations Expressing Support for Designation of Both Segments**

Prior to Town Meeting votes, the following agencies and organizations had expressed support for designation as per the locally developed river management plan:

- Appalachian Mountain Club
- Ashland Conservation Commission
- Bridgewater Conservation Commission
- Concord Monitor
- Lakes Region Planning Commission Executive Committee
- Merrimack River Watershed Council
- Nashua Telegraph
- New Hampshire Association of Conservation Commissioners
- New Hampshire Audubon Society
- New Hampshire Department of Environmental Services
- New Hampshire Rivers Campaign
- New Hampshire Sierra Club
- New Hampshire Wildlife Federation
- Pemigewasset River Council
- Society for the Protection of New Hampshire Forests
- Trout Unlimited, Basil W. Woods Jr. Chapter
- Vote Yes for the Pemi Committee

**Organizations Expressing Opposition to Designation**

Previous to Town Meeting votes, the following organizations had expressed opposition to designation:

- Friends of the Pemi
- New Hampshire Landowners Alliance
- Board of Directors of the Pemi Fish and Game Club
- Snowmobile Clubs of Grafton County

**3.F SUMMARY OF FINDINGS**

**Existing Protection**

Based upon a comprehensive evaluation of existing protection, the National Park Service finds that outstanding resources of the Franconia Notch segment are currently well protected.

The combination of regulations, conservation ownership and physical constraints to development provide good protection for river resources in five of the seven towns in the Valley segment: Campton, Plymouth, Holderness, Ashland, and New Hampton. To be suitable for designation, the towns of Thornton and Bridgewater would have to revise their zoning ordinances to: 1) protect a riparian buffer; 2) provide an adequate development setback from the river; and 3) prohibit heavy industry from siting near the river.

**Support For Designation**

At the present time there is not sufficient support from the State of New Hampshire (Franconia Notch segment) or local citizens and officials (Valley segment) to support or sustain a wild and scenic river designation of either study segment.
CHAPTER 4

CONSIDERATION OF ALTERNATIVES
This chapter describes several possible alternative actions resulting from the findings of the Pemigewasset Wild and Scenic River Study and contains the National Park Service’s preferred alternative.

CHAPTER 4: CONSIDERATION OF ALTERNATIVES

Several alternatives for the future management of the Pemigewasset River emerged after going through the study process and developing the Pemigewasset River Management Plan. All alternatives are based upon the guiding principles described in Chapter 1 and upon Congressional intent for a private/local/state/federal management partnership.

Three of the five alternatives call for full or partial Congressional designation of the study area. Each of the designated reaches under these alternatives would be managed according to the river management plan developed by the Study Committee. Undesignated reaches would be managed under a complementary plan developed by the state rivers program.

One alternative calls for Secretarial designation of the study area. Although this alternative did not receive much attention during the study, it is a reasonable scenario and deserves consideration.

Alternative 1
Status Quo. Under this alternative, no part of the Pemigewasset River would be included in the National Wild and Scenic Rivers System. The river would continue to be managed by existing state and local authorities, including the New Hampshire Rivers Management and Protection Program. The state rivers program calls for a local advisory committee (LAC), similar in composition to the Wild and Scenic Study Committee, to develop a river management plan for the state designated reach of the Pemigewasset, including the two wild and scenic study segments. According to the state Rivers Coordinator, the plan developed during the wild and scenic study will be presented to the LAC for adoption or revision and incorporation into an expanded version to cover the longer state-designated reach of the river.

Alternative 2
Wild and Scenic designation with the locally developed river management plan for the entire study area. Both the Franconia Notch and Valley segments would be Congressionally designated as a National Scenic and Recreational River. The Federal Energy Regulatory Commission would not grant a license for any new dam or project works within the designated segments, and no federally licensed, funded or sponsored water resource projects would be permitted to adversely affect the free flow or outstanding resources of the designated segments.

The river would be managed according to the Pemigewasset River Management Plan. The major participants in river management would sign a Memorandum of Understanding specifying what each party agrees to do and serving as a written commitment by the signatories to work cooperatively in the long-term management and protection of the river. An advisory committee would be formed to promote the coordinated protection of the river; ideally, this committee and the state LAC would be one and the same.

The National Park Service’s role in river management would be limited to review of federal water resource projects and providing technical and financial assistance (through a Congressional appropriation) with river management. Federal land acquisition and management would not be authorized, and the area would not be included in the National Park System nor be subject to the system’s regulations.

Alternative 3
Wild and Scenic designation of the Franconia Notch segment; status quo for the Valley segment. The Franconia Notch segment would be designated a National Scenic River, and would be managed according to the state’s existing...
management policies, with a few minor suggestions for improving management of outstanding resources. The Valley segment would be managed as in Alternative 1.

Alternative 4

Wild and Scenic designation of the Franconia Notch segment and partial designation of the Valley segment. The Franconia Notch segment would be designated a National Scenic River and managed as described in Alternative 3. A portion of the Valley segment would be designated a National Scenic and/or Recreational River and would be managed according to the locally developed river management plan. (Thornton and Bridgewater must first amend their zoning ordinances to be included in the designated portion.) The state would develop a compatible river management plan for the undesignated portions of the Valley segment.

Alternative 5

Secretarial designation of both study segments pursuant to Section 2(a)(ii). Under this alternative, the Governor of New Hampshire would request that the Secretary of the Interior include the study segments of the Pemigewasset in the national system pursuant to Section 2(a)(ii) of the Wild and Scenic Rivers Act. Under Section 2(a)(ii), the state would have to agree to protect the outstanding river resources in perpetuity. No federal expense could be incurred for the river's management, thus precluding land acquisition and financial assistance with river management. The river would be managed according to the river management plan to be developed by the state LAC.

4.B. Recommended Action

Alternative 1 - the status quo - is the recommended alternative based on the fact that it is the only alternative which does not violate National Park Service suitability factors or the guiding principles of the Pemigewasset River Study.

Both the Franconia Notch segment and the Valley segment are eligible for inclusion in the National Wild and Scenic Rivers System based on their free-flowing character and the existence of multiple outstanding resource values in each segment. However, neither segment meets the criteria for suitability at this time.

For the Pemigewasset River to be suitable for designation, there must be long-term protection provided for the river's outstanding resources, demonstrated local support for designation of the Valley segment, and state support for designation of the Franconia Notch segment. River resources are well-protected in the Franconia Notch segment and in five of the seven towns of the Valley segment. However, six of seven Town Meeting votes and the Commissioner of DRED indicated a lack of support for designation.

However, should local opinion change in the future, as evidenced by new town votes, or should the state reverse its position, the Service would reconsider its recommendation. Should the towns of Thornton and Bridgewater support designation in the future, they would need to upgrade their zoning ordinances before the National Park Service would recommend designation of their segments.
CHAPTER 5

MAPS
PEMIGEWASSET RIVER CORRIDOR:
LAND COVER

MAP 2: CAMPTON TO NEW HAMPTON

- Water
- Forest
- Agriculture or Idle
- Residential
- Commercial/Industrial
- Recreation
- Other

NEW HAMPSHIRE

GRANT

Study area

MILES

0 1 2 3

CAMPTON

HOLDENNESE

PLYMOUTH

ASHLAND

BRIDGEWATER

NEW HAMPTON
PEMIGEWASSET RIVER CORRIDOR:
ZONING DISTRICTS

MAP 1: THORNTON & CAMPTON

- Commercial
- Industrial
- Residential
- River Corridor Protection Zone (Campton)

NEW HAMPSHIRE

MILES

0 1 2 3
PENIGEWASSET RIVER
CORRIDOR:
PUBLIC LANDS

MAP 1: THORNTON & CAMPTON

- Water body
- Municipal boundary
- Study corridor boundary
- Road

NEW HAMPSHIRE

Study area

MILES

0 1 2 3
PEMIGEWASSET RIVER CORRIDOR:
PUBLIC LANDS

MAP 2: CAMPTON TO NEW HAMPTON

- Water body
- Municipal boundary
- Study corridor boundary
- Road

NEW HAMPSHIRE

MAP 2: CAMPTON TO NEW HAMPTON

- Water body
- Municipal boundary
- Study corridor boundary
- Road

NEW HAMPSHIRE

MAP 2: CAMPTON TO NEW HAMPTON

- Water body
- Municipal boundary
- Study corridor boundary
- Road

NEW HAMPSHIRE

MAP 2: CAMPTON TO NEW HAMPTON

- Water body
- Municipal boundary
- Study corridor boundary
- Road

NEW HAMPSHIRE
PEMIGEWASSET RIVER CORRIDOR: SENSITIVE AREAS

MAP 1: THORNTON & CAMPTON

- 100-year floodplain
- 15-25 percent slope
- 25 percent slope or greater
- Wetland
- Water body
PEMIGEWASSET RIVER CORRIDOR: ADDITIONAL SENSITIVE AREAS

MAP 1: THORNTON & CAMPTON

- Soil of prime agricultural importance
- Soil of statewide agricultural importance
- Deer yard

NEW HAMPSHIRE
PEMIGEWASSET RIVER CORRIDOR:
ADDITIONAL SENSITIVE AREAS

MAP 2: CAMPTON TO NEW HAMPTON

- Soil of prime agricultural importance
- Soil of statewide agricultural importance
- Deer yard
- Threatened or endangered species

NEW HAMPSHIRE

MILES

CAMPTON

HOLDERNESS

PLYMOUTH

ASHLAND

BRENNESHAMPTON