I. Introduction

The Pemigewasset River flows for approximately 70 miles through the north central section of New Hampshire. The river's headwaters are in Profile Lake and the river flows in a southerly direction to its confluence with the Winnipesaukee and Merrimack Rivers. The Pemigewasset River Council has nominated 60 miles of the Pemigewasset River for designation into the New Hampshire Rivers Management and Protection Program. There are approximately ten miles of the river that the Pemigewasset River Council have not included in this nomination, they include the segments through the towns of Lincoln and Woodstock. The nominated segments include ten miles through Franconia Notch State Park and from the northernmost Thornton town line to its confluence with the Winnipesaukee and Merrimack Rivers. The river segments have been evaluated by the Department of Environmental Services and are found to qualify for designation.

The Rivers Management and Protection Program Act (RSA Ch. 483) was passed by the General Court in 1988 and amended in 1990. The Act states in part: "It is the policy of the state to ensure the continued viability of New Hampshire rivers for the benefit of present and future generations. The state shall encourage and assist in the development of river corridor management plans and regulate the quantity and quality of in-stream flow along certain protected rivers or segments of rivers to conserve and protect outstanding characteristics including recreational, fisheries, wildlife, environmental, cultural, historical, archaeological, scientific, ecological, aesthetic, and community significance so that these valued characteristics shall endure as part of the river uses to be enjoyed by New Hampshire people."

The Act directs the Department of Environmental Services to receive and evaluate nominations for the designation of rivers or river segments to protect outstanding values and characteristics under the Rivers Management and Protection Program. The Rivers Management Advisory Committee and the Rivers Coordinator make recommendations to the Commissioner who in turn forwards a recommendation to the General Court for review and approval.

In fulfillment of this statutory directive, the nomination of the Pemigewasset River is hereby forwarded to the General Court. The Department of Environmental Services recommends that these river segments be designated into the Rivers Management and Protection Program and classified as stated in the summary and recommendations section of this report under the provisions of the protection measures in RSA Ch. 483. The outstanding statewide and local resource values and characteristics which qualify these river segments for designation are described in this report.
II. The Pemigewasset River Nomination

A. Description

The Pemigewasset River begins at Profile Lake in Franconia Notch and flows for 70 miles through the communities of Lincoln, Woodstock, Thornton, Campton, Plymouth, Holderness, Ashland, Bridgewater, New Hampton, Bristol, Hill, Sanbornton, and Franklin where it enters into the Merrimack River (see map). The Pemigewasset River Council has nominated 60 miles of the river. Ten miles through Lincoln and Woodstock are not nominated for designation. The Pemigewasset River watershed drains 1,000 square miles and has seven major tributaries, including the East Branch, Baker, Beebe, Mad, Smith, Squam and Newfound rivers.

Through the northern section of the river in Franconia Notch State Park the river corridor is generally undeveloped and natural in character. A few natural feature tourist attractions such as the Flume and the Basin are located near the river in this area. The river through Thornton and Campton include several falls, elevation drops and rocky bottoms. The largest falls, a drop of 50 feet, is located at Livermore Falls in Campton. The corridor through Thornton and Campton consists of scattered houses, and wooded areas. A broader river begins in Plymouth and meanders through a vast flood plain until it reaches Ashland where it drops slightly at the Sawhegeinit Falls and then somewhat straightens. The corridor through Plymouth represents community use with businesses, houses, Plymouth State College and the town center all within one-quarter of a mile of the river. South of Plymouth the river quickly becomes rural in character with scattered housing, rock cliffs, fields, and forested areas. The river then supports community use again as it flows through the town of Franklin and enters into the Merrimack River.

B. River Values and Characteristics

The Rivers Management and Protection Program Act (RSA Ch. 483) lists nine river values and characteristics which may qualify a river for designation into the program. The resource values which qualify the Pemigewasset River for designation are: geologic resources; wildlife, plant and fish resources; water quality; scenic values; historic and archaeological resources; community resources; and recreational resources. The Pemigewasset River supports many of these natural, cultural, and recreational resource values and characteristics at a level of either statewide or local significance.

1. Natural Resources

a. Geologic Resources: The southern Pemigewasset River valley was once part of a glacial lake extending north from Manchester. Much of the remains of that glacial lake can be found today along the Pemigewasset River. Dunes, deltas and terraces from the glacier have left sand deposits, sometimes reaching 100 feet deep, in the Pemigewasset Valley. The glacier left large outcroppings, basins, erratics, and gorges throughout the northern Pemigewasset River. One specific metamorphosed section of rock through Livermore Falls was first discovered in 1879. This rock, Camptonite, is unique and of unusual chemical composition. Geologist from around the world have since discovered this rock type in other regions and it continues to be called Camptonite throughout the world. Sections of the river have many rapids and no floodplains, indicating that even today it is actively cutting downward.
b. Wildlife & Plant Resources: The Pemigewasset River supports diverse habitat for a wide variety of wildlife and plant species, including several endangered species. A 1987 US Forest Service report listed 19 amphibians and reptiles living in the Pemigewasset corridor. Endangered birds using the corridor for nesting and feeding are the bald eagle, golden eagle, upland sandpiper, peregrine falcon and the sedge wren. Threatened wildlife which use the river and its corridor are the osprey, northern harrier, common loon, common nighthawk, cooper's hawk and the purple martin. Of considerable interest is the bat hibernaculum which lives in a cave in Campton. This bat is on the state critically endangered list. A list of other fauna has been compiled for the Pemigewasset River Council which includes numerous counts of other wildlife using the corridor and the river for shelter and feeding. The New Hampshire Natural Heritage Inventory has identified eleven state endangered plant species and 26 threatened species to be found in the river corridor.

c. Fish Resources: The Pemigewasset River supports at least ten species of fish, including the Atlantic salmon. The restoration of the Atlantic salmon to the Pemigewasset River has been a joint project of the US Fish and Wildlife Service and the States of New Hampshire and Massachusetts. It is the goal of this project to restore Atlantic salmon to spawning grounds throughout the Northeast.

d. Water Quality: The Pemigewasset River has been designated a Class B water by the NH General Court and is currently supporting the standards of this water quality designation. The maintenance of a high level of water quality in this river is critical to its future use for water supply and recreational purposes, as well as the river's ability to support high quality wildlife and plant habitat.

e. Scenic Values: The River provides scenic vistas for residents and tourists throughout the valley. Of considerable scenic value are the Flume and the Basin in the northern reaches of the Pemigewasset River. In its headwaters stands the Old Man of the Mountain, the NH State Symbol, that attracts people from across the country. One of the most outstanding scenic values on the river is Livermore Falls Gorge located in Campton. The NH Department of Transportation purchased a riverfront scenic easement in New Hampton to ensure a vista upstream. There are several picturesque scenic vistas from road crossings on the Pemigewasset River. These include scenic views of rapids, floodplains, cliffs and gorges. In the northern reaches surrounding the beauty of the river are the White Mountains in all their grandeur.

2. Cultural Resources

a. Historic & Archaeological Resources: Numerous Native American tribes passed along the Pemigewasset River, most of them from the Algonquin group. Many Native American trails and campsites are known to have existed along the river and the potential for further archaeological discoveries exists. In later years as settlers came north into the valley logging and paper mills flourished. The Pemigewasset River has a great history of transporting logs down the river to various mills. The Pumpkin Seed Bridge at Livermore Falls was originally built in 1885. It is the only bridge of its type in New Hampshire. There are several sites within the Pemigewasset River corridor that are listed on the National Historic Register.

b. Community Resources: The Pemigewasset River is a valued resource to the communities along the river as demonstrated through several communities' adoption of an overlay zone for shoreland protection and mention of river protection in their master plans. Plymouth State College uses the river for field classes in Biology, Anthropology, Geology, and History. The
Pemigewasset River is one of the major natural resources that attracts visitors to the area, providing opportunities for canoeing, swimming, sightseeing, fishing and camping. The management and protection of the Pemigewasset River is of major importance to the quality of life of river communities and the health of the regional economy.

3. Recreational Resources

a. Boating: Canoeing and kayaking are popular boating activities on the Pemigewasset River. The river offers both quick water and flat water experiences for boaters.

b. Fishing: There are 15 to 20 Bass Clubs in the state who use the southern segments of the Pemigewasset River for their annual tournaments. Trout fishing flourishes in the river above Livermore Falls. The anadromous fish restoration program has returned Atlantic salmon to the Pemigewasset River for more sport fishing potential.

c. Other Recreation: Golf, tennis, horseback riding, hiking, tubing, birding, swimming and camping are other recreational activities that people enjoy on or next to the Pemigewasset River. Campgrounds are located along the river from Franconia State Park to Franklin providing a full spectrum of camping experiences.

d. Public Access: The only designated public boat launch on the river is located in Bristol at the Route 104 bridge. Several canoeists and fishermen frequently use bridge crossings over the river as access points.

III. Local Support

Local support for river management and protection in the Pemigewasset River Valley has been demonstrated through zoning decisions, Master Plan recommendations and support for a National Park Service Study of the river. Support for the designation of the Pemigewasset River into the New Hampshire Rivers Management and Protection Program has been demonstrated through written letters, of support from the Selectmen of Franklin, Sanbornton, Bristol, New Hampton, Ashland, Holderness, Plymouth and Thornton. The Rivers Program Office has received several hundred letters, calls and petitions of endorsement for the designation of the Pemigewasset River into the Program, including the White Mountain National Forest, Public Service Company of New Hampshire, Merrimack River Watershed Council, Rivers Campaign, Appalachian Mountain Club, Lakes Region Planning Commission, and Plymouth State College. Two public hearings were held, January 23, 1991 and February 28, 1991, to receive public comments on the nomination of the Pemigewasset River. Both public hearings were attended by more than 150 people. At each hearing there were an equal amount of people in opposition to the nomination as were in support of it. Several hundred letters in opposition to the nomination were delivered to the Rivers Program Office. A majority of the opposition to the nomination came from the towns of Thornton and Campton.

IV. Summary and Recommendations

The Pemigewasset River supports a variety of significant state and local resources. To better protect and manage these resources, the Department of Environmental Services recommends the following actions:
Recommendation 1: The General Court should adopt legislation which designates the Pemigewasset River through Franconia Notch State Park and from the northernmost town line in Thornton to its confluence with the Merrimack River into the Rivers Management and Protection Program and classifies the river as a "Natural River" through Franconia Notch State Park, a "Rural River" from the northernmost townline of Thornton to the 1-93 Bridge in Plymouth, a "Community River" from the 1-93 Bridge in Plymouth to the Holderness/ Ashland townline, a "Rural River" from the Holderness/Ashland townline to the Franklin Falls Flood Control Dam in Franklin, and a "Community River" from the Franklin Falls Flood Control Dam to its confluence with the Merrimack River.

Under the provisions of the protection measure amendments to RSA Ch. 483, these designations will provide increased protection for the river in the areas of water quality, new dam construction, channel alterations, and the siting of solid and hazardous waste facilities within the river corridor. A designation will also require the establishment of protected instream flow levels to maintain the minimum amount of water in the river that is necessary to safeguard public trust resources for which the river is designated, including water quality, recreation, fisheries, and scenic values. A Local River Management Advisory Committee will be established to coordinate local issues related to the protection and management of the river and will provide local residents with a direct avenue for formal input to state decisions that affect the river. Finally, a designation will result in the development of a long-range management plan for the river that coordinates state planning and management of fisheries, water quality and quantity, and recreation.

The designation of the Pemigewasset River under the Rivers Management and Protection Program will clearly express the intent of the General Court with regard to the protection and management of the river and will focus attention on the river as a natural resource of both statewide and local significance. This attention will help to insure greater scrutiny of plans or proposals so as to protect the resources for which the river was designated.

Recommendation 2: The towns along the designated segments of the Pemigewasset River should continue to work toward the protection of the Pemigewasset River through the adoption of local river corridor management plans.

While a state designation will improve the protection and management of the river itself, continuing local efforts will be needed to address the use and conservation of the river corridor. A growing recognition by local citizens of the Pemigewasset River's valuable contribution to the overall quality of life in their communities is evidenced by their desire to see it designated into the Rivers Program. Citizen appreciation and concern for the river should be reflected in the decisions and actions of local officials. Upon request, the Department of Environmental Services will provide technical assistance to the Local River Advisory Committee and towns along the Pemigewasset River on the development of local river corridor management plans, including comprehensive shoreland protection ordinances.

In summary, the establishment of a clear policy and specific instream protection measures by the General Court through designation, and a continuing commitment on the part of local governments and residents to protect and manage the river corridor through sound land use decisions will ensure that the outstanding resources of the Pemigewasset River will "endure as part of the river uses to be enjoyed by New Hampshire people."