## **Chapter 1: Background**

This chapter provides an introduction to the Wild and Scenic Rivers Act and the Lower Farmington River and Salmon Brook Study. It includes a review of the project's history, the study strategy and process, the principal participants, and the major study products and accomplishments.

## 1.A. Wild and Scenic Rivers Program

The National Wild and Scenic River System was established by Congress in 1968 to protect certain outstanding rivers from the harmful effects of new federal projects such as dams and hydroelectric facilities. Since then 203 rivers or river segments totaling over 11,000 miles have been protected nationwide. To be considered "Wild and Scenic" a river must be free-flowing and have at least one river-related outstanding natural, cultural, or recreational resource value. Section 1(b) of the Act states:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

There are only eight Wild and Scenic River segments located in New England: the upper Farmington and Eightmile in Connecticut; the Allagash in Maine; the Wildcat and Lamprey in New Hampshire; and the Westfield, Sudbury-Assabet-Concord, and Taunton in Massachusetts. One additional study is ongoing in New England of the Missisquoi River in Vermont.



Each river designated into the national system receives permanent protection from federally licensed or assisted dams, diversions, channelization or other water projects that would have a direct and adverse effect on its free-flowing condition, water quality, and Outstandingly Remarkable resources, or, for projects outside the designated segments, that would invade the segments or unreasonably diminish the segment's fish, wildlife, scenic, or recreational resources. The Wild and Scenic Rivers Act explicitly prohibits any new hydropower dam and related facilities licensed by the Federal Energy Regulatory Commission (FERC) on or directly affecting a designated river segment. The determination of a proposed federally assisted water resource project's or FERC-licensed hydropower project's potential impacts on the river's "outstandingly remarkable" values, water quality, and free-flowing condition is made by the federal river administering agency, in this case the National Park Service.

Studies under the Wild and Scenic Rivers Act (WSRA) can bring additional local benefits such as the preparation of an advisory Management Plan, research studies, and cooperation among numerous river stakeholders. River designation may bring prestige and recognition to the region and can boost the local economy through tourism, possible funding through the National Park Service, matching grants, in-kind support, and volunteer assistance.

Before a river can be added to the National Wild and Scenic Rivers System, it must be found both *eligible* and *suitable*. To be eligible, the river must be 1) free-flowing and 2) possess at least one river-related Outstandingly Remarkable Value such as exceptional scenery, fisheries, and wildlife, water quality, or cultural resources. The suitability determination is based on factors such as public support for designation versus conflicting river uses (e.g., hydropower development), evidence of adequate existing resource protection,

River designation may bring prestige and recognition to the region and can boost the local economy through tourism...

Farmington River angler Photo: Wanda Colman and lasting protection measures such as are documented in the Management Plan. Local residents, leaders, and organizations must show strong support of their intent to participate in the long-term protection of the river. The *eligibility* and *suitability* analyses are presented in the chapters that follow.

## 1.B. Lower Farmington and Salmon Brook Study History and Methods History

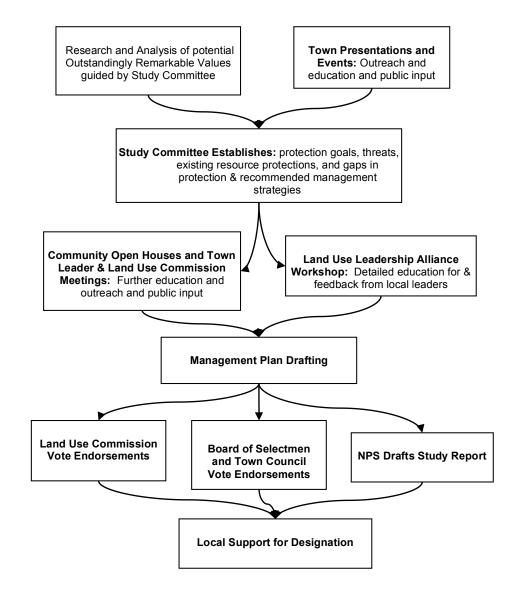
In 1994, the upper 14 miles of the Farmington River in Connecticut were designated a Wild and Scenic River. As the passing years proved this designation a success in terms of facilitating river protection through a partnership between residents and the state, local, and federal governments, interest arose in securing Wild and Scenic designation for the downstream segment of the river as well. The lower reach of the Farmington River is rich in recreational, historical, and biological values and has an important tributary, the Salmon Brook, noted to be among the state's most significant coldwater resources. Because of these factors, local interest, led by the Farmington River Watershed Association (FRWA), developed to pursue congressional authorization for a Wild and Scenic Study of the lower Farmington River and Salmon Brook. Former Congresswoman Nancy Johnson and former Senator Chris Dodd were instrumental in securing congressional authorization for the study. The Study bill was passed by Congress at the end of 2006. On November 27, 2006 Public Law No. 109-370 was signed into law by President Bush.

### **Study Committee**

The Wild and Scenic Rivers Act states that congressionally authorized studies "shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system." For more than 20 years, the National Park Service has taken advantage of this direction when conducting studies bordered by predominantly private and non-federal lands by encouraging formation of informal study committees based around state and local government representation. Such study committees become an integral part of the study approach, and the regular participation of local and state governments ensures full buy-in to the study process and eventual products. Local and state knowledge is often critical to effective and efficient research regarding potential Outstandingly Remarkable Values of the study area, and is absolutely essential to the development of local and state-based management strategies for protection of such values. Since it is a central tenet of such non-federal land river studies that land-based resource protection must be primarily accomplished through local, state, and non-governmental action, it is therefore a central task of the study committee to develop



Wild and Scenic Study Committee Photo: Sarah Hincks



# Figure 1: Wild and Scenic Study Process Flow Chart

a locally-based management plan to protect the important river values being researched and documented throughout the study.

As a part of the discussions that took place prior to congressional authorization of the Lower Farmington and Salmon Brook Study, local community support for the study was preconditioned on the understanding that such a study committee would be formed as the first step of the study process. Congress passed the Study bill in November of 2006, and the locally-based Lower Farmington and Salmon Brook Wild and Scenic Study Committee began meeting in April, 2007. Committee members were appointed by their towns, and brought a wealth of knowledge and experience in governmental, ecological, and organizational processes to the study team. Committee members included representatives from the ten river towns of the study area, the CT DEP, the Farmington River Watershed Association, Salmon Brook Watershed Association, and Stanley Black &

Decker (owner of the Rainbow Dam). Other organizations that joined the Study Committee through regular participation included the Connecticut Forest and Park Association, the Pequabuck River Watershed Association and the Tariffville Village Association. Additional input from independent researchers, local supporting agencies, professional contractors, and the general public has ensured the study's progress and comprehensiveness. The National Park Service provided staff support, overall coordination, and technical assistance on the development of the management plan document. Sub-committees on Outstanding Resource Values, Management and Protection, and Outreach and Education helped guide and implement the study process.

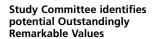
## Study Approach

#### **Partnership Rivers**

The Lower Farmington River and Salmon Brook Wild and Scenic Study was carried out in "Partnership" with local stakeholders. The Partnership Wild and Scenic Rivers make up a subset of rivers in the National Wild and Scenic Rivers System. The Partnership Wild and Scenic River approach was developed in response to the need for a Wild and Scenic River Study and designation program tailored to rivers characterized by extensive private land ownership along the river, and well-established traditions of local control of river management in a community-based setting. This type of study and designation model has a proven track record of effectively creating river protection strategies that bring communities together in protecting, enhancing, and managing high value river resources. Coordinated private sector, local, state, and federal government commitments are leveraged through the partnership approach to achieve efficient and effective Plan implementation.

The National Park Service recognizes 12 Partnership Wild and Scenic Rivers in eastern states that have gone through similar partnership-based study processes (coordinated through a locally-based study committee, as discussed above) and which share some common post-designation management approaches including:

• No reliance on federal ownership of land in order to achieve the WSRA's goals of protecting and enhancing river values.





- Land use management is regulated through existing local and state authorities, the same as before a designation.
- Administration and implementation of a locally led Management Plan is accomplished through a broadly participatory management committee, convened for each river specifically for this purpose.
- Responsibility for managing and protecting river resources is shared between the local, state, federal, and non-governmental partners on the committee.
- Reliance on volunteerism as a key to success.
- No National Park Service Superintendent, law enforcement, or similar elements of traditional federally managed units of the National Park System.

The land ownership patterns and local involvement scheme in the Farmington River and Salmon Brook towns closely matches conditions that prompted development of the partnership approach. Therefore, both the study process implemented for this study, and the potential Wild and Scenic River designation model evaluated as a part of the study closely track the precedents established by the existing Partnership Wild and Scenic Rivers. For more information about the National Park Service Partnership Wild and Scenic Rivers please visit the website: http:// www.nps.gov/pwsr/

## Study Goals and Methods General

The Study Committee with locally appointed representatives from the ten towns of the study area and representatives from other river stakeholder entities was tasked with:

- Providing local knowledge and expertise to help guide and interpret research on the natural, cultural, and recreational resource values associated with the rivers. This information forms the basis for both Outstandingly Remarkable Value determinations and the Management Plan.
- 2. Developing a comprehensive local advisory management plan to serve as a blueprint for improved management and conservation of the identified natural, cultural, and recreational values, with technical assistance from the National Park Service. This Plan could serve the river, local communities, state agencies, and other stakeholders

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regardless of whether Wild and Scenic River status is achieved or even sought as a result of the study.

3. To serve as the focal point for local community, citizen, and stakeholder involvement throughout the study process.

To meet these goals, the Study Committee conducted extensive research, established resource protection priorities, and worked intensively within the communities to educate and gain input for the Management Plan. **Research** 

Early in the study process, the Study Committee formed an Outstanding Resource Values Sub-committee which established that a multitude of special resources define the Farmington River and Salmon Brook. For example, in 2005 the Farmington Valley was highlighted in the book, Nature-Friendly Communities, recognizing the area for exceptional biodiversity and wildlife habitat, and for the success of the locally initiated Farmington Valley Biodiversity Project. The Biodiversity Project laid groundwork for the Wild and Scenic Study by documenting the richness of the river valley's plant and animal life. With excellent habitat and water quality the river corridor is a haven for diverse and abundant fish populations, unsurpassed freshwater mussel diversity, and provides a critical dispersal and migratory route for both terrestrial and aquatic wildlife in the region. The exceptional variety of river-based recreational activities and a rich cultural heritage were also determined to be clear examples of potential Outstandingly Remarkable Values (ORVs) worthy of further study and evaluation as a part of the Study.

The Study Committee identified five distinct potential ORVs which, along with free-flowing character and water quality, formed the backbone of the study's investigations. These five potential ORVs are **Geology**, **Water Quality, Biological Diversity, Cultural Landscape, and Recreation.** 

Research was performed by consultants, academic institutions, Study Committee members, the State of Connecticut, and local supporting agencies. The results of the research helped to produce a clear picture of the status of the potential ORVs, as well as identifying existing protections for the potential ORVs and the management outcomes resulting from these protections. Major research undertaken during the Wild and Scenic Study to identify ORVs, develop management schemes, and determine eligibility and suitability included several studies and authoritative reports:

Use and Economic Importance of the Lower Farmington River and Salmon Brook: This three-part study surveyed and evaluated the recreational use of the lower Farmington River and Salmon Brook and the watercourse's impact on local business. Additionally, the researchers studied the effect of proximity to the Farmington River and Salmon Brook on the sale prices of single family homes. (Conducted by the Center for Public Policy and Social Research, Central Connecticut State University)

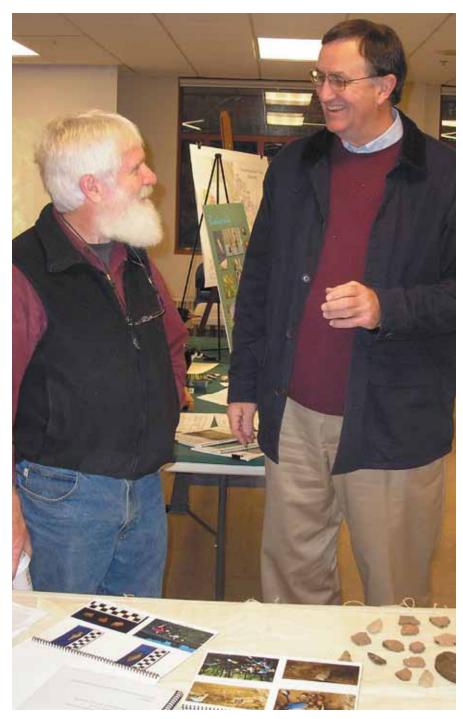
Archaeological Assessment of the Lower Farmington River and Salmon Brook: This assessment described and analyzed the significance of the archaeological resources of the lands adjacent to the Farmington River and Salmon Brook. The researchers conducted an archaeological sensitivity study of the stream corridors and an eligibility analysis of the archaeological sites for Outstandingly Remarkable Value status. (Conducted by Dr. Kenneth L. Feder, Ph.D., Central Connecticut State University (CCSU), Dr. Marc L. Banks, Ph.D., LLC, and Dr. John Harmon, Ph.D., CCSU)

**Cultural Landscape Study:** This study documented, analyzed, and assessed the significance of the important aspects of the Study area's cultural landscape. (Conducted by Leah S. Glaser, PhD, Lucas Karmazinas, MA, Diana Sheil, BA)

**Biodiversity and Vernal Pool Mapping Project:** This project's goal was to map vernal pools in study area and analyze and map ecoregions. (Conducted by Farmington River Watershed Association GIS Specialist Jeff Bolton)

**Geology of the Farmington River Valley:** The unique geology of the watershed was described in this report. (Conducted by Connecticut State Geologist Emeritus Ralph Lewis)

**Tariffville Gorge Hydrologic Study:** This study estimated the extent of the current Rainbow Dam impoundment, presented recommendations regarding two different potential boundary locations between the Farmington River's Wild and Scenic designated reach and Rainbow Dam's



Town of Canton Community Open House

impounded reach, and commented on potential impacts related to raising the existing flashboards on the crest of the Rainbow Dam to some height greater than which currently exists. (Conducted by Princeton Hydro Engineering PC)

**Municipal Plan and Regulation Review:** This effort identified and assessed existing municipal regulations, plans and programs in order to help identify the sufficiency of such regulations, plans and programs for protecting the lower Farmington River and Salmon Brook. (Conducted by Robinson & Cole LLP)

## Management Issues and Threats:

This assessment identified threats to the potential Outstandingly Remarkable Values. (Conducted by Study Committee)

**Existing Gaps in Protections:** Based on the status of existing regulations, plans and programs, gaps between threats to potential Outstandingly Remarkable Values, and the protection goals established were identified. (Conducted by Study Committee)

Land Trust Survey: This survey of the ten local land trusts collected information regarding open space protection. (Conducted by Study Committee)

**Geographic Information Systems (GIS) Studies:** (Conducted by FRWA GIS Specialist Jeff Bolton)

- Viewshed Analysis from the Farmington River and Salmon Brook
- Steep Slopes Analysis
- Local Basin Percent Impervious Surface
  Analysis
- Core Habitats Analysis
- Integrated Natural Resources Analysis
- Integrated Natural, Cultural, and Recreational Resources Analysis
- Protected Open Space Analysis (focus on Land Trust properties)
- Land Use Types Analysis (within river corridor)
- Dominant Vegetation Types Analysis (within the river corridor)
- Forest Fragmentation Percentages Analysis (entirety of Study Town area)
- National Register of Historic Places Analysis (within river corridor)
- Archaeological Resources Predictive Study

Many of these studies are available in the Lower Farmington River and Salmon Brook Management Plan and Appendices and on the Wild and Scenic Study website www. lowerfarmingtonriver.org

## **Outreach and Education**

A major outreach and education effort was conducted throughout the ten-town study region. The Outreach and Education Sub-committee led the effort to reach the leaders and residents of the communities through a series of meetings, presentations, open houses, workshops, booths at events, newsletters, posters, news articles, and mailings. A media plan was developed to insure that a broad assortment of outreach efforts were used to engage and educate community residents and leaders and gather citizen input for the study, as well as inform the public about the Wild and Scenic Study process and milestones.

Details of the outreach and education program conducted during the Wild and Scenic Study are included in **Consultations and Coordination Chapter**. Examples of the outreach and education efforts are included in the Appendices of this report.

## Management Plan

The Study Committee accomplished its major goal by preparing the Management Plan that will function as a blueprint for conservation actions and management practices. It is intended to provide a guidance framework for local commissions and governments as well as for the Wild and Scenic Committee, non-profit organizations, towns, and citizens (if the river receives the federal designation). The Management Plan is intended to serve as the comprehensive plan required for all designated Wild and Scenic Rivers, as well as to stand alone regardless of whether the river gains designation status. Technical assistance and involvement of the National Park Service throughout Plan development made preparation of the Plan feasible, and ensured that Wild and Scenic Rivers Act objectives would be met.

The State of Connecticut, Study area towns, and other stakeholders comprising the Study Committee suggested the following guiding principles for the Management Plan:

- Resource conservation and protection should be fully integrated with traditional patterns of use, ownership, and jurisdiction, relying on existing authorities.
- 2. Management of the lower Farmington and Salmon Brook should be based on a cooperatively developed plan that establishes resource protection standards and identifies key actions accomplished through cooperation among all public and private organizations with an interest in the river.
- 3. If the rivers are added to the National Wild and Scenic Rivers System, any land conservation initiatives related to this

designation should be based solely on voluntary willing seller arrangements.

To facilitate preparation of the Management Plan, the Committee established overarching protection goals for each potential Outstandingly Remarkable Value (ORV). A set of land use and conservation recommendations were identified to facilitate meeting the goals. These efforts fit into an overall integrated process for developing the plan—the key steps of which included:

- 1. *Determining existing resource protections* by engaging consultants to determine the adequacy of those protections through a comprehensive review of town regulations, plans, and policies as well as current federal and state regulations.
- 2. *Setting protection goals* for each resource value at local, state, and federal levels that (a) meet the Wild and Scenic River Act requirements of Section 6(c) and 10(a), which requires protection and enhancement of the Outstandingly Remarkable Values (ORVs), water quality, and free-flowing characteristics that make the river eligible for designation under the Wild and Scenic Rivers Act, and (b) meet any additional protection goals deemed appropriate by the Study Committee.
- 3. *Identifying threats* that currently impact or are likely to impact the potential ORVs and assigning them priorities based on the significance and likelihood of their potential impact.
- 4. *Comparing protection goals with known and potential threats* in order to assess the effectiveness of existing resource protection and to identify potential gaps in protection.
- 5. Establishing recommended management priorities and strategies based on gaps in protection: Where gaps were identified between existing protection measures and desired levels of protection, strategies to fill such gaps are recommended in the Management Plan.

The end product of these steps was a series of recommendations in the Management Plan that the Study Committee intends to begin implementing immediately. There also are examples included in the Management Plan of how the Committee and some towns have already taken steps to implement Plan recommendations.

Resource conservation and protection should be fully integrated with traditional patterns of use, ownership, and jurisdiction, relying on existing authorities.