

Upper Farmington River Management Plan

Update to the April 29, 1993 version

December, 2013



Farmington River Coordinating Committee

Upper Farmington River Management Plan

Update to the April 29, 1993 version

December, 2013



2013 REPRESENTATIVES:

Barkhamsted – Mario Santoro; Roger Behrens, alternate

Canton – vacant; Cherie Robinson, alternate (Chair)

Colebrook – Ross Delaney; Edna Travis - alternate

Hartland – Dan Bowler; Nicki Hall, alternate

New Hartford – Alison Murdock (Vice-Chair); Mark Lindquist, alternate

Connecticut Department of Energy and Environmental Protection
(CT DEEP) – Susan Peterson (Secretary); Maryann Nusom Haverstock,
alternate

Farmington River Anglers Association (FRAA) – Nick Masi; Scott Demoncada
and Paul Pinette; alternates

Farmington River Watershed Association (FRWA) – David Sinish (Education
& Outreach Subcommittee Chair); Eileen Fielding; alternate (Treasurer)

Metropolitan District Commission (MDC) – Tim Anthony (Resource
Stewardship Subcommittee Chair), Carol Youell; alternate

National Park Service (NPS) – Liz Lacy; Jamie Fosburgh, alternate



**The 2013 Revised Plan was coordinated by Joyce Kennedy Raymes,
National Park Service, under the direction of the Farmington River
Coordinating Committee (FRCC).**

**FRCC thanks former study and FRCC representatives and other
individuals who have assisted in this revision, especially Tom Stanton
of Colebrook, and Bill Roberts of Canton.**

The Management Plan is available digitally at www.farmingtonriver.org.

Original Farmington River Study Committee (November 1988 – April 1993):

Robert Alarie, Town of Becket, Massachusetts
Joy Brown, Town of Otis, Massachusetts
John Clark, Town of Tolland, Massachusetts
Patricia DeMarco, representing the Governor of Connecticut (Secretary)
James Fleming, State Senator, representing the Secretary of the Interior
Anthony Gallicchio, Metropolitan District Commission
Neil Gilpin, Town of Hartland, Connecticut
Alis Huhn, Town of Canton, Connecticut (former member)
David Lee, Town of Colebrook, Connecticut
Paul Mikell, Metropolitan District Commission (former member)
Culver Modisette, Farmington River Watershed Association
Robert Moore, representing the Governor of Connecticut
H. Randall Pease, Jr., Metropolitan District Commission
Douglas Poland, representing the Governor of Massachusetts
Robert (Bud) Rice, Town of Colebrook, Connecticut (former member)
Norman (Skip) Rogers, Town of New Hartford, Connecticut (Chair)
John Rossi, Metropolitan District Commission (former member)
Ralph Scarpino, Town of Barkhamsted, Connecticut
David Sinish, Town of Canton, CT, and Farmington River Watershed Association
Robert Tarasuk, Town of Sandisfield, Massachusetts
Cassie Thomas, representing the Governor of Massachusetts (former member)
Roger Thrall, Town of Canton, Connecticut (former member)

Technical Work Group:

Nathan Frohling, Farmington River Watershed Association
Richard Jacobson, Connecticut Department of Environmental Protection
George Sparks, Metropolitan District Commission

Contributors:

Lawrence Golden, Slater, Sandler and Daniells
Carolyn Hughes, Connecticut Department of Environmental Protection
Drew Parkin, National Park Service
James Sandler, Slater, Sandler and Daniells
Jamie Williams, National Park Service

Project Manager:

Philip Huffman, National Park Service





Table of Contents

Introduction to Upper Farmington River Management Plan — Revised 2013	1
Management Plan Introduction	4
Chapter 1: Approach To Resource Management	7
Goals and Management Philosophy	7
Wild and Scenic River Consideration	8
Chapter 2: Administrative Framework	12
Overview	12
Farmington River Coordinating Committee	12
Management Agreements	17
Chapter 3: Education And Outreach	19
Overview	19
Potential Activities	19
Chapter 4: Resource Management	21
Overview	21
Part I: Land Resource Management	23
Private and Public Lands	23
Part II: Water Resource Management	30
1. Water Quality	30
2. Water Quantity	35
3. Channel, Bank and Wetland Protection	42
Part III: Outstanding Resource Management	46
1. Recreation Resources	46
2. Fisheries and Wildlife	48
3. Historic Resources	52
Chapter 5: Management Of The Massachusetts Segment	54
Overview	54
River Management Issues	55
Chapter 6: Lower Farmington River Management	56
Overview	56
Management Recommendations	57
APPENDICES	59
A. Wild and Scenic Rivers Bill	59
B. Outstandingly Remarkable Values (ORVs)	60
C. Local River Protection Overlay Districts	62
D. Summary of Federal and State Statutes	62
E. FRCC Bylaws	71
F. FRCC Memorandum Of Understanding (MOU)	72
G. FRCC List of Major Accomplishments	76



FIGURES (Rear of Plan)

Individual Town Figures 1.–3. show the Wild and Scenic Corridor:

1. Colebrook and Hartland
2. Barkhamsted
3. New Hartford and Canton
4. Major Tributaries and Watersheds
5. Farmington River Watershed and Upper Farmington Towns
6. Potential Upper Farmington River Wild and Scenic Boundary Extension
7. Land Cover
8. Land Use
9. Land Cover Changes from 1985 to 2006
10. Floodplains
11. Elevation and Topography
12. Generalized Bedrock Geology
13. Quaternary Geology
14. State Water Quality Classifications
15. Local Basin Percent Impervious
16. Aquifer Protection Areas
17. Recreational Resources
18. Critical Habitats and Potential Vernal Pools
19. Ecoregions
20. Alluvial Floodplain Critical Habitat Subtype Communities
21. Endangered, Threatened, or Special Concern Species
22. Invasive Species
23. National Register of Historic Places

Maps available digitally on the FRCC website at www.farmingtonriver.org



Introduction to Upper Farmington River Management Plan — Revised 2013

Welcome to the updated Upper Farmington River Management Plan (UFRMP). The original UFRMP was published by the Farmington River Wild and Scenic Study Committee in 1993 and prior to the upper river's 1994 Wild & Scenic designation by the U.S. Congress. At that time, producing a management plan while the designation application was under review represented a new approach to Wild & Scenic study processes; the management plan would exist whether or not the designation was granted. It proved to be for the upper Farmington an effective approach and, today, many river associations take this tack.

The 1993 UFRMP advised that the managing committee — the Farmington River Coordinating Committee (FRCC) — review the plan periodically, assess its successes and shortcomings and, if deemed necessary, revise it to reflect issues currently affecting, or anticipated to affect, the river. In that spirit, at the conclusion of its latest review, the FRCC added: resilience to climate change, the infestation of invasive species, and working cooperatively to manage and preserve recreational use of the upper Farmington River. The set of accompanying maps at the end of this revised UFRMP represents a wealth of both existing and new information about the Wild and Scenic area, including land use, geology, water quality, local resources and the findings of research conducted by the FRCC between 1993 and 2013.

Since Designation

The plans for the creation and operation of the FRCC were promulgated in the original UFRMP and since designation, in 1994, the FRCC has followed that guidance. Today, the FRCC plays not only an important advising and planning role along the upper river but also in the riverfront

communities of Barkhamsted, Canton, Colebrook, Hartland, and New Hartford. Ranging from funding land protection efforts, such as Jones Mountain in New Hartford and Sugar Meadow Island in Barkhamsted, to streambank stabilization assistance, to providing grants for projects like information kiosks or museum displays about the river, the FRCC works cooperatively with the five member towns, local organizations and governmental bodies to pursue the goals established in the UFRMP. See Figures 1-3: Individual Town Figures and Figure 4: Major Tributaries and Watersheds.

The FRCC office, located at the historic Squire's tavern, in Pleasant Valley, Connecticut, and established since designation, has become a place people know to come to with their ideas, concerns, and questions about the upper Farmington River. Please take a look at the different projects and accomplishments achieved since 1994 in Appendix G, or on our website at www.farmingtonriver.org.

The Revision Process

In endeavoring to produce this 2013 update of the Upper Farmington River Management Plan, the FRCC sought to respect the larger purpose of the original plan while providing some revisions that will, it believes, make the UFRMP more timely and user-friendly. The introduction to, and large portions of, the first plan are included in this revised version, as the 1993 UFRMP remains a strong guiding document. Additionally, the committee decided that the 2013 plan will exist as both a published and electronic document.

FRCC members reviewed the 1993 UFRMP and 2013 revisions many times and in different ways. They decided to change verb tense, add new issues and accomplishments, provide additional



The FRCC works cooperatively with the five member towns, local organizations and governmental bodies to pursue the goals established in the UFRMP.

baseline information and maps, and remove outdated tasks. All members of the FRCC had a hand in making and approving the changes that appear in the 2013 plan. The updated UFRMP reflects this cooperative effort and incorporates as well comments received from the general public, whose opinions were sought throughout the two-year revision process. The updated report does not reflect any changes to major Wild and Scenic Rivers Act provisions, the role of the National Park Service or provisions that safeguard land owners.

Intent of the Plan

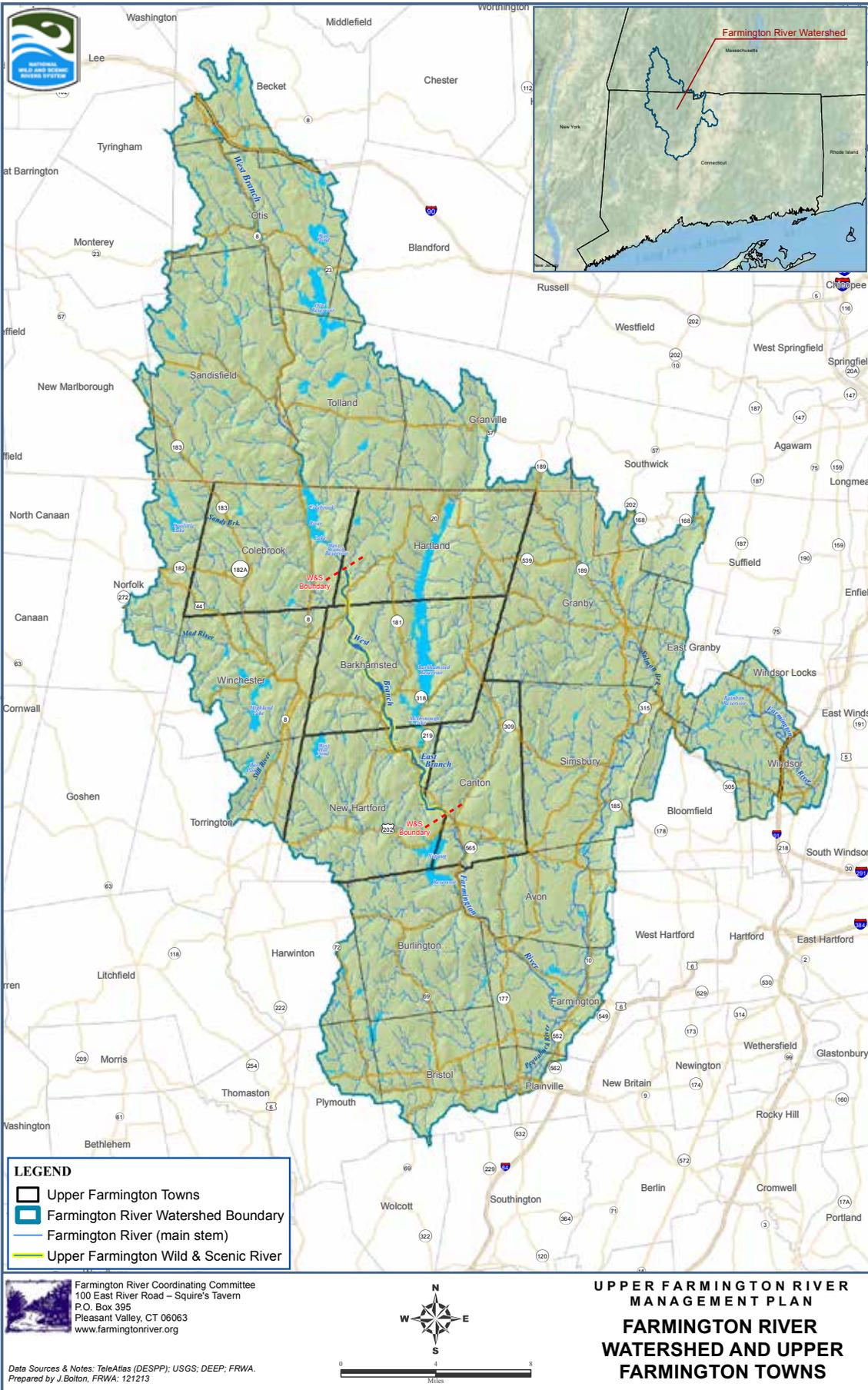
The UFRMP is not a set of regulations or laws. Rather, it is a stewardship guidance document created, submitted, and approved by Congress, in conjunction with the application to designate the upper Farmington River to the National Wild and Scenic Rivers System. The FRCC follows its guidelines and adheres to its recommendations.

The FRCC hopes that this document will be used to not only understand the goals and objectives of the FRCC, but to learn about the river's characteristics and outstanding resources, as well.

The UFRMP ... is a stewardship guidance document created, submitted, and approved by Congress, in conjunction with the application to designate the upper Farmington River to the National Wild and Scenic Rivers System.



UPPER FARMINGTON RIVER MANAGEMENT PLAN 2013



Management Plan Introduction

The FRCC has included this introduction in its entirety from the original Management Plan to provide historical context.



The Upper Farmington River Management Plan articulates a vision for future management of the uppermost segment of the river in Connecticut and its adjacent lands. It also proposes complementary actions that might be taken upstream and downstream of this segment.

The plan was prepared as one component of the Farmington Wild and Scenic River Study authorized by Congress in 1986 through P.L. 99-590. See *Appendix A: Wild and Scenic Bill*. The study covered two segments of the upper Farmington River – an 11 mile section of the West Branch in Massachusetts, and a 14 mile section of the West Branch and mainstem in Connecticut. The Connecticut segment is the focus of this management plan. See *Figure 5: Farmington River Watershed and FRCC Towns*.

The study was led by the Farmington River Study Committee, an advisory group created by Congress to represent the major interests in the study area. The Study Committee included representatives from

the nine towns along the two segments, the Commonwealth of Massachusetts, the State of Connecticut, the Hartford Metropolitan District Commission (MDC), the Farmington River Watershed Association (FRWA), and the U.S. Department of the Interior. Staff assistance and funding for the project have been provided by the National Park Service (NPS).

Traditionally, a river management plan is prepared following National Wild and Scenic River designation. This plan, however, was prepared *before* any decision was made regarding whether to recommend designation. This approach reflects the fact that the Farmington River area encompasses a unique set of circumstances that requires a unique management response. Because of these circumstances, the Study Committee concluded that it would be impossible to consider the issue of designation without first knowing how the river would be managed following such designation. Furthermore, the Committee felt that a



comprehensive management plan was needed regardless of whether the river was ever designated.

While the plan was prepared as part of the wild and scenic river study process, implementation of the plan's major actions is *not* dependent on designation. Indeed, many critical actions, including local adoption of riverfront zoning improvements, had already taken place. Those elements of the plan that are dependent on designation are clearly spelled out to distinguish them from the rest of the plan.

The Plan was not prepared in a vacuum. It represents months of concentrated attention on the part of the Study Committee and other contributors. A technical work group consisting of staff from the Connecticut Department of Environmental Protection (DEP), the MDC, the FRWA, and the NPS provided expertise and assistance in resolving several key issues. Each component of the plan was scrutinized to determine if it furthered the goals set forth by the Study Committee at the outset of the project and met the needs of the many interests involved. Inevitably there were differences of opinion. These were resolved through open dialogue at both the work group and sub-committee

level. The plan is therefore a consensus document that has the confidence and support of all who participated in its preparation.

A summary of the draft plan was presented and discussed at an open public meeting in Barkhamsted on January 14, 1993. Over 200 local residents attended, and support for the plan was overwhelming.

The plan has six parts:

- 1. Approach to Resource Management:** This section describes the basic philosophy that underlies the plan and presents the goals that guided development of the plan.
- 2. Administrative Framework:** This section describes the organizational structure that exists to oversee implementation of this plan and long-term protection of the river.
- 3. Education and Outreach:** This section identifies a number of activities that could be initiated to increase public awareness of the value of the river and techniques for managing it wisely.
- 4. Resource Management:** This section, by far the most extensive, is the main body of the plan. The section is divided



into three primary parts: land resources, water resources, and outstanding resources. For each, the plan identifies actions that will be undertaken, objectives, and standards to guide these actions.

5. **Management of the Massachusetts Segment:** This section describes how Wild and Scenic River designation of the Connecticut segment affects the river in Massachusetts, and presents recommendations for Massachusetts's river management. It also identifies the steps needed to obtain Wild and Scenic

river designation for this portion of the river at any time in the future.

6. **Lower Farmington River Management:** This section presents recommended actions that would help protect the lower portion of the river and complement the actions being taken further upstream. If the lower river gains Wild and Scenic designation then there will be opportunities to work cooperatively on projects that further the goals presented in both the upper and lower management plans.

This management plan is directed to local governments, the states of Connecticut and Massachusetts, federal agencies, public commissions and authorities, residents of the river corridor, river users, and others who care about the future of the upper Farmington River. All of these interests must continue to work together to protect the river and achieve this plan's goals.

The management plan does not contain a prescription for every situation that could confront river managers. Instead, it provides a vision for the future of the river and a context for interpreting and acting. The plan creates a specific mechanism — the Farmington River Coordinating Committee — to address management issues.



Approach to Resource Management

Goals and Management Philosophy

Goals

In September 1989, the Farmington River Study Committee adopted a set of goals for future management of the upper Farmington River. These goals provided the foundation for the development of this management plan. They are as follows:

1. Conserve and enhance important land-based natural and cultural resources, including wildlife habitat, forests, diverse landscapes, and the scenic and historical character of the Farmington Valley.
2. Encourage effective management of river-related growth that will protect the river's special qualities, and that will emphasize existing local control and the rights of private property owners.
3. Balance the legitimate demands on the river for water supply, waste assimilation, energy production, and commercial and industrial uses, while maintaining stream flow and water quality necessary to sustain fisheries, recreation and scenic qualities at levels sufficient for wild and scenic river designation.
4. Manage river recreational use to minimize resource degradation and impacts on private and public landowners, while providing for appropriate recreational use and public access.
During the 2013 Plan update the following management goals were recommended:
5. Protect river from further degradation due to contaminants and invasive non-native species.
6. Increase the Upper Farmington River's resilience to impacts resulting from climate change.
7. Conduct a recreational use study to assess river use and make recommendations for balancing competing uses.

These goals make it clear that, in the upper Farmington River Valley, resource protection and human activities are not separate issues, but always will be intertwined.

Management Philosophy

The above goals give direction as to *what* the management plan seeks to accomplish. Of equal concern is the issue of *how* these goals will be accomplished. Drawing upon their collective experience with resource management, and with the Farmington River area, the original Study Committee defined a management philosophy to guide development of the plan. This philosophy incorporates the following basic elements:

1. Resource conservation should be fully integrated with traditional patterns of use, ownership, and jurisdiction.
2. River management should be accomplished through cooperation among all public and private organizations with an interest in the river.
3. Long-term resource protection should rely on existing programs and authorities rather than on new layers of bureaucracy.
4. Future management should be based on a cooperatively developed plan which establishes resource protection standards and identifies key actions.

This management philosophy is built on the assumption that, for the most part, existing river protection mechanisms



The Committee felt that a comprehensive management plan was needed regardless of whether the river was ever designated.

are adequate to protect river resources. If a resource value has been protected by existing management, and if existing management seems adequate to address issues that can reasonably be expected to appear in the future, then the existing mechanism should be left alone. If the existing mechanisms could be improved or made more efficient by better coordination or enforcement, then this should be pursued. New or stricter regulations, or other actions, should only be undertaken when needed, not used as a primary management tool.

The Study Committee determined that *this management plan must not pre-empt existing rights or management responsibilities*. Rather, the plan should create a common vision for the future and an environment in which those concerned with the river can focus their collective energies on making this vision a reality.

Wild and Scenic River Consideration

Legislative Guidance

The Wild and Scenic Rivers Act (P.L. 90-542, as amended) provides the legal foundation and overall guidance for the National Wild and Scenic Rivers System. The fundamental concepts that underlie this Act, and the elements of paramount importance for designation of the Farmington River, are described below.

Section 1(b) summarizes the intent of the Act:

*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.

Section 10(a) specifies how designated rivers should be managed:

*Each component of the national wild and scenic rivers system shall be administered in such 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. In such administration primary emphasis shall be given to protecting its esthetics, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.*

Section 7(a) describes the specific protections provided to designated rivers:

*The Federal Power Commission [Federal Energy Regulatory Commission] shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act...**on or directly affecting** any river which is designated...and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a **direct and adverse effect** on the values for which such river was established... No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established...*

Relationship of the Management Plan to Designation

Section 3 (d) of the Wild Scenic Rivers Act requires that a comprehensive river management plan be prepared for each river designated into the national system: “to provide for the protection of the river values.” Furthermore, as described in Sec. 10(a) of the Act, management prescriptions can – and should – be tailored to meet the specific needs of the river in question. This



management plan satisfies the requirement of Sec. 3(d) and, therefore, constitutes the official framework for management of the river. As described in the **Administrative Framework** section, the plan is subject to periodic review and update by the Committee.

Safeguards

The plan includes the following specific provisions to safeguard the interests of landowners and others. These provisions are consistent with the direction provided by Congress through the Wild and Scenic designation.

1. There is no acquisition of lands by the federal government – through condemnation or otherwise – in conjunction with Wild and Scenic River designation.
2. There is no federal management of non-federal lands. Private lands along the river will continue to be managed by their respective owners in accordance with local land use regulations. Non-federal public lands will continue to be managed by the agencies that own those lands.¹
3. The river area is not a national park and is not subject to the federal regulations that govern units of the national park system.
4. No new federal permits are required as a result of designation.²

National Park Service Role

As this plan amply demonstrates, the upper Farmington’s designation is carried out through a nontraditional approach, with the federal government acting as a partner in river management rather than as the primary manager. The upper Farmington River is one of the first rivers known as a “Partnership River.” Several other rivers in the Wild and Scenic system have followed the partnership approach to management due to common characteristics such as historical alterations, extensive private land ownership along the river, and well-established local control of river management. Partnership river management has a proven track record of effectively creating river protection strategies that bring communities together in protecting, enhancing and managing local river resources.

1 The only existing federal lands near the segment are parcels administered by the U.S. Army Corps of Engineers around and above the Colebrook Reservoir.

2 No new federal permits are required; however some existing permits may require different thresholds.



The National Park Service (NPS) serves as the key federal representative in the implementation of the management plan and designation. The agency’s principal role is to represent the Secretary of the Interior in reviewing federal projects as required by Sec. 7(a) of the Act. Also, the NPS provides technical assistance, staff support, and/or funding appropriated by Congress for management of the river. Any such NPS assistance is coordinated with the Farmington River Coordinating Committee (management committee) described in the **Administrative Framework** section of this plan. The **Resource Management** section of this plan provides additional details on the NPS role under the heading of “Wild and Scenic River Provisions.”

Designated Area

The stretch of the Farmington River designated Wild and Scenic is the segment of the West Branch and mainstem extending from immediately below the Goodwin Dam and Hydroelectric Project in Hartland, Connecticut to the downstream end of the New Hartford/

Canton, Connecticut town line. With respect to lateral boundaries, Sec. 4(d) of the Wild and Scenic Rivers Act specifies that the area included in a study should “generally comprise that area measured within one-quarter mile from the ordinary high water mark.” However, there are no specific requirements regarding the minimum width of the boundary following designation. In the original management plan, the Study Committee concluded that, on the Farmington River, where much of the corridor is in private ownership and where some issues – notably water quality – involve the entire watershed, defining a distinct lateral boundary would serve no useful purpose and, indeed, could be counter-productive.

Although a specific lateral boundary therefore is not established, the plan focuses protection efforts on the river itself and the immediate riparian corridor (generally an area one-quarter mile from the high water mark on each side of the river or tributaries of the river comprises a review area for possible effects on the Wild and Scenic segment). In keeping with the

The plan focuses protection efforts on the river itself and the immediate riparian corridor.



river protection districts established by the riverfront towns, the lands within 100 feet of the river receive greatest attention throughout the plan. For uplands outside of this area, the plan also identifies numerous actions relating to water quality maintenance, public and private land management, and other issues.

Relationship to Lower River Designation

If the lower Farmington River is designated Wild and Scenic it is recommended that the Town of Canton river segment be administered as part of the upper Farmington Wild and Scenic River. The 1.1-mile river segment that reaches from the New Hartford/Canton town line to the confluence with the Nepaug River in Canton that was included in

the lower Farmington River Wild and Scenic Study is contiguous to the upper Farmington River Wild and Scenic area. The proposed 1.1-mile extension of the upper 14-mile Connecticut segment of the upper Farmington River could be under the jurisdiction of the FRCC due to the existing Town of Canton representation as a core member of the FRCC. The federal designation bill for the lower river would revise the lower boundary of the upper Farmington River Wild and Scenic area. Once the lower Farmington and Salmon Brook Study is complete, Canton would no longer be represented on the lower Wild and Scenic Advisory Committee. *See Figure 6: Potential Upper Farmington River Wild and Scenic Boundary Extension.*



Administrative Framework

Overview

This section describes a structure for administration of the Connecticut segment that provides ongoing coordination and communication among the many interests involved in the upper Farmington River area.

An underlying principle in this administrative framework is that existing institutions and authorities will provide the foundation for the long-term protection of the upper Farmington River. Landowners, riverfront communities, the state, the MDC, advocacy and user groups, and federal agencies all have active and indispensable roles in maintaining the high quality of the river system. The section of this plan on Resource Management provides a detailed description of the specific responsibilities of each of these players in river management. From an administrative perspective, the principal need is for a mechanism to coordinate the activities of those involved in the management of the river and its corridor.

There are two key parts to the administrative structure:

1. The existence of a broadly representative committee – the Farmington River Coordinating Committee (FRCC) – that links all of the players together on a long-term basis. This group builds upon the work and successes of the past eighteen years and is continually seeking increased cooperation among all river interests.
2. The development of agreements among the various parties involved in river management. These agreements reinforce the current consensus to work cooperatively in implementing this plan and pursuing the long-term protection of the upper Farmington River.



Farmington River Coordinating Committee (FRCC)

Purpose

The purpose of the Farmington River Coordinating Committee (FRCC) is to promote the long-term protection of the upper Farmington River by: (1) bringing the major players in river management together on a regular and ongoing basis, (2) stimulating cooperation and coordination among those players, (3) providing a forum for all river interests to discuss and resolve issues, and (4) coordinating implementation of this management plan.

This type of representative body is indispensable for long-term management because of the complexities and significance of the upper Farmington River system. Given the number of jurisdictions and interests involved in the upper Farmington River Valley, no one entity can assume sole management responsibility or provide the necessary protection by itself. Furthermore, management decisions by any one entity are likely to impact a number of other interests. The forum provided by the FRCC ensures communication among all parties and the representation of all viewpoints in making and implementing management decisions.

The FRCC's record of achievement is indicative of what can be accomplished through a participatory and cooperative effort.

Function

The FRCC has an advisory role only; it does not have regulatory or land acquisition authority. The Committee may provide advice to entities that have management or regulatory authority affecting the river, but it does not have the power to dictate the

actions or decisions they take. The FRCC is intended to complement and support the roles and activities of existing interests, rather than compete with them.

The FRCC does not have additional authority for the following reasons: (1) a major emphasis of the Partnership Wild and Scenic Rivers management approach is to work within existing authorities to achieve effective protection of the river, (2) there is no need to create an additional layer of regulatory bureaucracy, and (3) there is no need for land acquisition authority beyond what already exists at the local and state levels.

Responsibilities

The FRCC has the following responsibilities:

Address river-related issues: The FRCC pursues cooperative resolution of current issues affecting the upper Farmington River, as well as those that may arise. The Committee does not have the authority to resolve issues directly, instead, it provides a public forum for the discussion of them, helps to raise awareness about matters of particular importance, and stimulates the appropriate authorities to take responsive action.

Recreational-use management is an example of an issue that the FRCC addresses and is described more fully in the section on **Management of Outstanding Resources**.

Monitor activities that might affect the river: The FRCC evaluates specific proposals that could affect the segment and, as it deems necessary, provides comments to the appropriate authorities. An FRCC review may be initiated at the request of the public, local, state and/or federal officials, or at the Committee's discretion. Examples of proposals that the FRCC might review:

- zoning changes for lands along the river or its tributaries
- development projects near the river
- applications for state permits (e.g., point

source discharges; water withdrawals)

- changes to state programs or policies (e.g., statewide water quality standards; land management practices on the state forests)
- applications for federal permits (e.g., Army Corps of Engineers Section 404 permits; Federal Energy Regulatory Commission certification for pipeline crossings)
- other federal projects (e.g., changes in flood control operations)

As specified in the **Resource Management** section of this plan, the state may be asked to notify the FRCC of certain state permit applications and other potential actions, and give the Committee the opportunity to comment. Subsequent to being notified by the relevant federal agencies, the NPS informs the Committee of any proposed projects requiring federal permits or other assistance that would affect the segment. Town boards are encouraged to communicate and cooperate with FRCC on matters related to the river (including notifying the Committee of specific proposals) but, ultimately, it is the Committee's responsibility to keep itself informed of proposals under local jurisdiction that it may wish to review and provide comments on. Individual Committee members, particularly the town representatives, play an important role in keeping the group abreast of local issues.

The monitoring efforts of the FRCC will *not* affect monitoring and review functions of its member organizations.

Stimulate public involvement and education: The FRCC provides opportunities for the public to become aware of, and participate in, efforts to resolve matters affecting the river. This is accomplished through Committee meetings, the Committee's Web site, workshops, newsletters, surveys, mailings, or in other ways. The Committee also supports the education and outreach activities of its members. When appropriate, it may initiate its own



The FRCC was established following the Congressional authorization of the upper Farmington River segment into the National Wild and Scenic Rivers System.

projects to educate the public about the Farmington’s special values, the challenges confronting it, and sensible techniques for conserving it. See *Education and Outreach* section for details.

Promote river enhancement initiatives: The FRCC supports river enhancement projects initiated by its members or other groups it deems worthwhile and, when appropriate, will coordinate the involvement of its members in these efforts. The Committee may initiate its own similar efforts.

Examples of river enhancement projects that could merit FRCC support and involvement include the bank stabilization and re-vegetation initiative along West River Road in Barkhamsted, removal of invasive species and planting of non-invasive native species, improvement of fish habitat, and the frequent river cleanups, educational workshops that are sponsored by several advocacy and user groups.

Review and update the Upper Farmington River Management Plan: Changes to the UFRMP, which the FRCC is charged to review periodically, may become necessary owing to technological advances; new statutes, regulations, and programs; and emerging concerns affecting the river; or actions identified in the **Resource Management** section of the plan,

that have been undertaken and completed. The FRCC is responsible for reviewing the plan on a regular basis, and updating as necessary. The FRCC should avoid becoming mired in a continual review and revision process, but focus its energies and resources on implementation instead.

When actions inconsistent with this plan’s provisions for resource protection and management occur, the FRCC needs to evaluate potential responses and incorporate into the plan those it determines to be most appropriate.

Although this schedule may be altered as appropriate, it is recommended that the FRCC thoroughly review this management plan and/or develop a set of strategic goals every five years. The public should be allowed ample opportunity to participate in revising the plan. *Changes to this plan can only be made if they are approved by all voting core members of the FRCC.*

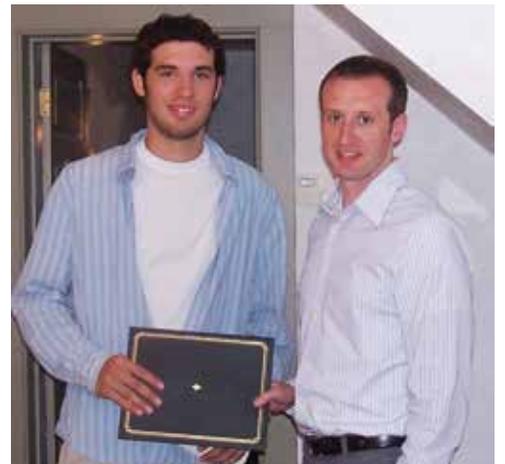
Prepare periodic status reports: Every one to five years the FRCC will prepare brief reports on the status of protection of the segment and the implementation of this management plan. They will serve two primary purposes:

1. To inform the general public, local officials, the Governor, the General Assembly, Congress, and the Secretary

The FRCC supports river enhancement projects initiated by its members or other groups it deems worthwhile...



Students receive FRCC sponsored scholarships.



of the Interior about the conditions of the river, and

2. To publicize any pressing matters requiring attention or assistance from the local, state and/or federal governments.

The reports will provide the FRCC regular opportunities to identify its accomplishments and chart its course for the next interval.

Membership

Core membership: The following entities constitute the core voting membership of the FRCC. Each will have one representative and one alternate.

- Town of Colebrook
- Town of Hartland
- Town of Barkhamsted
- Town of New Hartford
- Town of Canton
- U.S. Department of the Interior (National Park Service)
- State of Connecticut (CT DEEP)
- Metropolitan District Commission
- Farmington River Watershed Association

Non-core membership: The following organization joined FRCC as a non-core member since the time of designation.

- Farmington River Anglers Association

Appointments: Representatives and alternates will be appointed as follows:

- Town representatives, by the respective boards of selectman
- State representatives, by Commissioner of CT DEEP
- MDC representatives, by District Commissioners
- FRWA representatives, by Board of Directors
- Department of Interior representatives, by Regional Director, National Park Service

While not a requirement, each riverfront town is encouraged to appoint a riparian landowner as either its regular member or

its alternate.

Additional members: Membership may be expanded to include other interests based on the following provisions:

Massachusetts interests: If the Commonwealth of Massachusetts and/or any of the towns along the Massachusetts segment (Becket, Otis, Sandisfield, and Tolland) request membership, they will be granted non-voting status automatically. Any of those interests subsequently may be granted voting status by unanimous consent of the existing members. If the Massachusetts segment is designated as a Wild and Scenic River at some point in the future, the State and the towns along the designated section will be granted voting membership automatically, regardless of whether they were previously active on the Committee. The possibility of future designation of the Massachusetts segment as a Wild and Scenic River is discussed in the section of this plan on **Management of the Massachusetts Segment**.

Other interests: Other interested parties (downstream or tributary towns in Connecticut, river user groups, etc.) may be added to the Committee if they request membership and are approved by unanimous consent of the existing core members. The existing core members shall decide on a case-by-case basis whether any new member shall be granted voting or non-voting status.

Representatives of any new member institutions will be appointed by the governing body of that institution or, in the case of the Commonwealth of Massachusetts, by the Governor.

All representatives shall serve at the will of their respective member institution.

While the regular members and alternates are the official representatives of the respective organizations, staff from any organization having expertise relevant to the Committee's activities will be encouraged to participate on an ongoing basis.



Procedures

Establishment: The FRCC was established following the Congressional authorization of the upper Farmington River segment into the National Wild and Scenic Rivers System.

Decision-making: In the original 1993 management plan it was decided that *all Committee decisions and actions were to be made by the unanimous expressed consent of all voting members (not only those present at a given meeting)*. This provision could be waived for any future decision only by the unanimous consent of all voting members. Consequently, in by-laws enacted on November 10, 2004, the FRCC established by unanimous consent that it would operate by consensus on most issues; with the exception that unanimous consent is required for votes related to changes to the Upper Farmington River Management Plan, changes to the FRCC by-laws, addition of new members, expenditures of over \$2,000 and election of officers. *See Appendices E and F: By-laws and Memorandum of Understanding.*

While alternates will be encouraged to attend meetings and participate actively on the Committee, each member organization may cast only one vote on matters requiring a formal decision by the Committee.

Officers: The Committee has four officers: chair, vice-chair, secretary, and treasurer. The responsibilities of the officers are established in the Committee's by-laws. The chairperson is elected by the Committee from among its appointed town or state members.

Quorum: A majority of the members of the Committee constitutes a quorum.

By-laws: The Committee can develop and enact by-laws for all other procedural issues that may arise.

Funding/Staff

To fulfill its responsibilities identified above, the FRCC requires direct funding and, when practicable, seeks in-kind assistance. Funds are needed to (1) hire staff

to coordinate the Committee's activities, (2) undertake specific projects, and/or (3) cover costs related to general operations or specific responsibilities (office space and equipment, printing and distribution information, education and outreach, etc.).

As a National Wild and Scenic River, congressional appropriations assist with the operation of the FRCC. Such funds are part of the annual budget request to Congress by the National Park Service. With adequate funding, the NPS can (1) provide staff support for the FRCC from its own personnel, or (2) transfer money to the FRCC through a formal cooperative agreement (cooperative agreements are discussed later in this section). In addition to providing staff support and/or direct financial assistance to the FRCC, the NPS may provide technical planning and river conservation assistance to the Committee and its members if requested and if sufficient appropriations are available.

For long-term funding needs or for specific projects – such as those identified in the **Resource Management** section of this plan – the FRCC may wish to pursue financial assistance and/or in-kind contributions (office space, equipment, etc.) from individuals, foundations, corporations, and government (federal, state, and/or local). In pursuing funding from any of these sources, *the FRCC will avoid situations where it could be competing for funds with one or more of its member organizations.* The FRCC also will avoid situations where its receipt of funds or in-kind contributions could create perceptions of conflict of interest.

The NPS provides assistance to the FRCC in identifying potential sources of federal funding that would not result in an increased federal presence in the upper Farmington River Valley. For instance, federal funding for specific projects may be available through the Land and Water Conservation Fund, the National Park Service's "Challenge Cost-Share Program," or other similar sources.



Management Agreements

Coordinating Committee Agreement

FRCC developed a written agreement (see Appendix F: for copy of Memorandum of Understanding [MOU]) that was adopted by its member institutions. This MOU establishes a cooperative commitment among the members to participate in long-term management of the river and to implement those parts of this management plan under their jurisdiction or to which they have been assigned specific responsibility.

Inter-Agency Consistency and Coordination

The successful implementation of this management plan depends, in part, on state and federal agencies working consistently within the broad goals and specific provisions of the plan when taking any actions that could affect the segment. The CT DEEP³ takes the lead in pursuing

options to achieve such consistency at the state level. Possible approaches include statutory action by the General Assembly, Executive Order by the Governor, and/or other less formal means.

The NPS takes the lead in ensuring consistency at the federal level through its authority under the Wild and Scenic Rivers Act.

The FRCC can help coordinate and support communication amongst the various entities.

Cooperative Agreements between the FRCC and the NPS

During the time period that the upper Farmington River has been designated, the NPS has entered into formal cooperative agreements with the fiscal agent of the FRCC pursuant to Sec. 10(e) and/or Sec. 11(b)(1) of the Wild and Scenic Rivers Act. The agreements include provisions for limited financial or other assistance from the federal government to facilitate the protection and management of the upper

³ The CT Department of Energy and Environmental Protection (DEEP) was created by *Public Act 11-80*. Effective July 1, 2011, CT DEEP brings together the former Departments of Environmental Protection (DEP) and Public Utility Control (DPUC) along with the energy policy group from the Office of Policy and Management (OPM).



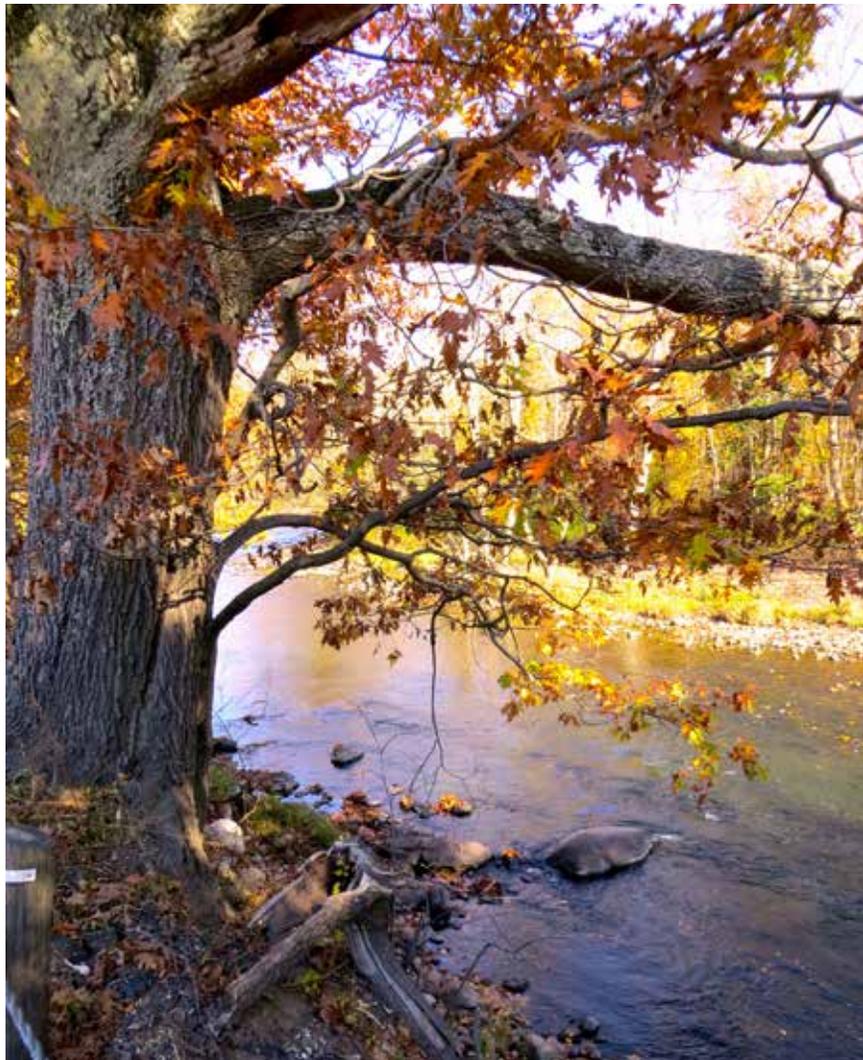
Farmington River. Relevant passages from the Wild and Scenic Rivers Act follow.

Section 10(e):

The federal agency charged with the administration of any component of the national wild and scenic river system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local government participation in the administration of the component.

Section 11(b)(1):

The Secretary of the Interior...shall assist, advise, and cooperate with States or their political subdivisions, landowners, private organizations, or individuals to plan, protect, and manage river resources. Such assistance, advice and cooperation may be through written agreements or otherwise... Any agreement under this subsection may include provisions for limited financial or other assistance.



Education and Outreach

Overview

Long-term protection of the upper Farmington River will depend upon a sense of shared responsibility and enlightened stewardship among all who use and manage the river and its adjacent lands. Developing this unified spirit, in an area with so many interests, issues, and jurisdictions, will require a commitment to education and outreach.

To this end, organizations with existing education and outreach programs will be encouraged to continue to expand these programs. The FRCC will help to organize cooperative efforts among its membership and other organizations. The Committee's objective will be to support and complement existing education and outreach activities, rather than to duplicate them.

Education and outreach plays a critical role in achieving the goals of the Management Plan. Because this is an advisory plan, it can be successful only with the voluntary support and engagement of many stakeholders including landowners, municipalities and their local land use commissions, state agencies and recreational users.

Education and outreach efforts can be effective when the various stakeholders understand why it is important to protect local resources, know what specific actions are needed and recognize the long-term benefits of resource protection.

Potential Activities

Following are examples of education and outreach activities that should be considered (several of these are discussed in greater detail elsewhere in the plan).

- Develop a communications strategy that provides the public with knowledge about the role and value of the FRCC, the special features of the upper

Farmington River and how the Wild and Scenic designation helps to protect and manage them. It might include using the Committee's website, multi-media presentations, printed materials, or a speaker's bureau (that presents to service organizations, garden clubs, and similar groups).

- Support volunteer monitoring programs that bring together professionals, volunteers, students, local service organizations, and community groups.
- Support and promote opportunities for all age groups to learn about the river and to help improve it through direct experience e.g., nature hikes, canoe trips, river clean-ups; Several organizations, including the Farmington River Watershed Association (FRWA), the Farmington River Anglers Association (FRAA), and Trout Unlimited (TU) have been quite successful in organizing such activities.
- Continue to build and promote the FRCC website as the primary source for information about the upper Farmington Wild and Scenic River. Post on it: 1) information that supports FRCC goals related to river and resource protection (e.g., events, links to town information and existing river protection regulations); 2) a database of accomplishments that encourages sharing, use and involvement and awareness; 3) a clearinghouse of information on river protection techniques that have been used successfully in other areas.
- Provide riparian landowners information on ways to enhance the stewardship of their riverfront land that might include, and as noted elsewhere in the plan, (1) sources of information and expertise, (2) workshops, and follow-up assistance, on voluntary land protection techniques, (3) Best Management Practices to control non-point source pollution,



- (4) funding opportunities to implement Best Management Practices, and (5) recognition and control of non-native invasive species.
- In cooperation with the local land use commissions and on a town-by-town basis to ensure accurate descriptions of each town's regulations, create a brochure for riverfront landowners that (1) summarizes the existing local, state, and federal regulations that may affect them and how those regulations are implemented, and (2) includes the addresses and phone numbers of the appropriate offices or agencies at each level of government.
 - Distribute information for landowners, developers, local land use boards, and others about the causes of non-point source pollution, its potential impacts on water quality and other instream resources.
 - Coordinate river-related activities with town boards and commissions, and other interested organizations.
 - Establish an awards program to recognize outstanding conservation achievements by individuals and groups in the Wild and Scenic designated segment of the upper Farmington River.
 - In cooperation with the Town of Barkhamsted and its Historical Society, continue to utilize Squire's Tavern in cooperation with the Town of Barkhamsted and its Historical Society, as an information and interpretive center for visitors to the Wild and Scenic designated segment of the upper Farmington River.
 - Develop ways to communicate experiences, share ideas and resolve issues with other partnership Wild and Scenic River committees.



Resource Management

Overview

This section of the plan describes a detailed management program that provides long-term protection for the upper Farmington River and its outstanding fisheries, recreation, wildlife, and historic values. The discussion is divided into three parts: Land Resource Management; Water Resource Management; and, Management of Outstandingly Remarkable Values (ORVs) (called Outstanding Resources in this plan). According to the Wild and Scenic Rivers Act, to be considered “Wild and Scenic” a river or river segment must have at least one Outstandingly Remarkable Value for which the river is designated. The ORV must be natural, cultural or recreational in character and have unique, rare or exemplary qualities on a regional or national scale. The ORVs detailed in this Plan are further subdivided into more specific categories, as indicated below. *For a more detailed listing of the ORVs see Appendix B.*

A fundamental tenet of the management

plan – the river’s Outstanding Resources can only be protected through sound management of the land and water base upon which they rely – is reflected in this structure. The provisions described in the Land Resource Management and Water Resource Management sections establish the foundation for long-term protection. Other management considerations specific to each Outstanding Resource are described in Management of Outstanding Resources section of this Plan.

For each management category, the following are discussed:

- **Objectives** establish a vision for future management. These objectives are intended to supplement the broad goals that were presented in the **Approach to Resource Management** in Chapter 1.
- **Standards** establish the basic criteria by which future management actions will be measured.
- **Action Program** lays out specific strategies for achieving the objectives and ensuring the long-term protection of the

Part I: Land Resource Management:	23
Private and Public Lands	23
Part II: Water Resource Management:	30
1. Water Quality.....	30
2. Water Quantity	35
3. Channel, Bank and Wetland Protection	42
Part III: Outstanding Resources Management	46
1. Recreation Resources	46
2. Fisheries and Wildlife.....	48
3. Historic Resources	52



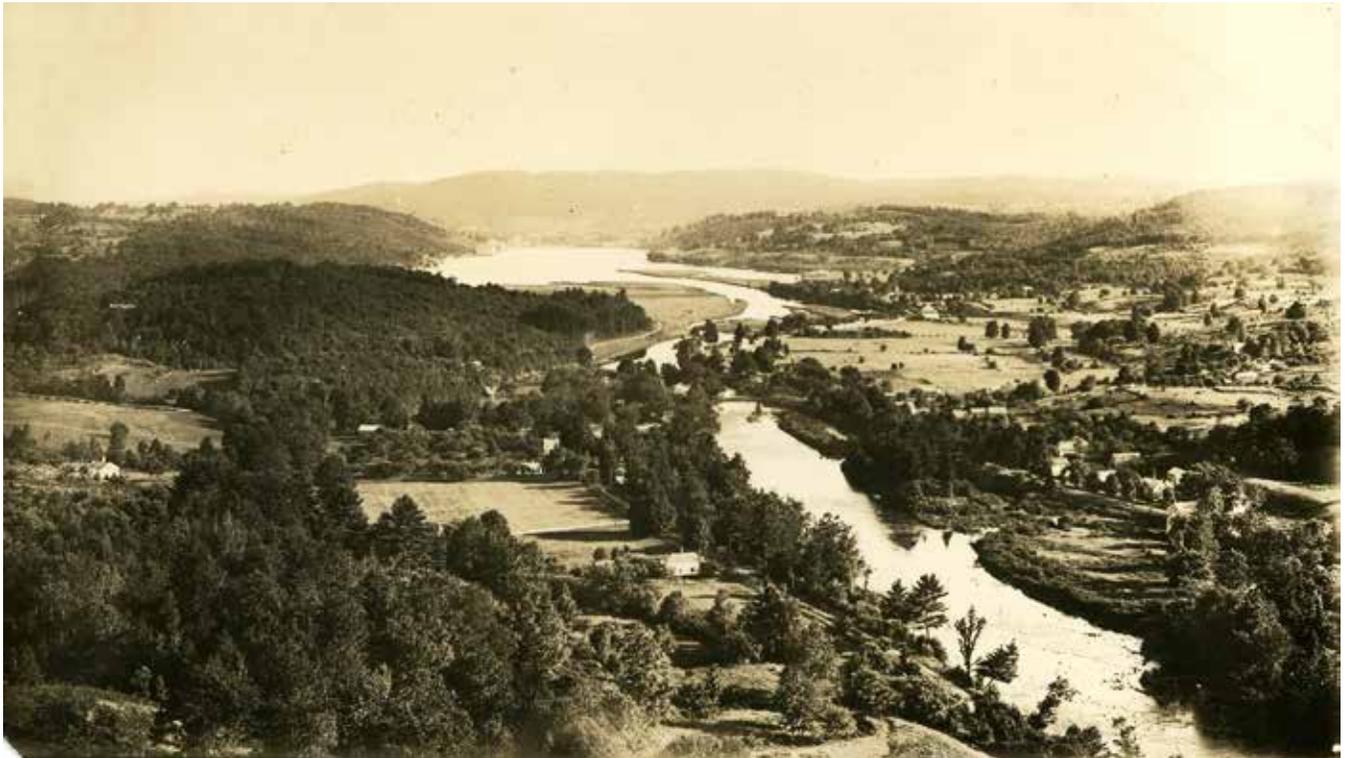
river and its important values. The Action Program has three components:

- **Key Actions and Opportunities** identify the most essential actions required for managing river resources according to the defined standards, along with recommendations that could enhance resource management and protection.
- **Supporting Programs, Tools and Regulations** identify other programs and regulations currently in place that contribute to effective management. *Also, see Appendix D for a roundup of federal and state regulations that provide an underlying scheme for resources protection.*
- **Wild and Scenic River Provisions** include special conditions such as the role of the National Park Service, specific policies and standards that are linked to designation, and any additional actions

that are required or other entities to implement the designation.

The reader should note that implementation of certain provisions contained in this management plan may require statutory, executive, or other action at the state level. These provisions primarily relate to notification requirements for future implementation of state regulatory responsibilities affecting the segment.

The reader also should also note that the local, state, and federal laws and regulations providing protection to the river are described in detail in the *Draft Evaluation of Existing Protection* (June 1990) that was conducted during the Wild and Scenic Study. This document serves as an important supplement to the management plan and can be found on the FRCC website at www.farmingtonriver.org.



Aerial view of Pleasant Valley, circa 1900

Part I: Land Resource Management

The adoption of any new land use regulations or other local mechanisms related to land resource management will continue to be at the discretion of the towns. The potential benefits and costs of any new action should be thoroughly evaluated, as should the level of community support.

See Land Use and Geology Figures: 7–13.

Private and Public Lands

Objective

Conserve the high water quality, ecological integrity and diversity, and scenic character of the segment and the upper Farmington River Valley through sensitive management of privately-owned and publicly-owned streambanks and upland areas, without unduly restricting other uses of those lands.

Standards

1. Private Lands

Shorelands: The shorelands are the lands bordering the riparian areas along the river. They are the highest priority lands for protection. The River Protection Overlay Districts adopted in Hartland, Barkhamsted, New Hartford, and Canton constitute the standard for shorelands protection on private lands.⁴ These districts establish a 100-foot setback for new structures, new septic system, the removal of earth materials, and clearcutting. Existing structures within 100 feet of the river are not affected, although the districts do establish limitations on the expansion of such structures.

Uplands: This plan does not establish specific standards for the management of privately-owned upland areas beyond the 100-foot shoreland buffer. Although activities in upland areas can affect river

values, existing regulations, incentive programs, and topography provide the segment with strong protection from potential adverse effects of upland land uses. To complement that protection, land managers should seek to minimize impacts on water quality, views to and from the river, and the scenic character of the river valley. For example, Best Management Practices should be used to control erosion and sedimentation on projects located near tributaries to the segment, and the impacts of clearcuts, if ever proposed on ridgelines that are visible from the river, should be evaluated prior to cutting (existing CT DEEP management policies provide the guidance necessary to achieve this protection). *See Appendix D: Summary of Federal and State Statutes.*

2. Public Lands

Shorelands: Publicly-owned shorelands should be managed in a way that maintains or enhances their natural appearance and function. To achieve this, management should meet or exceed the protection measures specified by the River Protection Overlay Districts that have been adopted in each of the riverfront towns. These provisions are described in the previous section in the streambanks standard for private land management. *See Appendix C: Town River Protection Overlay Districts.*

In addition, new infrastructure development within 100 feet of the river will be limited to that necessary for public health, welfare, and safety, for emergency response, or to provide public access to the river. Any infrastructure will be constructed so as to reasonably minimize both short- and long-term impacts on the ecological functions and scenic qualities of the shorelands area.

Uplands: Upland areas under public



⁴ The River Protection Overlay Districts referenced are those approved by the respective planning and zoning commissions in the four riverfront towns on the following dates: Barkhamsted, July 25, 1991; New Hartford, November 13, 1991; Canton, January 15, 1992; Hartland, January 27, 1992. These districts create an effective greenway and provide strong protection to the river and its streambanks. The ordinances are referenced in Appendix C.

ownership within the segment's watershed, to the extent reasonably possible, publicly owned uplands in the segment's watershed should be managed to ensure protection of water quality and quantity, scenic views to and from the river, wildlife habitat, forest health, and the natural character of the upper Farmington River Valley. Existing CT DEEP and MDC management policies provide the guidance necessary to achieve this protection. On the state forests, the CT DEEP's Best Management Practices (BMPs) "Guidelines for Water Quality While Harvesting Forest Products Silvicultural Operations on the CT DEEP Lands" and other applicable directives contain BMPs associated with the harvest of forest products, including specific standards for wetlands and water quality protection. The document can be found at: tinyurl.com/bmpharvest. The MDC utilizes the management practices found in this guide as well. The MDC establishes management plans and site-specific guidelines for management of its lands that are at least as stringent as those of the CT DEEP.

In addition to these directives, the aesthetic impacts of clearcuts, if ever proposed on ridgelines that are visible from the river, should be minimized. See *Scenic assessment of river corridor* on p. 27.

Action Program

Key Actions and Opportunities for Private and Public Lands

Landowner stewardship: *Private lands will remain private; landowners continue to be the primary stewards of lands along the segment.*

Longstanding traditions of private land ownership and diverse land uses in the Farmington River Valley have shaped the character and quality of the river corridor. An important objective of this management strategy is to support the traditional role of landowners as the primary and independent stewards of their property.

Landowners can fulfill their stewardship responsibility by taking an active interest

in the effects of their land use on the river, by expanding their knowledge of river-sensitive land management practices, and by incorporating those practices into management of their lands. Landowners can voluntarily enhance their stewardship abilities by: gaining expertise in forest, wildlife habitat, and wetland vegetation management; participating in the Public Act 490 program, which offers reduced tax assessments to forest landowners who own a minimum of 25 acres of forestland in return for keeping undeveloped lands in that condition (see *Appendix D: Summary of Federal and State Statutes*); and learning about conservation easements, deed restrictions, and other land conservation techniques. Other voluntary land management techniques directly related to reducing non-point source pollution are described under "Land Stewardship" in the Water Quality section of this plan.

Technical assistance to landowners:

Establish a program to provide resource management expertise to interested landowners.

Stewardship of riverfront and watershed lands could be greatly enhanced if private or public landowners can obtain professional guidance for activities such as forest, wetland, and wildlife habitat management. Landowners may be unaware that such expertise is necessary and available or they may be unable to afford the cost of obtaining it. A good example of an existing forest stewardship program is the CT DEEP's Service Forestry Connecticut Forest Stewardship Program for Forest Landowners. This program provides professional planning, education, technical on-the-ground forestry support, and financial assistance to forest owners, municipalities, conservation groups and other private or public organizations free of charge. Visit <http://www.ct.gov/deep/forestry> for more information.

Financial assistance may be available through the USDA's Natural Resources Conservation Service (NRCS) for approved



forest and wildlife habitat enhancement projects and practices. Visit <http://www.nrcs.usda.gov/> for more information.

The Extension Forestry Program of the University of Connecticut Cooperative Extension System provides Forest Stewardship education for natural resource professionals, elected and appointed officials, volunteers and private woodland owners who care for this valued resource and landscape. Visit <http://www.ctforestry.uconn.edu/> for more information.

The FRCC shall continue to provide opportunities for making resource management expertise more readily available by publicizing existing technical assistance programs and/or seeking funding to hire resource management professionals who could then provide services to landowners at reduced or no cost.

Voluntary land conservation: *The FRCC will assist private landowners, and support local land trusts, in voluntary land conservation measures that protect important riverfront and watershed lands. Continue to support and collaborate with local land trusts in protecting important riverfront and watershed lands by assisting landowners with voluntary land conservation actions.*

Voluntary land conservation programs have proven to be highly effective in protecting important riverfront and watershed lands on rivers across the country. The elements common to successful programs include: (1) identifying parcels of particular significance for the conservation of the river (for instance, those with undeveloped streambanks, steep slopes, striking visual features, or habitat for rare species); and (2) actively encouraging landowners to protect those parcels by providing them with information and assistance regarding the full range of voluntary private land protection techniques (e.g., donations of fee title or conservation easements, deed restrictions,

covenants, transfers of development rights).

Such efforts in the river corridor have established a foundation for long-term success. For the program to achieve its full potential, local land trusts should pursue opportunities for additional training, fund-raising, and collaborative projects with regional or national land conservation organizations. This would enable the trusts to strengthen their technical knowledge and negotiating skills, to expand their organizational capacities with respect to donations of easements and/or fee title, and to effectively manage these easements or lands.

FRCC has a proven track record of supporting and collaborating with land trusts by providing small grants, providing seed funding for start-up land trusts and by bringing land trusts together to work toward common goals in the region. These practices should continue.

Town roles: *Riverfront towns implement and enforce their existing land use regulations, including the River Protection Overlay Districts, and other programs that provide protection to the river.*

The River Protection Overlay Districts provide the backbone of protection for the immediate shorelands. Protection in the Overlay Districts is strengthened by town regulations relating to wetlands, septic systems, floodplains, zoning, and subdivisions. Each riverfront town should emphasize conservation of the river when implementing these regulations. Complementary management of upland areas can be achieved through active consideration of the river in the enforcement of existing regulations and other programs beyond the 100-foot buffer. Use of the non-regulatory, incentive-based Public Act 490 program can provide important additional protection both to streambank and upland areas.⁵

Local enforcement of regulations: *Support towns in actions that improve the*



The FRCC will assist private landowners, and support local land trusts, in voluntary land conservation measures that protect important riverfront and watershed lands.

⁵ A full description and analysis of the local land use regulations and other programs that contribute to protection of the river can be found in the Draft Evaluation of Existing Protection (June, 1990) located on the website at www.farmingtonriver.org.

zoning enforcement capacity of the riverfront towns.

The limited amount of zoning enforcement available to the riverfront towns has been identified as an ongoing issue related to the protection of streambanks and upland areas. The towns' limited enforcement capabilities are primarily a result of tight local budgets. Riverfront towns, with possible assistance from the FRCC and others, should pursue funding to enable them, either individually or collectively, to hire zoning enforcement staff to focus specifically on river-related issues.

Local planning: *Encourage each riverfront town to emphasize conservation of the river in future updates to its "Town Plan of Conservation and Development".*

Open space requirements: *Encourage riverfront towns to consider revising their subdivision regulations to require that riverfront subdivisions set aside shoreline areas as protected open space.*

Under the state statute authorizing local regulation of subdivisions, towns can require that subdivisions include set-asides of protected open space between developed areas and important natural features. By specifically targeting lands along the Farmington River for such set-asides, this authority could be used to provide further protection for streambanks.

Other local actions: *The riverfront towns should consider other local initiatives to provide further protection to the river.*

Specific suggestions for each town are in the *Draft Evaluation of Existing Protection* (June, 1990) See footnote 5.

Land transfers: *Public lands are to be kept in public ownership whenever possible.*

Because public lands are vital to the many qualities of the upper Farmington River Valley, those attributes could be severely jeopardized if all or part of those lands were to be transferred into private ownership and

opened to development. Such an occurrence is unlikely for state forest lands because they have been dedicated specifically for conservation purposes.

Should a change in ownership of any existing public lands be considered, every reasonable effort should be made to keep the land in public ownership and to ensure continued management that is compatible with the objective and standards described at the beginning of this section. If the land is to be transferred to private ownership, conservation easements or other legally-binding restrictions on development should be placed on areas that are most critical for maintaining the river's water quality and quantity, ecological integrity, and scenic qualities. This provision applies at a minimum to shoreland areas within 100 feet of the river's ordinary high water mark.

State land acquisitions: *Encourage the State of Connecticut to pursue the purchase of important river-related lands from willing sellers if parcels come on the market and if funding is available.*

Selective public purchase of critical lands from willing sellers can be a valuable component of a diversified strategy to protect a river corridor. In Connecticut, the primary mechanism for such acquisition is through the Recreation and Natural Heritage Trust Program, established in 1986 by C.G.S. 23-73 *et seq.* and administered by the CT DEEP.

Another important mechanism is through the Open Space and Watershed Land Acquisition Grant Program authorized under C.G.S. Section 7-131d to 7-131k, that provides financial assistance to municipalities and nonprofit land conservation organizations to acquire land that will add to a community's open space, enhance recreational opportunities, protect unique geographical features or conserve habitat for living creatures.⁶

A third mechanism that could be used to protect important river-related lands



⁶ <http://www.ct.gov/deep/cwp/view.asp?a=2706&q=323834>

is the state's agricultural preservation program authorized under C.G.S. 22-26-aa *et seq.* This program is administered by the Connecticut Department of Agriculture and the Office of Policy and Management.

The FRCC should assist the state in looking for opportunities to use these programs. Local representatives on the FRCC can play a particularly valuable role in monitoring when important parcels have been, or may be, put on the market.

Management practices: *The CT DEEP, the MDC, and the towns should continue to manage their respective lands along the segment. Each landowner should review its current policies and practices for consistency with the objective and standards stated above. Public land managers should be encouraged to work together and coordinate management efforts on lands where there is more than one entity or group involved in policy and decision-making, i.e., as a result of special agreements, etc.*

The substantial amount of state forest land and MDC land surrounding the segment plays a critical role in maintaining the high water quality, wildlife habitat,

recreational access, and scenic character of the upper Farmington River Valley. Town-owned lands along the segment also provide limited but important public access to the river. In addition to maintaining those values, the public lands support other uses such as timber harvesting. This plan supports a continuation of the diverse uses of these lands. *See Figure 8: Land Cover.*

Scenic assessment of river corridor: *Consider conducting a scenic assessment of exceptional views to identify resources in need of protection.*

Conduct a scenic assessment by identifying, evaluating and mapping the outstanding scenic resources such as scenic vistas, cultural landscape, and filtered river views. Scenic assessments define scenic resources, promote awareness of resource protection and land protection strategies.

For example, a scenic assessment could make available an objective-ranking tool for towns, land trusts and other landowners to utilize when evaluating lands for potential enhancement, protection or purchase. Conducting a scenic assessment could also result in greater public awareness of the



scenic and recreational value of the river corridor.

Supporting Programs, Tools and Regulations

Federal regulations: *The U.S. Army Corps of Engineers implements its permitting responsibilities under Section 404 of the Clean Water Act. See Appendix D for a summary of relevant federal statutes.*

State land use regulations: *Encourage the state to ensure consistency with this river management plan and the River Protection Overlay Districts when fulfilling its responsibilities related to land use. See Appendix D for a summary of additional relevant state statutes.*

State enabling legislation: The state has comprehensive enabling legislation governing the use of land, and it grants authority to towns to adopt regulations that effectively implement legislation at the local level. Towns have the power to choose regulatory tools to gain greater resource protection and have the flexibility to do so.

Scenic road designation: *The riverfront towns and the state could evaluate the potential to designate “scenic roads” along the segment.*

Under C.G.S. 7-149a, towns may establish ordinances to designate scenic town roads and regulate future alterations to those roads. To qualify, a local road must meet certain criteria, and the town must have agreement from a majority of the road’s abutters. At the state level, C.G.S. 13b-31c *et seq.* authorizes scenic designation of state highways by the CT DEEP in conjunction with the Departments of Transportation and Economic Development.

Local or state designation of scenic roads along the segment would highlight the aesthetic qualities of the river corridor, and would limit future impacts to the river from road-related alterations.

Incentive-based conservation

programs: *Towns in the upper Farmington River watershed should encourage owners of important river-related lands to participate in incentive-based conservation programs, such as the Public Act 490 program.*

As has been done in Barkhamsted, New Hartford, Canton and Colebrook, the Town of Hartland should consider adopting the “open space” provisions of the Public Act 490 program in addition to the “forest land” and “agricultural land” provisions. This could enable many significant river-related parcels to qualify for reduced tax assessments based on continued management as open space, and thereby provide important additional protection to the river. The Public Act 490 program can be a particularly effective tool for conserving upland areas. These lands, which have a direct bearing on the river’s condition, are not subject to all of the more rigorous regulations that apply to shoreland areas.

In addition, the towns should consider tax abatement programs for dairy farms and fruit orchards, as permitted by C.G.S. 12-81M.

Watershed protection initiatives: *The Farmington River Watershed Association should give special attention to the upper Farmington River watershed in implementing regional watershed land protection.*

Voluntary land conservation is an important component of FRWA’s overall strategy for maintaining high water quality and habitat values in the West Branch of the Farmington River. As part of its mission, FRWA engages in:

1. complementing and supporting the efforts of existing local land trusts;
2. assisting in the creation of new local land trusts in communities where they do not currently exist;
3. educating riverfront landowners, local officials, and other residents about voluntary land protection techniques:



4. working with interested landowners on specific land conservation projects; and
5. developing the organizational capacity to hold and manage land and/or easements.

FRWA also supports the public purchase of critical parcels, works with town governments to strengthen local protection mechanisms, and participates in the public review of specific development proposals that could affect the river.

Activities by FRWA in the upper Farmington River watershed thus complement the land protection actions described in this management plan.

Wild and Scenic River Provisions Relating to Acquisition of Private or Public lands

The federal government does not acquire private lands along the segment by condemnation or otherwise, nor does

it regulate the use of those lands, as a result of National Wild and Scenic River designation. In addition, there are no additional requirements related to the management of public lands. Furthermore, there are no requirements for additional state or local land use regulations resulting from designation. Designation does not preclude use of federal funds through the Land and Water Conservation Fund (<http://www.lwcfcoalition.org/>) or similar programs for state or local land acquisition, nor does it preclude acquisition by the federal government of land in the Farmington River basin for purposes not related to Wild and Scenic river designation. Additionally, designation does not preclude the use of federal funds through the Land and Water Conservation Fund or similar programs for state acquisition of MDC lands if they should be proposed for sale.



Part II: Water Resource Management

1. Water Quality

Objective

Maintain or enhance the segment's existing high water quality. See Figure 14: State Water Quality Classifications.

Standards

Point source discharges:

- No new discharges from sewage treatment plants or industrial sites into the segment or its tributaries will be allowed. Increases in volume from existing discharges will be allowed only if accompanied by improved treatment so that pollutant loading to the river is not increased.^{7 8}
- For other new activities (e.g., storm water drains) that are regulated under Sec. 402 of the Clean Water Act (P.L. 95-217) and that would discharge directly into the segment, Best Management Practices will be required.

Non-point source pollution: The riverfront towns and the state seek to avoid, reduce, or eliminate non-point source pollution impacts on the segment. The immediate shorelands within 100 feet of the ordinary high water mark on the riverbank are the highest priority for attention. Within that area, the principal mechanisms for controlling non-point source pollution are the implementation of the local River Protection Overlay Districts, and a requirement for the use of Best Management Practices on new projects that are covered by the state's applicable permitting procedures.

7 Note: Implementation of these standards may require state statutes changes in Connecticut's Water Quality Standards, including the anti-degradation standard.

8 Minor increases in the concentration of parameters that are potentially harmful to the aquatic environment (such as heavy metals, sodium, potassium, and chlorides) that would result from increases in existing discharges will not be precluded. As an example, the exception for heavy metals is due to the fact that the concentration of heavy metals, such as copper, in a sewage effluent is not readily decreased as result of improvements to conventional treatment processes. Secondary sewage treatment facilities typically discharge similar concentrations of metals as do facilities providing advanced (or tertiary) sewage treatment. The increase in metals loading may not be ecologically significant, but any increase in discharge rate will most certainly result in an increase in mass loading.

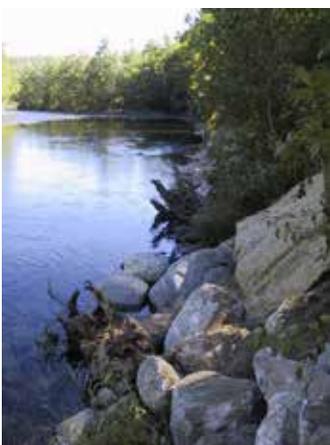
Action Program

Key Actions and Opportunities

Water quality monitoring: *Maintain a volunteer/citizen-based water quality monitoring program.*

A water quality monitoring program conducted by local volunteers can be a cost-effective method for collecting important data on a continuing basis. This type of program also provides an excellent opportunity to increase community awareness of water quality issues, and to stimulate citizen participation in efforts to address difficult problems such as non-point source pollution. Volunteer participants can be recruited from sources such as schools, community service groups or river user groups. Coordination for this type of program is provided by the FRCC. The CT DEEP and FRWA are actively involved in this effort to provide technical expertise and to ensure compatibility with existing water quality monitoring standards. FRWA currently organizes volunteer-assisted water quality monitoring in this reach of river, in partnership with the MDC and with the support of the FRCC.

To date, the FRWA and its partners and volunteers have recorded and analyzed multiple years of continuous data for physical, chemical, and bacterial indicators of water quality, and have conducted annual checks of the benthic macroinvertebrate community as indicators of water quality (see Biological Monitoring below). The results have helped locate areas of impairment in the upper watershed,



for example in the Still and Mad River tributaries, and have led to projects aimed at addressing causes of impairment. This work should continue and other water quality monitoring should be considered as needed in order to address new questions that arise. For example, an issue that may need to be examined is the presence of pharmaceuticals from wastewater treatment plants.

Biological monitoring: *Continue to conduct studies of the segment's aquatic biota to establish long-term baseline biological conditions, through a long-term biological monitoring program.*

Baseline information on existing biological “uses” provides a sound foundation for any future application of the state’s anti-degradation policy. Several recognized methodologies are available for gathering such information, including the EPA’s “Rapid Bioassessment Protocols” (which was used in the Instream Flow Study to evaluate biological conditions on the Massachusetts Wild and Scenic Study Segment), the “Index of Biotic Integrity” and the “Rapid Bioassessment in Wadeable Streams & Rivers by Volunteer Monitors, developed by the CT DEEP.” A long-term monitoring program provides important indications of change within the system, such as incremental water quality degradation from non-point source pollution. While CT DEEP should play the lead role in any such efforts, it is possible to incorporate long-term biological monitoring into the volunteer-based water quality monitoring program described above. Rapid Bioassessment by Volunteers is part of the annual volunteer monitoring activity organized by FRWA.

Determine protection goals for key tributaries such as Sandy Brook, Still River and Mad River. While they are not part of the Wild and Scenic designated reach of the Farmington River, tributaries affect the Outstanding Resources of the Farmington River’s West Branch. Two

key tributaries, the Still River and Mad River, have impairments that affect water quality in the Wild & Scenic reach. For this reason, FRCC has supported studies that identify the causes of impairment in these tributaries and has supported cost-effective actions that reduce impairment and engage local people in addressing pollution problems. Similarly, FRCC has supported study of Morgan Brook to identify actions that can reduce impairments. Sandy Brook, a relatively untouched tributary, is the focus of collaborative study and planning by local organizations that want to ensure that its value as a headwater area is better understood and maintained. Some of this work has also been supported by FRCC. These projects and similar ones should continue to be supported.

Assist with developing plans as needed and as required for Federal Clean Water Act funding. The restoration of impaired surface waters can be funded via certain provisions in the Clean Water Act. However, this funding may be conditional on prior completion of planning documents as specified by the US Environmental Protection Agency and the CT DEEP. FRCC could support the development of plans that meet agency requirements; or, if existing plans simply need augmentation in order to qualify, FRCC can support measures to improve them as needed. This could increase access to resources for addressing water quality impairments. See *Appendix D for a summary of Federal Clean Water Act statutes.*

Control of runoff: *Pursue opportunities for reducing pollution impacts resulting from various forms of runoff (non-point source pollution).*

Town and state roads. Both the towns and the state maintain roads along the segment. Each should review its procedures for road maintenance to determine opportunities for reducing impacts on water quality. Maintenance activities that may be relevant include resurfacing, winter



Baseline information on existing biological “uses” provides a sound foundation for any future application of the state’s anti-degradation policy.

sanding and salting, and cleaning of storm drains. Replacement of culverts and other road-crossing structures should follow the most up-to-date guidelines for stream crossing design, in order to reduce the incidence of destructive erosion, washouts, and scouring at stream crossings. Also, road crews should be alerted to the significance of the waterway as a Wild and Scenic River. This could be achieved by posting signs at bridge crossings or other appropriate locations, as is done for public water supply watersheds in Connecticut.

Reducing runoff from public and private lands. It is appropriate for the FRCC and its partners to encourage landowners, both private and public, to help maintain the segment's high water quality through sensitive management of their lands.

There are many land management techniques that landowners can use in order to protect the water quality of the river, its tributaries, and related aquifers. For example, landowners can maintain or re-establish vegetative buffers along the river and its tributaries, reduce or eliminate the use of fertilizers and pesticides on fields, lawns and gardens, and leave low

stumps and root structures in place if any vegetation is removed along the banks of the river or tributaries. Other voluntary practices that can be encouraged are the installation of swales, rain gardens, and stormwater detention areas, the use of various forms of pervious pavement or asphalt. See *Figure 15: Local Basin Percent Imperious*.

A key informational resource on runoff reduction, useful for both public and private landowners, is the *Nonpoint Education for Municipal Officials (NEMO) program* (nemo.uconn.edu). Stewardship opportunities for landowners are discussed in more detail under the **Land Resource Management Section – Key Actions**. Also, go to the www.farmingtonriver.org website for additional resources.

Achieve full benefit of existing regulations: *Support riverfront towns in implementing and enforcing existing local land use regulations, including the River Protection Overlay Districts, and other programs that protect water quality.*

Several local land use programs provide important protection for the upper

It is appropriate for the FRCC and its partners to encourage landowners, both private and public, to help maintain the segment's high water quality through sensitive management of their lands.



Farmington River's high water quality. In addition to the River Protection Overlay Districts, the most significant regulations are those related to septic systems, wetlands, floodplains, and subdivisions. The incentive-based Public Act 490 program also helps protect water quality by providing reduced tax assessments to landowners for keeping undeveloped lands in that condition. These regulations and programs are discussed in greater detail under **Key Actions and Opportunities for Private and Public Lands Management.**

While full implementation and enforcement of these mechanisms is most critical in those towns that directly abut the segment, water quality is also dependent upon sensitive land use management in the towns upstream of the segment and along its tributaries. The FRCC should continue to encourage these communities to implement and enforce their own land use regulations and programs in a way that protects the segment's high water quality.

Education and outreach: *Inform landowners, developers, and local land use boards about the causes of non-point source pollution, its impacts on water quality and instream resources, and the methods for reducing or eliminating it.*

This could be achieved through a variety of techniques, such as disseminating brochures, posting online information, conducting workshops, and publishing in local papers. This is a good opportunity for a cooperative effort involving many of the groups represented on the FRCC and there are already many examples of such collaborative work by FRCC member groups. *Also see the **Education And Outreach** chapter p. 19.*

Demonstration and pilot projects: *Pursue opportunities to initiate use of Best Management Practices in controlling non-point source pollution.*

Federal funding for pilot projects is available through grants from the EPA under Sections 319, 104b, and 604b of the

Clean Water Act. For example, Section 319 funds were awarded to FRWA to work cooperatively with FRCC and CT DEEP and the Town of Barkhamsted to stabilize and restore a streambank along West River Road. Natural channel design techniques and volunteers were used to plant natural vegetation.

Landowners and developers should take advantage of funding incentives for projects that would employ Best Management Practices. Local land use boards and/or the CT DEEP should notify permit applicants about the existence of these grant programs, and work with them to acquire this assistance. In addition, the FRCC and other groups should continue to identify non-point source pollution problems and implement solutions using these or other funding mechanisms.

Supporting Programs, Tools and Regulations

Federal regulation of stream alterations: *For any project that would affect water quality through the discharge of material into the segment or an adjacent wetland, the Army Corps of Engineers will implement its responsibilities under Sec. 404 of the Clean Water Act in a manner consistent with this plan's water quality standards. This responsibility is also described under **Channel, Bank and Wetland Protection.***

Water pollution control statutes: *The CT DEEP has primary responsibility for implementing state and federal water pollution control statutes. See Appendix D for a more detailed description of the statutes.*

Aquifer protection: *Towns in the upper Farmington River watershed in Connecticut should evaluate opportunities to further protect water quality in the segment and its tributaries through implementation of the "Aquifer Protection Act." See Figure 16: Aquifer Protection Areas and Appendix D for a more detailed summary of the state statute.*

Other state regulatory responsibilities: *The state should ensure consistency with this*



management plan in its implementation of other authorities that could have a bearing on water quality in the segment. See Appendix D for details.

Municipal water pollution control responsibilities: *In exercising their jurisdiction, the local water pollution control authorities in Canton, Barkhamsted and New Hartford should strive to meet the objectives and standards of this management plan and look for opportunities to upgrade facilities to protect and enhance water quality.*

Under Connecticut's Municipal Sewerage Systems Statute (C.G.S. 7-245 *et seq.*), each town is empowered to establish a local water pollution control authority. This board is responsible for preparing a local water pollution control plan, and for managing the town's sewage treatment plant if one exists. In carrying out these responsibilities, the board can take strong steps to protect riparian water quality through such actions as developing and implementing a sewer avoidance program for certain areas and ensuring effective management of on-site facilities – including requirements for periodic inspection and maintenance of on-site sewage disposal systems.

Of the four towns abutting the segment, Barkhamsted, New Hartford and Canton have established local water pollution control authorities, and New Hartford has the only municipal sewage treatment plant that directly affects the segment. (If the lower Farmington River is designated Wild and Scenic, there will be a designated river segment below the Canton sewage treatment facility). As with all municipal facilities, the New Hartford plant must comply with CT DEEP's water quality standards, regulations, and permitting requirements.

Hartland could consider establishing a water pollution control authority and developing waste water management plans in order to ensure effective on-site management and to avoid the need to

sewer the area adjacent to the river at any time in the future.

Wild and Scenic Provisions

- The NPS reviews new federal permit and grant applications that require approval under the Clean Water Act. This review is limited to projects that would discharge directly into the segment or its tributaries, and is based upon an evaluation of the project relative to the management plan's objectives and standards. No project that would have a direct and adverse effect on the segment's outstanding fisheries, recreation, and wildlife values will be allowed. NPS review is conducted in direct consultation with the CT DEEP and, where appropriate, the EPA. In order to fulfill this responsibility, the NPS is notified of relevant permit applications by the CT DEEP and relevant grant applications by the EPA. The NPS does not require notification of individual registrations for stormwater and other general permits. There is currently no statute in place that directs the CT DEEP to notify FRCC regarding standards and proposed projects that may potentially have an impact on the Wild and Scenic segment. Consequently, the two groups should work cooperatively to seek out opportunities to comment when standards are being revised as well as to stay informed about projects that could affect the segment. The NPS should be notified of and given the opportunity to review new federal permit and grant applications that are within the Wild and Scenic area.
- The CT DEEP should notify the NPS of any proposed revisions to Connecticut's water quality standards or any proposed projects requiring state certification under Sec. 401 of the Clean Water Act that are applicable to the segment. In either case, the NPS should be given the opportunity to comment, and will be granted party status in any given proceedings if it so requests.



- The FRCC should be notified of, and given the opportunity to comment on, any of the following that would directly affect the segment: 1) point source discharge permit applications under Sec. 402 of the Clean Water Act, not including individual registrations for stormwater and other general permits; 2) proposed projects requiring state certification under Sec. 401 of the Clean Water Act; and 3) proposed revisions to Connecticut's water quality standards.
- The Army Corps of Engineers should notify the NPS of any applications for individual permits under Sec. 404 of the Clean Water Act that would affect the segment, including areas within one-quarter mile of the segment or tributaries flowing into the Wild and Scenic segment. The Corps and the NPS have developed a coordination/screening procedure for projects which are authorized by the Corps under a general permit.

2. Water Quantity

Objective

Provide flows necessary to maintain the segment's existing water quality and to sustain aquatic biota, wildlife, recreation and scenic values, while meeting legal release commitments, waste assimilation needs, and compatible water supply demand.

Standards

Existing flow management: The flow regime that has existed since the Goodwin and Colebrook Dams were established provides sufficient flows to maintain water quality and the resources that made the segment eligible for Wild and Scenic River designation. That existing flow regime is dictated by several legal commitments; these are listed later in this section under Key Actions — Flow Management. *This*

plan does not propose, nor does Wild and Scenic River designation require, changes in the existing flow regime.

Modifications to existing flow management: *The standards which follow will be applied only if any changes are proposed to the existing flow regime. The specific flow conditions identified on page 37 are taken from the Instream Flow Study (June 1992), which provides the best available information on the flow needs of the different resources and the potential for compatibility between resource protection and water supply withdrawals. The study is a critical supplement to this management plan; a detailed summary of it, which was prepared by the Farmington River Study Committee, can be found on the FRCC website at www.farmingtonriver.org.⁹ For further description, refer to "Key Actions – Use of the Instream Flow Study" in the next section. Important considerations used in establishing the flow needs of the different resources are described in the box following these standards. Note that achieving the standards for aquatic biota and recreation resources will provide sufficient flows to sustain wildlife and scenic values.*

Aquatic biota: The quantity and quality of fish habitat under normal, dry, and drought conditions will be maintained at a level equivalent to, or greater than, the conditions that existed historically. To achieve this standard, the following conditions must be met:

Habitat maintenance: The optimum flow scenario (i.e., 150/130 cfs) identified in the Instream Flow Study will be maintained except during 99% exceedence (i.e., in a 100 year drought) or drier rainfall conditions. Under those drought conditions the near-optimum scenario (i.e., 95 cfs) or the intermediate scenario may be applied.

Flushing flows: To maintain habitat viability and streambed quality, adequate high seasonal flows will be provided yearly during the spring, except during 90%



⁹ Additional information related to the Instream Flow Study is contained in the final report from that study, entitled An Instream Flow Study of the Mainstem and West Branch of the Farmington River (June 1992).

exceedence (a 1 in 10 year drought) or drier rainfall years. The Instream Flow Study identifies the three-day average maximum flow from the period between 1970-1990 as sufficient for these purposes.

Recreation resources: The quantity and quality of recreational opportunity under normal, dry, and drought conditions will be maintained at a level equivalent to, or greater than, the conditions that existed historically (from 1961-1990). To achieve this standard, the following conditions must be met:

Frequency of opportunity: The total number of days of minimum and optimum conditions during the peak recreation seasons for each of the primary recreational activities (fishing, downriver canoeing, kayaking and other forms of play boating, and tubing) that existed historically under representative normal, dry, and drought conditions will be maintained. The historical number of days of optimum conditions for each use must be provided, and may be increased in conjunction with a corresponding decrease in days of minimum conditions.

Seasonal distribution: The days of minimum and optimum conditions for the primary recreation activities will be distributed across the peak recreation seasons in a pattern similar to the historical distribution from the representative normal, dry, and drought years. As was

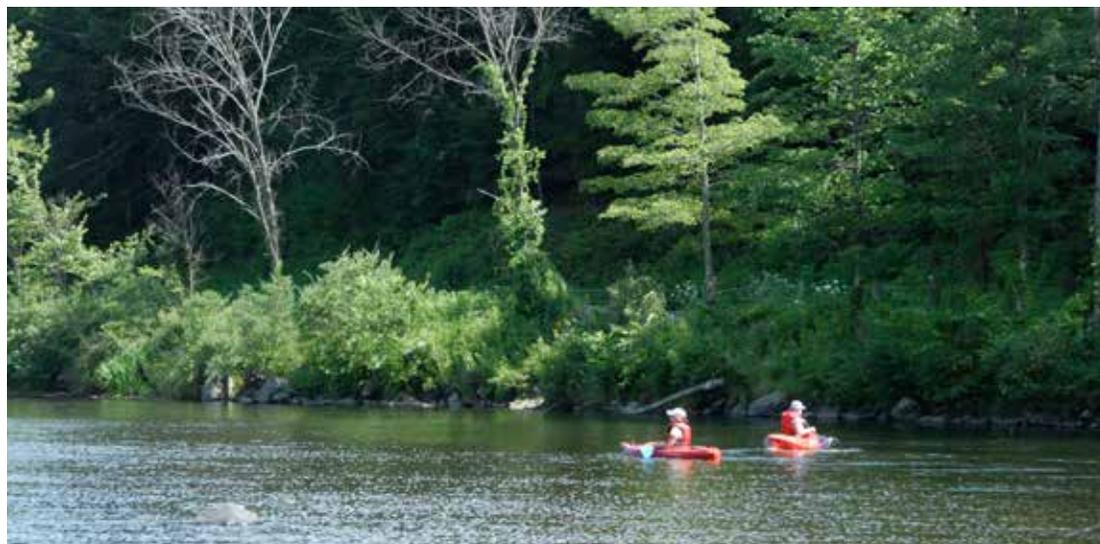
the case historically, at least some of the optimum recreation conditions will be provided during the spring runoff and storm events, when the greatest tributary inflow will be available to augment reservoir releases.

Distribution of flows within the minimum optimum ranges: During normal and wetter than normal years, a distribution of flows within the minimum and optimum ranges for each activity will be provided. During dry or drought years (i.e., 90% exceedence or drier), the low end of the minimum and optimum flow ranges for each activity must be maintained, but a distribution of flows within those ranges is not required.

Water quality: Sufficient flows will be provided to comply with Connecticut's water quality standards, including the applicable anti-degradation standard for the Farmington River.

Surplus water: After all the water resource needs are met, as identified in the Instream Flow Study, any surplus water available will be dedicated to enhancement of instream uses.

Emergency uses: In a declared water supply emergency, public health and welfare will be given priority over instream needs. That is, the above water quantity standards would be suspended, if necessary, for the duration of the declared emergency.

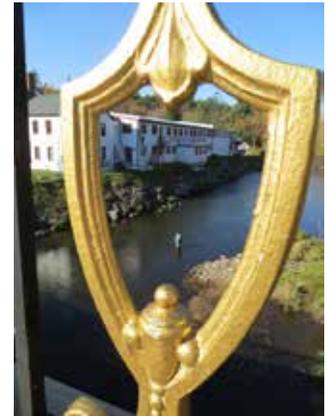


WATER QUANTITY STANDARDS for fisheries and recreation resources are based upon the following considerations which are to be taken directly from the 1992 Instream Flow Study.

- The levels of fish habitat and recreational opportunity are calculated for the stretch of the Farmington River that is downstream of the confluence with the Still River, and therefore reflect the flows contributed both from West Branch reservoir releases and the Still River.
- Fish habitat is measured in terms of the “Weighted Usable Area” (WUA) available for target species and lifestages (adult trout and juvenile Atlantic salmon).
- The time frame used to establish historical levels of fish habitat and flushing flows was 1970-1990. The period of record used to establish historical levels of recreational opportunity was 1961-1990.
- The peak recreation seasons for the primary activities are as follows:

Fishing:	March 1 ¹⁰ – October 31
Downriver Canoeing and Play Boating:	April 1 – September 30
Tubing:	Weekends only from Memorial Day – July 4 Daily from July 4 – Labor Day Weekends only for two weeks after Labor Day
- The representative rainfall years are as follows:

Representative normal year:	1974
Representative dry year:	1988
Representative drought year:	1965
- The historical number of days of minimum and optimum recreational conditions are derived from hydrographs of representative years, as presented in the *Instream Flow Study Summary, Table A*, that can be found on the FRCC website at www.farmingtonriver.org.
- In the flow scenarios developed in the Instream Flow Study, days with flows of 360 cfs were counted as providing optimum flow conditions for fishing, despite the fact that the optimum range for fishing identified by the consultant extended only from 150-350 cfs. Flows of 360 cfs were provided in order to reach the lower threshold for optimum downriver canoeing conditions. It was assumed that the additional 10 cfs increment would not have a noticeable impact on fishing conditions.



¹⁰ In Connecticut, the fishing season officially begins on the third Saturday in April. The March 1 date refers to the beginning of peak use of the Trout Management Area, which is open for fishing year-round.

Action Program

Key Actions and Opportunities

Use of the Instream Flow Study: *Utilize Instream Flow Study as a primary source of information in water management and planning.*

The Instream Flow Study and subsequent analysis performed by the Farmington River Study Committee provided critical information regarding the flows needed to protect instream resources as well as the potential for compatibility between resource protection and water supply withdrawals.¹¹ The MDC, the Army Corps of Engineers, the CT DEEP, and others should incorporate this information into any planning, management, or regulatory activities that involve water quantity issues on the West Branch.

Users of this information should keep in mind that the Instream Flow Study is not an evaluation of a specific withdrawal proposal, nor does it define a specific management regime for the West Branch Reservoirs. Rather, it incorporates two hypothetical levels of withdrawal into an intricate resource management and water allocation exercise. As with any scientific analysis, the study is based on a number of important assumptions; these assumptions have related limitations that should be considered in any future management decisions. Also, considering the possibility of long-term changes in regional precipitation and flow patterns, an update of the Instream Flow Study could be advisable to better inform future management decisions.

Given those considerations, the Instream Flow Study indicates that some use of the West Branch water for water supply could be compatible with protection of the river's instream resources and, therefore, with Wild and Scenic river designation. Based upon the assumptions utilized in the Instream Flow Study, during wetter-than-normal, normal, and dry years, there

appears to be sufficient water to provide for all resource needs and uses, including a potential water supply withdrawal of up to 7.3 billion gallons per year. Under severe drought conditions, there appears to be sufficient water to provide for all resource needs and uses and withdrawals of up to 7.3 billion gallons per year, if a near-optimum fisheries scenario is applied.

In the event that a withdrawal is proposed, the applicant would have to satisfy requirements for applicable state and federal permits and resolve other constraints. Should the proposed withdrawal be from either or both of the West Branch reservoirs, an essential element of the withdrawal proposal would be the development of a plan for reservoir management, including an operational plan and a detailed flow regime. The plan would identify how the reservoirs and releases would be managed to balance competing uses and protect the river's resources as identified in the Instream Flow Study and this management plan. Other constraints could include, for example, the need to renegotiate existing flow management agreements.

Water conservation: *Pursue water conservation opportunities to reduce reliance on the Farmington River Valley's surface and groundwater sources for water supply.*

There are two primary areas on which attention should be focused:

1. Supporting the conservation plans outlined in the MDC's *Individual Water Supply Plan*, and
2. Promoting water conservation in study area towns.

Considerable energy and resources have been expended in both of these areas for many years – the MDC has pursued both supply management and demand management throughout its system, and the FRWA has emphasized educational programs on water conservation



¹¹ This information is contained in the final report of the Instream Flow Study and the "Summary: Farmington River Instream Flow Study" found on the FRCC website at www.farmingtonriver.org.

throughout the Farmington River basin. While these programs already have been very successful, it may be possible to get even greater returns from them through a cooperative effort among MDC, the FRWA, and the other members of the FRCC.

Implementation of state and federal water conservation mandates will help to achieve further reductions in demand. At the state level, there is clear policy direction concerning the important role of water conservation in water management through Public Acts: P.A. 89-327, which establishes a water resources policy; P.A. 89-303, which concerns minimum efficiency standards for plumbing fixtures; and P.A. 89-266 establishing a residential water saving program to retrofit plumbing fixtures with water conserving devices. At the federal level, the National Energy Policy Act (P.L. 102-486; Oct. 24, 1992) establishes national plumbing efficiency standards.

Flushing flow management: *Consider the importance of flushing flows as they relate to the river's ecological integrity.*

Due to the existence of a regulated flow regime in the Farmington River there are limited methods by which to alter the flow dynamic through flushing flows. However opportunities for managing the river's ecological health through flow management should continue to be considered in

cooperation with the CT DEEP and the MDC. For example, occasional enhanced flushing flows might help maintain the historical diversity of plant and animal communities. *See FRCC website for summary of existing flow studies.*

Reservoir management: *Encourage the MDC and the Army Corps of Engineers to evaluate opportunities to enhance downstream resources within their existing reservoir management constraints.*

In the process of analyzing the results of the Instream Flow Study in 1993, it became apparent that there are opportunities which the MDC could pursue to enhance instream flows above historical levels while meeting existing obligations and maintaining adequate annual volumes for a potential water supply withdrawal. These findings raise the possibility that similar opportunities might be available to the Corps, while maintaining the maximum reservoir capacity needed for flood control. These opportunities should be evaluated in the face of current climate and possible changes in natural flow regimes. Both agencies should explore the feasibility of implementing any such enhancement opportunities, in cooperation and consultation with the FRCC and the CT DEEP.



Supporting Programs, Tools and Regulations

Federal regulation of stream

alterations: *The Army Corps of Engineers implements the permitting requirements of Sec. 404 of the Clean Water Act for any project affecting water quantity that would discharge dredged or fill material into the segment or an adjacent wetland.*

This responsibility is described under **Channel, Bank, and Wetland Protection – Key Actions.**

State regulation of water supply

emergencies: *The CT DEEP and Department of Public Health (DPH) maintain their authority to implement the state’s water supply emergency statutes if conditions arise that necessitate such action.*

In any future implementation of these authorities that would affect the segment, the state should make an effort to notify the FRCC. *Also see Summary of Federal and State Statutes in Appendix D regarding state regulation of water diversions, state water quality certifications and water supply emergencies.*

Flow management: *The MDC and*

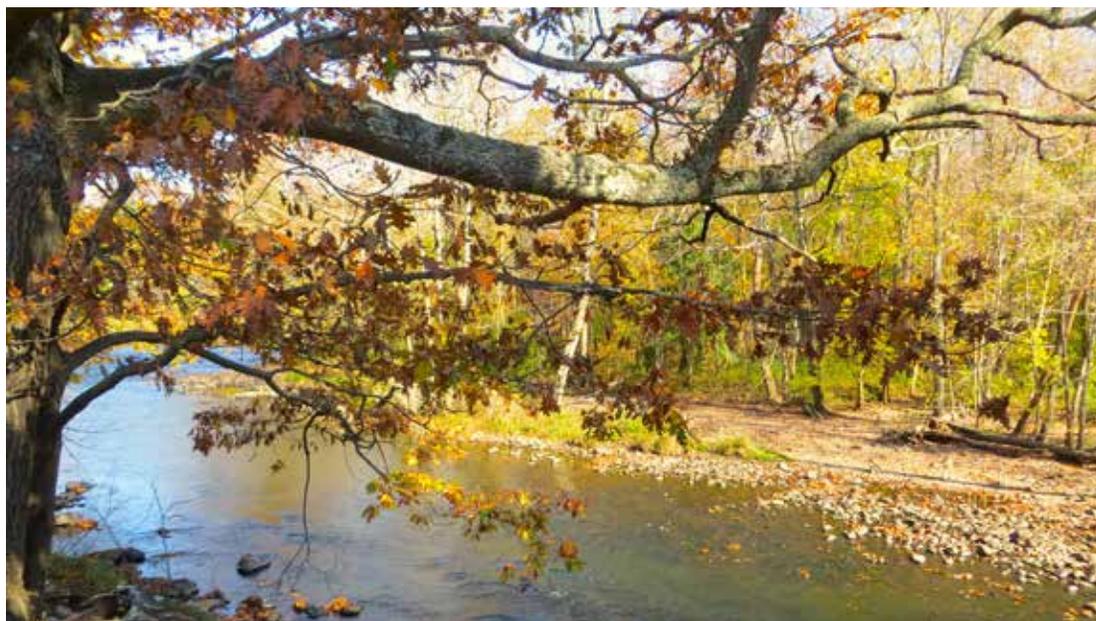
the U.S. Army Corps of Engineers manage flows from the West Branch reservoirs in accordance with existing commitments. Any changes to those commitments that would cause changes in flow management in the segment must conform to the water quantity standards described in Appendix D: Summary of Federal and State Statutes.

Under present conditions, flow management is dictated by the following:¹²

- 50 cfs minimum flow established under state statute;
- Riparian agreement between the MDC and the Farmington River Power Company;
- Agreement with the Allied Connecticut Towns;
- Army Corps of Engineers’ flood control requirements;
- Fall fisheries augmentation flow;
- Flood encroachment/American shad minimum flow; and
- Regulatory requirements of the Federal Energy Regulatory Commission (FERC) for hydroelectric facilities at Colebrook and Goodwin Dams.¹³

¹² Details on these agreements and obligations are provided in the final report of the Instream Flow Study and the Draft Evaluation of Existing Protection that can be found on the website at www.farmingtonriver.org.

¹³ The existing license from FERC for the Colebrook Hydroelectric Facility extends through 2034. The Goodwin Hydroelectric Facility has been granted an exemption from license by FERC; as such, there is no specific date for reconsideration of the exemption provisions.



If any changes to these commitments are proposed, certain issues would need to be addressed to ensure conformance with the water quantity standards. For instance, procedures would need to be established for determining whether a given year is “wet,” “normal,” “dry,” or “drought” year, and for linking reservoir releases accordingly. These procedures may have to conform to definitions or requirements introduced by the state streamflow regulations as adopted in 2011 (see below), or as modified since then. The FRCC will take an active role in efforts to resolve these and other flow-related issues.

It is important to note that if changes are proposed to certain of the commitments (particularly the riparian agreement with the Farmington River Power Company, the agreement with the Allied Connecticut Towns, and the fisheries pools), resultant changes to several of the other commitments could be necessitated in order to achieve the water quantity standards. (The 50 cfs minimum flow, the Corps’ flood control requirements, and the regulatory requirements for the hydroelectric facilities likely would not need to be adjusted). If such a situation arises, all of the parties involved in the various commitments should pursue a cooperative resolution and renegotiation of the obligations involved. However, this recommendation is not a requirement; each party would retain its right to determine whether renegotiation would be in its best interest. Again, new negotiations may have to accommodate requirements now imposed by the state’s streamflow regulations.

Water supply planning: *Potential needs for water supply withdrawals from the West Branch will be determined through the state’s water supply planning process and associated documents developed by the applicant.*

In 1985, the Connecticut General Assembly established a long-range, statewide water supply planning process: the “Connecticut Plan for Public Water

Supply Coordination,” authorized under C.G.S. 25-33 *et seq.* The statute divided the state into seven planning regions, and established a “Water Utility Coordinating Committee” (WUCC) for each region. Each water utility is required to prepare a 50-year water supply plan (under C.G.S. 25-32d); the WUCC for each region is then responsible for overseeing the preparation of a “Coordinated Water System Plan,” which integrates the individual utility plans into a comprehensive regional plan. Both the individual utility plans and each Coordinated Water System Plan must receive approval from the Department of Public Health (DPH), with concurrence from the CT DEEP. Recognizing that water supply planning is a dynamic process, the statute requires regular review and revision of both the individual utility plans (on a 3-5 year basis) and each regional plan (on a 10 year basis).

With respect to the upper Farmington River, the relevant documents are: (1) the regional plan for the “Upper Connecticut River Water Supply Management Area” (March 31, 1989); and (2) the MDC’s *Individual Water Supply Plan* (MDC 2008 Water Supply plan amended/ approved 4/2012), which was originally approved by the state in September 1991. The MDC’s plan states that “...no use of the Colebrook/West Branch system will occur before: (1) the safe yield of the augmented East Branch system...is exceeded; (2) the range of economically feasible groundwater options is fully evaluated; and (3) conservation potential is thoroughly assessed from a cost-effectiveness standpoint and in terms of expected long-range results.” Future revisions to these documents should reflect both the knowledge gained from the Instream Flow Study and any more recent flow studies, and the agreements incorporated into this management plan.

State Stream Flow Standards: In 2005 the Connecticut General Assembly passed Public Act 05-142 (CGS Section 26-141a and b) which required the CT



NPS reviews any proposed channel, bank, or wetland alteration that requires a federal permit, license, certification, or funding and that would directly affect the designated segment.

DEEP to work with the Department of Public Health and stakeholders to update standards for maintaining minimum flows in rivers and streams. The act requires these standards to balance the various uses of water by providing for river and stream ecology, wildlife and recreation while providing for the needs and requirements of public health, flood control, industry, public utilities, water supply, public safety, agriculture and other lawful uses of water.¹⁴ Extensive effort by CT DEEP and numerous stakeholders and work groups culminated on December 12, 2011, when the Stream Flow Standards and Regulations were filed with the Secretary of State's Office. They comprise Section 21-141b-1 to 26-141b-8, inclusive, of the Regulations of CT State Agencies. A summary is available at http://www.ct.gov/deep/cwp/view.asp?a=2719&q=434018&deepNav_GID=1654.



Wild and Scenic River Provisions

- NPS reviews any proposed project involving flow alteration and requiring federal assistance through permits, licenses, funding, or other action and that would be on or directly affecting the segment. This would apply to projects upstream or on tributaries, as well as those on the segment itself. NPS review is based upon an evaluation of the project relative to Wild and Scenic River Act. No project that would have a direct and adverse effect on the segment's outstanding fisheries, recreation, and wildlife resources will be allowed.
- The CT DEEP should make every effort to notify the NPS and the FRCC of any relevant diversion permit applications, as well as other proposals that would affect the segment's water quantity and require state certification under Sec. 401 of the Clean Water Act. The NPS and the FRCC are given the opportunity to comment on any such proposals, and the NPS

will be granted party status in any given proceedings if it so requests.

- The Army Corps of Engineers notifies the NPS of any applications for individual permits under Sec. 404 of the Clean Water Act that would affect the segment. The Corps and the NPS have developed a coordination/screening procedure for projects which are authorized under a general permit.
- Wild and Scenic River designation does not preclude Federal Energy Regulatory Commission approvals required for the continued operation of the Goodwin and Colebrook Hydroelectric Projects, nor does it supersede the existing authority of the Army Corps of Engineers for flood prevention through management of the Colebrook Dam and Reservoir. Designation also does not preclude the temporary lowering of surface elevations in the West Branch Reservoirs below normal management levels for dam repairs.

3. Channel, Bank and Wetland Protection

Objective

Maintain or enhance the natural condition of the river system, including its free-flowing character, the integrity of the stream channel and banks, and the ecological functions of adjacent wetlands.

Standards

Dams: In order to maintain the segment's free-flowing condition, no new dams will be allowed.

Other alterations: No other new man-made alterations to the river's channel, banks, and adjacent wetlands that would degrade their natural appearance and function that are federally funded or permitted will be allowed if they have direct and adverse effects. Actions will be taken to avoid impacts including the use of Best Management Practices during construction

¹⁴ http://www.ct.gov/deep/cwp/view.asp?a=2719&q=434018&deepNav_GID=1654%20

to control non-point source pollution. To prevent resource degradation, any new bridge abutments and other physical structures (such as may be necessary for an approved diversion) should be designed to minimize impacts and/or be located as far from the river banks as possible. Any necessary bank stabilization should be designed in a way that will maintain the natural character of the shoreline and, wherever possible, should be achieved using natural vegetation. Improvements for recreational access will not be precluded. However, the need for any such improvements should be clearly established, and design and construction should be done in a way that will minimize impacts to the integrity and function of the river's channel, banks, and adjacent wetlands.

Action Program

Key Actions and Opportunities

Plan for a changing, dynamic river:

The landscape of the Farmington Valley is sculpted by the dynamic behavior of rivers and streams. The natural meandering, erosion, and deposition that is characteristic of rivers has become better

known over time and is the subject of ongoing study by fluvial geomorphologists. Past development, conducted with a less complete knowledge of river dynamics, has produced some situations where streambank stabilization and flood control measures such as armoring banks or channelizing riverbeds has produced other problems (for example, exacerbated downstream erosion) that cause ongoing expense. In developing long-term plans of conservation and development, it is important to incorporate the principles and best practices recommended for accommodating the behavior of rivers and streams in a way that incorporates safety, ecological function, sustainability, and long-term (as opposed to short-term) cost-effectiveness for the whole community.

Consideration of river dynamics is especially important as we face the challenges of climate change. Increases in precipitation and flood flows in Connecticut rivers over the past century have been documented; these inevitably affect the size, shape, and other physical characters of stream channels. River corridor planning should include measures

In developing long-term plans of conservation and development, it is important to incorporate the principles and best practices recommended for accommodating the behavior of rivers and streams in a way that incorporates safety, ecological function, sustainability, and long-term (as opposed to short-term) cost-effectiveness for the whole community.



for adapting to the changes that can reasonably be expected for increased flow volumes, channel size and shape, substrate movements, wider fluctuations between high and low water, and other predictions emerging from the study of climate change in southern New England.

Monitor progress of proposed redevelopment of the Upper and Lower Collinsville Dams: The Town of Canton is pursuing development of a municipal hydropower project at the Upper and Lower Collinsville Dams and intends to proceed with hydropower development if the project is found to be economically feasible. The Collinsville Dams are owned by the CT DEEP, which is cooperating with the Town of Canton in its explorations.

FRCC should monitor the progress of this possible project and encourage the town to certify the project through the Low Impact Hydropower Institute (LIHI).

Supporting Programs, Tools and Regulations

Federal regulation of stream alterations: *The Army Corps of Engineers implements Sec. 404 of the Clean Water Act, which requires federal approval for any project that would discharge dredged or fill material into a river or wetland.*

Regulations governing the Army Corps of Engineers' Nationwide Permit Program (*Federal Register*, November 22, 1991) requires individual rather than nationwide permits for all proposed projects covered by Section 404 of the Clean Water Act that are “in a component of the National Wild and Scenic Rivers System.” In accordance with these regulations and the Wild and Scenic Rivers Act, the Corps will, in its review of individual permit applications proposed on the segment, integrate comments from the NPS regarding consistency of proposed projects with the standards set forth in this plan.

Other state regulatory responsibilities: *The state should ensure consistency with the provisions of this management plan*

in its implementation of other authorities and programs that relate to the protection of the river's channel, banks, and adjacent wetlands. Under Sec. 401 of the Clean Water Act, any project affecting the segment's channel, banks, or adjacent wetlands that requires a Clean Water Act discharge permit. Also see Appendix D for the Summary of Federal and State Statutes regarding the state water quality certification.

Local land use regulation: *The riverfront towns will implement and enforce existing land use regulations that protect the river's channel, banks, and adjacent wetlands.*

The natural appearance and function of the river's channel, banks, and adjacent wetlands receive strong protection through several local land use regulations. The most important include the River Protection Overlay Districts, floodplain regulations, and wetlands regulations. These are discussed in greater detail under **Land Resource Management**.

The FRCC should pursue opportunities to comment on any action under these programs that could affect the river's channels, banks or wetlands, other than those of an emergency nature.

Wild and Scenic River Provisions

- NPS reviews any proposed channel, bank, or wetland alteration that requires a federal permit, license, certification, or funding and that would directly affect the designated segment. NPS review will be based upon an evaluation of the project relative to Section 7 of the Wild and Scenic Rivers Act. No project that would have a direct and adverse effect on the segment's free-flowing condition or its outstanding fisheries, recreation, and wildlife values will be allowed. No new dams will be allowed on the segment, and no new FERC licensed hydroelectric projects that would be on or directly affecting the segment will be allowed.
- The CT DEEP should make every effort to notify the NPS and the FRCC of, and give each the opportunity to comment



on, any proposed project requiring state certification under Sec. 401 of the Clean Water Act. The NPS will be granted party status in any given proceedings if it so requests.

- The Army Corps of Engineers notifies the NPS of any applications for individual permits under Sec. 404 of the Clean Water Act that would affect the segment. The Corps and the NPS have developed a coordination/screening procedure for projects which are authorized under a

general permit.

- Wild and Scenic designation does not preclude the re-licensing of the Colebrook Hydroelectric Project, nor the continued exemption of the Goodwin Hydroelectric Project.
- The potential licensing of hydroelectric facilities on new or existing dams downstream of the segment, which could have an effect on the segment's Atlantic salmon resources, is discussed under the **Fisheries and Wildlife** section.



Part III: Outstanding Resource Management

1. Recreation Resources

The Farmington River supports tremendous recreational use with highly popular trout fishing, boating, and tubing. It is widely recognized as one of New England's premier trout streams, and draws anglers from throughout the Northeast and beyond. The mixture of flatwater, riffles and class I-III rapids draws a large number of paddlers. The most heavily used segment of the river for boating and tubing is where the river drops through Satan's Kingdom Gorge. The setting within the Gorge is spectacular, with a stretch of class III white water framed by steep cliffs on both banks. In addition, the land along the river supplies a wide range of recreational opportunities.

See Figure 17: *Recreational Resources*. Also, see the website www.farmingtonriver.org for information about *The Upper Farmington Wild and Scenic Water Trail Map*, and the *FRCC Wild and Scenic Interactive Map*.

Objective

Protect and enhance the upper Farmington River's outstanding recreational resources.

Standards

Recreation opportunities: Existing recreation opportunities will be maintained and enhanced.

Impacts on land and water resources: Recreational activities and facilities will be managed in a way that will prevent degradation of land or water resources.

Access: Public lands will be relied upon to provide access for all users to the river. Any access through private lands will be at the discretion of the landowner.

Action Program

Key Actions and Opportunities

Conduct a Recreational Use and Management Study: *Support public enjoyment of the recreational resources*

and protection of the natural resources by leading a study that would improve the understanding of recreational use of the river and recreational resources related to the river.

Design and conduct a recreational use and management study to learn more about current and projected future recreational use of the river, and to determine how recreational use levels and river access impact the natural resources. This type of study is typically one that assesses recreational use, and provides recommendations for protecting and enhancing the Outstandingly Remarkable Values (ORVs) while supporting a high quality recreational experience. Important factors to take into account might include analyzing current river use patterns, conflicts, permitting, and existing regulations.

Since the Upper Branch of the Farmington is a Partnership River that flows through land that is privately owned, FRCC has no specific regulatory authority to control recreational usage. Rather, FRCC could coordinate a study by partnering with the state, towns, and organizations that could play a significant role in designing a study and implementing the resulting recommendations to support the goal of balancing resource protection and recreational use.

The study should utilize existing river studies, including the *Use and Economic Importance of the West Branch of the Farmington River Study, 2002*, by Moore and Sideralis and to the extent possible follow NPS user capacity recommendations.

Recreational use of the river has spawned a number of issues that could be examined by a "recreational use study," such as:

- riparian landowner concerns (e.g., trespass, noise, vandalism, and lack of respect for their privacy)
- conflicts posed by competing recreational users



- adequate and appropriate access to the river
- commercial recreational activity management
- parking and traffic issues
- litter on both private and public lands
- health, safety, and welfare of river users
- potential intensification of these and other issues if recreational use increases in the future

Led by FRCC, a working group of partners could work to address potential areas of conflict, establish guidelines acceptable to all parties. This group could also advocate for and help to implement any study's possible recommendations e.g., change existing practices or regulations, support the enforcement of regulatory controls.

Private organization initiatives: *Work with river advocacy and recreation user groups that play an important role in recreation management.*

The Farmington River Valley's principal river advocacy and recreation user groups (including the FRWA, the Farmington River Anglers Association, the Connecticut Chapter of the Appalachian Mountain Club, and Trout Unlimited) have dealt with recreational issues on the river for many

years. Their continued involvement will be vital for effective recreation management in the future. They should focus attention on three primary activities:

1. educate users about the river and potential environmental and social effects of various recreational activities,
2. help to resolve recreational conflicts and balance competing uses,
3. assist in cooperatively developed projects, identifying new access sites and coordinating river cleanups.

Additional public access: *Encourage the CT DEEP and the MDC to evaluate opportunities to provide additional public access to the river on their lands, if such additional access is needed and is consistent with the purposes for which those lands were dedicated.*

In assessing needs and opportunities for additional access, the CT DEEP and the MDC should consult with the FRCC and organizations that represent river users. *The needs of seniors and people with disabilities should be specifically addressed in any proposal for new or improved access.* Cooperative projects (such as the handicapped fishing access site at the Church Pool in Pleasant Valley that was developed jointly by the MDC,

The Farmington River supports tremendous recreational use with highly popular trout fishing, boating, and tubing.



the CT DEEP, and the Farmington River Anglers Association) should be pursued when feasible.

Supporting Programs, Tools and Regulations

Recreation management on public lands: *The CT DEEP, the MDC, and the riverfront towns should continue to manage recreation on their respective lands along the segment. Land managers should review current policies and practices relating to recreation management for consistency with the objective and standards stated above, and revise them if necessary.*

Current management policies provide for extensive access and a variety of recreational uses on public lands along the segment, making the upper Farmington River one of the region's most important recreational resources. State forests, which contain the greatest amount of public acreage and frontage along the segment, support the broadest range of recreational activities and, in consequence, receive the most intense recreational pressure of any lands along the segment. Other public lands – particularly the state's Satan's Kingdom Recreation Area, the MDC's Greenwoods area, and New Hartford's town property – also provide important access opportunities and receive significant use.

Any major revision to existing recreation management policies and practices for public lands should be made in consultation with the FRCC.

Regulation of commercial recreation: *The CT DEEP and the towns regulate commercial recreation in accordance with their existing authorities.*

The CT DEEP regulates existing and potential commercial recreation on state lands to ensure public health, safety, and welfare, and resource protection. (Currently, commercial recreation on state lands is limited to the tubing concession at Satan's Kingdom.) The CT DEEP has a role in resolving other commercial recreation

issues that may arise, such as potential access needs for commercial canoe liveries.

Local land use regulations affecting recreation: *The riverfront towns play a role in managing recreation by implementing and enforcing existing land use regulations, including the River Protection Overlay Districts that affect recreational use of the river corridor.*

In general, the River Protection Overlay Districts allow for non-intensive and non-commercial recreational uses that do not require new structures within the 100-foot buffer area. These districts and other local regulations are discussed in further detail under **Land Resource Management — Key Actions**.

Wild and Scenic River Provisions

No additional requirements related to the management of recreation resources result from Wild and Scenic River designation. The National Park Service will not regulate recreational use or require permits for commercial recreation activities.

2. Fisheries and Wildlife

High water quality supports diverse aquatic habitats and aquatic life. The outstanding quality of water in the Farmington River corridor supports a large quantity and diversity of wildlife and vegetation. The variety of habitats, large tracts of undeveloped land and year-round availability of water all contribute to the area's suitability for both indigenous and migrant wildlife.

Objective

Protect and enhance the upper Farmington River's outstanding plant communities, fisheries and wildlife.

Standards

Habitat: The historical quality, quantity, and diversity of fish, wildlife and plant habitat will be maintained, restored or enhanced as needed. *See Figures 18-20.*

Sensitive Species: Populations of



sensitive species, including Atlantic salmon, mussels, bald eagles, and osprey, will be maintained, restored or enhanced as needed. *See Figure 21: Endangered, Threatened, or Special Concern Species.*

Sport Fisheries: The upper Farmington River's high quality sport fishery will be maintained and enhanced.

Action Program

Key Actions and Opportunities

Initiatives for habitat protection and enhancement: *The FRCC should promote projects that support the restoration, protection and/or enhancement of fish, wildlife and plant habitat.*

An example project is the streambank planting project of a stabilized area along West River Road in Barkhamsted. This was a cooperative effort designed to reduce erosion, improve wildlife habitat, and enhance the aesthetics of the site. The project was initiated by the Farmington River Anglers Association, with participation from the Town of Barkhamsted, the Natural Resources Conservation Service (NRCS), and a local nursery that donated plant materials.

Conduct non-native invasive plant management and native plant restoration projects: *The FRCC should continue to take the lead in promoting the removal of invasive species and in establishing native plant populations in coordination with the state, towns, partners, landowners, and other stakeholder organizations. See Figure 22: Invasive Species.*

Non-native invasive plants threaten the ecology of the river corridor and present a real threat to the biological diversity of the Upper Branch of the Farmington. Based on the results of annual surveys (see Figure 22: *Invasive Species* and website at www.farmingtonriver.org for more information about the FRCC Invasives Project) that document the existence and extent of non-native, invasive plants in the river corridor, FRCC should continue to address this emerging threat by focusing

management efforts on areas where native plant restoration is feasible.

For example, FRCC has begun to implement report recommendations as follows:

- Educate and work cooperatively with private landowners and with the CT DEEP and MDC.
- Remove non-native invasive plants on lands identified as critical habitat.
- Provide guidance on new control techniques, such as the use of goats for species control.
- Identify new populations of non-native invasive species through early detection and provide a system for rapid removal.

New infestations, such as the algae "rock snot" (*Didymosphenia geminata* or "didymo") or other aquatic invasive species, should also be identified and managed as well in cooperation and coordination with CT DEEP. To support this ongoing effort there is a need to educate private landowners, river users, and the communities along the river, and to develop a cadre of volunteers that actively manage invasives and provide long-term continuity to the program. Community support is vital in the effort to lessen this threat to the natural habitat and diversity of the river and associated lands.

Continue to operate as a CISMA: *FRCC functions as a Cooperative Invasive Species Management Area (CISMA) to coordinate non-native invasive plant species management in the Wild and Scenic corridor. The CISMA is a federal, state and local partnership that manages invasive species within a defined area.*

Inventory of sensitive species: *Continue to conduct sensitive plant and animal species inventories that are associated with the Farmington River.*

Effective management requires good information about the biological communities in and along the river. Where possible, data about endangered, threatened, or special-concern species,



indicator species, or significant community types should be obtained or updated. This effort could be pursued cooperatively through the CT DEEP's Natural Diversity Data Base in conjunction with the U.S. Fish and Wildlife Service, educational institutions, and other appropriate organizations such as FRWA. The Natural Resource Inventories and vernal pool surveys that the FRCC has supported over the last decade are examples of the type of work that should be continued.

Supporting Programs, Tools and Regulations

Fish and wildlife management: *The CT DEEP will retain responsibility for management of fish and wildlife.*

The CT DEEP's major fish and wildlife management activities include: (1) habitat management and protection, (2) fish and wildlife stocking programs, and (3) regulation and enforcement of fishing and hunting activities. The latter includes licensing requirements and the establishment of special management areas (for instance, the "Trout Management Area" of the West Branch/upper Farmington River for which details can be located on the CT DEEP website at

www.ct.gov/dep/fishing).

Any major changes to existing management practices that are specific to the Farmington River should be made in consultation with the FRCC.

Anadromous fish passage restoration: *The FRCC will actively support plans and programs to restore anadromous fish in the Farmington River basin.*

The Farmington River is one of the principal tributaries in the Connecticut River watershed and therefore the activities on the Farmington River are part of that larger effort to restore diadromous fish. The Connecticut River Atlantic Salmon Commission (CRASC) provides the leadership and decision-making for the restoration program and the CT DEEP is actively engaged in a program to restore native migratory fishes to the Farmington River. The support and participation of private groups, such as the FRWA and the FRCC, are critical to the success of the program.

Long-term success of the restoration efforts in the Farmington River basin will require protection of critical habitat in the upper segment and maintenance of adequate water quality and quantity in the river. The standards for water quality,

Long-term success of the restoration efforts in the Farmington River basin will require protection of critical habitat in the upper segment and maintenance of adequate water quality and quantity in the river.



water quantity, and channel, bank, and wetland protection established in the **Water Resource Management** section of this plan are intended, in part, to achieve those ends.

As a Wild and Scenic River there are special management provisions to protect anadromous fish that apply to both the designated segment and downstream areas. Specifically, the NPS will review any proposed water resource project requiring federal licensing, permitting, or funding to ensure consistency with this plan. The NPS will consult closely with the CT DEEP and the U.S. Fish and Wildlife Service in this regard.

Bald eagle restoration: *The MDC, the CT DEEP, and the U.S. Fish and Wildlife Service should continue their efforts to re-establish and monitor breeding pairs of bald eagles in the upper Farmington River watershed.*

These three agencies have been working cooperatively to support, protect, and monitor eagle activity in the upper part of the watershed in recent years. Re-establishment efforts came to fruition in May 1992, when a pair of eagles that had been nesting near the Barkhamsted Reservoir successfully hatched two chicks – the first born in Connecticut in more than 40 years. As of 2011, over 55 chicks have

been fledged from nests on MDC lands. Nesting has occurred near the Nepaug and Colebrook Reservoirs, in addition to the Barkhamsted Reservoir. The MDC works closely with a group of volunteers known as the Bald Eagle Study Group who play an instrumental role in monitoring nesting activities on MDC and other lands.

While much of the birds' activity has been centered in the protected watershed of the Barkhamsted Reservoir, they regularly use the upper segment of the Farmington River for feeding, particularly in winter when the reservoir is frozen. Eagle use of the segment is directly dependent upon protection of its abundant fisheries, as well as maintenance of the high environmental quality and largely natural character of the river corridor. The standards and actions for land and water management in this plan will ensure that the segment retains those values.

Wild and Scenic River Provisions

There are no additional requirements related to the management of fisheries and wildlife resources, and there is no National Park Service role in such management, as a result of the Wild and Scenic River designation.



3. Historic Resources

Noteworthy remnants of the Farmington Valley's long history of human activity can be found throughout the area. Evidence of early native inhabitants includes important documented archaeological sites. Also prevalent are historic structures associated with the early European settlement.

Objective

Protect and enhance outstanding historic resources associated with the upper Farmington River.

Standards

Historic sites: The integrity of sites associated with the segment and listed on the National Register of Historic Places or Connecticut's State Register of Historic Places will be maintained. *See Figure 23: National Register of Historic Places.*

Archaeological sites: The integrity of sites that are important in understanding and interpreting the activities of prehistoric cultures in the upper Farmington River Valley will be maintained.

Action Program

Key Actions and Opportunities

- Inventory archaeological and historic resources and scenic roads within the

river corridor and establish protections for them (as allowed under existing laws).

- Provide educational materials in various formats interpreting historic and archaeological resources.
- Promote heritage tourism.
- Consider historic and archaeological resources in open space acquisition.
- Promote regulations that favor adaptive reuse of historic structures and consideration of archaeological resources.

Supporting Programs, Tools and Regulations

Historic preservation laws: *The Connecticut Historical Commission, the National Park Service, and the Advisory Council on Historic Preservation will continue to exercise their respective authorities to protect historic sites under C.G.S. 10-321a et seq. and the National Historic Preservation Act (P.L. 89-665).*

Section 106 of the National Historic Preservation Act requires that a review be conducted before any federal action is taken that might affect a site listed on the National Register. Federal actions that trigger this review include construction, licensing and permitting, government loans, and similar activities. The purpose of the review is to determine if the site would



be adversely affected and, if so, to identify ways to avoid or mitigate the adverse effect. The act does not grant authority to stop a project in order to preserve a site; rather, it mandates that historic resources be “taken into account.” The state typically takes the lead in evaluating the potential impacts of proposed projects on listed sites. The NPS provides technical assistance as needed, and retains the option of conducting its own review, as does the Advisory Council on Historic Preservation.

Several sites in the area have been recognized for their historic significance. Three structures are listed on the National Register – the 19th century Chapin House in Pine Meadow, the depression era CCC museum in the Peoples State Forest, and the early 19th century gothic revival style stone Union Church in Riverton. An additional thirteen structures are listed on the Connecticut State Register, and the clusters of 19th century buildings in New Hartford and Pine Meadow have been designated as state and local historic districts.

Existing authorities will be sufficient to protect these outstanding historic resources. Agencies responsible for oversight of these resources should be informed of the existence of the management plan and encouraged to take it into account as they exercise their review and consultation responsibilities.

Protection and investigation of archaeological sites on public lands: *The CT DEEP and the MDC should review their existing management plans for the state forests and watershed lands for compatibility with the protection of important archaeological sites that are linked to the river, and should take additional actions if necessary to ensure the protection of those sites.*

Investigations conducted by the Farmington River Archaeology Project in selected areas of Peoples State Forest and Nepaug State Forest have uncovered a number of prehistoric sites. One site, which includes portions of Beaver Meadow in

Peoples State Forest, has been listed as a National Historic Site in recognition of its extensive remnants of pre-colonial Native American settlements.

Further investigations of archaeological sites on public lands should be encouraged, but should be coordinated in advance with the managing agency to avoid conflicts with other resource management activities. All archaeological activities should be overseen by recognized professional archaeologists using accepted field techniques.

Interpretation of historic resources: *The local historical societies will continue to be both the primary source of information for the public on the region’s historic resources, and the primary advocate for the protection of those resources.*

Local historical societies should evaluate opportunities for further research into the historical relationship between the adjacent communities and the river. This connection would also be an appropriate theme for the societies to emphasize in their public education efforts.

Wild and Scenic River Provisions

There are no additional requirements related to the management of historic resources as a result of Wild and Scenic River designation. National Park Service authority will be limited to that already established under the Historic Preservation Act.

Several sites in the area have been recognized for their historic significance.



Management of the Massachusetts Segment

Overview

The Upper Farmington River Management Plan focuses on the Connecticut portion of the upper Farmington River. This section, however, describes how implementing the plan for Wild and Scenic designation in Connecticut, could affect the Massachusetts section of the river. Its recommendations for managing this segment of the Farmington River recognize the segment's inherent resource worth, as well as the positive effect such management could have, downstream, on the river in Connecticut. See Figure 5: Farmington River Watershed and Upper Farmington Towns.

Effect of Designation in Connecticut

The National Park Service (NPS) will review any proposed water resource project on the Massachusetts segment or its tributaries that requires federal permits, licenses, or funding. Any project that would have an adverse effect on the Connecticut segment will, in accordance with the Wild and Scenic Rivers Act, be prohibited. Any project that would reduce either the quality or quantity of water flowing into the designated segment downstream would be of particular concern. Federal agencies that typically have a role in the funding or approval of such projects, notably the EPA, the U.S. Army Corps of Engineers, and the Federal Energy Regulatory Commission, will be apprised of the special status of the Connecticut segment and informed of the requirements of the Wild and Scenic Rivers Act. The NPS does not have regulatory authority over land use activities that are not water-related and do not require federal permits or other federal assistance.

Reconsideration of Wild and Scenic Designation

Should shoreland Massachusetts towns choose to seek Wild and Scenic designation, it may be sought without additional study. The May 1995 *Farmington Wild and Scenic River Study* explains that the Massachusetts segment was eligible for designation based on its free-flowing condition and its outstanding resource values, including recreation and wildlife, however, the segment was found not suitable due to lack of local support for designation and inadequate existing resource protection. Since that time the Massachusetts Rivers Protection Act (see next page) was enacted that provides a structure for riverfront protection. As a result, demonstration of local support and interest in the National Wild and Scenic designation framework is likely all that would be required to pursue designation. The NPS would be available to review and confirm these assumptions should any or all of the towns decide to seek designation.

While designating the entire Massachusetts segment Wild and Scenic might be preferred, a portion, for example, in Tolland and Sandisfield, could seek designation independently.

Designation could be obtained through Congressional action, or through a request from the Governor for administrative designation by the Secretary of the Interior (as authorized under Sec. 2(a)(ii) of the Wild and Scenic Rivers Act). Upon receipt of designation, the UFRMP shall be revised to include provisions for management of the Massachusetts segment, provisions comparable but not necessarily identical to those identified in the plan for the Connecticut segment.



River Management Issues

Management

Regardless of whether designation is sought and awarded, it is recommended that Massachusetts shoreland landowners, local governments, private organizations, and state agencies manage the Massachusetts segment so as to protect its inherent values and to prevent negative impact on the river downstream; several key actions and support activities outlined in this plan could be easily adapted for use in Massachusetts.

At the state level, there are several ways to help conserve the river. The 1996 Massachusetts Rivers Protection Act provides a framework of riverfront protection that satisfies a requirement of eligibility, no longer requiring towns to adopt local riverfront regulations. It creates a 200-foot riverfront area that extends on both sides of any river or stream (although in certain urban areas the riverfront area is 25 feet and pre-existing structures are exempt). For details see: <http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-rivers-protection-act-about.html>. The Massachusetts Department of Environmental Protection (DEP) is charged with enforcing environmental laws enacted to protect wetland and riverfront water quality and quantity. The Massachusetts DEP Division of Water Pollution Control should maintain its vigilance over water pollution in this segment of the river. The downstream Wild and Scenic designation should be noted by the Massachusetts DEP, as it regards water quality, and by the Department of Conservation and Recreation (DCR), relative to river basin planning. The Massachusetts Department of Environmental Protection (DEP) is charged with enforcing environmental laws enacted to protect wetland and riverfront water quality and quantity. The Massachusetts DEP Division of Water Pollution Control should maintain its vigilance over water pollution in this segment of the river. The

downstream Wild and Scenic designation should be noted by the Massachusetts DEP, as it regards water quality, and by the Department of Conservation and Recreation (DCR), relative to river basin planning.

Also, the Commonwealth has a major role in protecting the river's streambanks and watershed lands. The DCR manages two state forests that abut the segment as well as other forest lands that, while not adjacent to the river, provide critical protection to the watershed. The department should continue to manage these areas in ways that will both protect and enhance the river, its wildlife, recreation and scenic resources. The DCR should also continue to pursue opportunities to provide appropriate public access to the river for non-intensive recreational use. And, as authorized by the Massachusetts legislature in 1984, the DCR should continue to acquire key parcels along the river.

The DCR Lakes and Ponds Program provides technical assistance to communities and citizen groups, helps to monitor water quality at various public beaches, and provides educational materials about various lake issues. Intended to ensure, through a watershed approach and citizen education and involvement, a safe future for Massachusetts' waterbodies. The program should be maintained, and, if possible, enhanced.

Participation in the FRCC

Whether the Massachusetts segment is designated as a National Wild and Scenic River, the Massachusetts shoreland towns and/or the state are welcomed to join the Farmington River Coordinating Committee (FRCC) as non-voting members initially and, subsequently, with the unanimous approval of existing members, as voting members. Were the Massachusetts segment designated as a Wild and Scenic river, and regardless of whether they have been FRCC members, the State and the shoreland towns automatically will be granted voting membership.

Any project that would reduce either the quality or quantity of water flowing into the designated segment downstream would be of particular concern.

Lower Farmington River Management

Overview

The upper Farmington River must be viewed as part of a larger river system. Chapter Five addressed the headwaters area in Massachusetts. This chapter focuses on the downstream portion of the river that extends approximately 50 miles and includes seven communities – Burlington, Avon, Farmington, Simsbury, East Granby, Bloomfield, and Windsor – and identifies steps they and others could take to both protect the downstream portion of the river and support proposed measures for the upper Farmington area. *These are recommendations only. Their implementation is not required under the Upper Farmington River Management Plan.*

In 2011, the Lower Farmington River and Salmon Brook Wild and Scenic Study Committee recommended the streams for designation and, to that end, completed an advisory management plan. In 2013 Wild and Scenic bills were introduced

for Congressional action. Were the lower Farmington River and Salmon Brook awarded Wild and Scenic designation, the Town of Canton river segment will be administered as a part of the upper Farmington Wild and Scenic River by the FRCC. This 1.1-mile river segment, which reaches from the New Hartford/Canton town line to the confluence with the Nepaug River in Canton, is contiguous to the upper Farmington River Wild and Scenic area. (Once the lower Farmington and Salmon Brook Study concludes, Canton would no longer sit on the lower Wild and Scenic Advisory Committee.) Assuming Wild and Scenic designation is granted, there will be opportunities for the upper and lower river committees to work together to protect and enhance the river's outstanding resources. *See Figure 6: Potential Upper Farmington River Wild and Scenic Boundary Extension.*



Management Recommendations

Local Government Actions

As part of the Farmington River and Salmon Brook Wild and Scenic Study, the study committee developed a plan to protect and enhance the area's outstanding resources. A subsequent review of existing municipal plans and regulations concluded that they adequately provide a needed protection scheme and, therefore, no further regulatory actions are needed to meet the requirements of the Wild and Scenic Act. With that understanding, and despite how the Wild and Scenic designation application fares, the ten towns that endorsed the study committee's plan hope that it might help guide any future work of the Lower Farmington River and Salmon Brook Wild and Scenic Committee (FSWS). It is hoped that the management plan will be implemented regardless of the outcome of the designation effort.

Initiatives by Private Organizations

As discussed in the Land Management section of this plan, the Farmington River Watershed Association (FRWA) seeks to protect watershed lands by promoting voluntary land protection programs, adopting local shorelands protection ordinances, and acquiring environmentally sensitive lands. The FRWA identifies potential site-specific projects, as examples, producing a recreation management plan for Tariffville Gorge and developing a riverfront greenway in Simsbury. Successful, broadly-supported voluntary

land protection is important to the lower part of the watershed and local land trusts that dedicate themselves to river-related parcels are welcomed partners in these efforts.

The FRWA, the CT DEEP, and other interested groups should consider expanding FRWA's volunteer water quality monitoring program for the downstream segment. *See Water Quality Section for details.*

Upper and Lower River Committee Coordination

Were the lower Farmington River designated Wild and Scenic, it is believed that the Farmington River Coordinating Committee (FRCC) and the Lower Farmington River and Salmon Brook Wild and Scenic Committee (FSWS) would develop a long-term partnership that entails sharing resources and information, coordinating on some projects, etc. The Town of Hartland, the Farmington River Watershed Association (FRWA), and the CT DEEP, as members of both the FSWS and the FRCC, could potentially serve as liaisons between the two committees. If, however, the designation effort proves unsuccessful, lower river towns might consider joining the Farmington River Coordinating Committee (FRCC) formally, or informally, by way of exchanging information and cooperating on projects involving both sections of the river. (As discussed in the plan's Administrative Framework section, formal membership on the FRCC requires the unanimous consent of current members. A new member's voting status shall be determined by the Committee.)



UPPER FARMINGTON RIVER WILD AND SCENIC LEGISLATION

SEC. 3. DESIGNATION.

Section 3(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1274(a)) is amended by adding the following new paragraph at the end thereof:

`() FARMINGTON RIVER, CONNECTICUT- The 14-mile segment of the West Branch and mainstem extending from immediately below the Goodwin Dam and Hydroelectric Project in Hartland, Connecticut, to the downstream end of the New Hartford-Canton, Connecticut, town line (hereinafter in this paragraph referred to as the `segment`), as a recreational river, to be administered by the Secretary of the Interior through cooperative agreements between the Secretary of the Interior and the State of Connecticut and its relevant political subdivisions, namely the Towns of Colebrook, Hartland, Barkhamsted, New Hartford, and Canton and the Hartford Metropolitan District Commission, pursuant to section 10(e) of this Act. The segment shall be managed in accordance with the Upper Farmington River Management Plan, dated April 29, 1993, and such amendments thereto as the Secretary of the Interior determines are consistent with this Act. Such plan shall be deemed to satisfy the requirement for a comprehensive management plan pursuant to section 3(d) of this Act.'



Pat Keener at the Riverton Kiosk

OUTSTANDINGLY REMARKABLE VALUES (ORVs)

Recreation

Diversity of activities; intensity of use; uniformly high-quality experience for all users; proximity to major population centers:

- sport fisherman
- boaters (canoe and kayak)
- tubers
- extended season due to dam releases
- regional draw
- Satan's Kingdom
- Class III white water
- access to highly populated region
- most heavily stocked trout stream in state
- high-quality fly fishing, relatively high catch rate
- extended fishing season due to cold water releases

Fish

High-quality fish habitat; significance to both Atlantic salmon restoration and to prime trout stream:

- high-quality fish habitat (high water quality, gravelly bottom, cold water releases)
- classic habitat for salmonids
- critical component of salmon reintroduction
- Farmington (and tributaries) is largest of sixteen rivers in New England targeted for anadromous fish
- One of only four river systems projected to reach restoration potential in twenty-five years
- prime spawning grounds critical to success of restoration (salmon)
- all of Connecticut freshwater sport fish species
- one of few unpolluted prime trout streams in southern New England
- upper river portion most heavily stocked trout stream in Connecticut

Source: Adapted from Wild and Scenic River Study, Final Report, May 1995



Wildlife

Large quantity and diversity of wildlife; variety of habitats:

- provides habitat for federally endangered bald eagle*
- year-round population of eagles. first eagle chicks born in Connecticut in more than forty years
- avifauna extremely diverse (158 species observed)

*Bald eagle has been removed from endangered species list

Scenic

Topographical diversity key element contributing to character of area:

- river and adjacent lands retain natural character moderately altered by human activity
- Satan's Kingdom perhaps most dramatic scenic resource
- historic river communities add to scenic diversity
- natural segments of adjacent state forests and undeveloped land add to scenic diversity
- forested ridges along both sides of river form attractive corridor

Historic Resources

Historic structures and other artifacts that remain reflect river's central role in cultural heritage of Farmington Valley; nationally recognized sites linked to river:

- 19th-century structures (mills, hydro power industries in Riverton, Pleasant Valley, New Hartford)
- Chapin House (Pine Meadow)
- CCC shelter (American Legion Forest)
- Old Riverton Inn (Riverton)
- clusters of 19th-century buildings in state-and locally-designated historic districts (New Hartford, Pine Meadow)
- Hitchcock Chair Factory (Riverton)
- Union Church (Riverton)
- pre-historic and pre-Colonial archaeological sites
- national historic site (archaeological remnants at Beaver Meadow, Peoples State Forest)
- archaeological sites that were occupied year-round, possibly major trade route
- Farmington Valley as distinct system from other river valleys



LOCAL RIVER PROTECTION OVERLAY DISTRICTS

The text of the Barkhamsted, Canton, Hartland and New Hartland Overlay Districts can be viewed on the FRCC website via this link:

<http://farmingtonriver.org/OverlayProtectionDistricts/tabid/59/Default.aspx>

SUMMARY OF FEDERAL AND STATE ENVIRONMENTAL STATUTES PROTECTIVE OF THE UPPER FARMINGTON RIVER

There are many federal and state environmental statutes that offer some form of protection to the upper Farmington River. The most relevant of these are reviewed here.

At the Federal Level

Although enacted at the federal level by the U.S. Congress, many sections of the statutes described below are administered at the State and local levels.

The federal **Clean Water Act (CWA)** was created to restore and maintain the chemical, physical and biological integrity of the nation's surface waters. It sets forth both regulatory and non-regulatory means of addressing point and nonpoint sources of water pollution. Among other things, the CWA:

- requires states to adopt surface **Water Quality Standards** to manage waterbodies according to defined goals based on designated uses and criteria;
- requires states to adopt an **anti-degradation policy** to protect existing uses, and prohibit the lowering of high quality surface waters, except under certain conditions, following specified procedures;
- establishes the **National Pollution Discharge Elimination System (NPDES)**, a regulatory program, which requires municipal, industrial and other facility "point source" dischargers to

obtain a discharge permit from the appropriate authority. (In Connecticut, this program is administered by CT DEEP.) Stormwater point sources are also regulated under NPDES, including: discharges from municipal storm sewer systems in urbanized areas above a certain census size; stormwater associated with many kinds of industrial activities; and runoff from construction sites disturbing more than one acre. The Town of Canton falls under the CT DEEP's NPDES "**General Permit for Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems**" (MS4 GP). The CT DEEP has established general permits for stormwater discharges associated with two types of activities: (1) construction projects that involve the disturbance of greater than one acre of land; and (2) industrial facilities, as defined by the Standard Industrial Classification (SIC) Codes. Applicants are covered by these general permits if they register with the CT DEEP, but they must be able to demonstrate that they are in compliance with the general permit requirements. The permits require, among other things, that the permittee



develop a pollution prevention plan and monitor the discharge. The CT DEEP cannot deny a registration; however, the agency can enforce the permit requirements if the permittee is found to be in violation.

- requires the federal government to obtain a **Section 401 Water Quality Certification** from the state in which they are issuing a license or permit which may result in a discharge to waters of the United States, to ensure that the discharge is consistent with the CWA as well as any state ambient water quality standards.
- requires any project that would discharge dredged or fill material into “waters of the United States” to receive a **Section 404 permit** from the U.S. Army Corps of Engineers;
- provides a non-regulatory approach to address nonpoint sources of surface water pollution. Funding is available to states and other entities through the federal CWA **319 grant program** for the development and implementation of nonpoint source management programs for the reduction of non-point source pollution. Over the years, CT DEEP has used the funds in its 319 grant program to support many Agency and non-Agency projects focused on addressing nonpoint

source issues throughout the state. Among other things, 319 funds were used to assist another program within the CT DEEP to develop the “**2004 Connecticut Stormwater Quality Manual.**” This manual is intended as a planning tool and design guidance document to be used by the regulated and regulatory communities involved in stormwater quality management within Connecticut.

In addition to the summaries above, the CWA includes other elements aimed at protecting and improving surface water quality. Recent court decisions appear to be expanding the interpretation and application of the CWA.

The **National Flood Insurance Act** established the National Flood Insurance Program (NFIP) which enables property owners in participating communities to purchase federally subsidized insurance to protect against flood losses. NFIP is administered by the Federal Emergency Management Agency (FEMA), under the Department of Homeland Security. CT DEEP is designated as the State NFIP Coordinating Agency.

In order to qualify for this program, a community must enter into an agreement with the federal government, and adopt and enforce a floodplain management

There are many federal and state environmental statutes that offer some form of protection to the upper Farmington River.



ordinance to reduce future flood risks to new construction in areas of highest risk, called Special Flood Hazard Areas (i.e., 100-year floodplain). While the primary goal of NFIP is to protect against flood losses and prevent new development from increasing flood threat, it does not necessarily discourage development from taking place within floodplains. However, NFIP does encourage communities to engage in better floodplain management, and also allows municipalities to adopt more restrictive ordinances than the minimum regulatory requirements of the federal government. States can require more stringent measures than those of NFIP. The State of Connecticut recently adopted new requirements relative to “compensatory flood storage and equal conveyance” that establishes a regulatory standard more protective of floodplains.

The **Wild and Scenic Rivers Act (WSRA)** provides the strongest protection available for free flowing rivers or river segments. The WSRA protects designated rivers, or those under study, from any federally assisted or licensed dam, diversion, channelization, hydroelectric facility or other water resource development project that would have a direct and adverse

effect on the river’s free flowing condition or its Outstandingly Remarkable Values (described as Outstanding Resources or as ORVs in the Management Plan).

The National Environmental Policy Act (NEPA) requires federal agencies to incorporate environmental considerations into planning and decision-making with regard to major federal actions significantly affecting the environment. The Council on Environmental Quality was established to oversee NEPA. However, each federal agency undertaking an action is responsible for its own compliance with NEPA.

There are three levels of analysis under NEPA: categorical exclusion determination; preparation of an environmental assessment/finding of no significant impact (EA/FONSI); and preparation of an environmental impact statement (EIS). An EIS is prepared in cases where it has been determined that environmental impacts of the proposed federal action may be significant, or a proposed project is particularly controversial. Preparation of an EA or EIS includes: consideration of alternative actions, evaluation of environmental impacts, and a public participation process. While the goal of NEPA is to undertake federal actions in a



more environmentally responsible manner, the process does not necessarily guarantee that the least environmentally damaging alternative will be selected.

Section 10 of the federal **Rivers and Harbors Act** requires any structures or work in, over or under “navigable waters of the United States” to receive a permit from the U.S. Army Corps of Engineers (US ACOE). In general, “navigable waters of the United States” include waters affected by the ebb and flow of the tide, and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Projects are evaluated not only for possible impacts to navigation but to aquatic resources, as well. At the very least, the River and Harbors Act applies to the section of the Farmington River below the Rainbow Dam. It may also apply to sections of the river above the dam, depending on interpretation of the Act, and the history and use of the river.

At the State Level

In addition to federal statutes described in the foregoing section, the Connecticut General Assembly has enacted statutes, described below, that are administered at the state and/or local level. The state has comprehensive enabling legislation governing the use of land, and it grants authority to towns to adopt regulations that effectively implement legislation at the local level. Towns therefore have the power to choose regulatory tools to gain greater resource protection and have the flexibility to do so.

Recommendations are presented within the Management Plan for the state to potentially amend statutes to support proposed resource protection actions. As of the time of this update, FRCC has not regularly taken an active role in pursuing these changes; however, there may be opportunities for FRCC to comment when statutes are being revised. For example, just

recently, the National Park Service provided comments to CT DEEP regarding the Draft General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. While the original Management Plan directed the DEEP to take certain actions, it is recognized here that the FRCC and CT DEEP must work together to protect the Outstandingly Remarkable Values (ORVs) and identify projects that may have some potential impacts to the ORVs.

The **Inland Wetland and Watercourses Act** (CGS Sec. 22a-36 to 22a-45)¹⁵ requires the regulation of activities affecting the inland wetlands and watercourses in Connecticut which involve the removal or deposition of material, or any obstruction, construction, alteration or pollution of these natural resources. The CT DEEP’s role in implementing this Act is to regulate state activities affecting inland wetlands and watercourses, and to provide technical assistance to municipal inland wetland commissions. Most wetland regulation throughout the state occurs at the local level through municipal inland wetland commissions.

Water Quality Classifications are assigned to surface and groundwater in all areas of the state. These assignments are based on either the use or potential use of such waters as well as on their known or presumed quality. The upper Farmington River in Connecticut is currently designated as Class A (suitable for drinking water supply) from the Goodwin Dam downstream to the confluence with the Still River, and as Class B (suitable for fishing and swimming) for the remainder of the segment. For Class A waters, the CT DEEP’s existing anti-degradation policy prohibits point source discharges “unless a temporary discharge is necessary to remediate an existing surface or groundwater pollution problem” or “the discharge consists of clean water, treated backwash waters from public or private drinking water treatment



15 CGS = Connecticut General Statutes

systems or dredging and dredged material dewatering operations does not result in violation of Class A standards.” The policy requires that Class B waters be maintained at their existing high quality unless a lowering of water quality “is necessary to accommodate overriding economic and social development which the Commission [of the DEEP] has determined is clearly in the public interest, and...existing uses will be protected fully.”

Inland Surface Water Classifications Descriptions

Class AA

Designated uses: existing or proposed drinking water supply, fish and wildlife habitat, recreational use (may be restricted), agricultural and industrial supply.

Discharge restricted to: discharges from public or private drinking water treatment systems, dredging and dewatering, emergency and clean water discharges.

Class A

Designated uses: potential drinking water supply; fish and wildlife habitat; recreational use; agricultural and industrial supply and other legitimate uses including navigation.

Discharge restricted to: same as allowed in AA.

Class B

Designated uses: recreational use: fish and wildlife habitat; agricultural and industrial supply and other legitimate uses including navigation.

Discharge restricted to: same as allowed in A and cooling waters, discharges from industrial and municipal wastewater treatment facilities (providing Best Available Treatment and Best Management Practices are applied), and other discharges subject to the provisions of section 22a-430 CGS.

The Water Quality Standards and Criteria sets overall policy for management of surface and groundwater. The Clean Water Act requires states to adopt surface water quality standards, and

the state took an additional step by setting groundwater standards.

The Water Diversion Policy Act (CGS Sec. 22a-365 to 22a-370) requires the regulation of activities which cause, allow or result in the withdrawal from, or the alteration, modification or diminution of the instantaneous flow of the waters of the state. The purpose of the Act is to help ensure the balanced use of water resources for human and ecological needs, especially with regard to long-range planning and allocation. There are several different trigger points which would require obtaining a diversion permit, including any new diversions of greater than 50,000 gallons per day. Diversions which existed on or prior to July 1, 1982 are exempt from permitting requirements if these activities were formally registered with CT DEP by July 1, 1983. However, those who failed to register prior to this date, or have modified registered diversions, are subject to permitting requirements. In addition to evaluating the factors listed above, CT DEEP considers whether the applicant has adequately addressed the following: thorough exploration of alternatives, including conservation; implementation of conservation measures; and initiation of public information programs on conservation techniques. In general, the Department’s review emphasizes the following sequence: (1) avoid adverse effects of any diversion; (2) minimize any unavoidable effects; and (3) pursue mitigation for unavoidable effects.

If a withdrawal from the Farmington River’s West Branch is pursued, the applicant will need to prepare and submit a plan that demonstrates the extent to which the river’s various resource and use requirements will be maintained, as described above and in the “Summary: Farmington River Instream Flow Study,” found on the FRCC website.

The Water Pollution Control Act (CGS Sec. 22a-14 to 22a-527) has many components, and offers significant water quality protection from specific sources



of pollution. Many sections of this Act deal with sewage and associated treatment facilities. Among other things, it addresses the planning, building, operation and regulation of municipal wastewater treatment facilities and associated infrastructure. The Act also creates the Clean Water Fund which provides federal and state monies for loans and grants to municipalities for the planning, construction and upgrade of these facilities and systems. These activities and funding sources are overseen by CT DEEP. In addition, the Act establishes authority to regulate subsurface sewage treatment and disposal systems, more commonly known as “septic systems”. As a result CT DEEP regulates conventional systems with design flows greater than 5,000 gallons per day, community systems that serve more than one household, and alternative treatment systems. Meanwhile, the CT Department of Public Health (CT DPH) regulates conventional systems with flows less than 5,000 gallons per day, under the Public Health Code. CT DPH has delegated conventional systems with flows less than 2,000 gallons per day to local health departments. The Public Health Code requires minimum separating distances between these systems and adjacent land

items such as wells and watercourses.

The **Dam Safety** statutes (CGS Sec. 22a-401 to 22a-411) gives CT DEEP the authority to regulate the construction, alteration, repair or removal of dams, dikes, reservoirs and similar structures, which by, breaking away or otherwise, may endanger life or property. When making a decision regarding a permit, CT DEEP must consider, among other things, impacts to inland wetlands and watercourses.

The Act also requires that existing dams, dikes and similar structures be registered and periodically inspected to assure that their continued operation and use does not constitute a hazard to life, health or property. The CT DEEP commissioner may order a private dam owner to remove or fix a dam she determines is unsafe, within time limits she prescribes. The commissioner may repair a dam and bill the owner for the department’s costs if (1) the owner does not comply with DEEP’s repair order within the specified time, and (2) the commissioner finds the situation presents a clear and present danger to public safety (CGS § 22a-402). However, CT DEEP authority does not extend to dams licensed by the Federal Energy Regulatory Commission.

The **Aquifer Protection** statutes (CGS Sec. 22a-354a to 22a-354bb) protect major



public water supply wells (wells serving 1,000 or more persons) from contamination by regulating land uses in mapped aquifer protection areas. Implementation of the Aquifer Protection Act is delegated to the municipalities and carried out through municipal regulations. The regulations prohibit development of new high-risk land use activities in aquifer protection areas, and require existing high-risk activities in these areas to register and follow best management practices. CT DEEP provides oversight, training, and technical assistance to municipal aquifer protection agencies. Eighty Connecticut towns have well fields in aquifers that serve more than 1,000 people. The CT DEEP mapped these aquifers in what it calls “Level B” mapping and requires the water utilities that pump from the aquifers to complete and provide more accurate aquifer maps. These refined maps, produced through “Level A” mapping standards set by the CT DEEP, must be approved by the DEEP. The final maps define the boundaries of the Aquifer Protection Areas (APAs). Towns with APAs must designate an Aquifer Protection Agency. The towns must inventory land use in these areas and adopt and implement land use regulations in accordance with State of

Connecticut statutes in order to protect the aquifers from contamination. “The regulations restrict development of certain new land use activities that use, store, handle or dispose of hazardous materials and require existing regulated land uses to register and follow best management practices.” The towns of Canton and New Hartford have adopted final Aquifer Protection Areas. See Connecticut’s Aquifer Protection Area Program Municipal Manual 2011 for additional details found at: http://www.ct.gov/deep/cwp/view.asp?a=2685&q=322252&deepNav_GID=1654.

The Flood Management statutes (CGS Sec. 25-68b to 25-68n) cover a number of flood-related activities, including the requirement that all state actions in or affecting floodplains, or impacting natural or man-made storm drainage facilities, receive CT DEEP approval in the form of a “Flood Management Certification” permit, or an exemption from such approval. In making a decision to approve or reject a state agency’s flood management certification, CT DEEP must consider whether the proposed activity is consistent with state standards and criteria for preventing flood hazards to human life, health or property and with the



provisions of the National Flood Insurance Program (NFIP) and municipal floodplain regulations; does not adversely affect fish populations or fish passage; and does not promote intensive use and development of flood prone areas. For instance, Construction Over or Adjacent to Streams (C.G.S. 13a-94), requires the Connecticut Department of Transportation to refer plans for state highways and bridges near streams to the CT DEEP.

Stream Channel Encroachment Lines statutes (CGS Sec. 22a-342 to 22a-349a) require CT DEEP to regulate the placement of encroachments and obstructions riverward of stream channel encroachment lines, to lessen the hazards to life and property due to flooding. Stream Channel Encroachment Lines (SCEL) have been established for about 270 linear miles of riverine floodplain throughout the state, and are shown on SCEL maps which are on file in the town clerk's office in the affected town. In making a decision on a SCEL permit application, CT DEEP must consider the impact of proposed activities on the floodplain environment, including wildlife and fisheries habitats, and on flooding and the flood hazards to people and property posed by such activity. The SCEL statutes pre-dated many other federal and state flood and floodplain management programs that were subsequently established. A 2010 report, which CT DEEP was required to submit to the Connecticut General Assembly, reviewed and evaluated the Agency's permit programs. Concluding that more recent federal and state programs and SCEL statutes were duplicative and the jurisdictional boundaries between SCEL and federal FEMA flood zone unclear. As a result the SCEL statutes have been repealed.

The **Structures, Dredging and Fill Act** (CGS Sec. 22a-359 to 22a-363f) and **Tidal Wetlands Act** (CGS Sec. 22a-28 to 22a-35) require CT DEEP to regulate all activities conducted in tidal wetlands and in tidal, coastal or navigable waters in Connecticut. This is the basis of Connecticut's Coastal Permit Program. The

major objectives of the permit program are to avoid or minimize navigational conflicts, encroachments into the state's public trust area, and adverse impacts on coastal resources and uses, consistent with the Connecticut Coastal Management Act. Because the Connecticut River is tidally influenced as far north as Enfield and Suffield, the municipalities along the river corridor are considered "coastal towns", including Windsor. As a result, Coastal Permits apply to the section of the Farmington River below the Rainbow Dam which is tidally influenced by the Connecticut River.

The **Soil Erosion and Sediment Control Act** (CGS Sec. 22a-325 to 22a-329) serves to protect rivers from sedimentation impacts associated with construction and new developments. The Act requires municipalities to adopt regulations that: provide for proper soil and erosion control; ensure that a soil and erosion sediment plan be submitted with applications for development for any project cumulatively disturbing more than ½ acre of soil; and guarantee that these plans be certified by the municipality or Soil and Water Conservation District for compliance with the regulations. Intended to prevent soil from moving off-site, the Act can be very effective when vigorously implemented by towns. It also encourages towns to regulate stormwater runoff. To assist municipalities with these requirements, the Act directs the Connecticut Council on Soil and Water Conservation to develop guidelines for soil and sediment control for land that is being developed. These guidelines are to outline methods and techniques for minimizing erosion and sedimentation, based on the best available technology. In addition, the guidelines are to include model regulations that can be used by municipalities to comply with the Act. CT DEEP and the individual Soil and Water Conservation Districts are required to make these guidelines available to the public. The most recent version of these guidelines is the "2002 Connecticut Guidelines for Soil



Erosion and Sediment Control”.

In 1985, the Connecticut General Assembly established a long-range, statewide water supply planning process: the **Connecticut Plan for Public Water Supply Coordination**, authorized under C.G.S. 25-33 *et seq.* The statute divided the state into seven planning regions, and established a “Water Utility Coordinating Committee” (WUCC) for each region. Each water utility is required to prepare a 50-year water supply plan (C.G.S. 25-32d); the WUCC for each region is then responsible for overseeing the preparation of a Coordinated Water System Plan, which integrates the individual utility plans into a comprehensive regional plan. Both the individual utility plans and each Coordinated Water System Plan must receive approval from the Department of Public Health (DPH), with concurrence from the CT DEEP. Potential needs for water supply withdrawals from the West Branch will be determined through the state’s water supply planning process.

The CT DEEP and Department of Public Health (DPH) maintain their authority to implement the state’s water supply emergency statutes if conditions arise that necessitate such action under the **Water Supply Emergency** (22a-378) and **Public Drinking Water Supply Emergency** (25-32b) statutes. Under the first statute, if a water supply emergency is declared by the governor or otherwise according to law, the Commissioner of DEEP is empowered to: (1) suspend existing diversion authorizations for up to sixty days; and

(2) authorize diversions without the usual permitting requirements for up to ninety days. The second statute authorizes the Commissioner of DOHS, in consultation with DEEP and the Public Utilities Control Authority, to declare a public drinking water supply emergency. Under those circumstances, the Commissioner of DPH may authorize the sale, supply, or taking of any waters for up to 180 days. The definition of a “public drinking water supply emergency” in the statutes includes the contamination of water, the failure of a water supply system, or the shortage of water. In any future implementation of these authorities that would affect the segment, the state should notify the FRCC.

The purpose of the **Drought Preparedness and Response Plan** is to preserve essential water uses during a drought, to recommend a framework for an integrated approach to the assessment of drought conditions, and to set forth drought action levels and the appropriate responses that should occur as drought conditions worsen.

The **Model Water Use Restriction Ordinance** is for use in developing ordinances to restrict the use of water supplied by a water company. It is for communities wishing to establish enforceable limitations on the use of water during emergencies and temporary periods of high water demand. Proposed restrictions included in the ordinance should be consistent with the schedule of drought response measures indicated in the individual water supply plans of the water

The FRCC should work with the OPM to achieve consistency between these statewide plans and the river management plan.



company and the Connecticut Drought Preparedness and Response Plan.

The **Public Act 490** passed the legislature in 1963 (C.G.S. 12-107a-e) and allows a farm, forest, or open space land to be assessed, for purposes of local property taxation, at its use value rather than its fair market or highest and best use value (as determined by the property's most recent "fair market value" revaluation). Without the lower use value assessment, many landowners, unable to pay the higher taxes assessed on their property, would have to sell the land; thus, the act encourages the preservation of farm, forest, and open space land.

In addition to the state environmental laws described above, the Connecticut General Statutes also designate to municipalities certain powers for land use planning, zoning and subdivision regulation. Since most land use decisions are made at the local level, these municipal

powers have important environmental implications.

The **State Plan of Conservation and Development** (C.G.S. 16a-24 through 16a-33), serves as a statement of the development, resource management and public investment policies for the state. The Office of Policy and Management (OPM) is required to prepare a state plan of conservation and development on a recurring five-year cycle. The significance of the upper Farmington River is recognized in the current Plan of Conservation and Development, which identifies the segment as a preservation area. The Long Range Plan for Management of Water Resources has not yet been prepared; when it is written, it too should recognize the river's outstanding features and special status. The FRCC should work with the OPM to achieve consistency between these statewide plans and the river management plan.

— APPENDIX E —

FRCC BYLAWS

To read the bylaws for the FRCC, visit:

<http://farmingtonriver.org/AboutFRCC/tabid/54/Default.aspx>



FRCC MEMORANDUM OF UNDERSTANDING (MOU)

The following is a scan of the original MOU.

Memorandum of Understanding
for Protection of the Federal Wild and Scenic Segment
of the West Branch of the Farmington River
By and Among the Towns of Hartland, Colebrook,
Barkhamsted, New Hartford and Canton, Connecticut,
the State of Connecticut, the Metropolitan District Commission,
the Farmington River Watershed Association, and the National Park Service

WITNESSETH:

WHEREAS, the Farmington River's unique attributes and vital natural resources are key components in defining the community character of life in the Towns of Colebrook, Hartland, Barkhamsted, New Hartford and Canton, Connecticut.

WHEREAS, the Farmington River is a unique natural resource of value to all residents of the State of Connecticut.

WHEREAS, the *Upper Farmington River Management Plan* (the Plan) was adopted by the Farmington River Study Committee on April 29, 1993, relying on the use of local governments and local or state regulations and voluntary private landowner actions and voluntary river protection groups to meet the objectives of the Plan as follows:

- a. Conserve and enhance important land-based natural and cultural resources, including wildlife habitat, forests, diverse landscapes and the scenic and historic character of the Farmington Valley,
- b. Encourage effective management of river-related growth that will protect the river's special qualities and will emphasize existing local control and the rights of private property owners,
- c. Balance the legitimate needs on the river for water supply, waste assimilation, energy production, and commercial and industrial uses, while maintaining stream flow and water quality necessary to sustain fisheries, recreation and scenic qualities at levels sufficient for wild and scenic designation,
- d. Manage river recreation to minimize resource degradation and impacts on private and public landowners, while providing for appropriate recreational use and public access.

WHEREAS, the *Farmington River Coordinating Committee* (the Committee) is an integral part of the Plan and is comprised of one representative of the following:

The Town of Hartland,
The Town of Colebrook,
The Town of Barkhamsted,
The Town of New Hartford,
The Town of Canton,
The State of Connecticut
The Metropolitan District Commission
The Farmington River Watershed Association
The National Park Service

which has advisory powers to monitor this agreement, and shall periodically report on compliance to all participating parties.



WHEREAS, the 14 mile segment of the West Branch of the Farmington River, from the Hogback Dam to the downstream border of the towns of Canton and New Hartford, was designated as a national Wild and Scenic River on August 26, 1994 under P.L. 103-313.

Now, THEREFORE, BE IT RESOLVED the towns of Colebrook, Hartland, Barkhamsted, New Hartford and Canton, Connecticut, the State of Connecticut, Metropolitan District Commission, the Farmington River Watershed Association and the National Park Service agree to participate in this memorandum of understanding for the long term management of the designated section of the West Branch of the Farmington River. The specific roles are described in the Plan and summarized as follows:

Section 1. Role of the Communities

The Towns of Colebrook, Hartland, Barkhamsted, New Hartford and Canton, Connecticut shall have the following responsibilities:

- a. To enforce all applicable zoning and land-use regulations to protect the Farmington River.
- b. Give consideration to the Plan as referenced in the Wild and Scenic Rivers Act in any plan of development, and planning and zoning regulations and decisions.

Section 2. Role of the State of Connecticut

The State of Connecticut shall cooperate with all federal, state and local agencies, private non-profit organizations and public utilities in implementing management plans developed in accordance with the Wild and Scenic Rivers Act. Further, the Commissioner of Environmental Protection shall notify the joint standing committee of the General Assembly having cognizance of matters relating to the environment regarding any statutory changes necessary to implement the preservation and conservation of the river segment in accordance with the Wild and Scenic Rivers Act.

Section 3. Role of the Metropolitan District Commission

The Metropolitan District Commission shall have the following responsibilities:

- a. To recognize and balance the legitimate demands on the river for water supply, waste assimilation, energy production and commercial and industrial uses while maintaining stream flow and water quality necessary to sustain fisheries, recreation and scenic qualities.
- b. To continue with its emphasis on watershed protection.
- c. In accordance with the State's water supply planning process, evaluate potential needs for water supply withdrawals from the West Branch.
- d. To manage flows from the West Branch reservoirs in accordance with existing commitments.
- e. To consider the impact on water quality of any changes in flow management commitments.
- f. To work with the Department of Environmental Protection and riverfront towns in the management of recreation on their respective lands.
- g. To work with the Department of Environmental Protection and the U.S. Fish and Wildlife Service to reestablish breeding pairs of bald eagles in the upper Farmington River watershed.
- h. To maintain the high water quality, ecological integrity and scenic character of the wild and scenic segment, and the upper Farmington River valley, through sensitive management of its shore lands and upland areas without unduly restricting other uses of those lands.
- i. Evaluate opportunities to provide additional public access of the river on Metropolitan District Commission lands, if such additional access is needed and consistent with the purposes for



which those lands are dedicated.

Section 4. Role of the Farmington River Watershed Association

The role of the Farmington River Watershed Association shall be to:

- a. Advocate for enhancement of quality and quantity of Farmington River water and protection of watershed land resources.
- b. Educate users about the river and the potential environmental and social effects of various river related activities.
- c. Participate in efforts to solve conflicts, or balance competing use issues.
- d. Assist in cooperative projects of river protection and stewardship.
- e. Serve as a resource and liaison to individuals or organizations which desire to participate in the protection of the river.
- f. Assist individuals and groups with voluntary land conservation actions.

Section 5. Role of the National Park Service

The National Park Service shall serve as the key federal representative in the implementation of the Plan. In addition to participation as a voting member of the Committee, the agency's principal role shall be to represent the Secretary of the Interior in reviewing federal projects as required by Sec. 7(a) of the Wild and Scenic Rivers Act (P.L. 90-542, as amended). As described in the Plan, such review will be conducted in direct consultation with the Committee, Connecticut Department of Environmental Protection, U.S. Environmental Protection Agency, and the Army Corps of Engineers, depending on the type of project involved.

As required in the Designation legislation and Plan, the National Park Service shall also offer to provide technical assistance, staff support, and funding to the Committee and its members to aid in the implementation of the Plan. Any such National Park Service assistance shall be coordinated with the Committee, and will be subject to Congressional appropriations. The National Park Service will seek funds for such assistance in the following ways:

- a. The National Park Service will pursue federal appropriations to help fund the Committee's activities and operation, and to cover the cost of NPS staff involvement on the Committee, through the agency's annual budget request to Congress. In accordance with the Plan, the need for direct federal funding for Committee operations will be reevaluated at the end of the 3-5 year start-up period for the Committee, dating from the Committee's first meeting in September 1995.
- b. To ensure adequate long-term support for implementation of the Plan while avoiding an increased federal presence in the upper Farmington River Valley, the National Park Service will assist the Committee in identifying alternative sources of funding for its operations and activities.



Section 6. Effective Date/Authorization

The memorandum will become effective when it is signed by all participating parties.

William L. Abode
First Selectman, The Town of Hartland

Date: 8/13/97

George M. Wilton
First Selectman, The Town of Colebrook

Date: 6-16-97

Michael P. Fox
First Selectman, The Town of Barkhamsted

Date: 8/7/97

Ben H. Muench
First Selectman, The Town of New Hartford

Date: 7-14-97

James C. Casper
First Selectman, The Town of Canton

Date: 6/12/97

Paul L. Hill
Commissioner, Department of Environmental Protection
The State of Connecticut

Date: 6/6/97

William H. ...
Chairman, Metropolitan District Commission

Date: ~~2/2~~ JUNE 2, 1997

D. P. S. ...
Chairman, Farmington River Watershed Association

Date: 6/5/97

...
Regional Director, National Park Service
Northeast Region

Date: 9/30/97



FRCC LIST OF MAJOR ACCOMPLISHMENTS

In 1994, the United States Congress designated 14 miles of the upper Farmington River (from Goodwin (Hogsback) Dam in Hartland to the Canton-New Hartford line) as part of the National Wild and Scenic Rivers system. The Farmington River's outstandingly remarkable historic, fisheries, wildlife, and recreational characteristics led to its becoming Connecticut's first National "Wild & Scenic" river. Congress established the Farmington River Coordinating Committee (FRCC) to implement the Upper Farmington River Management Plan and promote the long-term protection of the upper Farmington River. The Committee comprises representatives from the towns of Barkhamsted, Canton, Colebrook, Hartland, and New Hartford, the Farmington River Watershed Association, the Metropolitan District Commission, the Connecticut Department of Energy & Environmental Protection, and the National Park Service. In 2004, the FRCC added the Farmington River Anglers Association as a new member.



The Farmington River's outstandingly remarkable historic, fisheries, wildlife, and recreational characteristics led to its becoming Connecticut's first National "Wild & Scenic" river.

Operations - Administration

- ✓ Developed and signed **Memorandum of Understanding** to establish roles and responsibilities for FRCC members.
- ✓ Developed FRCC **organizational by-laws** based on guidance from the Upper Farmington River Management Plan.
- ✓ Established an FRCC **headquarters** located at the historic *Squire's Tavern* on East River Road, Pleasant Valley, CT.
- ✓ Established a **Grants Program** to fund local projects that enhance protection of the W&S Farmington River. The FRCC has provided funding for projects including:
 - CT Department of Energy and Environmental Protection /Intern for Tree Identification Signs (2012)
 - Barkhamsted Historical Society for Interpretive Signs for the Historic Lighthouse Site (2011)
 - Canton Land Trust for Watershed Trail Signs (2011)
 - Farmington River Anglers Association for a Trout in the Classroom Project in Avon (2010)
 - Barkhamsted Historical Society for Continued Archaeological Study of the Richard Smith Site (2010)
 - Colebrook Land Conservancy for Preparation of a Management Plan for the Sandy Brook Natural Area Preserve (2010)
 - Barkhamsted for Engineering and Surveying for a Detention Basin Retrofit and Washout Restoration Project (2010)
 - Town of Hartland and Hartland Land Trust for a Hartland Build-out Analysis (2010)
 - Town of Barkhamsted for Renovations to the Riverton Bridge (2009)
 - Town of Hartland for Wetlands Training for Municipal Officials (2009)
 - Barkhamsted Historical Society for Continued Archaeological Study of the Richard Smith Site (2008)
 - Roaring Brook Nature Center in Canton for its "Keeping the Water Clean" Program at Canton Intermediate School (2008)

- Farmington River Anglers Association for Revising and Publishing its Guide to Fishing the Farmington River (2008)
- Camp Jewell in Colebrook for Watershed Education in the Afterschool Program (2008)
- Barkhamsted Historical Society for the Richard Smith Site Archaeological Study (2007)
- Farmington Valley Chapter Trout Unlimited for a Trout in the Classroom Project at the Hunter Montessori School in New Hartford (2007)
- Farmington River Anglers Association for a Trout in the Classroom Project at Colebrook Consolidated School (2007)
- Aton Forest in Colebrook for Land Preservation Transaction Costs (2006)
- Hartland Land Trust Start Up Funding (2006)
- Town of Barkhamsted for a Riverton Village Historic District Study (2006)
- Town of New Hartford for Creating a Riverwalk Trail (2005)
- Town of Barkhamsted Conservation Commission for Horizonline Mapping Training (2005)
- Town of New Hartford for Vernal Pool Identification (2005)
- Farmington River Anglers Association for Fish Habitat Enhancement. (2005)
- Colebrook Land Conservancy for associated costs in protecting 100 acres in the Sandy Brook watershed. (2004)
- Town of Barkhamsted Conservation Commission for costs associated with a public information meeting. (2004)
- New Hartford Land Trust for construction of the Riverwalk project. (2004)
- Storm drain markers for Miles Groth's Eagle Scout badge project in Barkhamsted. (2003)



- Farmington River Anglers Association's support to the Connecticut River Salmon Association's Classroom Project. (2003)
- Town of New Hartford Open Space brochure (2002, 2003)
- Winchester Land Trust Membership Drive (2002)
- Litchfield County Conservation District – Stormwater Management Awareness Program for Businesses (2001).
- Barkhamsted School's Farmington River Celebration (2001).
- Natural resource inventories for the towns of New Hartford and Barkhamsted (1999-2000).
- River bank enhancement projects in towns of Barkhamsted and New Hartford (1999-2000).
- Document research on the Richard Smith Historic Site (located on Sandy Brook, a tributary of the upper Farmington River)(1999).
- Barkhamsted Land Trust start-up costs (2000).
- The Community Watershed Initiative, a joint project of three watershed associations to develop a needs assessment of local land-use boards and their applicants.
- A University of Connecticut study of the transferability of trout habitat suitability criteria (1998).

- ✓ Periodically **reviewed and updated the Upper Farmington River Management Plan** and accomplishments and improved organizational structure and function.
- ✓ Met regularly with the other national **Partnership Rivers** to discuss strategy and tactics for successful river management.
- ✓ Hired **interns** to assist on several on-going projects including invasive plant management, communications with the public, and improvements to the landowner database.
- ✓ Participated with *American Rivers* and the *National Park Service* in the study – **Use and Economic Importance of the West Branch of the Farmington River**.
- ✓ Created an **Annual Report** each year to report to members and others on the accomplishments of the FRCC and its partners.

Education and Outreach

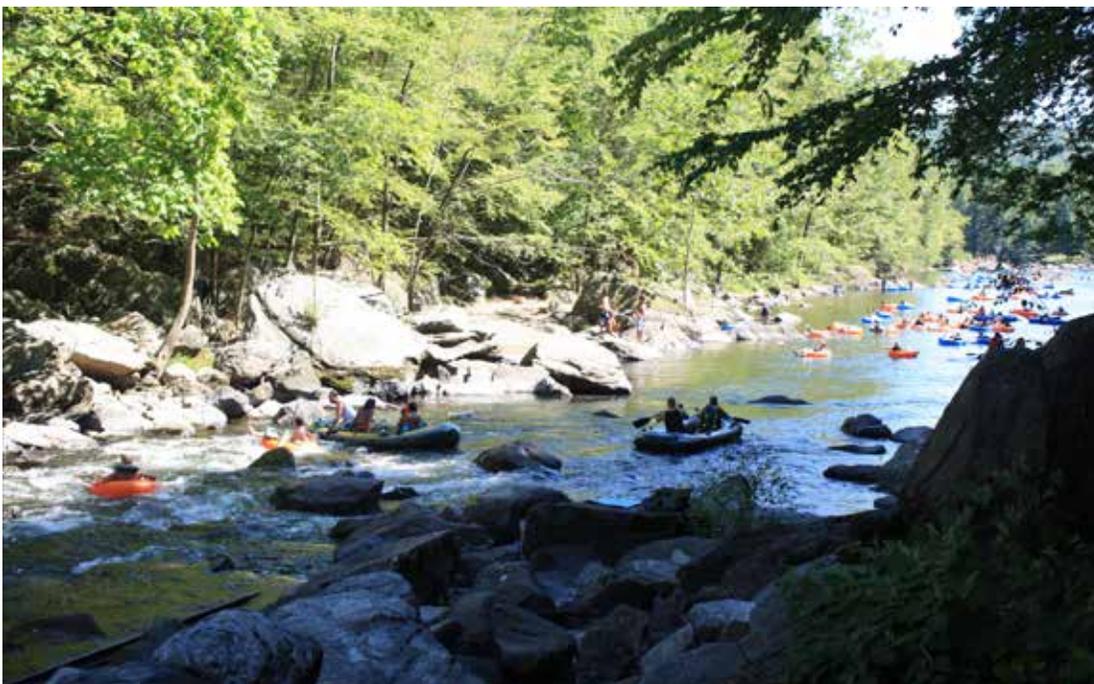
- ✓ Developed and printed **brochures** – “Wild & Scenic” Farmington River and “River Protection Overlay Districts”. FRCC has sent these out in periodic mass mailings to riverfront land owners, town land-use boards, and real-estate agents.
- ✓ Installed **W&S Rivers System signs** on highway bridges and major river access sites.
- ✓ Developed and continually update and improve web site - www.FarmingtonRiver.org
- ✓ Installed a series of **Information Kiosks** at high-use access points in the W&S corridor. The kiosks display a common set of information about the Wild and Scenic Farmington and site-specific displays with information on outstanding features and recreational amenities.
- ✓ Published and distributed **FRCC newsletters** to over 300 riverfront land owners and town leaders twice a year.
- ✓ Established the Pat Keener and Nancy Johnson **scholarships** for high school and college students going on to study environmental science.



- ✓ Held Annual **Open House and W&S Art Show** to celebrate accomplishments and share local art with partners and neighbors.
- ✓ Held **10th Anniversary Celebration** with over 100 attendees including local and state officials and congressional members.
- ✓ Created an outreach campaign to improve **river user “etiquette”** and to **reduce trash and glass in the river** – including re-usable water bottles with a “Share the River” message, a water trail map that provides tips for cooperation between users, and a poster for local businesses and kiosks with logo stating “Please Tell Your Friends – No Glass – No Trash”.

Resource Stewardship

- ✓ FRCC has provided **comments** to appropriate authorities on a variety of issues - ranging from the designation of Sandy Brook as a CT Natural Area Preserve to updates of Plans of Conservation and Development, and potential closing of MDC lands to the public.
- ✓ FRCC completed **Riverbank Stabilization** projects in Nepaug State Forest (New Hartford) and along West River Road in the Town of Barkhamsted. The Nepaug projects were a collaborative effort between FRCC, DEP and MDC. The FRCC and the Town of Barkhamsted collaborated on the West River Road project. FRCC funded the design and received a grant for the streambank work. Barkhamsted provided labor and necessary equipment. FRCC coordinated two **volunteer riverbank planting** days at the West River Road site.
- ✓ FRCC contracted with FRWA to complete **parcel mapping** for the towns of Barkhamsted, Canton, Colebrook, and New Hartford. A flyover was done to obtain **aerial photos** of the five-town area.
- ✓ FRCC reviewed permitting and provided coordination for input to the Tennessee Gas Pipeline crossing project in the Town of Barkhamsted. DEP Fisheries was able to **enhance fish habitat** in the area disturbed by the pipeline crossing by guiding the placement of rocks.



Water Resources:

- ✓ FRCC contracted with FRWA to conduct an annual **Water Quality Monitoring** Program – including **macro-invertebrate studies** and testing for wastewater compounds - in the upper watershed. Conducted follow up studies – such as the Still River watershed analysis to determine possible sources and solutions to pollution coming from that river to the Farmington.
- ✓ Conducted a study through the University of Connecticut to determine the river and its inhabitants' need for **flushing flows**.
- ✓ Held **workshops for resource managers** – a Stream Crossing Workshop for Foresters and Land Managers, and a Workshop for Public Works Managers on Water Quality Protection and Road Maintenance Practices.
- ✓ Contracted with FRWA and the Northwest Conservation District to determine the causes and establish methods for stopping pollution and bacteria from entering the west branch Farmington River from the Still River via Sandy Brook.

Land Resources:

- ✓ Developed policies and provided **assistance for land protection** projects – Sugar Meadow Island in Barkhamsted, Jones Mountain in New Hartford, Corliss Property in Colebrook, Aton Forest acreage in Colebrook, Kitchel property in Colebrook, and Bassett Property in Hartland. Continue to work with W&S town land trusts to further land protection in the upper watershed.
- ✓ FRCC is working with the Town of Barkhamsted and NRCS to determine approaches for bank stabilization and **erosion control on Mountain Brook** – a tributary to the Farmington River in Riverton.
- ✓ **GIS Mapping** – Including an analysis of **Land Cover Change** in the five-town river corridor since designation in 1994.
- ✓ Evaluated the stability and health of the **riverbanks** of the 14-mile Wild and Scenic stretch of the Farmington River.

Fish and Wildlife Habitat:

- ✓ FRCC contracted with botanist Betsy Corrigan to survey and create a **management strategy for Non-Native Invasive Plants** in the 14-mile W&S corridor.
- ✓ Contracted with Ethan Nadeau to study the distribution and habitat of **fresh water mussels, snails and crayfish** in the upper Farmington River. Nadeau determined that the Farmington has exemplary habitat for certain species.
- ✓ Joined the **Sandy Brook Conservation Corridor Project** to support planning for and protecting the Sandy Brook watershed (a major tributary of the upper Farmington River).

Historical and Other Resources:

- ✓ Supported the Barkhamsted Historical Society's renovations of the **historic Squires tavern**.
- ✓ Supported the Barkhamsted Historical Society multi-year effort to study and record artifacts from the **Richard Smith Forge archeological site** in Colebrook.
- ✓ Supported the Barkhamsted Historical Society to gain a **National Historic District status for Riverton**.

— PHOTO CREDITS —

Front and back cover photos by Tom Cameron
 Title page (page i) photo by Paul Fusco / CT DEEP
 Page ii photo by Tom Cameron
 Page iii photo by Joyce Kennedy Raymes
 Page iv photo by Joyce Kennedy Raymes
 Page v photo by Paul Fusco / CT DEEP
 Page vi photo by Joyce Kennedy Raymes
 Page 1 photo by Paul Fusco / CT DEEP
 Page 2 photo by Joyce Kennedy Raymes
 Page 4 margin photo by Joyce Kennedy Raymes
 Page 4 bottom photo by Bill Foreman / CT DEEP
 Page 5 photo by Joyce Kennedy Raymes
 Page 6 photo by Nick Masi
 Page 7 photo by Paul Fusco / CT DEEP
 Page 8 photo by Richard English
 Page 9 photo by Joyce Kennedy Raymes
 Page 10 photo by Richard English
 Page 11 photos by Duncan Somerville
 Page 12 photo by Joyce Kennedy Raymes
 Page 13 photo by Paul Fusco / CT DEEP
 Page 14 photos by Liz Lacy
 Page 15 photo by Joyce Kennedy Raymes
 Page 16 photo by Paul Fusco / CT DEEP
 Page 17 photo by Jamie Fosburgh
 Page 18 photo by Joyce Kennedy Raymes
 Page 19 photo by Liz Lacy
 Page 20 photo by Liz Lacy
 Page 21 photo by Liz Lacy
 Page 22 photo from historic archives
 Page 23 photo by Joyce Kennedy Raymes
 Page 24 photo by Tom Cameron
 Page 25 photo by Joyce Kennedy Raymes
 Page 26 photo by Paul Fusco / CT DEEP
 Page 27 photo by Tom Cameron
 Page 28 photo by Richard English
 Page 29 photo by Richard English
 Page 30 photo provided by FRWA
 Page 31 photo by Paul Fusco / CT DEEP
 Page 32 photo by Liz Lacy
 Page 33 photo by Alisa Phillips-Griggs
 Page 34 photo by Tom Cameron
 Page 35 photo courtesy of CT DEEP
 Page 36 photos by Duncan Somerville
 Page 37 photos by Joyce Kennedy Raymes
 Page 38 photo by Tom Cameron
 Page 39 photo by Joyce Kennedy Raymes
 Page 40 photo by Joyce Kennedy Raymes
 Page 41 photo by Tom Cameron
 Page 42 photo by Joyce Kennedy Raymes
 Page 43 photo by Joyce Kennedy Raymes
 Page 44 photo by Tom Cameron
 Page 45 photo by Duncan Somerville
 Page 46 photo by Joyce Kennedy Raymes
 Page 47 photo by Duncan Somerville
 Page 48 top photo by Paul Fusco, CT DEEP
 Page 48 bottom photo by Joyce Kennedy Raymes
 Page 49 photo by Gail DiMaggio, Hartland Land Trust
 Page 50 photo – stock photo
 Page 51 margin photo by Tom Cameron
 Page 51 bottom photo by Joyce Kennedy Raymes
 Page 52 and 53 photos from historic archives
 Page 54 photo by Paul Fusco
 Page 56 photo by Bill Foreman / CT DEEP
 Page 57 photo by Paul Fusco / CT DEEP
 Page 59 photo by Liz Lacy
 Page 60 left photo by Tom Cameron
 Page 60 right photo by Duncan Somerville
 Page 61 photos from historic archives
 Page 62 photo by Paul Fusco / CT DEEP
 Page 63 photo by Bill Foreman / CT DEEP
 Page 64 photo by Joyce Kennedy Raymes
 Page 65 photo by Tom Cameron
 Page 66 photo by Richard English
 Page 67 photo by Richard English
 Page 68 photo by Richard English
 Page 69 photo by Richard English
 Page 70 photo by Joyce Kennedy Raymes
 Page 71 photo by Liz Lacy
 Page 72 photo by Joyce Kennedy Raymes
 Page 73 photo by Joyce Kennedy Raymes
 Page 74 photo by Paul Fusco / CT DEEP
 Page 75 photo from historic archives
 Page 76 photo by Duncan Somerville
 Page 77 photo by Joyce Kennedy Raymes
 Page 78 photo provided by FRWA
 Page 79 photo provided by FRWA



Farmington River Coordinating Committee
100 East River Road
P.O. Box 395
Pleasant Valley, CT 06063

www.farmingtonriver.org

