



Eightmile Wild & Scenic Study

Draft Report & Environmental Assessment

7/17/2006



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The National Park Service would like to thank the Eightmile Wild and Scenic Study Committee for their five years of hard work to bring this study to completion:

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Thanks also to the volunteers, town citizens, state, municipal and federal government officials and staff who's interest and dedication to the Eightmile made this project possible. A more complete list of these contributors can be found in Appendix 6 of this report and also in the Watershed Management Plan.

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Summary – Principal Findings and Recommendations

Eligibility

The Wild and Scenic River Study of the Eightmile River concludes that the entire mainstem and East Branch congressionally authorized study area, plus additional tributary areas of the watershed, are eligible for designation into the National Wild and Scenic Rivers System based on free-flowing condition and the presence of one or more outstandingly remarkable resource value. Specific resource values covered in this report include outstanding watershed hydrology, water quality, unique species and natural communities, geology, watershed ecosystem and cultural landscape.

Classification

The Wild and Scenic Rivers Act provides for three possible classifications of eligible river segments: wild; scenic; and recreational. The criteria distinguishing these classifications are based on the degree of human modification of the river and its adjacent shorelines. Based upon the applicable criteria, the most suitable classification for the proposed designated segments of the Eightmile and its tributaries is 'scenic'.

Suitability

The Study concludes that 25.3 miles of the Eightmile and selected tributaries are suitable for designation.

This suitability is based on:

1. The adequacy of long-term protection afforded to the river's free flowing character and outstanding resources through conservation land ownership, state and local land use controls, and topography. These forms of protection serve to prevent land use changes that would significantly degrade the outstanding resource values of the Eightmile River Watershed.
2. The development of a comprehensive watershed management plan which provides a clear guide for ensuring the long term protection of the Outstanding Resource Values of the Eightmile River Watershed as identified through the Eightmile River Wild and Scenic Study.

3. The strong support for designation and the Watershed Management Plan expressed by the study area towns through town meeting votes and the endorsements from land use commission and governing bodies.

4. The existence of an appropriate river management framework, the Eightmile River Wild and Scenic Coordinating Committee, to implement the Watershed Management Plan and to administer the watershed in partnership with the federal government if designation occurs.

Alternatives Considered

This report evaluates two Wild and Scenic River designation alternatives in addition to the 'no action' ALTERNATIVE A:

ALTERNATIVE B: Designation of the entire Mainstem of the Eightmile River, East Branch of the Eightmile River and additional third order tributary streams totaling 25.3 miles.

ALTERNATIVE C. Designation of all second order and higher streams in the watershed.

Alternative B is selected as environmentally preferred based on analysis of the principal factors of Wild and Scenic River suitability.

Eightmile River Watershed Management Plan

The Eightmile River Watershed Management Plan (Management Plan) has been the primary focus of the Wild and Scenic River Study. A product of an extensive collaborative effort between the Study Committee and local citizens, land use commissioners and elected officials, the Plan contains the strategy and vision for preserving the Eightmile River Watershed and the outstanding resource values it contains. The Eightmile River Wild and Scenic Study Committee determined that these outstanding resource values depend on sustaining the integrity and quality of the Eightmile River Watershed, that these values are manifest within the entire Watershed and furthermore that the Watershed as a whole, including its protection, is itself intrinsically important to this designation. Based on this determination, the Study Committee took a watershed approach in studying and recommending management

25.3 miles of the Eightmile River and tributaries are recommended for designation.



Chapman Falls in East Haddam

options for the river segments and the Eightmile River Watershed as a whole. The Management Plan has been reviewed and endorsed by the full range of stakeholders as noted below.

The Management Plan should be read as a companion document to the Study Report. *The Study Report adds to the Management Plan only in the specific areas of Wild and Scenic River Eligibility, Suitability, and Alternatives/ Environmental Assessment – in all other areas, the more complete source is the Watershed Management Plan.*

Support for designation

Citizens from all three towns voted at separate town meetings to support the Eightmile River Watershed Management Plan and Wild and Scenic designation. Each land use commission from the three towns, and the Boards of Selectmen have voted in favor of the Management Plan and designation. The Connecticut General Assembly and Office of the Governor also supported Wild and Scenic

designation of the Eightmile by means of an endorsement bill. Lastly, the Eightmile River Wild and Scenic Study Committee have voted unanimously to recommend Congressional Wild and Scenic River designation.

Recommendation

25.3 miles of the Eightmile River and tributaries are recommended for designation as “scenic” under the national Wild and Scenic Rivers Act, to be managed in accordance with the Eightmile River Watershed Management Plan dated December 8, 2005. The river segments meet the eligibility and suitability criteria for such a designation, and the towns making up the study area have expressed strong support for the designation. In support of the watershed approach, the Watershed Management Plan, and to formally establish the importance of protection of the watershed as a whole, the Study Committee recommends additional language be included in the designation legislation which establishes the importance of all streams within the watershed (as detailed in section 4D).

Background

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

Wild & Scenic Rivers Program – 1.a.

The National Wild & Scenic River System was established by Congress in 1968 to protect certain outstanding rivers from the harmful effects of new federal projects such as dams and hydroelectric facilities. Since then over 160 rivers or river segments totaling over 11,000 miles have been protected nationwide. To be considered a “Wild & Scenic” river it must be free flowing and have at least one outstanding natural, cultural, or recreational value. Section 1(b) of the Act states:

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

Only seven Wild and Scenic segments are located in New England: the Farmington in Connecticut; the Allagash in Maine; the Wildcat and Lamprey in New Hampshire; and the Westfield and Concord-Sudbury-Assabet in Massachusetts. One additional study is ongoing in New England – the Taunton River in Massachusetts.

Each river designated into the national system receives permanent protection from federally licensed or assisted dams, diversions, channelizations and other water projects that would have a direct and adverse effect on its free-flowing condition and special resources.

The Wild & Scenic Rivers Act explicitly prohibits any new dam or other project licensed by the Federal Energy Regulatory Commission (FERC) on or directly affecting a designated river segment, and requires that all other proposed federally assisted water resource development projects in the area be evaluated by the managing agency (in this case the National Park Service) for their potential impacts on the river's “outstandingly remarkable” values and free-flowing condition. Any federally licensed or initiated project that would result in adverse effects to the designated segment is precluded under the Act.

A Wild & Scenic River Act (WSRA) designation process can also bring additional benefits to the local community through management plans, studies and staff effort required to qualify for consideration under the Act. Additionally, designation boosts the visibility of locally initiated land use initiatives and increases the likelihood of matching grants and support funding.

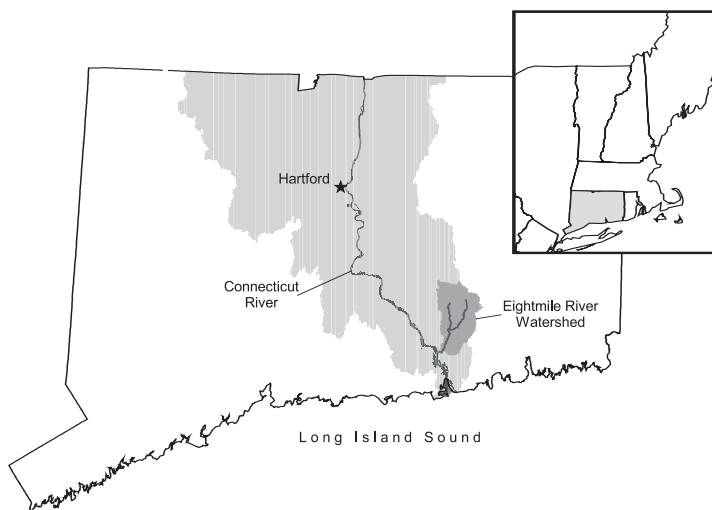
Before a river can be added to the National Wild and Scenic Rivers System, it must be found both *eligible* and *suitable*. To be eligible, the river must be 1) free flowing and 2) possess at least one “outstandingly remarkable” resource value such as exceptional scenery, fisheries and wildlife, water quality or cultural resources. The suitability determination is based on evidence of lasting protection measures (both current and planned) for the free flowing character and outstanding resources and on evidence of strong support from local residents and organizations that will participate in the long term protection of the river. The details of these requirements are explained in the following chapters as each requirement is addressed.

Since 1995, a broad group of local citizens has been working to protect the Eightmile River and the intact watershed landscape that surrounds it.

Eightmile River Study History and Methods – 1.b.

History

Since 1995, a broad group of local citizens has been working to protect the Eightmile River and the intact watershed landscape that surrounds it. The initial group of local citizens, supported by The Nature Conservancy and the University of Connecticut Cooperative Extension program, recognized that the host



of unique resources present in the watershed could likely qualify the area for a Wild & Scenic designation. A local campaign by members of town boards, area land trusts, The Nature Conservancy, river-fronting landowners and other residents was undertaken to initiate the Wild & Scenic process. Congressman Rob Simmons and Senator Chris Dodd helped secure authorization and funding from Congress to undertake a Wild & Scenic River Study. The entire Connecticut congressional delegation supported the Wild & Scenic Study Bill which was signed into law by President Bush on November 6, 2001 and became Public Law No. 107-65.

Study Committee

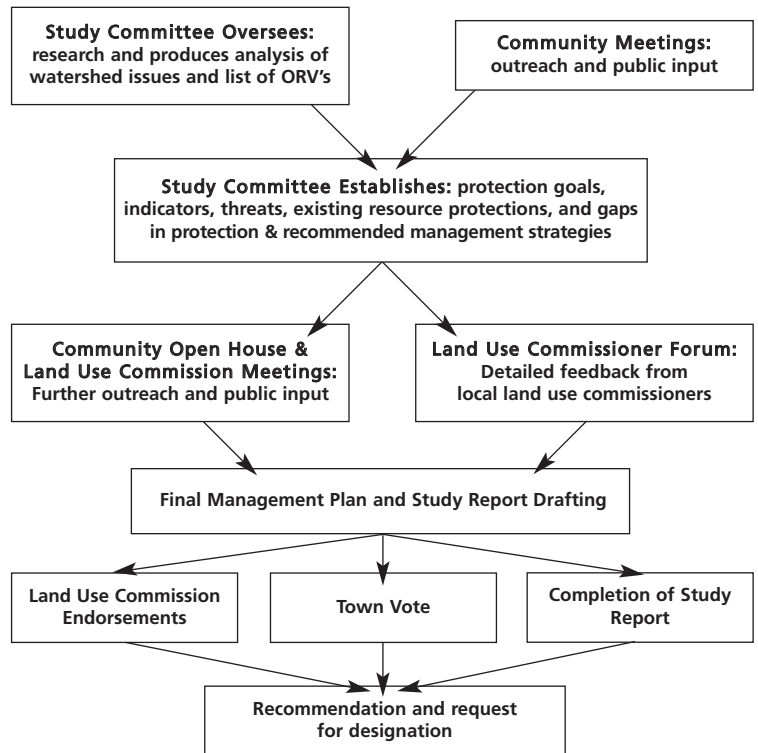
After the Study bill was passed by Congress, a local Wild and Scenic Study Committee was formed. Charged with carrying out the Wild & Scenic Study and developing a river management plan, the Committee's membership included the First Selectmen from the communities of Lyme, Salem and East Haddam, representatives of the three area land trusts, representation from a land use commission in each town, the CT River Estuary Regional Planning Agency, the Natural Resource Conservation Service, the Connecticut Department of Environmental Protection, and The Nature Conservancy. The National Park Service provided staff support and overall coordination. Sub-committees on management, natural resources, cultural resources and outreach and education helped guide and implement the study process.



Eightmile Wild & Scenic Study Committee Members

Committee members brought a wealth of knowledge and experience in governmental, ecological and organizational processes. The committee's credentials, along with much collaboration with independent researchers, local supporting agencies, professional contractors and the general public helped ensure the study's success.

Figure 1: Flow chart of Study process



Committee members brought a wealth of knowledge and experience in governmental, ecological and organizational processes.

Study Approaches

WATERSHED

A key decision made in the Wild & Scenic Study process was to pursue a watershed based Wild & Scenic designation rather than concentrate on discrete segments of the river. (See “Eightmile Wild and Scenic River Direction and Goals” document in appendix 2). This approach was motivated by the exemplary quality of the watershed itself. Recognized as a key component of one of the 40 Last Great Places in the Western Hemisphere by The Nature Conservancy in 1993, the Eightmile River system is remarkably intact throughout the watershed, free-flowing and virtually dam free. With excellent water quality and 80% forest cover, the watershed is a haven for diverse and abundant fish populations, globally rare species, an internationally recognized freshwater tidal marsh, and indicators of outstanding health such as native freshwater mussels.

As described in detail in section 3.b.1, the Study identified six distinct outstanding resource values (ORVs) which make the full river system within the watershed eligible for

Wild & Scenic designation. The six ORVs include the cultural landscape, geology, water quality, watershed hydrology, unique species and natural communities and the watershed ecosystem.

Of these six, the most distinct and outstanding characteristic to emerge was the watershed ecosystem itself. It is very uncommon for a river ecosystem of this size to be virtually intact throughout its watershed range, particularly in the near-coastal region of Southern New England. It is also clear that the other ORVs are components of, and combine to produce, this outstanding river system and that the long term quality of each ORV is directly connected to the quality of the watershed as a whole. In short, the watershed ecosystem is viewed as the single most compelling ORV while also being the driving force behind the other ORVs.

In recognition of these facts, the Committee concluded that a watershed-wide management framework should be established. Taking a watershed approach to management here means that at least a baseline of protection is identified for all perennial streams in the

watershed including associated riparian areas and that protection of large, critical blocks of intact habitat within the watershed is prioritized and facilitated to the extent feasible. The watershed approach means recognizing that protection and management strategies cannot just consider a single river segment, plant or animal species, or wetland system in isolation from all that is around it. Each of these components is related and if one is disturbed or altered, there is typically an effect on the others as well. For the Eightmile River Wild and Scenic Study, the watershed approach allowed for a comprehensive but practical treatment of the entire river system.

PARTNERSHIP RIVERS

Today, a subset of the Wild & Scenic Rivers system called Partnership Rivers is being used effectively to create river protection approaches that bring communities together in protecting and managing local river resources.

The Partnership Wild & Scenic Rivers consist of nine rivers along the east coast that share common management approaches:

- No reliance on federal ownership of lands;
- River management through existing local and state authorities;
- Management strategies developed and implemented through a locally led study committee and which are locally approved by land use commissions and the public prior to designation;
- Responsibilities associated with managing and protecting river resources are shared among all of the partners - local, state, federal, and non-governmental organizations as well as volunteer citizens;
- No National Park Service Superintendent, law enforcement, or similar elements of traditional NPS park units.

Because the land ownership patterns and local involvement scheme in the Eightmile River watershed closely matches conditions that prompted development of the partnership approach, the Eightmile River segments are being recommended for designation as a Partnership Wild & Scenic River.

Study Goals and Methods

GENERAL

With a membership representative of the watershed and with support from the National Park Service, the Study Committee set out to:

1. Establish eligibility of the Eightmile River for protection under the WSRA;
2. Develop an extensive watershed-wide management plan that would serve as a blueprint for conservation of the outstanding resource values of the Eightmile and support achievement of Wild & Scenic designation;
3. Determine suitability for Wild & Scenic River designation through gauging multiple aspects of community interest and involvement and finally through formal endorsements from town boards, commissions and citizens as a whole.

RESEARCH

To these ends, the study committee used both scientific and social methods for completing its work. Extensive scientific, cultural, regulatory and spatial research was undertaken by consultants, academic institutions and local supporting agencies to produce both a clear picture of the current Eightmile River watershed and a plausible prediction of the watershed's future using various growth, planning and management outcomes.



UMASS graduate students collect stream flow data

Reports and analyses amounting to more than 600 pages were completed in order to inform the study process and management plan drafting.

Major Studies Undertaken for the Study

Instream Flow and Biological Assessment – Modeled the effects of increased flows or water withdrawals on natural aquatic communities using target fish communities as indicators. (Northeast Instream Habitat Program UMASS Amherst Department of Natural Resources Conservation)

Cultural Landscape Study – Documented, analyzed and assessed the significance of the watershed as a cultural landscape. (Department of Landscape Architecture and Regional Planning at UMASS Amherst)

Biodiversity and Watershed Ecosystem Report – Assessed biodiversity values and significance of the Eightmile River watershed ecosystem. (Consulting biologist)

Rare Plant and Community Survey – Assessed the watershed for rare plant and significant natural community occurrences. (Consulting biologist)

Geology of Eightmile River Watershed – Reported on the unique geology of the watershed. (Consulting geologist)

Growth Analysis – Reported on growth trends in the three towns and outlined future growth projection scenarios. (Consulting planner)

Municipal Regulation Review – Identified and assessed existing municipal regulations, plans and programs in order to help identify the sufficiency of such regulations, plans and programs for protecting the Eightmile Watershed. (Natural Resources Conservation Service)

Management Issues and Threats – Identified threats to the outstanding resource values. (Staff and committee)

Existing Gaps in Protections – Based on the status of existing regulations, plans and programs, outlined the gaps between threats to ORV's and protection goals established for the ORV's. (Staff and committee)

Geographic Information Systems (GIS) – Analysis included a build-out prediction for the entire watershed, open space and habitat fragmentation analysis, land use trends, habitat types and many other topics. (Connecticut Coastal Conservation District w/staff)

Riparian Protection – Reported on current research regarding riparian conservation and protection efforts. The report also included a draft ordinance for use by the land use commissions. (Yale School of Forestry and Environmental Studies)

Many of these studies are available in the Eightmile River Watershed Management Plan Appendices and/or are included on the data disc provided with the Watershed Management Plan or online at www.eightmileriver.org

OUTREACH

A major outreach effort involving a series of community meetings, forums, newsletters and mailing were used to gather social needs and citizen input into the study process as well as inform the public about the Wild and Scenic process. The Study Committee contracted with the local Conservation District to provide professional staff and resources in order to best complete these outreach and educational activities.



Study Chairman Anthony Irving discusses a map during the community open house.

Major Outreach Efforts

Newsletters covering topics of interest and updates on the Wild and Scenic Study were sent to all community residents throughout the study period.

Community Meetings in each of the three towns were held in order to gather public comments and inform the public on various aspects of the Study. The first round of meetings held in May and June 2003 covered background, history and work to date by the Study Committee and presented the proposed list of Outstanding Resource Values (ORV). The next set of meetings took place in May 2004 and presented the approach being taken to form a watershed management framework and provide sufficient long term protection for the ORVs. Feedback was solicited regarding the types of management tools citizens would support. Collectively these meetings were attended by over 360 people.

Land Use Commissioners Summit was attended by over 40 local land use decision makers from the Planning, Zoning, Inland Wetlands and Conservation Commissions of the three major watershed towns. This event was a 4 hour facilitated work session which provided critical input into the formation of the management plan and also built a sense of ownership by local leaders in the Eightmile Wild and Scenic River management process.

Community Open House event was widely publicized and drew nearly 150 people. Exhibits, an ongoing slide presentation and 3 live presentations w/ question and answer sessions helped educate the public on the key resource values and management proposals. Soliciting feedback from the public was also a primary objective of the Open House.

Mailings, press releases and signage were used to inform the public of endorsement vote dates and topics.

Letters announcing the commencement of the study and explaining the study goals and opportunities for participation were sent to riverside landowners.

Fairs and local events were staffed by Wild and Scenic representatives. A kick-off event for the Study was held at Devil's Hopyard State Park and attended by dignitaries such as Senator Chris Dodd and Congressman Rob Simmons.

Brochures and pamphlets were distributed to town libraries, local stores and other locations.

Meetings and presentations with staff, chairman and full commissions kept the commissioners up-to-date and facilitated communications and collaboration between land use commissions and the Study Committee.

Several examples of these outreach efforts are included in the appendices of the accompanying report: Eightmile River Watershed Management Plan.

MANAGEMENT PLAN

A major focus of the study committee was to draft a management plan that would act as the blueprint for conservation and management practices throughout the watershed. Intended to provide a guidance framework for local commissions and governments as well as the Wild and Scenic Coordinating Committee, non-profit organizations and citizens, the Management Plan not only fulfills requirements of the Wild and Scenic Act but is also intended to stand alone regardless of designation status.

Using conservation of the outstanding resource values as the primary management goal, the study committee drafted the Management Plan using the following principles as guidance:

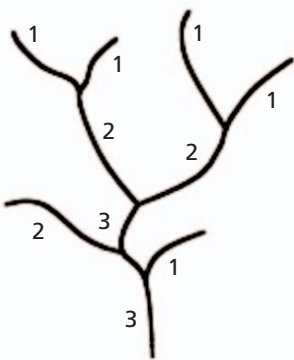
1. Resource conservation and protection should be fully integrated with traditional patterns of use, ownership, and jurisdiction, relying on existing authorities.
2. Management of the Eightmile River Watershed should be based on a cooperatively developed plan that establishes resource protection standards and identifies key actions accomplished through cooperation among all public and private organizations with an interest in the river.
3. Any land conservation initiatives related to a Wild & Scenic designation should be based solely on voluntary willing seller arrangements. There will be no acquisition of lands through federal condemnation in conjunction with a Wild & Scenic River designation.

To facilitate preparation of the Management Plan, the Committee established overarching protection goals for each Outstanding Resource Value (ORV) and quantified specific indicators for achieving these goals. A broad and detailed set of land use and conservation recommendations were identified to facilitate meeting the goals. These efforts fit into an overall integrated process for developing the plan – the key steps of which included:

1. Set protection goals for each ORV
2. Identify indicators for each ORV (e.g. impervious cover for watershed hydrology)
3. Establish specific indicator goals for each ORV indicator (e.g. maintain impervious cover levels below 4% for the overall watershed)
4. Perform a threat analysis of Outstanding Resource Values
5. Determine existing resource protection
6. Identify potential gaps in ORV protection
7. Establish Recommended Management Strategies based on gap analysis

The end product of these steps was a series of recommendations and tools that were categorized by priority, topic and implementing party. These tools were designed to apply across the entire watershed and ultimately afford protection to all perennial watercourses, including but not limited to the stream segments to be designated.

Further description of the Management Plan is in Section 4.c of this report.



The Study Committee's Use of Stream Order

Stream order is a term used by geographers and hydrologists to classify streams within a drainage by defining the network of stream branches. Each perennial stream that is at the origin of the branch is termed a first-order stream. When two first-order streams join, the classification for the following segment is second-order. The stream remains classified as second-order until joined by another second order stream and so on. Typically, a third order stream is larger than a second order stream and a fourth order larger than a third.

Description of the Study Area (Affected Environment)

Regional Setting – 2.a.

A tributary to the Connecticut River, the Eightmile's confluence with the Connecticut River is approximately eight miles upstream from the mouth of the Connecticut River at Long Island Sound, hence its name. This area was the focus of early industrialization in Connecticut but was spared intense maritime industrialization after World War II due in part to the restrictive and shifting sandbars at the mouth of the Connecticut River. The lower Connecticut River Valley which sits between the highly populated and densely developed areas surrounding Hartford, New Haven and New London is known for its rural character, relatively undeveloped landscape and hilly terrain, outdoor recreational opportunities and nationally and internationally recognized natural environment.



Stream Crossing in East Haddam

Watershed Characteristics – 2.b.

General Description

With over 150 miles of pristine rivers and streams and 62 square miles of relatively undeveloped rural land, the Eightmile River Watershed is an exceptional natural and cultural resource. The watershed contains large areas of unfragmented habitat, an array of rare and diverse wildlife, scenic vistas, high water quality, unimpeded stream flow, and significant cultural features. Most notable is that the overall Eightmile River Watershed ecosystem is healthy and intact throughout virtually all of its range.

See map on following page: General Watershed

The landscape of the watershed is characterized as one of low rolling hills and ridges separated by numerous small, narrow drainage corridors and hollows, and in places broader valleys and basins. Approximately 90% of the watershed lies in roughly equal portions within the three communities of East Haddam, Lyme and Salem, with the remaining 10% evenly split within Colchester and East Lyme. Because the East Lyme section of the watershed is almost entirely protected by state owned forest and the Colchester section is small and contains few tributaries, this study focuses on the portion of the watershed within East Haddam, Lyme and Salem.

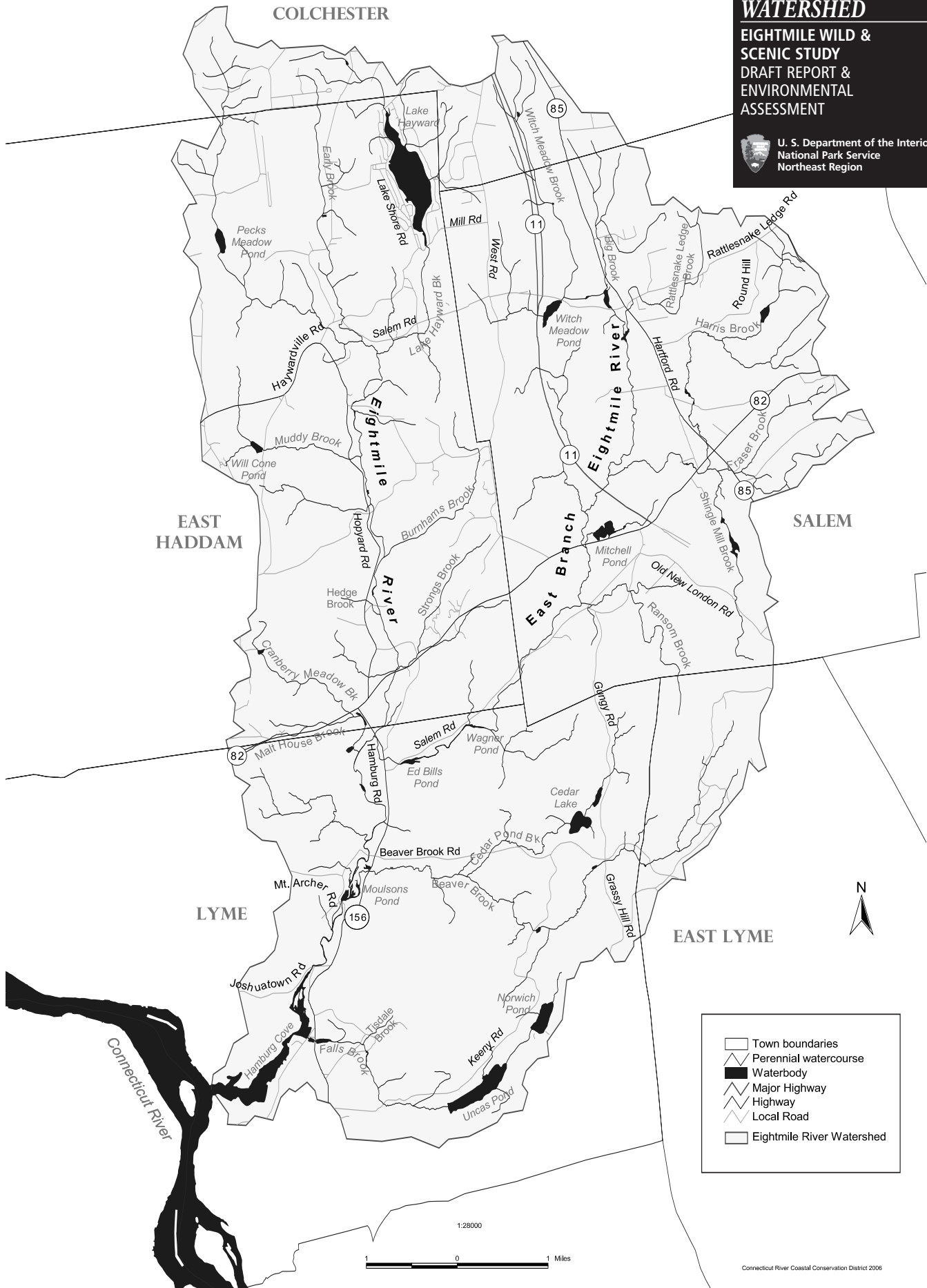
In 2004 the combined population of the three main communities was 15,228, with 60% located in East Haddam, 27% in Salem and 13% in Lyme. With just 5,400 people living in the watershed itself, population density is very low at 87 people per square mile as compared to the overall statewide average of 700 people per square mile. The low density has contributed to a rural, bucolic countryside with scenic views, occasional farm fields and a transportation pattern that has not changed substantially since the peak of the local agrarian economy in the mid-19th century. In the latter half of the 20th century, population growth in Salem and East Haddam have outpaced the average State growth with Salem increasing in population size by six-fold over the same period of time.

EIGHTMILE RIVER WATERSHED

EIGHTMILE WILD & SCENIC STUDY
DRAFT REPORT & ENVIRONMENTAL ASSESSMENT



U. S. Department of the Interior
National Park Service
Northeast Region



Ecology/Natural Communities

With over 83% of the watershed in forest, wetland or water, the Eightmile hosts a rich diversity of natural communities and rare and significant plant and animal species. Comprised primarily oak-hickory and maple-ash vegetative communities, the forests of the Eightmile provide resource requirements for a multitude of significant bird, mammal and insect species.

Further detail of the natural resources in the Eightmile watershed is described below in Section 3.b.1. – “Outstandingly Remarkable Resource Values”.

Land Use & Ownership Patterns

With only 6% developed area, the watershed is made up of large un-fragmented habitat blocks supporting an abundant array of rare and diverse species. Substantial open space conservation has been achieved in the watershed. As of March of 2006 nearly 32% of the watershed (12,600 acres) has been permanently protected, including over 5,000 acres of state forest and park land as well as significant holdings by municipalities, local land trusts and The Nature Conservancy.

However, there has been significant pressure for and a trend toward development and forest conversion in the watershed as shown in Table 2.1. Strong economic growth in Hartford and southeastern Connecticut is driving the region’s economy and development trends.

1985-2002 Land Cover Changes

| | Forest Acres Cleared: % of total 1985 Forested Land | Developed Acres Created: % Increase Over 1985 Developed | Barren Create: % Increase Over 1985 Barren |
|-------------|---|---|--|
| East Haddam | 1,051 – 4% | 327 – 11% | 803 – 26% |
| Lyme | 586 – 4% | 116 – 11% | 512 – 44% |
| Salem | 788 – 6% | 286 – 23% | 569 – 27% |

Table 2.1 Land Cover changes between 1985 and 2002 as reported by the Center for Land Use Education and Research (CLEAR), UCONN.

Land Use: Eightmile Watershed Compared to State-wide

| | Land Use in the Eightmile Watershed | Land Use State-Wide |
|------------------------|--|------------------------|
| Deciduous Forest | 61.5%* | 46.8% |
| Other Grasses & Agents | 8.6 | 12.0 |
| Developed | 6.7 | 18.7 |
| Forested Wetland | 11.0* | 3.5 |
| Coniferous Forest | 4.0 | 9.0 |
| Water | 2.0 | 3.0 |
| Turf & Grass | 0.7 | 4.5 |
| Barren Land | 0.7 | 1.2 |
| Non-forested Wetland | 0.5 | 0.5 |
| Utility ROW | 0.4 | 0.3 |

Table 2.3 Land Use in the Eightmile Watershed compared to state-wide land use.

Source: UCONN Center for Land Use Education and Research/*Consulting ecologist Bill Moorehead for the Study Committee.

See Map in Eightmile River Watershed Management Plan: Landcover

Towns

Lyme

The town of Lyme makes up the southern third of the watershed and contains Hamburg Cove, the Eightmile River's only navigable waterway. Lyme is the least populous of the three Watershed towns. The Town's population actually peaked in 1800 on the strength of its maritime industries and then declined to only 546 residents by 1930 before beginning a 70-year trend of slow growth to 2,016 people in 2000.

Lyme is the most isolated of the Watershed towns in terms of expressway access and is more than three towns removed from the regional employment centers of Groton, New London, and Norwich.

Since 1998, Lyme has been the most aggressive of the three principal watershed towns with respect to open space protection. Lyme has conserved approximately 40% of the Town overall with 1,724 acres (nearly 8%) of the Town protected in the last seven years alone.



Tiffany Farm in Lyme

East Haddam

East Haddam lies in the northwest section of the watershed and, at a population of 8,333, is the most populous of the three towns that comprise the Watershed. This was due initially to the industrialization and immigration of the 19th Century, and later due to the abundance of recreation opportunities and its access to jobs both inside and outside the region via Route 9. Devil's Hopyard State Park lies within

the Eightmile River Watershed in East Haddam and contains Chapman Falls, a locally known scenic and outdoor recreation area that attracts many visitors to the banks of the Eightmile.

Open space preservation efforts since 1998 have conserved 892 acres of land in East Haddam. East Haddam also recently adopted a comprehensive soils based zoning scheme that has significantly increased the level of resource protection in the town.

Salem

Salem makes up the northeast third of the watershed and remains a rural community with a small Town Green and a small commercial center nearby. Early clearing of significant forest resources was followed by agriculture that was hampered by the varied terrain, which also restricted residential growth. Regrowth of the forest has occurred over most of the Town since the 1890's. After a century of population decline, recent pressure for residential development has almost tripled the population in the past 35 years, so that the population is now higher than in colonial times (1,453 in 1970 to 3,858 in the 2000 census). Salem is the fastest

growing of the three Watershed towns due to its location closest to employment opportunities in Norwich, Groton and New London as well as its direct access to Colchester and Hartford.

The Town itself has protected 161 acres of open space since 1998. In total, over 2000 acres has been protected by other non-profit and government entities. The Town of Salem is currently working on adoption of its Open Space Plan, to prioritize lands for protection. The Plan of Conservation and Development highlights the importance of preserving the Town's rural character.



Music Vale Seminary Barn (Built in the 19th Century)

Eligibility and Classification

The purpose of this chapter is to document National Park Service findings relative to: 1. the “outstandingly remarkable” natural and cultural resource values associated with the Eightmile River study area; 2. the “free-flowing character” of the study segments; and 3. proposed “classifications” under which eligible river segments could be included in the National Wild and Scenic Rivers System.

Eligibility and Classification Criteria – 3.a.

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

Outstandingly Remarkable Values – 3.a.1.

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

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

NATIONALLY SIGNIFICANT RESOURCE VALUES

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

REGIONALLY SIGNIFICANT RESOURCE VALUES

Based upon the desirability of protecting a regional diversity of rivers through the national system, a river segment may qualify based on

regionally rare or exemplary resource values. For example, a river segment which supports wildlife populations rare or endangered within a given region (New England or Connecticut in this case) can qualify even if that population may not have clear “national” significance.

RESOURCE VALUES SIGNIFICANT IN AGGREGATE

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

Free-flowing – 3.a.2.

The Wild & Scenic Rivers System is designed to protect only “free-flowing” rivers and streams that support qualifying resource value(s). The Act's definition of “free-flowing” is outlined in Section 16:

(b) “Free-flowing”, as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: Provided, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.



Eightmile Waters

Classification Criteria – 3.a.3.

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

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

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

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

The Wild and Scenic Rivers Act requires that all eligible or designated river segments be classified as Wild, Scenic, or Recreational.

Eligibility and Classification Findings – 3.b.

The Study Committee concluded that, based on the results of the studies and assessments it conducted, the Eightmile River Watershed would be *eligible* for Wild & Scenic designation. A Watershed designation would be defined by designating all perennial¹ streams in the watershed. This was concluded because nearly all of the 150+ miles of perennial watercourses in the watershed show evidence of supporting the full suite of outstandingly resource values outlined below. In addition, the few small dams that exist on the tributaries and main stem do not regulate flow and are typically historic in nature (remnants of early mill development in dating to the colonial era). This conclusion of watershed-wide eligibility was itself a remarkable finding by the Study Committee and was one of the main factors in pursuing a watershed based management plan (see section 4.c.).

It should be noted that while the outstanding resources described below meet the eligibility criteria needed to consider a complete watershed designation, the most appropriate approach to the final recommended designation must also follow additional suitability considerations as outlined in Section 4.a. below.

¹a stream that flows all year round. This would include streams in the Eightmile both large and small.

Outstandingly Remarkable Resource Values – 3.b.1.

This subsection describes the natural and cultural resource values supported by the Eightmile River through the study area that are deemed to meet the “Outstandingly Remarkable” threshold. More detailed information on these resource values can be found in the Eightmile River Watershed Management Plan and on the Study web site, www.eightmileriver.org. All of the resources cited contribute to the overall eligibility of the Eightmile River. Not all river reaches in the study area support all noted outstanding values, but there is no stretch of river which does not contribute to the viability of the whole.

The Study Committee was tasked with determining if there is at least one outstanding resource value associated with the Eightmile River. Six outstanding resource values were identified for the Eightmile River Watershed. The analysis of these values (as described in detail in the Watershed Management Plan and briefly below) represents a thorough set of scientific and social research as well as an intentional and collaborative process by the Study Committee. The six outstandingly remarkable values found to make the Eightmile eligible for Wild and Scenic designation are: watershed hydrology, water quality, geology, unique species and natural communities, watershed ecosystem, and the cultural landscape.

NOTE: Maps relating to each ORV (as well as additional issues) can be found in the accompanying document: “Eightmile River Watershed Management Plan”.



WATERSHED HYDROLOGY

Unlike many watersheds in Connecticut today the Eightmile River Watershed is not relied upon as a major source of public or industrial water supply, nor is it impacted by significant point source discharges from wastewater treatment plants or industrial sources. The watershed has a very low level of impervious surfaces (currently only 3%) which is a strong indicator of high quality hydrologic processes. In addition, the watershed has over 80% forest cover (compared to the entire state at 60%) and only 6% of the riparian corridor area within 100 feet of the 160 miles of rivers and streams has any development associated with it. These qualities put the Eightmile River in a unique position for sustaining an intact hydrologic system.

It is rare in Connecticut, especially along the coast, to have a watershed system of this size with a natural, intact flow regime in place throughout the system with indicators of that flow regime well below thresholds for degradation. As such the Eightmile River Watershed can be considered exemplary of how a natural hydrologic system in Connecticut functions.



The Mainstem in Devil's Hopyard State Park, East Haddam

Some Key Findings on the Exemplary Status of Watershed Hydrology in the Eightmile River Watershed

There are no water diversions with any recognizable impact to natural flow regimes.

No dams currently regulate flow. Of the three remaining dams within the streams proposed for designation two have mitigation measures to allow fish migration and the third is slated for removal and restoration. Additionally, the small impoundments associated with these run-of-the-river dams are historic and scenic in nature and do not detract from the overall context of the river.

No point source discharges exist from industrial sources or wastewater treatment nor are there any other known discharges.

Very low levels of impervious cover exist throughout the watershed. Currently at 3%, these levels fall well below levels known to affect watershed hydrology.

The ratio of forest land cover to developed area is very favorable for intact watershed hydrology with over 80% of the watershed forested.



WATER QUALITY

Robust biological indicators show water quality in the Eightmile Watershed to be very high with very few current sources of degradation. The data demonstrate that water quality and aquatic habitat in the Eightmile is not only locally exemplary, but as good as the best rivers studied in the state.



Wood Frog
in Local
Vernal Pool

In addition to having outstanding water quality, major threats to water resources that are typically seen in other watersheds are almost nonexistent in the Eightmile. Currently, there are no point source discharges in the Eightmile watershed and indicators of non-point pollution such as impervious surface cover levels (at 3%) indicate that the watershed is currently significantly below degradation thresholds (ranging from 4-10%). Other key features that indicate high water quality include intact riparian corridor lands and a natural hydrologic system (as described above).

Some Key Findings on the Status of Water Quality in the Eightmile River Watershed

93% of the Eightmile's rivers and streams and 99% of the groundwater meet the State of Connecticut's highest water quality classification – Class A – or better. This classification has among its designated uses potential drinking water supply and fish and wildlife habitat. Most if not all of the remaining waters exhibit Class A characteristics but for technical reasons are not classified as such.

Aquatic insect studies indicate that conditions within the watershed are among the very best in Connecticut.

There are no wastewater or industrial surface point discharges in the watershed and there are no subsurface discharges impairing water quality.

Forested land cover is high and impervious surface cover is low (see hydrology above).

Riparian corridors are essentially intact and continuous (see hydrology above).

A natural hydrology and flow regime exists for ground and surface water systems.

GEOLOGY

Many aspects of the geology in the Eightmile River Watershed stand out as being regionally and locally significant. In addition to ecologically significant and relatively rare non-acidic soil and bedrock areas, the unusual alignment of bedrock in the watershed creates a rectangular or “blocky” local topography that is unusual in Connecticut and the region as a whole.

The watershed’s geology plays a critical role in overall watershed quality affecting resources from hydrology to biodiversity to the cultural landscape. The combination of an exceptional assemblage of bedrock, atypical local topography and exemplary glacial evidence remains all provide a distinct representation of geology in Connecticut and as such is considered an outstanding resource value for the Eightmile River Watershed.

In 1966, Lundgren described the bedrock of the Eightmile River Watershed as “an exceptionally varied suite of rocks that includes representatives of nearly all of the major stratigraphic and granitic units known in eastern Connecticut”.



UNIQUE SPECIES AND NATURAL COMMUNITIES

Studies of rare species, biodiversity and ecological communities found the Eightmile River Watershed to be in the top tier of watershed basins in the New England region. Present in the watershed are over 150 plant and animal species of high conservation value and nearly 100 significant natural communities. Globally, nationally and state listed species were found, and the number of new significant species found within a relatively short period of field work indicate that there is still much to be discovered in the watershed.

Natural Communities Breakdown

| | |
|---------------|----------------|
| Very High | 7 occurrences |
| High | 11 occurrences |
| Moderate-High | 10 occurrences |
| Moderate | 34 occurrences |
| Exemplary | 18 occurrences |
| Arguable | 20 occurrences |

When ranked among New England watershed basins in terms of number of rare species per unit basin area, the Eightmile watershed ranks in the 96th percentile in terms of rare species and in the 99th percentile in terms of globally rare species. During a relatively short field survey initiated by the Study Committee, 27 new occurrences or locations of State-listed rare plants were documented.

The quantity of “at-risk” plant and animal species known from the Eightmile River watershed is substantial. A summary of species considered to be ‘rare’, ‘threatened’, or ‘endangered’, in a state, regional, and/or global context, in addition to species that have been identified as ‘of special concern’ shows a total of 155 such species in the watershed. This list is comprised of 32 vascular plants, 6 amphibians, 81 bird species, 8 fish species, 12 invertebrate species, 7 reptiles and turtles, and 9 mammals.



Harvester Butterfly

Several qualities of the landscape contribute to the ecological diversity. One is the high percentage of forested habitat in the Eightmile River (80%). This is comparable in Connecticut only to watersheds in the northwest and southeast corners of the state which are recognized as having the highest known biodiversity in New England. Similarly, relative to the rest of Connecticut, a low percentage of the Eightmile River watershed is developed, there is a low density of roads (2.62 mi/mi²), and a high percentage of the watershed is occupied by large roadless blocks (72% occupied by roadless blocks greater than 1000 ac). All three parameters are strong indicators of a high level of habitat connectivity and intactness.

Though not the rarest species known to occur in the Eightmile watershed, the Cerulean Warbler is arguably the highest-profile wildlife management issue. The Eightmile watershed appears to have among the highest breeding-season densities of this bird in New England. It is perhaps the most area-sensitive of all North American birds, and is experiencing rapid range-wide decline. The Cerulean Warbler has been listed as a species of high global conservation concern by several international avian conservation organizations.

Overall, the combination of species and natural communities offer the rarity, abundance and diversity that support a biologically diverse Eightmile River watershed ecosystem. This combination is clearly unique and exemplary not only within Connecticut but throughout New England and as such qualifies as an outstanding resource value for the Eightmile River Watershed.

Some Key Findings on the Status of Unique Species and Natural Communities in the Eightmile River Watershed

The total of known extant State-listed plant occurrences in the watershed is 54 occurrences. Eleven of these species are also New England regional rare species, and several of these occurrences are of regional significance.

Approximately 100 occurrences of natural communities in the watershed were “significant” according to our research.

Potentially the most important biodiversity features of the Eightmile River watershed are the extensive meta-occurrence of “warm-season” grasslands, which represent among other things an important reservoir of native genotypes of grass species.

As ranked among the 417 New England regional basins in terms of number of extant rare species per unit basin area, the Eightmile ranks in the 96th percentile in terms of extant total rare species, and in the 99th percentile in terms of extant globally rare species.

See appendix 4 and 6 in the Eightmile River Watershed Management Plan for additional details.



The Cerulean Warbler has been listed as a species of high global conservation concern by several international avian conservation organizations.

@ Gillian Harris, 2006

WATERSHED ECOSYSTEM

The most outstanding of all characteristics of the Eightmile is the intact, high quality watershed ecosystem. The Eightmile River Watershed ecosystem reflects the sum of the many interacting ecological features found throughout the watershed. The fact that each of these features are generally in excellent condition means that their sum at the ecosystem level is synergistic – “greater than the sum of the parts” - and that an outstanding overall ecosystem is the result. Key components defining the structure, function and landscape context of the watershed were found to be favorable for designating the watershed ecosystem as an outstanding resource value.

Key components of the intact Eightmile watershed ecosystem are:

Structure

- Rare, diverse and abundant species and natural communities



Lily Pads on
Walden Preserve

- Extensive habitat which is intact and connected
- Limited presence of invasive species
- High water quality
- Stream connectivity throughout most of the watershed
- Natural channel morphology
- Extensive forest and vegetative cover

Function

- Hydrology of the watershed is as natural and unimpaired as any in Connecticut
- Sediment and scour characteristics are natural
- Nutrient and energy cycles reflect an undisturbed system
- Size of habitat and a low level of system manipulation allows natural disturbance regimes
- Context of the watershed within the southern Connecticut River Valley landscape is favorable.
- By definition, delineating the ecosystem at the full watershed level incorporates the full range of land-based ecological functions which occur within the system.

When combined with the specific qualities of each of the previously described natural resource ORVs (water quality, hydrology, geology, unique species and natural communities) these characteristics of structure and function easily qualify the watershed ecosystem as an outstanding resource value.

Some Key Findings on the Status of the Watershed Ecosystem in the Eightmile River Watershed

The Eightmile watershed contains all of the critical components of a high quality watershed ecosystem and these components are in excellent condition. Many of these are characterized by the other ORVs.

The quality of key ecological processes such as nutrient and energy cycling is excellent.

Immediately outside of the Eightmile Watershed, the landscape remains largely intact providing a good buffer for the Eightmile system and greater overall ecological integrity.

A large portion of the Eightmile watershed's forested portion occurs as large, unfragmented blocks (e.g., 72% of the watershed consists of large connected roadless blocks of habitat 1000 acres or more). There are also other indicators of high habitat connectivity and intactness such as high percentage of forested area and small amounts of development.

The Eightmile watershed has relatively low levels of invasive species.

The absence of flood control structures allows streams within the watershed to host in abundance various riparian communities that are dependent upon periodic flooding and natural scouring.

CULTURAL LANDSCAPE

The rural character, history and intact bucolic landscape contribute to the significance of the cultural landscape for the Eightmile River Watershed. The watershed remains a rural place, with small settlements, winding roads and trails. There are no large commercial developments and the few convenience stores are outnumbered by general stores and farm stands. Small dispersed hamlets and farmsteads, as well as town greens and 18th and 19th century buildings, are connected by a road network dating originally to the Colonial era. The historic pattern of settlement and human circulation within the watershed still exists today.

Nearly 300 archaeological and historic architectural sites have been identified for the towns and villages of the Eightmile River watershed, 23 of these are located near the Eightmile River main stem and the East Branch. The historic sites, nine of which are listed on the National Register of Historic Places, include buildings, bridges, mills, dams, cemeteries and wharfs as well as historic districts.

When compared to other watersheds of similar size in Connecticut all of these features combine to make the Eightmile River cultural landscape exemplary as an outstanding cultural resource value.



Sleigh Riders in Salem

Some Key Findings on the Status of Cultural Resources in the Eightmile River Watershed

The Eightmile River watershed landscape is a significant example of a successional agrarian landscape in southern New England that is relatively undisturbed by 20th century urbanization or other modern development.

Lands bordering the Eightmile River have a high potential for intact archaeological resources.

Many of the 17th, 18th and 19th century buildings, structures, and sites analyzed as cultural landscape study areas demonstrate the high degree of historic integrity that remains, particularly in architectural form.

The topography, past land use, and lack of modern development contribute to a unique watershed landscape allowing for the possibility of many additional intact archaeological sites to exist.

Free flowing determination – 3.b.2.

This subsection describes the free-flowing character of the study segment.

Three small impoundments exist along the main stem of the Eightmile and the East Branch. However, these dams are run-of-the-river and do not alter the riverine appearance of the area and therefore meet the “generally riverine in appearance” standard for segments eligible for designation under the Act.

Two of the impoundments lying along the reaches proposed for designation have been equipped with fish passage structures that further reduce their impact on the river system. One of these two, Moulsons Pond, also has a small hydroelectric generating station incorporated into a historic mill raceway. This facility is not regulated by the Federal Energy Regulatory Commission or Connecticut Department of Environmental Protection. The station is physically limited to a 40 cfs draw of water, and, as presently constituted, does not significantly detract from the preservation of the river values.

The remaining dam is scheduled for removal in the near future and with it there will be no impediments to fish passage along the Eightmile River including its two principal branches, the East Branch and the main stem.

This standard for free flowing eligibility is elaborated upon in the 1982 Guidelines from the Departments of Agriculture and Interior which states that “There may be some existing impoundments, diversion and other modifications of the waterway having an impact on the river area. Existing low dams, diversion works, riprap and other minor structures will not bar recreational classification, provided the waterway remains generally natural in appearance.”

Because the three dams do not regulate flow on the river, and because they meet the described criteria, the segments proposed for designation meet the free flowing status requirements of the National Wild and Scenic Rivers System.

Conclusion and classifications – 3.b.3.

As noted in the introduction to the eligibility findings (above) the committee found watercourses throughout the Eightmile system to meet the eligibility requirements of possession of outstandingly remarkable resources as well as free flowing character.

All segments of the Eightmile that are recommended for designation (see section 4.H) are to be classified as ‘scenic’. This classification was assigned due to the fact that the described segments of the Eightmile generally meet the requirements and intent of the scenic classification. While some small areas of the segments may better be described by the recreational classification, the National Park Service and the Study Committee chose to assign the classification that best fit the watershed as a whole and required less minute divisions of the designated segments.

Suitability Findings and Management Context

This chapter states the study's findings relative to Section 4(a) of the Wild and Scenic Rivers Act that requires the study report to detail the river's suitability or non-suitability for national designation. This chapter also includes a concurrent analysis of the management context as directly related to factors of suitability.

Principal Factors of Suitability – 4.a.

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

1. the adequacy of existing protection measures to conserve the river's outstanding resources without the need for federal land acquisition or federal land management;
2. whether there is an existing or proposed management framework that will bring the key river interests together to work toward the ongoing protection of the river;
3. the strength of local support for river protection and national designation;
4. the effects of designation on uses of the land, water base, and resources associated with the river, the neighboring communities, etc. (addressed under Chapter 5: Environmental assessment of Alternatives).

Descriptions of the analysis of these factors are described below in sections 4.b. through 4.d.

Existing Protections – 4.b.

Currently, there are strong protections in place for the Eightmile River Watershed. These protections include: local, state and federal statutes and regulations that directly protect the waterways and adjacent lands, large amounts of conserved land and open space, many non-profit and governmental supporting organizations, landscape features that do not promote development, and a strong desire by local citizens to preserve the resource values of the watershed. Together with a locally administered watershed management

plan, these existing protections are found to meet the suitability criteria for designated segments recommended for Wild and Scenic River designation.

The following are a summary of existing protections.

Regulatory Protections – 4.b.1.

In order to identify the controls, policies, and plans that favor protection and enhancement of the natural and cultural resources in the Eightmile River Watershed, the Study Committee contracted with the Natural Resource Conservation Service (NRCS) to provide an inventory and review of existing municipal regulations and programs. The full version of this review is available in the Eightmile Watershed Management Plan and in the DVD provided with this document. Appendix 3 includes a chart of regulations specifically pertaining to the outstanding resource values listed above as well as a summary of state and federal programs contributing to the protection of the Eightmile.

Local, State and Federal protections are briefly described below.

LOCAL

Salem, East Haddam and Lyme each have largely comprehensive local land use regulations. Each town has adopted a set of basic regulations designed to protect the natural, cultural, and historic features of the community.

Each town has incorporated conventional flood plain management regulations and erosion and sedimentation control regulations. All three communities have established to varying degrees

overlay or buffer areas in an effort to ensure that natural, cultural, and historic resources are identified and measures are implemented to protect those resources. Resource extraction regulations, state model wetland regulations,

septic system location and design, ridgeline protection vegetation restoration/preservation regulations and open space set asides as well as bonding requirements are all part of each town's collection of regulatory tools.

Some of the Key Local Protections

Local Wetlands Commissions – Connecticut state statute Inland Wetlands and Watercourses Act (sections 22a-36 through 22a-45 of the CT General Statutes) sets broad authority to regulate wetlands through local municipal watercourse commissions and state regulatory process. Municipal Inland Wetland and Watercourse Commissions can regulate for activities in upland review areas that would likely impact wetland or watercourse function. Reviews in upland areas may include assessing and regulating impacts from a proposed activity on hydrologic, water quality and ecological functions. The upland review area for the towns is 100 feet for East Haddam and Lyme and 75 feet for Salem.

Setbacks, Overlay Zones and Buffer Areas – In order to protect important riparian functions, The Town of Lyme recently adopted regulations along Hamburg Cove implementing a riparian setback for structures and vegetative cutting. East Haddam uses these tools to buffer rural and agricultural areas as well as to separate zone types. Salem uses several types of recreational zones.

Subdivision Regulations/Net buildable/Soil Based Zoning – Recognizing that new construction should be compatible with the carrying capacity of the land, all three towns have adopted net buildable area requirements in their subdivision regulations. East Haddam has incorporated soils based zoning into their regulations which further ensures that proposed development is compatible with the lands and resources the development may affect. Salem requires 75% of the net buildable area be outside of the upland review area and Lyme requires all of the net buildable area be at least 100 feet back from wetlands and watercourses.

Open Space – Each town has incorporated open space provisions into their regulations. Lyme and East Haddam require a minimum of 15% open space set asides whereas Salem uses a need based system for determining open space designation.

Existing protections are found to meet the suitability criteria for designated segments recommended for Wild & Scenic River designation.

STATE

Many state statutes contribute to the protection of the Outstanding Resource Values. Three of the most important state regulations protecting the Eightmile River are the Inland Wetlands and Watercourses Act (as described in the local regulation summary), the Water Diversion Policy Act and the Connecticut Water Pollution Control statutes. These programs regulate non-agricultural activities within or near wetlands and watercourses, water diversions of over 50,000 gallons per day, and pollution inputs to the river and groundwater.

FEDERAL

There are multiple federal regulations that offer some form of protection for the Eightmile River. The Clean Water Act provides substantial protection for the Eightmile River's water quality by restricting all discharges into the river through a series of different programs. The National Wild and Scenic Rivers Act provides the strongest protection available for the Eightmile by protecting designated rivers from any federally assisted or licensed water resource development project that would have a direct and adverse effect on the river's resources. Additionally, National Environmental Policy Act (NEPA) and the Rivers and Harbors Act provide some protection to the Eightmile.

Further description of these programs is available in Appendix 3.

In all, there is a substantial set of local, state and federal regulations that are currently protecting the Eightmile River Watershed. With the addition of the statutory protections a Wild and Scenic River designation provides from adverse federal actions, it is deemed that a sufficient regulatory protection framework for Wild and Scenic River suitability exists.

In addition, these protections meet the standards of Section 6c of the Wild & Scenic Rivers Act, and thereby trigger the provision of that Section which prohibits federal condemnation of lands.

Physical limitations to development – 4.b.2.

Wetlands, steep slopes, rock outcroppings and soil conditions limit the potential for development in much of the Eightmile River watershed.

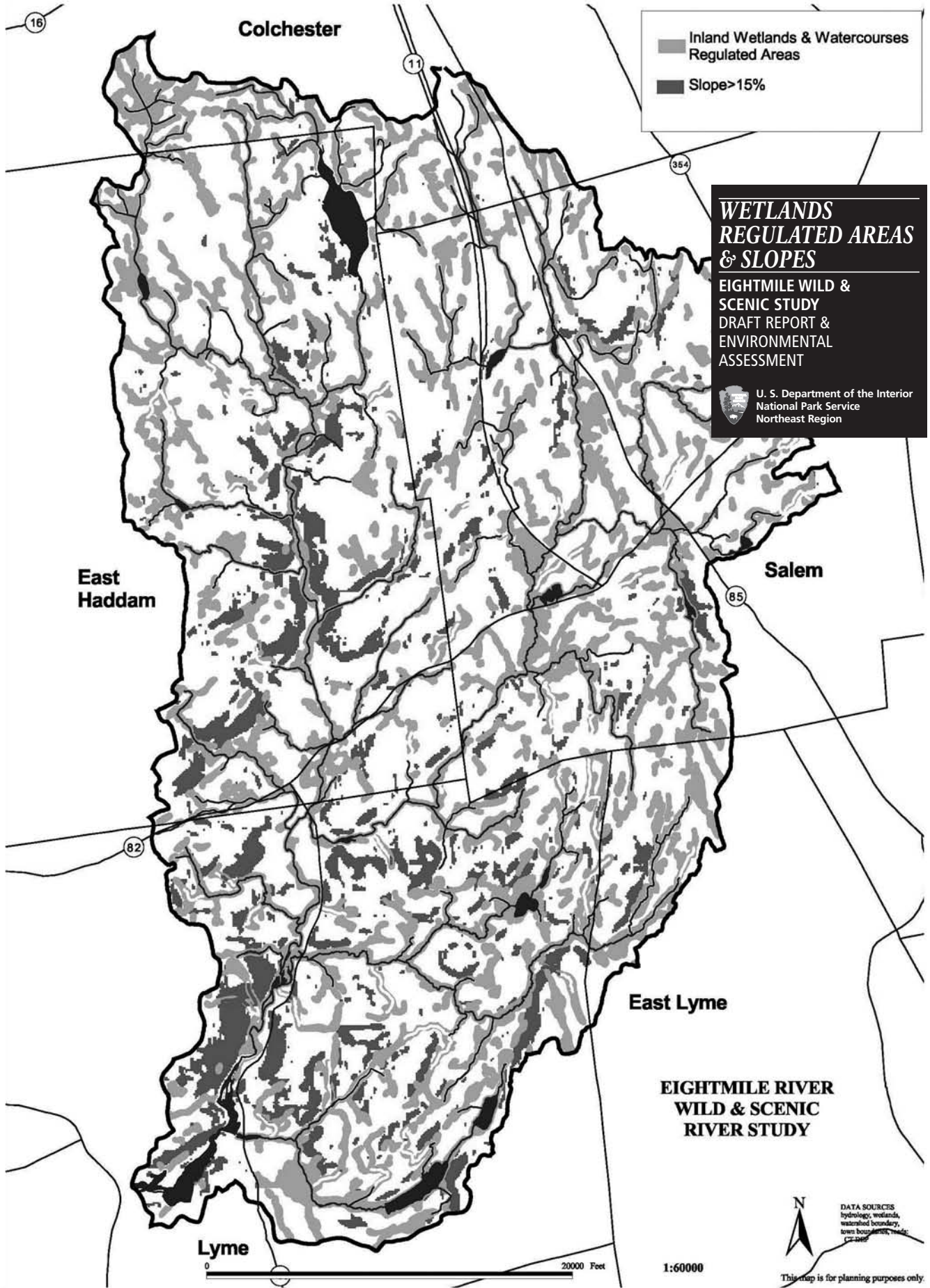
Over 31% of the land within the watershed falls within a wetland, watercourse or upland review area and 11% of the watershed within the towns of East Haddam, Lyme and Salem lies on steep slopes or rock outcroppings.

These limitations are one of the reasons that the Eightmile watershed has remained relatively undeveloped and therefore suitable for Wild and Scenic designation.

See map on the following page: Wetlands Regulated Areas and Slopes

Land Conservation – 4.b.3.

In total, the three towns, local land trusts, the state and The Nature Conservancy have permanently preserved over 31% of the watershed (over 12,500 acres of land) and 25% of all river frontage within 100 feet of the 160 miles of river and stream within the watershed (See map reference below). The Eightmile River watershed also has substantial unfragmented areas. 33% of forested areas in the watershed are in blocks of greater than 1000 acres and 17% are in blocks greater than 500 acres much of which is also made up of large land parcels. Ownership and land use patterns of this type tend to increase the efficiency of land conservation projects.



Inland Wetlands & Watercourses Regulated Areas
 Slope > 15%

**WETLANDS
 REGULATED AREAS
 & SLOPES**

**EIGHTMILE WILD &
 SCENIC STUDY
 DRAFT REPORT &
 ENVIRONMENTAL
 ASSESSMENT**

U. S. Department of the Interior
 National Park Service
 Northeast Region

**EIGHTMILE RIVER
 WILD & SCENIC
 RIVER STUDY**

DATA SOURCES
 hydrology, wetlands,
 watershed boundaries,
 town boundaries, roads,
 etc.

This map is for planning purposes only.

Currently there are three local land trusts and one global land trust actively working to protect land within the watershed. In addition, the State of Connecticut has made both direct open space purchases and provided significant grant funding to support local open space acquisition. Conservation programs by these groups and the towns are ongoing and potential for further conservation acquisition from willing sellers is strong. As noted in section 3.B.1, the ecological surveys conducted during the Study resulted in significant discoveries of rare and important natural communities. These findings, along with the increased visibility of the conservation needs within the watershed will likely continue the strong effort being put into land conservation. Additionally, the open space programs implemented by the three towns will have a significant impact on land conservation rates into the future. Lyme along with its partners, for example, has protected 1,724 acres of open space since 1998 bringing the total of open space to nearly 8000 acres.

Currently there are three local land trusts and one global land trust actively working to protect land within the watershed.

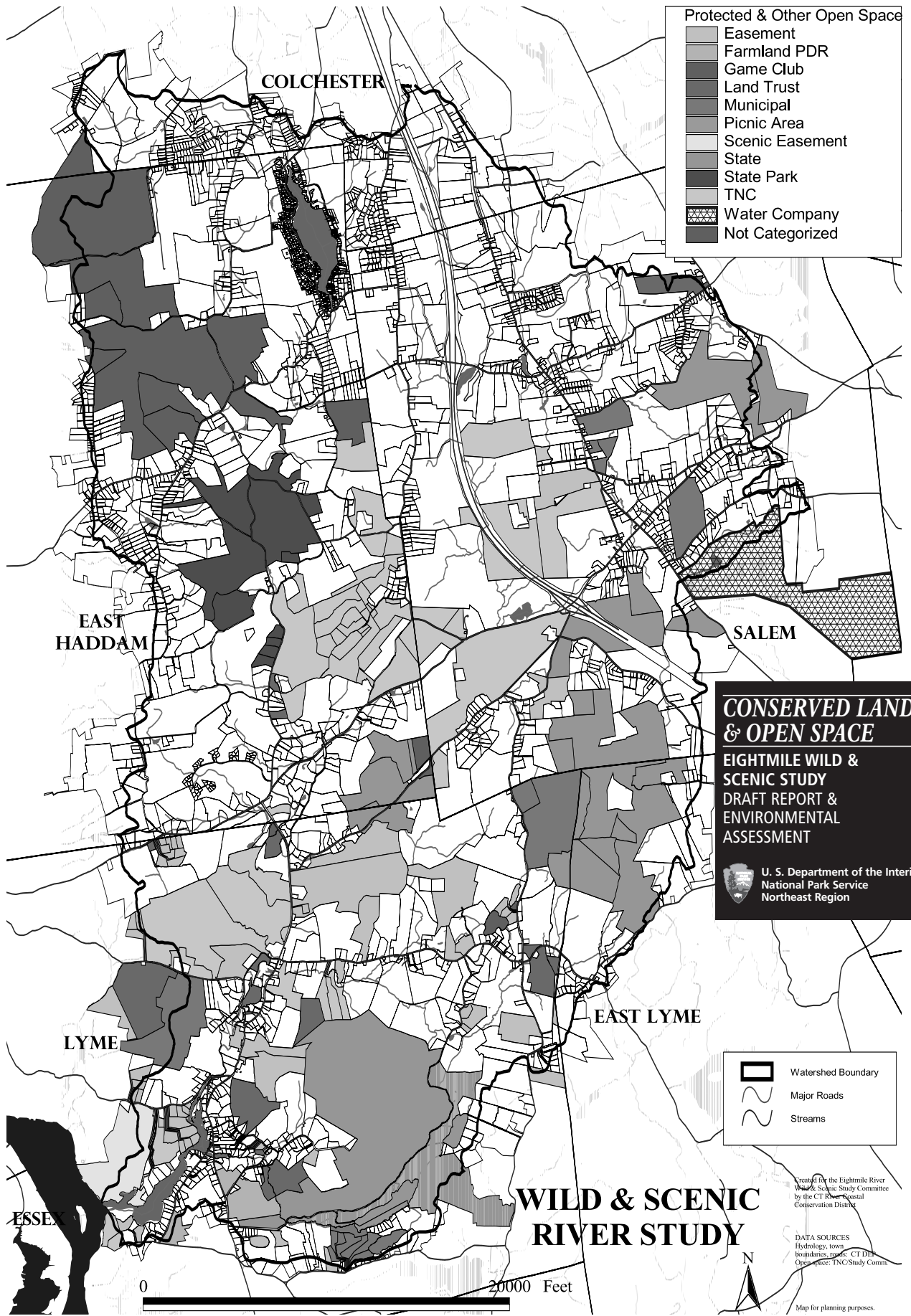
**See map on the following page:
Conserved Land and Open Space**
(reproduced in color in the Eightmile River Watershed Management Plan)

Other supporting programs – 4.b.4.

LOCAL LAND TRUSTS

Land trusts within the three towns have been major contributors to the Wild and Scenic Study effort and will hold three seats on the Eightmile River Wild and Scenic Coordinating Committee. In addition to actively seeking out and protecting important land in the watershed, the land trusts play a significant role in community outreach, education and land stewardship activities within the watershed.

Combined, the three local land trusts (Salem Land Trust, Lyme Land Conservation Trust and East Haddam Land Trust) hold in fee and protect with easements over hundreds of acres of pristine watershed land.



- Protected & Other Open Space**
- Easement
 - Farmland PDR
 - Game Club
 - Land Trust
 - Municipal
 - Picnic Area
 - Scenic Easement
 - State
 - State Park
 - TNC
 - Water Company
 - Not Categorized

**CONSERVED LAND
& OPEN SPACE**

**EIGHTMILE WILD &
SCENIC STUDY
DRAFT REPORT &
ENVIRONMENTAL
ASSESSMENT**

U. S. Department of the Interior
National Park Service
Northeast Region

- Watershed Boundary
- Major Roads
- Streams

**WILD & SCENIC
RIVER STUDY**

Created for the Eightmile River
Wild & Scenic Study Committee
by the CT River Coastal
Conservation District

DATA SOURCES
Hydrology, town
boundaries, roads: CT Dept.
Open Space: TNC/Study Comm.

Map for planning purposes.

Ken Gaudin, June 1, 2008

THE NATURE CONSERVANCY LOWER CONNECTICUT RIVER PROGRAM

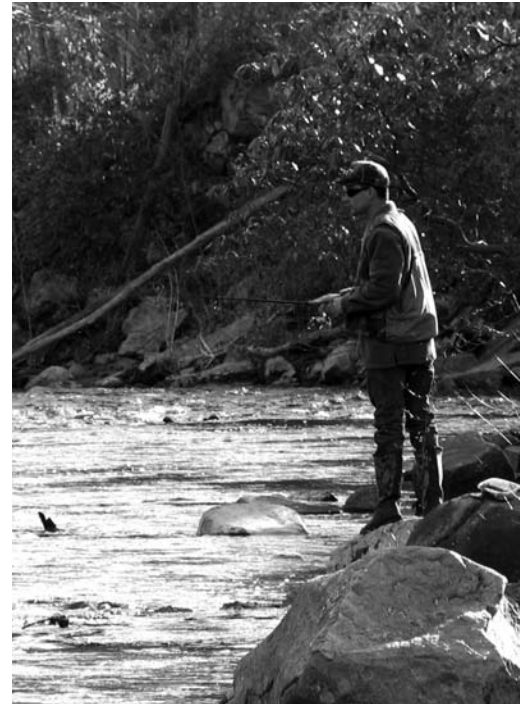
The Nature Conservancy (TNC) was a key convener of the original 1990's effort to study the Eightmile River watershed and played a key role in initiating and implementing the Eightmile Wild and Scenic Study. TNC continues to be highly active in the Eightmile watershed. As of 2006, TNC has protected nearly 4,000 acres in the Eightmile watershed. Administering a program dedicated specifically to the Eightmile, TNC is currently working on several fronts to protect the outstanding resource values of the watershed. In addition to continued work toward conservation of key properties within the watershed, TNC has recently secured funding and organized a project to remove the Zemko dam – the last fish barrier on the East Branch main stem of the Eightmile River. It is also implementing invasive species control projects in the Eightmile, conducting scientific research and monitoring and managing over 2,700 acres of 7 publicly accessible nature preserves.

UCONN COOPERATIVE EXTENSION SYSTEM/NEMO

The Nonpoint Education for Municipal Officials (NEMO) Program and UCONN Extension were key conveners of the original 1990's effort to study the Eightmile River Watershed. NEMO staff has also been active in the Wild and Scenic River Study process. Participation in the original 1990's effort and involvement in the Wild and Scenic Study have contributed to the overall success of the original 1990's initiative. In addition to supporting the Eightmile effort, the extension service provides land use planning education and resources to towns in the watershed.

CONNECTICUT RIVER COASTAL CONSERVATION DISTRICT

The Conservation District provided technical and outreach resources to the Eightmile Wild and Scenic study. The mission of the Conservation District is to assist municipal staff, land use commissions and the public with technical assistance and education services involving soil and water conservation, erosion and sedimentation control, stormwater management and watershed protection.



CONNECTICUT RIVER WATERSHED COUNCIL

The Connecticut River Watershed Council has been committed to the Connecticut River and its major tributaries such as the Eightmile for over 50 years. In 2005 the Council led a partnership to complete the removal of the last fish barrier on the main stem of the Eightmile River. Along with state and non-profit partners, the Council was a key organizer and supporter of this project. The Council continues to support migratory fisheries restoration throughout the Eightmile River watershed.

AMERICAN RIVERS

The New England field office of American Rivers has supplied engineering support for dam removal and fish passage restoration in the Eightmile River watershed and continues to support restoration and preservation projects key to preservation of resource values.

USFWS CONNECTICUT RIVER FISHERIES PROGRAM

Funding for dam removal and fish migration restoration has been provided by the US Fish and Wildlife Service River Fisheries Program and support by the Connecticut office strengthens programs to preserve the outstanding resource values. The last fish barrier on the main stem of the Eightmile was removed in 2005 with funding assistance from this program.

NOAA

The NOAA Community Restoration Program has provided funding and project support for fish way installation and dam removal on the Eightmile. The last fish barrier on the main stem of the Eightmile was removed in 2005 with funding assistance from this program.

USDA NRCS WATERSHED PROTECTION AND FLOOD PREVENTION PROGRAM

National Resource Conservation Service's conservation programs provide financial and technical assistance for natural resource conservation. Farmers and private landowners can address resource concerns on farmland, promote environmental quality, address challenges in water quality and quantity, protect prime farmland, and protect valuable wetland ecosystems and wildlife habitat on private lands. NRCS was an active participant in the Eightmile Study and carried out the municipal regulatory review.

NON-REGULATORY STATE PROGRAMS

The State of Connecticut has been active in dam removal and other water quality and land protection initiatives in the watershed. The State played a key role in design, funding and construction for fishways on the river as well monitoring and maintenance support.



Management Framework – 4.c.

The second suitability criterion addresses the need for a resource and protection framework that would protect the resources of the Eightmile from gaps in the existing resource protections described above. The framework also facilitates communication and cooperation among the citizens and entities that will be responsible for implementing protection measures.

The management framework for the Eightmile River watershed is based on a cooperative effort of all stakeholders to oversee the long-term protection of the watershed. An “Eightmile River Wild and Scenic Coordinating Committee” is to be established after completion of the Study and as part of the designation process (see description below). This committee will provide oversight and guidance in the implementation of the Eightmile Watershed

Management Plan. The Committee will work with and largely depend on landowners, town boards, commissions and their associated local communities, the state, user groups, and federal agencies that will all have active roles in the implementation of the management plan and the protection of the outstanding resource values.

The Eightmile River Wild and Scenic Study Committee determined that the outstanding resource values depend on sustaining the integrity and quality of the Eightmile River Watershed, that these values are manifest within the entire Watershed and furthermore that the Watershed as a whole, including its protection, is itself intrinsically important to this designation. Based on this determination, the Study Committee took a watershed approach in studying and recommending management options for the river segments and the Eightmile River Watershed as a whole.

In support of the watershed approach, the watershed management plan, and to formally establish the importance of protection of the watershed as a whole, the Study Committee recommends additional language be included in the designation legislation which establishes the importance of all streams within the watershed (as detailed in section 4D).

Management Plan – 4.c.1.

Development of the Eightmile River Watershed Management Plan was of paramount importance to the Study Committee. The Management Plan is an ambitious and detailed document that outlines the Committee's conclusions on the importance of the watershed as a whole, the outstanding values contained within the watershed and the specific strategies, tools and steps needed to fully secure protection of the outstanding resource values.

As described in the Methods section of this report, a series of goals, indicators, protection gaps and threats were established by the Study Committee. The end product of these steps was a series of recommendations that were categorized by priority and topic. A set of six Tier One Tools provides the Coordinating Committee and land use commissions with detailed recommendations that the Study Committee considers to be of primary importance. These

prioritized issues are discussed in detail and their implementation is to be initiated by each town within 6 to 12 months from town endorsement of the Management Plan (all town endorsements occurred in January/February 2006).



Tier Two Tools were used to outline the long term direction and strategies for protecting the ORVs. This longer list of recommendations and guidance includes less detail than the Tier One issues but rounds out the protection framework necessary to preserve the Eightmile well into the future. These tools are meant to be advisory in nature and implemented at the discretion of each land use commission and participating organization.

Each of the three communities has formally endorsed the plan through town Meeting votes and all of the land use commissions and boards of selectmen endorsed the Plan as well. This type of management framework has proven to be a successful approach in providing for management coordination and implementation on the seven other northeastern Wild & Scenic Rivers.

A note on future evolution of the management plan: It is the intention of the Study Committee that the Eightmile River Watershed Management Plan be implemented in an adaptive manner, allowing for the continual improvement of management policies and practices by learning from previous efforts and incorporating new knowledge. Additionally, many of the Tier Two and long term protection recommendations will require future monitoring and research to complete.

The close of the official congressionally designated study period does not preclude continuing and future studies of the Eightmile River system. For example, the instream flow study has several phases planned for completion after the close of the study period.

Description of the Management Plan drafting process guidelines are in Section 1.B.4 Study Goals and Methods of this report. The Executive Summary of the Eightmile River Watershed Management Plan is provided in Appendix 4 of this report. Chapters IV, V, and VI of the Eightmile River Watershed Management Plan detail the proposed management framework for implementation of the river protection strategies.

Eightmile River Wild and Scenic Coordinating Committee – 4.c.2.

The Eightmile River Wild & Scenic Coordinating Committee (ERWSCC) will be established in order to ensure ongoing involvement from a broad range of stakeholders, to achieve successful implementation of the Watershed Management Plan and to carry out obligations of Wild and Scenic designation.

The strength of the Coordinating Committee lies in its broad base of membership (as detailed below) from the community as well as members representing non-governmental and state agencies.

The purpose of the Eightmile River Wild & Scenic Coordinating Committee, which will be advisory, is to:

- Coordinate and champion implementation of the Watershed Management Plan.
- Bring the stakeholders in watershed management together on a regular and ongoing basis to facilitate continued cooperation and coordination.
- Provide a forum for all watershed interests to discuss and resolve watershed related issues.
- Monitor the outstanding resource values with respect to the degree they are protected, degraded or enhanced during implementation of the plan.
- Assist in securing additional funding to facilitate implementation of the watershed management plan

The following entities constitute the core voting membership of the ERWSCC. Each municipality will have two representatives and one alternate, all other entities will have one representative and one alternate. There can be no additional core members.

-
- Town of East Haddam

 - Town of Lyme

 - Town of Salem

 - East Haddam Land Trust

 - Lyme Land Conservation Trust

 - Salem Land Trust

 - The Nature Conservancy

 - State of Connecticut Department of Environmental Protection

 - U.S. Department of the Interior

Additional information on membership and operating guidelines are in the Watershed Management Plan Chapter V.

Recommended Approach for Watershed-based Designation – 4.d.

Throughout the Study, the Study Committee was dedicated to obtaining a designation that reflects the significance of the Eightmile River watershed as has been previously indicated. Results from the eligibility phase of the Study confirmed the legitimacy of designating the “full” network of Eightmile streams. The management framework was designed to provide for the protection and management of the watershed as a whole and as such furthered the potential suitability of a full watershed designation. Finally, community input during the Study suggested support for the watershed approach in general. In summary, these factors taken together pointed to designating all perennial streams within the watershed.

During the initial phase of evaluating which streams should actually be recommended for designation, the Study Committee considered designating all second order streams and higher (stream order is defined at the end of section 1.B). It was thought that in this case, although not every stream would be designated, second order streams would be nearly representative of the full watershed. After further discussion and analysis, the Study Committee made a further adjustment concluding that a watershed-based designation would be best defined as follows:

Designate the Eightmile River main stem, East Branch and most of the third order streams of the watershed (totaling 25.3 miles). These are the principle watercourses which define the watershed. To fully retain the watershed approach, all remaining perennial streams would be identified and recognized, in the Congressional legislation designating the Eightmile, for their critical role in the watershed. Although recognized these streams would not be formally designated.

The rationale for this approach was:

The management plan and management framework provide sufficient protection for all streams and the watershed as a whole without needing to rely on a full designation to provide such protection. Additionally, designation of the principal watercourses would still allow for consideration of the connection between the smaller tributaries and the designated segments.



(Top to bottom)

Town Meeting Votes in Lyme, East Haddam and Salem

A full designation could create an extra administrative burden with associated costs on the National Park Service, U.S. Army Corps of Engineers and Towns and such a burden is not necessary to fulfill the watershed approach identified by the Study Committee.

By identifying (but not designating) all other perennial streams in the watershed within the language of the designation legislation it is possible to formally recognize and make clear to all interested parties the importance of the watershed and its protection. Based on this, the Study Committee is recommending the following language be added to the designation bill:

“In furtherance of the watershed approach to resource preservation and enhancement articulated in the Eightmile River Watershed Management Plan the following tributaries of the Eightmile River watershed are recognized as integral to the protection and enhancement of the Eightmile River Watershed and to the segments designated by section 3: Beaver Brook, Big Brook, Burnhams Brook, Cedar Pond Brook, Cranberry Meadow Brook, Early Brook, Falls Brook, Fraser Brook, Harris Brook, Hedge Brook, Lake Hayward Brook, Malt House Brook, Muddy Brook, Ransom Brook, Rattlesnake Ledge Brook, Shingle Mill Brook, Strongs Brook, Tisdale Brook, Witch Meadow Brook, and all other perennial streams within the Eightmile River watershed.”

At the request of the Study Committee, the National Parks Service may comment on any project within the watershed regardless of designation status if the project has potential to degrade the outstanding resource values.



With this approach the Study Committee could achieve the purposes of a watershed-based designation while also providing for efficient and practical implementation.

Formal endorsements by the citizens of each town were based on designating the specific streams as recommended here.

See section 4.h. for a detailed summary of streams recommended for designation.

Support for River Protection and National Wild and Scenic Designation – 4.e.

Support for Wild and Scenic designation as well as conservation of the Eightmile Watershed was very high throughout the study. The broad range of supporting and interested organizations, the volunteer support and participation in stream assessments and other studies as well as a high level of direct involvement by the land use commissions, governing bodies, non-profit organizations and local citizens signifies this high level of support.

Evidence of Support – 4.e.1.

STUDY COMMITTEE

During their meeting of April 4, 2006, the Eightmile River Wild and Scenic Study Committee endorsed this plan with a unanimous vote. The Committee is confident that the Eightmile River Watershed Management Plan and Wild & Scenic designation is the best route to protecting the Eightmile for future generations.

LOCAL

During January and February of 2006, the towns of East Haddam, Lyme and Salem held town meeting votes to act on endorsement of the Eightmile River Watershed Management Plan and Wild and Scenic designation. Each town passed the endorsement by an overwhelming majority.

Town Vote Endorsement Language

“The Town of _____ endorses the Eightmile River Watershed Management Plan developed by the Eightmile River Wild and Scenic River Study Committee, together with its recommendation to seek Wild and Scenic River Designation through an act of the United States Congress.”

All land use commissions from the three towns voted to endorse the Eightmile River Watershed Management Plan and Wild and Scenic designation. These commissions included: Salem: Planning and Zoning Commission, Inland Wetlands and Conservation Commission; East Haddam: Planning and Zoning Commission, Inland Wetlands and Watercourses Commission, and Conservation Commission; Lyme: Planning and Zoning Commission, and Inland Wetlands Commission.

Town Meeting Votes

| | For | Against |
|-------------|-----|---------|
| Lyme | 280 | 5 |
| East Haddam | 290 | 35 |
| Salem | 108 | 8 |

Table 4.1: Approximate Town Meeting vote numbers.

Other commissions and governing bodies also voting to endorse the Eightmile River Watershed Management Plan and Wild and Scenic Designation were: East Haddam Board of Selectmen, East Haddam Board of Finance, Lyme Board of Selectmen, Lyme Board of Finance, Salem Board of Selectmen.

Documentation of these endorsements is found in Appendix 5

STATE

Public Act No. 05-18 “An Act Concerning Designation of the Eightmile River Watershed Within the National Wild and Scenic River System” was signed into law by Governor Jodi Rell at a riverside ceremony on May 9, 2005. This act endorsed Wild and Scenic designation and stated that “The Commissioner of Environmental Protection shall cooperate with all relevant federal, state and local agencies to provide for such designation and to implement any management plan developed in accordance with the federal Wild and Scenic Rivers Act.”

A copy of this legislation can be found in Appendix 5

Effects of Designation – 4.f.

In order to assess the effects of designation, two designation alternatives have been developed, and are compared to a non-designation alternative in Chapter 5.



Governor Rell addresses dignitaries, Study Committee members & residents at a riverside bill signing ceremony.

Conclusion on Suitability – 4.g.

Based on analysis of the principle factors of suitability by the Eightmile River Wild and Scenic Study Committee in cooperation with the National Parks Service it is found that the segments of the Eightmile River Watershed as described in section 3.B.3 are suitable for addition to the National Wild and Scenic Rivers System.

Additional conclusions include the following:

- Together with a locally administered watershed management plan, existing protections are found to adequately protect the Eightmile’s outstanding resource values without the need for federal land acquisition or federal land management. Existing local and State regulatory protections, combined with physical limitations to development, provide substantial protection to the river and its adjacent lands. These protections meet the standards of Section 6c of the Wild and Scenic Rivers Act, and thereby trigger the provision of that Section which prohibits federal condemnation of lands. The authority of the National Parks Service to acquire or manage lands for the purposes of protecting the resource values of the designated segments shall be limited to acquisition by donation or acquisition with the consent of the owner of the lands, and shall be subject to the additional criteria set forth in the Eightmile River Watershed Management Plan.
- The Eightmile River Watershed Management Plan along with the Eightmile River Wild and Scenic Coordinating Committee as established in the management plan provide an appropriate and effective management framework for the long term management and protection of the Eightmile River watershed.
- The Eightmile River Watershed Management Plan has been developed to meet the needs of local, state and federal stakeholders and programs. It has been endorsed as the management plan for the watershed by the governing bodies and citizens of East Haddam, Lyme and Salem. It should be utilized as the

“Comprehensive Management Plan” called for by Section 3d of the Wild and Scenic Rivers Act, if the River is designated as a component of the national system.

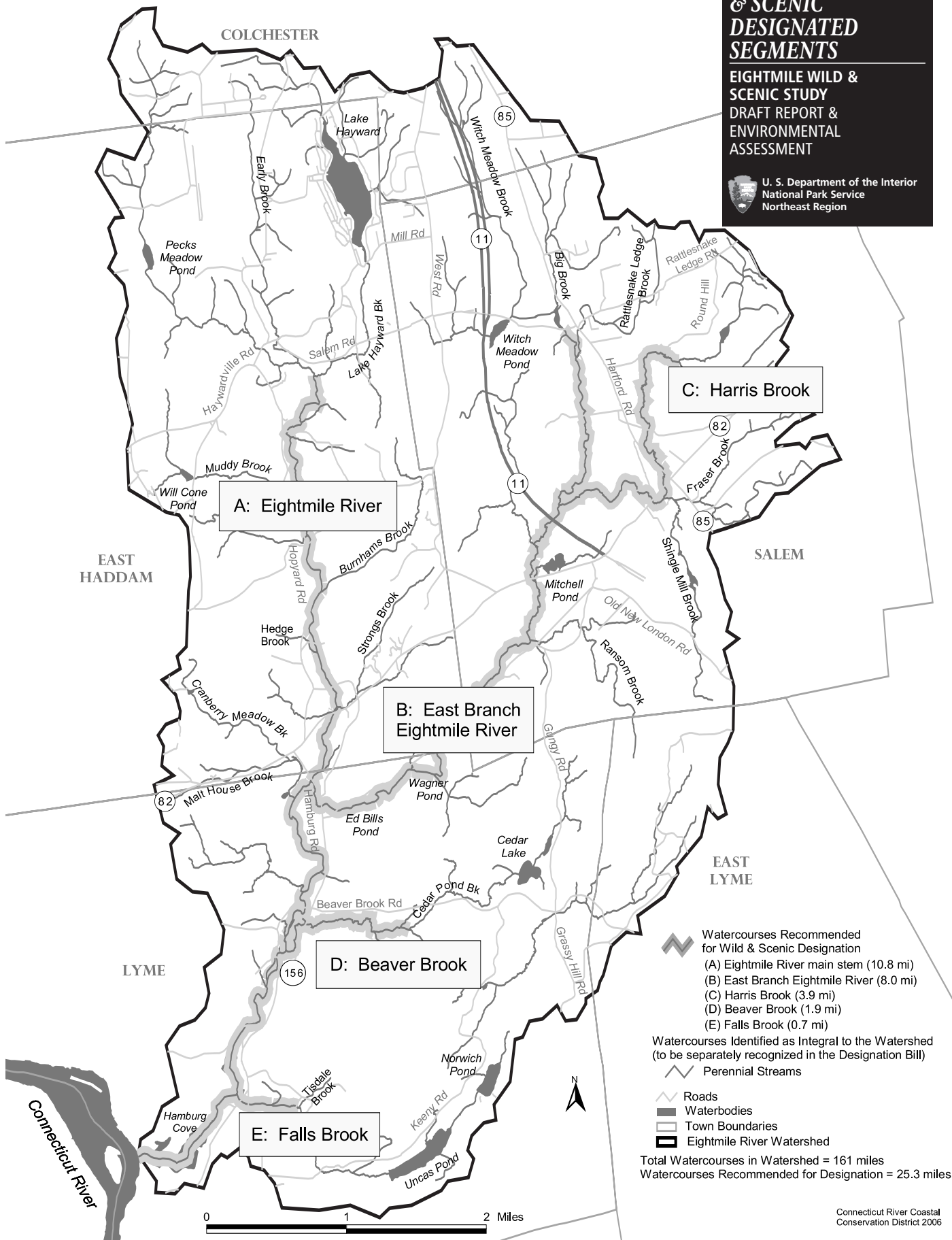
- The Eightmile River Wild and Scenic Study Committee has determined that the resource values depend on sustaining the integrity and quality of the Eightmile River Watershed, that these values are manifest within the entire Watershed and furthermore that the Watershed as a whole, including its protection, is itself intrinsically important to this designation. Based on this determination, the Study Committee took a watershed approach in studying and recommending management options for the river segments and the Eightmile River Watershed as a whole.
- Based upon the official record of endorsement from local citizens, local governing bodies and representatives, local and regional non-profit organizations as well as endorsement from the Connecticut General Assembly and Office of the Governor, it is concluded that there is sufficient support for designation as required by the Wild and Scenic Rivers Act.
- Based on Chapter 5 of this report, *Environmental Assessment of Alternatives*, the effects of designation on uses of the land, water base, and resources associated with the river, as well as socio-economic factors are concluded to be favorable for the Eightmile River Watershed and its citizens.

The resource values depend on sustaining the integrity and quality of the Eightmile River Watershed.

Recommended Stream Segments for Designation – 4.h.

In light of the qualifications described in the previous sections of this report, the following segments including the mainstream and certain tributaries, totaling approximately 25.3 miles, are found to be eligible and suitable for Wild and Scenic River designation and are to be classified as ‘scenic’:

Eightmile Mainstream: The entire 10.8 mile segment of the mainstream, starting at the confluence with Lake Hayward Brook to the confluence with the Connecticut River at the mouth of Hamburg Cover.



A: Eightmile River

B: East Branch Eightmile River

D: Beaver Brook

E: Falls Brook

C: Harris Brook

- Watercourses Recommended for Wild & Scenic Designation
 - (A) Eightmile River main stem (10.8 mi)
 - (B) East Branch Eightmile River (8.0 mi)
 - (C) Harris Brook (3.9 mi)
 - (D) Beaver Brook (1.9 mi)
 - (E) Falls Brook (0.7 mi)

Watercourses Identified as Integral to the Watershed (to be separately recognized in the Designation Bill)

Perennial Streams

- Roads
- Waterbodies
- Town Boundaries
- Eightmile River Watershed

Total Watercourses in Watershed = 161 miles
 Watercourses Recommended for Designation = 25.3 miles



Harris Brook
in the Spring

East Branch: The 8.0 mile segment of the East Branch of the Eightmile River starting at Witch Meadow Road to the confluence with the main stem of the Eightmile.

Harris Brook: The 3.9 mile segment of Harris Brook starting with the confluence of an unnamed stream lying 0.74 miles due east of the intersection of Hartford Road (CT Route 85) and Round Hill Road to the confluence with the East Branch of the Eightmile River.

Beaver Brook: The 1.9 mile segment of Beaver Brook starting with the confluence of Cedar Pond Brook to the confluence with the main stem of the Eightmile.

Falls Brook: The 0.7 mile segment of Falls Brook from the confluence with Tisdale Brook to the confluence with the main stem of the Eightmile River at Hamburg Cove.

The effects of designation on uses of the land, water base, and resources associated with the river, as well as socio-economic factors are concluded to be favorable for the Eightmile River Watershed and its citizens.

Identification and Comparison of Alternatives

This chapter considers several possible alternative actions resulting from the findings of the Eightmile Wild and Scenic River Study, and selects the Environmentally Preferred Alternative.

Identification of Alternatives – 5.a.

Alternative A. No Action

This alternative would maintain existing state and local controls for resource protection on the Eightmile River without additional federal oversight on federal water resource projects or federal support for local river protection efforts.

There are no direct costs associated with this alternative. Over the long-term, however, there could be substantial indirect costs if important river values, including water quality and identified outstandingly remarkable values, are allowed to deteriorate.

Alternative B. Designation of the entire Mainstem of the Eightmile River, East Branch of the Eightmile River and various additional third-order tributary streams.

This alternative would allow for a high level of protection for the Eightmile while avoiding extra administrative burden with associated costs on the National Park Service, U.S. Army Corps of Engineers and Towns that may be incurred under Alternative C.

Direct costs of this alternative to the federal government may be anticipated to be comparable to the direct costs of similar designations in the NPS' Northeast Region which have been averaging \$150,000 for each of seven designated "Partnership National Wild and Scenic Rivers". Some direct and indirect costs may also accrue to State agencies and non-governmental organizations partnering with the NPS through the Coordinating Committee, as they devote increased resources toward the Eightmile as compared to the no action alternative.

Alternative C. Designation of all second order and higher streams in the watershed

This alternative would maximize protection of the free-flowing condition and outstandingly remarkable natural and cultural resource values.

Direct short term costs associated with this alternative should be similar to those observed in Alternative B. Some likely difference would emerge over the long term due to designation of all second order streams and higher creating an extra administrative burden with associated costs on the National Park Service, U.S. Army Corps of Engineers and Towns.

Assessment of Alternatives – 5.b.

(See following table narratives)

Assessment of Alternatives – Description

| | | |
|--|---|---|
| <p>Alternative A: No Action</p> | <p>Alternative B: Designation of the entire Mainstem of the Eightmile River, East Branch of the Eightmile River and various additional order 3 tributary streams.</p> | <p>Alternative C: Designation of all second order and higher streams in the watershed</p> |
| <p>Description of Alternative</p> <p>Under this alternative, no portion of the Eightmile River watershed would be designated as a component of the National Wild and Scenic Rivers system. The existing local, state and federal river management and protection context would be unchanged. It is possible that the Eightmile River Watershed Management Plan prepared as a part of the study would be utilized by existing river stakeholders to guide and improve future river management and protection efforts. However, the absence of the federal designation and anticipated federal support for the Plan and its implementation would likely mean that the Plan and its implementation would be utilized to a much lesser extent than if designation were to occur. Similarly, it is possible that some other entity (rather than the National Park service) might organize, convene and support the Eightmile River Wild and Scenic Coordinating Committee charged with overseeing implementation of the Plan. The likelihood is, however, that this will not happen, and that the Coordinating Committee will not be a significant long-term factor in the absence of federal designation and support.</p> | <p>Description of Alternative</p> <p>Under this alternative, the main stem and certain tributaries, totaling approximately 25.3 miles would be designated as a component of the National Wild and Scenic Rivers System. This alternative would best match the desires of the communities, local governments and the Study Committee and other river stakeholders convened as a part of the Study. Under this alternative, 25.3 miles of the Eightmile River and certain tributaries would be subject to the additional protections of the federal designation. The National Park Service would be the anticipated convener for the Eightmile Wild and Scenic Coordinating Committee, ensuring that this oversight and coordination body exists and functions to stimulate implementation of the Eightmile River Watershed Management Plan. Federal funding (subject to congressional appropriations) would be available to assist the Coordinating Committee and its member institutions in Plan implementation.</p> | <p>Description of Alternative</p> <p>This alternative is similar to Alternative B, except that all second order and higher streams in the watershed would be designated. Federal support for the Eightmile River Wild and Scenic Coordinating Committee and Plan implementation would be similar to Alternative B. This alternative may require a level of extra administrative burden on the Corps of Engineers, National Park Service and land use commissions which is not offset by a corresponding benefit to the outstanding resource values of the watershed.</p> |

Assessment of Alternatives – Impact on Free-Flowing Character

| <p>Alternative A: No Action</p> | <p>Alternative B: Selected Designation</p> | <p>Alternative C: Widespread Designation</p> |
|---|--|---|
| <p>Impacts on Free-Flowing Character</p> <p>This alternative would provide no additional protection (beyond existing state and federal project review/permitting programs) to the free-flowing character of the Eightmile River. Federally assisted projects that could alter the free-flow of the river and its undisturbed shoreline areas would not be subject to Wild and Scenic River review. Over time a slow deterioration of natural stream channel conditions might occur, increasing the amount of river channel subject to bank hardening, channelization or other modifications. Since most, and perhaps all, projects posing a threat to free-flowing condition require federal assistance/ permitting, this lack of protection could be significant over time.</p> | <p>Impacts on Free-Flowing Character</p> <p>This alternative would protect 25.3 miles of the most crucial sections of the Eightmile River system from federally assisted or permitted projects that could alter the free-flow of the river. It would protect the segments of the Eightmile with the highest flow rates and highest potential for federally permitted projects that would alter the flow. The continued vigilance and oversight of the Coordinating Committee would also influence local and state river stakeholders to implement their programs in a resource-protective manner.</p> | <p>Impacts on Free-Flowing Character</p> <p>This alternative would provide maximum protection to the free-flowing condition of the Eightmile River Watershed by providing the protections of Section 7 of the Wild and Scenic Rivers Act to over 73 miles of rivers, streams and brooks in the watershed. The continued vigilance and oversight of the Coordinating Committee would also influence local and state river stakeholders to implement their programs in a resource-protective manner.</p> |

Assessment of Alternatives – Impacts on Protection of Identified Outstandingly Remarkable Values

| <p>Alternative A: No Action</p> | <p>Alternative B: Selected Designation</p> | <p>Alternative C: Widespread Designation</p> |
|---|--|--|
| <p>Impacts on Protection of Identified Outstandingly Remarkable Values</p> <p>This alternative would provide no increased protection to identified outstandingly remarkable natural, cultural and recreational values. The increased scrutiny afforded by the direct application of Section 7 of the Wild and Scenic Rivers Act would not be in effect for federal projects. In addition, the increased scrutiny likely for other federally funded or assisted projects (non-water resource development projects) that could be expected through required NEPA processes would not include recognition and protection of federal Wild and Scenic River “outstandingly remarkable values.” Similarly, the likely lack of oversight and project scrutiny applied to non-federal projects (state, local) through the Coordinating Committee, would erode local, state efforts to protect identified natural, cultural, and recreational values. The action programs contained on the Watershed Management Plan to promote protection and enhancement of river and watershed values would likely not be implemented without the designation, further leading to a long-term deterioration of identified “outstandingly remarkable” values.</p> | <p>Impacts on Protection of Identified Outstandingly Remarkable Values</p> <p>Alternative B would exclude the smallest of the Eightmile streams from direct protection of identified outstandingly remarkable values from federally permitted or assisted projects. Federally assisted water resource projects on the smaller undesignated streams that have a potential adverse effect on the downstream designated segments could be reviewed by the National Parks Service and prevented from negatively impacting the ORV’s subject to request from the Coordinating Committee. The Committee also concludes that the likelihood of this type of water resource project occurring to be small. The Management Plan and management framework provides sufficient protection for the second order streams and watershed as a whole without needing to rely on designation itself to provide such protection. As in Alternative C, the positive impacts of the Watershed Management Plan and Coordinating Committee would be applied over the entire watershed regarding non federal projects and resource value protection opportunities.</p> | <p>Impacts on Protection of Identified Outstandingly Remarkable Values</p> <p>Alternative C would provide the highest degree of protection to identified “outstandingly remarkable values” by including all stream segments of order two or higher. Federally assisted water resource development projects that would adversely affect identified values would be prohibited. NEPA review processes for federally funded or assisted non-water resource projects would need to weigh impacts on the identified outstandingly remarkable values, and National Park Service would comment through federal agency review processes to ensure this consideration. The positive impacts of the Watershed Management Plan and Coordinating Committee would be applied over the entire watershed regarding non-federal projects and resource value protection opportunities.</p> |

Assessment of Alternatives – Impacts on Socio Economic Values

| <p>Alternative A: No Action</p> | <p>Alternative B: Selected Designation</p> | <p>Alternative C: Widespread Designation</p> |
|---|--|--|
| <p>Impacts on Socio Economic Values</p> <p>Under Alternative A, only slight, long-term impacts to socio economic values could be anticipated relative to designation scenarios. The lack of increased recognition and protection to the Eightmile River might, over the long term, cause an erosion of quality of life, home prices and related values if degradation of the river and its values were to occur. The proactive strategies of the Watershed Management Plan aimed at maximizing the Eightmile’s natural, cultural and recreational values to the abutting communities would see less implementation, thus reducing, over time, the value of these resources to the community.</p> | <p>Impacts on Socio Economic Values</p> <p>Alternative B would maximize the natural, cultural and recreational resource values of the Eightmile River as community-based values, consistent with wide support expressed by local citizens. Over time it would be reasonable to expect that quality of life values, home prices and similar socio-economic standards might be preserved or increased through such efforts. High quality, protected river resources have been shown in numerous studies to have such positive economic community benefits. There could be some long-term shift in the nature, type, or density of adjacent land uses. This alternative is not likely to create the extra administrative burden as described in Alternative C. Landowners along the small undesignated streams may be more likely to adopt voluntary protection strategies and support adoption of the recommended protection tools by the land use commissions.</p> | <p>Impacts on Socio Economic Values</p> <p>Alternative C would in the short term maximize the natural, cultural and recreational resource values of the Eightmile River as community-based values. Many of the positive impacts outlined in Alternative B would also occur for this alternative. However, designation of all second order streams and higher could create an extra administrative burden with associated costs on the National Park Service, U.S. Army Corps of Engineers and Towns and such a burden is not necessary to fulfill the watershed approach identified by the Study Committee. This could take a toll on local resources and willingness to support long term efforts of the Coordinating Committee and Watershed Management Plan.</p> |

Assessment of Alternatives – Anticipated Costs

| <p>Alternative A: No Action</p> | <p>Alternative B: Selected Designation</p> | <p>Alternative C: Widespread Designation</p> |
|--|--|--|
| <p>Anticipated Costs</p> <p>There are no direct costs associated with this alternative. Over the long-term, however, there could be substantial indirect costs if important river values, including water quality and identified outstandingly remarkable values, are allowed to deteriorate.</p> | <p>Anticipated Costs</p> <p>Direct costs of this alternative to the federal government may be anticipated to be comparable to the direct costs of similar designations in the NPS’ Northeast Region. In FY05 and FY06, congressional appropriations through the National Park Service operating budget approximated \$150,000 for each of seven designated “Partnership National Wild and Scenic Rivers”. Some direct and indirect costs may also accrue to State agencies and non-governmental organizations partnering with the NPS through the Coordinating Committee, as they devote increased resources toward the Eightmile as compared to the no action alternative. Local communities’ direct involvement is expected to be all-volunteer, while indirect costs may be accrued through projects undertaken in partnership with the NPS and Coordinating Committee. Indirect costs through increased attention to preservation of river values may also occur.</p> | <p>Anticipated Costs</p> <p>Direct short term costs associated with this alternative should be similar to those observed in Alternative B. Some likely difference would emerge over the long term due to designation of all second order streams and higher creating an extra administrative burden with associated costs on the National Park Service, U.S. Army Corps of Engineers and Towns.</p> |

Evaluation of Alternatives – 5.c.

Alternative A: No Action.

Alternative A fails to support protection and enhancement of the special natural, hydrologic and cultural resource values of the Eightmile River. This alternative would allow for the possibility of a slow loss of these values, contrary to the strongly expressed desires of adjacent communities and other river stakeholders. Quality of life values may decline under this alternative along with the special river values. No corresponding advantages to the No Action alternative are known, other than a slight savings in financial expenditures and human capital devoted to the river and its protection which would likely be more than offset by resource value losses.

There are no direct costs associated with this alternative. Over the long-term, however, there could be substantial indirect costs if important river values, including water quality and identified outstandingly remarkable values, are allowed to deteriorate.

For these reasons, Alternative A is rejected.

Alternative B. Designation of the entire Mainstem of the Eightmile River, East Branch of the Eightmile River and high priority third order tributary streams.

While technically Alternative B is slightly less protective of the free flowing character and protection and enhancement of identified outstandingly remarkable values than is Alternative C, Alternative B is seen as the best option for balancing a high level of protection with practical and corresponding political considerations of implementation. Alternative B would limit adverse water resource projects on the significant waterways within the watershed. This alternative is consistent with community and land use commission votes to support the Eightmile River Watershed Management Plan and federal Wild and Scenic designation.

The management plan and management framework provide sufficient protection for the undesignated perennial streams and watershed as a whole without needing to rely on designation itself to provide such protection. This also

factors in that designation of the principal watercourses allows for consideration of the connection between the smaller streams and the designated streams which would allow the Coordinating Committee to request NPS review of projects occurring upstream of designated segments.

Exclusion of smaller streams within the watershed from Wild and Scenic designation does not in any way lessen the focus or intent of the Watershed Management Plan, the Wild and Scenic Coordinating Committee or role of future funding to assist in protecting the Eightmile River Watershed. Because the Study Committee adopted a watershed based management plan that is part of the study and designation process, these undesignated segments remain an important part of the future of the Wild and Scenic process in the Eightmile River watershed.

Direct costs of this alternative to the federal government may be anticipated to be comparable to the direct costs of similar designations in the NPS' Northeast Region. In FY05 and FY06, congressional appropriations through the National Park Service operating budget approximated \$150,000 for each of seven designated "Partnership National Wild and Scenic Rivers". Some direct and indirect costs may also accrue to State agencies and non-governmental organizations partnering with the NPS through the Coordinating Committee, as they devote increased resources toward the Eightmile as compared to the no action alternative. Local communities' direct involvement is expected to be all-volunteer, while indirect costs may be accrued through projects undertaken in partnership with the NPS and Coordinating Committee. Indirect costs through increased attention to preservation of river values may also occur. However, significant long-term savings would be gained with this alternative by preventing costs associated with loss or deterioration of important river values, including water quality and identified outstandingly remarkable values.

As further described below, Alternative B best meets community and Study objectives while protecting the ORVs present in the watershed.

Alternative B best meets community and Study objectives while protecting the ORVs present in the watershed.

Alternative C. Designation of all second order and higher streams in the watershed.

While Alternative C is the more protective of the free-flowing character and “outstandingly remarkable” natural, hydrologic and cultural resource values than Alternative B, it has the potential for posing socio economic costs both directly and indirectly.

Direct short term costs associated with this alternative should be similar to those observed in Alternative B. Direct long term costs associated with designation of all second order streams and higher (Alternative C) could create an extra administrative burden with associated costs on the National Park Service, U.S. Army Corps of Engineers and Towns and such a burden is not necessary to fulfill the watershed approach identified by the Study Committee.

Indirect costs could result from decreased public support, including loss of support from each town’s land use commissions, of the Watershed Management Plan. This decreased support would likely erode the strength of the protection framework and could ultimately cause quality of life values to decline along with the special river values as in Alternative A.

This Alternative does not meet community expectations and desires in this regard as expressed through Town Meeting and land use commission action, as well as citizen/community input received throughout the Wild and Scenic River study.

Selection of the Environmentally Preferred Alternative – 5.d.

Alternative B: Designation of the entire Main stem of the Eightmile River, East Branch of the Eightmile River and various additional order 3 tributary streams is selected as the Environmentally Preferred Alternative.

- This alternative best matches local community and river stakeholder expressed desires;
- This alternative provides strong, sufficient and cost effective long term protection of the outstandingly remarkable resource values of the Eightmile River;
- This alternative provides the clearest and most consistent support for the Eightmile River Watershed Management Plan and Eightmile River Coordinating Committee;
- This alternative supports the stated goals and objectives of the Eightmile River Wild and Scenic Study Committee.

Appendix 1: Eightmile River Study Act

H.R.182
One Hundred Seventh Congress
of the United States of America
AT THE FIRST SESSION

Begun and held at the City of Washington on Wednesday,
the third day of January, two thousand and one

AN ACT

To amend the Wild and Scenic Rivers Act to designate a segment of the Eightmile River in the State of Connecticut for study for potential addition to the National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Section 1. Short Title.

This Act may be cited as the 'Eightmile River Wild and Scenic River Study Act of 2001'.**SEC. 2. FINDINGS.**

The Congress finds that –

1. the Eightmile River in the State of Connecticut possesses important resource values, including wildlife, ecological, and scenic values, and historic sites and a cultural past important to America's heritage;
2. there is strong support among State and local officials, area residents, and river users for a cooperative wild and scenic river study of the area; and
3. there is a longstanding interest among State and local officials, area residents, and river users in undertaking a concerted cooperative effort to manage the river in a productive and meaningful way.

Section 3. Designation for Study.

Section 5(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1276(a)) is amended by adding at the end the following new paragraph:

'(138) EIGHTMILE RIVER, CONNECTICUT- The segment from its headwaters downstream to its confluence with the Connecticut River.'

Section 4. Study and Report

Section 5(b) of the Wild and Scenic Rivers Act (16 U.S.C. 1276(b)) is amended by adding at the end the following new paragraph:

'(18) The study of the Eightmile River, Connecticut, named in paragraph (138) of subsection (a) shall be completed by the Secretary of the Interior and the report thereon submitted to Congress not later than 3 years after the date of the enactment of this paragraph.'

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as may be necessary to carry out this Act.

Speaker of the House of Representatives.
Vice President of the United States and
President of the Senate.

END

Appendix 2: Eightmile Wild & Scenic River Direction & Goals

This list of direction and goals was adopted on October 28, 2002 by the Study Committee as a working document for guidance and planning of the study process. It is reproduced here to demonstrate the evolution and process by which the study committee has developed the Study Report as well as the Watershed Management Plan.

1. Take a watershed approach in identifying values and ensuring protection
2. Sustain the exemplary watershed-wide Eightmile riverine ecosystem including its upland habitats.
3. Ensure protection of fish, wildlife and rare and endangered species supported by system.
4. Maintain the unfragmented nature of the watershed's extensive forest
5. Sustain the exemplary rural and historical southern New England character manifest at the watershed scale
6. Sustain the river system's natural, free-flowing hydrograph (flow levels and associated timing).
7. Maintain an outstanding of water quality
8. Sustain natural riparian habitat throughout the river system
9. Enable compatible public access which enhances opportunities for appropriate recreational activities such as fishing, hiking, nature interpretation, boating where appropriate, etc.
10. Establish comprehensive natural and cultural resource information to:
 - a. Provide a single source for information on the river system including a web site
 - b. Provide basis for *eligibility*
 - c. Provide baseline of information to use in making future permitting decisions such as proposed water diversions or total allowable impervious surfaces associated with water resources.
11. Facilitate East Haddam, Salem and Lyme to seek and integrate the most advanced thinking and measures on how to shape future growth across their communities. Use the Eightmile Wild and Scenic River Study as a vehicle to energize strong existing community interest in sustaining values such as rural character and as a catalyst to overcome the inertia and common challenges associated with achieving strong growth management.
12. Establish an on-going non-regulatory body for building consensus on river issues.
13. Restore fish passage to natural historic conditions
14. Establish the basis for ongoing funding to support measures designed to protect the river system.
15. Strive to be an example for how towns can work together to plan for and protect a common natural resource.
16. Foster a strong, active, and enabled commitment to environmental stewardship among the community members of Salem, Lyme and East Haddam.

Appendix 3: Existing Programs for Protection

Municipal Regulatory Review – Towns of East Haddam, Lyme and Salem

FINAL DRAFT – December 14, 2004

By USDA Natural Resource Conservation Service for the Eightmile River Wild & Scenic Study Committee

Municipal Regulatory Review

| Outstanding Resource Value | | Towns | |
|---|--|---|---|
| Water Quality | East Haddam | Lyme | Salem |
| Does the town recommend the use of the State Stormwater Design Manual for development of stormwater management plan? | Yes. In some cases it requires meeting the specifications and guidelines established in the Manual. | No. | No. |
| Does the town recommend the use of the E&S Guidelines for stormwater management and control? | Yes. | Yes. | Yes. |
| Does the town have any limits for impervious surface? | No. Stormwater management plan for a site shall disclose assumptions made about the creation of impervious surface. | No. | Yes. Impervious surface limit less than or equal to 13% is set for Golf Course PRD. |
| Are road widths defined? If yes, what are they? | Yes. Pavement width is 18-24 feet. | Yes. No street shall have less than 60 foot right of way. It is recognized some streets may need to be wider. No actual street width is provided. | No. Regulations state roads are to be of a width that is 'adequate and convenient for present and prospective traffic'. |
| Are cul-de-sac specifications provided? | Yes. Minimum 50' radius; serving no more than 20 lots; road to be less than or equal to 2000'. | Yes. Road to be less than or equal to 800'. | Yes. Minimum 50' radius; road to be less than or equal to 1500'. |
| Are grassed swales or curbing required? | No. Identified as one method of conveyance. | No. | No. Identified as one method of conveyance. |
| Is the sizing for commercial parking defined? If yes, what is the square footage per vehicle? | Yes. Variable sizing ranging from 1 space/100sq. ft of building space to 1 vehicle/ 400 sq. ft. of building space. | Yes. Typically parking area required is to be 3 x the floor area used for the business or 250sq. ft for every 3 vehicles. | Yes. Varies depending on type of business, ranging from 1 space/ 250sq. ft of building space to 1 space/ 1000sq. ft. of building space to 1 space for each 3 users. |
| Is the construction of an alternative development (e.g. open space subdivision, cluster housing) left to the discretion of the towns? | Yes. Applicants apply for permission to construct a conservation subdivision. P&Z Commission has authority to grant. | Yes. The P&Z Commission has the 'power and authority to grant' cluster developments. | Yes. The P&Z Commission has the power to grant approval. |
| Do the towns have the power to require an alternative development or is the ultimate choice left up to the applicant? | No. | No. | No. |

Municipal Regulatory Review

| Outstanding Resource Value | Towns | | |
|--|---|--|---|
| Water Quality (continued) | East Haddam | Lyme | Salem |
| Are any areas in town identified as “by right ”areas for alternative developments? | No. | No. | No. |
| Are alternative developments identified as a way to maximize open space? | Regulations state alternative developments are a way to protect and preserve open space. | No. | Yes. Regulations require 70% of alternative development to be left in open space. Intent is to keep the parcel as open space to be used exclusively for recreational, conservation, and agricultural purposes. Serves as a way to provide range of residential choices in a preserved rural setting, foster sense of community, preserve and protect natural resources, provide greater opportunity for the continuation of agriculture and forestry, and preserve scenic vistas. |
| Is minimizing impervious surface a stated goal in cluster subdivision regulations? | No. | No. | No. |
| Do buffer and or setback areas exist for wetlands and watercourses? If yes, what is the width? * | Yes. 400’ from vernal pools; 100’ from wetland or watercourses. Identified as a setback. | Yes. 100’ from wetland or watercourse. Identified as a setback. No setback specific to Vernal pools. | Yes. 75’ Upland Review area established for wetlands and water courses. No setback specific to vernal pools. |
| Are any aquifer protection regulations in place? | No. Regulations are in place for groundwater protection. The purpose of the regulations is to protect existing and potential groundwater supplies from contamination due to discharges of hazardous materials. No specific aquifer protection zone is indicated. Rather a way to protect water quality of underground sources anywhere in Town. (perhaps the regs can be considered aquifer protection – may want to ask Town). | No. | Yes. This includes the Town in general and the golf course PRD area. |

* **Definition of Setback, Upland Review Area, and Buffer.** According to the CT DEP State Inland Wetland Division setback, upland review area, and buffer all have the same meaning. They are regulations that govern “construction activities located in upland areas surrounding wetlands and watercourses.” The regulations vary widely from town to town. For all three of these towns the width is measured horizontally from the edge of the boundary of the wetland or watercourse.

Municipal Regulatory Review

| Outstanding Resource Value | Towns | | |
|---|--|--|--|
| Water Quality (continued) | East Haddam | Lyme | Salem |
| Are E&S controls required for disturbed areas less than .5 acre cumulatively? | No. | No. Exception to this rule is the Gateway Conservation Zone where a plan is required for a disturbance of any size. Also, the Commission has discretion to require E&S Plan for any site that has potential for significant erosion. | No. |
| Is there a specified distance between a septic system and wetlands or water-courses? | No. | Yes. A 200' setback for specifically identified water-bodies, and a 150' setback for all other waterbodies. | No. |
| Are engineered septic systems permitted? | Yes. Town may require bond as part of work. | No, nothing indicated in regulations. | No, nothing indicated in regulations. |
| Are soil limitations cited as a limiting factor for septic placement and installation? | Yes. Regulations include a list of unsuitable soils. | No. | Yes, for the Rural Cluster Development Zone. Not for other areas. |
| Are Net Buildable Area regulations in place? | Yes. | Yes. | Yes. |
| Are slopes used as a limiting factor for development? If yes, what is the slope percentage? | Yes. Steep slopes defined as 20% or greater. | No. | Yes. Slope limit of 25% or greater for Net Buildable Area (NBA) measured from highest to lowest point in the NBA over minimum distance of 40 feet. - I |
| Does local regulation or guidance exist regarding timber cutting or clear cuts? | Yes. | Yes. | No. |



Municipal Regulatory Review

| Outstanding Resource Value | Towns | | |
|--|---|---|---|
| Watershed Hydrology | East Haddam | Lyme | Salem |
| Has the town established a limit on the net increase that can result in stormwater flow as a result of development? If yes, what is the net outflow permitted? | No. | No. | No. |
| Does the town use a certain sized storm for the design of its stormwater management practices? If yes, what sized storm? | Yes. The Town requires using the 2, 10, 25, and 100 year storm events as outlined in the DEP Stormwater Manual. (*) | No. | Yes. The 25 year storm event is used. |
| Are detention and or retention systems recommended in the regulations? | Yes. Detention and retention systems are noted among other types of stormwater management/ conveyance practices. | No. | Yes. Detention and retention systems are noted among other types of stormwater management/ conveyance practices. |
| Who is responsible for maintenance of stormwater management installations/structures? | Property Owner. A plan is also required detailing maintenance that will be required and the necessary training and skill for conducting maintenance. | Not noted in regulations. | Not noted in regulations. |
| Are regulations in place preventing development in identified floodplains? | Yes. Regulations in place to control development. | Yes. Regulations in place to control development. Development prohibited if any increase in flood levels. | Yes. Regulations in place to control development. Development prohibited if any increase in flood levels. |
| Do the towns have jurisdiction over dams and diversions? | Yes. Inland Wetland Commission has jurisdiction over the potential impact on the wetland and watercourse. State has jurisdiction over the water resource. | Yes. Inland Wetland Commission has jurisdiction over the potential impact on the wetland and watercourse. State has jurisdiction over the water resource. | Yes. Inland Wetland Commission has jurisdiction over the potential impact on the wetland and watercourse. State has jurisdiction over the water resource. |
| Is groundwater hydrology a consideration in resource extraction regulations? | No. | No. | No. Any condition deemed a threat to public safety by the Zoning Enforcement Officer can order a cease and desist. |

* East Haddam offers credits to developers for non-structural Best Management Practices (BMPs) as incentive over structural practices.

Municipal Regulatory Review

| Outstanding Resource Value | | Towns | |
|---|--|---|---|
| Unique Species and Natural Communities | East Haddam | Lyme | Salem |
| | Is protection of unique species and natural communities highlighted in alternative development subdivision regulations? | Yes. Site design process intended to identify important areas not to be adversely affected by development. | No. |
| Is protection of unique species and natural communities highlighted in open space set aside regulations? | Yes. | Yes. | Yes. A 'vegetation inventory' study and report, a 'revegetation/landscape' plan and a 'vegetation enhancement monitoring plan' is required for the Planned Residential/ Recreation Community. Plan requires input from CT DEP on how to conserve endangered, rare, or species of special concern, and incorporate such input into practices to be adhered to in the Plan. |
| Is protection of unique species and natural communities highlighted in traditional subdivision development regulations? | Yes. Site plan indicate natural features (e.g. streams. Rock outcrops, large trees, etc...). The site plan asks for these features to be noted but does it translate into a policy to try to protect them? A question to ask the Town. | Yes. Site plan indicate natural features (e.g. streams. Rock outcrops, large trees, etc...). See EH comment. | Yes. Site plan indicate natural features (e.g. streams. Rock outcrops, large trees, etc...). See EH comment. |
| Are any regulations present that address habitat fragmentation? | No. | No. | No. (*) |
| Are specific species or communities highlighted in the regulations (e.g. vernal pools) | Yes. Vernal pools are highlighted. Mention is also made generally of wetlands, rock outcrops, steep slopes, wildlife corridors, trees, shrubs. | Yes. Timber harvesting regulations require identification of unique vegetation, and continuously flowing streams. | No. Only mention of general natural communities such as wetlands, rock outcrops, steep slopes, wildlife corridors, trees, shrubs. |

* Although no regulations specifically identify habitat fragmentation, Salem requires that 70% of the area in an Open Space Subdivision shall remain in open space.

Municipal Regulatory Review

| Outstanding Resource Value | Towns | | |
|---|---------------------------------|--|------------------------------------|
| Unique Species and Natural Comm. (continued) | East Haddam | Lyme | Salem |
| Do the resource extraction regulations require consideration of unique species and natural communities? | No. | No, for gravel operations. Yes, for timber harvesting operations. | No. |
| Are Net Buildable Area regulations in place? (See Water Quality) | Yes. See Water Quality section. | Yes. See Water Quality section. | Yes. See Water Quality section. |

! Planned Recreational/Residential Community is development plan for the golf course parcel in Town. It is intended to provide greater range of residential choices, to retain significant open space areas, and preserve and protect natural areas and scenic vistas. Dwellings may be grouped within the golf course development parcel with the total number of single family dwellings not exceeding an aggregate of four units per each golf course hole (total of not more than 72 dwelling units on the entire development parcel.



Municipal Regulatory Review

| Outstanding Resource Value | Towns | | |
|--|--|--|--|
| Cultural Resources/ Archaeology | East Haddam | Lyme | Salem |
| Does the subdivision approval process require an archaeological review? | Yes. Required for subdivisions of 20 acres or larger. | No. P&Z Commission MAY review. | Yes. Required for the Planned Recreational/ Residential Community |
| Has the town identified any specific areas as archaeologically important? | No. Specific types of features are identified, but not specific areas. | No. Specific types of features are identified, but not specific areas. | No. Specific types of features are identified, but not specific areas. |
| Are archaeological resources included as resources to be protected as part of open space set asides? | Yes. | Yes. | No. Significant features are mentioned as resources to be protected as part of open space set aside. |

Municipal Regulatory Review

| Outstanding Resource Value | Towns | | |
|---|---|--|---|
| Intact Watershed Ecosystems | East Haddam | Lyme | Salem |
| Does the town use watersheds as a planning tool? | No. | No. | No. |
| Does the town recognize watershed (specifically the Eightmile River Watershed) as an overarching area.0 | Yes. Town signed the Eightmile Compact. | Yes. Town signed the Eightmile Compact. | Yes. Town signed the Eightmile Compact. |
| Does the town look at landscape scale for planning purposes? | No. | No. | No. |
| Does the town have any zoning in place to protect natural ecosystem functions? | <p>Yes. Town has designated certain areas as Conservation Zone and for Streambank Reservations. Conservation Zone developed in accordance with Sect. I of PA 73-349, "An act concerning the Preservation of the Lower Connecticut River Area". Zone is shown on Town zoning map (revised version 1974), and is in addition to and superimposed upon those zones and districts into which the Town is divided.</p> <p>Streambelts shall be established in accordance with the publication of the "Streambelt Map", April 1973, at Town Clerk's and Zoning Offices.</p> | <p>Yes. Town has established a Conservation Zone and has a set of regulations guiding types of acceptable activities in the area. Conservation Zone defined by Southerly and Northerly boundaries of Town of Old Lyme and uses boundaries of 300 feet in various direction easterly, northerly, westerly from Routes 156 and 148, Joshuatown Road, and River Road. The centerline of the Connecticut river is also used as a line of demarcation. (pp.2-3) The complete delineation of the Conservation Zone can be found in Section 1.12 of the Zoning Regulations.</p> | <p>Yes. Town has established a Seasonal Residential Zone (around Lake Gardner) and a Commercial Recreation Zone (to preserve area fronting Gardner Lake for water oriented activities).</p> |

Additional detail from the town regulatory review can be found in the accompanying document "Eightmile River Watershed Management Plan"

Summary of State and Federal Protecting Regulations

Excerpted and adapted from:
Farmington Wild and Scenic River Study
Draft Evaluation of Existing Protection
June, 1990

Prepared for
The Farmington River Study Committee
Prepared by
U.S. Department of the Interior
National Park Service
North Atlantic Region
Division of Planning and Design

Terry W. Savage, Chief
Philip B. Huffman, Project Manager
Jamie Williams, Project Planner
Michael Charette, Planner

Summary of State and Federal Protecting Regulations

There are many federal regulations that offer some form of protection for the Eightmile River, but only the most significant of these programs have been reviewed here. Excluding the temporary protection of the Wild and Scenic Rivers Act, existing federal statutes provide substantial protection for the water quality of the Eightmile River but less protection for the river's water quantity and its adjacent lands.

The Clean Water Act provides substantial protection for the Eightmile River's water quality by restricting all discharges into the river through a series of different programs. In addition to required treatment levels for municipal and industrial discharges, the Act requires Connecticut to administer an anti-degradation policy for the river by severely restricting new or increased point-source discharges into the Eightmile. In addition, section 404 of the Act requires any project that would discharge dredged or fill material into the river to receive a permit from the Army Corps of Engineers. These permits are evaluated for a project's impact on aquatic resources and for its ability to serve the public interest.

The National Flood Insurance Program (NFIP) has also had an important effect on the Eightmile by giving towns incentive to restrict building in the river's 100 year floodplain. Municipal adoption of the NFIP's minimum floodplain regulations qualify landowners in the participating community for federally subsidized flood insurance. This program cannot provide full protection for the floodplain as its primary goal is to prevent floods from damaging homes. In addition, the Eightmile's floodplain is often so narrow that floodplain restrictions would have little effect on river-fronting development.

The National Wild and Scenic Rivers Act provides the strongest protection available for free flowing rivers or river segments. The Act 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 nationally significant resources. The segments of the Eightmile River being studied for potential inclusion in the National Wild and Scenic Rivers System are protected by the Act during the study, but this protection will expire if Congress does not designate the river segments into the system.

The National Environmental Policy Act (NEPA) also provides the Eightmile with protection from federally assisted or licensed projects that would have a significant impact on the river, but this act cannot guarantee protection of the river's outstanding resources. NEPA requires a detailed analysis of environmental impact and a public review process, but it cannot require a federal agency to pursue the most environmental alternative.

Finally, the Rivers and Harbors Act applies to the section of the river within Hamburg Cove. Section 10 of the Act requires any obstruction in or over "navigable waters" of the United States to receive a permit from the Army Corps of Engineers. Permits are evaluated for a project's effect on navigation and more recently on river ecology as well.

Summary of Connecticut State Protection

There are many state laws in Connecticut that offer some form of protection for the Eightmile River; only the most important ones have been selected for review here. Taken as a whole, these statutes provide considerable protection for the Eightmile's water resources, but they offer less comprehensive protection for river-related scenic areas, steep slopes and the general natural integrity of the river valley.

Local Administration

The Inland Wetlands and Watercourses Act represents the most direct form of protection for the Eightmile River. The act prohibits almost any dredge and fill activity within or adjacent to wetlands and rivers unless a permit is received from the local inland wetlands commission. The Act provides significant protection for the Eightmile's water quality, although it is more cumbersome in its ability to protect the natural character of lands immediately adjacent to rivers.

Connecticut's Public Health Code protects the Eightmile from septic system pollution by requiring these systems to be setback at least 50' from rivers and to be placed in suitable soils. The code is effectively implemented by regional health districts. The **Soil Erosion and Sediment Control Act** serves to protect rivers from sedimentation impacts associated with construction and new developments. Towns must certify soil erosion and sediment control plans for any project cumulatively disturbing more than .5 acre of soil. 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.

Finally, zoning and subdivision regulations also represent important land use regulations authorized by state statute, but these controls are reviewed in the individual town sections.

State Administration

The three most important state levels of protection for the river are (again) the **Inland Wetlands and Watercourses Act**, the **Water Diversion Policy Act** and the state's **Water Pollution Control** statutes. The DEP's role in implementing the wetlands Act is to regulate state activities, dams and water supply reservoirs affecting wetlands and to provide technical assistance to inland wetland commissions. The **Water Diversion Policy Act** provides considerable protection for the Eightmile River's instream flow by prohibiting any new dam or diversion greater than 50,000 gallons per day without the issuance of a permit from the DEP. The Act's purpose is to ensure that all river values and uses are balanced in the long-term allocation of water.

The water quality of the Eightmile receives significant protection from point-source pollution by the state's **Water Pollution Control** statutes. A new **Aquifer Protection Act** can offer the river some protection from non-point source pollution by requiring towns to adopt protective land use regulations in zones of designated water supply aquifers.

A statute on Dams and Reservoir Safety requires the DEP to inspect dams for structural hazards and prohibits anyone from constructing or repairing a dam unless the DEP approves it after reviewing its impact to wetlands and water resources. Flood flows are also protected to some extent by the DEP's Flood Management program, which requires all state actions in floodplains to receive DEP approval. The intent of the program is to preserve the natural flood flow by encouraging non-intensive floodplain uses and to protect fishery habitats. The program also offers assistance to communities in establishing the Federal Flood Insurance Program (NFIP) and in developing basin stormwater management plans.

Appendix 4: Executive Summary Watershed Management Plan

The Eightmile River Watershed is an exceptional natural and cultural resource. The 62 square mile watershed is a rolling forested landscape with over 150 miles of pristine rivers and streams, large areas of unfragmented habitat, an abundant array of rare and diverse wildlife, beautiful vistas, high water quality, unimpeded stream flow and historic features making it a unique example of an intact and functioning watershed ecosystem in Southern New England. The watershed is almost entirely located within the three towns of East Haddam, Lyme and Salem, Connecticut. Designation as a component of the National Wild & Scenic Rivers System is being pursued for the entire watershed area.

This management plan was created as a part of the Eightmile River Wild & Scenic River Study to establish recommended tools and strategies for ensuring this watershed ecosystem is protected and enhanced for generations to come. The plan was developed by the locally-led Eightmile River Wild & Scenic Study Committee with input from town land use commissions, local citizens, the state and other key stakeholders. This plan and Wild & Scenic designation has been formally endorsed by all seven land use commissions in the three towns. In addition, the Connecticut General Assembly unanimously passed and the Governor signed an act supporting Wild & Scenic designation and the Department of Environmental Protection's participation in the implementation of the plan.

The Eightmile River Watershed Management Plan is a non-regulatory document, reflecting a partnership where local, state and federal interests all voluntarily agree to participate in its implementation and the realization of its purpose and goals. The roles and responsibilities of land use planning and regulatory commissions and agencies do not change if Wild & Scenic Designation occurs as there are no federal mandates or new regulatory powers created with a designation.

Implementation of the management plan through Wild and Scenic designation potentially offers a net financial gain for Eightmile towns and local partners. Costs associated with implementing the management plan are to be funded through new annual funding available through designation. In addition, other sources of funding can be more easily leveraged using the "clout" of a designation. If designation is delayed or unsuccessful or if annual funding levels provided by the National Park Service after designation are insufficient, towns have no obligation to expend funds. However, many of the costs associated with implementing the management plan are negligible and towns and partners can elect to go forward with implementation regardless of the status of new funding.

The development of the management plan was guided by three fundamental principles:

Resource Conservation and protection relies on existing authorities.

Management of the Eightmile River Watershed is based on a cooperatively developed plan that is implemented through the cooperation of all river and watershed interests.

Any land conservation initiatives related to a Wild & Scenic designation will be based solely on voluntary willing seller arrangements.

The National Wild & Scenic Rivers System

The National Wild & Scenic River System was established by Congress in 1968 to protect certain outstanding rivers from the harmful effects of new federal projects such as dams and hydroelectric facilities. Since then over 160 rivers or river segments have been protected nationwide, including 6 in New England. To be considered a “Wild & Scenic” river it must be free flowing and have at least one outstanding natural, cultural, or recreational value.

Today, a subset of the Wild & Scenic Rivers system called Partnership Rivers is being used effectively to create river protection approaches that bring communities together in protecting and managing local river resources.

Partnership Wild & Scenic Rivers are a unique subset of 9 rivers along the east coast that share some common management approaches including: no federal ownership of lands; river management through existing local and state authorities; management strategies that are developed and implemented through the locally led study committee and are locally approved prior to designation; responsibilities associated with managing and protecting river resources are shared among all of the partners - local, state, federal, and non-governmental; and volunteerism is a consistent backbone of success.

The Eightmile River Watershed is being recommended for designation as a Partnership Wild & Scenic River.

Benefits of a Wild & Scenic Designation

A National Wild & Scenic River designation can bring a river system many benefits. Through National Park Service funding and staff support resources could be made available to help all the partners achieve the protection of the watershed’s outstanding resource values resulting in:

- Preservation of a clean and plentiful water supply
- Protection of the rural character that defines the local communities
- Robust and diverse plant and animal populations that reflect a healthy ecosystem
- Possible funding support to help towns achieve their open space conservation goals
- Sound scientific information to help local land use commissions perform their functions
- Small grants to help local schools, towns, civic groups, private landowners and others on projects which support the purposes and goals of the plan

In addition, if designation is achieved, the National Park Service is required to review and comment on all projects that are either federally funded or federally permitted to ensure such activities are consistent with the protection and enhancement of the outstanding resource values that made the river eligible for designation.

The Eightmile River Wild & Scenic Study

Recognizing the watershed was a very special place with a host of unique resource values worth preserving a local campaign by town boards, area land trusts, river-fronting landowners and residents was undertaken requesting Congressman Rob Simmons and Senator Chris Dodd to pursue the authorization and funding from Congress to undertake a national Wild & Scenic River Study. The entire Connecticut congressional delegation supported the bill and on November 6, 2001 it was signed into law by President Bush (Public Law No. 107-65).

The study has been conducted by the locally-led Eightmile River Wild & Scenic Study Committee. The Committee's membership includes the First Selectman from the communities of Lyme, Salem and East Haddam, representatives of the three area land trusts, representation from a land use commission in each town, the CT River Estuary Regional Planning Agency, the Natural Resource Conservation Service, the CT Department of Environmental Protection, and The Nature Conservancy. The National Park Service provides staff support and overall coordination.

The Eightmile River Wild & Scenic Study Committee was responsible for three major tasks: (1) Discover and/or prove what is special about the Eightmile River Watershed; (2) Develop a watershed management plan that will facilitate the protection and enhancement of these special values; and, (3) Demonstrate to Congress that community members, local land use decision makers, the State of Connecticut and other watershed stakeholders support Wild & Scenic designation of the Eightmile River Watershed. A complete study report that summarizes all of the studies findings and recommendations will be published as a separate document, and have a public comment period, at the end of the study process.

A key decision was made early on by the Eightmile River Wild & Scenic Study Committee to pursue a watershed based Wild & Scenic designation. This decision was made in recognizing that of all its many special qualities, the most outstanding is that the Eightmile River Watershed is a rare example in the Northeast of a whole river system which is fully intact. Furthermore, taking a watershed ecosystem approach to conservation recognizes protection and management strategies cannot just consider a single river segment, plant or animal species, or wetland system in isolation from all that is around it. All of these components are interconnected and if any one is disturbed or altered, all of the others can be affected. The watershed ecosystem approach is comprehensive and based on the interconnectedness of all the natural and cultural resources within the watershed.

Outstanding Resource Values

To prove what is special about the Eightmile River Watershed the Study Committee researched and identified six Outstanding Resource Values (ORVs) in the Watershed. To be an ORV the resource must be natural, cultural or recreational in character and convey unique, rare or exemplary qualities on a regional or national scale. Local, regional and state resource professionals determined the six outstanding resource values that make the Eightmile Watershed exceptional include the cultural landscape, geology, water quality, watershed hydrology, unique species and natural communities, and most importantly the watershed ecosystem. Complete descriptions of these resources and why they are considered outstanding are available in the appendices.

Purpose of the Management Plan

The Eightmile River Watershed Management Plan achieves many purposes, some key ones include:

Providing stakeholders a clear recommendation of how to protect and enhance the watershed's outstanding resource values and the role a Wild & Scenic designation would have in implementing such recommendations.

Substantiating to Congress the suitability of the Eightmile River Watershed for designation as shown through the support of the local communities, the state and other stakeholders to be partners in the plan's implementation.

Providing strategies to measure the quality of the watershed's outstanding resource values over time.

Providing measurable indicators and guidance to future decision-makers about what constitutes sufficient protection if goals for the outstanding resource values are to be met.

Establishing management recommendations that rely principally on locally-led and locally implemented strategies. Regardless of achieving a designation, the Plan serves to help all the stakeholders protect the watershed's ORVs.

Implementing the Plan

To oversee the implementation of the Plan a non-regulatory advisory committee would be established called the Eightmile River Wild & Scenic Coordinating Committee (ERWSCC). The responsibilities of ERWSCC include: overseeing the implementation of the Eightmile River Watershed Management Plan; monitoring of the outstanding resource values with respect to the degree they are protected, degraded or enhanced during implementation of the plan; addressing river-related issues that arise in the watershed; review and update the Eightmile River Watershed Management Plan; and prepare periodic status reports on the quality of the watershed and the progress in implementing the Plan.

The membership of ERWSCC will include representatives from all key stakeholders including municipalities, landowners, the State, local land trusts, The Nature Conservancy and if designated the National Park Service. If designated congressional appropriations may become available to provide funding and staff resources to support the work of ERWSCC. The Committee is encouraged to leverage any potential federal or non-federal funding to maximize the impact of these resources.

The Partners

The Partnership Wild & Scenic Rivers effort is based on a clear understanding of the roles and responsibilities of each partner. The primary partners in the Eightmile River Watershed include landowners, local municipalities, the State and (if Wild & Scenic designation is achieved) the National Park Service.

Landowners – Landowners are considered key to overall management plan success. While landowners are under no new regulations or mandates as a result of this plan or a Wild & Scenic River designation, it is hoped they will be supportive of land stewardship practices that are consistent with the Plan and the spirit and goals for protecting the watershed's outstanding resource value goals. It is recommended that landowners are represented and actively participate on ERWSCC.

Local Municipalities – The role of each municipality is voluntary and the actions each town may take are solely up to the towns to decide. The plan calls for each town to be an active participant on ERWSCC and in achieving the goals for the watershed's outstanding resource values.

State of Connecticut – Similar to the towns, the state's role is to be an active participant on ERWSCC, working cooperatively with all the partners to implement the management plan.

National Park Service (NPS) – If Wild & Scenic River status is achieved NPS will be an active participant on ERWSCC and coordinate any funding that is authorized by Congress for use in implementing the Management Plan. In addition, as discussed above, NPS would be responsible for reviewing and commenting on all federally funded or federally permitted projects to ensure compatibility with protecting and enhancing the outstanding resource

The Management Recommendations – Tier One and Tier Two

In establishing the management recommendations a comprehensive assessment was completed that identified: a protection goal for each outstanding resource value (ORV); the level of existing local, state and federal protection available for each ORV; threats and management issues that could degrade ORV quality; gaps between in existing local, state and federal protection and threats/management issues that might lead to long-term impairment of the ORVs; and, recommended tools that could be implemented to achieve adequate protection and enhancement of all the ORVs. The management recommendations are organized into two categories: Tier One and Tier Two.

Tier One – Tier One recommended tools are high priority items that have been identified as important to implement in the short-term to ensure protection of the outstanding resource values. Management partners including local communities, the state and others are asked to begin the process of implementing Tier one tools within 6-12 months of achieving affirmative votes of support for Wild & Scenic designation at town meetings. As an initial step in pursuing the implementation of the tier one tools each partner is asked to first establish a timeline and approach for completing such an implementation process.

It is recognized that it is unlikely designation and the securing of funds to support designation will be achieved in the 6-12 months timeframe that has been suggested to begin the implementation of the tier one tools. As such it is recommended that the Eightmile River Wild & Scenic Coordinating Committee be established upon the dissolution of the Eightmile River Study Committee. This action will not only achieve providing continuity and continued momentum between the end of the study process and a formal designation it will also show Congress the high level of partner commitment to the long-term preservation of the watershed. As there would be no congressional authorization for the National Park Service to participate as a member of ERWSCC prior to a designation, the agency's involvement may be limited.

The implementation of some of the tier one tools will take significant human resources, time and possibly funding to complete. As such it will be the intent of the Eightmile River Wild & Scenic Coordinating Committee and the National Park Service to prioritize any funding or technical resource support if a designation occurs on implementation of these items. Management Plan partners, including local communities and the state, while not expected to implement all the recommended tools if a designation does not occur are strongly encouraged to implement those parts of the plan that can be done without undo stress on human or financial resources.

It is important to note that all the recommendations for local commissions are just that, recommendations. This planning document or the powers of a Wild & Scenic designation can not force a community to adopt them. The actual implementation of these recommendations will require all the formal procedures the commissions must follow especially in considering and potentially adopting any new regulations, including public notice, public hearings, and commission deliberation prior to making a final determination.

Tier one recommendations include:

1. **RIPARIAN CORRIDOR PROTECTION** – Riparian corridor lands, those lands adjacent to rivers and streams, are the first line of defense for a river system. Maintaining and protecting these areas in a natural native condition is the most important action that can take place to ensure the long-term quality of river and watershed resources.

RECOMMENDED ACTION: To protect riparian corridor function adopt a River Protection Overlay Zone for all perennial streams and rivers in the Eightmile River Watershed that provides a 50 foot protection area along small headwater streams, and a 100 foot protection area along larger streams.

NOTE: The effect of this proposal on property owners is very small. Only 5 % of all the lands in the watershed would be within the proposed overlay. Of that, 97% of the proposed overlay protection area is already regulated by local Inland Wetlands Commissions as wetlands or are under review by the local Inland Wetlands Commission as an upland review areas. The proposal is sensitive to ensuring landowners are not unduly burdened through its potential implementation. Details of the proposal, its purpose and its limitations can be found in the Watershed Management Plan document Appendix 9 - Tier One Tools Recommendation Details.

2. HABITAT FRAGMENTATION – Habitat size directly effects species distribution, migration and population size, and is critical for maintaining overall biological diversity and ecosystem functions. Fragmentation of habitat occurs when a large region of habitat has been split into a collection of smaller patches. For example, a forest habitat may become fragmented when a road is built across it splitting it into two smaller disconnected patches. Fragmentation can cause, among other things: a reduction of total habitat area; vulnerability for species forced to migrate to other habitat patches; the isolation of populations leading to a decline in population size and quality; and edge effects altering habitat, species composition, microclimates, and vulnerability to predation.

RECOMMENDED ACTION: Commit to making protection of important habitat blocks an open space conservation priority, work with partners on identifying voluntary land conservation opportunities, and be a partner in pursuing federal funding to support such types of acquisitions.

3. INCREASES IN IMPERVIOUS SURFACES – Impervious surfaces, including rooftops, parking lots, and roadways can cause significant impacts to overall water quality and watershed hydrology. Impervious surfaces block rainfall from infiltrating into the soil, increasing surface runoff and decreasing groundwater infiltration. Among other things this can lead to reduced groundwater recharge causing a decreased base flow, in turn potentially causing streams to become intermittent or dry. Water quality as well can be affected as impervious surfaces increase polluted stormwater runoff impacting variables such as nutrient levels, temperature, bacteria and heavy metals.

RECOMMENDED ACTION: Each community sets a maximum impervious surface goal of 10% for any sub-basin within local the watershed and 4% for the Eightmile River Watershed as a whole. In addition, each community supports working with the Eightmile River Committee to 1. refine modeling of current and future impervious levels, 2. use the modeling to predict future increases in imperviousness in each town and 3. adopt appropriate tools to address limiting impervious surface increases to meet impervious surface goals.

4. STORMWATER MANAGEMENT – Poor stormwater management can affect a host of issues associated with overall watershed quality including impacts to: overall hydrology; stream channel morphology; floodplain function; water quality; habitat; and overall ecological function.

RECOMMENDED ACTION: Three actions have been identified including: 1. Require the design, implementation and maintenance of all new stormwater systems to be consistent with the 2004 CT DEP Stormwater Quality Manual; 2. Complete a Stormwater Management Plan for each municipality's stormwater system as described in the State's General Permit for Small Municipal Stormwater Systems; 3. Adopt The University of Massachusetts guidance for watercourse crossings, an approach that is promoted by the Army Corps of Engineers (New England Region).

Tier Two – Tier Two recommended tools are longer-term actions partners can take to further protect watershed resources. There are a host of recommendations that if pursued will provide a strong combination of sound science and good stewardship to substantially enhance the long-term protection of the resources. Many of the tier two tools recommend establishing additional scientific baseline information and monitoring for the outstanding resource values. This information is critical to the overall success of the plan and its ability to assess and document the level of protection and enhancement achieved through the plan's implementation. In addition, other important tools include supporting the use of voluntary open space conservation to protect important values and outreach and education initiatives to important target audiences such as landowners, school groups and land use commissions.

It is highly recommended that towns attempt to pursue these tools in addition to and generally after implementation of the Tier One tools. It is understood and anticipated that it will take 2-5 years or more to implement the majority of the tier two tools. Again, this will partially depend on the ability of the ERWSCC to provide support to the partners where and when needed.

Outreach & Education

The goal of outreach and education is to engage the public, including landowners, recreational users, towns and the state to be continually involved and active in protecting and enhancing the outstanding resource values of the Eightmile River Watershed. Key actions include publishing periodic newsletters and other publications, providing annual protection progress reports, establish and maintain a website, offer pertinent workshops and trainings, provide volunteer opportunities to keep the public engaged, pursue publicity and the media when necessary, and engage the local schools in activities that help promote awareness and stewardship of watershed resources.

Summary

Implementation of the Eightmile River Management Plan and achievement of a Wild & Scenic Designation for the Eightmile River Watershed will provide long lasting benefits to all the Eightmile River Communities. This partnership approach will support and enhance the quality of life residents of the watershed have come to expect, while ensuring local communities remain in control of their own futures.

Appendix 5: Record of Endorsements and Support

Appendix 6: List of Preparers

A more complete list of involved parties can be found in the Eightmile River Watershed Management Plan. The following people contributed to both the Study and the management plan:

Wild & Scenic River Study Committee

Eric Belt, Salem Inland Wetlands & Conservation Commission
David B. Bingham, Vice-President, Salem Land Trust, Salem Planning and Zoning Commission
Randy Dill, Selectman and Chair IWC, Town of East Haddam
Roger Dill, Lyme Inland Wetlands & Conservation Commission
Nathan M. Frohling, Lower CT River Program Director, The Nature Conservancy
Anthony Irving (Study Committee Chairman), Past-President, Lyme Land Conservation Trust
William Koch, First Selectman, Town of Lyme
Linda Krause, Executive Director, CT River Estuary Regional Planning Agency
Susan Mellow, East Haddam Land Trust, (Past-First Selectwoman – East Haddam)
Brad Parker, First Selectman, Town of East Haddam
Larry Reitz, First Selectman, Town of Salem
John Rozum, Past-member East Haddam Planning and Zoning Commission
Walter Smith, Natural Resource Conservation Service (USDA)
Sally Snyder, CT Dept. of Environmental Protection, Bureau of Water Management

Former members included:

Charlie Fredette, CT DEP
Maureen VanDerStad, East Haddam Land Trust
Peter Sielman, Town of Salem
Jon Morris, East Haddam Conservation Commission
David Tiffany, Lyme Planning and Zoning
Michael Ott, Town of Salem

National Park Service

Jamie Fosburgh – Rivers Program Manager, NER-Boston
Kevin Case – Eightmile Program Manager, Local Office
Damon Hearne – Study Coordinator, Local Office

Local Contributors

Connecticut River Coastal Conservation District
Towns of East Haddam, Lyme, Salem
The Nature Conservancy
Salem Land Trust
Lyme Land Conservation Trust
East Haddam Land Trust
CRERPA
CT DEP
Ralph Lewis

Consultants

Wendy Goodfriend, Paul Woodworth, Ken Geisler, Jane Brawerman and Barbara Davis:
Connecticut River Coastal Conservation District
Bill Moorehead, ecology, Piotr Parasiewicz
Diana Walden & graduate students, stream flow and hydrology
Lauren Todd and Ethen Carr, cultural landscape study
Jennifer R. Heintz, threat analysis
Dr. Marc Banks and Dr. Lucianne Lavin, assessment of archaeological resources
Seth Lerman of NRCS CT, town regulations review
Daniel Hubbard, public relations

Photo Credits

| | |
|-------------|--|
| Front Cover | Chapman Falls — Carol Geise |
| p.ii | Eightmile River Valley Looking North from Hamburg Cove — Joel Stocker |
| p.iii | Winter in the Eightmile watershed — Larry Reitz |
| p.iv | Water Quality Sampling — Study Committee |
| p.vi | Chapman Falls in East Haddam — Nathan Frohling |
| p.2 | Eightmile Wild & Scenic Study Committee Members — Wendy Goodfriend |
| p.3 | UMASS Graduate Students Collect Stream Flow Data — John Rozum |
| p.4 | Study Chairman Anthony Irving Discusses a Map during the Community Open House — Dan Hubbard |
| p.8 | Stream Crossing in East Haddam — Carol Geise |
| p.11 | Tiffany Farm in Lyme — Study Committee |
| p.12 | Music Vale Seminary Barn (Built in the 19th Century) — David Bingham |
| p.14 | Eightmile Waters — Carol Geise |
| p.15 | The Mainstem in Devil's Hopyard State Park, East Haddam — River Watch Program |
| p.16 | Wood Frog in Local Vernal Pool — Carol Geise |
| p.17 | Harvester Butterfly — R. Chyinski |
| p.18 | Cerulean Warbler — Courtesy of Gillian Harris |
| p.19 | Lily Pads on Walden Preserve — Larry Reitz |
| p.20 | Sleigh Riders in Salem — David Bingham |
| p.28 | Opening Day on the Eightmile — David Bingham |
| p.30 | The Old Mill at Moulsons Pond — Nathan Frohling |
| p.32 | (Top to bottom) Town Meeting Votes in Lyme, East Haddam and Salem — Damon Hearne, Nathan Frohling |
| p.33 | Governor Rell Addresses Dignitaries, Study Committee Members & Residents at a Riverside Bill Signing Ceremony — Linda Bireley |
| p.36 | Harris Brook in the Spring — Larry Reitz |
| Back Cover | (clockwise from top) Eightmile in Devil's Hopyard State Park, Wood Frog in Local Vernal Pool, Stream Crossing in East Haddam) — Carol Geise |
| Back Cover | Cerulean Warbler Illustration — Courtesy of Gillian Harris |



March 23, 2006

To Whom it may concern:

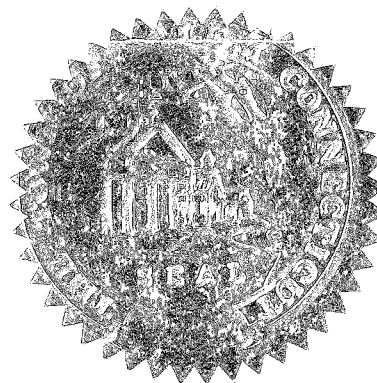
At a special Town Meeting held at Gardner Lake Volunteer Fire Company, 429 Old Colchester Road, Salem, Connecticut on February 1, 2006 the electors of the town of Salem, Connecticut **endorsed** the Eightmile River Watershed Management Plan and the recommendation that "Wild and Scenic" status be adopted by the United States Congress in a vote of 108 Ayes to 8 Nays.

Certified to be a true reporting of a resolution passed at the town meeting specified above in Salem, Connecticut.

ATTEST:



Patricia J. Crisanti CCTC
Town Clerk of Salem



Special Town Meeting
January 23, 2006

Town Clerk, Debra H. Denette, called the Special Town Meeting to Order at 8:01 p.m. at the auditorium of the Nathan Hale Ray High School. The Pledge of Allegiance was recited. Approximately 450 people were in attendance, including many high school students. Brad Parker motioned to nominate Deb Denette as Moderator. Pete Govert seconded the motion.

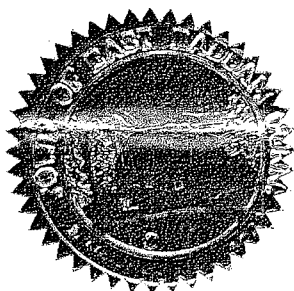
The Town clerk called for other nominations from the floor. None were offered. Brad Parker motioned to close nominations. Said motion was duly seconded and carried unanimously via voice vote. A vote was called for regarding the nomination of Deb Denette as Moderator. It passed unanimously via voice vote.

The Moderator briefly explained the rules of conduct for Town meeting. The call of the meeting was read by the Town Clerk, Bradley Parker motioned to accept the call of the meeting as read. The motion was duly seconded by Joe Albuquerque and carried unanimously via voice vote.

Item 1: Laurie Alt motioned that the legislative body herein assembled act upon the recommendation of the Board of Selectmen, Inland Wetlands and Watercourse Commission, and Planning and Zoning Commission to endorse the Eightmile River Watershed Management Plan developed by the Eightmile River Wild and Scenic River Study Committee, together with its recommendation to seek Wild and Scenic River Designation through an act of the United States Congress. Said Eightmile River Watershed Management Plan is on file with the Town Clerk of the Town of East Haddam for public inspection. Said motion was duly seconded. A presentation was made by members of the Wild & Scenic study committee. Comments and questions were raised and where appropriate answered. After approximately an hour of discussion, upon a motion to call the question made by Laurie Alt and duly seconded, and unanimously approved a voice vote was called for. The Moderator being unable to determine the outcome of the voice vote called for a vote via a show of hands. The motion carried with the following results:

435 voted 295 yes 140 no

United States Senator Christopher Dodd briefly addressed the audience and the significance of the motion that was just adopted.



Item 2: Laurie Alt motioned that the legislative body herein assembled act upon the recommendation of the Board of Selectmen and the Board of Finance to accept a grant from the Department of Homeland Security and the Office for Domestic Preparedness entitled "FY 05 Assistance to Firefighters Grant" in the amount of \$53,153.00; and to appropriate said funds to line #841 Fire Department Equipment; and to appropriate matching funds in the amount of \$2,797.00 from Contingency to line #841 Fire Department Equipment; for a total grant amount of \$55,950.00. Said motion was duly seconded. Opportunity for discussion was offered, there were no comments. Said motion carried unanimously via voice vote.

Item 3: Pete Govert motioned that the legislative body herein assembled act upon the recommendation of the Board of Finance and the Board of Selectmen to accept a grant in the amount of \$7,000.00 from the State of Connecticut, State Library, for the purpose of historic document preservation; and to appropriate said grant to the Historic Document Preservation Fund. Said motion was duly seconded. The Town Clerk advised that these funds will be used to microfilm older meeting records that have yet to be preserved. Opportunity for discussion was offered, several questions were asked and answered. The Town clerk called for a vote, the motion carried unanimously via voice vote.

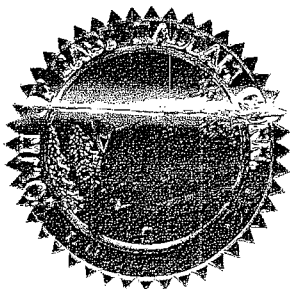
Item 4: Jim Ventres motioned that the legislative body herein assembled act upon the recommendation of the Board of Finance to appropriate \$130,000.00 from the Undesignated Fund Balance to line #890 Board of Education CIP - High School Field Lighting Project. Said motion was duly seconded. Mr. Parker made a few brief comments explaining the project. Opportunity for discussion was offered. Comments were offered and questions were asked and answered. John Blaschik moved the question, which action was duly seconded and carried via unanimous voice vote. The Moderator called for a vote. Dick Everett voted in opposition, the remainder of the votes were unanimously in favor. Motion carried.

There being no further business, upon a motion made by Richard Parker and seconded by Ruth Ziobron, the meeting adjourned at 9:20 p.m.

ATTEST:

Debra H. Denette
Town Clerk of East Haddam

February 2, 2006



ELECTORS AND CITIZENS QUALIFIED TO VOTE IN TOWN MEETING ARE HEREBY WARNED THAT A SPECIAL TOWN MEETING WILL BE HELD ON FRIDAY, JANUARY 13, 2006, AT THE LYME CONSOLIDATED SCHOOL, HAMBURG ROAD, LYME, CONNECTICUT AT 8:00 P.M. FOR PRESENTATION OF THE FOLLOWING AGENDA:

1. CONSIDER AND ACT UPON A RESOLUTION BY WHICH THE TOWN OF LYME WOULD ENDORSE THE EIGHTMILE RIVER WATERSHED MANAGEMENT PLAN DEVELOPED BY THE EIGHTMILE RIVER WILD AND SCENIC RIVER STUDY COMMITTEE, TOGETHER WITH ITS RECOMMENDATIONS TO SEEK WILD AND SCENIC RIVER DESIGNATION THROUGH AN ACT OF THE UNITED STATES CONGRESS.
2. CONSIDER AND ACT UPON A RESOLUTION REQUIRING THE BOARD OF SELECTMEN TO CONSIDER THE DEVELOPMENT OF A NOISE ORDINANCE FOR THE TOWN OF LYME.

DATED AT LYME, CONNECTICUT THIS 6th DAY OF JANUARY 2006.

WILLIAM T. KOCH, JR.
PARKER H. LORD
STEVEN MATTSON

RECORDED BY: TOWN CLERK

CERTIFIED TO BE A TRUE COPY
 DATE 3/23/06 TIME 9:00 A
 ATTEST *[Signature]*
 TOWN CLERK, LYME, CONN.

SPECIAL TOWN MEETING MINUTES JANUARY 13, 2006

MEETING CALLED TO ORDER BY FIRST SELECTMAN, WILLIAM T. KOCH, JR. AT 8:00 P.M.. THE MEETING WAS THEN ORGANIZED BY THE SELECTION OF ROWLAND BALLEK AS MODERATOR. THE CALL OF THE MEETING WAS READ BY RUTH PERRY, TOWN CLERK.

THE FIRST ITEM TO COME BEFORE THE MEETING WAS A RESOLUTION CONCERNING THE EIGHTMILE RIVER WATERSHED MANAGEMENT PLAN.

RESOLUTION:

WHEREAS: THE 62 SQUARE MILE EIGHTMILE RIVER WATERSHED IS AN EXCEPTIONAL NATURAL AND CULTURAL RESOURCE IN THE TOWN OF LYME.

AND WHEREAS: ON NOVEMBER 6, 2001, PUBLIC LAW NO. 107-65, SUPPORTED BY CONGRESSMAN ROB SIMMONS AND SENATOR CHRISTOPHER DODD WAS PASSED AUTHORIZING THE COMMENCEMENT OF A WILD AND SCENIC RIVER STUDY TO BE FUNDED BY THE UNITED STATES CONGRESS.

AND WHEREAS: IN 2005, GOVERNOR RELL SIGNED INTO LAW PUBLIC ACT=05-18 WHICH PROCLAIMED THE STATE OF CONNECTICUTS SUPPORT FOR CONGRESSIONAL WILD AND SCENIC DESIGNATION OF THE EIGHTMILE RIVER WATERSHED:

AND WHEREAS: THERE ARE MANY BENEFITS TO A WATERSHED APPROACH TO MANAGEMENT OF THE EIGHTMILE RIVER AND WILD AND SCENIC DESIGNATION:

NOW THEREFORE:

BE IT RESOLVED BY THE TOWN OF LYME IN TOWN MEETING CONVENED THAT THE TOWN OF LYME ENDORSES THE EIGHTMILE RIVER WATERSHED MANAGEMENT PLAN DEVELOPED BY THE EIGHTMILE RIVER WILD AND SCENIC RIVER STUDY COMMITTEE, TOGETHER WITH ITS RECOMMENDATION TO SEEK WILD AND SCENIC RIVER DESIGNATION THROUGH AN ACT OF THE UNITED STATES CONGRESS.

MOVED
SECONDED
DISCUSSION

ANTHONY OPENED THE DISCUSSION WITH A HISTORY OF WHAT THE EIGHT MILE RIVER STUDY GROUP HAS BEEN DOING OVER THE PAST FOUR YEARS MR. IRVING EMPHASISED THE AREAS NATURAL UNIQUENESS AND A NEED TO PROTECT THIS AREA AS BEING ONE OF THE FEW LEFT IN THE NATION. THE MANAGEMENT PLAN WOULD PROTECT THE AREA AND COST THE TOWN NOTHING. THIS PROTECTION GOAL FORMALY DECLARES THE IMPORTANCE WITH LOCAL CONTROL WHILE HAVEING THE FUNDING SOURCE FROM THE GOVERNMENT. (ALSO SEE ATTACHED FACT SHEET).

NATHAN FROLING FROM THE NATURE CONSERVANCY ALSO SPOKE CONCERNING THE IMPORTANCE OF THIS PROPOSAL AND CONFIRMED THAT THE SELECTMEN, THE LOCAL LAND USE BOARDS AND OTHERS HAVE ENDORSED THIS LOCAL CONTROL PLAN. THE MANAGEMENT PROVIDES GUIDELINES AND RECOM MENDATIONS WITH NO NEW AUTHORITY. THERE IS NO FEDERAL REGULATION, NO FEDERAL MANDATES.

QUESTIONS: MR. FURGESON QUESTIONED THE ADMINISTRATIVE BURDEN ON THE TOWN WHICH WOULD BE EMPOSED. WHAT HAPPENS TO PROPERTY OWNERS ON THE RIVER?

AGAIN NO FINANCIAL COST TO TOWN. IMPACT ON LOCAL LANDOWNERS WOULD BE THE SAME AS ANY PRESENT REGULATIONS SUCH AS PLANNING AND ZONING. THERE WOULD BE A PUBLIC PROCESS INVOLVED.

CARTER COURTNEY FEELS THAT THERE WILL BE NEW REGULATIONS EMPOSED ON LANDWONERS ON THE RIVERS. HIS CONCERN FOR UNDO HARDSHIP. ANTHONY IRVING RESPONDED WITH THERE WOULD BE NO HARDSHIPS FOR LANDOWNERS. PLEADS FOR KEEPING THE RIVERS CLEAN. A REGIONAL APPROACH TO PROTECT THE RIVER.

MR. ORZACK WHAT AREA OF THE TOWN WOULD BE EFFECTED?

ANSWER: 28 MILES OF RIVERS AND PRIMARY STREAMS. EAST HADDAM AND SLAEM NEEDS TO SUPPORT.

JOHN LEONARD LANDWONERS ARE UP AGAINST THE REST OF THE VOTING COMMUNITY WHEN IT COMES TO CONTROL OT LAND ON THE WATERFRONT. MR. LEONARD DOES NOT FEEL COMFORTABLE AS TO WHAT NEW REGULATIONS MIGHT EFFECT THESE LANDOWNERS.

MRS. WILKINS DESCRIBED THE FEDERAL PLAN TO CONTROL RIVERS IN THE FUTURE TO BE A WATER SOURCE FOR THE LOWER PART OF CONNECTICUT. THIS PLAN KEEPS CONTROL OF THE RIVERS HERE.

MR. WOODY SPOKE AS A LANDWONER ON THE RIVER AND FEELS THAT THERE ARE NOT ENOUGH REGULATIONS AND WELCOMES THIS IDEA.

MR.THACH INDICATED THAT IT WAS OUR DUTY TO DEFEND AND PROTECT THE TOWN'S NATURAL RESOURCES WITH NO COST AND LOCAL CONTROL

THE NATIONAL PARK SERVICE WOULD BE THE OVERSIGHT FEDERAL AGENCY.

THERE BEING NO FURTHER DISCUSSION THE MODERATOR CALLED FOR THE VOTE:
VOTED STRONGLY AFFIRMATIVE
SOME NAYS

RESOLUTION #2 CONCERNING THE DEVELOPMENT OF A NOISE ORDINANCE

WHEREAS: A PETITION WAS RECEIVED BY THE BOARD OF SELECTMEN REQUESTING THAT THE BOARD OF SELECTMEN"CONSIDER THE DEVELOPMENT OF A NOISE ORDINANCE FOR THE TOWN OF LYME."

AND WHEREAS: THE BOARD OF SELECTMEN HAS ALREADY CONSIDERED A NOISE ORDINANCE FOR THE TOWN OF LYME AND UNANIMOUSLY DETERMINED THAT A NOISE ORDINANCE IS NOT APPROPRIATE FOR THE TOWN OF LYME AT THIS TIME

NOW THEREFORE:

BE IT RESOLVED BY THE TOWN OF LYME IN TOWN MEETING CONVENED THAT THE BOARD OF SELECTMEN SHOULD NOT CONSIDER A NOISE ORDINANCE FOR THE TOWN OF LYME AT THIS TIME.

MOVED

SECONDED

DISCUSSION: MR.KOCH TURNED OVER THE MEETING TO CHRISTINE SEMENZA WHO BROUGH FROTH THE PETITION TO THE BOARD OF SELECTMEN. MRS. SEMENZA SPOKE ABOUT CONSERVATION AND HOW PEACE AND TRANQUILITY ARE A PART OF THAT. SHE SAYS THE RURAL, QUIET CHARACTER OF THE TOWN IS RUINED BY NOISE QUALITY NOT CONSISTANT WITH THIS ATMOSPHERE AND SUGGESTS A STUDY COMMITTEE BE FORMED TO RESEARCH FURTHER A NOISE ORDINANCE.

THERE WAS A SUGGESTION OF PLACING SOMETHING IN THE PLANNING AND ZONING REGULATIONS CONCERNING CONSTRUCTION. MRS. SEMENZA DOES NOT FEEL THAT THIS ENOUGH

SHE URGES A COMMITTEE BE FORMED TO INVESTIGATE JUST WHAT THE ORDINANCE COVERS HOW IT WOULD BE ENFORCED and THEN BE BROUGHT TO ANOTHER TOWN MEETING FOR A VOTE.

MR. KOCH SAID THAT THE BOARD OF SELECTMEN INVESTIGATED NOISE ORDINANCES IN OTHER TOWNS. TOWN ATTORNEY WHO LIVES IN OLD LYME WAS NOT AWARE OF THE NOISE ORDINANCE IN OLD LYME BUT DETERMINED THAT TOWNS WOULD NEED EQUIPMENT TO MEASURE NOISE AS WELL AS AN ENFORCEMENT AGENCY SUCH AS A LOCAL POLICE DEPARTMENT.

MR. ORZECH FELT NEIGHBORS SHOULD SPEAK TO ONE ANOTHER AND WORK THINGS OUT.

MR. TIFFANY FELT THE SAME WAY AND GAVE AN EXAMPLE OF AN EVENT IN HIS CHILDHOOD WHERE NEIGHBORS HELPED AND AGAIN SPOKE TO WHAT KIND OF COMMUNITY LYME WAS AND HAS BECOME.

HADLYME HISTORICAL DISTRICT REPRESENTATIVE SPOKE OF THE NOISE FROM MOTORCYCLES AT THE FERRY LANDING AND LAWN MOWING AT UNREASONABLE HOURS AND WOULD LIKE TO SEE A NOISE ORDINANCE.

MRS. CRITES HAS A PROBLEM ON BEAVERBROOK ROAD WITH DIRT BIKES ON A NEIGHBORING PROPERTY. SHE HAS CALLED THE NEIGHBOR AND HAS NOT HAD ANY LUCK. SUGGESTED SHE CONTACT THE STATE POLICE.

MRS. IRVING SPOKE OF THE NOISE ON RT.156. TOWN ORDINANCE COULD NOT REGULATE STATE ROADS.

MR. KOCH INDICATED THAT THE STATE POLICE WOULD RESPONDE TO BREACH OF PEACE.

DOGS :

MAUREEN GRIFFIN INDICATED THAT THERE ARE STATE LAWS REGARDING BARKING DOGS AND THE LOCAL DOG WARDEN WOULD ENFORCE THESE LAWS.

NORMAN CAINE SUGGESTED A COMMITTEE BE FORMED.

THE MODERATOR CALLED FOR A VOTE AFTER CLAIRFIYING JUST WHAT YES AND NO MEANT.

MOTION VOTED YES

SOME NAYS

A MOTION TO ADJOURN THE MEETING WAS CALLED BY ANTHONY IRVING. SECONDED
MEETING ADJOURNED AT 8:50 p.m.

THERE WAS A LARGE TURNOUT AT THIS MEETING ON A VERY FOGGY NIGHT.

RECORDED BY: TOWN CLERK *Ruth Perry*

Bradley P. Parker
First Selectman

Randolph W. Dill
Peter T. Govert
Selectmen

Office: 860-873-5020
Fax: 860-873-5025
Email: admin@easthaddam.org

Selectmen's Office

TOWN OFFICE BUILDING
EAST HADDAM
CONNECTICUT
06423



April 4, 2006

Eightmile River Wild and Scenic Study Committee
c/o Anthony Irving, Chairman
P.O. Box 1002
Lyme, CT 06371

Dear Anthony,

I am writing on behalf of the East Haddam Board of Selectmen to confirm the Selectmen's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by formal vote of the selectmen at their meeting on September 27, 2005.

A copy of the endorsement is included with this letter.

Sincerely,

Brad Parker
First Selectman



SAMPLE OF FULL
LAND USE DEPARTMENT
ENDORSEMENT

CERTIFIED RESOLUTION

**Eightmile River Wild & Scenic River Study
Management Plan Endorsement**

Certified a true copy of a resolution adopted by the Town of East Haddam, CT at a meeting of its Board of Selectmen on September 27, 2005 and which has not been rescinded or modified in any way whatsoever.



October 25, 2005

Debra H. Denette
(Debra H. Denette, Town Clerk)

At a meeting of the Board of Selectmen held on September 27, 2005, a motion was made by Board Member Brad Parker and seconded by Board Member Randolph Dill, to endorse the following management plan as presented:

WHEREAS, the Town of East Haddam Board of Selectmen recognizes that the Eightmile River Watershed provides outstanding resource values including water quality, watershed hydrology, unique species and natural communities, geology, the cultural landscape and the watershed ecosystem that are important for the well-being and quality of life of the Town of East Haddam; and

WHEREAS, the Town of East Haddam Board of Selectmen recognizes the Eightmile River Watershed Management Plan, that has been developed in partnership with local communities and will be implemented in partnership with the local communities, will provide an important mechanism to protect and enhance the outstanding resource values of the Eightmile River Watershed; and

WHEREAS, the *Eightmile River Wild & Scenic Study Committee* recognizes that full implementation of the Watershed Management Plan will require human and financial resources that may be beyond the capacity of the Town of East Haddam to provide and that full implementation of the Plan will require funding and technical support that may become available as a result of Wild & Scenic Designation; and

WHEREAS, the National Park Service was authorized, at the request of the local communities, to determine if the Eightmile River Watershed is eligible and suitable for inclusion in the National Wild & Scenic Rivers System; and

WHEREAS, the National Park Service will not own or manage any lands, will not create any new regulatory powers and will not have any control over local municipal boards and commission activities and actions associated with a Wild & Scenic designation.

NOW, THEREFORE, BE IT RESOLVED

1. The Town of East Haddam Board of Selectmen endorses designation of the Eightmile River Watershed as a component of the National Wild & Scenic Rivers System.
2. The Town of East Haddam Board of Selectmen endorses the purposes and goals of the Draft Eightmile River Watershed Management Plan.
3. The Town of East Haddam Board of Selectmen commits to being a partner and participant in the implementation of the Draft Eightmile River Watershed Management Plan.
4. The Town of East Haddam Board of Selectmen agrees that within 6-12 months of achieving an affirmative vote of support for Wild & Scenic designation at a town meeting they will begin the process of implementing Tier one tools and will establish a timeline in which to complete such a process. The commission will do this to the best of their ability however, the implementation of tools that require funding outside the normal expenditures of the town may not be pursued until or unless outside funding is secured. These proposed tier one tools include:
 - Adopting a River Protection Overlay Zone for all perennial streams and rivers in the Eightmile River Watershed that provides a 50 foot setback on small headwater streams, and a 100 foot setback on larger streams.
 - Making protection of important habitat blocks an open space conservation priority and being a partner in pursuit of federal funding to support such types of acquisitions.
 - Working with the Eightmile River Committee to establish local management tools that will support maintaining less than 4% impervious cover for the entire Eightmile River Watershed.
 - Requiring the CT DEP Stormwater Quality Manual to be used as guidance for the design, implementation and maintenance of all new and existing stormwater systems in each community.

- Completing and implementing a Stormwater Management Plan for each municipality's stormwater system as described in the State's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems.
 - Adopting the University of Massachusetts guidance for watercourse crossings.
5. The Town of East Haddam Board of Selectmen will work on implementing the Draft Eightmile River Watershed Management Plan to the best of its abilities regardless of a Wild & Scenic Designation being achieved, recognizing that the implementation of tools that require funding outside the normal expenditures of the town may not be pursued until or unless outside funding is secured.

**INLAND/WETLANDS AND WATERCOURSES COMMISSION
TOWN OF EAST HADDAM
LAND USE OFFICE**

(860) 873-5031

HOURS: Mon., Wed., & Thurs. 9AM-4PM / Tues. 9AM-7PM / Fri. 9AM-12 NOON

April 4, 2006

Damon Hearne
Eightmile River Wild and Scenic Study Committee
Middlesec County Extension Center
P.O. Box 70
Haddam, CT 06438

Dear Mr. Hearne,

I am writing on behalf of the East Haddam Inland Wetlands and Watercourses Commission to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by formal vote of the Commissioners at their meeting on December 20, 2005.

Sincerely,



Randolph Dill, Chairman
East Haddam Inland Wetlands and Watercourses Commission

RD/jl

**East Haddam Conservation Commission
7 Main Street
P.O. Box K
East Haddam, CT 06423**

April 4, 2006

Damon Hearne
Eightmile River Wild and Scenic Study Committee
Middlesex County Extension Center
P.O. Box 70
Haddam, CT 06438

Dear Mr. Hearne,

I am writing on behalf of the East Haddam Conservation Commission to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by formal vote of the Commissioners at their meeting on March 7, 2006.

Sincerely,



John Gibson, Chairman
East Haddam Conservation Commission

**TOWN OF EAST HADDAM
PLANNING AND ZONING COMMISSION**

Town Office Building - P. O. BOX K
EAST HADDAM, CONN. 06423
HOURS: Mon., Weds. & Thurs. - 9AM - 4PM; Tues. - 9AM - 7PM; Fri. - 9AM - Noon
(860) 873-5031 - Fax (860) 873-5042

April 4, 2006

Damon Hearne
Eightmile River Wild and Scenic Study Committee
Middlesex County Extension Center
P.O. Box 70
Haddam, CT 06438

Dear Mr. Hearne,

I am writing on behalf of the East Haddam Planning and Zoning Commission to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by formal vote of the Commissioners at their meeting on January 10, 2006.

Sincerely,



Harvey Thomas, Chairman
East Haddam Planning and Zoning Commission

JV/jl

CONSERVATION / INLAND
COMMISSION / WETLANDS
AGENCY



LYME TOWN HALL
480 HAMBURG ROAD
LYME, CT 06371
(860) 434-7733

April 19, 2006

Eightmile River Wild and Scenic Study Committee
c/o Anthony Irving
P.O. Box 1002
Lyme, CT 06371

Dear Anthony:

I am writing on behalf of the Lyme Conservation and Inland Wetlands Agency to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by formal vote of the Commissioners at their meeting on October 19, 2005.

Sincerely,

A handwritten signature in cursive script, appearing to read "Paul Armond".

Paul Armond
Chairman, Conservation Commission and Inland Wetlands Agency

PLANNING AND ZONING
COMMISSION



LYME TOWN HALL
480 HAMBURG ROAD
LYME, CT 06371

(860) 434-7733

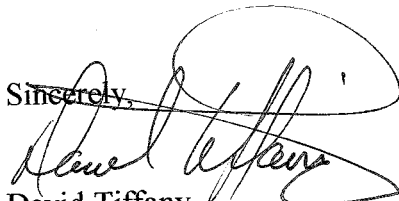
April 11, 2006

Eightmile River Wild and Scenic Study Committee
c/o Anthony Irving, Chairman
P.O. Box 1002
Lyme, CT. 06371

Dear Anthony,

I am writing on behalf of the Lyme Planning and Zoning Commission to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by formal vote of the Commissioners at their meeting on October 11, 2005.

Sincerely,



David Tiffany
Chairman, Planning and Zoning Commission




May 22, 2006

Eightmile River Wild and Scenic Study Committee
Anthony Irving, Chairman
PO Box 1002
Lyme CT 06371

Dear Anthony,

I am writing on behalf of the Salem Inland Wetlands and Conservation Commission to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by a formal vote of the Commission at their meeting on December 12, 2005. Enclosed is a copy of the motion from that meeting.

Very truly yours,


George Ziegler, Chairman
Salem Inland Wetlands and Conservation Commission

Encl.



May 22, 2006

Eightmile River Wild and Scenic Study Committee
Anthony Irving, Chairman
PO Box 1002
Lyme CT 06371

Dear Anthony,

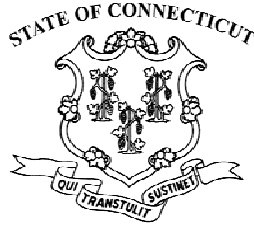
I am writing on behalf of the Salem Planning and Zoning Commission to confirm the Commission's support for the Eightmile River Watershed Management Plan and its recommendation to seek Wild and Scenic Designation. This position was taken by a formal vote of the Commission at their meeting on December 13, 2005. Enclosed is a copy of the motion from that meeting.

Very truly yours,

A handwritten signature in black ink, appearing to read "H. McKenney", with a long, sweeping horizontal line extending to the right.

Hugh McKenney, Chairman
Salem Planning and Zoning Commission

Encl.



House Bill No. 6414

Public Act No. 05-18

AN ACT CONCERNING DESIGNATION OF THE EIGHTMILE RIVER WATERSHED WITHIN THE NATIONAL WILD AND SCENIC RIVER SYSTEM.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) (*Effective October 1, 2005*) (a) It is declared to be the policy of the state of Connecticut that the portion of the Eightmile River watershed which is the subject of the authorized study by the Eightmile River Wild and Scenic River Study Committee for purposes of designation as a national wild and scenic rivers system be preserved as provided for in the federal Wild and Scenic Rivers Act, Public Law 90-542, as amended.

(b) The Commissioner of Environmental Protection shall cooperate with all relevant federal, state and local agencies to provide for such designation and to implement any management plan developed in accordance with the federal Wild and Scenic Rivers Act. Upon the designation of the river watershed by Congress, the commissioner 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 watershed in accordance with the federal Wild and Scenic Rivers Act. The commissioner shall cause a copy of

House Bill No. 6414

this section to be delivered to all United States Representatives and Senators representing Connecticut in the Congress of the United States.

Approved May 9, 2005



Eightmile River Wild & Scenic Study
P.O. Box 70
1066 Saybrook Rd
Haddam, CT 06438

860-345-8700
<http://www.eightmileriver.org>



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