Nomination of the Upper Housatonic River as an Area of Critical Environmental Concern



Date of Nomination: August 29, 2008

Nomination prepared by Upper Housatonic River ACEC Steering Committee:

- Berkshire County League of Sportsmen
- Berkshire Natural Resources Council
- Green Berkshires, Inc.
- Massachusetts Audubon Society

Technical assistance and support provided by:

- Leslie Luchonok, Community and Environmental Consulting
- Massachusetts Division of Fisheries and Wildlife

Save The Housatonic, P.O. Box 501, Great Barrington, MA 01230

August 29, 2008

Ian A. Bowles, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Dear Secretary Bowles:

On behalf of many citizens, communities, and supporting organizations, and pursuant to the Area of Critical Environmental Concern Regulations (301 CMR 12.00), we submit to you this Nomination of the Upper Housatonic River as an Area of Critical Environmental Concern (ACEC).

The area nominated - the Upper Housatonic River – includes a 13-mile stretch of the river extending from the confluence of the East and West Branches in south Pittsfield southward to north Lee. It includes portions of four communities – Lee, Lenox, Pittsfield, and Washington – and covers approximately 12,280 acres.

This stretch of the Housatonic River is comprised of a complex and rich ecosystem that includes the river itself, adjacent wetlands and floodplains, several tributary streams, abundant wildlife, concentrations of rare species, and the steep, forested, western slopes of October Mountain State Forest. The river and its adjacent uplands also provide an array of dramatic scenic vistas and a wide range of public educational and recreational activities on protected lands, and include important historical and archaeological resources.

The Massachusetts Division of Fisheries and Wildlife (DFW) recently referred to the Housatonic River watershed as "one of the most biologically rich and unique regions in the Commonwealth," supporting "a unique ecosystem" with "many species found nowhere else in Massachusetts." Indeed, there are 31 documented state-listed rare species located within the proposed ACEC. The Massachusetts Audubon Society (Mass Audubon) has designated the Upper Housatonic River Valley as an Important Bird Area, underscoring its significance as bird habitat and as a migratory corridor, and referring to the "approximately 1,300 acres of riparian wetland, oxbow ponds, marshes, beaver swamps, grasslands, and upland woods along the meandering Housatonic River" (located in the proposed ACEC) as representing "some of the finest riparian habitat remaining in Central Berkshire County."

Critical protected lands located within the nominated area include the 818acre DFW George L. Darey Wildlife Management Area, the adjacent 200-acre Post Farm managed by the Lenox Conservation Commission, and the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary along and adjacent to the river corridor, plus approximately 5,500 acres of critical uplands located in October Mountain State Forest. *Our general goals are identical to those that have accompanied ACEC designations throughout the state for the past 30 years:*

- To recognize the critical environmental value and significance of this area, and to use the ACEC designation to help preserve, restore, and enhance the resources and ecosystem of the Upper Housatonic River.
- To direct state agencies to provide higher standards of review and protection for the Upper Housatonic River ACEC, and to establish a framework for local, regional, and state stewardship.
- To educate our communities and citizens about the environmental significance of the resources of this area and ecosystem, and to encourage citizen and community involvement in the long-term protection and management of the ACEC.

We also intend to use this ACEC designation to help build a strong community coalition to raise awareness of the important resources of the Housatonic River with a science-based rationale, with the goal of increasing community and state agency participation in the current examination of alternatives and long-term solutions needed to address the clean-up of the current levels of PCB contamination in and along the river, and to develop and implement a restoration plan that returns the river and its resources to a functioning and healthy habitat and ecosystem.

We are very aware that an ACEC designation is not a "silver bullet" that will magically remove contaminants from the river and assure a complete restoration. However, we strongly believe that an ACEC designation will help focus attention on this crucial stretch of the river, both in terms of its extraordinary resources and in terms of the next stage of the proposed clean-up, an enterprise that will affect not only this stretch of the river but also miles of downstream communities, both human and environmental. It will also support our long-term efforts to provide the wise stewardship that this special stretch of the river deserves.

Please also see the one-page Purpose of Upper Housatonic River ACEC Designation included in the first section of the nomination document.

In terms of public outreach and education, we have worked diligently to build a strong base of individuals, organizations, and public officials who support the nomination, as evidenced by the individual nominators listed below and the letters of support that accompany the nomination. We held a well-publicized meeting to inform the public about the nomination, and the goals and purposes of ACEC designation in the Lenox Town Hall on August 7, 2008. Approximately 135 people attended the meeting, and strong support was voiced for this initiative. Further information about our public outreach efforts is included in Appendix G of the nomination. We are eager to work with you and ACEC Program staff to schedule any additional public meetings that may be needed prior to the commencement of a formal nomination review by your Office. As stated in the nomination document, we are confident that the combination and concentration of the resources of this special area leave no doubt that it meets the ACEC threshold of regional or statewide significance and that the Upper Housatonic River nomination merits ACEC designation.

Very truly yours,

Concerned Citizens and Nominators of the Upper Housatonic River as an Area of Critical Environmental Concern

[The nominators' signatures are on file and have been replaced with this typed list.]

- 1. Morgan Bulkeley 3rd
- 2. George S. Wislocki (Green Berkshires, Inc.)
- 3. George L. Darey (Green Berkshires, Inc.)
- 4. Eleanor Tillinghast (Green Berkshires, Inc.)
- 5. Timothy Gray (Housatonic River Initiative; Housatonic Riverkeeper)
- 6. Jane Winn (Berkshire Environmental Action Team)
- 7. Benno Friedman (Housatonic River Initiative)
- 8. René Laubach (Massachusetts Audubon Society)
- 9. Warren E. Archey (Lenox Land Trust)
- 10. Smitty Pignatelli (State Representative)
- 11. Christopher. J. Waitekus (Pastor, St. Ann Church)
- 12. Patricia A. Archey
- 13. Linda Messana (Lenox Select Board)
- 14. Charlie Liston
- 15. Lorraine A. Schulze
- 16. Joseph H. Nolan
- 17. Michael L. Ward (Pittsfield City Council, Ward 4)
- 18. Denis E. Guyer (State Representative)

- 19. Margo N. Paddock
- 20. Gretchen DeBartolo
- 21. Marjorie Cohan (Berkshire Bike Path Council)
- 22. J. Thomas Ferguson (Lenox Sportsmen's Club)
- 23. Mark Miller
- 24. Michael Makes
- 25. Clemens Kalisher
- 26. Jonathan Lothrop (Pittsfield City Council, Ward 5)
- 27. Ben Downing (State Senator)
- 28. Tad Ames (Berkshire Natural Resources Council)
- 29. Mark Jester (Berkshire County League of Sportsmen)
- 30. Christopher N. Speranzo (State Representative)
- 31. John W. Olver (U.S. Congressman)
- 32. George Hamilton, Jr.
- 33. Eugene R. Chague (Taconic Chapter of Trout Unlimited)
- 34. Philip G. Hiser Jr. (Lee Sportsmen's Association)
- 35. Stephen Pavlosky (Select Board, Lenox)
- 36. Ginny Akabane
- 37. Laura Johnson (Massachusetts Audubon Society)
- 38. Andrew Breslin
- 39. Dennis Regan (Housatonic Valley Association)
- 40. Edwin J. Neumuth
- 41. Rose Borgnis (Select Board, Washington)
- 42. Bill Cawley (Select Board, Washington)
- 43. Susan Minnich



Aerial view of Housatonic River and surrounding lands

Photo courtesy of Jonas Dovydenas



Dewey Hill

Photo courtesy of Tony Gola & Tammy Ciesla



Cardinal Flower

Photo courtesy of Eleanor Tillinghast



Pickerel-Weed

Photo courtesy of Eleanor Tillinghast



Yellow-Rumped Warbler

Photo courtesy of René Laubach



Wood Duck

Photo courtesy of Eleanor Tillinghast



Red Eft

Photo courtesy of René Laubach



Photo courtesy of Eleanor Tillinghast

Box Turtle



Eastern Veined White Butterfly

Photo courtesy of René Laubach



Widow Skimmer Dragonfly

Photo courtesy of René Laubach



Woods Pond and October Mountain

Photo courtesy of Eleanor Tillinghast



Aerial view of Housatonic River and surrounding lands

Photo courtesy of Jonas Dovydenas

Upper Housatonic River ACEC Nomination

Table of Contents

1. The U	Upper Housatonic River ACEC Nomination	
1.1	Introduction	
1.2	Purpose	
1.3	Summary	
2. Descr	iption of Resources Located within the Boundar	y of the
Uppe	r Housatonic River ACEC Nomination	
2.1	Resources Summary	
2.2	Resources Overview	
2.3	Resource Features	
3. Propo	osed Upper Housatonic River ACEC Boundary .	
3.1	General Proposed Boundary Description	
3.2	Detailed Proposed Boundary Description	
3.3	Rationale for Proposed Boundary	
4. Criter	ia for Designation of the Upper Housatonic Rive	er as an ACEC 37
4.1	Factors Supporting Designation	
4.2	Factors Relating to Potential or Actual Threats	
4.3	Economic Benefits	41
4.4	Supporting Factors	
Append	ices	
Append	ix A.1 Maps	
	A.1.1 Proposed ACEC Boundary	
	A.1.2 Water/Wetland Resources	
	A.1.3 Habitat/Wildlife Resources	v 01 0
1	A.1.4 Protected Open Space	following page 47

A.1.5 La	nd Use	following page 47
A.1.6 Fo	rest Resources/Steep Slopes	following page 47
A.1.7 Or	thophoto- Map 1, North Part	following page 47
A.1.8 Or	thophoto- Map 2, South Part	following page 47
Appendix A.2 Ma	p Documentation	
Appendix B. 1935	Panoramic View of October Mour	ntain State Forest 55
Appendix C. Mass	achusetts Audubon Society	
Important Bird	Area (IBA) documentation	
11	achusetts Division of Fisheries and esources Relative to the Proposed	
	achusetts Division of Fisheries and dangered Species Program – Biodi	
U U	Proposed ACEC Nomination Area	2
Appendix F. A His	tory of the Upper Housatonic Rive	er Corridor 69
Appendix G. Desc	ription of Public Outreach	
Appendix H. Lette	rs of Support	
Acknowledgments		
References		

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1. The Upper Housatonic River ACEC Nomination

1.1 Introduction

The nomination of the Upper Housatonic River as an Area of Critical Environmental Concern (ACEC) has been prepared by an ad-hoc Steering Committee on behalf of a coalition of conservationists and Housatonic River watershed stakeholders. The group quietly began working on the feasibility of an ACEC nomination for this stretch of the Housatonic in April 2008. This research then evolved into the preparation of this nomination, and its submittal to the Massachusetts Secretary of Energy and Environmental Affairs (EOEEA).

In the course of preparing the nomination, members of the Steering Committee met with many local citizens, state and local officials, and with representatives of conservation and sportsmen organizations to discuss the purpose and content of a potential nomination. As part of gathering support for this enterprise, a one-page purpose statement was developed, titled *Purpose of Upper Housatonic River ACEC Designation*, which appears in sub-section 1.2 in this nomination, following this Introduction. The formal nomination letter, signed by concerned citizens, further describes the general goals of the nomination. Documentation regarding public outreach and education prior to submitting the nomination is in Appendix G; letters of support are in Appendix H of this nomination.

The Steering Committee sponsored a widely publicized meeting to inform the public about the nomination and the goals and purposes of ACEC designation in the Lenox Town Hall on August 7, 2008. Approximately 135 people attended the meeting, and strong support was voiced for this initiative, as documented in Appendix G. At. Following the formal submittal of this nomination, the Steering Committee and supporters will sponsor at least one additional public meeting prior to the formal public review conducted by ACEC Program staff on behalf of the Secretary.

The basic organization and content of the nomination – the description of resources of the nominated area, the proposed boundary, and criteria for ACEC designation – are designed to meet the requirements set forth in the ACEC Regulations at 301 CMR 12.00. A series of maps and appendices providing supplemental information is included as part of the nomination.

It is our strong belief that the Upper Housatonic River ACEC Nomination more than meets the criteria of the ACEC Regulations and Program, and that the Upper Housatonic River merits designation as a Massachusetts Area of Critical Environmental Concern.

1.2 Purpose

Save The Housatonic is a coalition of conservationists and Housatonic River watershed stakeholders. The coalition has nominated the Upper Housatonic River for designation as an Area of Critical Environmental Concern (ACEC). Portions of Pittsfield, Lenox, Lee, and Washington are included in the nomination.

Our goals for the designation of an ACEC focused on this remarkable natural resource include:

- Raising public awareness of the exceptional resources represented by the Upper Housatonic River, its floodplain and immediate watershed;
- Establishing a more formal and active role for the Commonwealth of Massachusetts in the effort to encourage the most sophisticated standards and methodology for removal and disposal of contaminated materials from the Housatonic River and its floodplain;
- Establishing a framework for long-term public participation in the stewardship of the Upper Housatonic River.

Save The Housatonic regards ACEC designation as an essential tool for giving the Commonwealth of Massachusetts and its citizens a stronger role in the effort to restore the Upper Housatonic River to a healthy, naturally functioning ecosystem with a vital place in the life of Berkshire County's natural and human-made worlds.

The PCB clean-up of the first two miles of the River in Pittsfield, though pursued in good faith by all parties, has taught us hard and valuable lessons about the benefits of some approaches, and the serious limitations of others. We believe ACEC designation will help bring the most successful practices to the fore, while avoiding repetition of the less successful practices.

An ACEC designation will not by itself guarantee or prevent any particular outcome of the anticipated clean-up and restoration. It will, however, emphasize the need to take a long view of the process, and to do our utmost to ensure the best and healthiest future for the teeming, interdependent web of life in the Upper Housatonic River valley.

1.3 Summary

<u>1.3.1</u> General Purpose of ACEC Nomination and Designation

The purpose of an ACEC nomination and designation is to recognize and to preserve, restore, and enhance critical environmental resource areas that meet criteria established by the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA).

An ACEC designation directs state agencies to provide higher standards of review and protection for ACECs, and establishes a framework for local, regional, and state stewardship of these areas.

Above all, an ACEC designation educates communities and citizens about the environmental significance of the resources of an ACEC, and fosters greater understanding and involvement for the long-term protection and management of ACECs.

This nomination has been prepared to achieve these general goals of ACEC designation and the ACEC Program, in addition to the purpose and goals set forth in the Purpose of Upper Housatonic River ACEC Nomination (see section 1.2).

<u>1.3.2</u> Overview of the Upper Housatonic River ACEC Nomination

The primary focus of the nominated area is the 12.9-mile corridor of the Upper Housatonic River from south Pittsfield to north Lee, and portions of the critical supporting watersheds that drain into the River from the east and west. This stretch of the Housatonic is comprised of a complex and rich ecosystem that includes the River itself, adjacent wetlands and floodplains, several tributary streams, abundant wildlife, concentrations of rare species, and the steep, forested, western slopes of October Mountain State Forest. The River and its adjacent uplands also provide an array of dramatic scenic vistas and a wide range of public educational and recreational activities on protected lands, and include important historic and archaeological resources.

According to data generated by the Massachusetts Geographic Information System (MassGIS), the nominated area covers approximately 12,280 acres in portions of four Berkshire communities: Lee, Lenox, Pittsfield, and Washington. The respective approximate acreage of the nominated area within each community is:

- Lee, 1,610 acres
- Lenox, 3,545 acres
- Pittsfield, 3,155 acres
- Washington, 3,970 acres.

According to protected open space data generated by MassGIS, 7,730 acres or 63% of the nominated area is protected open space. The approximate breakdown of open space within the nominated area within each community is:

- Lee, 1,055 acres, or 66%, of the nominated area within Lee
- Lenox, 1,270 acres, or 36%, of the nominated area within Lenox
- Pittsfield, 1,490 acres, or 47%, of the nominated area within Pittsfield
- Washington, 3,915 acres, or 99%, of the nominated area within Washington.

Areas of protected open space are shown on the Protected Open Space Map.

Two Orthophoto Maps (2005) have been included as part of the series of supplemental maps prepared for this nomination, to provide an aerial overview of land use and natural resources within the nominated and immediate surrounding areas.

A Land Use Map (1999) is also included as a supplemental map. MassGIS data generated from this map indicate that approximately 8,375 acres, or 68%, of the nominated area are forested; 985 acres, or 8%, are cropland or pasture; and, 965 acres, or 8%, are developed residential areas. According to additional GIS data, approximately 1,445 acres, or 12%, of the nominated area are wetlands. A mix of other uses, such as industrial, commercial, and mining, covers approximately 5% of the area. Although these land-use data are dated – they are current as of 1999 – they still provide a useful overview of land use within the nominated area.

The resource features of the nominated area are summarized below and described more fully in Section 2 of the nomination document.

<u>1.3.3</u> Resource Highlights and Significance of Upper Housatonic River ACEC Nomination

According to ACEC Program guidelines, an ACEC must contain at least four of the 11 features listed in the ACEC Regulations, in an ecosystem of regional or statewide significance.

The nominated area contains all nine of the possible inland resource features listed in the ACEC regulations, in an ecosystem with regional or statewide significance.

The concentration, significance, complexity, and diversity of the resources described in this nomination leave no doubt that the proposed area meets the ACEC threshold of regional or statewide significance. As separate resource features, and as a dynamic ecosystem, the Upper Housatonic River corridor is highly significant to both the Berkshires and the state.

<u>1.3.3.1</u> Habitat Resources

The habitat and wildlife values reflected in the extraordinary number of rare species (31), Certified and Potential Vernal Pools (46); amount of Biomap Core Habitat (4,600 acres, or 37%, of the area, plus another 27% of Biomap Supporting Natural Landscape); and, amount of Living Waters Core Habitat and Critical Supporting Watershed (3,600 acres, or 29%) are more than enough to meet any criteria for regional or statewide significance.

Priority and Estimated Habitats of Rare Species cover approximately 3,440 acres, or 28%, of the nominated area. The listed species include seven Endangered, 13 Threatened, and 11 Special Concern species pursuant to the Massachusetts Endangered Species Act (MESA). There are three, or portions of three, separate Biomap Core Habitats within the nominated area. These three Biomap Core Habitats were delineated for six exemplary communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders.

The nominated area includes two natural communities documented by Massachusetts Division of Fisheries and Wildlife (DFW) Natural Heritage & Endangered Species Program (NHESP) that are uncommon community types across Massachusetts, an Acidic Graminoid Fen and a Level Bog.

Further, the nominated area is a regionally significant bird habitat and migratory corridor, and has been designated an Important Bird Area by the Massachusetts Audubon Society (Mass Audubon).

Finally, NHESP is currently undertaking a two-year, \$556,950 survey to identify previously unknown rare-species locations, and sites for land acquisition and rare-species restoration.

<u>1.3.3.2</u> Fishery Habitat

Fishery Habitat includes at least 21.5 river miles of Cold Water Fisheries. DFW sampling records show that Mill Brook, Ashley Brook, Sackett Brook, Washington Mountain Brook, Yokun Brook, Roaring Brook, and the outflow stream of Felton Pond support reproducing populations of brook and/or brown trout. There are approximately thirty fish species collected or suspected present in this section of the Housatonic River.

<u>1.3.3.3.</u> Inland Surface Waters

Surface Waters include approximately 12.9 miles of the Housatonic River, and portions of at least eight named tributary brooks and creeks, all highly important to the water quality, wildlife habitat, and overall resource quality of the nominated area. The area also includes several ponds, lakes, and reservoirs.

<u>1.3.3.4</u> Inland Wetlands

Wetlands cover approximately 1,445 acres, or 12%, of the total proposed area.

<u>1.3.3.5</u> Water Supply Areas

Water supply features include Farnham Reservoir, part of the Pittsfield water supply system, and approximately 425 acres of protected watershed lands within the nominated area.

<u>1.3.3.6</u> Natural Hazard Areas

Natural hazard areas – defined by 100-year flood zones, or steep slope grades averaging 25% to 30% – cover approximately 56% of the nominated area, indicating the overall environmental sensitivity of the nominated area.

<u>1.3.3.7</u> Agricultural Areas

Lands of agricultural productivity and forestry cover approximately 9,360 acres, or 76%, of the nominated area, about three-fourths of the entire nominated area. The western slopes of October Mountain State Forest include 1,120 acres of designated Forest Reserves. 1830s Forest, considered a valuable forest and habitat resource, covers approximately 3,450 acres, or 28%, of the nominated area. The amount of forest lands, Forest Reserves, and 1830s Forest clearly indicates the importance of these areas as part of the larger Upper Housatonic River corridor and ecosystem.

<u>1.3.3.8</u> Historic and Archaeological Resources

There is a wealth of documentation of the historic and archaeological resources for the Upper Housatonic River corridor, as well as for the greater Housatonic River valley. The nominated area is part of the Upper Housatonic Valley National Heritage Area. Historic and archaeological resources have been documented in a *Cultural Resources Assessment for the Housatonic River*, prepared for General Electric in April 2008. The old Lenox Train Station is listed on the State and National Registers of Historic Places. There are historic and archaeological sites located within October Mountain State Forest. A History of the Upper Housatonic River Corridor by local historian Bernard A. Drew was prepared for this nomination.

<u>1.3.3.9</u> Special Use Areas

<u>1.3.3.9.1</u> Public Recreational Areas

Public recreation areas within the nominated area cover approximately 6,800 acres, or over half (55%), of the nominated area. These areas include the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary; the 818-acre DFW George L. Darey Wildlife Management Area (Darey WMA); the 200-acre Post Farm managed by the Lenox Conservation Commission; several boat access sites; and, approximately 5,520 acres of October Mountain State Forest, owned and managed by the state Department of Conservation and Recreation (DCR).

The Darey WMA is one of the most heavily utilized wildlife management areas in western Massachusetts for all types of passive recreation including hunting, fishing, trapping, hiking, canoeing/kayaking, bird watching, and wildlife viewing.

Canoe Meadows contains outstanding wildlife habitat resources, and is dedicated to wildlife habitat conservation, and public education. Trails in the Sanctuary are used extensively by the public for passive recreation, wildlife appreciation, and group programs.

October Mountain State Forest is the largest state forest in Massachusetts at 16,500 acres. Approximately 5,520 acres of the Forest are located within the proposed ACEC (or 45% of the total area of the proposed ACEC.)

<u>1.3.3.9.2</u> Significant Scenic Sites

Significant Scenic Sites are located throughout the nominated area, ranging from the river corridor to the upper reaches of October Mountain State Forest.

<u>1.3.4</u> Proposed Upper Housatonic River ACEC Boundary

<u>1.3.4.1</u> ACEC Program Guidelines for Proposing an ACEC Boundary

The draft proposed boundary addresses the guidelines set forth by the ACEC Program, and is intended to be as conservative as possible. The guidelines state that the proposed boundary should include the minimum area necessary to protect and preserve the critical resources of the proposed ACEC, and, by using such markers as roads or other rights-of-way, should be easily recognized by the general public and local and state regulatory agencies working in the area.

The proposed boundary for the Upper Housatonic River ACEC follows roads, other rights-of-way, and natural resource features that have been used in previous ACEC designations, such as the 200-foot Riverfront Area adjacent to perennial rivers and streams and the 100-foot wetlands Buffer Zone pursuant to the Wetlands Protection Act Regulations (310 CMR 10.00).

<u>1.3.4.2</u> General Extent of Proposed Boundary

As stated above, the primary focus of the nominated area is the 12.9-mile corridor of the Upper Housatonic River from south Pittsfield to north Lee, and portions of the critical supporting watersheds that drain into the River from the east and west. The northern extent of the proposed boundary of the Upper Housatonic River ACEC includes the confluence of the East and West Branches of the Housatonic River in Pittsfield. The southern extent runs to the Golden Hill Road bridge in Lee. The westerly boundary generally follows roadways that run in a north-south direction parallel to the Housatonic River in Pittsfield, Lenox, and Lee, and includes gently rolling uplands that drain into the River. The easterly boundary generally includes and follows critical tributary streams and sub-watersheds that drain into the River, located mostly in the steep, western slopes of October Mountain State Forest, in Lee, Washington, and Pittsfield. The proposed boundary covers approximately 12,280 acres in portions of four communities: Lee, Lenox, Pittsfield, and Washington.

<u>1.3.5</u> Criteria for Designation of the Upper Housatonic River as an ACEC

The ACEC Regulations describe nine factors that the Secretary of EOEEA must consider in designating an area as an ACEC.

As stated in the Regulations, these factors need not be weighed equally, nor must all of these factors be present for an area to be designated. While the more factors an area contains, the more likely its designation, the strong presence of even a single factor maybe sufficient for designation.

<u>1.3.5.1</u> Quality, Productivity, and Uniqueness

The following three factors can be grouped together in terms of the resources described above. Based upon the resources described above, all three factors are strongly present regarding the proposed ACEC, and support ACEC designation. These three factors alone are sufficient for designation:

- Quality of the Natural Characteristics The area possesses outstanding natural characteristics
- Productivity The area is rich in biological richness and diversity
- Uniqueness of Area The area is unique from a regional, state, or national perspective.

As outlined in the Description of the Resources Located within the Boundary of the Upper Housatonic River ACEC Nomination, especially the Summary of Resource Highlights and Significance, the concentration, significance, complexity, and diversity of the resources described above leave no doubt that the proposed area meets the ACEC threshold of regional or statewide significance. As separate resource features, and as a dynamic ecosystem, the Upper Housatonic River corridor is highly significant to both the Berkshires and the state.

<u>1.3.5.2</u> Threats and Impacts

The next four factors relate to potential or actual threats to the area:

- Threat to the Public Health Through Inappropriate Use
- Imminence of Threat to the Resource
- Irreversibility of Impact
- Magnitude of Impact.

High levels of polychlorinated biphenyls (PCBs) currently contaminate the Upper Housatonic River. General Electric is in the process of working with the Environmental Protection Agency (EPA) and other stakeholders to develop a proposed clean-up plan for the River. There is concern that widespread alteration of the River corridor could result from the clean-up – including highly adverse impacts to wildlife habitat, and to recreational, scenic, and economic values. There is strong local interest and support for ensuring the highest standard of river remediation and restoration, as evidenced by the public comments submitted to EPA in May 2008.

The clean-up poses a large-scale and imminent potential threat to the Upper Housatonic River. This nomination seeks to help ensure that the clean-up is completed in a manner that will preserve the high-quality resources, and social and habitat values of the River that are described in the nomination. All four of these factors – threat through inappropriate use, imminence of threat, irreversibility of impact, and magnitude of impact – strongly support ACEC designation.

<u>1.3.5.3</u> Economic Benefits

The area has intrinsic values that are important to a region's economic stability, including recreation and tourism.

Recreational areas providing economic benefits include the Darey WMA, Canoe Meadows, the Lenox Post Farm, and October Mountain State Forest. These areas cover approximately 6,800 acres, or over half (55%), of the nominated area, and provide recreational opportunities to thousands of residents and visitors each year. The nominated area is part of the federally-designated Upper Housatonic Valley National Heritage Area, underscoring its value and significance to tourism. Finally, farming and forestry activities described above contribute to the region's economy. The nominated area provides significant and multiple economic benefits to the region.

<u>1.3.5.4</u> Supporting Factors

There are several Supporting Factors listed in the ACEC Regulations as criteria for considering designation. These include strong public consensus on the intrinsic value of the area; public awareness of the importance of the area; legislative identification of the value of the resources; the lack of coordinated local control because the area is contained within more than one municipality; ownership of some or all of the resource by the local, state or federal government; or, the existence of supplementing management programs in the area.

All of these factors support ACEC designation:

<u>1.3.5.4.1</u> Strong public consensus on the intrinsic value of the area, and public awareness of the importance of the area

The outpouring of public comment and concern regarding the recently proposed PCB clean-up and restoration of the Housatonic River reflects the public's strong awareness of the intrinsic value of the area. As listed on the EPA website, over 110 public comments were submitted regarding the March 2008 GE Corrective Measures Study, from over 150 citizens, public officials and agencies, and non-governmental groups. The intensive recreational use of the public lands in this area also reflects the importance of the area.

<u>1.3.5.4.2</u> Legislative identification of the value of the resources

The U.S. Congress has included this area as part of the Upper Housatonic Valley National Heritage Area.

<u>1.3.5.4.3</u> Lack of coordinated local control because the area is contained within more than one municipality

The nominated area is located with four municipalities. Currently, there is no intermunicipal coordination to provide resource protection or stewardship for the area.

<u>1.3.5.4.4</u> Ownership of some or all of the resource by the local, state, or federal government

Public lands cover over half of the nominated area.

<u>1.3.5.4.5</u> The existence of supplementing management programs in the area

Mass Audubon and DFW have longstanding programs of research, monitoring, management, and public education concerning their lands within the nominated area.

In conclusion, the Upper Housatonic River region clearly merits designation as an Area of Critical Environmental Concern based upon all the criteria listed in the ACEC Regulations at 301 CMR 12.09.

2. Description of Resources Located within the Boundary of the Upper Housatonic River ACEC Nomination

2.1 Resources Summary

According to ACEC Program guidelines, an ACEC must contain at least four of the 11 features listed in the ACEC Regulations, in an ecosystem of regional or statewide significance. This section of the nomination uses the specific features listed in the ACEC Regulations as a format to describe these resources.

The nominated area contains all nine of the possible inland resource features listed in the ACEC Regulations, in an ecosystem of regional or statewide significance.

2.2 **Resources Overview**

The primary focus of the nominated area is the 12.9-mile corridor of the Upper Housatonic River from south Pittsfield to north Lee, and portions of the critical supporting watersheds that drain into the River from the east and west. This stretch of the Housatonic is comprised of a complex and rich ecosystem that includes the River itself, adjacent wetlands and floodplains, several tributary streams, abundant wildlife, concentrations of rare species, and the steep, forested, western slopes of October Mountain State Forest. The River and its adjacent uplands also provide an array of dramatic scenic vistas and a wide range of public educational and recreational activities on protected lands, and include important historic and archaeological resources. The size of the proposed ACEC is approximately 12,280 acres, located in portions of four communities: Lee, Lenox, Pittsfield, and Washington.

Several Massachusetts Geographic Information System (MassGIS) resource overlay maps are included as part of this nomination to help describe and document the resources of the nominated area. These maps show surface waters, sub-drainage basins, wetlands, floodplains, wildlife habitat (especially rare-species habitat), forestry resources, protected open space, land use and land coverage, aerial photos (orthophotos), and other land and resource features. These maps are listed in Appendix A, and are referenced in the text where appropriate.

2.3 **Resource Features**

The specific resource features listed in the ACEC Regulations are described as follows:

<u>2.3.1</u> Habitat Resources

The ACEC Regulations list Habitat Resources as habitat for threatened or endangered plant or animal species, habitat for species of special concern, or other significant wildlife habitat.

The habitat resources of the nominated area are extraordinary. This section includes material and information from a variety of sources, including the Massachusetts Division of Fisheries and Wildlife (DFW) Natural Heritage & Endangered Species Program (NHESP), the DFW Western District Office, and Mass Audubon. The Habitat/Wildlife Resources Map shows much of the information described below.

2.3.1.1 Rare Species

There are 31 documented state-listed rare species located within the proposed ACEC. The listed species include seven Endangered, 13 Threatened, and 11 Special Concern, pursuant to the Massachusetts Endangered Species Act (MESA). A list of these species and their MESA status is provided in a June 24, 2008 letter from the Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program (NHESP), included as Appendix E. Priority and Estimated Habitats of Rare Species are located along the Housatonic River, tributary streams, and within October Mountain State Forest. These habitats cover 3,440 acres, or 28% (over a quarter), of the proposed ACEC.

<u>2.3.1.1.1</u> Biomap Core Habitat and Supporting Natural Landscape

There are portions of three separate Biomap Core Habitats within the nominated area. BioMap Core Habitats are those areas of the state delineated by the NHESP which, if protected, will conserve rare species and exemplary natural communities for the future. These three Biomap Core Habitats were delineated for six exemplary communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders. Biomap Core Habitat covers 4,600 acres, or 37%, of the proposed ACEC (over one third); Biomap Supporting Natural Landscape, also delineated by the NHESP, covers another 3,270 acres, or 27% (over one quarter), of the proposed ACEC. Combined Biomap areas cover 7,870, or 64%, of the proposed ACEC.

<u>2.3.1.1.2</u> Living Waters Core Habitat and Critical Supporting Watershed

Living Waters Core Habitat, delineated by the NHESP, covers approximately 55 acres of the nominated area, and includes Morewood Lake and part of the Housatonic River in Pittsfield. These Living Water Core Habitats are the aquatic counterpart to BioMap Core Habitat. Living Waters Critical Supporting Watershed (areas that have the greatest potential to influence the species living in Core Habitats) is located along the rest of the Housatonic River, its adjacent floodplains and wetland, and certain tributary streams, including Yokun, Willow, Washington Mountain, Ashley, and Sackett Brooks, and the stream that flows from Felton Pond. Critical Supporting Watershed covers 3,660 acres, or 29% (over a quarter), of the proposed ACEC.

2.3.1.1.3 Exemplary Natural Communities

There are two NHESP-documented natural communities within the proposed ACEC that are uncommon community types across Massachusetts, an Acidic Graminoid Fen and a Level Bog. These communities cover about 17 acres.

2.3.1.1.4 Certified and Potential Vernal Pools

There are two Certified Vernal Pools and 44 Potential Vernal Pools located within the proposed ACEC.

2.3.1.1.5 Rare Species Research

Additional rare species research is currently underway, further underscoring the importance of this area and the likelihood that additional data will be produced regarding this area. NHESP is currently undertaking a two-year, \$556,950 survey, funded by General Electric through a Natural Resources Damages fund, to identify previously unknown rare-species locations, and sites for land acquisition and rare-species restoration.

<u>2.3.1.2</u> Other Significant Wildlife Habitat

2.3.1.2.1 Bird Habitat and Migratory Corridor

Mass Audubon has designated the Upper Housatonic River Valley as an Important Bird Area (IBA), underscoring its significance as bird habitat and as a migratory corridor. More than 200 species of birds have been recorded within the proposed ACEC since 1970. Many important bird species breed in the area, such as the stateendangered American Bittern and state-listed Common Moorhen. Up to several pairs of the state-endangered American Bittern breed in the area annually. A special concern species, the Common Moorhen, is an uncommon though regular breeder in the area. Other high-conservation priority species represented by at least 25 breeding pairs include: American Black Duck, American Woodcock, Hairy Woodpecker, Eastern Wood-Pewee, Alder Flycatcher, Least Flycatcher, Great Crested Flycatcher, Eastern Kingbird, Veery, Chestnut-sided Warbler, American Redstart, Indigo Bunting, and Rose-breasted Grosbeak. In addition, the following species with more than one percent of their entire breeding population within Massachusetts breed in the area: Eastern Phoebe, Wood Thrush, Gray Catbird, Blue-winged Warbler, Scarlet Tanager, and Baltimore Oriole. Riparian Forest is present along this portion of the Housatonic River. Characteristic breeding bird species of this increasingly rare habitat type include: Wood Duck, Hooded Merganser, Warbling and Yellowthroated Vireos, Veery, and Blue-gray Gnatcatcher. Rare and/or declining species

representative of extensive freshwater marshlands that breed on the area include: American Bittern, Sora, Virginia Rail, King Rail, and Common Moorhen. (See Appendix C, Mass Audubon Massachusetts Important Bird Area for more information.) In addition, according to the surveys conducted by DFW, the River and adjacent backwaters are both a breeding and a major migratory waterfowl area.

<u>2.3.1.2.2</u> Additional Wildlife Resources

According to DFW, the diversity in habitat and community types within the proposed boundaries results in substantial use by wildlife species both common and rare. Large fauna with wide home ranges such as black bear, moose, deer, and coyote utilize the area for food and cover. Forest mammals such as fisher, squirrel, and bobcat benefit from the forested western slopes of October Mountain State Forest, while aquatic or semi-aquatic mammals such as beaver, otter, mink, and muskrat utilize the River and the supporting floodplain to meet their biological requirements. Open field or early successional dependent species such as grouse, rabbits, and other small mammals can be found in the fields and shrub-dominated areas. Wild turkeys are also present in strong numbers throughout the proposed area.

2.3.2 Fishery Habitat

<u>2.3.2.1</u> Cold Water Fisheries

Cold Water Fisheries are designated by the Fisheries Section of DFW because they support breeding populations of native brook trout. Within the nominated area, there are 21.5 miles of Cold Water Fisheries located in the Housatonic River and portions of Yokun Brook, Washington Mountain Brook, Mill Brook, Ashley Brook, and Sackett Brook.

[Note: August 2008 sampling by DFW staff found wild reproducing populations of native brook trout in Roaring Brook and the outflow stream of Felton Pond.]

DFW states that most of the tributaries included in the ACEC proposal support cold water species throughout the year, citing the importance of small streams and drainages, even when site-specific data are lacking. DFW further explains that fish will utilize these habitats on a seasonal basis or as a thermal refuge at certain times of the year. When the productive nature of the watershed is coupled with cool, high quality water, the combination can result in substantial, sustainable, cold water fisheries populations. (See DFW statement regarding Fisheries resources in Appendix D.)

2.3.2.2 Additional Fisheries Resources

According to DFW, there are approximately 30 fish species collected or suspected present in the section of the Housatonic River within the nominated area, including the reach of the River below Woods Pond Dam. (See DFW statement regarding Fisheries resources in Appendix D for more details.) This section of the Housatonic

River is extremely popular for recreational fishing. Woods Pond is one of the most heavily used water bodies for ice fishing in the region.

2.3.3 Inland Surface Waters

The nominated area includes approximately 12.9 miles of the Housatonic River, and portions of at least eight named tributary brooks and creeks. These water bodies cover approximately 370 acres, according to MassGIS, and are shown on the Water/Wetland Resources Map.

2.3.3.1 Tributaries from West

Yokun Brook and Willow Creek are the chief named tributary streams flowing into the Housatonic from the west.

<u>2.3.3.2</u> Tributaries from East

Sackett, Ashley, Sykes, Mill, Roaring, and Washington Mountain Brooks are all highly important tributary streams that flow into the Housatonic from the east, from October Mountain State Forest or adjacent watershed lands. The proposed ACEC boundary is designed to include important portions of the steep slopes of the subbasins of these surface waters, all of which are integral to the integrity and health of the Housatonic River corridor.

<u>2.3.3.3</u> Cold Water Fisheries

The Housatonic River and several tributary streams include 21.5 river miles of Cold Water Fisheries, reflecting the high habitat value of these waters.

<u>2.3.3.4</u> Ponds, Lakes, and Reservoirs

The area also includes several ponds, lakes, and reservoirs:

- Morewood Lake in Pittsfield, located adjacent to wetlands and part of an important Rare Species Habitat
- Woods Pond, located in the main stem of the Housatonic River in Lee and Lenox, created by a dam first constructed in 1890 (in 1989, a new dam was constructed approximately 200 feet downstream of the historic dam)
- Felton Lake (a.k.a. Felton Pond) and Halfway Pond in October Mountain State Forest
- Farnham Reservoir, created by a 900-foot dam around 1912 as part of the Pittsfield water supply system; Farnham Reservoir provides public drinking water to the Pittsfield water system.

[Note: The current USGS topographical maps of the area show Washington Mountain Lake in October Mountain State Forest as a large open water-body. However, since the USGS maps were prepared, much of the "lake" has been drained, and the area now consists of a smaller open water-body and an extensive wetland marsh.]

<u>2.3.4</u> Inland Wetlands

The nominated area includes extensive freshwater wetlands located along the Housatonic River, generally coincident with the 100-year flood zone as mapped by the Federal Emergency Management Agency (FEMA).

Other important wetland areas include wetlands located adjacent to Morewood Lake in Pittsfield, Halfway Pond and Washington Mountain Lake (a.k.a. Washington Mountain Marsh) in October Mountain State Forest, and tributary streams to the Housatonic such as Sackett and Yokun Brooks.

These wetlands are shown on the Water/Wetland Resources Map, based upon 1:5000-scale wetlands mapping by the state Department of Environmental Protection (DEP). According to MassGIS, these wetlands cover approximately 1,445 acres, or 12%, of the total proposed area.

Wetlands within the nominated area provide valuable and extensive wildlife and Rare Species habitat, including Critical Supporting Watershed, Priority Habitat, and Core Habitat as shown on the Habitat/Wildlife Resources Map.

2.3.5 Water Supply Areas

Farnham Reservoir, located in the Town of Washington, is an integral part of the Pittsfield water supply system. It is located within the Mill Brook drainage subbasin, which flows into the Housatonic. The portion of the sub-basin that flows into Farnham Reservoir is classified as an Outstanding Resource Water, defined by the state as surface waters that flow directly into public surface water supplies. The Farnham Reservoir, the Mill Brook sub-basin, and the Outstanding Resource Water area within the proposed ACEC are shown on the Water/Wetlands Map. Approximately 125 acres of this Outstanding Resource Water sub-basin are located within the proposed ACEC. As stated above, the reservoir was created by constructing a 900-foot dam around 1912.

The drinking water for the city of Pittsfield and its water supply system for other customers in the towns of Dalton, Lenox, and Lanesborough comes from six surface water reservoirs. These reservoirs are Cleveland Reservoir and Sackett Reservoir, both located in the Town of Hinsdale; and, Ashley Lake, Farnham Reservoir, Sandwash Reservoir, and Lower Ashley Intake Reservoir, all located in the Town of Washington. The City owns most of the land around these reservoirs and restricts the use of the land and the reservoirs to prevent contamination of its drinking water supply sources. Approximately 425 acres of Pittsfield-owned watershed protection lands are included within the nominated area.

2.3.6 Natural Hazard Areas

The ACEC Regulations list floodplains and erosion areas under the resource feature of Natural Hazard Areas.

There are extensive floodplains (100-year FEMA flood zone) located along the Housatonic River and some tributary streams. As stated above, many of these floodplains are located in wetlands. In addition to these floodplains and wetlands located along the Housatonic River, there are areas of significant floodplains located at the southern edge of the proposed ACEC in Lee, along the Housatonic and extending up along Washington Mountain Brook, along Sackett Brook, and around Morewood Lake, as shown on the Water/Wetlands Map.

According to MassGIS, approximately 2,405 acres are located in the 100-year FEMA flood zone, or approximately 20% of the nominated area. Given the amount of upland areas within the nominated area, this percentage indicates that floodplains are an important feature of the nominated area.

Steep slopes are located predominately on the eastern side of the Housatonic, as shown on the Forest Resources/Steep Slopes Map. These steep slopes are defined as areas containing slope grades of 25% or more, according to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soils surveys. These steep slopes closely parallel the drainage sub-basins used to delineate the proposed boundary of the ACEC, as show on this map. According to MassGIS, approximately 4,495 acres, or 37%, of the nominated areas are included within these slopes.

Based upon MassGIS data, using the 100-year FEMA flood zone and areas of steep slopes (areas containing slope grades of at least 25%), approximately 56% of the nominated area falls within this natural hazard category, indicating the overall environmental sensitivity of the nominated area.

<u>2.3.7</u> Agricultural Areas

The ACEC Regulations list Agricultural Areas as lands of agricultural productivity and forestry. As described below, these areas cover approximately 9,360 acres, or 76%, of the nominated area – about three-fourths of the entire nominated area.

2.3.7.1 Farming

Farming has historically been a major land use and economic activity located along this stretch of the River corridor. Some of this activity is described in the *History of the Upper Housatonic River Corridor* by Bernard A. Drew, included as Appendix F of the nomination. Currently, farming activities located on the uplands adjacent to or in close proximity to the River corridor include Tweenbrook Farm, Pulpit Rock Farm, and Noble Farm.

According to 1999 land-use data generated from the Land Use Map, approximately 985 acres, or 8%, of land within the nominated area are shown as agricultural cropland or pasture.

2.3.7.2 Forest Lands

Extensive forest lands are located in the steeply sloped areas to the east of the Housatonic River, including thousands of acres in October Mountain State Forest managed by the Department of Conservation and Recreation (DCR), and adjacent watershed lands managed as part of the Pittsfield water supply system. According to data derived from the Land Use Map, forested areas cover approximately 8,375 acres, or 68%, of the nominated area. Forest management activities are ongoing within the State Forest.

Information regarding the amount of forest lands, Forest Reserves, and 1830s Forest clearly indicates the importance of these areas as part of the larger Upper Housatonic River corridor and ecosystem, and as part of the nominated area.

General forest cover is shown on the Land Use Map, as well as on the Orthophoto Maps; the DCR Forest Reserves and 1830s Forest are shown on the Forest Resources/Steep Slopes Map.

2.3.7.3 Forest Reserves

The western slopes of the State Forest include 1,120 acres of designated Forest Reserves, pursuant to the state's Green Certification Program and a *Central Berkshire District Forest Resource Management Plan* prepared and approved in 2007 by DCR. This acreage represents about 20% of the DCR state forest located within the nominated area. Special forestry and recreation management guidelines are applied to these areas, for example, limiting recreation uses to low-impact recreational activities such as hiking, hunting, and fishing, and greatly limiting forest management activities to very specific vegetation-management purposes. More information is available in the DCR *Central Berkshire District Forest Resource Management Plan*.

<u>2.3.7.4</u> 1830s Forest

Lands mapped in the 1830s as forest, *considered a valuable forest and habitat resource, cover approximately 3,450 acres, or 28%, of the nominated area.*

2.3.8 Historic and Archaeological Resources

The ACEC Regulations list buildings, sites, or districts of historic, archaeological, or paleontological significance. There is a wealth of historic and archaeological resource material and documentation for the Upper Housatonic River corridor, as well as for the greater Housatonic River valley. The nominated area is part of the Upper Housatonic Valley National Heritage Area. Historic and archaeological

resources have been documented in a *Cultural Resources Assessment for the Housatonic River* prepared for General Electric in April 2008. The old Lenox Train Station is listed on the State and National Registers of Historic Places, and is home to the Berkshire Scenic Railway, which maintains a museum and operates occasional excursion trains. There are historic and archaeological sites located within October Mountain State Forest. Finally, *A History of the Upper Housatonic River Corridor* by local historian Bernard A. Drew was prepared in June 2008 for this nomination, and is included in the nomination as Appendix F.

2.3.8.1 Upper Housatonic Valley National Heritage Area

The U.S. Congress designated the Upper Housatonic Valley National Heritage Area in 2006. According to the National Park Service, a Natural Heritage Area is "a place designated by the United States Congress where natural, cultural, historic and recreational resources combine to form a cohesive, nationally-distinctive landscape arising from patterns of human activity shaped by geography. These areas tell nationally important stories about our nation and are representative of the national experience through both the physical features that remain and the traditions that have evolved within them."

The upper Housatonic valley is noted for its scenic landscape and traditional New England towns. Writers, artists, and vacationers have visited the region for over 150 years, making it one of the country's leading cultural resorts. The Upper Housatonic Valley National Heritage Area includes 29 communities in the hilly terrain of western Massachusetts and northwestern Connecticut, and to date is among 40 such areas designated by Congress.

2.3.8.2 Lenox Train Station

The old Lenox Train Station is listed on the State and National Registers of Historic Places. It is located in Lenox just west of Woods Pond and is home to the Berkshire Scenic Railway. Properties listed in the State and National Registers include districts, sites, and buildings that are significant in American history and culture.

2.3.8.3 Archaeological Sites

Several archaeological sites located within the nominated area have been documented by the 2008 *Cultural Resources Assessment for the Housatonic River* prepared for General Electric in April 2008. According to this Assessment, the area around the confluence of the West and East Branches of the Housatonic River has one of the highest densities of previously recorded prehistoric sites in the region. Other sections of the River corridor that are close to the River and relatively level and well drained have high potential for containing prehistoric sites. More information is available in the *Assessment* report.

<u>2.3.8.4</u> Civilian Conservation Corps (CCC)

The legacy of Civilian Conservation Corps (CCC) at October Mountain State Forest is visible throughout the state forest, particularly in the road and trail network constructed by the CCC during the 1930s. The Felton Pond and Schermerhorn Gorge recreational areas are the most significant recreational features constructed by the CCC that remain today.

2.3.8.5 A History of the Upper Housatonic River Corridor

A History of the Upper Housatonic River Corridor by local historian Bernard A. Drew provides a wonderful and entertaining overview of the history of the nominated and surrounding area. Excerpts and brief summaries of text are included below – the entire History is included in Appendix F.

- The land and river corridor described in this overview, which includes a 13mile stretch of the Upper Housatonic River and a portion of the western slopes and forests of October Mountain State Forest, shares Berkshire's rich cultural, industrial, agricultural, and natural history, and excels in many aspects. ... A popular fishing area for native Mohicans, the river valley followed traditional patterns of colonial settlement and agricultural activity, was innovative in literary and industrial endeavor, and set itself apart in large-acreage land preservation. If divided into thirds, the area today is a comfortable mix of suburbia and farming remnants in southeast Pittsfield, light industry and village in east Lenox and northeast Lee, and outdoor recreation in the gone-back-to-wild uplands of west Washington. The Housatonic River curves through and unifies its length.
- Native Americans migrated seasonally to the Berkshires from the Hudson Valley in New York 2,700 to 3,700 years ago, and continued here through the time of first contact with European settlers. The Mohicans lived by collecting wood for fuel; by harvesting bark, reeds, and saplings for houses; by taking plant materials for nets, canoes, weapons, and food containers; by using weeds, stones, and earth for dyes and medicines; by killing and processing a selection of wildlife; by gathering edibles; by clearing land; by raising and storing crops; by occupying living spaces; by making cooking and storage containers; and by the other activities of living. They occasionally moved to pristine locations, allowing their previous settings to return to a natural, but altered, state.
- Early colonial settlement began in the mid-eighteenth century. In Pittsfield, Col. Jacob Wendell and John Stoddard acquired Pontoosuc Plantation land, and settlement on the first 40 lots began about 1745. Lenox's first white settlers were Jonathan and Sarah Hinsdale, who uprooted from Hartford, Connecticut, in 1750. Lee was cobbled from parts of five land grants. Some 250 residents in 1777 petitioned for incorporation. Once called Hartwood, Washington incorporated in 1777.

- Water privileges along the Housatonic River in Lenox Dale spurred three large-scale nineteenth-century industries that produced iron, glass, and paper. Commercial businesses and light industries filled in along the riverfront in the 20th century.
- The Housatonic Railroad opened its line from Bridgeport, Connecticut, north • through Great Barrington to West Stockbridge and connected with the Western (later Boston & Albany) at State Line in 1842. For an improved link with towns to the northeast, the Stockbridge & Pittsfield Railroad Company secured a charter and placed track through Stockbridge, Lee, and Lenox. The Housatonic Railroad leased the line. It first carried passengers in June 1850. It later became the New York, New Haven & Hartford Railroad. Penn Central acquired the tracks in 1969 but ended passenger service in 1971. A new Housatonic Railroad took over freight service in 1991 from Guilford Transportation. After the railroad abandoned Lenox Station, the building became an auto repair shop and warehouse until it was donated in 1986 to Berkshire Scenic Railway, which maintains a museum and runs occasional excursion trains. The building is on the National Register of Historic Places. Berkshire Street Railway served the length of the county. Streetcar tracks followed Holmes Road to Chapman Corner, went through New Lenox, and braided the railroad and river into Lee. From Lenox Dale, a connecting short line went to the center of Lenox. The first car to roll over the tracks in August 1902 was No. 22. The last car ran on the railway in 1930.
- This stretch of Housatonic River has a long tradition of private and public preservation activities, beginning with the land acquisitions of the Whitney game preserve. Ex-Secretary of the Navy William Collins Whitney (1841-1904) wanted to create a game preserve and woodland retreat. He had discovered the mountain expanse one day while on a carriage ride with his wife, Flora Payne Whitney. By 1896, he had quietly acquired 42 farms. Kelton B. Miller, publisher of the *Berkshire Eagle* and ex-mayor of Pittsfield, and Cortland Field Bishop of Lenox undertook public subscription in 1915 to acquire the Whitney estate from Harry Payne Whitney. Pittsfield had already instituted eminent domain proceedings to secure some 3,000 acres for Farnham Reservoir. When the new transaction was complete, the document ran for 36 pages. October Mountain State Forest was born.
- One can't begin to catalog the newspaper and magazine articles that have been written about the Housatonic River, including this stretch. An unusual mix of artists has depicted the landscape here. They show the artistic eye that has viewed the landscape.
- This section of Housatonic River is unusual in its many literate observers over the years. Early geologists remarked on the waterway's many features. Men and women of letters paid tribute. Add to them recreationists who paddled it and you have a diverse body of literature. Writers include Lydia Howard Sigourney, Clark W. Bryan, Henry Parker Fellows, Chard Powers

Smith, and Morgan G. Bulkeley III. Bulkeley wrote a weekly "Our Berkshires" column on nature and history for the *Berkshire Eagle* from 1960 to 1973. In a trio of "River Reports" published in 1961, Bulkeley articulated the condition of the river as he found it from a canoe. He and a companion launched from the Holmes Road bridge. "We shoved off into the miasmal morning mists as though down the river Styx. The three headwaters of the Housatonic had picked up their complement of civilization; the water was a dirty gray-brown, slithering between slimy banks strewn with assorted rubbish." Bulkeley revisited the river in 1978, after he had retired from regular column writing, and assessed the work of the Housatonic River Watershed Association, Berkshire Natural Resource Council, the Pittsfield River Committee, and others. "This old river rat who had his first 'Housatonic baptism' as a schoolboy just 50 years ago can only conclude that things are looking up."

<u>2.3.9</u> Special Use Areas

The ACEC Regulations list public recreational areas, significant scenic sites, and undeveloped or natural areas as Special Use Areas.

<u>2.3.9.1</u> Public Recreational Areas

Public Recreational Areas within the nominated area, which are almost entirely comprised of Undeveloped or Natural Areas, cover approximately 6,800 acres, or over half (55%), of the nominated area. These areas include the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary, the 818-acre Darey WMA, the adjacent 200-acre Post Farm managed by the Lenox Conservation Commission, several boat access sites, and approximately 5,520 acres of October Mountain State Forest (which covers 16,500 acres and is the largest state forest in Massachusetts), managed by DCR. These lands are shown on the Protected Open Space Map.

2.3.9.1.1 DFW George L. Darey Wildlife Management Area

The 818-acre Darey WMA is one of the most heavily utilized wildlife management areas in western Massachusetts for all types of passive recreation including hunting, fishing, trapping, hiking, canoeing/kayaking, bird watching, and wildlife viewing. Most portions of the Darey WMA border or contain various segments of the Housatonic River which flows through the WMA north to south. The relatively narrow, elongated area is comprised of several parcels of flat, floodplain habitat. There are a number of oxbow ponds and backwaters, including Woods Pond at the southern end of the Darey WMA. There are also segments of several tributary streams, including Yokun Brook.

The Darey WMA contains seasonally flooded wooded swamps, shrub swamps, deep open marshes, and shallow open marshes. There are also a number of abandoned fields which are being invaded to various degrees by woody shrubs. Wildlife include stocked trout, stocked pheasant, waterfowl, aquatic furbearers, woodcock, deer, and numerous non-game species associated with the lowland habitat. (See also Habitat Resources, sub-section 2.3.1, for more information.)

A canoe and boat access ramp and parking area is accessible off New Lenox Road.

2.3.9.1.2 Mass Audubon Canoe Meadows Wildlife Sanctuary

The Mass Audubon Canoe Meadows Wildlife Sanctuary is dedicated to wildlife habitat conservation and public education. Trails in the Sanctuary are used extensively by the public for passive recreation and wildlife appreciation, and for group programs. The Sanctuary, established in 1975, is located in Pittsfield just one mile from the center of the city, and attracts a variety of birds such as bobolinks, ospreys, and great blue herons, at different times of the year. Three miles of trails wind through the Sanctuary's scenic woods, fields, and wetlands, and along the edge of the Housatonic River. Wildlife includes beavers, otters, and wild turkeys. The ecological characteristics of the Sanctuary are unusual in Massachusetts. The calcium-rich bedrock underlying the Housatonic Valley has given rise to especially fertile floodplain soils that support a uniquely high concentration of rare or uncommon species. The Sanctuary alone provides habitat for at least seven statelisted rare species, including the American Bittern (Endangered), a breeding population of Wood Turtle (Special Concern), Bristly Buttercup (Threatened), and White Adders-mouth (Endangered). Canoe Meadows also contains vernal pools, and the uncommon northern leopard frog occurs here. In addition to these rare and uncommon species, there are also significant archaeological resources located here. Public programs are offered at the Sanctuary through the Pleasant Valley Wildlife Sanctuary in Lenox, including canoe trips on the Housatonic River.

2.3.9.1.3 October Mountain State Forest

October Mountain State Forest is the largest state forest in Massachusetts at 16,500 acres. Approximately 5,520 acres are located within the proposed ACEC (or 45% of the total area of the proposed ACEC.) According to the DCR website, visitors can camp, hike, and enjoy the outdoors while they visit nearby Berkshires attractions. A total of 46 campsites are located within the nominated area, and offer a base to explore this vast forest. The name "October Mountain" is attributed to writer Herman Melville, whose view of these hills in the fall from his home in Pittsfield so impressed him. (See the drawing in Appendix B referenced below under Significant Scenic Sites, as well as the Historic and Archaeological Resources section below, for more information.) Trails are available for every level of experience, and include the famous Appalachian Trail (located outside of the nominated area). There are also designated trails for motorized All-Terrain Vehicles (ATVs), also referred to as Off-Road Vehicles (ORVs) or Off-Highway Vehicles (OHVs), one of six DCR state forests that permit this type of trail use. These ATV trails are located both within and outside of the nominated area. One of the most scenic trails leads through Schermerhorn Gorge, located within the nominated area, a striking natural feature which has intrigued generations of geologists. Countless varieties of wild plants and animals can be found throughout the varied terrain.

According to the *Ecological Characterization of the Housatonic River*, prepared in 2002 for General Electric, the state forest contains a diversity of natural communities, including rich mesic forests, northern hardwoods-hemlock-white pine forests, high-gradient streams, grasslands, woodland vernal pools, and deep emergent marshes that border open water. A number of rare and uncommon plant species were seen in mature stands of sugar maple, white ash, and basswood (a rich forest mesic community.) Woodland vernal pools here were found to be used extensively by wood frogs for breeding.

(See also the Habitat Resources section for more information about wildlife and Rare Species, the Agricultural Areas section above for more information about forest land, and the Historic and Archaeological Resources section.)

2.3.9.1.4 Post Farm

The Post Farm, managed by the Lenox Conservation Commission, was acquired by the town in the early 1980s. Just south of the Darey WMA, this 200-acre property is an important wildlife habitat area.

<u>2.3.9.2</u> Significant Scenic Sites

Significant Scenic Sites are located throughout the nominated area. In particular:

- The views across the Housatonic River from the west side of the River, looking east, include the dramatic, forested slopes of October Mountain State Forest and adjacent forested lands, with cascading streams and brooks flowing into the River. This perspective is wonderfully illustrated by a blackand-white elevation drawing published in 1935 by the predecessor agency of DCR, showing virtually the length of the proposed ACEC area, looking east, as a hawk would see it. A copy of the drawing is included in Appendix B. This extraordinary view remains virtually unchanged since that time.
- The views of the River and adjacent lands from the River are equally breathtaking. For many decades, thousands of canoeists have taken advantage of these peaceful and scenic views as they paddle along this meandering stretch of the Housatonic.
- There are a host of scenic sites and views within and from October Mountain State Forest, most of them as yet not documented.

<u>2.3.9.3</u> Undeveloped or Natural Areas

Undeveloped or Natural Areas, in addition to including the Public Recreation Areas described above, are found in many other parts of the nominated area. Most notably, they are found within the Pittsfield watershed lands, which include approximately 425 acres within the nominated area.

<u>2.3.10</u> Summary of Resource Highlights and Significance

The concentration, significance, complexity, and diversity of the resources described above leave no doubt that the proposed area meets the ACEC threshold of regional or statewide significance. The nominated area includes all nine of the possible inland resource features listed in the ACEC Regulations. As separate resource features, and as a dynamic ecosystem, the Upper Housatonic River corridor is highly significant to both the Berkshires and the state.

2.3.10.1 Habitat Resources

The habitat and wildlife values reflected in the extraordinary number of rare species (31); Certified and Potential Vernal Pools (46); amount of Biomap Core Habitat (4,600 acres, or 37%, of the area, plus another 27% of Biomap Supporting Natural Landscape); and, amount of Living Waters Core Habitat and Critical Supporting Watershed (3,600 acres, or 29%) are more than enough to meet any criteria for regional or statewide significance. The listed species include seven Endangered, 13 Threatened, and 11 Special Concern pursuant to the Massachusetts Endangered Species Act (MESA). There are three, or portions of three, separate Biomap Core Habitats within the nominated area. These three Biomap Core Habitats were delineated for six exemplary communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders. The nominated area includes two NHESP-documented natural communities that are uncommon community types across Massachusetts, an Acidic Graminoid Fen and a Level Bog. Further, the nominated area is a regionally significant bird habitat and migratory corridor, and has been designated an Important Bird Area (IBA) by Mass Audubon.

2.3.10.2 Fishery Habitat

Fishery Habitat includes at least 21.5 river miles of Cold Water Fisheries. DFW sampling records show that Mill Brook, Ashley Brook, Sackett Brook, Washington Mountain Brook, Yokun Brook, Roaring Brook, and the outflow stream of Felton Pond support reproducing populations of brook and/or brown trout. There are approximately thirty fish species collected or suspected present in this section of the Housatonic River.

<u>2.3.10.3</u> Inland Surface Waters

Surface Waters include approximately 12.9 miles of the Housatonic River, and portions of at least eight named tributary brooks and creeks, all highly important to the water quality, wildlife habitat, and overall resource quality of the nominated area. The area also includes several ponds, lakes, and reservoirs.

<u>2.3.10.4</u> Inland Wetlands

Wetlands cover approximately 1,445 acres, or 12%, of the total proposed area.

<u>2.3.10.5</u> Water Supply Areas

Water supply features include Farnham Reservoir, part of the Pittsfield water supply system, and approximately 425 acres of protected watershed lands within the nominated area.

<u>2.3.10.6</u> Natural Hazard Areas

Natural hazard areas – areas defined by 100-year flood zones or steep slope grades averaging 25% to 30% – cover approximately 56% of the nominated area, indicating the overall environmental sensitivity of the nominated area.

2.3.10.7 Agricultural Areas

Lands of agricultural productivity and forestry cover approximately 9,360 acres, or 76%, of the nominated area. The western slopes of October Mountain State Forest include 1,120 acres of designated Forest Reserves. 1830s Forest, considered a valuable forest and habitat resource, covers approximately 3,450 acres, or 28%, of the nominated area. The amount of forest lands, Forest Reserves, and 1830s Forest clearly indicates the importance of these areas as part of the larger Upper Housatonic River corridor and ecosystem.

<u>2.3.10.8</u> Historic and Archaeological Resources

There is a wealth of documentation of the historic and archaeological resources for the Upper Housatonic River corridor, as well as for the greater Housatonic River valley. The nominated area is part of the Upper Housatonic Valley National Heritage Area. Historic and archaeological resources have been documented in a *Cultural Resources Assessment for the Housatonic River*, prepared for General Electric in April 2008. The old Lenox Train Station is listed on the State and National Registers of Historic Places. There are historic and archaeological sites located within October Mountain State Forest. *A History of the Upper Housatonic River Corridor* by local historian Bernard A. Drew was prepared for this nomination.

2.3.10.9 Special Use Areas

<u>2.3.10.9.1</u> Public Recreational Areas

Public recreation areas within the nominated area cover approximately 6,800 acres, or over half (55%), of the nominated area. These areas include the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary; the 818-acre Darey WMA; the 200-acre Post Farm managed by the Lenox Conservation Commission; several boat access sites; and, approximately 5,520 acres of October Mountain State Forest. The Darey WMA is one of the most heavily utilized wildlife management areas in western Massachusetts for all types of passive recreation including hunting, fishing, trapping, hiking, canoeing/kayaking, bird-watching, and wildlife viewing. Canoe Meadows contains outstanding wildlife habitat resources, and is dedicated to wildlife

habitat conservation and public education. Trails in the Sanctuary are used extensively by the public for passive recreation, wildlife appreciation, and group programs. October Mountain State Forest is the largest state forest in Massachusetts at 16,500 acres. Approximately 5,520 acres of the Forest are located within the proposed ACEC (or 45% of the total area of the proposed ACEC.)

<u>2.3.10.9.2</u> Significant Scenic Sites

Significant Scenic Sites are located throughout the nominated area, ranging from the River corridor to the upper reaches of October Mountain State Forest.

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3. Proposed Upper Housatonic River ACEC Boundary

3.1 General Proposed Boundary Description

<u>3.1.1</u> Primary Resource Focus of the Upper Housatonic ACEC Nomination

The primary focus of the nominated area is the 12.9-mile corridor of the Upper Housatonic River from south Pittsfield to north Lee, and portions of the critical supporting watersheds that drain into the River from the east and west. This stretch of the Housatonic is comprised of a complex and rich ecosystem that includes the River itself, adjacent wetlands and floodplains, several tributary streams, abundant wildlife, concentrations of rare species, and the steep, forested, western slopes of October Mountain State Forest. The River and its adjacent uplands also provide an array of dramatic scenic vistas, and a wide range of public educational and recreational activities on protected lands, and include important historic and archaeological resources.

<u>3.1.2</u> ACEC Program Guidelines for Proposing an ACEC Boundary

The draft proposed boundary addresses the guidelines set forth by the ACEC Program, and is intended to be as conservative as possible. The guidelines state that the proposed boundary should include the minimum area necessary to protect and preserve the critical resources of the proposed ACEC, and that, using markers such as roads or other rights-of-way, it should be easily recognized by the general public and local and state regulatory agencies working in the area. The proposed boundary for the Upper Housatonic follows roads, other rights-of-way, municipal boundaries, and natural resource features that have been used in previous ACEC designations, such as the 200-foot Riverfront Area adjacent to perennial rivers and streams, and the 100-foot wetlands Buffer Zone pursuant to the Wetlands Protection Act Regulations (310 CMR 10.00).

3.1.3 General Extent of Proposed Boundary

The proposed boundary is shown on the Proposed ACEC Boundary Map in Appendix A. As required by the ACEC Regulations, the boundary is shown on a United States Geological Survey (USGS) 1:25,000-scale topographical quadrangle map, last revised 1987 and 1988.

The northern extent of the proposed boundary of the Upper Housatonic River includes the confluence of the East and West Branches of the Housatonic River in Pittsfield. The southern extent includes the Golden Hill Road bridge over the Housatonic River in Lee. The westerly boundary generally follows roadways that run in a north-south direction parallel to the Housatonic in Pittsfield, Lenox, and Lee, and includes gently rolling uplands that drain into the River. The easterly boundary generally includes and follows critical tributary streams and sub-watersheds that drain into the River, located mostly in the steep western slopes of October Mountain State Forest, in Lee, Washington, and Pittsfield. The proposed boundary covers approximately 12,280 acres in portions of four communities: Lee, Lenox, Pittsfield, and Washington.

The respective acreage of nominated area within each community is:

- Lee 1,610 acres
- Lenox 3,545 acres
- Pittsfield 3,155 acres
- Washington 3,960 acres.

3.2 Detailed Proposed Boundary Description

3.2.1 Proposed Boundary Description Notes

Consistent with ACEC Program guidelines, the proposed boundary described below extends to and includes the entire width of the rights-of-way of public and private streets, roads, highways, and other rights-of-way such as railroads and utility easements. Where the proposed boundary follows a wetland resource area (as defined in the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00), the boundary is defined by a line following the outer edge of the Buffer Zone (as defined in 310 CMR 10.04, that area of land extending 100 feet horizontally from the boundary of any area specified in 310 CMR 10.02(1)(a), any bank, freshwater wetland, marsh or swamp bordering on any creek, river, stream, pond, or lake). Where the proposed boundary follows a perennial stream (as defined in the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00), the boundary is defined by a line following the outer boundary of the Riverfront Area (as defined in 310 CMR 10.58(2)(a) and 10.58(2)(a)3., the area of land between a river's mean annual high-water line measured horizontally outward from the river (perennial stream) and a parallel line located 200 feet away.)

In addition to the USGS topographical map referenced above, the boundary description also references the current Department of Conservation and Recreation (DCR) October Mountain State Forest (October Mountain) Trail Map, and the Town of Washington Assessors Maps C, D, and F.

<u>3.2.2</u> Description of Proposed Boundary

Beginning in the northwest corner of the proposed ACEC boundary in the <u>City of</u> <u>Pittsfield</u>, at the intersection of Crofut Street and South Street (Route 7), the boundary follows South Street in a southerly direction, crossing the bridge over the West Branch of the Housatonic River, to the intersection of South Street and the Housatonic Railroad Company railroad right-of-way; thence southeasterly along the railroad right-of-way to the intersection of the railroad right-of-way and the 100-foot wetlands Buffer Zone located to the south and west of the railroad right-of-way; thence southerly, easterly, and westerly along the outer edge of the 100-foot wetlands Buffer Zone that includes Morewood Lake and all adjacent wetlands to the intersection of the 100-foot wetlands Buffer Zone and the railroad right-of-way (the boundary does not include those portions of three tributary streams that extend beyond the edge of the bordering vegetated wetlands shown on the current Massachusetts Department of Environmental Protection (DEP) 1:5000 scale wetlands maps); thence southerly along the railroad right-of-way to the intersection of the railroad right-of-way and Holmes Road; thence southerly along Holmes Road to the intersection of Holmes Road and Chapman Street;

Thence southerly along Chapman Street into the <u>Town of Lenox</u>, where Chapman Street becomes East Street; thence southerly along East Street to the intersection of East Street and Walker Street; thence southeasterly along Walker Street to the intersection of Walker Street and Lawton Street; thence westerly along Lawton Street to the intersection of Lawton Street and Catherine Street; thence southerly along Catherine Street to where Catherine Street becomes Golden Hill Street;

Thence southerly along Golden Hill Street into the Town of Lee, where Golden Hill Street becomes Lenoxdale Back Road; thence southerly along Lenoxdale Back Road to the intersection of Lenoxdale Back Road and Golden Hill Road; thence easterly along Golden Hill Road, crossing the bridge over Housatonic River, to the intersection of Golden Hill Road and the Housatonic Railroad Company railroad right-of-way; thence southerly along the main railroad right-of-way to a secondary railroad right-of-way; thence veering to the south along the secondary railroad rightof-way (the main railroad right-of-way continues southwesterly along the Housatonic River) in the vicinity of Columbia Street and Old Columbia Street to the intersection of the secondary railroad right-of-way and Columbia Street; thence a very short distance northerly along Columbia Street to the intersection of Columbia Street and Old Columbia Street; then easterly along Old Columbia Street to the intersection of Old Columbia Street and Greylock Street; thence northerly along Greylock Street, which becomes Bradley Street; thence easterly and northerly along Bradley Street to Woodland Road; thence northerly along Woodland Road to the intersection of Woodland Road and the 200-foot Riverfront Area on the south side of Washington Mountain Brook;

Thence northeasterly along the 200-foot Riverfront Area into the Department of Conservation and Recreation (DCR) October Mountain State Forest and then into the <u>Town of Washington</u>, continuing to the intersection of the 200-foot Riverfront Area of Washington Mountain Brook and the 200-foot Riverfront Area on the east side of the tributary stream that leads to Washington Mountain Marsh Swamp (a.k.a. Washington Mountain Lake); thence northerly along the tributary stream, continuing along the 100-foot wetlands Buffer Zone of the eastern edge of a small pond, and continuing northerly and northeasterly along the 200-foot Riverfront Area of the tributary stream to the intersection of the stream and a large berm originally constructed for a dam; thence easterly along the southern edge of the berm, which leads directly to a gated DCR park roadway, as shown on the current DCR October

Mountain State Forest (October Mountain) Trail Map; thence southerly and westerly along this park roadway to the intersection of this DCR park roadway and West Branch Road; thence northeasterly along West Branch Road to the intersection of West Branch Road and Lenox-Whitney Place Road; thence northwesterly along Lenox-Whitney Place Road, which becomes Whitney Place Road, as shown on the DCR October Mountain State Forest (October Mountain) Trail Map and the Town of Washington Assessors Maps C and D; thence along Whitney Place Road to the intersection of Whitney Place Road and the Washington-Pittsfield municipal boundary line, as shown on the DCR October Mountain State Forest (October Mountain State Forest (October Mountain) Trail Map and the Town of Washington Assessors Maps C and F; thence easterly and northerly along the Washington-Pittsfield municipal boundary line to the Pittsfield-Dalton municipal boundary line; thence northerly along the Pittsfield-Dalton municipal boundary line, crossing Ashley Brook, to the intersection of the municipal boundary line and the north side of the 200-foot Riverfront Area of Ashley Brook;

Thence westerly and northerly along the boundary of the 200-foot Riverfront Area of Ashley Brook into the <u>City of Pittsfield</u>, crossing Sackett Brook in a straight line, to the intersection of this straight line and the north side of the 200-foot Riverfront Area of Sackett Brook; thence westerly along the 200-foot Riverfront Area to the intersection of the 200-foot Riverfront Area and East New Lenox Road; thence northerly along East New Lenox Road to the intersection of East New Lenox Road and Williams Street; thence westerly along Williams Street to the intersection of Williams Street and Gravesleigh Terrace; thence southerly along Gravesleigh Terrace to the intersection of Gravesleigh Terrace and Cooper Parkway; thence westerly along Cooper Parkway, across Holmes Road, where Cooper Parkway becomes Marshall Avenue, to the intersection of Marshall Avenue and Pomeroy Street; northwesterly along Pomeroy Street to the intersection of Crofut Street and South Street/Route 7.

3.3 Rationale for Proposed Boundary

The ACEC Program guidelines require a description of critical resources and ecological relationships relative to the proposed ACEC boundary. Please see also the above Description of Resources, sub-section 3.1.1.

[Please see sub-section 3.3.4 for Notes on Terminology.]

<u>3.3.1</u> Northern and Western Boundary

Beginning just north of the confluence of the East and West Branches of the Housatonic River in Pittsfield, the proposed boundary includes the confluence of the East and West Branches of the Housatonic River, Core Habitat and Supporting Natural Landscape, Living Waters Core Habitat and Critical Supporting Watersheds, Estimated Habitats of Rare Wildlife, and Priority Habitats of Rare Species (Rare Species Habitat), portions of tributary streams flowing east to the Housatonic River, wetlands, and 100-year floodplains located along the River corridor. This area of the proposed ACEC also includes portions of the Darey WMA. To provide as conservative a boundary as possible, the boundary follows a railroad corridor, includes important Rare Species Priority Habitat (Morewood Lake and adjacent wetlands) to the south of the railroad corridor, then follows public roadways to the east of heavily trafficked and commercially developed Route 7 to Golden Hill Road in Lee.

The proposed boundary also includes Woods Pond, portions of additional tributary streams, additional portions of the Darey WMA, 200 acres of adjacent conservation land owned by the Town of Lenox (Post Farm), wetlands and floodplains, and additional areas of Rare Species Habitat, Core Habitat, and Living Waters Critical Supporting Watershed. The entire stretch of the Housatonic River corridor within the proposed boundary is classified as a Cold Water Fishery and as either Living Waters Core Habitat or Critical Supporting Watershed. Another stretch of the River below Lenox Dale includes Rare Species Habitat.

<u>3.3.2</u> Southern and Eastern Boundary

From the Golden Hill Road crossing of the River, the proposed boundary includes a small wetland, 100-year floodplain, and Priority Habitat area located to the east of the River and south of Golden Hill Road. It includes a portion of 100-year floodplain as it extends northerly and easterly to Washington Mountain Brook. From here, to include several important resources areas of Rare Species Habitat, Core Habitat, Supporting Natural Landscape, Critical Supporting Watershed, several Cold Water Fishery tributary streams, portions of the Darey WMA, the steep, forested western slopes of October Mountain State Forest, and the Mass Audubon Canoe Meadows Wildlife Sanctuary, the proposed boundary follows a combination of natural features and roads/rights-of ways in an attempt to approximate the sub-watersheds of critical tributary streams that flow westerly to the River. The boundary follows the Riverfront Area of Washington Mountain Brook in a northeasterly direction to the Washington Mountain Marsh, then northerly along roads, rights-of-ways and the Washington-Pittsfield municipal boundary line to Ashley Brook and Sackett Brook. In parallel approach to the boundary proposed for the southeast section of the nominated area (Washington Mountain Brook, a Cold Water Fishery), the boundary in this northeast section follows the Riverfront Areas of Ashley Brook and Sackett Brook, both classified as Cold Water Fisheries, in a northwesterly direction until Sackett Brook intersects a public roadway, East New Lenox Road in Pittsfield. The proposed boundary then follows public roadways in Pittsfield to encompass the confluence of the East and West Branches of the Housatonic. As stated above, this portion of the nominated area east of the Housatonic includes important resource areas of Rare Species Habitat, Core Habitat, Supporting Natural Landscape, Critical Supporting Watershed, several Cold Water Fishery tributary streams, portions of the Darey WMA, the steep, forested, western slopes of October Mountain State Forest, and the Mass Audubon Canoe Meadows Wildlife Sanctuary.

3.3.3 General Notes on Proposed ACEC Boundary

Scenic vistas and landscapes are found on both sides of the River corridor, in addition to 46 Certified and Potential Vernal Pools, and historic and archaeological resources dating back several centuries.

Because the primary focus of the nomination is the Upper Housatonic River corridor, associated wildlife habitat and recreational areas, important tributary streams, and the rich ecological relationship of the River corridor to the western slopes of October Mountain State Forest, the important public drinking water supply watersheds located in the more easterly portions of the State Forest are not included within the proposed boundary, except for Farnham Reservoir (which is included as part of the important Mill Brook and Roaring Brook sub-watersheds as the boundary follows portions of public roads through October Mountain State Forest, Lenox-Whitney Place Road, and Whitney Place Road).

<u>3.3.4</u> Notes on Terminology

<u>3.3.4.1</u> Living Waters Core Habitat, and Critical Supporting Watersheds

These are designations attributed by NHESP for water bodies that contain rare species and exemplary habitats, and upland and upstream areas that have the greatest potential to influence the species living in Core Habitats, respectively (Living Waters, 2003).

<u>3.3.4.2</u> Biomap Core Habitat, and Supporting Natural Landscapes

These are designations attributed by NHESP for the most viable statewide habitats for rare plants and animals, and natural communities (Biomap Project, 2001).

<u>3.3.4.3</u> Estimated Habitats of Rare Wildlife, and Priority Habitats of Rare Species (Rare Species Habitat)

These are designations attributed by NHESP to identify State-listed rare-species habitats pursuant to the Massachusetts Endangered Species Act and the Wetlands Protection Act.

<u>3.3.4.4</u> Cold Water Fisheries

This is the designation attributed by DFW for rivers and streams with confirmed populations of cold-water fish species.

4. Criteria for Designation of the Upper Housatonic River as an ACEC

The ACEC Regulations describe nine factors that the Secretary of EOEEA must consider in designating an area as an ACEC. These factors need not be weighed equally, nor must all of these factors be present for an area to be designated. While the more factors an area contains, the more likely its designation, the strong presence of even a single factor may be sufficient for designation.

4.1 Factors Supporting Designation

The following three factors listed in the ACEC Regulations can be grouped together in terms of the resources described in this nomination. Based upon the resources described, all three factors are strongly present regarding the proposed ACEC, and strongly support ACEC designation. These three factors alone are sufficient for designation:

- Quality of the Natural Characteristics The area possesses outstanding natural characteristics
- Productivity The area is rich in biological richness and diversity
- Uniqueness of Area The area is unique or unusual from a regional, state, or national perspective.

Excerpts from the Summary of Resource Highlights and Significance (sub-section 2.3.10) are included below to address these three factors supporting ACEC designation. Also, please see Resource Features (sub-section 2.3), and several related Appendices.

The concentration, significance, complexity, and diversity of the resources described in this nomination leave no doubt that the proposed area meets the ACEC threshold of regional or statewide significance. The nominated area includes all nine of the possible inland resource features listed in the ACEC Regulations, in an ecosystem with regional or statewide significance. As separate resource features, and as a dynamic ecosystem, the Upper Housatonic River corridor is highly significant to both the Berkshires and the state.

4.1.1 Habitat Resources

The habitat and wildlife values reflected in the extraordinary number of rare species (31); Certified and Potential Vernal Pools (46); amount of Biomap Core Habitat (4,600 acres, or 37%, of the area, plus another 27% of Biomap Supporting Natural Landscape); and, amount of Living Waters Core Habitat and Critical Supporting

Watershed (3,600 acres, or 29%) are more than enough to meet any criteria for regional or statewide significance.

The listed species include seven Endangered, 13 Threatened, and 11 Special Concern species pursuant to the Massachusetts Endangered Species Act (MESA).

There are three, or portions of three, separate Biomap Core Habitats within the nominated area. These three Biomap Core Habitats were delineated for six exemplary communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders.

The nominated area includes two natural communities documented by the Massachusetts Division of Fisheries and Wildlife (DFW) Natural Heritage & Endangered Species Program (NHESP) that are uncommon community types across Massachusetts, an Acidic Graminoid Fen and a Level Bog.

Further, the nominated area is a regionally significant bird habitat and migratory corridor, and has been designated an Important Bird Area by Mass Audubon.

Finally, NHESP is currently undertaking a two-year, \$556,950 survey to identify previously unknown rare-species locations, and sites for land acquisition and rare-species restoration, further underscoring the importance of this area, and the likelihood that additional habitat and wildlife data will be produced regarding this area.

4.1.2 Fishery Habitat

Fishery Habitat includes at least 21.5 river miles of Cold Water Fisheries. DFW sampling records show that Mill Brook, Ashley Brook, Sackett Brook, Washington Mountain Brook, Yokun Brook, Roaring Brook, and the outflow stream of Felton Pond support reproducing populations of brook and/or brown trout. There are approximately thirty fish species collected or suspected present in this section of the Housatonic River.

4.1.3 Inland Surface Waters

Surface Waters include approximately 12.9 miles of the Housatonic River, and portions of at least eight named tributary brooks and creeks, all highly important to the water quality, wildlife habitat, and overall resource quality of the nominated area. The area also includes several ponds, lakes, and reservoirs.

4.1.4 Inland Wetlands

Wetlands cover approximately 1,445 acres, or 12%, of the total proposed area.

<u>4.1.5</u> Water Supply Areas

Water supply features include Farnham Reservoir, part of the Pittsfield water supply system, and approximately 425 acres of protected watershed lands within the nominated area.

<u>4.1.6</u> Natural Hazard Areas

Natural hazard areas – areas defined by 100-year flood zones, or steep slope grades averaging 25% to 30% – include approximately 56% of the nominated area, indicating the overall environmental sensitivity of the nominated area.

4.1.7 Agricultural Areas

Lands of agricultural productivity and forestry cover approximately 9,360 acres, or 76%, of the nominated area. The western slopes of October Mountain State Forest include 1,120 acres of designated Forest Reserves, as well as approximately 3,450 acres (28% of the nominated area) of 1830s Forest. The amount of forest lands, Forest Reserves, and 1830s Forest clearly indicates the importance of these areas as part of the larger Upper Housatonic River corridor and ecosystem.

4.1.8 Historic and Archaeological Resources

There is a wealth of documentation of the historic and archaeological resources for the Upper Housatonic River corridor, as well as for the greater Housatonic River valley. The nominated area is part of the Upper Housatonic Valley National Heritage Area. Historic and archaeological resources have been documented in a *Cultural Resources Assessment for the Housatonic River* prepared for General Electric in April 2008. The old Lenox Train Station is listed on the State and National Registers of Historic Places. There are historic and archaeological sites located within October Mountain State Forest. *A History of the Upper Housatonic River Corridor* by local historian Bernard A. Drew was prepared for this nomination.

4.1.9 Special Use Areas

4.1.9.1 Public Recreational Areas

Public recreational areas within the nominated area cover approximately 6,800 acres, or over half (55%), of the nominated area. These areas include the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary; the 818-acre Darey WMA; the 200-acre Post Farm managed by the Lenox Conservation Commission; several boat access sites; and, approximately 5,520 acres of October Mountain State Forest.

The Darey WMA is one of the most heavily utilized wildlife management areas in western Massachusetts for all types of passive recreation including hunting, fishing, trapping, hiking, canoeing/kayaking, bird-watching, and wildlife viewing.

Canoe Meadows contains outstanding wildlife habitat resources, and is dedicated to wildlife habitat conservation, and public education. Trails in the Sanctuary are used extensively by the public for passive recreation, wildlife appreciation, and group programs. October Mountain State Forest is the largest state forest in Massachusetts at 16,500 acres. Approximately 5,520 acres of the Forest are located within the proposed ACEC (or 45% of the total area of the proposed ACEC.)

4.1.9.2 Significant Scenic Sites

Significant Scenic Sites are located throughout the nominated area.

4.2 Factors Relating to Potential or Actual Threats

The following four factors listed in the ACEC Regulations can be grouped together for this nomination:

- Threat to the Public Health Through Inappropriate Use
- Imminence of Threat to the Resource
- Irreversibility of Impact
- Magnitude of Impact.

<u>4.2.1</u> Background of GE PCB Contamination of the Housatonic River

General Electric (GE) began its operations in Pittsfield in 1903. By the 1950s, GE's 254-acre plant in Pittsfield, located next to the Housatonic River, was building the largest transformers in the world, using the man-made toxic chemical polychlorinated biphenyl (PCB) as an insulating fluid in its electrical transformers. (The transformer operation was closed down in 1986.) The GE plant has historically been the major handler of PCBs in western Massachusetts, and is the only known source of PCBs found in the Housatonic River sediments and floodplain soils in Massachusetts. According to GE's reports, from 1932 through 1977, releases of PCBs reached the waste and storm-water systems associated with the facility, and were subsequently conveyed to the East Branch of the Housatonic River and to Silver Lake. Further, during the 1940s, efforts to straighten the Pittsfield reach of the Housatonic River by the City of Pittsfield and the U.S. Army Corps of Engineers resulted in 11 former oxbows being isolated from the river channel. The oxbows were filled with material that was later discovered to contain PCBs and other hazardous substances.

The GE Pittsfield/Housatonic River site has been subject to regulatory investigations dating back to the early 1980s, and a series of public health advisories has been issued regarding fish and wildlife as a result of contamination in the river sediments. The United States Environmental Protection Agency (EPA) proposed the Site to the Superfund National Priorities List in September 1997. Federal and state government

agencies and GE entered into negotiations late in 1997, in an attempt to reach a comprehensive settlement to include remediation, redevelopment, and restoration components. This agreement, which also included the City of Pittsfield, was translated into a Consent Decree approved by the federal district court on October 27, 2000. The agreement provides for, among other things, the clean-up of the GE plant facility, clean-up, and restoration of the former oxbows, environmental restoration of the Housatonic River and floodplain, compensation for natural resource damages, and government recovery of past and future response costs.

The EPA is primarily responsible for working with GE to implement the Consent Decree. To date, GE has worked to remove PCBs from the first half-mile adjacent to the former GE plant in Pittsfield, and the next mile and a half downstream from the plant. Under the terms of the Consent Decree, GE is charged with developing a Corrective Measures Study (CMS) to address contamination in the Rest of the River (ROR), the section of the River from the confluence of the East and West Branches of the Housatonic in Pittsfield to Long Island Sound. The GE CMS, which primarily focuses on the next 10-mile stretch of the River to North Lee, was published and made available for public comment in March 2008, and elicited an outpouring of negative public comment on GE's proposed alternatives to cleaning up the River. As stated below, the EPA website lists over 110 public comments that were submitted regarding the GE CMS, from over 150 citizens, public officials and agencies, and non-governmental groups. The intensive recreational use of the public lands in this area also reflects the importance of the area.

<u>4.2.2</u> Summary of Current Threat

High levels of PCBs currently contaminate the Upper Housatonic River, and GE is in the process of working with the EPA and other stakeholders to develop a proposed clean-up plan for the Rest of the River. There is concern that widespread alteration of the River corridor could result from the clean-up – including highly adverse impacts to wildlife habitat, and to recreational, scenic, and economic values. There is strong local interest and support for ensuring the highest standard of River remediation and restoration, as evidenced by the public comments submitted to EPA in May 2008.

The clean-up poses a large scale and imminent potential threat to the Upper Housatonic River. This nomination seeks to help ensure that the clean-up is completed in a manner that will preserve the high-quality resources, and social and habitat values of the River that are described in the nomination. All four of these factors – threat through inappropriate use, imminence of threat to the area, irreversibility of impact, and magnitude of impact – strongly support ACEC designation.

4.3 Economic Benefits

The area has intrinsic values that are important to a region's economic stability, including recreation and tourism.

Recreational areas providing economic benefits include the Darey WMA, the Mass Audubon Canoe River Wildlife Sanctuary, the Post Farm, and October Mountain State Forest. These areas cover approximately 6,800 acres, or over half (55%), of the nominated area, and provide recreational opportunities to thousands of residents and visitors each year. The nominated area is part of the Upper Housatonic Valley National Heritage Area, underscoring its value and significance to tourism. Finally, farming and forestry activities described above contribute to the region's economy. The nominated area provides significant and multiple economic benefits to the region.

4.4 Supporting Factors

Finally, there are several Supporting Factors listed in the ACEC Regulations as criteria for considering designation. These include strong public consensus on the intrinsic value of the area; public awareness of the importance of the area; legislative identification of the value of the resources; the lack of coordinated local control because the area is contained within more than one municipality; ownership of some or all of the resource by the local, state or federal government; or, the existence of supporting management programs in the area. All of these factors support ACEC designation:

<u>4.4.1</u> Strong public consensus on the intrinsic value of the area, and public awareness of the importance of the area

The outpouring of public comment and concern regarding the recently proposed PCB clean-up and restoration of the Housatonic River reflects the public's strong awareness of the intrinsic value of the area. As listed on the EPA website, over 110 public comments were submitted regarding the March 2008 GE Corrective Measures Study, from over 150 citizens, public officials and agencies, and non-governmental groups. The intensive recreational use of the public lands in this area also reflects the importance of the area.

<u>4.4.2</u> Legislative identification of the value of the resource

Congress has included this area as part of the Upper Housatonic Valley National Heritage Area.

<u>4.4.3</u> Lack of coordinated local control because the area is contained within more than one municipality

The nominated area is located with four municipalities. Currently there is no intermunicipal coordination to provide resource protection or stewardship for the area.

<u>4.4.4</u> Ownership of some or all of the resource by the local, state, or federal government

Public lands cover over half of the nominated area.

<u>4.4.5</u> The existence of supplementing management programs in the area

Mass Audubon and DFW have longstanding programs of research, monitoring, management, and public education concerning their lands within the nominated area.

In conclusion, the Upper Housatonic River region clearly merits designation as an Area of Critical Environmental based upon all the supporting factors and criteria listed in the ACEC Regulations at 301 CMR 12.09.

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List of Appendices

A.1 Maps

- A.1.1 Proposed ACEC Boundary Map
- A.1.2 Water/Wetland Resources
- A.1.3 Habitat/Wildlife Resources
- A.1.4 Protected Open Space
- A.1.5 Land Use
- A.1.6 Forest Resources/Steep Slopes
- A.1.7 Orthophoto- Map 1, North Part
- A.1.8 Orthophoto- Map 2, South Part
- A.2 Map Documentation
- B. 1935 Panoramic View of October Mountain State Forest
- C. Massachusetts Audubon Society Important Bird Area (IBA) Documentation
- D. Massachusetts Division of Fisheries and Wildlife Fisheries and Wildlife Resources Relative to the Proposed ACEC Designation
- E. Massachusetts Division of Fisheries and Wildlife Natural Heritage & Endangered Species Program – Biodiversity Information Regarding the Proposed ACEC Nomination Area
- F. A History of the Upper Housatonic River Corridor, by Bernard A. Drew
- G. Description of Public Outreach
- H. Letters of Support

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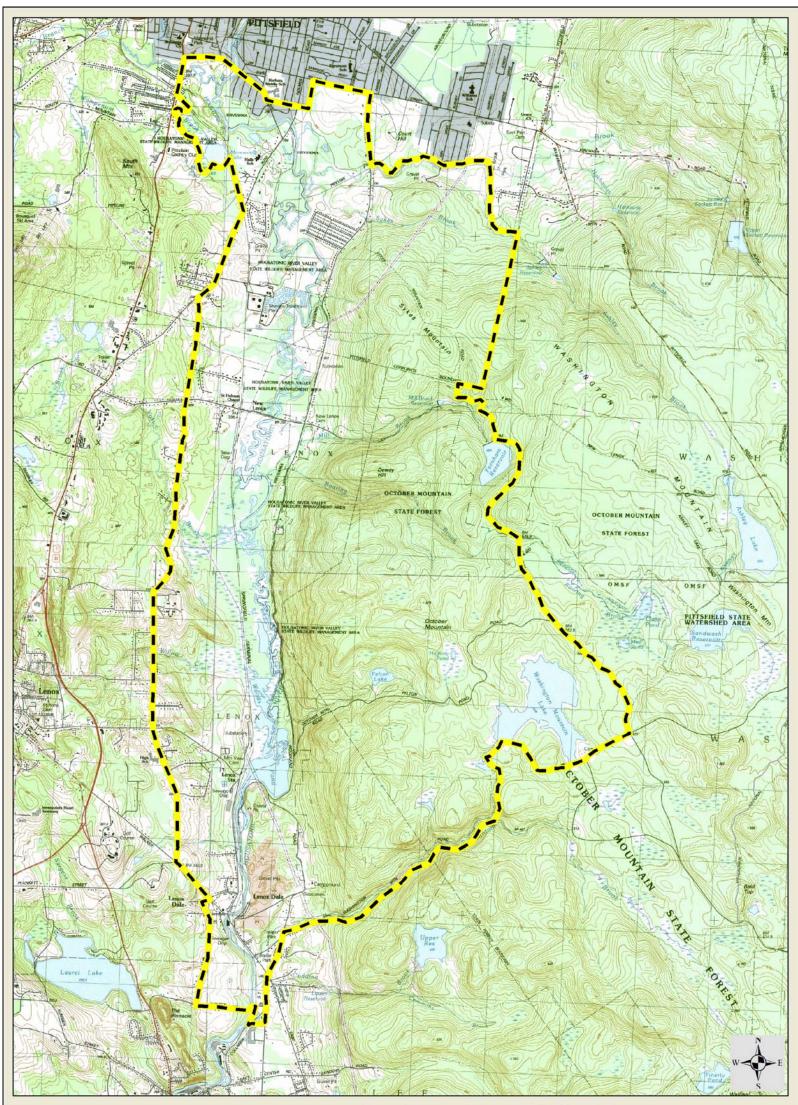
Appendix A.1 Maps

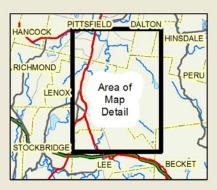
GIS maps:

- A.1.1 Proposed ACEC Boundary
- A.1.2 Water/Wetland Resources
- A.1.3 Habitat/Wildlife Resources
- A.1.4 Protected Open Space
- A.1.5 Land Use
- A.1.6 Forest Resources/Steep Slopes
- A.1.7 Orthophoto- Map 1, North Part
- A.1.8 Orthophoto- Map 2, South Part

See Maps on Following Pages

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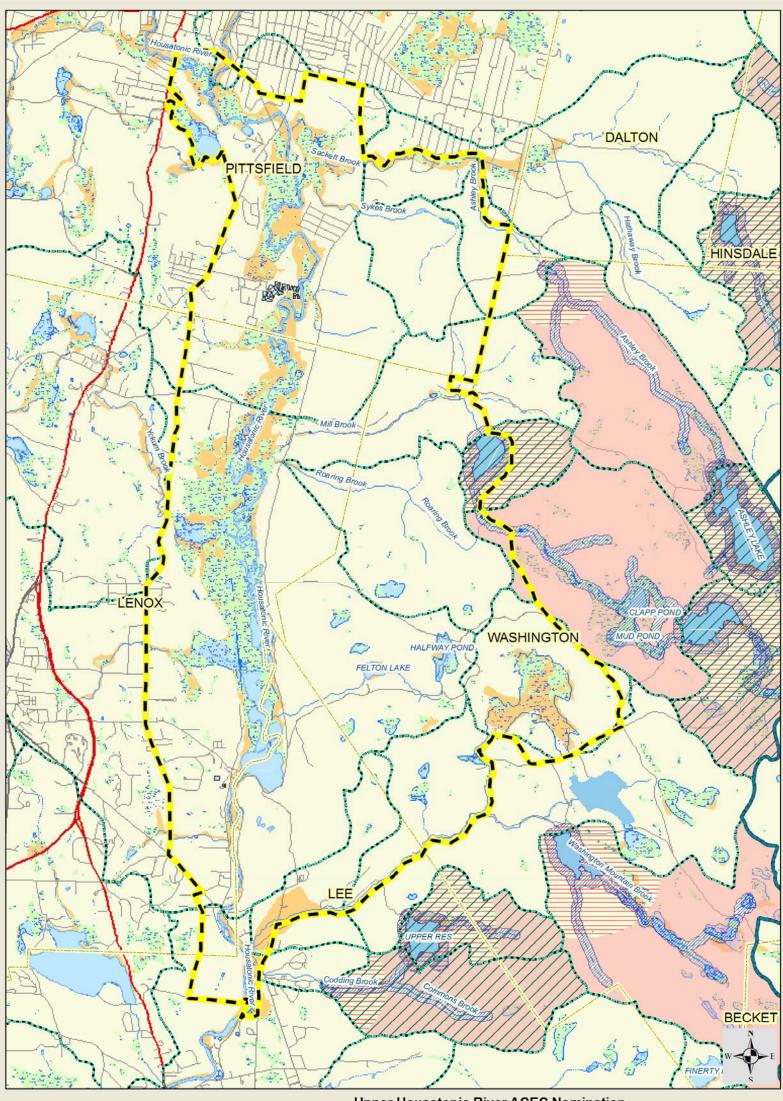
Upper Housatonic River ACEC Nomination Proposed ACEC Boundary

Froposed ACEC Boundary

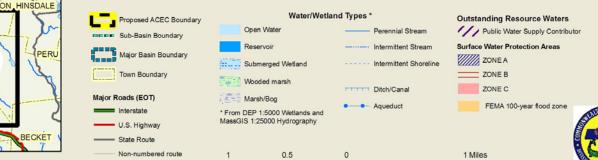
USGS 1:25000 Quadrangle Maps for this area last revised, 1987 and 1988

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Upper Housatonic River ACEC Nomination Water/Wetland Resources

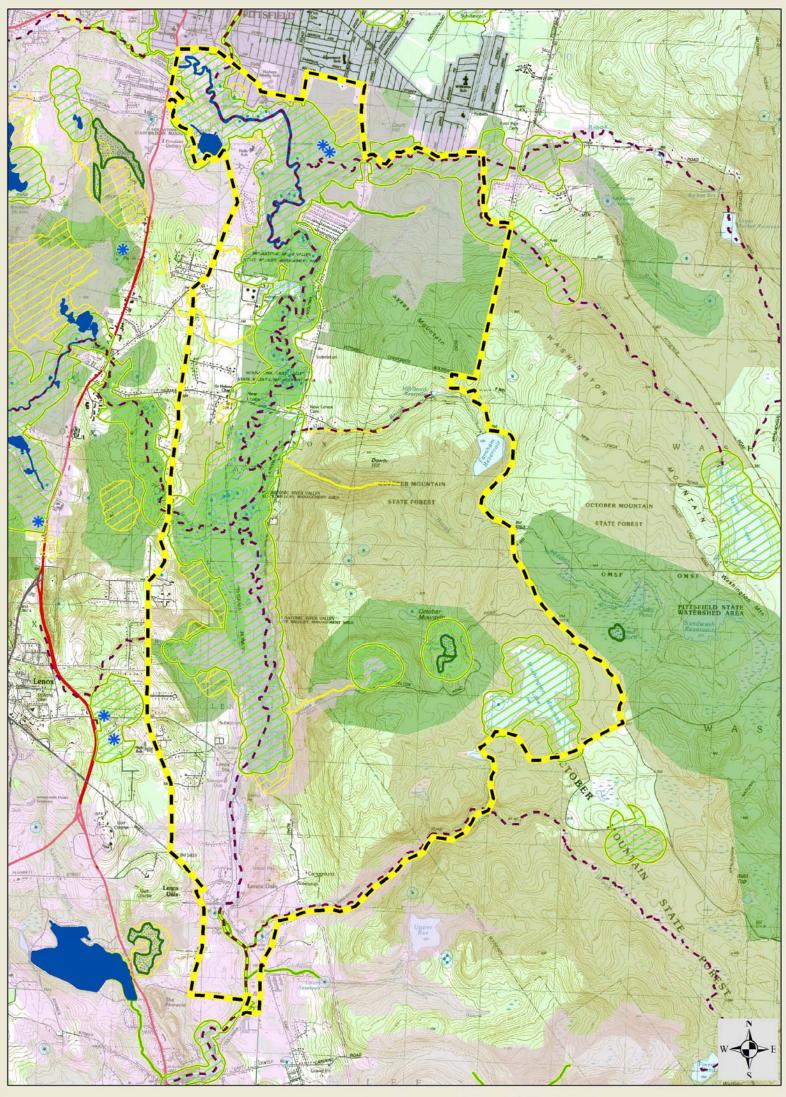




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Upper Housatonic River ACEC Nomination Habitat/Wildlife Resources

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Proposed ACEC Boundary

NHESP Certified Vernal Pools

Potential Vernal Pools NHESP BioMap Core Habitat

Cold Water Fisheries Resource NHESP Estimated Habitats of Rare Wildlife NHESP Priority Habitats of Rare Species

NHESP BioMap Supporting Natural Landscape

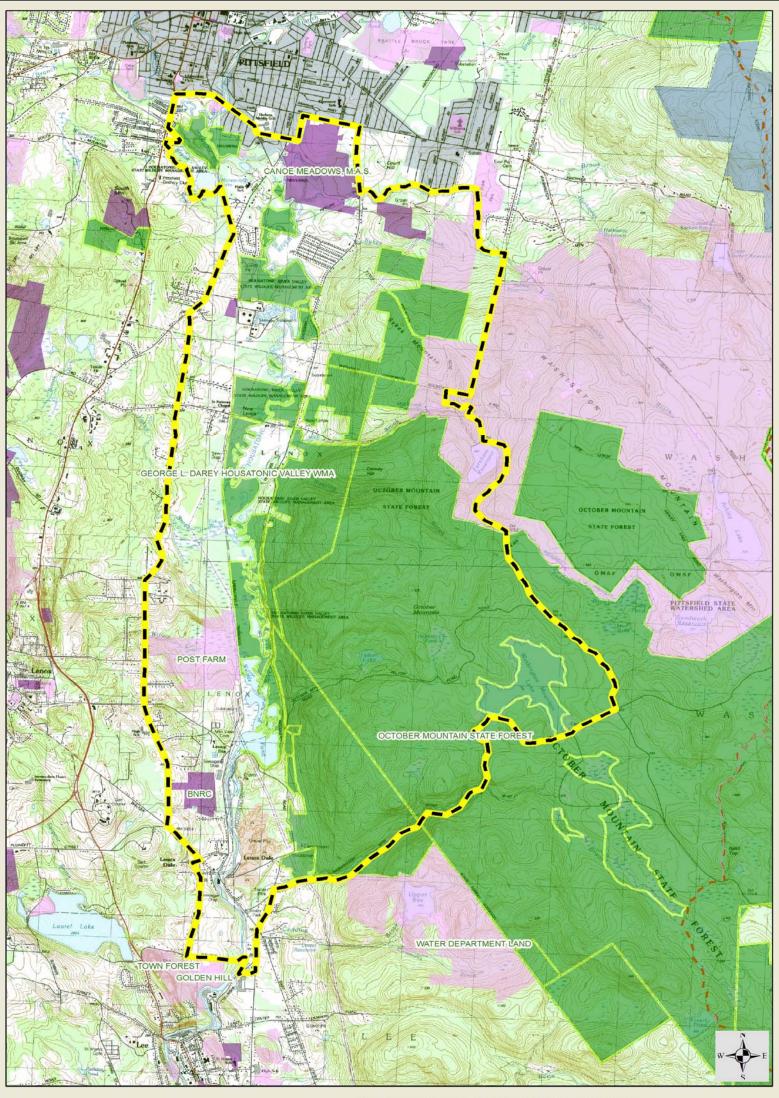
0.5

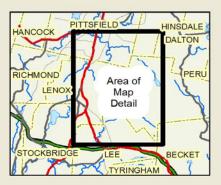
NHESP Living Waters Core Habitats NHESP Living Waters Critical Supporting Watersheds

NHESP Exemplary Natural Communities

1 Miles







Upper Housatonic River ACEC Nomination Protected Open Space

Proposed ACEC Boundary
Open Space Categories:

Federal

State owned or managed, including Dept. Conservation and Recreation, Dept. of Fish & Game; Department of Agricultural Resources Municipal

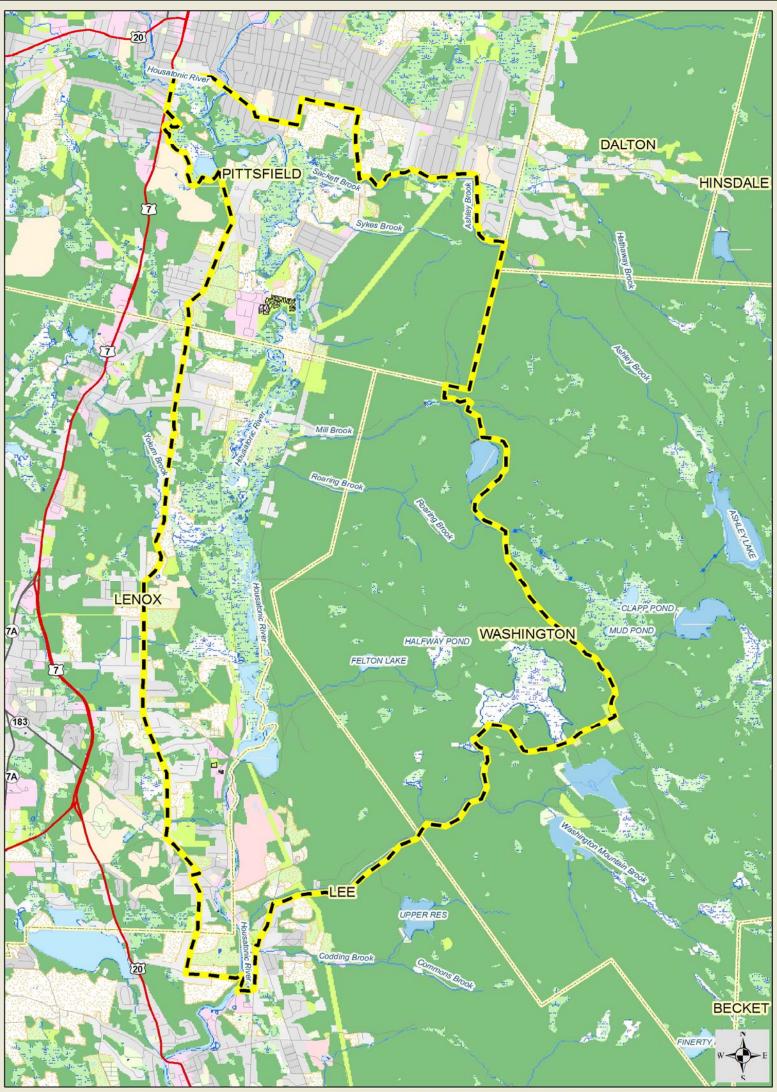
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Public Non-Profit; Land Trust; Conservation Organization; Non-Profit

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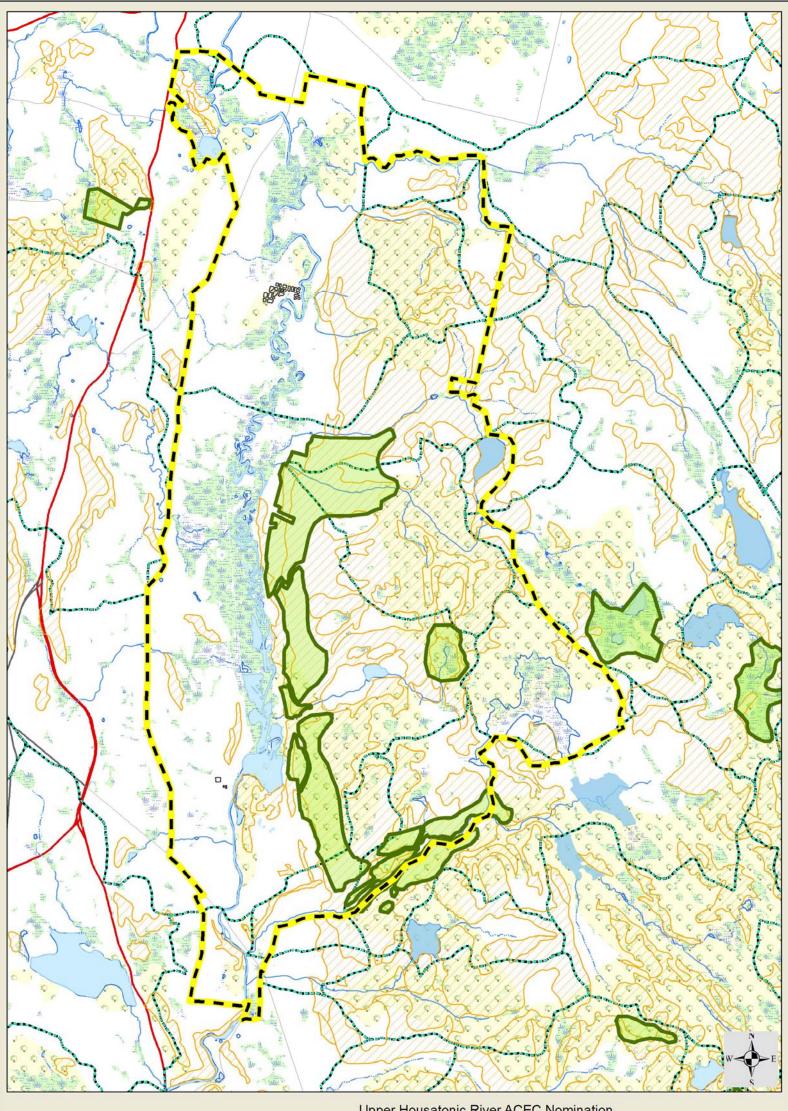
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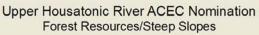


Upper Housatonic River ACEC Nomination Land Use









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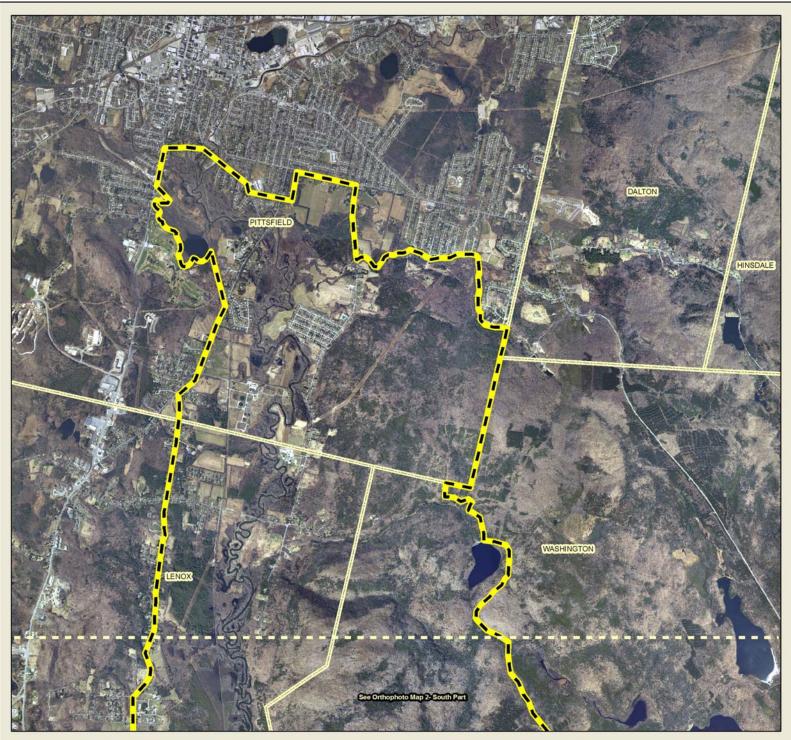
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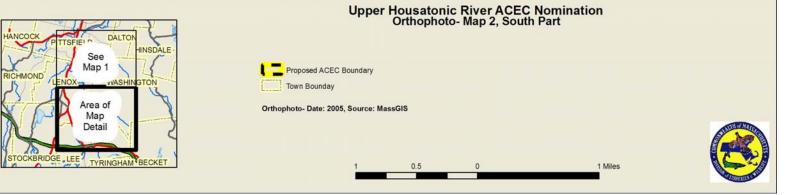
Upper Housatonic River ACEC Nomination Orthophoto- Map 1, North Part

Proposed ACEC Boundary Town Bounday Orthophoto- Date: 2005, Source: MassGIS



1 Miles





Appendix A.2 Map Documentation

The GIS maps and data are listed by thematic group.

A.2.1 Proposed ACEC Boundary

The Massachusetts Office of Geographic and Environmental Information (MassGIS) scanned United States Geological Survey (USGS) topographic quadrangles to create a digital database that can provide images of the paper maps. The paper maps were converted to image format by scanning. The topographic maps used in the mapping were from 1987 and 1988. The boundary was digitized at a scale of 1:24,000. Full description: <u>http://www.mass.gov/mgis/im_quad.htm</u>

A.2.2 Water/Wetland Resources

<u>A.2.2.1</u> DEP 1:5000 wetlands

The wetlands are interpreted from 1:12,000-scale, stereo color-infrared (CIR) photography by staff at the University of Massachusetts Amherst. The photography was captured in 1990, 1991, 1992, 1993, 1999 and 2000. The interpretation is field-checked by the Department of Environmental Protection (DEP) Wetlands Conservancy Program (WCP). Final quality control is performed by WCP Geographic Information System (GIS) staff. Full description: <u>http://www.mass.gov/mgis/wetdep.htm</u>

A.2.2.2 MassGIS 1:25000 Hydrography

The MassGIS 1:25,000 Hydrography datalayer represents hydrographic (waterrelated) features, including surface water (lakes, ponds, reservoirs), wetlands, bogs, flats, rivers, streams, and others (see attributes below). The layer is a hybrid of data based on United States Geological Survey (USGS) Digital Line Graphs (DLGs), scanned mylar separates obtained from the USGS, and digitized hydrographic features from paper USGS 1:25,000 Topographic Quadrangle maps. Full description: <u>http://www.mass.gov/mgis/hd.htm</u>

A.2.2.3 FEMA 100-year flood zone

These data represent a subset of the data available on the paper Flood Insurance Rate Maps (FIRM) as provided by the Federal Emergency Management Agency (FEMA). All zones with a value of A were selected. Full description: http://www.mass.gov/mgis/q3.htm

<u>A.2.2.4</u> Outstanding Resource Waters

This datalayer delineates those watershed areas in which some resources may be afforded Outstanding Resource Waters classification under the Massachusetts Surface Water Quality Standards of 1995. The entire datalayer was check-plotted by MA DEP and quality checked by MA DEP Wetlands Conservancy Program staff. Full description: <u>http://www.mass.gov/mgis/orw.htm</u>

A.2.2.5 Surface Water Protection Areas

These Surface Water Supply Protection Areas delineate those areas included in 310 CMR 22.00, the Massachusetts Drinking Water Regulations, as Surface Water Supply Protection Zones.

Full description: http://www.mass.gov/mgis/swp.htm

<u>A.2.2.5.1</u> ZONE A

Represents a) the land area between the surface water source and the upper boundary of the bank; b) the land area within a 400 foot lateral distance from the upper boundary of the bank of a Class A surface water source, as defined in 314 CMR 4.05(3)(a); and c) the land area within a 200-foot lateral distance from the upper boundary of the bank of a tributary or associated surface water body.

A.2.2.5.2 ZONE B

Represents the land area within one-half mile of the upper boundary of the bank of a Class A surface water source, as defined in 314 CMR 4.05(3)(a), or edge of watershed, whichever is less. Zone B always includes the land area within a 400-foot lateral distance from the upper boundary of the bank of a Class A surface water source.

A.2.2.5.3 ZONE C

Represents the land area not designated as Zone A or B within the watershed of a Class A surface water source, as defined in 314 CMR 4.05(3)(a). All zones were depicted.

A.2.2.6 Major and Sub-Basin Boundaries

MassGIS has produced a statewide digital datalayer of the twenty-seven major drainage basins of Massachusetts as defined by the USGS Water Resources Division and the Massachusetts Water Resources Commission. Sub-basins were aggregated together to make the twenty-eight basins of the major basins. Full description: <u>http://www.mass.gov/mgis/maj_bas.htm</u> and http://www.mass.gov/mgis/subbas.htm

A.2.3 Habitat/Wildlife Resources

A.2.3.1 NHESP BioMap Core Habitat

The Core Habitat layer depicts the most viable habitat for rare species and natural communities in Massachusetts. Using a variety of data sources, primarily field data, ancillary literature, and color-infrared aerial photographs, Natural Heritage & Endangered Species Program (NHESP) scientists delineated Core Habitat polygons. Full description: <u>http://www.mass.gov/mgis/biocore.htm</u>

A.2.3.2 NHESP BioMap Supporting Natural Landscape

The Supporting Natural Landscape buffers and connects Core Habitat polygons, which depict the most viable habitat for rare species and natural communities in Massachusetts, and identifies large, naturally vegetated blocks that are relatively free from the impact of roads and other development. The quality of undeveloped land considered in the landscape analysis was evaluated based on four major components:

- Natural vegetation patch characteristics
- Size of relatively roadless areas
- Sub-watershed integrity
- Contribution to buffering BioMap Core Habitat polygons for plants and exemplary communities.

Full description: http://www.mass.gov/mgis/biosnl.htm

A.2.3.3 NHESP Living Waters Core Habitats

The Core Habitat data layer represents areas of high-quality freshwater biodiversity. These Core Habitats are a compilation of all the aquatic species habitat and exemplary aquatic communities delineated by NHESP biologists. They were based primarily on site visits and field data stored in the NHESP database. Full description: <u>http://www.mass.gov/mgis/lwcore.htm</u>

A.2.3.4 NHESP Critical Supporting Watersheds

Critical Supporting Watersheds are those areas with the most immediate hydrologic contribution to Core Habitat, and thus the highest potential to sustain or degrade it. They were created by 'AQUALAND,' a grid-based watershed model created through the combined efforts of the NHESP and the University of Massachusetts Landscape Ecology Program.

Full description: http://www.mass.gov/mgis/lwcsw.htm

A.2.3.5 NHESP Estimated Habitats of Rare Wildlife

Estimated Habitats are for use with the Wetlands Protection Act Regulations (310 CMR 10.00). The Estimated Habitats of Rare Wildlife datalayer contains polygons

that are a subset of the Priority Habitats of Rare Species. They are based on occurrences of rare wetland wildlife observed within the last 25 years and documented in the NHESP database. They do not include those areas delineated for rare plants or for rare wildlife with strictly upland habitat requirements. The Estimated Habitats presented here are those published in the 12th Edition of the Massachusetts Natural Heritage Atlas, and are effective beginning October 1, 2006. Full description: <u>http://www.mass.gov/mgis/esthab.htm</u>

A.2.3.6 NHESP Priority Habitats of Rare Species

The Priority Habitats of Rare Species datalayer contains polygons representing the geographic extent of Habitat of state-listed rare species in Massachusetts based on observations documented within the last 25 years in the database of the NHESP. Priority Habitats are the filing trigger for proponents, municipalities, and other stakeholders for determining whether or not a proposed project must be reviewed by the NHESP for compliance with the Massachusetts Endangered Species Act (MESA). The Priority Habitats presented here are those published in the 12th Edition of the Massachusetts Natural Heritage Atlas, and are effective beginning October 1, 2006.

Full description: http://www.mass.gov/mgis/prihab.htm

A.2.3.7 NHESP Exemplary Natural Communities

The NHESP Natural Communities datalayer consists of polygons that represent the extent of various natural communities of biodiversity conservation interest in Massachusetts. These polygons are based on records of natural communities maintained in the NHESP database. Program scientists classify and delineate natural community polygons by analyzing "on-the-ground" field data and available information about the landscape (particularly topographic maps and aerial photographs). All sites in the NHESP database have been visited by NHESP biologists or by other biologists who have submitted reports on community occurrences that NHESP biologists have reviewed and accepted. Aquatic community types are not included.

Full description: http://www.mass.gov/mgis/natcomm.htm

A.2.3.8 NHESP Certified Vernal Pools

This datalayer contains points for all vernal pools that have been certified by the NHESP according to the *Guidelines for Certification of Vernal Pool Habitat* (Massachusetts Division of Fisheries and Wildlife, 2000). The data presented in the maps were current as of January 2008.

Full description: http://www.mass.gov/mgis/cvp.htm

A.2.3.9 NHESP Potential Vernal Pools

This datalayer identifies the locations of more than 29,000 potential, unverified, vernal pool habitats. Potential vernal pools visible on aerial photographs were

interpreted and included in this layer. Full description: http://www.mass.gov/mgis/pvp.htm

A.2.3.10 Cold Water Fisheries Resource Areas

The Massachusetts Division of Fisheries and Wildlife (DFW) determines Cold Water Fisheries Resources based on the presence of cold water species. This includes streams with naturally reproducing salmonids (brook trout, brown trout, and/or rainbow trout), slimy sculpin, longnose sucker, or streams that are part of the Atlantic Salmon Restoration Effort.

A.2.4 Protected Open Space

The protected and recreational open space datalayer contains the boundaries of conservation lands *and* outdoor recreational facilities in Massachusetts. The associated database contains relevant information about each parcel, including ownership, level of protection, public accessibility, assessor's map and lot numbers, and related legal interests held on the land, including conservation restrictions. Conservation and outdoor recreational facilities owned by federal, state, county, municipal, and nonprofit enterprises are included in this datalayer. Open space for the maps was broken out be category of ownership - state, nonprofit, and municipal. Full description: <u>http://www.mass.gov/mgis/osp.htm</u>

A.2.5 Land Use

The MassGIS Land Use datalayer has thirty-seven land-use classifications interpreted from 1:25,000 aerial photography. Photo interpretation and automation were done by the Resource Mapping Project at the University of Massachusetts Amherst. Land use data used in the maps were current as of 1999. Full description: http://www.mass.gov/mgis/lus.htm

<u>A.2.6</u> Forest Resources/Steep Slopes

A.2.6.1 1830s Forest

Using maps that were generated for each Massachusetts town in 1830, Harvard Forest developed maps indicating forest land, open land, meadows, and cultural features, including roads, mills, meeting houses, etc. Because 1830 was near the period of maximum forest clearance, the resulting data layers provide a reasonable approximation of the Massachusetts landscape at the height of agricultural activity. Those areas indicated as '1830s Forest' were selected from the data layer. Full description: <u>http://harvardforest.fas.harvard.edu/research/1830readme.html</u>

A.2.6.2 DCR October Mountain Forest Reserves

Department of Conservation and Recreation (DCR) Forest Reserves are delineated for October Mountain State Forest as part of the 2007 DCR Central Berkshire

District Forest Resource Management Plan. Full description: <u>http://www.mass.gov/dcr/stewardship/forestry/manage/planning.htm</u> and <u>http://www.mass.gov/dcr/stewardship/forestry/manage/docs/cbk_resourceManageme</u> <u>nt.pdf</u>

A.2.6.3 Steep Slopes

The Soils datalayer has been automated from 1:25,000 published soils surveys as provided on various media by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). All soils data released by MassGIS have been "SSURGO-certified," which means they have been reviewed and approved by the NRCS and meet all standards and requirements for inclusion in the national release of county-level digital soils data. Soil polygons were depicted that had an average slope value of 25-30%.

Full description: http://www.mass.gov/mgis/soi.htm1830s forest

A.2.7 Orthophotos- North & South Parts (2005 Color Orthophoto)

Two orthophotos were produced for the Upper Housatonic River ACEC nomination to provide more detail for viewing the entire nominated area - one map for the north area, another for the south area.

A.2.7.1 2005 Color Orthophoto

These medium resolution true color images are considered the new "basemap" for the Commonwealth the Executive Office of Energy and Environmental Affairs (EOEEA) and MassGIS. The photography for the entire commonwealth was captured in April 2005 when deciduous trees were mostly bare and the ground was generally free of snow.

Full description: http://www.mass.gov/mgis/colororthos2005.htm

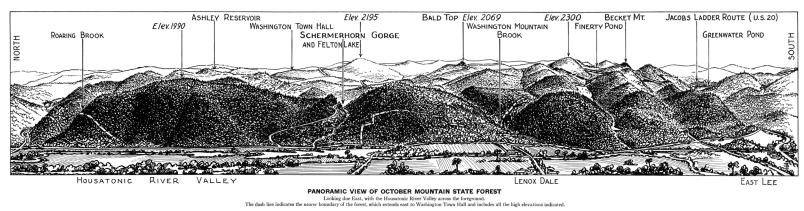
A.2.7.2 EOT Roads

This layer is the official state-maintained street transportation dataset available from MassGIS and represents local and major roadways, including designations for Interstate, U.S., and State highways. The Executive Office of Transportation, Office of Transportation Planning (EOT-OTP), which maintains this layer, added other line work using the Color Orthophoto Imagery as a base.

Full description: http://www.mass.gov/mgis/eotroads.htm

Appendix B. 1935 Panoramic View of October Mountain State Forest

Published by Massachusetts Division of Forestry, 5m-5-'35. No. 4420., 1935.



Appendix C. Mass Audubon, Massachusetts Important Bird Area

Site Summary: Upper Housatonic Valley

Nominated By: René Laubach

Size: 1,300 acres

Towns and Counties: Lee, Lenox, Pittsfield; Berkshire

Ownership: MassWildlife, municipal, Mass Audubon

Major Habitats: 30% emergent freshwater wetland, 22% river/stream, 12% scrubshrub wetland, 9% palustrine woodland swamp, 8% cultural grassland, 5% early successional shrubland, 5% oak-conifer transition forest, 5% lake/pond, 3% cultivate field

Land Use: wildlife conservation, hunting/fishing, agriculture, utility/right of way

Threats: invasive/non-native plants, water pollution, introduced animals, succession, development, hydrologic changes

Site Description:

Approximately 1,300 acres of riparian woodland, oxbow ponds, marshes, beaver swamps, grasslands, and upland woods along the meandering Housatonic River, this IBA represents some of the finest riparian habitat remaining in central Berkshire County. The area is comprises Mass Audubon's 262-acre Canoe Meadows Wildlife Sanctuary in Pittsfield at the northern end of the proposed IBA; the 816-acre Housatonic River Valley Wildlife Management Area, south of Canoe Meadows, extending from Pittsfield to Lenox and Lee; and the 200-acre Post Farm, the site of a former Lenox town dump, currently managed by the Lenox Conservation Commission and abutting the Wildlife Management Area at its southern end. Canoe Meadows was established in 1975, the Housatonic Valley Wildlife Management Area was established in 1968, and Post Farm was established in the early 1980s. More than 200 species of birds have been recorded at the combined areas since 1970. The Housatonic is the major river of the Berkshires and flows almost 150 miles from its three sources near Pittsfield to Long Island Sound. The river valley is underlain by calcareous bedrock, and it is the alkaline properties of the soils created that give rise to numerous unusual species of flora and fauna. The area is bordered immediately to the east by the 16,000-acre October Mountain State Forest and several thousand acres of city of Pittsfield watershed land. This riparian corridor serves as a breeding habitat for numerous wetland species, as well as serving as a migration corridor for many other species of birds.

Current Conservation Status:

There is currently a broad-based effort underway to designate the Upper Housatonic River Valley region (Pittsfield to northwestern Connecticut) as a national heritage area (similar to the Blackstone River Valley) by the US National Park Service (USNPS). The proposed IBA falls within this potential Corridor. Recommendation by USNPS to Congress is thought to be very likely. River-bottom sediments in the Housatonic in this area contain very high levels of polychlorinated biphenyls (PCBs). This polymer was manufactured by General Electric and released into the environment for decades in Pittsfield prior to being outlawed in 1972 by the Environmental Protection Agency (EPA). This cancer-causing substance bioaccumulates in the fatty tissues of animals that feed on prey found in or near contaminated sediments. Scientific tests conducted by consultants for the EPA have found extremely high PCB levels in the tissues of animals present including dabbling ducks such as American Black Duck, The Tree Swallow, and other vertebrates. Another threat to the ecological integrity of this area is the spread of exotic invasive plants (notably Purple Loosestrife) within the Housatonic's floodplain communities.

Ornithological Significance:

Up to several pairs of the state-endangered American Bittern breed in the area annually. A special concern species, the Common Moorhen is an uncommon though regular breeder in the area. Other high conservation priority species represented by at least 25 breeding pairs include: American Black Duck, American Woodcock, Hairy Woodpecker, Eastern Wood-Pewee, Alder Flycatcher, Least Flycatcher, Great Crested Flycatcher, Eastern Kingbird, Veery, Chestnut-sided Warbler, American Redstart, Indigo Bunting, and Rose-breasted Grosbeak. Although numbering fewer than 25 pairs, one of the few Cliff Swallow colonies in Berkshire County is located under the New Lenox Road bridge. In addition, the following species with more than 1 percent of their entire breeding population within Massachusetts breed in the area: Eastern Phoebe, Wood Thrush, Gray Catbird, Blue-winged Warbler, Scarlet Tanager, and Baltimore Oriole. Riparian Forest is present along this portion of the Housatonic River. Characteristic breeding bird species of this vanishing habitat include: Wood Duck, Hooded Merganser, Warbling and Yellow-throated Vireos, Veery, and Blue-gray Gnatcatcher. Rare and/or declining species representative of extensive freshwater marshlands that breed on the area include: American Bittern, Sora, Virginia Rail, King Rail, and Common Moorhen. The site is a migration corridor for the Common Nighthawk.

State Listed Species:

Species	Breeding	Winter	Migration
Common Moorhen	1-2 pairs (2002)		
American Bittern	4-5 pairs		

Other Important Species:

Species	Season	Maximum Numbers	Years
Brown Thrasher	Spring, Summer, Fall		
Veery	Spring, Summer		
Cliff Swallow	Spring, Summer	17 active nests and 9 active nests	1998 and 2001
Eastern Kingbird	Spring, Summer, Fall		
Great Crested Flycatcher	Spring, Summer, Fall		
Least Flycatcher	Spring, Summer, Fall		
Alder Flycatcher	Spring, Summer, Fall	6 pairs	2002
Eastern Wood-Peewee	Spring, Summer, Fall		
Common Nighthawk	Spring, Summer, Fall	2,927 (FM)	1993
American Woodcock			
American Kestrel	Spring, Summer, Fall	4-5 pairs	
American Black Duck	Year-round		

Other Floral or Fauna of Significance: A breeding population of Wood Turtle a species of special concern in Massachusetts occurs in the area. Canoe Meadows Wildlife Sanctuary contains certified vernal pools where spotted salamanders breed. The Northern Leopard Frog also occurs there. A number of state-listed plant species have been recorded at Canoe Meadows Wildlife Sanctuary including Bristly Buttercup, and White Adder's-mouth. All three state sites of Wapato are located in the wildlife management area. Foxtail Sedge, a plant listed as threatened in the state, has been found at one site on the IBA.

- Data Sources: Hendricks, Bartlett. 1999. *Berkshire Birds*. Third ed. The Berkshire Museum. 75 pp.
- Laubach, René.1999. Canoe Meadows Wildlife Sanctuary. *Bird Observer*. pp. 324-331.
- Perkins, Simon. 2000. A Checklist of the Birds, Canoe Meadows Wildlife Sanctuary. Mass Audubon.
- Robinson, Scott and Joan Robinson. 2001. The Pittsfield Nighthawk Watch: 1993-2001. *Bird Observer* pp. 446-447.
- St. James, David P. 1986. Birds of the Housatonic Wildlife Management Area (checklist). MassWildlife. 1993.

Birding the Housatonic Valley Wildlife Management Area. *Bird Observer* pp. 76-84. 1999.

Wetland Specialties in Berkshire County. Bird Observer. pp. 313-316.

Veit, Richard R. and Wayne R. Petersen. 1993.*Birds of Massachusetts*. Mass Audubon. 514 pp.

Massachusetts Important Bird Areas

What is an IBA?

An IBA (Important Bird Area) is a site providing essential habitat to one or more species of breeding, wintering, and/or migrating birds. The primary goals of the IBA program are:

- To identify, nominate, and designate key sites that contribute to the preservation of significant bird populations or communities.
- To provide information that will help land managers evaluate areas for habitat management and/or land acquisition.
- To activate public and private participation in bird conservation efforts.
- To provide public education and community outreach opportunities.

The Massachusetts Important Bird Area Program (IBA) is carried out cooperatively by staff from Mass Audubon, a volunteer Technical Committee and various partner organizations. We have an <u>informational brochure</u> (PDF - 400KB) about the IBA program that is available for distribution at birding meetings and events. If interested, please contact <u>iba@massaudubon.org</u> for more information.

The IBA concept was developed by BirdLife International in 1985 as a model for bird conservation. By 2000, BirdLife and its European partners identified 3,400 IBA sites in Europe. In 1995, BirdLife partnered with the American Bird Conservancy and the National Audubon Society to launch the IBA Program in the United States. To date, IBA Programs have been started in 156 countries and in 46 states with 1500 nominated IBAs throughout the U.S. In 2000, the Massachusetts Audubon Society launched this initiative for the Commonwealth.

The IBA nomination process ended in December 2002. As a result of the hard work of Mass Audubon's IBA staff and the volunteer technical committee, 79 sites in Massachusetts were approved. Mass Audubon is currently working cooperatively with interested parties to develop conservation plans for future habitat management on designated sites. In some cases, efforts will be made to include IBAs in the state's open space planning program. In other cases conservation easements or a modification in land management practices may be recommended. The primary objective will be to facilitate whatever strategy works best for the site as well as to ensure the future protection of the site as an Important Bird Area.

Appendix D. Massachusetts Division of Fisheries and Wildlife – Fisheries and Wildlife Resources Relative to the Proposed ACEC Designation

D.1 Fisheries Resources

Fish Species collected or suspected present in the proposed ACEC section of the river are listed below. All species listed are known to be found in the Housatonic River or its tributaries. Some species were not collected in the most recent survey efforts but are suspected to exist within the reach.

Black crappie (*Pomoxis nigromaculatus*) Blacknose dace (*Rhinichthys atratulus*) Bluegill (*Lepomis macrochirus*) Bluntnose minnow (*Pimephales notatus*) *Bridle shiner (*Notropis bifrenatus*) Brook trout (Salvelinus fontinalis) Brown bullhead (*Ameiurus nebulosus*) Brown trout (Salmo trutta) Carp (*Cyprinus carpio*) Chain pickerel (Esox niger) Common shiner (Notropis cornutus) Creek chub (Semotilus atromaculatus) Fallfish (Semotilus corporalis) Golden shiner (Notemigonus crysoleucas) Goldfish (Carassius auratus) Largemouth bass (*Micropterus salmoides*) Longnose dace (*Rhinicthys cataractae*) *Longnose sucker (*Catastomus catastomus*) Northern pike (*Esox lucius*) Pumpkinseed (Lepomis gibbosus) Rainbow trout (Oncorhynchus mykiss) Redfin pickerel (Esox americanus) Rock bass (*Ambloplites rupestris*) Slimy sculpin (*Cottus cognatus*) Smallmouth bass (*Micropterus dolomieu*) Spottail shiner (*Notropis hudsonius*) Tiger muskellunge (*Esox lucius* x *Esox masquinongy*) White sucker (Catastomus commersoni) Yellow bullhead (Ameiurus natalis) Yellow perch (*Perca flavescens*)

Sources: Division of Fisheries and Wildlife fisheries database, Ecological Characterization of the PSA, Ecological Characterization of the ROR. Woodlot Alternatives, Inc. * MESA Regulated Species

Sampling by Division of Fisheries and Wildlife in the proposed reach is limited because intensive studies of the fisheries populations from the confluence of the branches to Woods Pond was conducted as part of the ecological characterization of the river in relation to remediation. Sampling of the river reach below the Woods Pond dam was conducted in 2002. That sampling effort produced records of 7 fish species: white sucker, brown trout, brown bullhead, rock bass, largemouth bass, longnose dace, blacknose dace, and bluegill. The presence of brown trout is the most notable because of that species' limited tolerance for warm water temperatures and poor water quality.

D.2 Tributaries

Most of the tributaries included in the ACEC proposal support cold water species throughout the year. Sampling records show that Mill Brook, Ashley Brook and Sackett Brook support slimy sculpin, and reproducing populations of brook trout and brown trout in addition to other minnow species. Washington Mountain Brook and Yokun Brook have documented populations of reproducing brook and/or brown trout. No data exists for Willow Brook and Sykes Brook, however, based on the topography and fish populations in adjacent waters it is likely that Sykes Brook also supports cold water fish. Willow Brook is a slightly lower gradient stream with a larger wetland complex at its confluence. These factors make it difficult to speculate on the fish populations there. As a resource agency we recognize the importance of small streams and drainages, even when site specific data are lacking. Fish will utilize these habitats on a seasonal basis or as a thermal refuge at certain times of the year. When the productive nature of the watershed is coupled with cool, high quality water, the combination can result in substantial, sustainable, cold water fisheries populations.

[Additional note: August 2008 sampling undertaken by DFW staff found native, wild reproducing populations of brook trout in Roaring Brook and the Felton Pond outflow stream.]

D.3 Wildlife Resources

The area proposed for ACEC designation contains extensive wetlands and forested areas. The diversity in habitat and community types within the proposed boundaries results in substantial use by wildlife species both common and rare. Large fauna with wide home ranges such as black bear, moose, deer, and coyote utilize the area for food and cover. Forest mammals such as fisher, squirrel and bobcat benefit from the forested western slopes of October Mountain State Forest, while aquatic or semiaquatic mammal such as beaver, otter, mink and muskrat utilize the river and the supporting floodplain to meet their biological requirements. Open field or early successional dependent species such as grouse, rabbits and other small mammals can be found in the fields and shrub-dominated areas. Wild turkeys are also present in strong numbers throughout the proposed area. Waterfowl surveys have shown the river and adjacent backwaters to be both a breeding area and a major migratory waterfowl area.

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Appendix E. Massachusetts Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program – Biodiversity Information Regarding the Proposed ACEC Nomination Area

June 24, 2008

Eleanor Tillinghast Green Berkshires, Inc. P. O. Box 342 Great Barrington, MA 01230

Dear Ms. Tillinghast:

Thank you for contacting the Massachusetts Natural Heritage & Endangered Species Program (NHESP). Natural Heritage has current, documented habitat of the following **31 species** protected under the Massachusetts Endangered Species Act (MESA) in the Housatonic River corridor you are considering proposing an as Area of Critical Environmental Concern (ACEC):

Common Name	Scientific Name	MESA Status
American Bittern	Botaurus lentiginosus	E
Narrow-leaved		
Spring Beauty	Claytonia virginica	Е
Hairy Wild Rye	Elymus villosus	E
Bald Eagle	Haliaeetus leucocephalus	Е
	Malaxis monophyllos var.	
White Adder's-mouth	brachypoda	Е
Straight-leaved		
Pondweed	Potamogeton strictifolius	Е
		Е
		(proposed for down-
Zebra Clubtail	Stylurus scudderi	listing to SC)
	Cardamine pratensis var.	
Fen Cuckoo Flower	palustris	Т
Foxtail Sedge	Carex alopecoidea	Т
Gray's Sedge	Carex grayi	Т
Intermediate Spike-		
sedge	Eleocharis intermedia	Т
Dion Skipper	Euphyes dion	Т
Riffle Snaketail	Ophiogomphus carolus	Т
Eastern Veined White	Pieris oleracea	Т

Common Name	Scientific Name	MESA Status
		Т
		(proposed for down-
Bristly Buttercup	Ranunculus pensylvanicus	listing to SC)
Wapato	Sagittaria cuneata	Т
Long-styled Sanicle	Sanicula odorata	Т
Arrow Clubtail	Stylurus spiniceps	Т
	Symphyotrichum	
Crooked-stem Aster	prenanthoides	Т
Culver's-root	Veronicastrum virginicum	Т
Black Maple	Acer nigrum	SC
Triangle Floater	Alasmidonta undulata	SC
Jefferson Salamander	Ambystoma jeffersonianum	SC
Hemlock Parsley	Conioselinum chinense	SC
Tule Bluet	Enallagma carunculatum	SC
Common Moorhen	Gallinula chloropus	SC
Wood Turtle	Glyptemys insculpta	SC
Four-toed		SC
Salamander	Hemidactylium scutatum	(proposed for delisting)
American Clam		
Shrimp	Limnadia lenticularis	SC
Mossy-cup Oak	Quercus macrocarpa	SC
Water Shrew	Sorex palustris	SC

MESA Status: E – Endangered; T – Threatened; SC – Special Concern

There are two **Certified Vernal Pools** and 44 **Potential Vernal Pools** documented within the possible ACEC boundaries. An **Acidic Graminoid Fen** and a **Level Bog**, both uncommon natural community types across Massachusetts, have been documented from the area, as well.

Much of the Housatonic River corridor is **BioMap Core Habitat**; three separate such Core Habitats were delineated by NHESP in the possible ACEC boundary. BioMap Core Habitats are those areas of the state which, if protected, will conserve rare species and exemplary natural communities for the future. These particular Core Habitats were delineated for six exemplary natural communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders.

Morewood Lake and part of the Housatonic River in Pittsfield have been delineated by NHESP as **Living Waters Core Habitats**. As with BioMap Core Habitats, Living Waters Core Habitats are the aquatic areas of the state – lakes, rivers, streams, etc. – which, if protected, will conserve rare species and exemplary natural communities for the future. These particular Core Habitats were delineated for an uncommon aquatic plant and a rare freshwater mussel. The mainstem of the Housatonic, Sackett Brook, Ashley Brook, Yokun Brook, and Washington Mountain Brook are all designated by the Fisheries section of the Massachusetts Division of Fisheries and Wildlife as **Coldwater Fisheries Resources**, because they support breeding populations of native Brook Trout.

In summary, this area contains an impressive diversity of species and natural communities of conservation concern.

Please do not hesitate to call Lynn Harper, NHESP Habitat Protection Specialist, at 508-389-6351 if you have any further questions.

Sincerely, Henry Woolsey, NHESP Program Manager Natural Heritage & Endangered Species Program

cc: Leslie Luchonok, Lynn Harper

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Appendix F. A History of the Upper Housatonic River Corridor

Bernard A. Drew, June 2008

1. SUMMARY

The land and river corridor described in this overview, which includes a 13-mile stretch of the Upper Housatonic River and a portion of the eastern slopes and forests of October Mountain State Forest, shares Berkshire's rich cultural, industrial, agricultural and natural history and excels in many aspects. It falls within the Upper Housatonic Valley National Heritage Area, designated by Congress in 2007. A popular fishing area for native Mohicans, the river valley followed traditional patterns of colonial settlement and agricultural activity, was innovative in literary and industrial endeavor and set itself apart in large-acreage land preservation. If divided into thirds, the area today is a comfortable mix of suburbia and farming remnants in southeast Pittsfield, light industry and village in east Lenox and northeast Lee and outdoor recreation in the gone-back-to-wild uplands of west Washington. The Housatonic River curves through and unifies its length.

2. METHODOLOGY

This overview was prepared as a reference document for a coalition of citizens and organizations interested in documenting some of the historic values of the Upper Housatonic River Corridor. It was compiled from respected secondary sources including published town and county histories, guide books, gazetteers, maps and atlases, also land records, municipal and state reports and contemporary news accounts. Berkshire County has long cared about, collected and recorded its history, thus an abundance of material is available to document land-use changes in the past three centuries. Most of the material is at the Berkshire Athenaeum's Local History Room in Pittsfield. Some is at Lee Library. The rest is in the author's collection. A bibliography appears at the end.

3. NATIVE INHABITANTS

Native Americans migrated seasonally to Berkshire from the Hudson Valley in New York in the Late Archaic and Transitional Archaic periods (2,700 to 3,700 years ago) and continued here in the Early Woodland era through the time of first contact with European settlers (Henry Hudson in 1609).

3.1 LIFESTYLE

At the time of the first encounter with Europeans, according to historian Shirley W. Dunn, the Mohicans "had devised routines to raise crops and store food which, as a rule, prevented hunger. To achieve this success, Native Americans in the Hudson

Valley utilized their environment. Indians gradually degraded any area where they lived by collecting wood for fuel; by harvesting bark, reeds and saplings for houses; by taking plant materials for nets, canoes, weapons, and food containers; by using weeds, stones and earth for dyes and medicines; by killing and processing a selection of wildlife; by gathering edibles; by clearing land; by raising and storing crops; by occupying living spaces; by making cooking and storage containers; and by the other activities of living. They occasionally moved to pristine locations, allowing their previous settings to return to a natural, but altered, state...."

"Their lives were rooted in the woodlands in which they lived," we learn from a Mohican Nation Stockbridge-Munsee Band history. "These were covered with red spruce, elm, pine, oak maple and birch trees. They were filled with black bear, deer, moose, beaver, otter, bobcat and mink, as well as turkey and other birds. The clean rivers were filled with fish. Usually the native people built their homes near rivers, so they could be close to food, water and transportation.... While women planted gardens in the spring, the men fished for herring and shad which swam up the river in large schools. From dugout and bark canoes, the men speared or netted fish. During late summer and fall they hunted the animals which were so plentiful in the woods. After the harvest, dried meat and vegetables and smoked fish were stored in pits dug deep in the ground and lined with grass or bark."

3.2 DEPARTURE

European settlers persuaded the larger village of Mohicans (from *Muh-he-con-nuk*, meaning great waters) to consolidate into a mission in 1734. Indian Town (Stockbridge) intermingled Dutch and English families and Mohicans, Mohawks and free and enslaved blacks. The Rev. John Sergeant (1710-49) was the first missionary. Natives living in Pittsfield, Lenox, Lee and environs were not part of the experiment that ultimately failed, as white settlers took advantage of the Mohicans, trading liquor and illegally securing their lands. The Indians moved to New York. Captain Jehoiakim Mtocksin left in 1788, the last Mohican in Berkshire, according to historian Lion G. Miles.

3.3 ARCHAEOLOGY

Amateur collectors scuffed hundreds of projectile points from the shores of Onota and Pontoosuc Lakes and Richmond Pond. Collections given to the Berkshire Museum included a mortar found in the town of Washington by Mrs. Eleazor Motter. Pittsfield historian J.E.A. Smith said a major confirmed site was "at Unkamet's Crossing, around the Canoe Meadows," where "upon the eastern bank of the river, rises a knoll which was once used as a burial-place by the Mohegans, who, after they were collected in one community at Stockbridge, were accustomed to make pious pilgrimages to this spot, leaving the birch-canoes, in which they had ascended the river, in the Meadows to which they thus gave name."

Archaeologists are reluctant to reveal specific sites, including any that may exist within the area covered by this report, so amateur arrow hunters won't be tempted to loot them.

A major professional dig at Kampoosa Bog in Stockbridge led by Eric S. Johnson in summer 1993 uncovered some 25,000 artifacts. Findings are indicative of activity at Canoe Meadows. "We found evidence," Johnson wrote, "from the archaeological

sites and the bog sediments that the documented forest management practices of the Native people of New England may go back as much as 4,000 years. At that early time, people who hunted and gathered wild animals and plants were using their knowledge and hard work to manage, maintain, and improve the productivity of their environment."

4. COLONIAL SETTLEMENT & GROWTH

European settlement of Berkshire, in westernmost Massachusetts, was slowed by fears of Indian attack at the time of King Philip's War. By the 1690s, Dutch farmers seeking to avoid the harsh rents charged by the New York state patroons began to scratch the soil in what became the town of Mount Washington. New York and Massachusetts sorted out their mutual boundary in the early 1700s. By 1725, English migrated from Westfield and Northampton to settle the Upper and Lower Housatuhnuk land grants, the area of Sheffield and Stockbridge. More Dutch came from Kinderhook. Sheffield became the first incorporated Berkshire town in 1735, Stockbridge the next in 1739.

4.1 PITTSFIELD

Col. Jacob Wendell and John Stoddard acquired Pontoosuc Plantation land, and settlement on the first 40 lots began about 1745. Solomon Deming brought his young bride, Sarah, from Wethersfield—she was the first white woman on the plantation, and bore the first child born in town. There were 200 inhabitants when Pittsfield incorporated in 1761. The citizenry grew tenfold by the eve of the American Revolution, and, sparked by Fighting Parson Thomas Allen, the agrarian community took an active role in achieving the break from Great Britain. Except for a sprinkling of merchants and tavern keepers, the community was agrarian. Sheep became a popular herd animal and Pittsfield pioneered with the Merino breed in 1807. The wool triggered a textile industry. Lemuel Pomeroy established a musket works in 1816 and supplied weaponry to the federal arsenal. The town became a city in 1891, and within short time electrical inventor William Stanley established a manufacturing facility. Entering the 20th century, the city boasted makers of electric pianos and voting machines, automobiles and trucks, ledger paper and cloth and more. The Rev. Samuel Harrison was chaplain to the famed Massachusetts 54th allblack regiment in the Civil War, the conflict that saw vigorous leader Major William F. Bartlett lose a leg. Lt. Col. Charles W. Whittlesey won the Congressional Medal of Honor as commander of World War I's "Lost Battalion." Downtown Pittsfield became the county's commercial hub, home to banks, insurance companies and retailers including family-owned England Brothers department store. Pittsfield was home to one of New England's first ski areas, a natural history and art museum and stage and movie theaters. A city ordinance in 1791 regulating the playing of "base ball" within 80 yards of the meeting house, uncovered in municipal records by family historian Don Lutes Jr., gave the city a claim to be the first to play the sport. One city resident, Heidi Voelker, represented the United States in the Calgary Olympics. Another, Stephanie Wilson, became a NASA astronaut.

4.2 LENOX

Lenox's first white settlers were Jonathan and Sarah Hinsdale, who uprooted from Hartford, Conn., in 1750. Hinsdale kept a store on what is now Stockbridge Road and took in guests. As settlement grew, the area was divided in two in 1767. The western portion became Richmond, the eastern Lenox. The early inhabitants were subsistence farmers, but Lenox's rich mineral deposits - limonite and quartz sand and limestone/marble — would soon instigate iron making and glass making and quarrying along the river. Although one citizen, Gideon Smith, was a stubborn Tory, most in town favored rebellion, and some 230 men served in the state militia. Col. John Paterson was a strong leader of the time, and was called back to service to quell outbreaks during Shays' Rebellion. Lenox was Berkshire's second shire town (beginning in 1787), ceding to Pittsfield in 1871. Berkshire's first "cottage," Samuel G. Ward's Highwood, was built just south of the town line in Stockbridge, but Lenox became synonymous with Newport as home to elegant mansions and lavishly gardened grounds, summer home to Carnegies, Fields and Morgans, Woolseys, Tappans and Aspinwalls. Today Tanglewood is world famous for its classical music performances, Shakespeare & Company for its depictions of the works of the great bard. Fanny Kemble Butler lived here, as did Henry Ward Beecher and Edith Wharton. Photojournalist Stefan Lorant had a home in Lenox, conductor Serge Koussevitsky too. The Massachusetts Eagle, forerunner of today's Berkshire Eagle, began publication here in 1833. In the last decade, Canyon Ranch spa and Kripalu Center set a new tone of spiritual and physical health for the tourism trade.

4.3 LEE

Lee was cobbled from parts of five land grants. Some 250 residents in 1777 petitioned for incorporation. The town's limestone substrate would prove a marketable commodity and Lee Marble quarry is still active today. But Lee's largest employers would be paper mills, beginning with Samuel Church's in 1806 (later known as Owen & Hurlburt, and since 1957 operated by Mead Paper). "The first North Lee mill, and the third built in the county, was put up by Lyman Church, in 1808, on ground covered now by the Smith Paper Company's 'Eagle Mill,'" according to Hamilton Child. Elizur Smith, and his nephews Wellington and DeWitt came to own Valley and Centennial Mills, both near the railroad tracks and Housatonic River and within the proposed protection area. Lee developed a thriving downtown and a variety of machine shops, flock and shoddy mills, sawmills and cider presses and paper collar manufactories. Sawmill owner Levi "Beartown" Beebe, who had a home on the southwest highlands, offered weather predictions that in the case of the Blizzard of 1888 was surprisingly accurate. Still-active High Lawn Farm is an eminent Jersey dairy farm. Berkshire Street Railway's now-gone Pleasure Park was a horse racing course. Greenock Country Club remains a popular golfing venue. Dutch Queen Wilhelmina took refuge at an estate in Lee during World War II, among her visitors Franklin D. Roosevelt.

4.4 WASHINGTON

Once called Hartwood, Washington, incorporated in 1777, lacked the rich farmland, abundant natural resources and fast-moving waterways that brought growth and prosperity to its neighbors. Two of its Revolutionary War soldiers, Gideon Bush and

John Walker, escorted British Gen. John Burgoyne's German mercenaries to Boston, following the American victory at Saratoga. Many of the fields laboriously cleared for farming reverted to forest, the farmers drawn to richer soils in the Midwest. Washington's ponds provide water to neighboring municipalities. The Western Railroad crossed the northern part of town. George H. Hubbard settled near the Becket depot in 1873, and found on his property water of particular medicinal value. He served it to boarders at his guesthouse. Scotsman John B. Watson outshone his neighbors in raising Shetland ponies in the 1920s, while Leland M. Stone in the same decade took pride in his herds of Mammoth Bronze and White Holland turkeys, Flemish giant rabbits, White Leghorn hens, Hungarian pheasants and Italian bees. A native son, E.D. Morgan, became New York governor in the 1860s. The Appalachian Trail navigates Washington's mountains. More than a third of the town is subsumed by October Mountain State Forest, which, with 16,500 acres, is Massachusetts' largest. Film and television actor Wendell Corey's folks lived in the community. Folk singer Arlo Guthrie has a rural home here. That alone sets the town apart.

5. LAND AS A RESOURCE

Remote from outside markets in Springfield, Hartford or Hudson, early settlers were of necessity subsistence farmers. Small-scale rural endeavors provided necessary goods to exchange in what was, until the early 1800s, largely a barter economy. Settler families were eager for cloth and clothing, buttons and kerchiefs and knives and tools, plates and pots, lamps and furniture and books. They needed cash.

5.1 COLONIAL AGRICULTURE

Historian John T. Cumbler categorized New England farms of 50 acres as "subsistence based, dependent upon cooperation and sharing with neighbors, fishing, hunting, free-range pasturing, and long fallow periods." That's how the first Europeans here lived.

Farming lost its luster. Berkshirites either moved west, where they could purchase larger and more fertile tracts, or, with the advent of the industrial age, found better pay laboring in village factories. In Berkshire by the Civil War era, only the larger farms continued. Until the 1840s and the arrival of the Housatonic Railroad, most farms had pigs and sheep, a cow, oxen or horses. The rails were a link to outside markets for cheese, butter and milk and by the 1850s, farmers increased their dairy production.

5.2 RURAL INDUSTRY

Waterpower privileges were carefully granted and monitored along the river. A 1783 plan of Pittsfield shows Ebenezer White's Mills below Unkamet Crossing, near the Elm Street bridge. Other maps show grist and saw mills on Mill Brook (of course) in Lenox. The skilled miller there supervised the grinding of corn and grains into meal. Most early Berkshire sawmills "were of the up-and-down, or vertical blade, type," according to researcher John S. Wilson. "Indeed, this was the most frequent type of sawmill in North America until the mid-nineteenth century. The circular sawmill was invented in the 1820s and did not appear in significant numbers until the 1860s...."

came from burning hardwoods and leaching the fine ash with water to create lye. Potash was used to make soap, glass and gunpowder, to process (full) wool, to dye fabric and to fertilize fields. It also was an export commodity.

In bloomery forges, the operator heated ore in a charcoal fire inside a chamber then hammered the soft, spongy metal to drive out impurities. The process was repeated until there was a usable metal "bloom." A blacksmith could reheat the wrought iron and make it into utensils, tools and weapons.

Small-scale quarries abounded. Plaster mills rendered limestone into powder. Presses each autumn squeezed juice from apples for cider, which with age became vinegar or hard cider. Carding mills prepared wool for spinning. By the 1870s, dairy production engendered cheese factories, including one on Mill Brook in Lenox.

5.3 ABANDONED FARMS

Pittsfield ranked eighth among 348 communities in Massachusetts in agricultural production in 1885, according to a census report. "There were almost 4,000 farms in Berkshire County in 1880," Carl Nordstrom wrote in *The Berkshire Eagle*. The figure today is 401 farms, dairy numbering the highest followed by greenhouse and nursery crops, according to Massachusetts Department of Agricultural Resources. The loss of farms was rampant in the late 19th century. *The Boston Daily Globe* in 1889 noted the abundance of deserted hill farms in Berkshire County, and reported "a movement has been started in Pittsfield, the county seat, to see what can be done to repopulate these towns and cause the soil again to bring forth abundance… There are many good unoccupied farms, some of which are excellent, scattered all through the hill towns of Berkshire…."

This was opportunity for men of means such as Fred S. Pearson in Great Barrington and West Stockbridge or William C. Whitney in Washington (See 10.1 THE ANTLERS) to amass large tracts in the late 1890s and early 1900s for private game preserves.

5.4 ABBY LODGE FARM

Pittsfield native Dr. Eugene O. Brielman (1885-1974), a graduate of Chicago Veterinary College, opened a practice just before World War I. He purchased Abby Lodge Farm on Holmes Road, across from Arrowhead, in 1926, and operated it as a dairy farm while he treated animals large and small. At one time he had 1,000 White Leghorn chickens, according to his daughter, Dr. Marguerite Gulick. The chickens were housed across the Housatonic River. Brielman's holdings extended two-thirds the way up the mountain opposite. When a flood took out the bridge near the sewer beds, making it difficult to reach that land, her father sold it, Gulick said.

Brielman cut lumber on his property and hired contractor Edward J. Tierney to build a new house in 1938. Its furnishings were fixtures from old area mansions including the Zenas Crane house in Dalton and Cortland Field Bishop's "Big House" on Old Stockbridge Road in Lenox.

Brielman strongly resisted a Pittsfield Department of Health edict in the mid-1930s that raw milk couldn't be distributed to the public. He kept his herd, but ended his dairy business in 1941. He gave up farming entirely when the barns burned a few years later. Brielman continued Abby Lodge Veterinary Hospital until autumn 1973.

The family still owns the property. (See also 6.4 MEADOW FARM)

5.5 TWEENBROOKS & PULPIT ROCK FARMS

Still active are George W. Noble Jr.'s Tweenbrooks Farm and Wellington Butler's Pulpit Rock Farm. The former is surrounded by suburbia, the latter is sandwiched by post-war housing and EPRI's High-Voltage Transmission Laboratory. George Noble in 1978 inherited the farm between Sykes and Sackett Brooks his grandfather began in the early 1900. His uncle milked about 100 head of Holsteins and Jerseys. Noble raises sweet corn, butternut squash and hay. Besides the farm's 110 acres, he leases another 300 acres for crops. Noble was among the first farmers in the commonwealth to join the Conservation Security Program, which rewards participants for historic conservation activities. Noble entered the state's Agricultural Preservation Restriction program in 1999.

Tweenbrooks and Pulpit Rock Farms both back up to the Housatonic River. General Electric in 2007 purchased 60 PCB-contaminated acres from Noble for \$600,000 and nearly 40 acres from Leona Alice Butler for \$450,000.

Wellington Butler accepted a Conservation Restriction on his property in 2007. The Butlers have long had a small dairy herd at Pulpit Rock Farm, at the Pittsfield-Lenox line. Wellington and Leona A. Butler's mother, Leona Briggs Butler, had been born on the Whitney Preserve in 1904. Their grandfather and great-uncles had been gamekeepers there. (See 10.1 THE ANTLERS, also 12.1 MARGUERITE BRIDE.)

6. COUNTRY HOMESTEADS OF NOTE

Two of Berkshire's 19th century literary lights lived on the rise west of the Housatonic River in Pittsfield, on Holmes Road. Here and on East Street, Lenox, thrived large stock farms and one Berkshire "cottage." Today one driving along either side of the Housatonic River would encounter new streets and vigorous post-World War II housing, particularly on the east side in Pittsfield.

6.1 HOLMESDALE

Dr. Oliver Wendell Holmes said, "There's no tonic like the Housatonic." Descended from Pittsfield proprietor Oliver Wendell and father of the eminent associate Supreme Court justice who shared his name, Holmes was a professor of anatomy and physiology and a famed man of letters. The essayist and poet in 1848 inherited Canoe Meadow in Pittsfield. He made alterations to the house, which sits on a knoll with a fine view of the river. Henry Ward Beecher in one of his "Star Papers" in the *New York Independent*, "A Walk Among Trees," observed, "Oliver Wendell Holmes spends his summer months upon a beautiful farm near Pittsfield on which are half a hundred acres of the original forest trees, some of them doubtless 500 years old... It is said that Dr. Holmes has measured with a tape line every tree on his place and knows each one of them with intimate personal acquaintance." Catherine Drinker Bowen wrote in *Yankee From Olympus*, "The house was called Canoe Meadows and the Holmes children loved it. From the wide front porch you could see Greylock Mountain and the Housatonic River. The hillsides were wild with scrub and pine, high pastures where granite rocks showed rough and grey, warm under a boy's bare foot at noontide. Before the house a great single pine tree spread its branches... Dr. Holmes was always busy somewhere about the place, fixing and mending, making small contraptions for his private use...."

John A. Gernochan called the house Holmesdale after he purchased it in 1872. His widow and her second husband, William Pollock (1863-1916), built Grey Towers, an adjacent summer estate. The Pollocks entertained lavishly; baritone Cecil Fanning sang for a large gathering at the estate in 1911. Two years later, the horse breeder suffered a \$30,000 loss when the Holmesdale horse stables burned. Donald Weston (the son of Lt. Gov. Byron Weston and a descendant of Dalton's pioneer papermaker Byron Weston) and his wife, Ruth Church Weston (the daughter of Monument Mills president George H.C. Church), acquired the Grey Towers property in 1928. An occasional visitor in Mrs. Weston's day was a niece, television's French chef, Julia Child. Zenas Crane Colt purchased the Holmesdale mansion in 1949, while Mrs. Weston retained the second home until her death in 1996. Both dwellings still stand.

6.2 ARROWHEAD

Herman Melville (1819-1891) wrote *Moby Dick* at his desk at Arrowhead on Holmes Road, Pittsfield, the view of Greylock to the north affording inspiration. He equally appreciated the Housatonic River valley and the mountains beyond. Melville named October Mountain in his short story, "Cock-A-Dodle-Doo!" In the 1853 piece, Melville describes "a densely-wooded mountain, which I call October Mountain, on account of its bannered aspect in that month."

Melville first visited Pittsfield in 1833, and stayed with his uncle Thomas Melvill at the farm Broadhall, now Pittsfield Country Club. A writer of South Seas adventures, Melville brought his family here in 1837, when he purchased the Robert Melville farmhouse. Herman Melville renamed it Arrowhead and in it he wrote *Pierre, Israel Potter, The Confidence Men* and *Piazza Tales*. When he abandoned Pittsfield, Melville left the property to his brother, Allen Melville. From him it passed to Maria Melville Morewood. The family sold it in 1927. Berkshire County Historical Society acquired the property in 1975 and opened it the next year as a house museum. The property is listed on the National Register of Historic Places.

(Arrowhead is at the edge of the proposed ACEC, but its restoration helps define the neighborhood's 19th century character.)

6.3 ABBY LODGE

Col. Richard Lathers (d. 1903), a millionaire commission merchant in the South, defended the Union during the Civil War and hoped his Northern connections would help revive the Southern economy after the war. In that effort he failed. In 1874, he sold his mansion in Charleston and moved to Winyah Park in New Rochelle, N.Y. He soon "purchased nine farms in Berkshire, Massachusetts, about equidistant between Pittsfield and Lenox, and erected thereon a neat villa, having a library and picture-gallery, called, after Mrs. [Abby Thurston] Lathers [d. 1904], 'Abby Lodge,' which became a popular social centre of Western Massachusetts, and, perhaps, made more so by the beauty of the scenery, having nearly a mile of the mountain-margined Housatonic running through the lovely meadows and skirting the mountains on the east of it, with views from its piazzas of the surrounding country,... Here, with his family and his numerous friends in and out of the State, he passed the summers of

fifteen years, and their dinner- and garden-parties became a leading feature in that part of Berkshire," according to an autobiography Lathers prepared as condition of membership in the Grand Army of the Republic.

Abby Lodge on Holmes Road, recalled Henry G. Morewood, grandnephew of Herman Melville, "was built like a small European Castle. I recall that it had a music room with a sky-blue ceiling, stone terraced gardens and beautiful flowers. It had a beautiful view, unobstructed, of the western mountains, as the site has today, right down to the railroad track. The whole property was sold about 1900 to a Mr. Arthur Cooley, a wealthy man who raised orchids that won international awards. He used the property for a stock farm and raised prize cattle." The mansion, Morewood said, burned in the early 1900s. (See 5.4 ABBY LODGE FARM)

6.4 MEADOW FARM & MISS HALL'S SCHOOL

Col. Walter Cutting (1841-1907), a New York native with a distinguished service record during the Civil War, married Maria Pomeroy of Pittsfield in 1869 and settled on an estate on Holmes Road, Pittsfield. His Meadow Farm became a major supplier of milk to city customers. Cutting was active on the Berkshire Agricultural Society and Berkshire Athenaeum. Cutting at one time also owned Abby Lodge and part of Canoe Meadows (See 6.1 HOLMESDALE and 10.3 CANOE MEADOWS). Mira Hinsdale Hall (1863-1937), a Smith College graduate, took over a small independent school begun by her aunt, Nancy Hinsdale, a school once known as Pittsfield Young Ladies' Seminary and by 1898 called Miss Mary Salisbury's School for Girls on South Street. Miss Hall in the next 37 years brought the girls' boarding school to solid footing. In 1908, she acquired Cutting's estate and the school relocated there. A fire in 1923 destroyed the house. It wasn't the first such tragedy on the property; a severe fire in 1907 wiped out barns, silos, boiler house and the dairy herd. A new school corporation built a new handsome Georgian building that remains at the heart of the campus today. Margaret H. Hall guided the school for 10 years after her aunt's death. The school's ninth head, Jeannine Norris, has held the post since 1996.

6.5 EASTOVER ESTATE & RESORT

Harris Fahnestock (1869-1939) and Mabel Metcalf Fahnestock (1870-1930) constructed one of the last great Lenox estates, Eastover, on East Road in 1910. Fahnestock's family made its fortune with First National Bank of New York. The grounds were gathered from several farmsteads, 930 acres all told. Besides the mansion there were a coach barn, ice house, garden sheds, superintendent's house and chauffeur's house, garages and various outlying houses and barns from the previous farmsteads. Francis L.V. Hoppin designed the brick main house in Georgian style, according to Richard S. Jackson and Cornelia Brooke Gilder in *Houses of the Berkshires 1870-1930*.

Following the death of the Fahnestocks, the property was sold at auction. Benne Virgillio acquired it in 1943 and leased it to Duncan School for Boys. In 1946, two years after the school went bankrupt, George J. and Paul J. Bisacca and Fred M. Noble of Stamford, Conn., purchased the derelict buildings and 500 acres for \$41,000 and revived it as a resort. George Bisacca (d. 1983) was principal operator with his wife, Ruth (d. 1976). Born in Italy, Bisacca was a circus roustabout and

streetcar motorman in his younger years before entering the wholesale and retail gasoline business. He was a Civil War buff and had a military museum in basement rooms of the mansion. Bison still roam the grounds. Family members operate the resort today.

7. INDUSTRY

Water privileges along the Housatonic River in Lenox Dale spurred three large-scale 19th century industries that produced iron, glass and paper. Commercial businesses and light industries filled in along the riverfront in the 21st century, Donovan gravel bed, County Concrete, GL&V, Daley & Son, Dufour, Borgnis Lumber, Lenox Oil, Lenox Machine, Sheet Metal. Co. and Industrial Welding Co. among them. Smith Paper pioneered in production of pulpwood paper. General Electric acquired land in the 1958 for lightning resistance and other experiments. The Commonwealth of Massachusetts, through its Office of Dam Safety is responsible for inspecting dams on major waterways today, including the one at Woods Pond.

7.1 LENOX FURNACE

Lenox Iron Works, established in 1765 near the Housatonic River, turned out pig iron until 1881, according to industrial historians Herbert C. Keith and Charles Rufus Harte. The furnace heated iron ore with charcoal harvested and smoldered in outdoor kilns on adjacent October Mountain and brought by wagon to the ironworks. Job Gilbert established the works but sold it in 1783 to Elisha Martindale and Zephraim Hollister, who sold it back to Gilbert two years later. Judge William Walker and half a hundred investors rescued the business the next year, according to town historian David H. Wood. Owners raised the original 28-foot stack to 35 feet 4 inches when they converted the furnace to hot blast in 1839. The bosch remained 9 feet in diameter. Hiram Pettee was ironmaster at Lenox Furnace in the 1850s, succeeded by his brother, Seneca Pettee. Demand during the Civil War kept the furnace busy, but the scarcity and increasing cost of charcoal forced it to close. A grist mill and blacksmith shop were located near the furnace.

One of the richer veins of ore to supply the furnace ran beneath the commercial center of town. Sink holes in 1862 were a startling reminder to townsfolk of past industry. One house settled into a forgotten mine shaft up to its second floor windows. "Wallace Seeley was cutting across lots heading for Main Street when the ground opened and swallowed him," *The Berkshire Evening Eagle* said. "He had been returning from a social call and it was late at night, but his cries brought help and he was lifted unhurt from an old shaft which had caved in under his feet." At least one resident, J. Curtis Arnold, and probably others, "brought suit against the Lenox Furnace company for damages to his property caused by this settling of the earth about his buildings," the *Sunday Morning Call* reported.

7.2 LENOX GLASSWORKS

One of the original Lenox land grants was the Glassworks Grant, a strong hint there was raw material in the ground that would support an industry. According to local historian Charles Flint, quartzite sand from the town of Washington was some of the highest quality in the country, and was even shipped to Sandwich Glass for its famed

products. Established in 1765, Lenox Glass Works laborers brought the sand down the mountain in carts and wagons. John Franklin and investors ran the glassworks near the iron furnace, on the Lee side. It eventually failed.

The Berkshire Evening Eagle said William A. Phelps, an ironworks owner, and Oliver Peck re-established a glassworks in 1853-54. Phelps and Peck had money to invest; they had already built a hotel in the center of Lenox in 1837. It became the Curtis Hotel and is in housing and retail use today. Seneca Pettee supervised the glassworks after his brother Hiram left to work at the Briggs iron furnace in Lanesborough. A fire closed the enterprise within a few years.

James N. Richmond organized Lenox Glass Co. in 1855. Artisans poured ovenheated molten glass onto flat tables, rolled and cooled it, Mary E. Averill told *The Eagle*. Richmond failed. There were more false starts, more fires, until Lenox Plate Glass Co. organized in 1866. Lenox Glass Co. succeeded that business in 1869. The huge facility "was situated between the main highway in Lenox Dale and the railroad tracks and is now owned by the railroad company," *The Eagle* said in1937. "The company had a large market throughout the country, supplying plate glass, crystal and rough plate. In spare time the employees manufactured several novelties made of the glass, including paperweights and canes." Investors toward the last included Theodore Roosevelt, father of President Theodore Roosevelt, and his brother James, grandfather of President Franklin D. Roosevelt. The Lenox glass works closed in the panic of 1872.

7.3 SMITH PAPER

Elizur Smith (1812-1889), an owner of Ingersoll & Platner's Turkey Mill in Tyringham, partnered with George Platner to acquire Pleasant Valley Mill north of Lenox Furnace in 1855. They produced writing paper from 1835 to the 1890s—50 tons a day. Smith purchased the Housatonic Mill in 1858, and rebuilt it after a fire. The company built the Columbia Mill closer to the center of Lee in 1867, the Niagara Mill in 1903.

Smith built a large house and barns at High Lawn Stock Farm, on the west side of town, and retired. Wellington Smith (1841-1910) succeeded him. Smith Paper took a risk. It purchased wood pulp from a grinding facility in Interlaken. The first wet pulp was made in this country March 5, 1867, and was transported to Smith's Centennial and Niagara mills and turned into paper — paper that would become the standard for newspapers and inexpensive magazines. The first seven shipments weighed 13,605 pounds, less 55 percent allowance for water, yielding a net of 6,123 pounds, for which the charge was \$489.89.

Peter J. Schweitzer of New York City purchased part of Smith Paper in 1954. Kimberly-Clark came to own Smith's Valley mill. That building was sold and became a warehouse in 1984. The sale, to Thomas R. Garrity, included 30 acres and the Woods Pond dam. Schweitzer-Mauduit in 2008 closed its Greylock, Eagle, Columbia and Niagara mills in Lee and Lenox.

7.4 LIGHTNING LABORATORY

Dr. Karl B. McEachron (1890-1954) was a brilliant electrical engineer. He worked for General Electric in Pittsfield for three decades, researching natural and artificial lightning at laboratories in the city and at the Empire State Building in New York City. In May 1929, McEachron engineered a demonstration of a million-volt, manmade bolt of lightning. The lightning struck a power line. The power line survived. McEachron's specialty, you see, was in lightning arrestors. He found ways to make electric wires and insulators and poles serve longer. He supervised demonstration of a 10-million-volt thunderbolt at the New York World's Fair in 1939. General Electric in 1958 purchased land in Lenox, on East New Lenox Road south of the Butler farm, and constructed a new research facility. GE transferred that facility to nonprofit Electric Power Research Institute (EPRI) in November 1984. On the grounds is an accelerated aging chamber and equipment to evaluate icing performance of insulators, also an installation to determine what causes manhole covers to blow off underground electrical conduits. In 2006 it published the third edition of the highly regarded *Electric Line Reference Book*.

8. RAILS

Railroad tracks weave along and over the Housatonic River through Berkshire.

8.1 HOUSATONIC RAILROAD

The Housatonic Railroad opened its line from Bridgeport, Conn., north through Great Barrington to West Stockbridge and connected with the Western (later Boston & Albany) at State Line in 1842. For an improved link with towns to the northeast, the Stockbridge & Pittsfield Railroad Company secured a charter and placed track through Stockbridge, Lee and Lenox. The Housatonic Railroad leased the line. It first carried passengers in June 1850. It later became the New York, New Haven & Hartford Railroad. Penn Central acquired the tracks in 1969 but ended passenger service in 1971. A new Housatonic Railroad took over freight service in 1991 from Guilford Transportation.

There were three depots in Lenox. The original 1850 Lenox Station was at the intersection of Housatonic and Crystal Streets. It burned to the ground in 1896. Plans of the NY, NH & H to consolidate service at Lenox Dale (that depot stood where the post office is today) momentarily flustered "cottagers," who were not keen on disembarking in the town's industrial heart. Sloanes, Bishops, Westinghouses and others rode their carriages instead to the Lee depot. The railroad constructed a new 82-foot-long Lenox Station in 1903—of unusual half-timber, half stucco style and with a little park next to Woods Pond — and soon closed Lenox Dale.

The third station was at New Lenox, as much a general store as depot, operated independently by Oscar R. Hutchinson. Located at the most convenient crossroad to reach the heart of October Mountain, it was demoted to a flag and freight station in 1922, and soon closed.

Riding the New Haven line was an adventure. One autumn day in 1920 a bull moose wandered out of the Whitney game preserve and delayed the morning express just north of Lenox Station. "The big, ungainly animal was stalking between the rails when first seen by the engineer, who stopped his train, and the crew after much persuasion drove him away," *The New York Times* reported.

After the railroad abandoned Lenox Station, the building became an auto repair shop and warehouse until it was donated in 1986 to Berkshire Scenic Railway, which maintains a museum and runs occasional excursion trains. The building is on the National Register of Historic Places.

8.2 BERKSHIRE STREET RAILWAY

Berkshire Street Railway served the length of the county, though not without some controversy. In Pittsfield, noted horseman William Pollock sputtered he would sell Holmesdale if the line ran down Holmes Road. In Lenox, "The cottagers have been opposed to having any trolley line run through the town," *The New York Times* reported in 1901, "but as the Berkshire company presented a plan of a route through the east side of the town, away from any important highway, it was acceptable...." Streetcar tracks followed Holmes Road to Chapman Corner, went through New Lenox, and braided the railroad and river into Lee. From Lenox Dale, a connecting short line went to the center of Lenox. The first car to roll over the tracks in August 1902 was No. 22. The last car ran on the railway in 1930.

9. FRESH WATER, WASTE WATER, RUNNING WATER, FOUL WATER

Sites within the proposed Area of Critical Environmental Concern provide Pittsfield drinking water, and accept and purify its wastewater as well.

9.1 FARNHAM RESERVOIR

Drought years in 1908 and 1909 spurred drastic measures in Pittsfield, which even diverted flow from Roaring Brook into its Mill Brook supply. Nudged by the state, as well as demanding users, City Council in 1910 at the request of Mayor William H. MacInnis authorized creation of a study committee that suggested "construction of a large storage reservoir on October Mountain," according to historian Edward Boltwood. The site was at the headwaters of Mill Brook, in Washington. Public Works engineer Arthur B. Farnham championed the location, and eventually lent his name to the result. Winston & Co. of New York gained the contract. A 900-foot dam impounds up to 440 million gallons of water. Hiram A. Miller of Boston was chief engineer. Construction was completed in November 1912. Pittsfield Department of Public Utilities maintains Farnham and other reservoirs.

(Lenox and Lee reservoirs are on October Mountain, but south of the proposed protected area.)

9.2 PITTSFIELD SEWER BEDS

Pittsfield with 1890 enabling legislation began construction of a sewage system. Trunk lines from city neighborhoods sent discharge that previously emptied into the West Branch to new filtration beds adjacent to the present wastewater treatment plant, near the East Branch below Brielman Swamp off Holmes Road. The system was improved in 1915, 1937, 1963, 1976 and 1989.

The Lenox Wastewater Treatment plant is also near the river, on Crystal Street diagonally across from the train station.

9.3 RUNNING WATER

Bridges over the Housatonic River were wood-constructed until the industrial revolution and the advent of iron, about the time of the Civil War. There were hundreds of bridge design patent holders in the 1870s, among them Hezekiah S. Russell (1835-1914), one-time Pittsfield mayor. Through his firm Clary & Russell, he built a handful of metal truss bridges for Pittsfield, including an 83-foot span at Holmes Road. It stood until the early 1960s.

A bridge near the Pittsfield Wastewater Treatment facility never was replaced in the 1940s, and it took a half-century for a new Woods Pond bridge after the old one deteriorated and was removed in the 1950s. The new pedestrians-only bridge was completed in the early 2000s. It is included in a proposed Lenox bike path. Berlin Iron Bridge Co. of Connecticut came to dominate the market by the 1880s and two of its pony truss spans were in service, at Valley Mill in Lenox Dale (replaced in the 1970s) and Golden Hill Road in Lee (replaced in the 2000s). The bridges were based on the 1878 lenticular truss patent of William O. Douglas's (no relation to the later Supreme Court justice). The old Golden Hill Road bridge survives, disassembled but in the collection of 19th century bridges at the University of Massachusetts, Amherst, supervised by Alan J. Lutenegger, Department of Civil & Environmental Engineering. (See 12.3 WOLDEMAR NEUFELD)

9.4 FOUL WATER

Berkshire's district attorney filed an unusual indictment against Smith Paper in January 1882, "for alleged public nuisance in maintaining a dam at its Pleasant Valley Mill, which, by setting back water over a large tract of land above it, alternately drawing and flowing it, caused malaria along the river banks," *The New York Times* said.

The Housatonic River had first been dammed below Woods Pond in about 1790, and had been rebuilt five times by 1870, when it was also elevated a foot. With the last alteration, as water was drawn down, pockets of backfill water became brackish. Neighbors came to believe it was the cause of an unusually large number of malaria cases in Lenox Dale. The legal action caused a stir among manufacturers, frightful of the precedent, and prompted lengthy courtroom arguments about the causes of malaria and the responsibilities of companies. A jury dismissed the charges that autumn. (Mosquitoes hadn't yet been identified as the carriers of infection-bearing parasites.) (See7.3 SMITH PAPER)

10. LAND CONSERVATION & RECREATION

This stretch of Housatonic River has a long tradition of private and public preservation activities, beginning with the land acquisitions of the Whitney game preserve.

10.1 WILLIAM C. WHITNEY'S THE ANTLERS ESTATE & GAME PRESERVE Who was mysteriously buying up all the abandoned farms on October Mountain in the town of Washington? Patrick T. Carty was the first to sell his farm, to Thomas Post, an out-of-town lawyer and agent, in 1895. By 1896, Post had quietly acquired 42 farms. The unknown buyer, it turned out, was ex-Secretary of the Navy William Collins Whitney (1841-1904), a corporate counsel in New York and an active fighter against the Tweed Ring. He assembled his fortune largely through investments in street railways. He modernized the U.S. Navy during his tenure 1885-1889 in Grover Cleveland's administration. Whitney wanted to create a game preserve and woodland retreat. He had discovered the mountain expanse one day while on a carriage ride with his wife, Flora Payne Whitney (1842-1893). Mrs. Whitney charmed society at Lenox during five seasons at Vent Fort, Ogden Haggerty's Italianate villa, while her husband toiled for the government.

Whitney put carpenters to work building a shingle-style "cottage" called The Antlers on top of the mountain. Frederick Law Olmstead assisted with garden design. Laborers also had to hastily construct a honeymoon "camp" for Whitney's son Harry Payne Whitney, who was about to marry Gertrude Vanderbilt. Lower on the social rung, Whitney's head gamekeeper, Charles R. Briggs, bedridden with severe illness, recovered and in 1903 married the woman who nursed him back to health, Marie Campbell.

Whitney imported bison and moose, partridge, Belgian hare, Virginia deer, grouse, quail, angora sheep and more, releasing them into an 800-acre wire-fenced area. Whitney lost interest after the death of his second wife, Edith Randolph, in 1899 of injuries suffered in a horse riding accident. Whitney himself died after an operation for appendicitis in 1904. He left a \$21 million estate, including \$7 million in Standard Oil stock and \$4.7 million in Consolidated Tobacco shares.

Harry Payne Whitney (1872-1934), who became a noted horse breeder, kept the preserve going for several years, but eventually had most of the exotic animals collected and shipped away — all but the elusive Old Bill, who evaded capture until shot illegally by a hunter in 1920. Bill's mounted head is in the Berkshire Museum's collection. The Antlers dwelling burned in 1929. The outbuildings, 24 houses and 30 barns, eventually fell in or were razed.

10.2 OCTOBER MOUNTAIN STATE FOREST & THE CCC

Kelton B. Miller, publisher of *The Berkshire Eagle* and ex-mayor of Pittsfield, and Cortland Field Bishop of Lenox undertook public subscription in 1915 to acquire the Whitney estate from Harry Payne Whitney. Pittsfield had already instituted eminent domaint proceedings to secure some 3,000 acres for Farnham Reservoir. When the new transaction was complete, the document ran for 36 pages. October Mountain State Forest was born.

But it was little used until the Great Depression and rampant unemployment spurred President Franklin D. Roosevelt to propose a Civilian Conservation Corps. Several companies were assigned to October Mountain. The recruits developed the state forest for recreation. Much of their activity was on the forest section closest to Lenox Station. "New roads have opened this portion which has been developed more intensively than all the rest," *The Berkshire Eagle* reported in 1935. The men built bridges, cleared campgrounds, put up log cabins, axed trails, dammed streams and cleared fire roads. They dug fire ponds, made parking areas, dug latrines, rip-rapped streams and eradicated gypsy moths.

Alec Gillman, ranger at Mount Greylock Reservation, compiled this list of camps at October Mountain:

Camp S52, Company 120 (1933-1934), Becket Camp on Washington line;

Camp SA52, Company 125 (1933-1936) Yokum Pond Camp in Becket;

Camp SP11, Company 120/124 (1934-1935) Becket Camp;

Camp S93, Company 120 (1935-1939) Becket Camp;

Camp S93, Company 120 (1940-1941) Becket Camp

Camp S83, Company 1168 Veterans (1935) Lenox Camp, Farnham Dam Road;

Camp SP28, Company 1168 Veterans (1935-1937) Lenox Camp; and

Camp SP28 Company 1105 Veterans (1938-1941) Lenox Camp.

(The S designations mean state-managed, A is for agriculture, P is for parks.) The commonwealth was proud of the work. A 1941 recreation guide, *State Forests and Parks of Massachusetts*, pointed out, for example, "Tory Glen, about 500 feet from the boundary of the forest north of Roaring Brook in Lenox, is a singular outcropping of quartzite with a cave 10 feet deep and 4 feet high where Gideon Smith and others of the unruly Lenox Tories hid. Just above it roaring Brook makes a 10-foot waterfall, a finishing touch to a spot of much beauty."

A state inventory of CCC remnants in 1999 found two chimneys but little other reminder of the actual camps or picnic sites, though at Felton Lake an earthen dam is still in use, as is a stone arch bridge.

October Mountain State Forest is a popular camping and hiking destination today. Musician James Taylor and Gov. Duval Patrick turned out in May 2008 at a trails work bee to pick up trash and clear trails on October Mountain.

10.3 CANOE MEADOWS & MASSACHUSETTS AUDUBON

Some 220 acres of Canoe Meadows, part of a larger tract owned in the 1700s by proprietor Jacob Wendell, became Massachusetts Audubon's Canoe Meadows Wildlife Sanctuary in 1975, thanks to a gift from Cooley Graves Crane. In the decades between Wendell and Audubon, this northern acreage was part of the Gravesley estate and there are hints of an old carriage road visible from the hiking trails today. Some Crane acreage was separated out for building lots, to help establish an endowment. Dr. and Mrs. Edward F. Olchowski gave an adjacent strip of land to Audubon in 1980. Ben and Barbara England donated another 40 acres in 1983. The property was noteworthy both as being a rare wildlife reservation within a city's boundaries, and for offering space for community gardens.

10.4 GEORGE L. DAREY WILDLIFE MANAGEMENT AREA

The Massachusetts Executive Office of Environmental Affairs in May 2004 named the 818-acre Housatonic Valley Wildlife Management Area for George L. Darey of Lenox, longtime chairman of the state Board of Fisheries & Wildlife. Darey had worked to assemble the preserve, which stretches from the Lenox-Pittsfield line at New Lenox Road north in a jagged pattern to the Holmes Road bridge near Canoe Meadows, and with an additional section above Morewood Lake. There are four canoe access points within the floodplain habitat. The area was designated originally in 1968.

10.5 POST FARM

Just south of the Housatonic Valley Wildlife Management Area the former Lenox town dump. Now known as Post Farm and managed by the town's Conservation Commission since the early 1980s, the 200+ acre property is habitat to numerous bird and other species.

11. RIVER JOURNEYS

This section of Housatonic River is unusual in its many literate observers over the years. Early geologists remarked on the waterway's many features. Men and women of letters paid tribute. Add to them recreationists who paddled it and you have a diverse body of literature.

11.1 LYDIA HOWARD SIGOURNEY

Lydia Howard Sigourney (1791-1865) acknowledged the river in a verse, "The Housatonic," included in her 1845 collection, *Scenes in My Native Land*. The Hartford resident was a leading figure in the rising feminist literature of the day. She first encountered the Housatonic while visiting her good friend, novelist Catharine M. Sedgwick. As Sedgwick often lived at her brother's place in Lenox, it's not a great stretch to imagine Sigourney wrote about the river as it flows through that town. She apparently composed it while making a rail journey to the county. The verse begins:

O gentle River winding free Through realms of peace and liberty, Who that thy mode hath seen You shall pool mid thickets green...

11.2 CLARK W. BRYAN

A Springfield publisher who acquired *The Berkshire Courier* in Great Barrington in 1879, Clark W. Bryan (1824-1899) also wrote Berkshire travel guides, including one commissioned for the Housatonic Railroad, *Through the Housatonic Valley to the Hills and Homes of Berkshire* (1882). His description is from the perspective of riding the rail line alongside the river, though for this section it becomes more a catalog: "...on to Lenox Furnace, a manufacturing hamlet only, and still on, a mile or two, to Lenox Station, and we have yet two miles before we reach [by carriage] the proud old town of Lenox… From Lenox station the track of the Housatonic railway takes us quickly to Pittsfield, the county seat of Berkshire, a thriving and beautiful town of inhabitants sufficient to entitle it to be called by the ambitious name of a city...."

11.3 HENRY PARKER FELLOWS

Henry Parker Fellows came out from Boston to row a skiff the length of the Housatonic River. In *Boating Trips on New England Rivers* (1884), he bluntly remarked on the discolored water he found below Pomeroy's lower woolen mill on West Housatonic Street, on the west branch, and below the Columbia, Eagle and Housatonic mills in Lee. Mostly, he wanted to have a good time and see what there was to see. After he navigated the canal at Woods Pond, he wrote of a paper factory nearby. "The mill belongs to the Smith Paper Company, and is known as the Pleasant Valley mill. Paper is made here one hundred inches wide, on the largest machine in the country." He observed remains of Lenox Furnace, had to do a carryaround at a grist mill. "A high bank made it awkward to launch the boat, and the stern dipped some water."

11.4 CHARD POWERS SMITH

Chard Powers Smith (1894-1977), a poet and fiction writer as well as historian, wrote *The Housatonic: Puritan River* for the Rivers of America series. He noted the Lenox Glass Works, which "was said to cover more area under one roof than any other building in the world." He noted the building was long gone in 1946, but "What remains of its machinery is sometimes grotesquely visible in the river, where it was jettisoned."

11.5 MORGAN G. BULKELEY III

Morgan G. Bulkeley III (b. 1913) wrote a weekly "Our Berkshires" column on nature and history for *The Berkshire Eagle* from 1960 to 1973. The Yale graduate kept close tabs on the Housatonic River, and eventually relocated from his Mount Washington potato farm to a home on the Holmesdale estate. In a trio of "River Reports," published as "Our Berkshires" columns in 1961, Bulkeley articulated the condition of the river as he found it, from a canoe. He and a companion launched from the Holmes Road bridge. "We shoved off into the miasmal morning mists as though down the river Styx. The three headwaters of the Housatonic had picked up their complement of civilization; the water was a dirty gray-brown, slithering between slimy banks strewn with assorted rubbish." Bulkeley revisited the river in 1978, after he had retired from regular column writing, and assessed the work of the Housatonic River Watershed Association, Berkshire Natural Resource Council, the Pittsfield River Committee and others. "This old river rat who had his first 'Housatonic baptism' as a schoolboy just 50 years ago, can only conclude that things are looking up."

11.6 OTHER EXPLORERS

One can't begin to catalog the newspaper and magazine articles that have been written about the Housatonic River, including this stretch. John Coleman Adams (1849-1922) in 1889 observed, "Here in our Housatonic, is a noble example of how hard a river dies. It keeps up a magnificent fight against the vandal powers of the human race, as they fetter it with dams and degrade it in sluiceways and millponds...."

James and Margaret Cawley described their river adventures in a 1978 book, *Exploring the Housatonic River and Valley*. They found, for example, "Woods Pond is a natural sanctuary for waterfowl and, as we paddled along, several specie of ducks took wing as we passed. We passed several areas of wetlands back of which, on the east shore, were a beautiful range of hills. They stayed with us until we reached the foot of the pond." They noted progress in cleaning the river—of trash and pollution from textile and paper mills.

Housatonic River Watershed Association, Berkshire County Regional Planning Commission and Housatonic Valley Association singly or in combinations have published three editions of *A Canoeing Guide to the Housatonic River in Berkshire County*. Each booklet has included maps and historical nuggets. The 2001 version notes access points from south Pittsfield to northern Lee: John F. Decker Canoe Access, New Lenox Road; Housatonic and Crystal Streets at Woods Pond, Lenox Dale; and the bridge at Golden Hill Road.

Charles W.G. Smith in *Water Trails of Western Massachusetts* describes the natural delights to be encountered by canoe around Woods Pond, also on Felton Lake, October Mountain Lake and Schoolhouse Reservoir on October Mountain, and down the Housatonic from New Lenox Road to Woods Pond.

11.7 UNEXPECTED RIDE

Not all water experiences were planned. William Ingalls, 42, a stone mason, "tripped on a rope while at work on the Niagara Mill headgate in Lenoxdale yesterday and fell into the raceway, which is a swollen and swiftly moving current by reason of the Housatonic River having been turned into it while a new dam is being built," *The New York Times* reported in June 1903. Ingalls rode "250 feet down the race through the wheel pit of the mill into the tail race, and thence across the river and came out alive." He went a quarter mile in less than a minute. "When Ingalls realized what he had been through he fainted."

12. ARTISTIC IMPRESSIONS

An unusual mix of artists has depicted the landscape here. They show the artistic eye that has grasped the landscape.

12.1 MARGUERITE BRIDE

Artist Marguerite Bride, a Berkshire resident since 1995, trained at Worcester Art Museum, Interlaken School of Art and Berkshire Community College. Her watercolor *Berkshire Farm in Winter* captures the rambling New England connected architecture of Pulpit Rock Farm (See 5.5 TWEENBROOKS & PULPIT ROCK FARMS). Her *Lenox Flats, Housatonic Reflections* and *On the River* paintings depict landscapes along the Housatonic in Lenox Dale.

12.2 J.L. GARDNER

Pittsfield photographer J.L. "Jeff" Gardner's snapped *Frosty Farm on Winter Day* at the DeVos farm in winter 2004, a year before the buildings there were razed. The scene is from the East New Lenox Road bridge over the Housatonic River, with October Mountain in the background.

12.3 WOLDEMAR NEUFELD

"My father didn't want me to be an artist. He wanted me to be an engineer and I wanted to build bridges. But in the 1930s, engineers were peddling apples. So I studied art and naturally my favorite subjects were bridges," Woldemar Neufeld (1909-2002) said. Born in Russia, raised in Ontario, active in New York, thriving in New Milford, Conn., Neufeld painted scenes of every bridge over the Housatonic River as an American Bicentennial project. The 65 paintings have been exhibited at the Berkshire Museum and the Housatonic Valley Association. "Bridges Across the Housatonic" includes Golden Hill Road, Walker Street, Valley Mill Road, Housatonic Street, New Lenox Road and Holmes Road.

12.4 BILL GRIFFITH

Bill Griffith began his artistic career drawing cartoons for the *East Village Other*. Active in the underground comix movement of the 1970s, he brought his Zippy the Pinhead character into legitimacy and national newspaper syndication in 1976. The Connecticut resident frequently works roadside diners and natural curiosities into his daily strip stories. "Copping a Plea," which appeared in *The Berkshire Eagle* and other publications 17 January 2003, shows Frog Rock "somewhere in Lenoxdale, Mass.," in a monologue about loneliness. This leads to...

12.5 PETER J. TYER

...Frog Rock, itself a piece of art. Peter Joseph "Uncle Pete" Tyler (1864-1942), an outdoorsman with a keen wit, worked for Smith Paper for 55 years, the last as superintendent. He had charge of the manufacture of fine tissue papers, and was known for his sensitive eye for color. He lived in mill housing across from the Centennial Mill. Tyer one day found a boulder in the river just below Valley Mill dam that to his eye resembled a giant frog. He had Amos Washburn, an artist and house painter, render the boulder green and give it eyes. The frog became a popular sight from passing trains. "The Sage of Frog's Landing," as Tyer came to be known, in 1915 accepted appointment to the Mount Everett Commission. Other hands have maintained his stone frog since his death.

12.6 "TH"

Proud of its accomplishments in bring its state forest system into shape, the Massachusetts commissioner of conservation, Division of Forestry, in 1935 issued *Massachusetts State Forests*, with descriptions of each park. The publication includes a tri-fold black-and-white elevation drawing of virtually the length of the proposed ACEC area, looking east, as a hawk would see it. It spans Roaring Brook in the north to East Lee in the south. Washington Town Hall is evident in the distance. The artist is uncredited, but used an initial form that may be "Th."

13. AUTHOR

Bernard A. Drew, a journalist, local historian and author of reference books, prepared this history. A Great Barrington resident, he is a past president of the Berkshire County Historical Society and Great Barrington Historical Society, is a member of the Upper Housatonic African American Heritage Trail, is on the steering committee of Friends of the Du Bois Homesite, is a past member of the board of the Upper Housatonic National Heritage Area, is a property steward for Berkshire Natural Resource Council and belongs to The Trustees of Reservations, the Society for Industrial Archaeology and the Thoreau Society. He is an "Our Berkshires" columnist for *The Berkshire Eagle*. He has written *Berkshire Forests Shade the Past* (2007), *The Berkshire Photo Album* (1999) and 25 other published Berkshire histories.

14. BIBLIOGRAPHY

Abbott, Kate, "At Eastover Resort, it's still all in the family," *Advocate*, 15 April 2004.

Adams, John Coleman. *Nature Studies in Berkshire*. New York: Putnam's, 1899. Ag Facts Berkshire County, Massachusetts Department of Agricultural Resources. http://www.mass.gov/agr/facts/berkshire.htm (viewed 17 May 2008).

"An Entire Mountain For Sale," *Boston Daily Globe*. 7 April 1907.

"An Interesting Case," *Boston Daily Globe*, 11 October 1882.

"Animals Perish in Flames; Col. Walter Cutting's Stock and Property Destroyed Near Pittsfield," *New York Times*, 1 October 1907.

"Arrowhead,' The Pittsfield, Mass., Home of Herman Melville now open to the Public," *Newtown Bee*, 6 August 1976.

"Arrow Head, Literary Shrine, Scene of 'I and My Chimney," *Berkshire Evening Eagle*, 11 February 1923.

Atlas of Berkshire County. Pittsfield: Barnes & Farnum, 1904.

"Background information concerning the original 1791 document containing the bylaw prohibiting baseball, and other games played with balls," Local History & Genealogy Department, Berkshire Athenaeum. http://www.pittsfield-

ma.org/images/downloads/document history.pdf (viewed 16 May 2008).

Barg, Shary Page. The Civilian Conservation Corps; Shaping the Forests and Parks of Massachusetts. A Statewide Survey of Civilian Conservation Corps Resource.

Boston: Department of Environmental Management, 1999.

"Bay State Buffaloes: Great Game Preserve on October Mountain," *Boston Daily Globe*, 1 August 1897.

Beecher, Henry Ward. *Star Papers; Experiences of Art and Nature*. New York: J.C. Derby, 1855.

Berkshire Farm in Winter, Marguerite Bride watercolor,

http://www.margebride.com/enl-Berkshire%20Farm-Winter.htm (viewed 20 May 2008).

Beers, F.W. *County Atlas of Berkshire, Massachusetts*. New York; R.T. White, 1876. "Berkshire Hoards of Indian Relics of Much Interest," *Berkshire Eagle*, 29 July 1922.

"Berkshire In The Winter," New York Times, 7 February 1881.

"Berkshire Trolley Line," New York Times, 3 March 1901.

Boltwood, Edward. The History of Pittsfield, Massachusetts, From the Year 1876 to the Year 1916. Pittsfield: City, 1916.

Bowen, Catherine Drinker. *Yankee from Olympus: Justice Holmes and His Family*. Boston: Little Brown, 1944.

Bride, Marguerite Web site, http://www.margebride.com/Town%20Listing.htm (viewed 20 May 2008).

Bruun, Erik, "Archeologists dig up clues to Berkshires' prehistoric past," *Advocate*, 24 June 1992.

Bryan, Clark W. *Through the Housatonic Valley to the Hills and Homes of Berkshire, Prepared for the Housatonic Railroad*. Great Barrington: Clark W. Bryan & Co., 1992.

Bulkeley, Morgan G. *Berkshire Stories*. Great Barrington: Lindisfarne Books, 2004, —, "Headway on the Housatonic," *Berkshire Eagle*, 11 May 1978.

—. *Housatonic Greenway*. Unpublished manuscript, collection of newspaper columns 1960-1974. Courtesy Morgan G. Bulkeley IV.

—, "River Reports," *Berkshire Eagle*, 10, 17, 24 August 1961 (reprinted in *Berkshire Stories*).

Butler, Leona Alice, to General Electric, property on East New Lenox Road, Pittsfield, Middle Berkshire District Registry of Deeds, Book 3865/Page 288, 10 August 2007.

Butler, Wellington J., Pulpit Rock Farm, to Massachusetts Department of Conservation & Recreation, conservation restriction, property at 916 East New Lenox Road, Pittsfield, Middle Berkshire District Registry of Deeds, Book 3840/Page 1, 6 July 2007.

Canoeing Guide for the Housatonic River in Berkshire County including The Williams River, third edition. Pittsfield: Berkshire County Regional Planning Commission & Housatonic Valley Association, 2001.

"Canoe Meadows given an addition," Berkshire Eagle, 24 January 1980.

Carman, Linda, "Housatonic's 'green corridor' made nearly complete by gift," *Berkshire Eagle*, 40 November 1979.

Carman, Linda, "Research group takes over Lenox high-voltage facility," *Berkshire Eagle*, 18 September 1985.

Carr, Amy, "Electric Power Research Institute: Marking 50 years with a bang," *Berkshire Eagle*, 13 June 2008.

Cawley, James and Margaret. *Exploring the Housatonic River and Valley*. New York: A.S. Barnes, 1978.

Chapman, Gerard, "Lee's captain of industry," *Berkshire Eagle*, 27 September 1977. —, "The Housatonic line," *Berkshire Eagle*, 1 June 1982.

—, "The newsprint revolution," *Berkshire Eagle*, 3 November 1977.

Child, Hamilton. *Gazetteer of Berkshire County, Mass. 1725-1885*. Syracuse, N.Y.: Child, 1885.

Civilian Conservation Corps: Official Annual, 1937, Third C.C.C. District – First Corps Area. DirectAdvertising Co., 1937.

"Col. Lathers's Golden Wedding," New York Times, 10 July 1896.

"Col. Walter Cutting Dead," New York Times, 24 July 1907.

Consolati, Florence. See All The People. Lee: Consolati, 1978.

Cooperman, Alan, "Kimberly-Clark sells former mill to Lee contractor," *Berkshire Eagle*, 10 December 1984.

Cronon, William. *Changes in the Land: Indians, Colonists, and the Ecology of New England*. New York: Hill & Wang, 1983.

Cumbler, John T. Reasonable Use: The People, the Environment, and the State, New England 1790-1930. New York: Oxford University Press, 2001.

Cummings, O.R. *A History of the Berkshire Street Railway*. Warehouse Point, CT: Connecticut Valley Chapter, National Railway Historical Society, January-December 1972.

"Death of Col. R. Lathers," New York Times, 18 September 1903.

"Death of Mrs. [Flora Payne] Whitney," New York Times, 5 February 1893.

Deedy, John, "Where Melville Wrote, New York Times, 25 April 1976.

Dew, Jack, "General Electric Co. has bought two parcels of land along the

Housatonic River," Berkshire Eagle, 6 September 2007.

"Down on the farm," Berkshire Eagle, 17 October 1981.

"Dr. McEachron, 64, Dies; World Famed GE Engineer," *Berkshire Evening Eagle*, 25 January 1954.

Drew, Bernard A., "Eugene Brielman, Holmes Road veterinarian," *Berkshire Eagle*, 19 December 2007.

-, "Lemuel Pomeroy, county industrialist," *Berkshire Eagle*, 17 May 2008.

—, "Lenticular Bridges in the Berkshires," *Journal of the Society for Industrial Archaeology*, Vol. 5. No. 1.

—. *Walter Prichard Eaton's The Odyssey of Old Bill, The Berkshire Moose.* "Great Barrington: Attic Revivals Press, 1996.

—, "Woldemar Neufeld: preserving with a brush," *River Valley Chronicle*, September 1978.

Dunn, Shirley. *The Mohican World 1680-1750*. Fleischmanns, N.Y.: Purple Mountain Press, 2000.

—. *The Mohicans and Their Land 1609-1740*. Fleischmanns, N.Y.: Purple Mountain Press, 1994.

East Lee, Stockbridge, Pittsfield East topographic maps, U.S. Geological Survey, 1987/1997.

Elliott, Louise. 1777-1977 Two Hundred Years The history of the town of Washington, Massachusetts. Washington: Historical Commission, 1977.

"End of Malaria Case: Not Guilty," Valley Gleaner, 1 November 1882.

EPRI High-Voltage Transmission Laboratory. http://my.epri.com/portal/server.pt? (viewed 15 May 2008).

"Fahnestock Estate Sale Completed," *Berkshire Evening Eagle*, 21 July 1943. Fairweather, Judith, "Lenox Historical Society: Unearthing Berkshire County history, piece by piece," *The Advocate*, 12 June 2008.

"Famous Columbia Paper Mill in Lee," *Springfield Republican*, 4 April 1954. Fellows, Henry Parker. *Boating Trips on New England Rivers*. Boston: Cupples, Upham & Co., 1884.

"Fire Causes One Death at Girls' School; Drives Pupils Into Snow at Another," *New York Times*, 18 February 1923.

"For Berkshire County farmer, clean water is key to conservation stewardship," Natural Resources Conservation Service,

http://www.ma.nrcs.usda.gov/news/feature_CSP2005_Berkshire.html (viewed 16 May 2008).

Frosty Farm on Winter Day, J.L. Gardner photograph,

http://www.artisansoftheberkshires.com/Frosty-Farm-on-Winter-Day-p/jlgu020.htm (viewed 20 May 2008).

"GE/Housatonic River Site in New England: Site History and Description."

http://www.epa.gov/ne/ge/sitehistory.html (viewed 15 May 2008).

Gentile, Derek, "Old bridge to find new life at UMass," *Berkshire Eagle*, 28 October 2002.

"George Bisacca, Eastover owner, dies after being stricken at home," *Berkshire Eagle*, 31 October 1983.

George H. Darey Housatonic Valley Wildlife Management Area,

http://www.mass.gov/dfwele/dfw/dfw_wma/westernwma/george_darey_housatonic_ wma.pdf (viewed 16 May 2008).

"George L. Darey Wildlife Management Area," Berkshire Natural Resources Council Resources Report, http://www.bnrc.net/newsletter/200401/geodarey.htm (viewed 16 May 2008).

Gilder, Cornelia Brooke, and Joan R. Olshansky. *A History of Ventfort Hall*. Lenox: Ventfort Hall Association, 2002.

Gillman, Alec, Visitor Services Supervisor, Mount Greylock Reservation, "CCC Camps in Massachusetts" unpublished manuscript, 18 May 2008 draft. Drew collection.

Goldberger, Nancy, and Andrea Scott, eds. *Art and the River: Views and Visions of the Housatonic*. Great Barrington: Sheffield Art League, 2004.

Greene, Josephine Boardman, John Kittredge and Judith Hill Kittredge. *The Crane Family of Dalton, Massachusetts: Descendants of Zenas5 Crane and his line of descent from Henry1 Crane and Judith Hill Kittredge*. Dalton: Crane & Co., privately printed, 2005.

Griffith, Bill, "Copping a Plea," *Zippy* newspaper syndicated comic strip, 17 January 2003.

Haywood, John. *New England Gazetteer Containing Descriptions of all the States, Counties, and Towns of New England*. Concord, N.H.: Israel S. Boyd & William White, 1839.

"He Owns the Station: Why the Agent at New Lenox Does pretty Much as He Likes," *Boston Daily Globe*, 16 April 1922.

Helman, Scott, and Lucas Wall, "State admits lax dam oversight, orders inspection of private and Mass. structures," *Boston Globe*, 19 October 2005.

"Hill Farms, Deserted, Like Goldsmith's Village," *Boston Daily Globe*, 29 December 1889.

Hochstuhl Jr., "Lee Concern First in Country To Make Paper of Wood Pulp," *Berkshire Eagle*, 4 January 1950.

"Holmesdale' Bought by Weston," *Berkshire Evening Eagle*, 4 September 1928. "Holmesdale, Summer Home of Famous Author, Changes Hands," *Berkshire Eagle*, 16 December 1928.

"Hon. W.C. Whitney Passes Away," *Boston Daily Globe*, 3 February 1904. Housatonic Greenway in Massachusetts: A Progress Report, Housatonic Valley Association, no date (ca 2000s), www.hvatoday.org/land/Mass%GW%20Report.pdf (viewed 27 May 2008).

"Housatonic River Once Goal of Indian Hunters Now Vile, Polluted Stream," *Berkshire Evening Eagle*, 28 September 1929.

"Housatonic River: Beautiful Tributes to Berkshire in Prose and Poetry," *Berkshire Hills*, 1 June 1902.

"In the Berkshires: Marshall R. Kernochan's Songs Sung at Mr. and Mrs. Pollock's Musicale," *New York Times*, 6 September 1911.

"In Their Berkshire Cottage: Mr. and Mrs. Harry Whitney at the Summit of October Mountain," *New York Times*, 1 September 1896.

Jackson, Richard S., and Cornelia Brooke Gilder. *Houses of the Berkshires 1870-1930*. New York: Acanthus Press, 2006.

Johnson, Eric S. *Discovering the Ancient Past at Kampoosa Bog, Stockbridge, Massachusetts*. Amherst: University of Massachusetts Archaeological Services, 1996.

Katz, Judy, "Proposal to draw down Woods Pond being resisted by owner of the dam," *Berkshire Eagle*, 14 June 1985.

Keith, Herbert C., and Charles Rufus Harte. *The Early Iron Industry of Connecticut*. Reprinted from the 55th Annual Report of the Connecticut Society of Civil Engineers, 1935.

Kirby, Ed. *Echoes of Iron in Connecticut's Northwest Corner*. Sharon, Conn.: Sharon Historical Society, 1998.

Lee, Lenox, Pittsfield, Washington topographic maps, U.S. Geological Survey, 1897/1934.

"Lenox Estate Being Sold By Virgillio," *Berkshire Eagle*, 7 June 1946. Lenox history, Town of Lenox.

http://www.townoflenox.com/Public_Documents/LenoxMA_WebDocs/about (viewed 16 May 2008).

"Lenox Proposed Bike Path," Berkshire County Regional Planning Commission, 2008. http://www.berkshireplanning.org/3/bike/download/lenox.pdf (viewed 17 May 2008).

"Lenox Station History," Berkshire Scenic Railway.

http://www.berkshirescenicrailroad.org/history.php (viewed 17 May 2008).

"Lenox Station Restoration Continues," *Along the River: Newsletter of Berkshire Scenic Railway Museum*, fall 1997.

"Lenox Underground Still Keeps Residents Jumpy," *Berkshire Evening Eagle*, 24 May 1946.

"Lenox Undermined," Sunday Morning Call, 26 February 1899.

"Looking Over Their Property," New York Times, 1 March 1891.

Luttenegger, Alan J., and Amy B. Cerato, "Lenticular Truss Bridges of

Massachusetts." http://www.ecs.umass.edu/cee/cee_web/bridge/l.html (viewed 27 May 2008).

Mansfield, Luther Stearns, "Glimpses of Herman Melville's Life in Pittsfield, 1850-1851," *American Literature*, March 1937.

Massachusetts State Forests. Boston: Department of Conservation, 1935.

Melville, Herman, "Cock-A-Doodle-Doo! Or, The Crowing of the Noble Cock Beneventano," *Harper's New Monthly*, December 1853.

Miles, Lion G., "Mahican history corrected," Advocate, 21 October 1992.

—, "The Red Man Dispossessed: The Williams Family and the Alienation of Indian Land in Stockbridge, Massachusetts, 1736-1818," *New England Quarterly*, March 1994.

Miss Hall's School, http://www.misshalls.com/pages/sitepage.cfm?page=105217 (viewed 21 May 2008).

"Miss Mira H. Hall, Girls' School Head; Founder of the Institution at Pittsfield, Mass., Bearing Her Name, 74," *New York Times*, 27 August 1937.

Mohican history, Mohican Nation Stockbridge-Munsee Band.

http://www.mohican.com/history/oeh.htm (viewed 13 September 2000).

Morewood, Henry G., letter to Donald S. Smith, 8 May 1976, Drew collection.

"Mr. Whitney's Game Preserve Opened," New York Times, 3 April 1903.

"Mrs. Wm. C. [Edith] Whitney Dead," New York Times, 7 May 1899.

Neufeld, Woldemar, "Bridges Over the Housatonic," exhibition of watercolors, Kent (Conn.) School, 1976.

"New Depot Ready for Occupancy," *Boston Daily Globe*, 16 August 1903. "New Lenox Thriving Community When Glass Works Were Operated," *Berkshire Eagle*, 4 August 1937.

Noble, George Jr., Tweenbrooks Farm, to Massachusetts Department of Food & Agriculture, Agricultural Preservation Restriction, property on East New Lenox Road, Pittsfield, Middle Berkshire District Registry of Deeds, Book 1672/Page 791, 11 June 1999.

Noble, George Jr., Tweenbrooks Farm, to General Electric, property on East New Lenox Road, Pittsfield, Middle Berkshire District Registry of Deeds, Book 3808/Page 23, 29 May 2007.

Nordstrom, Carl, "Our farming past," *Berkshire Eagle*, 21 November 1979. "Novel Suit Against Mill-Owners," *New York Times*, 31 January 1882.

O'Connell, James. *Upper Housatonic Valley National Heritage Area Feasibility Study*. National Park Service, 2003.

"October Mountain CCC Camp May Close April 1," *Berkshire Eagle*, 1 March 1939. October Mountain State Forest Trail Map. Boston: Massachusetts Department of Environmental Management, 1999.

"Our Business Pioneers: Elizur Smith, Who Made the First Pulp Paper in New England," *Boston Daily Globe*, 26 January 1917.

Painton, Priscilla, "360 acres of pride and tradition: Lenox Dale, residents say, is something special," *Berkshire Eagle*, 20 July 1981.

Pantridge, Margaret," GE seeks to transfer high-voltage operation," *Berkshire Eagle*, 15 November 1984.

Perry, Clay, "Powder-Mill Blast in 1808 Started Paper-Making at Lee," *Springfield Sunday Republican*, 4 April 1954.

"Peter J. Tyer Dies in Lee; Was Sage of Frog's Landing," *Berkshire Evening Eagle*, 12 May 1942.

Pittsfield reservoirs, Department of Environmental Protection Source Water Assessment and Protection Report,

http://www.mass.gov/dep/water/drinking/1152000.pdf (viewed 20 May 2008)

Pittsfield history, City of Pittsfield. http://www.pittsfield-ma.org/history.asp (viewed 16 May 2008).

Pittsfield map, 1783. Berkshire Athenaeum, Pittsfield.

Pittsfield Open Space and Recreation Plan, 2007, www.pittsfield-

ma.org/images/downloads/OSRP.pdf (viewed 16 May 2008).

Pittsfield Waste Water Treatment Plant, Frequently Asked Questions.

http://www.pittsfield-ma.org/subpage.asp?ID=208 (viewed 16 May 2008).

"Pollock Stables Burned," New York Times, 21 September 1913.

Post, Thomas, transactions on behalf of William C. Whitney, Middle Berkshire District, Registry of Deeds.

"Railroad Service at Lenox," New York Times, 16 February 1896.

"Raises Shetland Ponies On Washington Mountain," *Springfield Sunday Republican*," 25 February 1923.

"Real Bull Moose Holds Up New Haven Express Train," *New York Times*, 7 October 1920.

Rolando, Victor R. 200 Years of Soot and Sweat: The History and Archeology of Vermont's Iron, Charcoal, and Lime Industries. Burlington: Vermont Archaeological Society, 1992.

"Romance of October Mountain," Boston Daily Globe, 21 July 1903.

Rud, A.G., "How hard a river dies," *Berkshire Eagle*, 10 May 1979.

Sigourney, Lydia Howard. *Scenes in My Native Land*. Boston: James Monroe, 1845. Smith, Chard Powers. *The Housatonic: Puritan River*. New York: Rinehart & Co., 1946.

Smith, Charles W.G., and Susan A. Smith. *Discover the Berkshires of*

Massachusetts. Boston: Appalachian Mountain Club, 2003.

Smith, Charles W.G., *Water Trails of Western Massachusetts*. Boston: Appalachian Mountain Club, 2001.

Smith, J.E.A. *The History of Pittsfield (Berkshire County) Massachusetts, From the Year 1734 to the Year 1800.* Boston: Lee and Shepard, 1869.

—, *The History of Pittsfield (Berkshire County) Massachusetts, from the Year 1800 to the Year 1876.* Boston: Lee and Shepard, 1876.

State Forests and Parks of Massachusetts: A Recreation Guide Compiled and written by the Massachusetts WPA Writers' Project. Boston: Department of Conservation, 1941.

"State Gets Big Reservation on October Mountain, Berkshires," *Boston Daily Globe*, 25 March 1922.

Stevens, Lauren R., "Artifacts from early humans found at site in south county," *Advocate*, 21 July 1993.

-, "Uncovering history," Advocate, 12 January 1994.

-, "Unearthing our history," Advocate, 30 March 1994.

"Stockbridge and Pittsfield Railroad, Berkshire Courier, 6 June 1850.

"Swept Through a Millrace," New York Times, 24 June 1903.

"Taylor, governor assist cleanup," Berkshire Eagle, 18 May 2008.

Taylor, Holly A., "Bypass survey unearths prehistoric Indian sites," *Berkshire Eagle*, 10 December 1986.

This Discursive Biographical Sketch 1841-1902 of Colonel Richard Lathers was compiled as Required for Honorary Membership in Post 509, Grand Army of the Republic, Embracing a Sixty Years' Residence in South Carolina, new York, and Massachusetts: Devoted Actively to Commerce, Agriculture, insurance, banking, and railroad Enterprise. Philadelphia: J.B. Lippincott, 1902.

"Vigorous Pioneer Life of Pittsfield," New York Times, 31 May 1929.

Walling, Henry F. *Map of Berkshire Massachusetts*. Boston: Smith, Gallup 1858. "Washington Man Outdoes Texas Turkey Raisers with Flock of Gobblers,"

Berkshire Evening Eagle, 5 October 1923.

"W.C. Whitney's Estate Valued at \$21,000,000," *New York Times*, 28 July 1904. "W.C. Whitney Is to Wed," *New York Times*, 29 September 1896.

"Weston Estate, Holmesdale, Sold to Zenas Colt of Dalton," *Berkshire Evening Eagle*, 26 September 1949.

"William C. Whitney Dead; Appendicitis Kills Former Secretary of Navy," *Pittsfield Sun*, 4 February 1904.

"William C. Whitney Passes Away," *New York Times*, 3 February 1904. Willison, George F. *The History of Pittsfield, Massachusetts, 1916-1955*. Pittsfield: City, 1957.

Wilson, John S. *The Upper Factory Brook Sawmill Site: An Early Industrial Site in Middlefield, Massachusetts*. Amherst: Graduate School of the University of Massachusetts, January 1976.

"Woldemar Neufeld 1909-2002," Housatonic Valley Association. http://www.hvatoday.org/show.cfm?page=events/neufeldbio.htm&folder=events (viewed 17 May 2008).

Wood, David. *Lenox: Massachusetts Shire Town*. Lenox: Town, 1969. Woodbury, Susanna, "New Woods Pond footbridge envisioned," *Berkshire Record*, 16 August 1996.

Appendix G. Description of Public Outreach

G.1 Summary

<u>G.1.1</u> Steering Committee (Nomination Sponsors)

Members of the Steering Committee preparing the nomination of the Upper Housatonic River ACEC began informally contacting local officials, residents, and members of various community and environmental organizations about submitting an ACEC nomination in May 2008. The Steering Committee is comprised of representatives of the Berkshire County League of Sportsmen, Berkshire Natural Resources Council, Green Berkshires, Inc., and the Massachusetts Audubon Society (Mass Audubon). One of the goals of the Steering Committee is to use the vehicle of an ACEC nomination and designation to build a strong coalition of citizens, organizations, and local and state governments to preserve and restore the upper Housatonic River.

<u>G.1.2</u> www.savethehousatonic.org Website

To support this effort, the Steering Committee also created the www.savethehousatonic.org website, which went on-line July 19, 2008. The website provides a wealth of information on the ACEC Program, a summary and maps of the Upper Housatonic River ACEC nomination, and facts about the contamination of the Housatonic River and the actions of General Electric and the U.S. Environmental Protection Agency to address the mandated clean-up of the river. The complete ACEC nomination document, and supporting maps, will be posted on the website following the formal submittal of the nomination to Massachusetts Secretary of Energy and Environment Ian Bowles.

<u>G.1.3</u> Support for the Nomination

Informal support for the nomination has grown over the course of several weeks and months. Organizations publicly supporting the nomination include:

Berkshires Environmental Action Team (BEAT) Berkshire Litchfield Environmental Council (BLEC) Citizens for PCB Removal (CPR) Housatonic Clean River Coalition (HCRC) Housatonic Environmental Action League (HEAL) Housatonic River Initiative (HRI) Housatonic River Walk of Great Barrington Housatonic Valley Association (HVA) The Nature Conservancy (TNC) Northwest Conservation District (NCD) Stratford Action for the Environment (SAFE) Taconic Chapter of Trout Unlimited Trout Unlimited (TU).

Members of the Steering Committee met with the Lenox Board of Selectmen on July 10, 2008, and with the Lee Board of Selectmen on August 19, 2008, and received the strong endorsement of both boards. The *Berkshire Record* published an article about the Lee Selectmen meeting on August 20, 2008. Meetings were held with Pittsfield City Councilors Jonathan Lothrop and Mike Ward, and with state legislators Senator Ben Downing and Representatives Denis Guyer, Smitty Pignatelli, and Christopher Speranzo in late May-early June. Members of the Committee also met with U.S. Representative John Olver. All of these local, state, and federal legislators expressed support for the nomination.

The Steering Committee anticipates that the list of supporters will continue to grow over the coming weeks and months.

<u>G.1.4</u> August 7, 2008 Public Meeting in Lenox

As suggested by ACEC Program guidelines and ACEC Program staff, a public meeting was organized and held on the evening of August 7, 2008 in the Lenox Town Hall, an easily-accessible and central location for the area of the ACEC nomination. Approximately 135 people attended the meeting. Strong support was voiced for the ACEC nomination. Copies of the agenda and handouts are included in this appendix. Advance publicity for the meeting included published advertisements in the *Berkshire Eagle* on July 21 and 27 and August 3 and 4, 2008. A July 21, 2008 article and a July 21, 2008 editorial appeared in the *Berkshire Eagle* prior to the meeting, and an August 8, 2008 *Berkshire Eagle* article was published following the meeting In addition, public radio station WMAC included a story regarding the nomination effort on July 23, 2008.

<u>G.1.5</u> Letters Sent to Landowners and Town Officials

Also, as suggested by ACEC Program guidelines and ACEC Program staff, in advance of the public meeting, the Steering Committee sent a letter on August 1, 2008 to owners of property of 10 acres or more located within the proposed ACEC. The letter included a map of the proposed ACEC boundary, a two-page summary of the nomination, and an ACEC Program Frequently Asked Questions (FAQ) handout. A similar letter with the same enclosures plus a separate meeting announcement flyer was sent to community leaders in Lee, Lenox, Pittsfield, and Washington.

<u>G.1.6</u> Media Coverage

As indicated above, several news articles, an editorial, and a radio story covered the proposed ACEC nomination. A list of this media coverage is included below, and copies of this material are included in this appendix. In addition, members of the Steering Committee met with the editorial board of the *Berkshire Eagle* on July 18, 2008.

G.2 List of Materials Included in the Appendix

<u>G.2.1</u> News articles and advertisements appearing in local media outlets

<u>G.2.1.1</u> July 21 and 27, 2008 advertisements in *Berkshire Eagle*.

<u>G.2.1.2</u> August 3 and 4, 2008 advertisements in *Berkshire Eagle*.

<u>G.2.1.3</u> Kevin Moran, "Conservation groups seek special label for Housatonic," *Berkshire Eagle*, July 21, 2008.

<u>G.2.1.4</u> Editorial, "Seeking a better cleanup," *Berkshire Eagle*, July 21, 2008.

<u>**G.2.1.5</u>** Carrie Saldo, "New Conservation Group Seeks Protective Designation for Housatonic," WAMC, July 23, 2008.</u>

<u>G.2.1.6</u> Gene Chague, "ACEC would be aces for Berkshire waters," *Berkshire Eagle*, July 27, 2008.

<u>G.2.1.7</u> Jack Dew, "Housatonic PCB Cleanup Coalition moves to preserve river," *Berkshire Eagle*, August 8, 2008.

<u>G.2.1.8</u> Michael Kelley, "Local group petitions for special designation for Housatonic River," *Berkshire Record*, August 22-28, 2008.

<u>G.2.2</u> Letters to Landowners and Community Leaders

- G.2.2.1 Letter to landowners
- **<u>G.2.2.2</u>** Letter to community leaders
- **<u>G.2.2.3</u>** Enclosures for both letters
 - **<u>G.2.2.3.1</u>** Upper Housatonic River ACEC Nomination summary
 - **<u>G.2.2.3.2</u>** ACEC Frequency Asked Questions (FAQ)
 - <u>G.2.2.3.3</u> Proposed ACEC Boundary map

<u>**G.2.2.3.4</u>** August 7, 2008 public meeting announcement flyer (sent to community leaders only)</u>

<u>G.2.3</u> August 7, 2008 Public Meeting Agenda and Handouts

- <u>G.2.3.1</u> Agenda
- <u>**G.2.3.2</u>** Upper Housatonic River ACEC Nomination Summary</u>
- **<u>G.2.3.3</u>** ACEC Frequently Asked Questions (FAQ)
- <u>G.2.3.4</u> Proposed ACEC Boundary map

Save the Housatonic!

The proposed plan for PCB cleanup will end the Housatonic River's life as a natural ecosystem while disrupting neighborhoods for years to come.

We must do better.

Please join us to put the Housatonic River on track for a healthier, more natural future.

Thursday, August 7th, 7:00 p.m., Lenox Town Hall

Your voice matters — let it be heard!

Berkshire County League of Sportsmen Berkshire Natural Resources Council Green Berkshires Massachusetts Audubon Society

www.SaveTheHousatonic.org

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The Berkshire Eagle

Housatonic River

Conservation groups seek special label for Housatonic

By Kevin Moran, Berkshire Eagle Staff Article Last Updated: 07/21/2008 10:18:58 AM EDT

Monday, July 21 PITTSFIELD — Several conservation groups are seeking a special environmental designation for the upper stretch of the Housatonic River, a move that could shape the PCB cleanup and restoration by giving the state a larger say in the process.

If successful, the state designation — called an Area of Critical Environmental Concern — would also add a layer of conservation standards, raise the levels of environmental review and encourage stewardship of the nearly 1,300-acre parcel.

It would also bar dredging the river and landfilling the contaminated soils on the site without a state-granted waiver. This alone would prompt rethinking the cleanup and restoration methods like those carried out in the Housatonic in Pittsfield, according to Save the Housatonic, an organization comprised of the Berkshire League of Sportsmen, Berkshire Natural Resources Council, Green Berkshires Inc., and Massachusetts Audubon Society. The group plans to unveil its plan at a public meeting on Thursday, Aug. 7, at 7 p.m., in the Lenox Town Hall.

The area's boundary would encompass the river south of Memorial Park in Pittsfield to about two miles south of Woods Pond in Lenox and includes October Mountain to the east — all land located in Pittsfield, Lenox, Lee and Washington.

"Everyone wants to see the river cleaned," said George S. Wislocki, a director of Green Berkshires. "But we want to do it thoughtfully and carefully — that's the urgency."

The group is the latest to surface in opposition to a GE plan to remedy PCB — or polychlorinated biphenyl — pollution found in the Housatonic below the point where the east and west branches meet. GE's proposal calls for dredging the first five miles of river and covering the next five miles and Woods Pond with a thin layer of sand.

The EPA has said it would seek major changes to GE's proposal, but growing public opposition to an invasive cleanup has delayed the agency's response. Last month, state Environmental Affairs Secretary Ian Bowles asked the EPA to wait so that alternatives could be discussed. Meanwhile, nearly three dozen citizen groups and civic organizations have formed the Housatonic Clean River Coalition to demand that new cleanup methods be considered and that the public be granted a larger role in the coming decisions.

All of the cleanup is being performed under the terms of a settlement that was finalized in October 2000. GE, the EPA, the state and the city of Pittsfield all signed onto that deal, which has guided the cleanup of the river and GE's plant since.

But Tad Ames, president of the Berkshire Natural Resources Council, said the cleanup that has already been performed along a two-mile stretch of river in Pittsfield is not an appropriate way to fix the rest of the river.

GE and the EPA dredged the first two miles over a six-year period. They then armored the banks with rip-rap — heavy stones and soil — to prevent erosion. Critics have said the river now looks "channelized" and lost its natural beauty.

"No otter is going to want to walk the walk on a thing like that every day," said George Darey, of Lenox, who is also chairman of the state Fisheries & Wildlife Board.

An ACEC "would not prevent a cleanup, but it would make the cleanup pay more attention to the delicacy of the river," Ames said. "We need to take from what we learned in Pittsfield ... and do it better. It doesn't change the fundamentals of the cleanup, but (it makes one ask) what can we do better?"

At the end of August, Save the Housatonic will file the nomination paperwork for the Area of Critical Environmental Concern with state Environmental Affairs Secretary Bowles. After that, a public hearing will be held on it. Bowles will have final say on the designation.

Eagle reporter Jack Dew contributed to this story.

The Berkshire Eagle

Seeking a better cleanup

Editorial

Article Last Updated: 07/21/2008 03:00:11 AM EDT

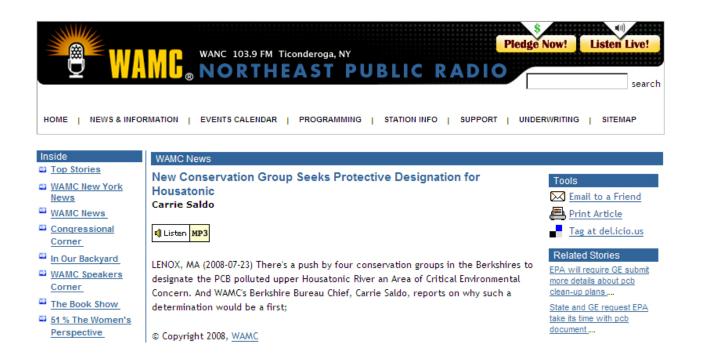
Monday, July 21

The proposal by Save the Housatonic, a coalition of four Berkshire environmental groups, to seek a special designation for the Upper Housatonic River that will raise the standards for the anticipated cleanup, has considerable potential given the growing consensus that General Electric's plan is inadequate. This designation would give the state a role in the process, a role it should be willing to play.

Save the Housatonic is seeking an Area of Critical Environmental Concern (ACEC) designation for a roughly 1,300-acre parcel that encompasses the river south of Memorial Park in Pittsfield to roughly two miles south of Woods Pond in Lenox, and includes October Mountain to the East. The environmental review standards would be raised and ideally, consideration would be given to possible alternative cleanup methods, as well as the impact of the cleanup on wildlife and even the proposed bike trail through Pittsfield and Lenox.

The cleanup procedure for the river worked well enough for Pittsfield, but as the work proceeds south, aesthetic considerations enter the picture, as well as concerns about the impact upon the abundant wildlife. ACEC designation could help assure that those concerns are addressed and lessons learned from the cleanup in Pittsfield are applied to the rest of the river.

ACEC designation bars dredging without a state waiver, and it would be counter-productive if ACEC in any way hamstrings a cleanup indefinitely. This concern and others can be raised at a public hearing August 7 at the Lenox Town Hall, but if ACEC can facilitate a cleanup of the river that will assure that the cure is not worse than the disease, that designation will be well worth pursuing.



The Berkshire Eagle

Berkshire Woods & Waters

ACEC would be aces for Berkshire waters

By Gene Chague Article Last Updated: 07/28/2008 01:51:11 PM EDT

Sunday, July 27 LENOX

The recent news that the newly-formed organization called Save the Housatonic is attempting to establish an area of critical environmental concern in the Housatonic River watershed comes as good news to local sportsmen and conservationists. (See July 21, 2008 Berkshire Eagle article entitled Groups seek special label). Hats off to the Berkshire County League of Sportsmen, Berkshire Natural Resources Council, Mass Audubon and Green Berkshires for heading up this project.

Although the details will be unveiled at an Aug. 7 meeting at the Lenox Town Hall, it was disclosed that the ACEC would cover the area from Memorial Park in Pittsfield to about two miles south of Woods Pond. Some of the brooks that feed the river in this stretch from north to south are: Sackett, Sykes, Yokum, Mill, Roaring, Sawmill, Felton, Woods Crossing, Washington Mountain, and several others that are unnamed or their names are unknown to me. There are many smaller streams that feed the above listed ones, too. Undoubtedly, there are ponds such as Felton Pond on October Mountain that will also be included in this area. Think of all of the plants and wildlife that these water bodies support. Most of these brooks contain populations of wild brook trout and they could certainly benefit by the additional layer of environmental review.

Included in this area are thousands of acres of open space owned and managed by the Massachusetts Department of Fisheries and Wildlife, the Massachusetts Department of Conservation and Recreation, the Massachusetts Audubon Society, Berkshire Natural Resources, and the lands preserved and/or protected by the various towns in the area, such as the Post Farm in Lenox. According to Fish and Wildlife Board Chairman, George Darey, the area is unique in that it contains the largest contiguous wetland that is open for passive recreation west of the Connecticut River. According to the DFW, the area from New Lenox Road in Lenox to Woods Pond in Lenox Dale is considered the second-best warm-water fishery in the commonwealth.

What effects, if any, this designation would have on the General Electric Polychlorinated biphenyls clean up is unclear at this point, but no matter. Sportsmen and conservationists should seize the moment and give moral and financial support to the proposed ACEC. This river, its

watershed and the critters that live in it deserve nothing less.

Because of past GE discharges of PCBs into the 26-acre Silver Lake in Pittsfield, it was required by a consent decree between the Environmental Protection Agency and GE to remove about 400 cubic yards of contaminated sediments from a section of the lake and then cap the entire lake bottom. In a recent report to the Citizen's Coordinating Council, Kenneth Munney from the United States Fish and Wildlife Service reported that based on fish tissue (which showed PCB levels from 24 to 168 parts per million) some fish removal is warranted. The fish targeted for removal will be the larger sized carp, goldfish, largemouth bass, yellow perch, white sucker and sunfish. They will be removed, dispatched and disposed at an out-of-area toxic waste dump.

According to Munney, two reasons for the fish removal (which will be conducted by electroshocking and gill netting) are to eliminate the possibility of PCB recontamination when the older, larger fish die and drop to the bottom, and also to eliminate the possibility of the larger fish stirring up the sediment when they are poking around (presumably for food or spawning). The lake will not be restocked, but rather the smaller fish will be left to repopulate it naturally. The fish removal operations are scheduled to begin this summer and continue through the fall.

Local environmental groups such as the Berkshire Environmental Action Team and the Housatonic River Initiative are upset because habitat restoration was also spelled out in the consent decree along with the destruction of the fish. They believe that neither GE, nor the USFW, plan to restore the habitat because they might be liable if the cap fails because of the restoration. (Some feel it is likely that plants would eventually penetrate the cap). Because of the change of the remediation plans, a modification to the consent decree was required.

Some environmentalists feel that GE should be required to clean up the lake at least enough to restore habitat all along the shoreline. They are hoping that the Massachusetts Department of Environmental Protection will intervene and insist on a restoration which would then require a better cleanup.

One can't help but wonder what kind of remediation will take place on Silver Lake when there is concern that poking fish or plant growth could undo some of the remediation effort.

There is one other Housatonic River related matter that I would like to pass on. A few weeks ago I bumped into Jack Teahan, an old fishing friend from the Springfield area who I had not seen in 10 years. After exchanging the usual niceties and silently observing how each of us had aged, he couldn't wait to tell me about a wonderful experience he had recently when he took a day off to do some fishing in the Housatonic River catch-and-release area in Lee.

Yes, he caught some nice fish, but what really made his day was how friendly and helpful the people were that he met on different sections of the river. They unselfishly told him where to fish and what flies to use and also suggested where to have lunch. Jack remarked that the whole day

was a wonderful, memorable fishing experience in the Berkshires.

With treatment like that, it's no wonder that the catch-and-release area is becoming a destination point for more and more out-of-area visitors.

To reach Gene Chague: berkwoodsandwaters@adelphia.net, (413)637-1818.

The Berkshire Eagle

Housatonic PCB Cleanup Coalition moves to preserve river

Jack Dew, Berkshire Eagle Staff Article Last Updated: 08/08/2008 03:04:47 AM EDT

Friday, August 08

LENOX — Seeking a stronger local voice in the cleanup of the Housatonic River, a new coalition of conservation groups last night unveiled plans to seek a special designation for the heavily polluted river.

The group — Save the Housatonic — will nominate the river as an Area of Critical Environmental Concern, or ACEC. If successful, the designation would add conservation standards to a 12.9 mile stretch of river and roughly 1,300 surrounding acres, likely requiring special permission from the state for any dredging or landfill within those boundaries.

"We want to give (the state) a tool to negotiate for the best possible cleanup," said Eleanor Tillinghast of Green Berkshires, one of four groups that constitute Save the Housatonic. "And we want to use this tool to encourage people to evaluate cleanup options and how they might affect the river and surrounding lands and neighborhoods."

The Berkshire County League of Sportsmen, Berkshire Natural Resources Council, and Massachusetts Audobon Society have joined Green Berkshires in the new group. They will send the ACEC nomination to the state Executive Office of Energy and Environmental Affairs, which is expected to hold several public information sessions before rendering a decision, which could come late this year or early next.

The move is the latest iteration of intense local opposition to a proposal by General Electric to remove PCBs from the river as it runs out of Pittsfield and through South County. GE is required to perform the cleanup by the terms of a settlement finalized in October 2000.

The company used PCBs, or polychlorinated biphenyls, until 1977, when the government banned the chemical, which is considered a probable cause of cancer and has been linked to a host of health problems. The EPA's studies have concluded that the pollution in the Housatonic threatens people, wildlife and the ecosystem.

Last night, as more than 100 people filled the auditorium in the Lenox Town Hall, a panel of proponents made the case for the ACEC designation. They projected two pictures on a movie screen: The first showed a stretch of river in Pittsfield that has already been dredged and restored.

The stripped banks were lined with sun-bleached rocks and newly planted trees protected against beavers by rings of chicken wire. The next frame showed a verdant curve of Housatonic, shade trees leaning gently over dark undergrowth and green lily pads.

George Wislocki, the former president of the Berkshire Natural Resources Council, said the Pittsfield cleanup was "the turning point. It was plainly clear that this was not what we wanted for this river."

GE is proposing to dredge the first five miles of river south of Fred Garner River Park on Pittsfield's Pomeroy Avenue. It would cover the next five miles and Woods Pond with a thin layer of sand. South of Woods Pond, it would do nothing.

The EPA is the final authority on the cleanup and has already said it will seek major changes to GE's proposal. But opposition from local groups and the state Executive Office of Energy and Environmental Affairs has created a standstill, with the EPA delaying its response to GE.

It is not clear how the ACEC designation would interact with the cleanup settlement. When that deal was finalized in a federal court in 2000, the state signed on, as did the EPA, General Electric, the city of Pittsfield and several additional federal agencies.

While the supporters of the new designation said it would force the EPA to respect the state's wishes, they acknowledged there is a possible loophole: The EPA can waive the state's restrictions, allowing GE to go forward. The state would have the right to appeal, they said, but it is not certain that a court would look favorably on a state that is trying to make changes in 2008 to a deal it signed in 2000.

There are also fears that the push to restrict dredging could stop the cleanup altogether. Benno Friedman, an environmentalist with the Housatonic River Initiative, said that won't happen.

"This is a very useful, very powerful addition to the arsenal" used to fight for the river, he said. "It will help shape the cleanup that is most definitely going to occur. The ACEC will not stop the cleanup, and that is not the intention of anyone associated with the ACEC."

To reach Jack Dew: jdew@berkshireeagle.com (413) 496-6241

Local group petitions for special designation for Housatonic River

By Michael Kelley

LEE – A group of environmentally minded individuals from the Berkshire County League of Sportsmen, the Berkshire Natural Resources Council, Green Berkshires and the Massachusetts Audubon Society, are teaming up to bring an added sense of protection to the Housatonic River.

The group, Save the Housatonic, is in the midst of nominating a stretch of the river as an Area of Critical Environmental Concern (ACEC), a designation bestowed by the state because of an area's quality, uniqueness and significance of its natural and cultural resources.

The purpose behind designating the area an ACEC is to protect the natural resources of the river, which Green Berkshires President Eleanor Tillinghast said houses 31 rare species and includes breeding ground for 30 fish species.

The section of the river being nominated is a 12.9 mile, 12,280 acre stretch running through Pittsfield, Lenox, Washington and Lee from the east and west branches of the river in Pittsfield to Golden Hill Road in Lenox.

The ACEC, Tillinghast said, includes both public and private, developed and undeveloped and residential and commercial properties and does not limit development within its boundaries or supercede local regulations.

Since its inception in 1975, 28 ACECs have been named covering 73 communities in Massachusetts. There are three ACECs in South County including Kampoosa Bog in Stockbridge, Karner Brook in Egremont and Schenob Brook in Mt. Washington.

Save The Housatonic P.O. Box 501 Great Barrington, MA 01230

Friday, August 1, 2008

Dear Landowner:

As you may know, under a Consent Decree, General Electric has agreed to clean up the polychlorinated biphenyls (PCBs) from the Housatonic River south of Pittsfield, under the direction of the U.S. Environmental Protection Agency.

PCBs have already been removed from two miles of the Housatonic River in Pittsfield. The result is that section of the river today looks like an industrial drainage ditch.

The next stretch of the river passes through Canoe Meadows, the wildlife sanctuary owned by the Massachusetts Audubon Society, and through the George L. Darey Wildlife Management Area owned by the state Division of Fisheries & Wildlife. In addition, the river runs through Post Farm, owned by the town of Lenox, and through neighborhoods in Lenox and Lee.

Many of us feel that this stretch of river -- with over 1,000 acres of protected conservation land -- should be cleaned with greater care, so that this river corridor will continue to serve as an outstanding natural area.

The Berkshire County League of Sportsmen, Berkshire Natural Resources Council, Green Berkshires, and Massachusetts Audubon Society have joined forces in a coalition, "Save The Housatonic," to nominate a 12,280-acre area of the upper Housatonic watershed as an Area of Critical Environmental Concern (ACEC). As shown on the enclosed map, the ACEC will extend along the river from South Pittsfield to North Lee, covering 12.9 miles of the river, and land in Pittsfield, Lenox, Lee, and Washington.

An ACEC is a state designation that will provide the Massachusetts Secretary of Energy and Environmental Affairs a stronger role in the cleanup of the river. ACECs enable a more thorough environmental review for large projects that require state review or funding. ACECs do not generally affect owners of single-family homes. Today, there are four ACEC areas in Berkshire County within the towns of Egremont, Hinsdale, Mount Washington, Sheffield, and Stockbridge. To date, we have received support and encouragement from the Berkshire legislators representing the area, as well as from Congressman John Olver. Town officials have expressed support, as have numerous environmental and sportsmen groups which for generations have enjoyed and protected the river.

More information about the ACEC program and about this particular area being nominated for designation can be found on our website www.SaveTheHousatonic.org. You can also find the list of supporting groups in the Supporters section of the website.

We are also hosting a public meeting about the ACEC at the Lenox Town Hall, Thursday, August 7th, at 7:00 p.m. If you have any questions beforehand, please feel free to contact any of the sponsoring groups through the website, or call me at home, (413) 443-1855.

We hope you will attend this informational meeting to hear more about the proposal and to hear answers to any questions you may have. We look forward to seeing you there, and hope that you will lend your support to this critically important effort.

Cordially yours,

GEORGE 5. WISLOCHI

George S. Wislocki Green Berkshires, Inc.

Mark Jester, Berkshire County League of Sportsmen Tad Ames, Berkshire Natural Resources Council George L. Darey, Green Berkshires, Inc. René Laubach, Massachusetts Audubon Society

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Upper Housatonic River ACEC Nomination – Summary

Area of ACEC Nomination

The primary focus of the Upper Housatonic River ACEC Nomination is the 12.9mile corridor of the Upper Housatonic River from south Pittsfield to north Lee, and portions of the critical supporting watersheds that drain into the river from the east and west. This stretch of the Housatonic is comprised of a complex and rich ecosystem that includes the river itself, adjacent wetlands and floodplains, several tributary streams, abundant wildlife, concentrations of rare species, and the steep, forested, western slopes of October Mountain State Forest. The river and its adjacent uplands also provide an array of dramatic scenic vistas and a wide range of public educational and recreational activities on protected lands, and include important historical and archaeological resources.

•The nominated area covers approximately 12,280 acres in portions of four Berkshire communities – Lee, Lenox, Pittsfield, and Washington. The respective approximate acreage of the nominated area within each community is:

Lee, 1,610 acres;
Lenox, 3,545 acres;
Pittsfield, 3,155 acres; and
Washington, 3,970 acres.

• Protected open space covers 7,730 acres or 63% of the nominated area. The approximate breakdown of open space within the nominated area within each community is:

oLee, 1,055 acres or 66% of the nominated area within Lee;
oLenox, 1,270 acres or 36% of the nominated area within Lenox;
oPittsfield, 1,490 acres or 47% of the nominated area within Pittsfield; and
oWashington, 3,915 acres or 99% of the nominated area within Washington.

• According to available land use data, over 80% of the area is undeveloped.

<u>Resources of the Upper Housatonic ACEC Nomination</u> Wildlife Habitats

- Include 31 State-listed Rare Species and 44 Certified and Potential Vernal Pools. Rare Species include seven Endangered, 13 Threatened, and 11 Special Concern species. Rare Species habitats cover approximately 3,440 acres or 28% of the nominated area.
- Include portions of three separate Biomap Core Habitats, delineated for six exemplary communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders. The area includes 4,600 acres (or 37% of nominated area) of Biomap Core Habitat (plus another 27% of Supporting Natural Landscape).
- Include 3,600 acres (or 29% of nominated area) of Living Waters Core Habitat and Critical Supporting Watershed.

- Include at least 21.5 river miles of Cold Water Fisheries, with breeding populations of native brook trout, and abundant fishery resources, with approximately 30 fish species.
- Include a regionally significant bird habitat and migratory corridor and an Important Bird Area (IBA) designated by Mass Audubon, with more than 200 species recorded since 1970.
- Include a diversity that supports wildlife species both common and rare, such as black bear, moose, deer, coyote, bobcat, fisher, otter and mink.
- In addition, the state is undertaking a two-year, \$556,950 state survey to identify previous unknown rare species locations and sites for land acquisition and rare species restoration.

Surface Waters

• Include approximately 12.9 miles of the Housatonic River, and portions of at least eight named tributary brooks and creeks, all highly important to the water quality, wildlife habitat, and overall resource quality of the nominated area. The area also includes several ponds, lakes and reservoirs.

Wetlands

• Cover approximately 1,445 acres or 12% of the total proposed area.

Agricultural Areas

- Include farmland and forest land, and cover approximately 9,360 acres or 76% of the entire nominated area.
- Include designated Forest Reserves, covering 1,120 acres of the west slopes of October Mountain State Forest.
- Include 1830s Forest Land (land inventoried as forest in 1830), a valuable forest and habitat resource, covering approximately 3,450 acres or 28% of the nominated area.

Natural Hazard Areas

• 100-year flood zones and steep slopes (greater than 25%) cover approximately 56% of the nominated area.

Public Recreation Areas

- Cover approximately 6,800 acres or over half (55%) of the nominated area.
- Include the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary, the 818-acre Division of Fisheries and Wildlife (DFW) George Darey Wildlife Management Area, the 200-acre Lenox Post Farm, several boat access sites, and approximately 5,520 acres of the Department of Conservation and Recreation (DCR) October Mountain State Forest.

Scenic Sites and Views

• Are located throughout the nominated area, ranging from the river corridor to the upper reaches of October Mountain State Forest.

Historical and Archaeological Resources

• The nominated area is part of the Upper Housatonic Valley National Heritage Area, extensive historic and archaeological resources have been documented, and *A History of the Upper Housatonic River Corridor* by local historian Bernard Drew was prepared for this nomination.

Proposed ACEC Boundary

- •The proposed boundary addresses the guidelines set forth by the ACEC Program, and is intended to be as conservative as possible. The guidelines state that the proposed boundary should include the minimum area necessary to protect and preserve the critical resources of the proposed ACEC, and that it should be easily recognized by the general public and local and state regulatory agencies working in the area, such as roads or other rights-of-way.
- •The northern extent of the proposed boundary of the Upper Housatonic River includes the confluence of the East and West Branches of the Housatonic River in Pittsfield. The southern extent runs to the Golden Hill Road bridge in Lee. The westerly boundary generally follows roadways that generally run north-south parallel to the Housatonic in Pittsfield, Lenox and Lee, and includes gently rolling uplands that drain into the river. The easterly boundary generally includes and follows critical tributary streams and subwatersheds that drain into the river, located mostly in the steep western slopes of October Mountain State Forest, in Lee, Washington and Pittsfield.

Area of Critical Environmental Concern Program Frequently Asked Questions (from the Massachusetts Department of Conservation and Recreation, ACEC Program)

What is an ACEC?

An Area of Critical Environmental Concern (ACEC) is a place in Massachusetts that receives special recognition because of the quality, uniqueness, and significance of its natural and cultural resources. Such an area is identified and nominated at the community level and is reviewed and designated by the state's Secretary of Energy and Environmental Affairs. ACEC designation creates a framework for local, regional, and state stewardship of these critical resources.

What is the purpose of the ACEC Program?

The purpose of the Areas of Critical Environmental Concern (ACEC) Program is to preserve, restore, and enhance critical environmental resources and resource areas of the Commonwealth of Massachusetts. The goals of the program are to identify and designate these ecological areas, to increase the level of protection for ACECs, and to facilitate and support the stewardship of ACECs.

What is the ACEC Program's background?

The ACEC Program was established in 1975 when the Massachusetts Legislature authorized and directed the Secretary of Environmental Affairs to identify and designate areas of critical environmental concern to the Commonwealth and to develop policies for their acquisition, protection, and use. Since that time, 28 ACECs have been designated covering approximately 241,000 acres in 73 communities, from the Berkshires to the North Shore and Cape Cod. The Department of Conservation and Recreation (DCR) administers the ACEC Program on behalf of the Secretary.

The ACEC Regulations (301 CMR 12.00) describe the procedures for the nomination, review, and designation of ACECs. The ACEC Regulations also direct the agencies of the Executive Office of Environmental Affairs (in 2007 renamed Energy and Environmental Affairs, or EOEEA) to take actions, administer programs, and revise regulations in order to preserve, restore, or enhance the natural and cultural resources of ACECs. As a result, DCR has a close working relationship with many state agencies. Together these agencies can provide information on a variety of resource management issues, grants to communities and organizations, and technical assistance for planning, research, and project design and permitting. In particular, DCR coordinates closely with the Office of Coastal Zone Management regarding all aspects of coastal ACECs.

How are ACECs nominated?

An ACEC nomination is usually prepared by citizens and communities and involves extensive public input and discussion. Public outreach and community meetings help inform citizens about the nomination review process, and identify local and regional goals for resource management of the area. A nomination describes the area's natural and cultural resources and its ecological relationships; discusses potential benefits of and reasons for designation; identifies goals and objectives for stewardship; describes the process of public outreach and education prior to submitting the nomination; and proposes a potential ACEC boundary to the Secretary for public review. More detailed information is provided in the ACEC Nomination Guidelines page.

What are the effects of ACEC designation?

An ACEC designation recognizes significant ecosystems and is intended to foster appreciation and stewardship of the unique natural and cultural resources in an area. The designation works through the existing state environmental regulatory and review framework. Projects within an ACEC that are subject to state agency jurisdiction or regulation, particularly those that are initiated by an agency, require a state permit, or are funded by a state agency, are reviewed with closer scrutiny to avoid or minimize adverse environmental impacts. Ultimately, the designation provides a framework for citizens, communities, and agencies to work together and ensure the long-term preservation and management of these areas. It is also important to understand what ACEC designation does not do. It does not supersede local regulations or zoning, change or affect land ownership, allow public access on private property, or prohibit or stop land development.

More detailed information is available in the ACEC Program Regulatory Summary page and the ACEC Guide to State Regulations and Programs.

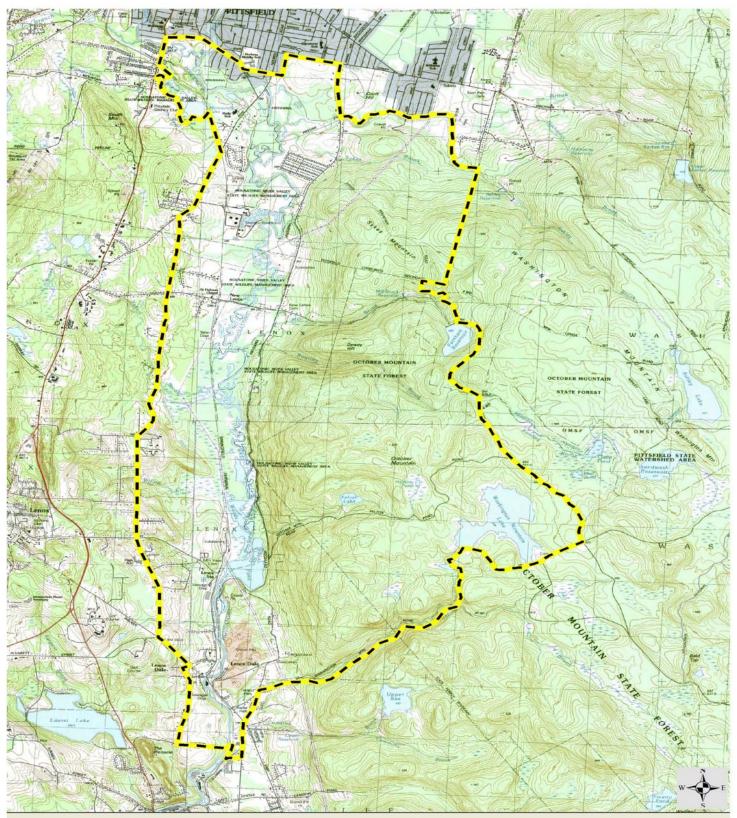
Why is ACEC stewardship important?

Proactive stewardship and collaboration is essential to achieve the purpose and goals of ACEC designation. State agency programs and actions alone cannot successfully preserve and manage these resources and ecosystems. ACEC communities, local citizens, agencies, and organizations can work together to identify problems, develop stewardship goals, collect information about natural resources, design management approaches, monitor resource quality, and conduct public outreach to protect, restore, and enhance the ACEC resources. For stewardship to be effective, a variety of strategies must be considered. These approaches range from education and advocacy to land protection, research, and formal management planning. The variety of available stewardship techniques is often as diverse as the ACECs themselves. Further suggestions are described in the ACEC Stewardship fact sheet.

Where can you get more information?

ACEC Program staff provide information and technical assistance to citizens, communities, and other agencies and organizations; promote and support stewardship activities at the local and regional levels; participate in state regulatory reviews; and review ACEC nominations, amendment proposals, and resource management plans on behalf of the Secretary of Energy and Environmental Affairs. Other state agencies and nonprofit organizations recognize the special value of ACECs and often collaborate through informal networking as well as through planning committees, natural resource mapping and research, grant programs, land protection projects, and other technical assistance.

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Upper Housatonic River ACEC Nomination Proposed ACEC Boundary

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Find the second second

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USGS 1:25000 Quadrangle Maps for this area last revised, 1987 and 1988



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Save the Housatonic!

The proposed plan for PCB cleanup will end the

Housatonic River's life as a natural ecosystem while disrupting neighborhoods for years to come.

We must do better.

Learn how an ACEC could help create a healthier, more natural future for the Housatonic River.

Thursday, August 7th, 7:00 p.m., Lenox Town Hall

Your voice matters — let it be heard!

Berkshire County League of Sportsmen Berkshire Natural Resources Council Green Berkshires Massachusetts Audubon Society

www.SaveTheHousatonic.org

Upper Housatonic River ACEC Nomination

Public Meeting, Lenox Town Hall, August 7, 2008

Meeting Agenda

1. Welcome and Overview of Meeting George Wislocki, Green Berkshires

2. General Purpose of the Upper Housatonic River ACEC Nomination Narain Schreoder, Berkshire Natural Resources Council

3. The Upper Housatonic River ACEC: Significance and Threats Kathy Sferra, Director of Stewardship, Mass Audubon

4. Why ACEC Designation? Eleanor Tillinghast, Green Berkshires

5. The Value of Preserving the Upper Housatonic River George Darey, Massachusetts Division of Fisheries and Wildlife

6. Questions and Answers

An opportunity to ask questions and learn more about the Upper Housatonic River ACEC nomination, the ACEC nomination process, and the effects of ACEC designation

Meeting Handouts

- ✓ 11x17 map of proposed ACEC nomination
- ✓ Summary of Upper Housatonic River ACEC Nomination
- ✓ ACEC Frequently Asked Questions (FAQs)

For Further Information

About the Upper Housatonic River ACEC Nomination and the proposed General Electric clean-up of the Housatonic River: www.savethehousatonic.org

About the Massachusetts ACEC Program: www.mass.gov/dcr/stewardship/acec/acecProgram Liz Sorenson, ACEC Program Director 617-626-1394 or Elizabeth.Sorenson@state.ma.us G.2.3.1

Upper Housatonic River ACEC Nomination – Summary

Area of ACEC Nomination

The primary focus of the Upper Housatonic River ACEC Nomination is the 12.9mile corridor of the Upper Housatonic River from south Pittsfield to north Lee, and portions of the critical supporting watersheds that drain into the river from the east and west. This stretch of the Housatonic is comprised of a complex and rich ecosystem that includes the river itself, adjacent wetlands and floodplains, several tributary streams, abundant wildlife, concentrations of rare species, and the steep, forested, western slopes of October Mountain State Forest. The river and its adjacent uplands also provide an array of dramatic scenic vistas and a wide range of public educational and recreational activities on protected lands, and include important historical and archaeological resources.

•The nominated area covers approximately 12,280 acres in portions of four Berkshire communities – Lee, Lenox, Pittsfield, and Washington. The respective approximate acreage of the nominated area within each community is:

Lee, 1,610 acres;
Lenox, 3,545 acres;
Pittsfield, 3,155 acres; and
Washington, 3,970 acres.

• Protected open space covers 7,730 acres or 63% of the nominated area. The approximate breakdown of open space within the nominated area within each community is:

oLee, 1,055 acres or 66% of the nominated area within Lee;
oLenox, 1,270 acres or 36% of the nominated area within Lenox;
oPittsfield, 1,490 acres or 47% of the nominated area within Pittsfield; and
oWashington, 3,915 acres or 99% of the nominated area within Washington.

• According to available land use data, over 80% of the area is undeveloped.

<u>Resources of the Upper Housatonic ACEC Nomination</u> Wildlife Habitats

- Include 31 State-listed Rare Species and 44 Certified and Potential Vernal Pools. Rare Species include seven Endangered, 13 Threatened, and 11 Special Concern species. Rare Species habitats cover approximately 3,440 acres or 28% of the nominated area.
- Include portions of three separate Biomap Core Habitats, delineated for six exemplary communities, 22 rare plants, two rare butterflies, one rare damselfly, three rare birds, one rare turtle, and four rare salamanders. The area includes 4,600 acres (or 37% of nominated area) of Biomap Core Habitat (plus another 27% of Supporting Natural Landscape).
- Include 3,600 acres (or 29% of nominated area) of Living Waters Core Habitat and Critical Supporting Watershed.

- Include at least 21.5 river miles of Cold Water Fisheries, with breeding populations of native brook trout, and abundant fishery resources, with approximately 30 fish species.
- Include a regionally significant bird habitat and migratory corridor and an Important Bird Area (IBA) designated by Mass Audubon, with more than 200 species recorded since 1970.
- Include a diversity that supports wildlife species both common and rare, such as black bear, moose, deer, coyote, bobcat, fisher, otter and mink.
- In addition, the state is undertaking a two-year, \$556,950 state survey to identify previous unknown rare species locations and sites for land acquisition and rare species restoration.

Surface Waters

• Include approximately 12.9 miles of the Housatonic River, and portions of at least eight named tributary brooks and creeks, all highly important to the water quality, wildlife habitat, and overall resource quality of the nominated area. The area also includes several ponds, lakes and reservoirs.

Wetlands

• Cover approximately 1,445 acres or 12% of the total proposed area.

Agricultural Areas

- Include farmland and forest land, and cover approximately 9,360 acres or 76% of the entire nominated area.
- Include designated Forest Reserves, covering 1,120 acres of the west slopes of October Mountain State Forest.
- Include 1830s Forest Land (land inventoried as forest in 1830), a valuable forest and habitat resource, covering approximately 3,450 acres or 28% of the nominated area.

Natural Hazard Areas

• 100-year flood zones and steep slopes (greater than 25%) cover approximately 56% of the nominated area.

Public Recreation Areas

- Cover approximately 6,800 acres or over half (55%) of the nominated area.
- Include the 262-acre Mass Audubon Canoe Meadows Wildlife Sanctuary, the 818-acre Division of Fisheries and Wildlife (DFW) George Darey Wildlife Management Area, the 200-acre Lenox Post Farm, several boat access sites, and approximately 5,520 acres of the Department of Conservation and Recreation (DCR) October Mountain State Forest.

Scenic Sites and Views

• Are located throughout the nominated area, ranging from the river corridor to the upper reaches of October Mountain State Forest.

Historical and Archaeological Resources

• The nominated area is part of the Upper Housatonic Valley National Heritage Area, extensive historic and archaeological resources have been documented, and *A History of the Upper Housatonic River Corridor* by local historian Bernard Drew was prepared for this nomination.

Proposed ACEC Boundary

- •The proposed boundary addresses the guidelines set forth by the ACEC Program, and is intended to be as conservative as possible. The guidelines state that the proposed boundary should include the minimum area necessary to protect and preserve the critical resources of the proposed ACEC, and that it should be easily recognized by the general public and local and state regulatory agencies working in the area, such as roads or other rights-of-way.
- •The northern extent of the proposed boundary of the Upper Housatonic River includes the confluence of the East and West Branches of the Housatonic River in Pittsfield. The southern extent runs to the Golden Hill Road bridge in Lee. The westerly boundary generally follows roadways that generally run north-south parallel to the Housatonic in Pittsfield, Lenox and Lee, and includes gently rolling uplands that drain into the river. The easterly boundary generally includes and follows critical tributary streams and subwatersheds that drain into the river, located mostly in the steep western slopes of October Mountain State Forest, in Lee, Washington and Pittsfield.

Area of Critical Environmental Concern Program Frequently Asked Questions (from the Massachusetts Department of Conservation and Recreation, ACEC Program)

What is an ACEC?

An Area of Critical Environmental Concern (ACEC) is a place in Massachusetts that receives special recognition because of the quality, uniqueness, and significance of its natural and cultural resources. Such an area is identified and nominated at the community level and is reviewed and designated by the state's Secretary of Energy and Environmental Affairs. ACEC designation creates a framework for local, regional, and state stewardship of these critical resources.

What is the purpose of the ACEC Program?

The purpose of the Areas of Critical Environmental Concern (ACEC) Program is to preserve, restore, and enhance critical environmental resources and resource areas of the Commonwealth of Massachusetts. The goals of the program are to identify and designate these ecological areas, to increase the level of protection for ACECs, and to facilitate and support the stewardship of ACECs.

What is the ACEC Program's background?

The ACEC Program was established in 1975 when the Massachusetts Legislature authorized and directed the Secretary of Environmental Affairs to identify and designate areas of critical environmental concern to the Commonwealth and to develop policies for their acquisition, protection, and use. Since that time, 28 ACECs have been designated covering approximately 241,000 acres in 73 communities, from the Berkshires to the North Shore and Cape Cod. The Department of Conservation and Recreation (DCR) administers the ACEC Program on behalf of the Secretary.

The ACEC Regulations (301 CMR 12.00) describe the procedures for the nomination, review, and designation of ACECs. The ACEC Regulations also direct the agencies of the Executive Office of Environmental Affairs (in 2007 renamed Energy and Environmental Affairs, or EOEEA) to take actions, administer programs, and revise regulations in order to preserve, restore, or enhance the natural and cultural resources of ACECs. As a result, DCR has a close working relationship with many state agencies. Together these agencies can provide information on a variety of resource management issues, grants to communities and organizations, and technical assistance for planning, research, and project design and permitting. In particular, DCR coordinates closely with the Office of Coastal Zone Management regarding all aspects of coastal ACECs.

How are ACECs nominated?

An ACEC nomination is usually prepared by citizens and communities and involves extensive public input and discussion. Public outreach and community meetings help inform citizens about the nomination review process, and identify local and regional goals for resource management of the area. A nomination describes the area's natural and cultural resources and its ecological relationships; discusses potential benefits of and reasons for designation; identifies goals and objectives for stewardship; describes the process of public outreach and education prior to submitting the nomination; and proposes a potential ACEC boundary to the Secretary for public review. More detailed information is provided in the ACEC Nomination Guidelines page.

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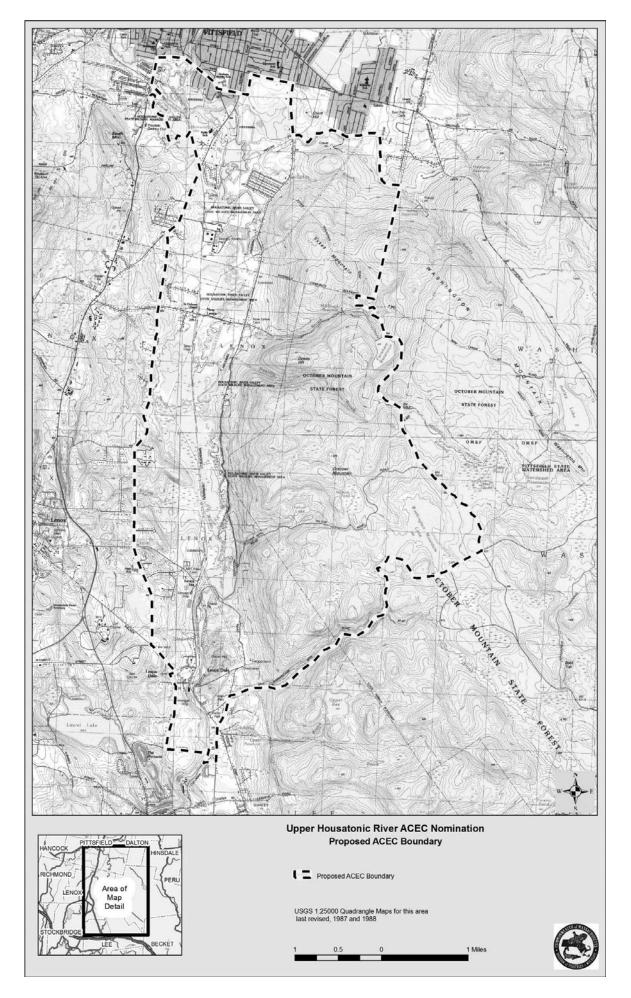
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Why is ACEC stewardship important?

Proactive stewardship and collaboration is essential to achieve the purpose and goals of ACEC designation. State agency programs and actions alone cannot successfully preserve and manage these resources and ecosystems. ACEC communities, local citizens, agencies, and organizations can work together to identify problems, develop stewardship goals, collect information about natural resources, design management approaches, monitor resource quality, and conduct public outreach to protect, restore, and enhance the ACEC resources. For stewardship to be effective, a variety of strategies must be considered. These approaches range from education and advocacy to land protection, research, and formal management planning. The variety of available stewardship techniques is often as diverse as the ACECs themselves. Further suggestions are described in the ACEC Stewardship fact sheet.

Where can you get more information?

ACEC Program staff provide information and technical assistance to citizens, communities, and other agencies and organizations; promote and support stewardship activities at the local and regional levels; participate in state regulatory reviews; and review ACEC nominations, amendment proposals, and resource management plans on behalf of the Secretary of Energy and Environmental Affairs. Other state agencies and nonprofit organizations recognize the special value of ACECs and often collaborate through informal networking as well as through planning committees, natural resource mapping and research, grant programs, land protection projects, and other technical assistance.



Appendix H. Letters of Support

Included in this appendix are letters of support that were gathered by the time the Upper Housatonic River ACEC nomination document was submitted to the Secretary of Energy and Environmental Affairs. Additional letters of support will be submitted to the Secretary over the course of the following weeks.

JOHN W. OLVER 1ST DISTRICT, MASSACHUSETTS

> COMMITTEE: APPROPRIATIONS

SUBCOMMITTEES: TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES CHAIRMAN

INTERIOR, ENVIRONMENT, AND RELATED AGENCIES ENERGY AND WATER DEVELOPMENT

SENIOR WHIP

August 28, 2008

Ian A. Bowles Executive Office of Energy and Environmental Affairs 100 Cambridge Street Suite 900 Boston, MA 02114

Dear Secretary Bowles:

I am writing to express my support for the designation of a portion of the upper Housatonic River Valley as an Area of Critical Environmental Concern.

I understand that the formal nomination for this designation will be mailed to you this week. As an expression of my support, I have agreed to be one of the nominators on behalf of Save the Housatonic, a coalition of local conservation groups that is spearheading this initiative. If approved, the ACEC designation would enhance the conservation standards for a 12.9-mile stretch of river that is of particular scenic and recreational importance. As you may know, this initiative was prompted by concerns among river advocates that GE may not be employing sufficiently aesthetic and ecological standards in its restoration efforts thus far. In addition, there has been adverse public reaction to GE's proposed actions in its Corrective Measures Study for the rest of the river, which includes the proposed designated section.

Congress of the United States

House of Representatives

Washington, DC 20515-2101

The ACEC designation will establish a framework for long-term, public participation in the stewardship of the Upper Housatonic River. It will also raise awareness of the exceptional resources of the river and its watershed, and provide the Commonwealth with an active role to encourage only the most efficient and sophisticated methods to remove and dispose contaminated materials from the river and its floodplain. For these reasons, I hope you will give your fullest consideration under the law in ruling on this designation of the Upper Housatonic River as an Area of Critical Environmental Concern.

W.Olver John W. Olver Member of Congress

JWO:rtd

PLEASE RESPOND TO: 1111 LONGWORTH HOUSE OFFICE BUILDING WASHINGTON, DC 20515-2101 (202) 225-5335 (202) 226-1224 Fax

> DISTRICT OFFICES: 57 SUFFOLK STREET SUITE 310 HOLYOKE, MA 01040 (413) 532–7010 (413) 532–6543 FAX

CONTE FEDERAL BUILDING 78 CENTER STREET PITTSFIELD, MA 01201 (413) 442–0946 (413) 443–2792 Fax

 463 MAIN STREET
 FITCHBURG, MA 01420 (978) 342–8722
 (978) 343–8156 FAX

PRINTED ON RECYCLED PAPER



Working with you to protect the environment of Berkshire County and beyond

August 27, 2008

Secretary Ian A. Bowles Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Dear Secretary Bowles,

Berkshire Environmental Action Team, Inc. (BEAT) strongly supports the designation of the Upper Housatonic River Area of Critical Environmental Concern (ACEC). BEAT's Executive Director grew up canoeing and boating this section of the river and exploring the banks of the Pittsfield section by foot. This is an area deserving of special attention, containing many state-listed species, vernal pools, and important habitats for a wide variety of common as well as uncommon species. We hope that the designation of this corridor as an ACEC will help to ensure a thoughtful remediation and restoration process for this section of the Housatonic River and surrounding floodplain.

Sincerely,

are h-

Jane Winn Executive Director

BEAT
27 Highland Ave. Pittsfield, MA 01201
413-230-7321
jane@thebeatnews.org
Printed on 100% post-consumer recycled paper whitened without chlorine

BERKSHIRE NATURAL RESOURCES COUNCIL, INC.

20 Bank Row, Pittsfield, Massachusetts 01201 Tel: (413) 499-0596 Fax: (413) 499-3924 www.bnrc.net

August 25, 2008

Secretary Ian Bowles Executive Office of Energy and Environmental Affairs 100 Cambridge Street Boston, Massachusetts 02114

Dear Secretary Bowles:

Berkshire Natural Resources Council is pleased to write in support of the nomination of the Upper Housatonic River Area of Critical Environmental Concern.

The nominated area boasts outstanding wildlife, scenic, cultural, agricultural and recreational resources. The Commonwealth of Massachusetts, together with Mass Audubon, Berkshire Natural Resources Council, the Town of Lenox Conservation Commission and others has made substantial investments in the conservation and stewardship of important lands within the nominated area.

Designation of the ACEC would help protect and enhance these resources and the public and private investments therein. The nominators of this ACEC – including BNRC – are dedicated to the effective stewardship of these resources, and will continue to make every effort to ensure that this nomination is well understood and heartily supported by the public.

We encourage you to accept the nomination for review, and look forward to working with you and your offices to ensure that the nomination receives the most thorough and objective review.

Sincerely yours,

Tad Ames

President

Green Berkshires

Great Barrington, MA 01230

www.greenberkshires.org 413-528-9363 fax 413-528-6854

August 29, 2008

Ian A. Bowles, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Dear Secretary Bowles:

Today, Green Berkshires joins with Berkshire Natural Resources Council, Berkshire County League of Sportsmen, and Massachusetts Audubon Society to submit a nomination of the upper Housatonic River and environs as an Area of Critical Environmental Concern. Representatives of numerous other organizations have signaled strong support with their signatures on the nomination. Many politicians representing constituencies within the nominated area have also registered their positions with letters of support or signatures on the nomination.

As has been shown by the outpouring of support from organizations, politicians, and citizens, nomination of this area as an ACEC reflects widespread concerns about the environment, the economy, recreation, and quality of life within the four communities covered by the ACEC, and further down the Housatonic River, as well.

Green Berkshires supports the ACEC nomination because we believe the area is extraordinary for all the reasons enumerated in the nomination, and warrants special protection by state agencies.

We also support the nomination because we believe the ACEC designation will give you as the state's top environmental official a powerful tool to negotiate with the U.S. Environmental Protection Agency and General Electric regarding the future of the Housatonic River. The hopes and expectations of thousands of people in the Berkshires and beyond are with you as our leader in the effort to produce the best possible clean-up and restoration of the Housatonic River.

Respectfully yours, Leann Illing Loss Eleanor Tillinghast, President

CC: George L. Darey, Director, Green Berkshires, Inc. George S. Wislocki, Director, Green Berkshires, Inc.



Box 321 Lenoxdale, MA 01242 TEL: 413-446-2520

August 28, 2008

Secretary Ian A. Bowles Executive Office of Energy and Environmental Affairs 100 Cambridge Street Boston, MA 02114

Dear Secretary Bowles,

The Housatonic River Initiative enthusiastically supports the nomination for the Upper Housatonic River Area of Critical Environmental Concern. This area is widely known for it's rare and endangered species, birds and wildlife, cold and warm water fisheries, and public utilization. This and much more defines this area as one of the most biologically diverse areas in the state of Massachusetts.

The proposed ACEC contains some of the most important wetland areas in the Housatonic Watershed. Within its borders are vast areas of October Mountain State Forest, the George Darey Wildlife Management Area, and vast areas of public land. It is one of the most utilized areas for public recreation on the Housatonic River. Canoeing, fishing, birding, hunting, hiking, and camping are only some of the recreational uses this area supports.

We fully support this endeavor and believe that this nomination is long overdue and the Commonwealth should throw its full support behind the public's enthusiasm to protect this jewel. This will ensure that the area gains the protection and enhanced stewardship that an Area of Critical Environmental Concern designation deserves.

Sincerely,

Vinothy Gir

Timothy Gray Housatonic Riverkeeper Executive Director Housatonic River Initiative PO Box 321 Lenoxdale, Ma 01242 413-446-2520



August 26, 2008

Ian A. Bowles Secretary, Executive Office of Energy and Environmental Affairs 100 Cambridge, 9th Floor Boston, Massachusetts 02114

RE: Housatonic River Area of Critical Environmental Concern Nomination

Dear Secretary Bowles;

On behalf of the Housatonic Valley Association, I am very pleased to offer our full support to the nomination of the section of Housatonic River as an Area of Critical Environmental Concern (ACEC). We feel strongly that this unique area qualifies for this distinction and offers the citizens of the Commonwealth an important level of protection for this significant environmental, cultural and historic resource.

We are pleased to see that communities are beginning to recognize the Housatonic Watershed as a positive community resource rather than the dumping grounds that it once was, and are incorporating the river resource in their community revitalization efforts. This ACEC designation will provide recognition of this unique resource which will assist the local communities in their stewardship efforts to protect this area for this and future generations. Therefore, we urge your acceptance of this important nomination.

Sincerely,

Rean

Dennis Regan Berkshire Program Director

Housatonic Valley Association · www.hvatoday.org

In Connecticut and New York: 150 Kent Road • P.O. Box 28 • Cornwall Bridge, CT 06754 • 860-672-678 • Fax: 860-672-0162 • ct@hvatoday.org • ny@hvatoday.org In Massachusetts: 1383 Pleasant Street • P.O. Box 251 • South Lee, MA 01260 • 413-394-9796 • Fax: 413-394-9818 • ma@hvatoday.org



The Nature Conservancy in Massachusetts 205 Portland Street, Suite 400 Boston, MA 02114-1708 tel [617] 227.7017 fax [617] 227.7688

nature.org/massachusetts

August 25, 2008

Ian A. Bowles, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Re: Proposed Areas of Critical Environmental Concern (ACEC) designation

Dear Secretary Bowles:

The Nature Conservancy supports the designation of the Housatonic River as an ACEC based on the ecosystem's features of regional and statewide significance:

The mission of The Nature Conservancy is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. With the help of public and private partners, The Conservancy has protected more than 23,000 acres of land and water in Massachusetts.

The Housatonic River watershed, with marble and limestone bedrock and calcium-rich waters, is unique in Massachusetts. Thirty species of fish are found in the watershed, and many tributaries included in the ACEC proposal support environmentally sensitive, coldwater species such as brook trout and slimy sculpin throughout the year. Thirty-one species protected under the MA Endangered Species Act, such as riffle snaketail dragonfly and wood turtle which are ecoregional target species for The Conservancy, are found in the river corridor. Additionally, floodplain forests along the Housatonic and other large rivers are among the most threatened, globally significant wetland community types in New England. These riverside forests provide invaluable services such as controlling floodwaters, recharging groundwater and filtering pollutants.

The Conservancy is working to reconnect floodplain forests along the Housatonic River and its tributaries by protecting land, removing invasive plants and planting native trees.

ACEC designation has the potential to help protect the Housatonic River by raising public consciousness about its significance and providing enhanced regulatory review of projects that might threaten its ecological values.

Thank you for this opportunity to comment. Please let us know if The Nature Conservancy can be of further assistance with this process. If you have questions, please contact Jason Miner at 413-229-0232 x226, jminer@tnc.org.

Sincerely,

Loring Schwarz Acting State Director



Taconic Chapter Trout Unlimited 65 East Street Lenox, MA 01240 Phone/fax (413)637-1818

August 25, 2008

Ian A. Bowles, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Dear Secretary Bowles,

In recent years, Trout Unlimited has partnered with numerous state and federal agencies, conservation organizations and academic organizations and formed the Eastern Brook Trout Joint Venture. The scope of this venture covers the area from Maine to South Carolina. One of its goals is to conserve, enhance and restore eastern brook trout populations that have been impacted by habitat modification.

The Taconic Chapter of TU which is located in central and southern Berkshire County is comprised of some 150 members. At a recent Meeting of its Board, it was unanimously voted to support the designation of Area of Critical Environmental Concern for the Upper Housatonic River and to sign on as a nominator. Although it has been determined by the EBTJV that most populations of wild brook trout in this watershed have been classified as reduced or greatly reduced, there still remain some intact populations in the watershed, especially on October Mountain.

This is one of the few places in the state where they still exist and Taconic TU is concerned about their protection. We view any additional layer of environmental review and oversight of this watershed as a good thing which will help to conserve and restore the eastern brook trout, thus allowing future generations to enjoy them as we have.

Respectfully yours,

Gene Chaque

Gene Chague President, Taconic Chapter Trout Unlimited

Acknowledgments

The ACEC nomination was prepared with the generous assistance of the following individuals, agencies, and organizations:

Berkshire County League of Sportsmen - Mark Jester

Berkshire Natural Resources Council — Tad Ames

Green Berkshires — Emma Blair, George Darey, Laurily Epstein, James Ferris, Bobbie Hallig, Eleanor Tillinghast, George Wislocki

Massachusetts Audubon Society — Laura Johnson, René Laubach, Kathy Sferra, Gail Yeo

Lenox Board of Selectmen

Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife — Lynn Harper, Wayne MacCallum, Andrew Madden, David Szczebak, Mark Tisa, Henry Woolsey

The Nature Conservancy

The Whitehead Foundation

Ginny Akabane

Elizabeth and Jonas Dovydenas

Bernard Drew, Berkshire Writer and Historian

Mickey Friedman, Website Designer

Barbara Kellogg, Esq.

Leslie Luchonok, Community and Environmental Consulting

References

ACEC Program Website: www.mass.gov/dcr/stewardship/acec/acecProgram.htm

Barnes, Rebecca, Western Regional Trails Coordinator, Department of Conservation and Recreation, Division of State Parks and Recreation.

BioMap, Guiding Land Conservation for Biodiversity in Massachusetts, Massachusetts Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program, 2001.

City of Pittsfield, Dinking Water Quality Report for Year 2007.

Drew, Bernard A., History of the Upper Housatonic River Corridor, June 2008.

General Electic Company, Corrective Measures Study (CMS) Report for the Housatonic River - Rest of River, March 2008.

Gillman, Alexander, Visitor Services Supervisor, Mount Greylock State Reservation, Department of Conservation and Recreation, Division of State Parks and Recreation.

Harper, Lynn, Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program.

Housatonic Clean River Coalition (HCRC), May 14, 2008 letter to United States Environmental Protection Agency, comments on the Housatonic River Corrective Measures Study.

Living Waters, Guiding the Protection of Freshwater Biodiversity in Massachusetts, Massachusetts, Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program, 2003.

Upper Housatonic Valley National Heritage Area website: www.upperhousatonicheritage.org

Madden, Andrew, Western Region Manager, Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife.

Massachusetts Audubon Society, May 20, 2008 letter to United States Environmental Protection Agency, Comments on General Electric Corrective Measures Study for Housatonic "Rest of River."

Massachusetts Audubon Society website: www.massaudubon.org

Massachusetts Department of Conservation and Recreation, Division of State Parks and Recreation, *Central Berkshire District Forest Resource Management Plan, January 2007.* Massachusetts Departments of Fish and Game and Environmental Protection, *May* 20, 2008 letter to United States Environmental Protection Agency, comments on the Housatonic River Corrective Measures Study (March 2008), prepared by General Electric Company.

Massachusetts Division of Fisheries and Wildlife, *May 19. 2008 letter to United States Environmental Protection Agency, Comments on General Electric, Housatonic, Rest of River Remediation, Corrective Measures Study Report dated March 2008.*

Massachusetts Executive Office of Energy and Environment, Office of Geographic and Environmental Information (MassGIS) website: www.mass.gov/mgis/massgis.htm

Mellace, Robert, Western Regional Director, Department of Conservation and Recreation, Division of State Parks and Recreation.

National Park Service, National Heritage Areas website: www.nps.gov/history/heritageareas

Natural Heritage & Endangered Species Program website: www.nhesp.org or www.mass.gov/dfwele/dfw/nhesp/nhesp.htm

October Mountain State Forest website: www.mass.gov/dcr/parks/western/octm.htm

Save The Housatonic website: www.savethehousatonic.org

Sorenson, Elizabeth, ACEC Program Director, Massachusetts Department of Conservation and Recreation.

Szczebak, David, Geographic Information System (GIS) Director, Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife.

United States Environmental Protection Agency/General Electric websites: www.epa.gov/ne/ge/index.html, and www.epa.gov/ne/ge/thesite/restofriver-reports.html

URS Corporation, *Initial Phase IA Cultural Resources Assessment for the Housatonic River - Rest of River Project, April 3, 2008, Public Release Version*, prepared for the General Electric Company.

Woodlot Alternatives, Inc., *Ecological Characterization of the Housatonic River, September 2002*, prepared for the U.S. Environmental Protection Agency

Woolsey, Henry, Program Manager, Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife, Natural Heritage & Endangered Species Program.