# The Commonwealth of Massachusetts
## Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

DEVAL L. PATRICK
GOVERNOR
TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR
IAN A. BOWLES
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
http://www.mass.gov/envir


**DESIGNATION** of the

**UPPER HOUSATONIC RIVER**

**AREA OF CRITICAL ENVIRONMENTAL CONCERN**

located in portions of the

MUNICIPALITIES OF LEE, LENOX, PITTSFIELD AND WASHINGTON

WITH SUPPORTING FINDINGS

Following an extensive formal review required by the regulations of the Executive Office of Energy and Environmental Affairs (301 CMR 12.00) including nomination, review, on-site visits, research, public information meetings, a public hearing and written comment period, and evaluation of all public comment and assembled data, I, the Secretary of Energy and Environmental Affairs, hereby designate the Upper Housatonic River, located in portions of the municipalities of Lee, Lenox, Pittsfield and Washington, as an Area of Critical Environmental Concern (ACEC). I take this action pursuant to the authority granted me under Mass. Gen. L. ch. 21A, § 2(7).

I also hereby find that the wetland resource areas included in the Upper Housatonic River ACEC are significant to the protection of groundwater supply and public water supply, the prevention of pollution, flood control, the prevention of storm damage, the protection of fisheries, and the protection of wildlife habitat - all of which are public interests defined in the Wetlands Protection Act and regulations promulgated thereunder.

## I. Procedures Leading to ACEC Designation

On September 2, 2008 I received a letter of nomination from 43 Massachusetts citizens, including State Representatives Denis Guyer, Smitty Pignatelli, and Christopher Speranzo, and State Senator Ben Downing, pursuant to the ACEC Regulations at 301 CMR 12.05. In a letter dated September 29, 2008 I accepted the Upper Housatonic River ACEC nomination for full review. In this letter I outlined the ACEC nomination review process including the initial public information meetings to be held in October of 2008. Notice of these public information meetings was included in the October 8, 2008 issue of The Environmental Monitor, published by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA); in an September 30, 2008 press release, issued by EEA; in an article published in the Berkshire Eagle on October 4, 2008; and in an update posted on the ACEC Program website.

Printed on Recycled Stock

Public information meetings were held at the Lenox Town Hall on October 21, 2008, the Pittsfield City Hall on October 22, 2008, Lee Town Hall on October 28, 2008, and the Washington Town Hall on October 29, 2008. Attendance averaged 22 for the first three public meetings. Nine individuals attended the Washington public meeting. Copies of the nomination and maps showing the proposed boundary were distributed to local officials in the four communities, and were available for viewing at city and town halls, public libraries, and offices of the Berkshire Regional Planning Commission in Pittsfield, Mass Audubon's Pleasant Valley Wildlife Sanctuary in Lenox, Berkshire Natural Resources Council in Pittsfield, and Green Berkshires in Great Barrington. A review copy was also available at the offices of the Department of Conservation and Recreation (DCR) Bureau of Planning and Resource Protection, 251 Causeway Street, 7th Floor, Boston. The nomination and a map of the proposed ACEC boundary were posted on the nominator's website, http://savethehousatonic.org.

In correspondence dated November 7, 2008, I notified the nominators that a public hearing would be held in Lenox on December 11, 2008. A copy of the public notice was mailed to the Boards of Selectmen, Planning Boards and Conservation Commissions of the four municipalities located within the nominated area. Approximately 350 copies of the public notice were e-mailed or mailed to state legislators, state and regional agencies, environmental organizations, individuals, and other interested parties. A copy of the public notice was published in the November 10, 2008 issue of The Environmental Monitor. Copies of the public notice were published in three local papers – in the Berkshire Eagle on November 10, 2008, and in The Advocate and The Pittsfield Gazette on November 13, 2008. Information regarding the public hearing was also posted on the DCR website, the ACEC Program website, and the nominators' website. The December 11th public hearing was cancelled due to hazardous winter weather, with public notice, press releases, and emails issued that day.

In email correspondence dated December 19, 2008, the nominators were notified that a public hearing would be rescheduled and held at Lenox High School on January 29, 2009. A copy of the public notice was published in the December 24, 2008 issue of The Environmental Monitor. Copies of the public notice were published in three local papers – in the Berkshire Eagle on December 22, 2008, and in The Advocate and The Pittsfield Gazette on December 25, 2008. A copy of the public notice was e-mailed to the Boards of Selectmen, Planning Boards and Conservation Commissions of the four municipalities located within the nominated area. Approximately 350 copies of the public notice were e-mailed or mailed to state legislators, state and regional agencies, environmental organizations, citizens, and other interested parties. A press release was issued January 12, 2009. Information regarding the date, time, and location of the public hearing was also posted on the DCR website, the ACEC Program website, and the nominators' website.

Philip Griffiths, Undersecretary for Environment, conducted a public hearing on my behalf regarding the nomination on January 29, 2009, at the Lenox High School. Oral and written testimony was received from 41 people, including municipal officials, residents, and representatives of local businesses, environmental and sportsmen organizations. A ten-day period for the submission of additional written comments, until February 9, 2009, followed the public hearing.

In the course of the overall nomination review written and oral testimony was received from numerous individuals, private organizations, and public agencies. Copies are on file at the office of the ACEC Program at the DCR, Bureau of Planning and Resource Protection in Boston. A total of 136 comments, including ones from one federal agency, 4 state agencies, one regional agency, 9 municipal boards and commissions, 20 non-governmental organizations, 8 businesses and economic

development organizations, and 54 citizens, as well as 979 individuals on two petitions were received in the course of the public participation and review process. Support for the designation with boundaries as nominated was stated in 114 of the 136 comments; 14 comments supported the designation with proposed boundary changes or exemptions; 6 comments opposed designation, and 2 comments were neutral. All 979 petitioners were supportive of the designation. Further details are provided in Section IV. Discussion of the Criteria for Designation, (9) Supporting Factors.

## II. Description of the Resources of the Upper Housatonic River ACEC

### Resource Overview

A brief summary of the resources of the ACEC is provided in this designation document. Additional useful information regarding these resources is provided in the Upper Housatonic River ACEC nomination document (dated August 29, 2008, submitted September 2, 2008) and other materials and correspondence assembled as part of the nomination review.

The total acreage included in the area as originally nominated was approximately 12,280 acres. The size of the designated ACEC is approximately 12,276 acres (acreages based on Massachusetts Geographic Information System (MassGIS) digital data), approximately 1,614 acres in Lee (13% of the ACEC), 3,517 acres in Lenox (29%), 3,166 acres in Pittsfield (26%), and 3,978 acres in Washington (32%). The ACEC includes all nine of the inland resource features listed in the ACEC Regulations (Fishery Habitat, Inland Wetlands, Inland Surface Waters, Water Supply Areas, Natural Hazard Areas, Agricultural Areas, Historical/ Archaeological Resources, Habitat Resources, and Special Use Areas) of which a minimum of four are required for nomination review (301 CMR 12.06).

The boundary focuses on the 13-mile corridor of the Upper Housatonic River from southern Pittsfield to northern Lee, and portions of the supporting watersheds that drain into the river from the east and west. This section of the Housatonic River includes a complex ecosystem that includes the river, adjacent wetlands and floodplains, several coldwater tributary streams, large expanses of wildlife and rare species habitat, and the steep, forested, western slopes of October Mountain State Forest. There are also historical and archaeological resources, farmland and open space, and scenic and recreational areas. Acreages, numbers, and percentages of important resource features include:

- Public and private non-profit open space totals approximately 7,788 acres, or 63% of the ACEC (including 1,057 acres in Lee; 1,239 in Lenox; 1,578 in Pittsfield; and 3,914 in Washington). The largest permanently protected areas within the ACEC are October Mountain State Forest (approximately 5,517 acres or about 1/3 of this state forest managed by the DCR), and the state George Darey Wildlife Management Area (818 acres managed by the Division of Fisheries and Wildlife (DFW)).
- Approximately 8,373 acres or 68% of the ACEC is comprised of forest, of which 6,605 acres are protected open space, and 985 acres or 8 % are farmland according to the state's 1999 Land Use data (detailed in the Habitat Resources Section).
- There are 1,845 acres of wetlands identified by MassGIS data, of which 559 acres are shrub swamp, 529 acres are forested wetlands, and 390 acres are open water.
- The regionally significant biodiversity and wildlife habitat in the designated area is indicated by the exceptional number of rare species (32), Certified and Potential Vernal Pools (46), and the combined total of 11,405 acres or 93% of the area delineated as viable habitat by the DFW's Natural Heritage & Endangered Species Program (NHESP). Of this total, 7,869 acres (64%) of the ACEC is designated as BioMap Core Habitat and Supporting

Natural Landscapes, 3,536 acres (29%) as Living Waters Core Habitat and Critical Supporting Watershed. Regulated areas of rare species Priority Habitats and Estimated Habitats total 3,130 acres or 25% of the ACEC, with the majority of these acres included in the BioMap and Living Waters areas.

- According to the nomination, there are more than 21 river miles of Coldwater Fisheries, with breeding populations of native brook trout and other fishery resources, with approximately 30 fish species, as reported by DFW.

**Resource Analysis and Mapping**

In the course of administering the review of the nomination, DCR prepared a series of environmental resource maps regarding the nominated area. This information was mapped using the EEA's MassGIS. The maps, which were used to assist in the evaluation of the nomination and the determination of final boundaries, are part of the public record of the Upper Housatonic River ACEC designation, and are on file at the offices of the ACEC Program at DCR, Bureau of Planning and Resource Protection.

MassGIS data was used to map and evaluate several categories of information, including compilation of acreages and percentages, for: land use; protected open space, conservation and recreation lands owned by municipal governments and non-profit organizations; rare and endangered species habitat; public drinking water supplies and aquifers; wetlands; floodplains; and soils data.

The resources of the area are summarized further in the sections below as well as in Section IV. Discussion of the Criteria for Designation.

**Fishery Habitat**

According to the nomination and comments submitted by DFW, there are at least 21.5 miles of Coldwater Fisheries located within the ACEC. The criteria defining a Coldwater Fishery is a water body where the reproduction of brook, brown or rainbow trout or the presence of slimy sculpin or longnose sucker has been determined, and such identified streams are designated as such by DFW and receive higher protection from local Conservation Commissions and from Massachusetts Department of Environmental Protection (MassDEP) under the Surface Water Quality Standards, and wetlands, stormwater, and dredging regulations. DFW sampling records show that Mill Brook, Ashley Brook, Sackett Brook, Washington Mountain Brook, Yokun Brook, Roaring Brook and the outflow of Felton Pond support reproducing populations of brook and/or brown trout.

According to comments supplied by the Massachusetts/ Rhode Island Council of Trout Unlimited:

> The eastern brook trout is a true native to our Massachusetts cold waters…Wild brook trout populations are considered strong biological indicators of a healthy ecosystem.
>
> This ACEC designation will help protect the watershed supporting coldwater habitat of the eastern brook trout ….

Approximately 30 species of fish have been collected or are suspected present in this section of the Housatonic River based upon recent surveys and historical records.

According to comments supplied by the DFW:

> The proposed ACEC encompasses a unique natural system with an abundance of diverse and ecologically sensitive fisheries and wildlife resources…

The Department of Fish and Game (DFG) notes that:

The Housatonic River and its tributaries contain numerous Coldwater Fisheries that support sensitive coldwater fish populations and habitats that warrant the highest protection…

The Housatonic River also supports recreationally important species such as trout, perch, bass, northern pike, and tiger muskie. Woods Pond in Lenox is consistently one of the most heavily ice-fished waters in Massachusetts, and the Catch and Release sections of the Housatonic River attract anglers from throughout the Northeast.

**Inland Surface Waters**

There are approximately 13 miles of the Housatonic River and portions of 10 brooks, 3 lakes, 2 ponds, and 2 reservoirs found within the ACEC. Brooks include Ashley, Codding, Mill, Roaring, Sackett, Sykes, Wampanum, Washington Mountain, Willow Creek, and Yokun within the ACEC. Lakes and ponds include Felton Lake (in Washington), Morewood Lake (in Pittsfield), and Washington Mountain Lake (also known as Washington Mountain Marsh in Washington) and two ponds: Halfway Pond (in Washington) and Woods Pond (114 acres in Lee and Lenox, but also considered a "run of the river impoundment" along the mainstem of the Housatonic River, according to MassDEP reports). The length of river through Woods Pond is approximately 0.8 miles.

There are also two reservoirs named on the USGS topographic map within the ACEC: Farnham and Mill Brook Reservoirs, both impoundments along Mill Brook (and both in Washington). The City of Pittsfield operates the 41-acre Farnham Reservoir (upstream of the small inactive Mill Brook reservoir) as part of the Ashley Lake System which provides drinking water to the City.

According to the DCR Office of Dam Safety, there are seven dams within the ACEC: Beaver Dam on an unnamed stream in Lenox; Farnham Reservoir on Mill Brook in Washington (owned by the City of Pittsfield), Felton Lake Dam on an unnamed stream in Washington (owned by DCR); Gravesleigh Pond Dam on an unnamed stream in Pittsfield; Washington Mountain Lake Dam on a tributary of Washington Mountain Brook in Washington (owned by DCR); Washington Mountain Lake Dike on a tributary of Washington Mountain Brook (owned by DCR); and Woods Pond Dam on the Housatonic River across the Lee/Lenox border. Of these seven dams, two, Farnham Reservoir and Washington Mountain Lake Dam, are listed as "high hazard" indicating that they hold enough water volume where failure *will* result in loss of life or damage to property; one, Woods Pond, as "significant hazard" indicating that failure *may* result in loss of life or damage to property; and one, Felton Lake, as "low hazard" indicating that failure is *not likely* to result in loss of life or damage to property. The other three dams are non-jurisdictional under the Dam Safety Regulations, that is, small enough to not be under regulatory review. At the most recent DCR inspections, the four jurisdictional dams were found to be in fair, satisfactory, or good condition. There may be other impoundments in the ACEC that are smaller historic structures or remnants of structures. One example is found along Mill Brook at Mill Brook Reservoir.

According to the 2002 Housatonic River Watershed Water Quality Assessment Report (WQAR) prepared by Mass DEP, the river segment primarily within the ACEC, from the confluence of the Southwest Branch Housatonic River and the West Branch Housatonic River in Pittsfield, (just to the west of the ACEC boundary and the confluence of the West Branch and East Branch Housatonic River) to the outlet of Woods Pond in Lee/Lenox is listed as impaired for Aquatic Life; Fish Consumption and Primary Contact Recreation due to PCB contamination from the former General Electric site in Pittsfield. This river segment's status is "support" for Secondary Contact Recreation and Aesthetics. Although this section is reported as being classified as Class B, Warm Water Fishery, in the 2002 WQAR, DFW has since designated it a Coldwater Fishery, as detailed above in the section on Fisheries Habitat. MassDEP states that it considers reclassification as

additional information is presented to determine the appropriate classification of streams/stream segments under the Massachusetts Surface Water Quality Standards. It should be noted that streams are protected for existing uses, even if not designated for that use under the Massachusetts Surface Water Quality Standards.

The river segment downstream from Woods Pond to the southern boundary of the ACEC and beyond (20 miles total to Great Barrington) is listed as impaired for just the upper 9 miles for Aquatic Life and Fish Consumption due to PCB contamination from the former General Electric site in Pittsfield. It is also listed as impaired for Aquatic Life, Primary Contact Recreation, Secondary Contact Recreation and Aesthetics primarily due to excess algal growth caused by nutrient inputs from point sources (municipal and industrial) and non-point source runoff.

Limited data on aquatic invasive species in the ACEC are available, however a water chestnut (*Trapa natans*) infestation is documented at Woods Pond and purple loosestrife (*Lythrum salicaria*) is found at Woods Pond and along other stretches of the Housatonic River.

**Inland Wetlands**

Important wetland areas are located adjacent to Morewood Lake in Pittsfield, Halfway Pond and Washington Mountain Lake within October Mountain State Forest, and tributary streams to the Housatonic such as Sackett and Yokun Brooks. According to MassGIS data, wetlands cover approximately 1,455 acres or 12% of the ACEC (not including open water). The types of wetlands identified in MassGIS data include shrub swamp (559 acres), wooded swamp (529 acres), shallow marsh meadow or fen (261 acres), deep marsh (56 acres), and bog (50 acres); and open water covers 390 acres.

According to a comment letter submitted by The Nature Conservancy, Massachusetts Office:

> ...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 valuable services such as controlling floodwaters, recharging groundwater and filtering pollutants.

Wetlands of special concern include 2 Certified Vernal Pools and at least 44 Potential Vernal Pools. The ACEC includes two uncommon natural community types documented by NHESP: an Acidic Graminoid Fen and Level Bog. Acidic Graminoid Fens are sedge and sphagnum-dominated acidic peatlands that experience some groundwater and/or surface water flow but no calcareous seepage. Standing water is often present throughout much of the growing season. Level Bogs are dwarf shrub peatlands, generally with pronounced hummock and hollow formations. These wetland peatlands are the Commonwealth's most acidic and nutrient-poor, because they receive little overland water input, and are not connected to the water table.

**Natural Hazard Areas**

Natural hazard areas, as defined in the ACEC Regulations as floodplain and erosion areas, cover approximately 57% of the ACEC. There are extensive floodplains (100-year Federal Emergency Management Agency (FEMA) flood zone) located along the Housatonic River and some tributary streams, including along Washington Mountain Brook and Sackett Brook, as well as around Morewood Lake. According to MassGIS, approximately 2,450 acres are located in the 100-year FEMA flood zone, or approximately 20% of the designated area.

It is important to preserve floodplains for flood storage. Therefore, it is worth noting that 1,268 acres of these floodplains, slightly more than half of the total floodplains, are protected open space. MassGIS digital data used for floodplain calculations represents a subset of the data available on

the paper Flood Insurance Rate Maps (FIRM) as provided by FEMA.

Steep slopes, defined as areas containing slope grades of 25% or more, according to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Surveys, are located predominantly on the eastern side of the Housatonic River along the western slopes of October Mountain State Forest. According to MassGIS, approximately 4,495 acres (or 37%) of the designated area are included within these slopes.

**Habitat Resources**

The wildlife habitat resources of the Upper Housatonic River ACEC are diverse and extensive. These resources include both general wildlife habitat and rare species habitat. According to the GIS Land Use maps (1999 data), approximately 8,373 acres or 68% of the ACEC is comprised of forest, 985 acres 8% cropland or pasture, and according to MassDEP wetlands mapping, 1,455 acres or 12% is wetland (not including open water).

The ACEC is comprised of large areas of relatively unfragmented wildlife habitat particularly across approximately 7,788 acres of public and private conservation lands, including: 5,517 acres of October Mountain State Forest, the 818-acre George Darey Wildlife Management Area, 425 acres of City of Pittsfield Watershed Area land (of which 283 acres are in the Town of Washington), approximately 182 acres of City of Pittsfield parks, the 240-acre Town of Lenox Post Farm, Mass Audubon's 255-acre Canoe Meadows Wildlife Sanctuary, and the 66-acre Hallowell Meadows property owned by the Berkshire Natural Resources Council.

*Rare Species Habitat*

According to comments submitted by NHESP, the ACEC has 32 state-listed species within the ACEC. These species include 8 listed as Endangered (E) pursuant to the Massachusetts Endangered Species Act, 12 listed as Threatened (T), and 12 listed as species of Special Concern (SC). These include:

| Scientific Name | Common Name | MESA Status |
|---|---|---|
| *Botaurus lentiginosus* | American Bittern | E |
| *Claytonia virginica* | Narrow-leaved Spring Beauty | E |
| *Elymus villosus* | Hairy Wild Rye | E |
| *Haliaeetus leucocephalus* | Bald Eagle | E |
| *Malaxis monophyllos* var. *brachypoda* | White Adder's-mouth | E |
| *Potamogeton strictifolius* | Straight-leaved Pondweed | E |
| *Carex tuckermanii* | Tuckerman's Sedge | E |
| *Gomphus abbreviatus* | Spine-crowned Clubtail | E |
| *Cardamine pratensis* var. *palustris* | Fen Cuckoo Flower | T |
| *Carex alopecoidea* | Foxtail Sedge | T |
| *Carex grayi* | Gray's Sedge | T |
| *Eleocharis intermedia* | Intermediate Spike-sedge | T |
| *Euphyes dion* | Dion Skipper | T |
| *Ophiogomphus carolus* | Riffle Snaketail | T |
| *Pieris oleracea* | Mustard White | T |
| *Sagittaria cuneata* | Wapato | T |
| *Sanicula odorata* | Long-styled Sanicle | T |

| | | |
|---|---|---|
| *Stylurus spiniceps* | Arrow Clubtail | T |
| *Symphyotrichum prenanthoides* | Crooked-stem Aster | T |
| *Veronicastrum virginicum* | Culver's-root | T |
| *Acer nigrum* | Black Maple | SC |
| *Alasmidonta undulata* | Triangle Floater | SC |
| *Ambystoma jeffersonianum* | Jefferson Salamander | SC |
| *Conioselinum chinense* | Hemlock Parsley | SC |
| *Enallagma carunculatum* | Tule Bluet | SC |
| *Gallinula chloropus* | Common Moorhen | SC |
| *Glyptemys insculpta* | Wood Turtle | SC |
| *Ophiogomphus aspersus* | Brook Snaketail | SC |
| *Quercus macrocarpa* | Bur Oak | SC |
| *Ranunculus pensylvanicus* | Bristly Buttercup | SC |
| *Sorex palustris* | Water Shrew | SC |
| *Stylurus scudderi* | Zebra Clubtail | SC |

MassGIS data show the general location and extent of known rare species habitat within the ACEC. Both Priority Habitats for Rare Species and Estimated Habitats for Rare Wildlife for state-listed species are shown and account for 3,130 acres, or 25% of the ACEC. Surface water bodies within the ACEC that are Priority and Estimated Habitats include: Ashley Brook, Felton Lake, Halfway Pond, portions of the Housatonic River, Morewood Lake, Washington Mountain Lake, Woods Pond, and Yokun Brook. Priority Habitats (3,130 acres) delineate all habitats for rare plant and animal populations documented within the last 25 years and protected under the Massachusetts Endangered Species Act Regulations. Priority Habitats are also considered under the Massachusetts Environmental Policy Act and the Forest Cutting Practices Act. Estimated Habitats (2,844 acres) represent a subset of Priority Habitats that are based on occurrences of rare wetland wildlife observed within the last 25 years and do not include areas delineated for rare plants or for rare wildlife with strictly upland habitats. The Estimated Habitats are for use with the Wetlands Protection Act Regulations.

According to a comment letter from DFW:

> There are two certified vernal pools, another possible 44 vernal pools, [two] exemplary natural communities, and coldwater fisheries resources, including the main stem Housatonic River and numerous direct coldwater tributaries within the proposed ACEC boundaries; all of which are of conservation concern.

NHESP is currently undertaking an intensive two-year survey to identify previously unknown rare-species locations, and sites for land acquisition and rare species restoration within the Housatonic watershed in Massachusetts, with funding from the Natural Resources Damages settlement as part of the 2000 Consent Decree in which the General Electric Company (GE) agreed to clean up or pay for remediation of PCB releases from the GE facility in Pittsfield to the Housatonic River.

*NHESP BioMap and Living Waters Project*

In 2001, the NHESP developed the BioMap biodiversity mapping project to identify areas most in need of protection in order to preserve and support the native biodiversity of the Commonwealth. The Core Habitat is one part of this mapping project and identifies the most viable habitat for rare species and natural communities in Massachusetts. The Upper Housatonic ACEC contains one entire Core Habitat and portions of two others. The BioMap project identified only 23% of the Commonwealth as Core Habitat, emphasizing the significance of having 37% of the ACEC (4,600

acres) designated as Core Habitat.

Further demonstrating the importance of this area, when combined with the 3,269 acres (27%) of BioMap Supporting Natural Landscape there is a total of 7,869 acres or 64% of the ACEC in this category of important habitat. BioMap Core Habitat reports (NHESP, 2001) indicate that one Core Habitat area (C735), entirely within the ACEC area, including Felton Lake, Halfway Pond, and other wetlands is completely undeveloped, unfragmented, and located entirely within the October Mountain State Forest. Halfway Pond contains a peatland complex consisting of two exemplary natural communities, a Level Bog and an Acidic Graminoid Fen (described in the Wetlands Section). This Core Habitat includes habitat for the rare Tule Bluet damselfly.

Also according to BioMap Core Habitat reports, a portion of a second BioMap Core Habitat area (C677) hosts a tremendous diversity of rare plant species that are adapted to calcareous fens, swamps, meadows and forests. The state's most outstanding population of Wapato, a rare relative of the Common Arrowhead (both wetland plants), makes its home here in a floodplain community. Core Habitat within the ACEC, along the majority of the Housatonic River and Sackett Brook, provides significant habitat for Wood Turtles, "where mosaics of riparian habitats include miles of meandering river and streams, old river oxbows, wet meadows, shrub and wooded swamps, and adjacent upland forests and fields." (NHESP, 2001) In this same area, shallow riverine marshes and wet meadows, "including beaver-impounded wetlands and old oxbows, that have a good interspersion of cattails, aquatic bed vegetation, and open water provide habitat for American and Least Bitterns, Common Moorhens, and other marsh birds." (NHESP, 2001) Also in this Core Habitat, mixed upland forests with clusters of vernal pools support populations of Jefferson Salamanders. Additionally, the BioMap Core Habitats that include areas extending beyond the ACEC were so designated for 6 exemplary natural communities, 22 rare plants, and 2 rare butterflies, 1 rare damselfly, 3 rare birds, 1 rare turtle, and 4 rare salamanders.

The Living Waters project of the NHESP delineated as Living Waters Core Habitat the aquatic resources of the state – lakes, ponds, rivers, etc. – which, if protected, would protect the most viable populations of wholly aquatic rare plants and animals and the best examples of aquatic natural communities. Approximately 3,536 acres or 29% of the ACEC is designated as Living Waters Core Habitat and Critical Supporting Watershed. As mentioned in the Fisheries Habitat section, the Upper Housatonic River and its tributaries located within the ACEC provide coldwater fisheries habitat for approximately 30 species of fish including reproducing populations of Brook and/or Brown Trout.

In total, the combined BioMap Core Habitat and Supporting Natural Landscape and the Living Waters Core Habitat and Critical Supporting Watershed equal 11,405 acres or 93% of the ACEC.

*Bird Habitat*

The ACEC is also a regionally significant bird habitat and migratory corridor for over 200 species, and has been designated an Important Bird Area (IBA) by the Massachusetts Audubon Society (Mass Audubon). According to Mass Audubon:

> 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 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 [also known as George Darey] Wildlife Management Area, south of Canoe Meadows, extending from Pittsfield to Lenox and Lee; and the 207 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... 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....

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. .... 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.

*General Wildlife Habitat*

Additional information regarding wildlife and fisheries is provided in the nomination document and in reference documents reviewed by state environmental agency staff as part of the nomination review. According to DFW, common wildlife in the region includes squirrels, bobcat, coyote, White-tail Deer, bear and moose. According to Mass Audubon, wildlife found at Canoe Meadows Wildlife Sanctuary also includes a breeding population of Wood Turtles, Spotted Salamanders, Northern Leopard Frogs, Osprey, and Bald Eagles.

Woodlot Associates conducted an Ecological Characterization of the Housatonic River in 2002 for the U.S. Environmental Protection Agency (USEPA) to support EPA's Superfund work along the river and documented Wood, Snapping, and Painted Turtles; Wood and Green Frogs; American Toads; Spotted and Jefferson Salamanders; Woodchucks, Striped Skunks, Virginia Opossums, North American River Otters, Mink,, Brown Bats, Eastern Coyotes, Red and Gray Foxes, Raccoons, Eastern Chipmunks, North American Porcupines, Common Muskrats, American Beavers; Ruffed Grouse; Milk and Garter Snakes; and voles, shrews, mice, and rabbits.

The extensive wildlife habitats of the ACEC, including many rare and unique habitats, illustrate the close ecological interdependence of the various natural and cultural resource features of the ACEC, including surface waters, wetlands, floodplains, open fields and farmlands, and forest.

**Agricultural Areas**

The ACEC Regulations permit me to consider land of agricultural productivity and forestry land within the Agricultural resource category. Farming and forest management are an integral part of overall resource preservation and management within an ACEC. Agricultural cropland and pasture cover approximately 985 acres and forested lands cover approximately 8,373 acres, together totaling approximately 9,358 acres or 76% of the ACEC based on MassGIS Land Use mapping data (1999). Of the 8,373 forested acres estimated in the Land Use data, at least 529 acres are forested wetlands (wooded swamp in the MassGIS wetlands data layer), leaving over 7,800 acres of forest. According to MassGIS soils data, within this area 1,712 acres are considered prime farmland soils, and 3,927 are considered prime forestland soils, indicating the value and richness of the geological soils in this region of floodplain and forest. However, actively farmed and managed forestry lands are a smaller subset of these totals.

*Agriculture*
A total of 127 acres in the ACEC where sweet corn, butternut squash, and hay are farmed are subject to an Agricultural Preservation Restriction (APR) with the Massachusetts Department of Agricultural Resources (DAR). An APR is a permanent deed restriction that precludes any use of the property that will have a negative impact on its agricultural viability. Area farms also produce beef cattle, vegetables and fruits, hay, and dairy products. Several farmers also lease lands from other landowners such as DFW and Mass Audubon. There is a small Community Supported Agriculture (CSA) farm in Lenox, and there are several farm stands within the ACEC. CSA farms provide a way for the public to form a relationship with a local farm, buying "shares" or paying fees upfront in exchange for receiving weekly distributions of farm products. This system enables farmers to remain viable and contributes to the health of the local economy. The Canoe Meadows Organic Community Gardens, operating for the past 25 years at the Mass Audubon Canoe Meadows property in Pittsfield, offers the opportunity for approximately 75 local residents to grow vegetables and flowers on two acres and represents a unique community farming program.

Maintaining these small-scale, locally owned farms and gardens is an important way of life that provides local food and farmed products, preserves open space, and provides a scenic quality of life. These farms also support and are supported by local restaurants who serve Berkshire agricultural products on their menus. According to "The Regional Plan for the Berkshires," 2000, prepared by the Berkshire Regional Planning Commission (BRPC), the number of large farms in the Berkshire region (and statewide) have historically decreased, however, between 1985 and 1997 there has been an increase in the number of small farms in the Berkshires (from 352 to 387). During this time, the average farm size decreased from 166 acres to 144 acres. Small farms under 49 acres increased 53% between 1992 and 1997, and are attributable to "niche" farms catering to smaller specialty markets, such as honey and unusual vegetables. Also of note is a 13% increase in agricultural employment between 1980 and 1990. Although farming is not a major contributor to the regional economy, it does provide significant local economic, social, cultural, scenic landscape, and environmental benefits.

*Forestry*
Forestry is also an important element of the ACEC, providing habitat, working landscape, scenic value, and economic benefit. DCR owns and actively manages October Mountain State Forest and provides oversight and assistance to private landowners in the region. Through the MA Forest Stewardship Program and the MA Current Use Forest Tax Program DCR works with private landowners to create 10-year management plans that help protect and manage the inherent ecosystem values of their forests.

As an example of potential forestry activities within the ACEC, the DCR Service Forestry Program and MassGIS digital data have records of 24 properties under the MA Current Use Forest Tax Program (Chapter 61, 61A, 61B) and/or Forest Stewardship Program totaling approximately 1000 acres (520 acres, Pittsfield; 425 acres, Lenox; 54 acres in Washington, and 1 acre in Lee) or 8% of the ACEC area as Chapter 61/61A/61B and Forest Stewardship Program participating parcels. Chapter 61 and the DCR Forest Stewardship Programs support and encourage private forest landowners' efforts to manage, enjoy, and care for their land using a long-term approach.

Under the Massachusetts Forest Cutting Practices Act (Ch. 132), timber harvesting on both public and private forestland involving any commercial timber cutting of wood products greater than 25 thousand board feet or 50 cords on any parcel of land at any one time is required to have a Forest Cutting Plan approved by the DCR Service Forestry Program. According to the DCR Service

Forestry Program, for FY2008, one private property owner within the ACEC (in Pittsfield) applied for approval of a Forest Cutting Plan to harvest forest products on 25 acres of forest land.

According to the MassGIS Land Use digital data (1999) there are over 7,800 acres of forested land (including forested wetlands) in the ACEC, of which approximately 6,605 acres are within permanently protected open space properties.

October Mountain State Forest totals 16,323 acres. Approximately 5,517 acres or one third of the State Forest is within the ACEC, including approximately 1,212 acres or 75% of the total 1,616 acres of Small-scale Forest Reserve Areas within the Forest. According to the Central Berkshire District Forest Resource Management Plan (2007), these areas are passively managed and set aside from the traditional land management base to: "protect important habitat or landscape features, provide habitat for species that utilize older and complex forest structure, serve as controls for research; and as places where natural systems and disturbance regimes can function relatively free of human interference." (p. 23)

Approximately 4,134 acres or 75% of the State Forest within the ACEC is in active forest management. Nearly all state-owned forest lands (DCR and DFW own over 500,000 acres) received Green Certification from the Forest Stewardship Council (FSC) in 2004. The five-year certification is currently under review for renewal, and includes an annual audit of state forestry practices to ensure the highest standards of forest management.

DCR's Central Berkshire District Forest Resource Management Plan (2007) provides strategic forestry management direction for 18 Division of State Parks and Recreation (DSPR) properties (including October Mountain State Forest) on approximately 31,251 acres in an ecological, economic, and socially sustainable manner. The Plan addresses climate change considerations by recognizing the carbon sequestration benefits of forests, focusing on sustainability and ecosystem function rather than species distribution, and focusing attention on management of non-native species.

October Mountain State Forest also has recreational and historical features, described below in the Historical/Archaeological Resources and Special Use Areas sections.

**Water Supply Areas**

Water supply features of the ACEC include the 41-acre Farnham Reservoir, part of the Pittsfield public water supply system, adjacent protected watershed lands, an inactive non-community groundwater source for drinking water, a large medium-yield aquifer, and multiple water withdrawals for industrial use. The only Outstanding Resource Water (ORW) designated to maintain public drinking water quality within the designated area is Farnham Reservoir and its drainage area.

*Surface water drinking water supply*

The City of Pittsfield owns and operates the Farnham Reservoir (within the Town of Washington), a Class A Public Water Supply. Farnham Reservoir (41 acres) is one of four reservoirs (with Ashley Lake, Sandwash and Lower Ashley Intake reservoirs) which comprise the Ashley Lake System and provide drinking water to the City. Water from the reservoirs flows to the Ashley Intake Structure and then to the Ashley Water Treatment Plant where sediments and contaminants are filtered out. Farnham Reservoir is surrounded by 4,000 acres of City of Pittsfield Watershed Area land, plus a 1,097-acre parcel of October Mountain State Forest. Approximately 425 acres of the Pittsfield Watershed Area adjacent to Farnham reservoir are within the boundaries of the ACEC. Farnham Reservoir is Pittsfield's only potable, municipal withdrawal point within the ACEC.

*Groundwater drinking water supply*
Maple Glade Campground is an inactive private campground with a small, transient, non-community groundwater water supply source. According to MassDEP data, a new source would need to be permitted in order to come into compliance with current regulations.

*Non-potable water supply*
MassGIS data shows that 384 acres (3% of the ACEC) of the 600- acre medium-yield aquifer south of Woods Pond in Lee lies within the ACEC. The aquifer lies beneath the Lane Construction quarry and floodplains to the east of the Housatonic River. There are three industrial supply wells located within this area permitted through the Water Management Act.

According to MassDEP data, there are five non-potable water withdrawal points within the ACEC. Three wells formerly operated by Schweitzer-Mauduit are adjacent to the Housatonic River; Lane Construction operates one river withdrawal along the Housatonic River; and the Pittsfield Country Club operates one withdrawal point on Morewood Lake.

**Historical/Archaeological Resources**
The ACEC contains a number of historic and archaeological resources. According to comments provided by the Massachusetts Historical Commission (MHC):

> Review of the Inventory of Historic and Archaeological Assets of the Commonwealth indicates that a range of significant historic and archaeological resources are located within and immediately adjacent to the proposed ACEC. The Berkshire region of western Massachusetts and the Upper Housatonic River drainage contain much managed open space, and have not been subject to the intense modern development pressures of the eastern portion of the state. Consequently, the concurrent intensity of cultural resource management investigation has been low. Because the majority of the proposed ACEC has not been subject to systematic archaeological survey, it is likely that many other significant historic and archaeological resources are present within undisturbed and archaeologically sensitive areas, than is reflected by the known site areas recorded in MHC's Inventory.

The MHC comment letter also identifies areas within the ACEC that are "documented centers of Native American occupation and land use from at least the Archaic and Woodland Periods (approximately 10,000 through 450 years ago) and may include unmarked human burials" and are "highly archaeologically sensitive for Native American archaeological resources." These areas include:

> The Canoe Meadows area and adjacent uplands portions of Southern Pittsfield, northern Lenox and northwestern Washington… the October Mountain State Forest area in Washington… associated with the use of the mountains for stone tool raw material quarrying, gathering and hunting… areas along the Housatonic and its tributaries in Lenox and Lee.

Further review by DCR's Office of Cultural Resources noted the presence of three prehistoric sites within the Upper Housatonic River ACEC. These sites are clustered adjacent to one another on the Housatonic River and nearby Court Hill. The cultural/temporal affiliations for these sites are unknown as are the activities or seasons of the year that they were occupied. By the time of Euro-American occupation it was recorded that this area was a popular fishing area for local Native Americans, particularly the Mohicans.

The MHC also states that the Upper Housatonic towns of Pittsfield, Lenox and Lee "experienced a fluorescence as a summer resort vacation destination during the mid 19$^{th}$ through mid 20$^{th}$ centuries." Large estates, known as "cottages" were constructed, and to "facilitate this summer residential

occupation, public structures" were also constructed. Two such structures within the ACEC are the Lenox Railroad Station in Lenox and the Golden Hill Bridge over the Housatonic River in Lee. Both structures are listed in the State and National Register of Historic Places.

DCR's Office of Cultural Resources also provided information on notable historic activities in the area now known as October Mountain State Forest. In 1896 William C. Whitney, Secretary of the Navy under President Grover Cleveland, acquired 11,000 acres in the town of Washington to develop a game preserve. At one time, over 24 houses and over 30 outbuildings made up the Whitney estate. After Whitney's death in 1904 the property remained unused until 1915 when the property was acquired by the Commonwealth to create a state forest. Improvements were initiated to provide for public access and active use, including the construction of roads and the development of recreational facilities. In 1933, the Civilian Conservation Corps (CCC) was established by President Roosevelt to provide employment opportunities for young men. That same year, a CCC camp was established at October Mountain State Forest. A second camp was established in 1934. Building on the previous efforts of the Commonwealth, the CCC concentrated on the development of recreational facilities at October Mountain, primarily located along Schermerhorn Gorge and at Felton Lake, and included trails, bridges and shelters.

There is little visual evidence of the former Whitney estate. Although most of the facilities developed by the CCC at October Mountain are no longer in existence, what is left is located in the Felton Lake Area. Several cabin foundations and a free-standing chimney associated with the CCC Camp can be found north of the lake. An earthen dam at the upper end of the gorge at Felton Lake still exists but is in poor condition. The most notable remaining CCC feature is a stone arch bridge. Also located in the Felton Lake area, the bridge provides an outstanding example of the rustic stonework that characterized the CCC aesthetic.

*Upper Housatonic Valley National Heritage Area (UHVNHA)*

The UHVHA was designated by Congress in 2006, encompasses 29 communities in western Massachusetts and northwestern Connecticut, and includes all four of the communities in the ACEC. According to the National Park Service (NPS) National Heritage Area website, a National Heritage Area is a "place designated by Congress where natural, cultural, historic and scenic resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography." The NPS administers the program with the goal of expanding "traditional approaches to resource stewardship by supporting large-scale, community centered initiatives that connect local citizens to the preservation and planning process."

The UHVHA identifies four broad heritage themes across the region:

1) The past and present activity of writers, artists, musicians and others in creating a cultural oasis
2) Our unmatched scenic beauty, both natural and man made
3) Our role in key early industries of national significance
4) Our role in the development of democracy - the independent spirit.

**Special Use Areas**

The ACEC regulations cite "undeveloped or natural areas, public recreational areas, or significant scenic sites" as examples of "special use areas." Undeveloped or natural areas have already been described in the sections above and are a central feature of the ACEC. Although not formally recognized by a scenic designation, the remaining farmlands, floodplain, wetlands, and forests that characterize this area create a scenic and rural region that inspires a high quality of life for its residents and visitors.

There are significant public recreational areas and preserved conservation and agriculture lands within the ACEC. MassGIS data show the location and extent of municipal and privately owned open space, including conservation and agricultural restrictions. Geographic analysis indicates that within the ACEC there are approximately 7,788 acres of open space land (63% of the ACEC). These are permanently protected as follows: state owned, 6,326 acres (81% of the protected open space within the ACEC); municipally owned, 858 acres, (11%); private non-profit, 321 acres (4%); privately owned, 169 acres (2%) in private Conservation Restrictions; and private Agricultural Preservation Restriction, 127 acres (less than 2 %).

Major recreational lands within the ACEC include a 5,517-acre portion of the DCR October Mountain State Forest and the 818-acre DFW George L. Darey Wildlife Management Area (WMA). Other important protected open space includes 425 acres of City of Pittsfield public water supply Watershed Area land, the 240-acre Post Farm managed by the Lenox Conservation Commission, the 255-acre Mass Audubon Canoe Meadows Wildlife Sanctuary, and 182 acres of Pittsfield municipal park land.

DCR's October Mountain State Forest offers a range of recreational pursuits including hiking, camping, fishing, hunting, snowmobiling, off-road vehicle driving, and cross-country skiing. A 46-site campground and day use areas are located within the ACEC. Also within the ACEC, numerous trails traverse the State Forest, allowing for passive hiking and biking; as well as for Off Highway Vehicle (OHV), also known as All-Terrain Vehicles (ATVs), riding and snowmobiling. The predominant trail use in this area is OHV riding (on approx. 26 miles of multiuse motorized trails) occurring from May 1st to the end of November. A very scenic 1.7 mile hiking trail climbs steeply through the Schermerhorn Gorge, a special geologic feature, to Felton Lake and returns to Roaring Brook Road. There is a long-range vista area on Schermerhorn Road, presenting a view north to Mount Greylock. Washington Mountain Meadow (also known as Washington Mountain Marsh) is accessible by a 3.2 mile interpretive hiking trail that includes cellar holes, a 19th century cemetery, marsh boardwalks, a rocky outcrop overlooking the marsh, and a wide variety of habitats from forests, to fens and peatlands, to beaver lodges. Some of the common wildlife of Washington Mountain Meadow includes American Beaver, Eastern Coyote, Red Fox, Raccoon, White-tail Deer, Short-tailed Weasel, North American Porcupine, Bobcat, Snowshoe Hare, Black-capped Chickadee, Pileated Woodpecker, and Black Duck. DFW stocks Pheasant in Washington Mountain Marsh during the fall hunting season. Although the CCC developed shelters, bridges and trails at Felton Lake, the remaining CCC resources are a dam and a stone arch bridge, the Felton Lake Bridge.

According to DFW, the Darey WMA

> is one of western Massachusetts' most heavily utilized wildlife management areas for all types of passive recreation including hunting, fishing, trapping, hiking, canoeing, kayaking, bird watching, and wildlife viewing. Wildlife-dependent outdoor recreation has significant and far-reaching benefits to the economy of the surrounding region.

DFW stocks the Darey WMA with Pheasant in the fall. Woods Pond is considered one of the premier ice-fishing locations in the region. The Darey WMA also has one of four canoe launch locations in the ACEC, the John F. Decker Canoe Access.

Canoe Meadows Wildlife Sanctuary, owned by Mass Audubon, is dedicated to wildlife habitat conservation and public education, with trails for passive recreation and bird watching. The Town of Lenox's Post Farm offers passive recreational and hunting opportunities. Pittsfield's Kirvin Park and Fred Garner Park offer recreational opportunities within city limits with views of October Mountain and canoe access to the Housatonic River (from Fred Garner Park).

## III. Boundary of the Upper Housatonic River ACEC

Upon review of the boundary as recommended in the nomination letter, oral testimony presented at the public hearing, correspondence submitted to the Secretary, and information gathered in the course of EEA agency review, I hereby designate the final boundary of the ACEC as the same boundary proposed in the nomination. Other than technical clarifications (such as of road names and of 200-foot Riverfront Areas and 100-foot wetland Buffer Zones), the final boundary is identical to the one nominated.

According to GIS data, the final designated Upper Housatonic River Watershed ACEC boundary includes approximately 12,276 acres. (According to GIS data provided by DFW for the nomination, the originally nominated boundary included approximately 12,280 acres.) The approximate acreage located in each municipality is as follows:

| | |
|---|---|
| Lee | 1,614 acres |
| Lenox | 3,517 acres |
| Pittsfield | 3,166 acres |
| Washington | 3,978 acres |

**Discussion of Final ACEC Boundary**

The environmental information available for the review of the nomination, summarized above in the Description of the Resources of the Upper Housatonic River ACEC, supports the basic approach for delineating the boundary described in the nomination. The flow of ground and surface water throughout and within the Upper Housatonic River watershed is essential to the health and integrity of the ecosystem of river, wetlands, floodplain, tributaries, steep slopes and the rare species habitats located throughout the designated area. The use of roads as a boundary is a reasonable approximation of the subwatersheds and the central resource features of the Upper Housatonic River area in most cases. However, in specific areas, especially where roads do not exist or to be inclusive of certain resources within subwatersheds, railroads, 100-foot wetlands Buffer Zone, 200-foot Riverfront Area, and municipal boundary lines are used to delineate the boundary.

Proposals to change the boundary

Several proposals to change the nominated ACEC boundary were submitted during the course of the public review or were provided as public testimony at the public hearing. Requests were made to exclude the northernmost Lee Industrial Zone or individual properties within it, several industrial properties in Lenox, and several municipal properties in Pittsfield. There were also requests to exclude October Mountain State Forest. Finally, there was a request to expand the boundary to add a conservation/residential zone in Lee.

In its letter, the United State Environmental Protection Agency (EPA) notes that the proposed ACEC includes an area that has been contaminated by the release of PCB's from the General Electric plant in Pittsfield. Pursuant to a consent decree signed by EPA, GE, the Commonwealth, the State of Connecticut, and the City of Pittsfield, GE is analyzing various remedial options for this area, known as the "Rest of River." EPA expresses a concern that "certain challenges would accompany the designation of an ACEC for an area covered by the cleanup process" and states that the ACEC designation should not "be used to delay or even preclude remediation, habitat protection, or restoration activities that we determine [are] necessary to protect human health and the environment." (The State of Connecticut articulates a similar concern in its comment letter).

At the same time, however, EPA also states that "if the designation goes forward, we will work closely with the Commonwealth and the community to address such challenges."

I agree fully with the EPA and Connecticut that the ACEC designation should not be used to delay or preclude remediation, habitat protection, or restoration activities along the Rest of the River. In my view, the ACEC designation is fully consistent with these objectives, in fact furthers them by highlighting the important ecological value of this stretch of the river and ensuring that this ecological value is considered in the remediation decision. I also agree with EPA that to the extent there is any conflict between the ACEC designation and the remediation (and I am not aware of any such conflict at this time), EEA and its agencies will work with EPA, Connecticut, and others to resolve such conflicts in a good faith, reasonable manner.

EPA also requests that in the ACEC designation, I either exempt the remediation activities from any restrictions imposed by the ACEC designation, or clarify that certain types of activities are allowable under various regulations that are triggered by the ACEC designation. I believe that it is premature to act upon this request, as no remedy has been selected, and indeed GE and other stakeholders are still analyzing the benefits and detriments of a wide variety of approaches. I also believe that it is unnecessary in light of the level of cooperation and broad agreement on goals that has characterized the remediation process thus far.

Requests to exclude industrial properties

The Town of Lee Board of Selectmen and Planning Board wrote to offer "qualified support" of the ACEC from Woods Pond to the north, requesting that the Town's Industrial Zone with manufacturing and a gravel and asphalt plant within the nominated ACEC be excluded. Although the Lee Community Development Corporation first opposed the ACEC, they later submitted a written letter supporting the Lee boards' qualified support. Lane Construction Corporation submitted a letter requesting that the section of the Housatonic River adjacent to Crystal Street, including any property owned by Lane, be excluded from the proposed ACEC. In response to other comments in Lane Construction's letter, I wish to make clear there are no prohibitions on renewing water withdrawal permits within ACECs, however, higher scrutiny may be used in reviewing the hydraulic effect on any wetlands when reviewing a permit renewal application; there are no zoning changes associated with ACEC designation; and there are no restrictions on the "current allowable uses" of their properties based upon ACEC designation.

Several existing industrial business interests in Lenox requested that their properties be excluded from the ACEC. I do not believe that any of these businesses will be restricted from continuing to conduct their existing businesses based upon the effects of ACEC designation.

I find that the resources contained within these areas in Lee and Lenox that border the Housatonic River itself, or are located within the adjacent floodplain, Riverfront Area, and contributing subwatersheds, are important to the central integrity of the ACEC. Thus I must respectfully decline all of these requests for property exclusions. The ACEC is not intended to impede development or redevelopment, and I find that the challenge of balancing environmental protection of critical resources with the support of economic improvements to the region through appropriate and sustainable development is worthy of our concerted efforts. The designation is intended to encourage sensitively designed development within the ACEC that incorporates Low Impact Development (LID) techniques and best practices to minimize impacts to the important ecological and cultural resources of the Upper Housatonic River.

I also received a request from Interstate Biofuels, LLC. This company intends to purchase a 5.5 acre parcel in Lenox to build a biofuel production facility, but expresses strong concern that the

ACEC designation will interfere with the permitting of this facility. This facility will produce approximately 15 million gallons per year of a clean, biofuel product that can be used for vehicles with diesel engines and in residential and commercial furnaces using heating oil. I believe that the development of facilities to manufacture clean and non-fossil based fuel are manifestly in the public interest, as such facilities will lower greenhouse gas emissions and help make Massachusetts a center of clean energy technology. Facilities such as this one are also needed to enable Massachusetts to meet the requirements of the Clean Energy Biofuels Act, which Governor Patrick signed into law in 2008.

I also believe that this is a promising location for this facility, as the site is a discontinued paper mill and therefore represents a creative re-use of property. Also, the property is located in Lenox's industrial zone, and is contiguous to an active railroad line, which allows the organic materials and the biofuel byproduct to be shipped by rail, thereby further reducing the greenhouse gas emissions that would otherwise be associated with the project.

I have decided not to exclude this property from the ACEC designation, just as I have rejected excluding other industrial properties. My decision should not be construed as a determination that this five acre parcel has unique environmental resources or that this proposed biofuel facility at this location is in any way incompatible with the protection of the natural environment.

In response to the general concerns expressed by Interstate Biofuels, I would like to state clearly that the inclusion of this parcel is not intended to place additional burdens upon this project, or in any way suggest that the project should be denied by state or local permitting agencies. For example, should EEA's MEPA Office review an Environmental Notification Form ("ENF") under MEPA and 301 CMR 11.00 for this project, and should it exceed **only** the ACEC threshold at 301 CMR 11.03(11), a rebuttable presumption will exist that the project will not require the preparation of an Environmental Impact Report ("EIR").

Requests to exclude municipal properties

The Mayor and the Pittsfield Department of Community Development submitted comments indicating endorsement of the ACEC if the City-owned wastewater treatment plant and Farnham Reservoir with "associated city owned lands in [Washington]" were excluded.

I find that the Farnham Reservoir, a municipal public water supply, and its surrounding protected watershed lands are important resources worthy of protection under the ACEC Regulations and therefore are not excluded. The City's wastewater treatment plant is located in a central area of the ACEC with adjacent resources of floodplain, wetlands, potential vernal pool, river, coldwater fisheries, and rare species and wildlife habitat and is also vital to the integrity of the ACEC and is therefore not excluded.

However, it is not the intention of the ACEC designation to prohibit or complicate future permitting for either of these important public service industries for drinking water supply and for wastewater treatment should they need to upgrade, renovate, or expand their operations. Furthermore, I note the public health interests served by both of these facilities.

Requests to exclude October Mountain State Forest

Two off-road vehicle organizations submitted comments requesting that October Mountain State Forest be excluded from the ACEC boundary to avoid potential closure of the Forest to off-road vehicle use currently permitted on this DCR property. I understand that DCR has conducted a multi-year public review of Off-Highway Vehicle (OHV) use of public DCR properties resulting in criteria for the sustainable practice of this recreational use on DCR properties as concluded in

the DCR OHV Policy in 2007. The Policy for siting OHV trails includes a two-step process of analysis consisting of "coarse filter" and "fine filter" analysis. While the first step was conducted in 2007, the second step, where the most thorough and detailed assessment of the specific site conditions occurs, has yet to be completed. Although DCR currently allows OHV recreational use in October Mountain State Forest, that use comes with the responsibility to use the resources properly, with care given to sensitive environmental resources. The erosion of trail networks is well known. The Forest is a multi-use property with camping, passive and active recreation, and active forest management. Although I am not exempting these lands and facilities from the ACEC boundary, I encourage DCR, subject to the availability of resources, to continue its efforts to develop a fine-filter analysis for this property and to assess resource protection, management, recreation, and public safety to determine the future of OHV use at October Mountain State Forest through a public review process.

Requests to Expand the Boundary

In their public comment letter, the Town of Lee Board of Selectmen and Planning Board requested that a Conservation-Residential Zone of 158 acres that includes Town Forest and Pinnacle Park, not originally within the proposed boundary, be added to the designated area. This proposal includes resources that may merit further review for potential ACEC designation but the resources would need to be documented in detail and garner additional public discussion and review. I suggest that if desired, the Town of Lee consider a potential amendment to the ACEC one year past designation as provided for in the ACEC Regulations.

**Overview of the Upper Housatonic River ACEC Boundary Description**

As described in the nomination, the Upper Housatonic River ACEC boundary primarily follows readily identifiable boundaries such as streets, roads, and railroad rights-of-way, municipal boundaries, and jurisdictional areas such as the 100-foot wetlands Buffer Zone and 200-foot Riverfront Area as defined in the Wetlands Protection Act Regulations. Where the ACEC boundary is defined by roads, this office relies upon road names in the MassGIS datalayer from the Executive Office of Transportation as the primary source of road names. Any unnamed roads or other conflicting names are identified according to other sources as noted in the boundary description below.

Where the ACEC boundary is defined by the location of natural resource features (e.g. wetland resource areas), the boundary may be subject to clarification based on the most current definitions and data for the resource areas. For a review of site specific projects within the ACEC, the ACEC boundary may need to be determined in the field or in consultation with the ACEC Program. Actual field verification of the 100-foot wetlands Buffer Zone or the 200-foot Riverfront Area would be determined during the course of filing, by a project proponent to the Conservation Commission of the appropriate municipality, either a Request for Determination of Applicability or a Notice of Intent following the procedures specified in the Wetlands Protection Act, M.G.L. Ch. 131, sec. 40, and its regulations at 310 CMR 10.00.

Only for purposes of delineating this ACEC boundary, the 200-foot Riverfront Area takes precedence over the 100-foot wetlands Buffer Zone. However, where a 200-foot Riverfront Area is specified as the ACEC boundary, based upon the location of a presumed perennial stream, and said stream is later determined by the Conservation Commission or the DEP to be intermittent and therefore would not contain Riverfront Area, the ACEC boundary will revert to the 100-foot wetlands Buffer Zone in that location.

Where the ACEC boundary is defined by the location of Riverfront Area, the boundary follows a line along the outer boundary of Riverfront Area as defined in 310 CMR 10.58(2)(a) and

10.58(2)(a)3. For most locations, Riverfront Area is 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).

Where the ACEC boundary is defined by the location of wetlands Buffer Zone, the boundary follows a line along the outer edge of the wetlands 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) - which include any bank, freshwater wetland, marsh, or swamp bordering on any creek, river, stream, pond or lake).

Unless otherwise specified, the ACEC boundary as described extends to and includes the entire width of the rights-of-way of public and private streets and roads and other rights-of-way such as railroads.

**Final ACEC Boundary Description**

The final boundary is shown on the attached map developed using the following MassGIS data layers: DEP Wetlands, 1:12,000 (April 2007); Executive Office of Transportation (EOT), Office of Transportation Planning Roads (June 2008); Trains (April 2008). The above MassGIS data are supplemented by the following maps:

- Department of Conservation and Recreation's October Mountain State Forest Trail Map (2008),
- Town of Lee Assessors' Map 8, and
- Town of Washington Assessors' Maps C and D.

The boundary is displayed on the following Massachusetts (single quadrangle) United States Geological Survey (USGS) 15 minute series, 1:25,000-scale metric topographic quadrangle maps: East Lee (1988), Pittsfield West (1988), Pittsfield East (1988) and Stockbridge (1987). An official map and supplemental maps are on file at the ACEC Program office at the DCR Bureau of Planning and Resource Protection.

**Boundary Description of the Upper Housatonic River ACEC**

Specifically, the boundary of the ACEC is defined as follows (commencing in the northwest corner of the ACEC boundary in the City of Pittsfield):

| Boundary Type | Boundary Description |
|---|---|
| **Road** | 1. Commencing in the **City of Pittsfield**, 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 southern edge of the Housatonic Railroad Company right-of-way; |
| **Railroad Right-of-Way** | 2. Thence southeasterly along the railroad right-of-way to the intersection of the railroad right-of-way and the 100-foot wetlands Buffer Zone of the wetlands located to the south and west of the railroad right-of-way; |
| **100-foot Wetlands Buffer Zone** | 3. Thence westerly, southerly, and easterly 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 southern edge of the railroad right-of-way; |

| | |
|---|---|
| **Railroad Right-of-Way** | 4. Thence southerly along the railroad right-of-way to the intersection of the railroad right-of-way and Holmes Road; |
| **Road** | 5. Thence southerly along Holmes Road to the intersection of Holmes Road and Chapman Road; |
| **Road** | 6. Thence southerly along Chapman Road into the **Town of Lenox,** where Chapman Road becomes East Street; |
| **Road** | 7. Thence southerly along East Street to the intersection of East Street and Walker Street; |
| **Road** | 8. Thence southeasterly along Walker Street to the intersection of Walker Street and Lawton Street; |
| **Road** | 9. Thence westerly along Lawton Street to the intersection of Lawton Street and Catherine Street; |
| **Road** | 10. Thence southeasterly along Catherine Street to the intersection of Catherine Street, Church Street, and Golden Hill Road; |
| **Road** | 11. Thence southerly along Golden Hill Road into the **Town of Lee**, where Golden Hill Road becomes Lenoxdale Back Road; |
| **Road** | 12. Thence southerly along Lenoxdale Back Road to the intersection of Lenoxdale Back Road and Golden Hill Road; |
| **Road** | 13. Thence easterly along Golden Hill Road, crossing the bridge over the Housatonic River, to the intersection of Golden Hill Road and the western edge of the Housatonic Railroad Company railroad right-of-way; |
| **Railroad Right-of-Way** | 14. Thence southerly along the main railroad right-of-way to the intersection with the western edge of the right-of-way of the railroad spur that forks to the east; |
| **Railroad Right-of-Way** | 15. Thence southerly along the railroad spur right-of-way towards Columbia Street to the intersection of the railroad spur right-of-way and Columbia Street; |
| **Road** | 16. Thence northeasterly along Columbia Street to the intersection of Columbia Street and Old Columbia Street, as shown on the Town of Lee Assessors' Map 8; |
| **Road** | 17. Thence easterly along Old Columbia Street to the intersection of Old Columbia Street and Greylock Street; |
| **Road** | 18. Thence northerly along Greylock Street, which becomes Columbia Street as shown on the MassGIS EOT Roads datalayer (also known as Bradley Street on the Town of Lee Assessors' Map 8); |
| **Road** | 19. Thence northerly along Columbia Street until the fork at Mill Street and Bradley Street; |
| **Road** | 20. Thence easterly and northerly along Bradley Street which becomes Woodland Road at the intersection of Washington Mountain Road; |
| **Road** | 21. 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; |

| | |
|---|---|
| **200-foot Riverfront Area** | 22. Thence northeasterly along the 200-foot Riverfront Area into the Department of Conservation and Recreation (DCR) October Mountain State Forest (OMSF) and then into the **Town of Washington**, 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 an unnamed tributary stream that leads to the southwestern branch of the Washington Mountain Marsh (labeled Washington Mountain Lake on the USGS Topographic Map); |
| **200-foot Riverfront Area** | 23. Thence northerly along the 200-foot Riverfront Area of the unnamed tributary stream to the intersection with the 100-foot wetlands Buffer Zone of a small pond or deep marsh; |
| **100-foot Wetlands Buffer Zone** | 24. Thence continuing northwesterly along the 100-foot wetlands Buffer Zone of the eastern edge of this wetlands complex to the intersection of the 200-foot Riverfront Area of an unnamed tributary stream; |
| **200-foot Riverfront Area** | 25. Thence continuing northeasterly along the 200-foot Riverfront Area of the unnamed tributary stream to the intersection of the 200-foot Riverfront Area of the unnamed stream and the southern edge of Washington Mountain Lake Dam, a large earthen berm originally constructed for a dam; |
| **Dam** | 26. Thence easterly along the southern edge of the dam (berm) to the southern right-of-way of the OMSF park road (an extension of West Branch Road) near DCR gate 5, as shown on the DCR OMSF Trail Map (dated 2008); |
| **Road** | 27. Thence southerly and easterly along the OMSF park road past DCR gate 6 and continuing on West Branch Road to the to the intersection of West Branch Road and Lenox-Whitney Place Road, as shown on the DCR OMSF Trail Map (dated 2008); |
| **Road** | 28. Thence northwesterly along Lenox-Whitney Place Road, which becomes Whitney Place Road, as shown on the DCR OMSF Trail Map and the Town of Washington Assessors Maps C and D (although the MassGIS EOT Roads layer indicates it remains Lenox-Whitney Place Road); |
| **Road** | 29. Thence northerly along Whitney Place Road around Farnham Reservoir to the intersection of Whitney Place Road and New Lenox Road, as shown on the DCR OMSF Trail Map and the USGS Topographic Map Pittsfield East; |
| **Road** | 30. Thence westerly along New Lenox Road to Sykes Mountain Road (an unpaved forest road indicated on USGS Topographic Map Pittsfield East); |
| **Road** | 31. Thence westerly and northerly along Sykes Mountain Road to the intersection of Sykes Mountain Road and the **Town of Washington - City of Pittsfield** municipal boundary line; |
| **Municipal Boundary Line** | 32. Thence easterly and northerly along the **Town of Washington - City of Pittsfield** municipal boundary line to the **City of Pittsfield - Town of Dalton** municipal boundary line; |

| | |
|---|---|
| **Municipal Boundary Line** | 33. Thence northerly along the **City of Pittsfield - Town of Dalton** municipal boundary line, crossing Ashley Brook, to the intersection of the **City of Pittsfield - Town of Dalton** municipal boundary line and the north side of the 200-foot Riverfront Area of Ashley Brook; |
| **200-foot Riverfront Area** | 34. Thence westerly and northerly along the eastern boundary of the 200-foot Riverfront Area of Ashley Brook into the **City of Pittsfield**, to the intersection of the eastern boundary of the 200-foot Riverfront Area of Ashley Brook with the northern boundary of the 200-foot Riverfront Area of Sackett Brook; |
| **200-foot Riverfront Area** | 35. Thence westerly along the 200-foot Riverfront Area of Sackett Brook to the intersection of the 200-foot Riverfront Area and East New Lenox Road; |
| **Road** | 36. Thence northerly along East New Lenox Road to the intersection of East New Lenox Road and Williams Street; |
| **Road** | 37. Thence westerly along Williams Street to the intersection of Williams Street and Gravesleigh Terrace; |
| **Road** | 38. Thence southerly and westerly along Gravesleigh Terrace to Holmes Road; |
| **Road** | 39. Thence westerly across Holmes Road along Cooper Parkway which becomes Marshall Avenue, continuing westerly to the intersection of Marshall Avenue and Pomeroy Avenue; |
| **Road** | 40. Thence northwesterly along Pomeroy Avenue to the intersection of Pomeroy Avenue and Crofut Street; |
| **Road** | 41. Thence westerly along Crofut Street to the intersection of Crofut Street and South Street (Route 7) to the point of beginning. |

Unless otherwise specified, the ACEC boundary as described above extends to and includes the entire width of the rights-of-way of public and private streets and roads and other rights-of-way such as railroads.

## IV. Discussion of the Criteria for Designation

In the review process leading to the designation of a nominated area, I must consider the factors specified in 301 CMR 12.09 of the ACEC Regulations regarding the designation of Areas of Critical Environmental Concern. As stated in the regulations, the factors need not be weighed equally, nor must all of these factors be present for an area to be designated. The strong presence of a single factor may be sufficient for designation.

Based on the information presented in the letter of nomination, at the public hearing, in written comments received throughout the public review process, and in state agency research and review, I find the following factors relevant to the designated ACEC:

(1) Threat to the Public Health through Inappropriate Use
According to MassDEP's Housatonic River Basin 1997/1998 Water Quality Assessment Report:

> PCB contamination from electrical manufacturing companies located in the upper portion of the watershed overshadows all other water quality issues in the Housatonic River Basin. In 1981, Department Environmental Protection (DEP) Bureau of Waste Site Cleanup issued an Administrative Consent Order designating the General Electric (GE) Company Pittsfield and the river as a hazardous waste site because of severe PCB contamination. (p. v)

The United States Environmental Protection Agency (EPA) proposed the GE Pittsfield/Housatonic River site to the Superfund National Priorities List in September 1997.

According to MassDEP's Housatonic River Watershed 2002 Water Quality Assessment Report (published 2007):

> Downstream from the confluence with the East Branch Housatonic River, the *Aquatic Life Use* is assessed as impaired for the lower 11.3 miles based upon high levels of PCB contamination. Whole fish PCB levels greatly exceeded the National Academy of Sciences and National Academy of Engineering (NAS/NAE) guideline for the protection of fish-eating wildlife. Surficial sediments are also contaminated with PCBs in this reach. ... All of the whole fish samples analyzed for total PCB exceeded (by between 5 and 894 times) the NAS/NAE guideline for the protection of fish-eating wildlife. (p.30)

The report continues (on p. 30):

> In 1982 the Massachusetts Department of Public Health (MA DPH) issued a fish consumption advisory for the Housatonic River because of PCB contamination associated with the General Electric site. The MA DPH advisory recommends: "*The general public should not consume any fish, frogs, or turtles from Housatonic River in the towns of Dalton, Pittsfield, Lenox, Lee, Stockbridge, Great Barrington, and Sheffield*".... In 1995 MA DPH updated their advisory to include a recommendation that fish taken from feeder streams to the Housatonic River should be trimmed of fatty tissue prior to cooking.

As noted above, I am well aware that the PCB cleanup overseen by the EPA and pursuant to a Consent Decree in 2000 among GE, the Commonwealth of Massachusetts, the State of Connecticut, and other parties, will progress on a course of public review and interagency coordination separate from the usual ACEC designation implementation. My office is fully committed to this endeavor. However, I note that the ACEC will bring heightened attention to the cleanup of this central portion (13 miles) of the Housatonic River known as the 'Rest of River.' Bearing in mind the foregoing statements, this ACEC designation is intended to facilitate the cleanup by encouraging scientifically based decision making and alternatives analysis 1) to promote remediation while avoiding and minimizing adverse environmental impacts, and 2) to encourage mitigation and restoration of critical resources to meet the purpose of designation which is to preserve, restore, or enhance the resources of the ACEC.

This concern was noted in comments received by the Lenox Conservation Commission:

> We feel that a strong state voice in the planned Housatonic River PCB removal and subsequent restoration will be a critical factor in returning the Housatonic River to the natural condition with a minimum negative impact to the river itself, the land, the people, their homes and businesses surrounding it.

US Congressman John Olver in a letter of support for the nomination on August 28, 2008 expressed similar thoughts:

> 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.

Regardless of the PCB contamination, the water quality of the Housatonic River and its tributaries continue to support high quality coldwater fisheries; these waters also recharge groundwater supplies and support regionally significant wildlife habitat. Water quality and public health are further dependent on the appropriate use of the extensive floodplain and erosion hazard areas within the ACEC. Inappropriate use of these areas would be a serious threat to public health, safety and welfare. This criterion alone supports ACEC designation.

(2) Quality of the Natural Characteristics

The high quality of the natural characteristics of the ACEC is described in the nomination document and in public comments received during the public review. These high quality resources range from the extensive surface water and wetlands systems to the agricultural and forested landscapes that comprise this area of Lee, Lenox, Pittsfield and Washington. The extensive and diverse wildlife habitats of the Upper Housatonic River, including rare species habitat for 32 state-listed species as described by the NHESP, reflect the high quality of the natural characteristics of the ACEC. The presence of two rare natural communities within the ACEC boundary, the Acidic Graminoid Fen and Level Bog, also contributes to the high quality of the area's natural characteristics. This criterion alone would support designation.

As stated in the comment letter from the Commissioner of DFG:

> Not only does the Upper Housatonic River area contain most of the 11 ecosystem features specified in 301 CMR 12.06, but these fisheries, wetlands, floodplain, [Massachusetts Endangered Species Act] MESA and other wildlife habitats and resources are high quality, rich in diversity and pervasive. Furthermore, the Upper Housatonic River fits squarely within the designation criteria under 301 CMR 12.09 for similar reasons – i.e., due to the area's uniqueness and quality of natural characteristics (particularly from a MESA standpoint); its support of a high diversity of finfish, ...waterfowl, wildlife, or other biota; and the Commonwealth's ownership of substantial and prized wildlife management and public recreational areas (the George Darey WMA and October Mountain State Forest).

(3) Productivity

The relatively undeveloped area within the ACEC boundary helps to preserve the unfragmented ecosystem that supports the rich biodiversity and native habitats described above. As stated previously, the combined total of 11,405 acres, or 93% of the ACEC, is delineated as areas representing the highest priority for biodiversity protection in Massachusetts by DFW's NHESP. Of this total, 7,869 acres (64%) of the ACEC is designated as BioMap Core Habitat and Supporting Natural Landscapes, 3,536 acres (29%) as Living Waters Core Habitat and Critical Supporting Watershed. There are also productive farmlands and forestlands within the ACEC.

(4) Uniqueness of Area

The uniqueness of the area strongly supports designation. According to written comments submitted by the NHESP, the unique biological value of the area is highlighted by the unfragmented nature of much of the area. The area within the ACEC includes habitats for 32 state-listed species (8 Endangered, 12 Threatened, and 12 Special Concern) including regionally significant, state-listed species.

Comments from the DFW stated:

> The Housatonic River watershed is one of the most biologically rich and unique regions of the Commonwealth supporting one of the highest densities of state-listed species in the state.

A support letter from The Nature Conservancy Massachusetts Office stated:

> 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.

According to written comments submitted by the MHC, the ACEC includes known and potential significant archaeological properties and two sites listed in the State and National Registers of Historic Places. It is likely that many other significant historic and archaeological resources are present within undisturbed and sensitive areas.

As discussed in the Historical/Archaeological Resources section, the Upper Housatonic Valley Heritage Area was designated by Congress in 2006, encompassing 29 communities in western Massachusetts and northwestern Connecticut, and including all four of the communities in the ACEC. A National Heritage Area is a "place designated by Congress where natural, cultural, historic and scenic resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography."

The resource features documented above substantiate this criterion alone as supporting designation.

(5) Irreversibility of Impact

The interdependence of the ecological resources within the ACEC, and the sensitivity of the habitats, especially of state-listed rare species, speaks to the irreversibility of impact that they are susceptible to without careful attention. The loss of the opportunity to preserve, manage and restore the rich diversity and quality of these resources for present and future generations would be irreversible should habitat fragmentation replace interconnected ecosystems, should rare species habitats disappear, or should serpentine riverine floodplains be altered beyond restoration. Thus extra attention to PCB remediation and resource restoration strategies is warranted. This criterion alone supports designation.

(6) Imminence of Threat to the Resource

In considering the factor of Imminence of Threat to the resources of this area, I note that when the ACEC nomination was submitted in September 2008, EPA's Informal Public Input Period for the GE Corrective Measures Study (CMS) had concluded three months prior in May 2008. According to the EPA website over 110 public comments were submitted regarding the CMS. During the public review of the ACEC nomination the GE cleanup and restoration were cited by the nominators and in public comments as reasons to work together, with the help and support of an ACEC, to preserve, restore, and enhance the natural and cultural resources of the Upper Housatonic River. The nomination states:

> 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.(p. 41)

As emphasized by US Congressman John Olver in his additional comment letter March 6, 2009:

> I support the contention of *Save the Housatonic* and dozens of other environmental and recreational groups that the ACEC and its accompanying regulations comprise Applicable or Relevant and Appropriate Requirements (ARARs), and thus must be considered by the EPA and the General Electric Company in its operations within the designated area. This contingency is one of the greatest potential benefits of the proposed ACEC designation. Failure by the EPA or GE to comply with the ACEC designation and its regulations as ARARs would provide you with the exclusive right to appeal such a matter. Consequently, the interests of all those towns and public and private landowners along the river who were excluded from the negotiations regarding the [Consent Decree] would gain a voice in the further plans to remove PCBs from the river and its floodplain.

This criterion alone supports ACEC designation.

(7) Magnitude of Impact

As indicated under (5) Irreversibility of Impact, the potential adverse impacts from negative changes to the area would be highly significant, whether from potential inappropriate development or from potentially inappropriate remediation and restoration measures chosen for the GE cleanup. As stated in GE's Response to EPA, March 2009, the proposed combination of sediment and floodplain soil removal alternatives evaluated in the CMS

> would result in a "take" of at least 12 state-listed rare animal species … and at least 9 state-listed rare plant species…. The "takes" of at least 13 of these state-listed rare species would be of a significant percentage of the local population of those species such that the work would be absolutely prohibited by the Massachusetts Endangered Species Act. (p. 4)

This criterion alone supports ACEC designation.

(8) Economic Benefits

The intrinsic natural, cultural and historic values of the area, and the wise preservation and management of these resources, will help to support the quality of life of the communities of Lee, Lenox, Pittsfield and Washington and thus provide indirect long-term economic benefits to these municipalities. The recreational opportunities afforded by the Housatonic River, state protected lands such as the DFW Darey WMA and the DCR October Mountain State Forest, municipally protected lands such as Lenox's Post Farm and Pittsfield watershed areas and public parks, and protected lands owned and preserved for the public by non-profit organizations such as Mass Audubon and the Berkshire Natural Resources Council are significant to the region and contribute significantly to local tourism. As stated previously in this document, public and private non-profit open space totals approximately 7,788 acres, or 63% of the ACEC (including 1,057 acres in Lee; 1,239 in Lenox; 1,578 in Pittsfield; and 3,914 in Washington). The largest permanently protected area within the ACEC is October Mountain State Forest (approximately 5,517 acres or about 1/3 of this state forest managed by the DCR and 45% of the ACEC).

Maintaining a small-scale, locally owned and land-based economy in agriculture and forestry provides local products to residents, preserve critical open space including grasslands, tilled fields, scenic areas and riparian buffers, and contribute to the vitality and environmental quality of the area. The protection and preservation of surface watersheds and aquifers located within the ACEC will yield long-term economic benefits by providing current public water supplies and industrial water uses, as well as potential future supplies.

Public comments provided by Joseph S. Larson, Emeritus Professor of Natural Resources Conservation, University of Massachusetts, Amherst stated:

> The Upper Housatonic is a unique ecosystem in Massachusetts with a long history of providing valuable natural functions to the citizens, cities, and towns in the immediate region, to communities downstream in Massachusetts and Connecticut, and internationally, with respect to migratory bird populations. The economic value that people in the Housatonic Valley place on this ecosystem is amply demonstrated in public investments by local, state, and national public and private agencies and organizations.

The comment letter from DFW stated:

> The Division has invested substantial resources on behalf of the Commonwealth to protect open space as habitat for fish and wildlife in the Housatonic watershed. The Division has been acquiring property in the upper Housatonic River area over the past several decades to protect this unique natural system and its wildlife resources and is one of the single largest land owners along the Housatonic River in the Commonwealth. ...The Darey WMA ... includes approximately 818 acres spread across multiple parcels consisting largely of floodplain and riverfront lands (this includes approximately 85% of the land along river's bank on one or both sides of the river from the confluence downstream to Woods Pond in Lenox...) ... Wildlife-dependent outdoor recreation has significant and far-reaching benefits to the economy of the surrounding region.

The comment letter submitted jointly by the Town of Lenox Board of Selectmen, Planning Board, and Conservation Commission stated:

> Eco-tourism is thriving here and depends on the natural resources contained within the ACEC. Thus, the added protection the designation affords is an important part of our economic strategy.

(9) Supporting Factors

The nominating committee for the Upper Housatonic River ACEC ensured a thorough and swift nomination process that was completed within six months. The outpouring of support for this nomination at public meetings, the public hearing, and in the written comments submitted, is a strong statement in favor of designation, and I find that the quality and uniqueness of the resources of the area, in addition to other factors described, strongly supports designation.

The ACEC is within four municipalities and can benefit from having more coordinated local and regional management for resources affected across municipal boundaries. Many organizations have offered to partner to help protect and better manage the resources of the area, including Berkshire Natural Resources Council, Green Berkshires, Housatonic Valley Association, Mass Audubon Society, Save the Housatonic, and other local and regional land trusts and alliances. These organizations together with state agencies and municipal boards and commissions can provide a broad foundation for citizen involvement and cooperative and collaborative efforts to protect the ACEC resources. The Berkshire Regional Planning Commission asked that "each of the directly affected municipalities and BRPC have formal positions on the ACEC steering committee." The City of Pittsfield also asked that all four municipalities within the ACEC be provided a formal seat

on an ACEC Steering Committee to "foster coordination of ACEC activities with municipal land use and environmental protection activities."

The strong support within the communities and regional environmental organizations should help achieve the long-term goals of this ACEC designation, including stewardship. The establishment of an ACEC stewardship group will encourage greater partnership and support, and help create a shared vision for preserving the environmental and community resources of this area. We have written commitments from many supporters who wish to form such a group, including a draft stewardship proposal identifying key potential activities for resource management submitted by Mass Audubon on behalf of the nominators, as well commitments from the four municipalities and the Berkshire Regional Planning Commission.

Summary of Comments

Approximately 136 comments were received in the course of the public participation and review process including 8 support letters appended to the nomination. The original letter of nomination included nomination signatures from 43 nominators from Lee, Lenox, Pittsfield, Washington and other Massachusetts communities. The nominators included U.S. Representative Olver, State Senator Ben Downing, State Representatives Dennis Guyer, Smitty Pignatelli and Chris Speranzo, and some members of the Boards of Selectmen of Lenox and Washington, two City Councilors of Pittsfield, and regional and state environmental organizations.

Residents of all four communities, as well as environmental organizations, voiced strong and thoughtful support for designation through their comment letters. The public testimony offered at the January 29 hearing attended by over 200 people showed strong support for the nomination, with 30 comments in support, 6 for conditional support with boundary exemptions or exclusions, 3 opposed, and 2 neutral. Of the 136 written and oral comments, 114 were in support of the ACEC boundary as nominated, 14 in support with proposed boundary changes or exemptions, 6 opposed to designation, and 2 neutral, plus petitions received with over 900 signatures in support. Comments offering conditional support for the ACEC and requesting boundary changes or exclusions were addressed in III. Boundary of the Upper Housatonic River ACEC, Discussion of Final ACEC Boundary.

Letters of support were submitted by the Berkshire Regional Planning Commission, and the Lenox Board of Selectmen, Planning Board, Conservation Commission, and two of three members of the Lenox Board of Health. The Town of Lenox stated in their comment letter:

> The advantages of having the ACEC designation are important to us. The creation of a stewardship committee, active management of the area, and the potential for raising the bar for the PCB clean-up efforts, are just a few of the important reasons that lead us to urge you to establish this new ACEC.

Letters of support were also received from 19 environmental organizations and the Massachusetts Historical Commission (MHC), Massachusetts Division of Fisheries and Wildlife (DFW) and Massachusetts Department of Fish and Game (DFG). These state agencies and others provided information about the importance of the resources within the nominated area during the review period.

Additional Factors Supporting Designation

The ACEC is located in four communities, two of which include portions of two other ACECs – the Kampoosa Bog and Hinsdale Flats ACECs, and is part of a broader network of conservation lands in the Berkshires. There are now a total of five ACECs in the Berkshires. It is important to build upon existing regional efforts for resource management and stewardship and to coordinate municipal and

regional priorities for the area, establishing specific objectives that can be accomplished through partnerships. I strongly encourage the formation of an ACEC stewardship group that develops stewardship goals and objectives and carries out actions developed among the communities, and all levels of government, community and environmental organizations, and residents. The Upper Housatonic River ACEC designation can provide a regional planning framework to encourage this coordination and positive stewardship for environmental resource management and open space preservation. EEA and ACEC Program staff can provide technical assistance to the stewardship committee.

**Conclusion**

Based on the foregoing, I am pleased to exercise the authority granted to me pursuant to Mass. Gen. L. ch. 21A, § 2(7), to designate the Upper Housatonic River as an Area of Critical Environmental Concern. The significance of this ACEC requires that the highest standards of environmental review and protection be applied to actions that may affect its resources.

Signed: _____ Date: 3/30/09

Ian A. Bowles
Secretary of Energy and Environmental Affairs

March 30, 2009