

**Announcement of Three Mile River Watershed
ACEC Designation**

On August 25, 2008 Secretary Ian A. Bowles designated the Three Mile River Watershed Area of Critical Environmental Concern (ACEC). The ACEC covers approximately 14,275 acres in Dighton, Norton, and Taunton in southeastern Massachusetts.

The effective date of the designation is August 27, 2008, the date of publication of this issue of *The Environmental Monitor*, in accordance with 301 C.M.R. 12.11.

The newest ACEC increases the total number of Areas of Critical Environmental Concern throughout the Commonwealth to 29. The combined acreage statewide is now 255,275 acres in 74 communities.

This announcement includes the following documents:

- Three Mile River Watershed ACEC designation document,
- Three Mile River Watershed ACEC boundary map, and
- Regional ACEC map for Three Mile River Watershed ACEC, including adjacent Canoe River Aquifer ACEC and Hockomock Swamp ACEC, designated in 1991 and 1990 respectively.

The digital ACEC boundary will be available via the online mapping tools: for ACECs at <http://maps.massgis.state.ma.us/acecs/pages/main.jsp>, and for “Oliver,” an interactive online data viewer, at http://maps.massgis.state.ma.us/massgis_viewer/index.htm, and in the ACEC data layer that can be downloaded from the MassGIS web site at <http://www.mass.gov/mgis/acecs.htm>

For further information, please contact:

Elizabeth Sorenson at (617) 626-1394 or Elizabeth.Sorenson@state.ma.us

Please also visit the ACEC Program website for updates:

<http://www.mass.gov/dcr/stewardship/acec/index.htm>.

DESIGNATION of the
THREE MILE RIVER WATERSHED
AREA OF CRITICAL ENVIRONMENTAL CONCERN

located in portions of the
MUNICIPALITIES OF DIGHTON, NORTON AND TAUNTON
WITH SUPPORTING FINDINGS

Following an extensive formal review required by the regulations of the Executive Office of Energy and Environmental Affairs (301 C.M.R. 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 Three Mile River Watershed, located in portions of the municipalities of Dighton, Norton, and Taunton, 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 Three Mile River Watershed 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 February 27, 2008 I received a letter of nomination from eleven citizens, including the Mayor of Taunton and a representative of the Southeastern Regional Planning and Economic Development District (SRPEDD), pursuant to the ACEC Regulations at 301 C.M.R. 12.05. In a letter dated, April 7, 2008 I accepted the Three Mile River Watershed ACEC nomination for full review. In this letter I outlined the ACEC nomination review process, and scheduled three initial public information meetings to be held in April and May of 2008. Notice of these public information meetings was included in the April 23, 2008 issue of The Environmental Monitor, published by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), in an April 22, 2008 press release, in an article published on April 23, 2008 in the Taunton Daily Gazette, and was posted on the ACEC Program website.

Public information meetings were held at the Benjamin Friedman Middle School on April 28, 2008, the Norton Public Library on April 29, 2008 and the Town of Dighton Grange Hall on May 1, 2008. On May 15, 2008 a proposal to extend the previously submitted ACEC boundary was submitted to the Secretary by SRPEDD on behalf of the Three Mile River ACEC Planning Committee, and in accordance with the wishes of the Mayor of Taunton, Dighton Board of Selectmen/Board of Health, and the Conservation Commissions in Dighton and Taunton. On May 19, 2008 I accepted the proposed boundary extension as part of the public review. Following the initial public information meetings, in correspondence to the nominators dated May 23, 2008 I confirmed the scheduling of one additional public information meeting, to be held on June 12 at the Grange Hall in Dighton. This public information meeting was held as scheduled. The four public meetings had light attendance. Additional letters of support for the nomination and the proposed boundary extension were received from the Mayor of Taunton dated May 19, 2008, from the Town of Dighton Board

of Selectmen/Board of Health dated May 19, 2008, and from the Town of Dighton Conservation Commission dated May 12, 2008.

In correspondence dated May 23, 2008 I notified the nominators that a public hearing would be held in Taunton on June 25, 2008. A copy of the public notice for the hearing was included in this correspondence. Over 200 copies of the letter and public notice were emailed to state legislators, state and regional agencies, environmental organizations, residents, and other interested parties.

A copy of the public notice was published in the May 21, 2008 issue of The Environmental Monitor. Copies of the public notice were also published in the May 23, 2008 editions of the Taunton Daily Gazette and the Attleboro Sun Chronicle. Copies of the Secretary's announcement and letter of acceptance, the public notice, and a link to the nominators' website for the full nomination and the proposal to extend the boundary were all posted on the ACEC Program website. Information regarding the date, time, and location of the hearing was also posted on DCR's Public Meeting webpage, and in a press release issued June 3, 2008.

Phil Griffiths, Undersecretary for the Environment, conducted a public hearing on my behalf regarding the nomination on June 25, 2008, at the Benjamin Friedman Middle School in Taunton, MA. Oral and written testimony was received from 18 people, including municipal officials, legislators, individual residents, and a variety of groups and organizations. A ten-day period for the submission of additional written comments, until July 7, 2008, 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 Department of Conservation and Recreation (DCR), Bureau of Planning and Resource Protection in Boston. Approximately 106 comments, including ones from 5 legislators, 14 municipal boards and commissions, four regional and state agencies including the Dighton Intertribal Indian Council, 12 organizations, and 37 citizens including 25 form letters, were received in the course of the public participation and review process. Eighteen individuals offered oral and written testimony at the public hearing. All testimony and comments but two were supportive of the designation.

II. Description of the Resources of the Three Mile River Watershed 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 Three Mile River Watershed ACEC nomination document (dated November 2007, submitted February 27, 2008) and other materials and correspondence assembled as part of the nomination review.

The total acreage included in the originally nominated area was approximately 14,210 acres. A proposal to extend the boundary added another 66 acres. The size of the designated ACEC is approximately 14,276 acres, approximately 125 acres located in Dighton, 5,400 in Norton, and 8,751 in Taunton. The ACEC includes all nine of the inland resource features listed in the ACEC Regulations, of which a minimum of four are required for nomination review (301 .C.M.R. 12.06).

The resources of the ACEC are located in portions of two sub-watersheds – the Three Mile River sub-watershed, located principally in Norton, including portions of the Wading River and the Rumford River, and in Taunton and Dighton; and headwaters of the Segreganset River sub-watershed in Taunton. Both of these sub-watersheds are located within the Taunton River watershed. The distinguishing characteristics of these

sub-watersheds are that they provide crucial inputs of surface and ground water to local and downstream waters and communities; share a large expanse of diverse wildlife habitat extending across municipal borders with extensive historical and archaeological resources; and are subject to intense and ever-increasing development pressures. For convenience the term 'watershed' will be used interchangeably with the term 'sub-watershed' in the remainder of this document.

The area provides important surface water and ground water inputs to public drinking water supplies in multiple communities. Rare species habitats for 12 state-listed species (including one federally designated as Threatened and several considered globally rare) are located throughout the ACEC. Priority Habitats for rare species cover approximately 1,999 acres or 14% of the area. A total of 13,486 acres (nearly 95%) of the ACEC are comprised of the habitats designated by the Division of Fisheries & Wildlife's Natural Heritage & Endangered Species Program (NHESP) as BioMap Core Habitat and Supporting Natural Landscapes, and as Living Waters Core Habitat and Critical Supporting Watersheds. The Three Mile River watershed contains a large hydrologically connected area of small tributaries, forested wetlands, and unique and valuable wetlands of rare floodplain and riparian forests. The area contains unique and highly significant archaeological and historical resources. Public and private non-profit open space (including conservation and agricultural preservation restrictions) totals approximately 1,642 acres, or 12% of the ACEC (818 acres in Norton, 803 acres in Taunton, and 22 acres in Dighton). Approximately 10,878 acres or 77% of the ACEC is comprised of forest, non-forested wetlands, and open lands and farmland according to the state's 1999 Land Use data (detailed in the Habitat Resources Section).

Resource Analysis and Mapping

The DCR, in the course of administering the review of the nomination, prepared a series of environmental resource maps regarding the nominated area. This information was mapped using the EEA's Massachusetts Geographic Information System (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 Three Mile River Watershed ACEC designation, and are on file at the offices of the ACEC Program at the 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: surface waters and drainage basins; wetlands; public drinking water supplies and aquifers; floodplains; rare and endangered species habitat; land use; protected open space, conservation and recreation lands owned by municipal governments and non-profit organizations.

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

Fisheries Habitat

According to comments supplied by the Division of Fisheries & Wildlife (DFW),

The Three Mile River is generally a low gradient warmwater river formed by the confluence of the Rumford River and Wading River, [and] the river flows for 11.7 miles at a gradient of 4.2 feet per mile to its confluence with the Taunton River in Dighton. In general, the fish populations in the proposed ACEC are comparable to other low gradient warmwater rivers of southeastern Massachusetts.

Fish populations summarized by DFW as sampled or reported from the Three Mile River include the catadromous American eel; the anadromous blueback herring, alewife, white perch, and (possibly striped

bass); and the resident redbfin pickerel, chain pickerel, golden shiner, white sucker, brown bullhead, pumpkinseed, bluegill, largemouth bass, black crappie, tessellated darter, and yellow perch. Bowfin have also been reported recently.

DFW describes the recreational fisheries as follows:

As for recreational fisheries, the Mt. Hope Mill pond impoundment is fished for the typical warmwater assortment of the area such as largemouth bass and panfish such as sunfish and brown bullheads. But the fishery is smaller than other nearby ponds such as Lake Sabbatia or Norton Reservoir. [The] Oakland Dam impoundment has a good warmwater fishery but has had access problems in the past. Besides the impounded areas, the recreational fisheries in the rivers themselves are limited.

Regarding the anadromous fish populations, the Division of Marine Fisheries (DMF) states that it has been involved with a river herring restoration effort for Alewife and Blueback herring in the Three Mile River for more than a decade.

Since 1996 a total of 11,000+ fish, 8,594 Bluebacks and 2,700 Alewife have been stocked into potential spawning habitat above the dams to reestablish and augment a natal population and in anticipation of the two fish passages at the Harodite Dam (installed 2006 replacing an earlier fishway that was washed out in 1998) and the Draka/Raytheon Dam (installation planned for 2009/2010). [The] diadromous species present ... use the lower Three Mile River section into the main stem [of the] Taunton [River]. With construction of the planned fishway at the Draka Dam anadromous fish will then have access to approximately 50 more acres of stream and impoundment habitat up through the Gertrude Boyden Wildlife Nature Refuge along several miles of the Three Mile River main stem.

There has been a strong, sustained local interest both in the Town of Dighton and the City of Taunton in support of this river herring restoration project for the Three Mile River.

According to support letters submitted from many environmental organizations, a coalition of partners will work with the two municipalities to ensure efforts to re-establish the historic herring runs continue and to provide ongoing volunteer monitoring of the anadromous fish thus providing a measurement of the success of these restoration projects.

Inland Surface Waters

As stated above, the ACEC includes portions of two watersheds – the Three Mile River and the Segreganset River watersheds. The Three Mile River begins at the confluence of the Wading and Rumford Rivers in Norton. The Wading and Rumford Rivers watersheds flow from the northwest from the towns of Attleboro, Mansfield, Plainville, Wrentham, Foxborough, and Sharon. The Three Mile River flows southeasterly through Taunton and Dighton until it joins the Taunton River in Taunton and Dighton. As stated in the nomination, several feeder streams contribute to the Three Mile River throughout its length, including Meadow Brook and Fall Brook. In addition to these named surface waters, the ACEC includes a dense network of unnamed creeks, streams, and brooks.

There are seven ponds found within the nominated area: Goose Branch Pond and Meadow Brook Pond are within Norton and Mount Hope Mill Pond, Oakland Pond, Segreganset River Pond, the Three Mile River Impoundment, and Willis Lake (Pond) are found within Taunton. According to a 1999 MassDEP Invasive Species survey, only three of these water bodies were found to have invasive species present. Meadow Brook Pond in Norton was found to have purple loosestrife (*Lythrum salicaria*), the Segreganset River Pond

in Taunton was found to have Phragmites (*Phragmites* spp.), and the Three Mile River Pond was found to have fanwort (*Cabomba caroliniana*) present. Impoundments along the Three Mile River include the Three Mile River #1 Dam in Taunton, and the Dighton Industries Dam and Three Mile River Dam in Dighton. In total, there are eight dams within the nominated area: three along the Three Mile River; one along the Segreganset River and one on an unnamed tributary; one at Barrowsville Pond along the northwestern border of the ACEC; one at Meadowbrook Pond; and one at Goose Branch Pond. Three of these dams are listed as “significant hazard” according to the DCR Office of Dam Safety dam hazard classification indicating that they hold enough volume where failure *may* result in loss of life or damage to property – the Dighton Industries, Barrowsville Pond, and Three Mile River #1 dams. Two of the dams are small enough to not be jurisdictional under state DCR dam regulation – the Goose Branch Pond and Segregansett Country Club dams.

The headwaters of the Segreganset River within Taunton are included within the ACEC boundary. These waters include two small dams within the Segregansett Golf Course and feed the Dighton well field located just south of the ACEC boundary, and the Somerset public water supply, diverted from the river further south.

Inland Wetlands

According to MassGIS data, wetlands cover approximately 2,712 acres or 19% of the ACEC. There is a mix of wooded swamp (2102 acres or 15% of the ACEC), shrub swamp, open water, shallow marsh meadow or fen, deep marsh, bog and cranberry bog. There are also 44 Certified Vernal Pools and 302 Potential Vernal Pools located within the ACEC according to NHESP data. Two of the most significant wetlands in the ACEC are the two Natural Communities identified by the NHESP and described in the nomination: Small-River Floodplain Forest and Alluvial Red Maple Swamp. According to the comment letter submitted by NHESP,

NHESP has documented reports of two exemplary natural communities within the proposed Three Mile River ACEC: an excellent **Alluvial Red Maple Swamp** along the river in Norton and an exceptional **Small-River Floodplain Forest** along the river in Taunton. Alluvial Red Maple Swamps are considered a **Vulnerable** natural community type in Massachusetts, while Small-River Floodplain Forests are considered **Imperiled**, even rarer. *Floodplain forests are considered to be among the rarest and most imperiled natural communities in Massachusetts. [emphasis added]* Although land acquisition and conservation restrictions are important ways to protect the remaining examples of floodplain forests in Massachusetts, land protection alone will not maintain these sites as high-quality, natural floodplain forest communities. The natural hydrologic regime that created these special communities and their natural closed-canopy forest structure must be maintained....

The relative scarcity of vernal pools, and their susceptibility to destruction by development or pollution, probably contributes to the rarity of the following MESA-listed rare vertebrates which use vernal pools in Massachusetts:

- Marbled Salamander (Threatened), Eastern Spadefoot (Threatened), Blue-spotted Salamander (Special Concern), and Jefferson Salamander (Special Concern), all of which breed only in vernal pools; and
- Blanding’s Turtle (Threatened), Eastern Box Turtle (Special Concern), and Wood Turtle (Special Concern), which use vernal pools for feeding, rehydration or over-wintering.

The proposed Three Mile River ACEC includes reported sites for five of these seven rare species. The high number of Certified and Potential Vernal Pools within the proposed ACEC is very likely a major factor in the presence of these five species in this area.

Natural Hazard Areas

Natural hazard areas are described in the ACEC Regulations as including floodplain areas. According to GIS data, floodplains cover approximately 1,524 acres, or 11% of the ACEC as 100-year Floodplain, and an additional 1,040 acres or 7 % of the ACEC as 500-year Floodplain according to the digital data that represent a subset of the data available on the paper Flood Insurance Rate Maps (FIRM) as provided by the Federal Emergency Management Agency (FEMA). These areas are located principally along the Three Mile River and its tributaries and the Segreganset River.

Habitat Resources

The wildlife habitat resources of the Three Mile River Watershed ACEC are diverse and extensive. These resources include both general wildlife habitat and rare species habitat. As mentioned above in the Resource Overview, according to the GIS Land Use maps (1999 data), approximately 10,878 acres or 77% of the ACEC is comprised of forest (8,911 acres, 63%), non-forested wetlands (363 acres, 3%), and open lands and farmland (1,604 ac., 11%; this category includes the following Land Use categories: cropland, pasture, open areas with no vegetation, participation recreation, urban open, and woody perennial), all providing valuable interconnected habitat. The ACEC is comprised of large areas of relatively unfragmented wildlife habitat.

According to comments submitted by the Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife, 12 state-listed species occur within the ACEC. These species include three listed as Endangered pursuant to the Massachusetts Endangered Species Act, five listed as Threatened, and four listed as species of Special Concern.

MESA Status	Scientific Name	Common Name
Endangered	<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon
Endangered	<i>Bidens eatonii</i>	Eaton's Beggar-ticks
Endangered	<i>Cardamine longii</i>	Long's Bitter-cress
Threatened	<i>Ambystoma opacum</i>	Marbled Salamander
Threatened	<i>Carex typhina</i>	Cat-tail Sedge
Threatened	<i>Emydoidea blandingii</i>	Blanding's Turtle
Threatened	<i>Scaphiopus holbrookii</i>	Eastern Spadefoot
Threatened	<i>Platanthera flava</i> var. <i>herbiola</i>	Pale Green Orchis
Special Concern	<i>Glyptemys insculpta</i>	Wood Turtle
Special Concern	<i>Ligumia nasuta</i>	Eastern Pondmussel
Special Concern	<i>Sabatia kennedyana</i>	Plymouth Gentian
Special Concern	<i>Terrapene carolina</i>	Eastern Box Turtle

Further comments from NHESP stated that several of these species are particularly significant: Eaton's Beggar-ticks is considered a **globally Imperiled** rare species, meaning it is at high risk of extinction; both Long's Bitter-cress and Plymouth Gentian are considered **globally Vulnerable** rare species, meaning the species are at moderate risk of extinction. **Atlantic sturgeon** is designated as Threatened under the federal Endangered Species Act and is considered **globally Vulnerable**. Atlantic sturgeon are found in the Taunton River, which the Three Mile River flows into, and a very small portion of the Three Mile River is considered habitat for this fish.

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 1,999 acres and 14% of the ACEC. Priority Habitats 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 used in conjunction with the Massachusetts Environmental Policy Act and the Forest Cutting Practices Act. Estimated Habitats 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.

As discussed in the Wetlands section above, there are 44 certified vernal pools and 302 potential vernal pools located within the ACEC, and there are two exemplary Natural Communities identified by the NHESP: Small-River Floodplain Forest and Alluvial Red Maple Swamp.

There are also important “Core Habitats” within the ACEC. According to the NHESP,

The BioMap project of NHESP delineated as Core Habitat those areas of the state which, if protected, would protect the most viable populations of rare plants and animals and the best examples of natural communities. Twenty-three percent of the entire state was delineated as BioMap Core Habitat; **forty-two percent of the proposed Three Mile River ACEC is BioMap Core Habitat, demonstrating the importance of this area.** The BioMap Core Habitats within the proposed ACEC were so designated for two exemplary natural communities, three rare plants, and four rare vertebrates.

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. Two sections of the Three Mile River are **Living Waters Core Habitat**, supporting three freshwater mussel species, including the rare Eastern Pondmussel and the uncommon Eastern Lampmussel (*Lampsilis radiata*, not MESA-listed). The Eastern Pondmussel is only known from five rivers in southeastern Massachusetts. In addition, the Taunton River, into which the proposed ACEC drains, is **Living Waters Core Habitat** for the Endangered Atlantic Sturgeon.

Additional information regarding wildlife and fisheries is provided in the nomination document and in research conducted by state environmental agencies as part of the nomination review. As mentioned above in the Fisheries Habitat section, Three Mile River provides warmwater habitat for at least 15 species of fish. The Taunton Open Space Plan indicates that common wildlife in the region includes “Raccoons, Mink, Muskrat and probably otters.... Nesting water birds include Wood Ducks, Canadian Geese, Swans, Black Ducks, Mallard Ducks, Great Blue Herons and others.... Much of the wildlife living in upland habitats [are] common species like Whitetail Deer, Gray and Red Fox, Eastern Coyote, Eastern and New England Cottontail Rabbit, Woodchuck, Red and Gray Squirrel, Eastern Chipmunk, Striped Skunk, Opossums, small rodents, Shrews and Moles, Ruffed Grouse, Milk Snakes, Garter Snakes, and most, if not all, common songbirds.” The Norton Open Space Plan states that since 2000, the town has conducted biodiversity surveys (following then EOEA Secretary Bob Durand’s challenge to state residents) that now total over 700 species of wildlife town wide.

The extensive wildlife habitats of the ACEC, including several globally 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 include land of agricultural productivity and forestry land under the Agricultural resource category. While relatively small in acreage, active agriculture and forestry together (approximately

478 acres, 3% of the ACEC according to the nomination document) are important components of the overall resource complex, economics, and scenic quality of the area. According to the nomination, there are 3 forestry properties totaling 64 acres, 4 cranberry bogs totaling 136 acres, 143 acres of vegetable farms, 99 acres of hay farms, and 26 acres of tree farms, nurseries, and greenhouses. A total of 238 acres in the ACEC are registered with the Massachusetts Department of Agricultural Resources (DAR) with an Agricultural Preservation Restriction, a permanent deed restriction which precludes any use of the property that will have a negative impact on its agricultural viability.

DAR stated that the Three Mile River ACEC is located in an area considered regionally significant to farming - especially in surrounding communities to the south. Thus, maintaining these small-scale, locally owned remaining farms is an important way of life that provides local food and farmed products, preserves open space, and provides a scenic quality of life rapidly disappearing in this region near I-495. There has been a 51% loss of agricultural land in Norton and Taunton over the last 50 years according to statistics from SRPEDD (online Community Statistics). DAR also indicated that there are 203 acres that have been or are currently under a Covenant with the Farm Viability program (FVP) in Dighton, Norton, and Taunton, and there are 86 acres that have been impacted by the FVP via a business plan or other "assist" in the same region.

The 136 acres of farmed cranberry bogs in the ACEC create an important economic interest in the region. According to the USDA regional Natural Resources Conservation Service (NRCS), three of these farms have developed Farm Conservation Plans with assistance from NRCS to help manage the land profitably while protecting the natural resources.

In addition to these figures above, GIS data provided by DCR regarding land use shows an overall figure of approximately 777 acres of farmland (cropland, pasture, orchard, nursery, and cranberry bog; 5% of the ACEC) and 8,911 acres of forest (63% of the ACEC) based on MassGIS's 1999 land use data.

Forestry is also an important component of the ACEC, providing habitat, working landscape, and economic benefit. There are 10 private forest owners with a total of 422 acres enrolled with DCR's Forest Stewardship Program. The size of these properties with Forest Stewardship Plans ranges from 14 acres to 102 acres, with five plans in Taunton, four in Norton, and one partially in Norton and in Taunton. DCR works with woodland owners to protect the inherent ecosystem values of their forests with 10-year plans for long-term management. At the larger scale of forested land, the MassGIS 1999 land use data identifies 8911 acres (63% of the ACEC) as forest. This figure includes forested wetlands, which the current MassDEP wetlands data layer quantifies as 2102 acres (15% of the ACEC) as wooded swamp.

Water Supply Areas

Water supply is an important issue in the ACEC. There are significant drinking water resources present within the ACEC: aquifers, public drinking water wells, delineated Zone II recharge areas, and headwaters that supply a public drinking water reservoir. The Three Mile River (source to confluence, 15.8 miles) and Wading River (from water supply intake, Mansfield, to confluence with Three Mile River) are classified as Class B, Warm Water, according to MassDEP's Surface Water Quality Standards. The Segreganset River is classified as Class A, Public Water Supply, (as part of the Somerset Reservoir classification, "source to outlet in Somerset and those tributaries thereto including Segreganset River from pumping station, Dighton to source").

Aquifers comprise 1,283 acres (9% of the ACEC) as medium-yield aquifers, and 70 acres (<1% of the ACEC) as high-yield aquifers. MassGIS data show multiple medium-yield aquifers throughout the region. Several lie under the Three Mile River at the border of Norton and Taunton and extend northerly and southerly. Others are along the Wading River, a section of wetlands in the northeast corner of the ACEC, and

near the Boyden Wildlife Refuge in Taunton. The only high-yield aquifer is between the Meadow Brook Pond and the Three Mile River in Norton. In addition, a small portion of the federally designated Canoe River Sole Source Aquifer stretches from the Canoe River Aquifer ACEC that borders the Three Mile River ACEC to the north towards the two Norton municipal wells within the Three Mile River ACEC.

Within the ACEC there are two of the Town of Norton's public drinking water wells (although one has been inactive since 1996), and the delineated Zone II recharge area for these wells. The majority of the Zone II recharge areas for two of the Town of Dighton's public drinking water wells are also within the ACEC, as are small portions of the Zone IIs for three other public drinking water wells for Norton and for the three public drinking water wells at the Dever Developmental Center (formerly the Paul A. Dever School) in Taunton. Total acreage of Zone II recharge areas within the ACEC is 1,016 acres (7 % of the ACEC).

The headwaters of the Segreganset River in southwest Taunton are within the ACEC and supply water to a surface water supply. This area is not within the Three Mile River watershed but within the Segreganset River watershed. Further down the river, outside of the ACEC, water is diverted from the Segreganset River between November and April to fill the Somerset Reservoir, which is the major source of drinking water for the Town of Somerset. As stated above, the Segreganset River is classified as a Class A water, and therefore an Outstanding Resource Water, from the Somerset Reservoir Diversion to the source. The Zone A protection zone for Class A waters is considered the most critical for surface water supply protection efforts and includes the area 400 feet from the bank of the river and 200 feet from the bank of tributaries to the river. Outstanding Resource Waters receive higher protections from the state and in general, discharges are not allowed to such waters.

According to MassDEP data, there are three non-public water withdrawals authorized under the Water Management Act to withdraw water from within the Three Mile River Basin (watershed). These withdrawals are for a cranberry bog, a golf course, and an industrial operation.

USGS flow gages on both the Three Mile and Segreganset Rivers indicate water flows are occasionally manipulated by water bodies upstream and in the case of the Three Mile River by diversion to and from upstream basins for municipal water supplies. DCR's Office of Water Resources is updating reports for stream flows in basins statewide based on on-going work with new methodologies.

Historical/Archaeological Resources

The ACEC contains a wealth 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 wide range of significant historic and archaeological resources are located within the proposed ACEC. The Three Mile River drainage forms a portion of the wider Taunton River drainage, which has been more or less continuously inhabited by Native American groups as a core settlement, peripheral resource procurement area and transportation route from at least 12,000 years ago through the historic period. During the historic period, the Three Mile River drainage was located between the industrial centers of Attleborough and Taunton, and saw a variety of agricultural, industrial and domestic activities occurring along its length throughout the 17th through 19th centuries. Both avocational and professional archaeological investigations conducted over the last half century within the Taunton River drainage have developed a substantial body of data on ancient and historic period Native and Euro-American occupation and land use within and adjacent to the Three Mile River and its associated brooks, streams and wetlands.

The MHC also states that there were extensive archaeological investigations in the 1980s for the I-495 corridor construction project which revealed several archaeological sites in the northern portion of the ACEC

in Norton and Taunton – the G.B. Crane Site and the White Crow Site that include evidence of long and short-term occupations along the banks of the Three Mile River and associated streams and wetlands from the Archaic Period (10,000 to 3,000 years before present) through the Woodland Period (3,000 to 450 years before present) and related to Native American occupations further east and north. Representatives of the Dighton Intertribal Indian Council were nominators of this ACEC and also provided comments regarding these resources.

For 7,000 – 8,000 years – the Native People lived on the banks of these rivers. It has always been their belief to respect “Mother Earth.” We are all brothers – the water – the animals – the land. What happens to one – happens to us all. It is the “circle of life.”

It is with great honor [we] speak for our people and for those with “no voice” – the “water” – the “trees” – the “winged” and the “four-legged.”

The MHC’s comments included information regarding historical resources,

More recent historic and archaeological sites dating from the 17th through early 20th centuries include multiple cemeteries throughout Norton and Taunton, as well as industrial areas and features in all three towns. Again, it is likely that significant, unrecorded historical archaeological resources are located within the drainage. Likewise, the proposed ACEC includes over 150 individual buildings, structures, and historic areas and districts listed among the Inventory of Historic and Archaeological Assets, and the State and National Registers of Historic Places. These above-ground resources include the industrial and domestic cores on Norton Center, and Barrowsville in Norton, Oakland, Westville and Wades Corner in Taunton, and North Dighton.

Further review by DCR’s Office of Cultural Resources indicated

“there is an [incredible] amount of significant history represented by the existing buildings, structures and landscapes that were built into the mid-20th [century] that help to define the character of this area.”

The Three Mile River ACEC includes several properties listed on the National Register of Historic Places including National Register Historic districts (NRDIS) and one Local Historic District (LHD). Portions of the Norton Historic District (LHD), designated in 1975, with 48 properties, and the Norton Center Historic District (NRDIS), designated in 1977, with 66 properties are within the ACEC. These two districts overlap one another, and they include multiple Wheaton College campus buildings as well as some civic buildings located in Norton Center. Taunton has many individual listings on the National Register of Historic Places, due to a National Register Multiple Resource Area listing effort that was undertaken in 1984. There are at least four sites within the ACEC, and several more just outside the ACEC boundary. The ACEC nomination mentions many historic and archaeological resources, and identifies even more on an online interactive map (up to 30 sites), but it is not clear that they are documented with MHC – eight have MHC inventory forms prepared. More documentation is needed to confirm the preservation and significance of these sites.

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, rolling hillsides, meadows, wetlands, and forests that characterize this area create a scenic and mixed rural and low-density residential region that inspires a high quality of life for its residents and visitors.

There are 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 approximately 1,642 acres of open space land, or 12%, are located within the ACEC, as follows: municipal, 1,123 acres, (8%); private non-profit, 308 acres (2%); and state, 212 acres (2%). Currently, 818 acres in Norton, 803 acres in Taunton, and 22 acres in Dighton are permanently protected within the ACEC boundary. Major municipal recreational lands within the ACEC include the John F. Parker Municipal Golf Course (195 acres), the Arthur Sharpe Estate (272 acres), and the Boyden Wildlife Refuge owned by the Taunton Conservation Commission (189 acres) in Taunton; and land protected by the Land Preservation Society of Norton and the Town of Norton known as Woodward Forest/Woods totaling 243 acres, and the Everett Leonard Field (27 acres) in Norton. Privately protected lands within the ACEC area include 189 acres of conservation restrictions and a total of 238 acres of agricultural restriction.

III. Boundary of the Three Mile River Watershed 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, the final boundary of the ACEC is increased in size as compared to the boundary proposed in the nomination, by including the expansion proposed during the course of the public review. According to GIS data provided by the DCR, the originally nominated boundary included approximately 14,210 acres.

According to GIS data, the final designated Three Mile River Watershed ACEC boundary includes approximately 14,276 acres. The approximate acreage located in each municipality is as follows:

Dighton	125 acres
Norton	5,400 acres
Taunton	8,751 acres

Discussion of Final ACEC Boundary

Boundary Modifications

The final ACEC boundary, as compared to the boundary proposed in the February 27, 2008 ACEC nomination, is modified in one location. The change occurs in an area to the southeast of the originally proposed boundary in Dighton and Taunton to include the Three Mile River to its confluence with the Taunton River. This change followed a request submitted by the regional planning agency SRPEDD to extend the proposed boundary in order to include a key section of the Three Mile River with habitat for globally rare species and anadromous fish. The Secretary in a letter dated May 19, 2008 accepted this proposed boundary modification into the full public review prior to a public information meeting and the public hearing. It is important to state that in some locations there are other highly important resources just outside of or nearby the final ACEC boundary.

Proposals for Future Study and Consideration

Following the June 25, 2008 public hearing, and in the course of EEA agency review of the nomination, several resource areas were identified that warrant future study and consideration by the towns and residents. These areas could also be considered for potential future inclusion in the Three Mile River Watershed ACEC or for separate ACEC nominations. I encourage the municipalities and residents of these areas to consider them for further research and study.

- The Town of Dighton public water supply well field and resource area, located south of the Taunton-Dighton municipal line and Route 44 (Winthrop St.) is an important part of the Segreganset River resource complex of the ACEC, and could be added to the ACEC using a series of public roads following Walker Street, Wheeler Street, and Williams Street. This relatively small area includes important resources: a section of the Segreganset River, a portion of the delineated Zone II aquifer recharge area for the public water supply wells, associated floodplains and wetlands; numerous potential vernal pools, and potential other resources.
- The areas designated by the NHESP as Priority Habitats for Rare Species, Estimated Habitats for Rare Wildlife, Living Waters Core Habitat and Supporting Watersheds to the east of the Three Mile River Watershed ACEC along the Taunton River include important rare species habitat that may be deserving of further protection.
- The historically significant Mount Hope Finishing Company mill complex and surrounding neighborhood in North Dighton were designed and laid out by the Olmsted firm in the 1920s. This area has been documented on a Massachusetts Historical Commission inventory form and is potentially eligible for listing on the National Register of Historic Places. The Town of Dighton might consider adding this area to the Three Mile River ACEC, or could also consider pursuing National Register designation for the area to recognize its significance to the community. Additionally, the town could consider two more protective mechanisms - Local Historic District designation or Neighborhood Architectural Conservation District designation.

Staff of the ACEC Program and other EEA agencies can provide further information and technical assistance to municipalities and citizens interested in pursuing these proposals.

Overview of the Three Mile River Watershed ACEC Boundary Description

As described in the nomination, the Three Mile River Watershed ACEC boundary, for the most part, follows readily identifiable, legal bounds such as streets, roads, highways, corporate boundaries as well as the previously designated Canoe River ACEC boundary line and the 200-foot Riverfront Area as defined in the Wetlands Protection Act Regulations. The Three Mile River Watershed ACEC closely approximates the watershed delineation, incorporating the cultural and natural resources integrated within the watershed while following recognizable boundaries. The ACEC boundary also includes the watershed and headwaters of the Segreganset River within the corporate bounds of Taunton in order to protect the significant resources there that include the Zone II recharge area of the downstream Dighton well fields and the Class A Public Water Supply designation of the Segreganset River that is applied for the downstream Somerset Reservoir.

Where the ACEC boundary is defined by the location of Riverfront Area, the boundary follows a line following 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). The boundary may be subject to clarification based on the most current definitions and data for that resource area. 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 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.

Final ACEC Boundary Description

The final boundary is shown on the attached map developed using MassGIS data layers derived from the following Massachusetts (single quadrangle) United States Geological Survey (USGS) 7.5 minute series, 1:25,000-scale metric topographic quadrangle maps: Assonet (1985), Dighton (1985), Norton (1987), and Taunton (1987). An official map and supplemental maps are on file at the ACEC Program office at the DCR Bureau of Planning and Resource Protection.

The USGS map is supplemented by the following maps:

the Official Zoning Map of the Town of Norton, dated May 2, 1988 and the Town of Norton Assessors Map 24, dated July 7, 1989, showing the ACEC boundary as it runs along the boundary of the residential/agriculture and commercial zones delineated at that time between South Washington Street and Interstate 495 in Norton, and coincident with the Canoe River Aquifer ACEC boundary designated June 10, 1991.

Boundary Description of the Three Mile River Watershed ACEC

Specifically, the boundary of the ACEC is defined as follows (moving in a clockwise direction from the south):

- | | |
|-----------------------|---|
| Road | 1. Commencing in the southern region of the ACEC, near the Dighton-Taunton corporate boundary at the intersection of Forest and Summer Streets in Dighton and following Forest Street northerly and along its continuation as South Walker Street in Taunton northerly to Winthrop Street (Route 44); |
| Road | 2. Thence westerly along Winthrop Street (Route 44) to the Taunton-Dighton corporate boundary; |
| Municipal Line | 3. Thence westerly along the Taunton-Dighton corporate boundary to the Rehoboth-Taunton corporate boundary; |
| Municipal Line | 4. Thence northerly along the Rehoboth-Taunton corporate boundary to the Norton-Rehoboth corporate boundary; |
| Municipal Line | 5. Thence westerly along the Norton-Rehoboth corporate boundary to its intersection with Dean Street in Norton ; |
| Road | 6. Thence northerly along Dean Street to its intersection with Barrows Street and South Worcester Street; |
| Road | 7. Thence northeasterly along Barrows Street to Summer Street; |
| Road | 8. Thence northeasterly along Summer Street to Taunton Avenue (Route 140); |
| Road | 9. Thence northerly along Taunton Avenue (Route 140) to East Main Street (Route 123); |
| Road | 10. Thence easterly along East Main Street (Route 123) to the intersection with South Washington Street; |

- Road** 11. Thence following South Washington Street (where the boundary is coincident with the Canoe River Aquifer ACEC boundary) in a southeasterly direction to a point, west of the intersection of South Washington and Hill Streets, shown on the Official Zoning Map of the Town of Norton (1972, revised May 2, 1988), demarcating commercial and residential zones at the time of the Canoe River Aquifer ACEC designation in 1991;
- Connecting Line** 12. Thence following from that point along that zoning line beginning at South Washington Street, extending in a northeasterly direction approximately 62 feet coincident with the intersection of parcels 22 and 23, Norton Assessors Map 24, and extending in a direct line along the zoning line approximately 2,438 feet to Interstate Route 495 (I-495), again coincident with the Canoe River Aquifer ACEC;
- Road** 13. Thence southeasterly along I-495 to the Norton-Taunton corporate boundary (still coincident with the Canoe River Aquifer ACEC);
- Municipal Line** 14. Thence following the Norton-Taunton corporate boundary in a southwesterly direction to the intersection with Hill Street;
- Road** 15. Thence southeasterly along Hill Street in **Taunton** to Crane Avenue South;
- Road** 16. Thence along Crane Avenue South in a southerly and southeasterly direction to the northern Right-of-Way of the CSX railroad line;
- Railroad** 17. Thence southeasterly along the CSX railroad line to its intersection with Fremont Street;
- Road** 18. Thence south and southeasterly along Fremont Street to Dunbar Street;
- Road** 19. Thence southwesterly along Dunbar Street to Norton Avenue;
- Road** 20. Thence southerly along Norton Avenue to Tremont Street (Route 140);
- Road** 21. Thence southeasterly along Tremont Street (Route 140) to Anawan Street;
- Road** 22. Thence southerly along Anawan Street to Shores Street;
- Road** 23. Thence westerly and southerly along Shores Street to Highland Street;
- Road** 24. Thence southeasterly along Highland Street, crossing Winthrop Street (Route 44), continuing on Highland Street to Cohannet Street;
- Road** 25. Thence southwesterly along Cohannet Street to Dighton Road;
- Road** 26. Thence southwesterly along Dighton Road to Dighton Avenue;
- Road** 27. Thence southerly along Dighton Avenue to South Street/Railroad Avenue;
- Road** 28. Thence westerly along South Street to the intersection with the 200-foot jurisdictional Riverfront Area along the eastern bank of the Three Mile River;
- 200-ft Riverfront Area** 29. Thence southeasterly along the Riverfront Area on the eastern and northern banks of the Three Mile River and continuing along the same line following 200 feet from the mean annual high-water line of the Three Mile River to a point on the western bank of the Taunton River at the confluence of the Three Mile River with the Taunton River;

- Connecting Line** 30. Thence continuing along the arc of the same line in an extension to its intersection with the Taunton-Berkley corporate boundary at the center of the Taunton River;
- Municipal Line** 31. Thence following the Taunton-Berkley corporate boundary in a southerly direction to the point of intersection of the Taunton/Dighton/Berkley corporate boundaries;
- Connecting Line** 32. Thence following a line from that point to the closest point on the western bank of the Taunton River and continuing along that line to its intersection with the Riverfront Area along the bank at the confluence of the Three Mile River with the Taunton River in **Dighton**;
- 200-ft Riverfront Area** 33. Thence northwesterly along the Riverfront Area along the southern and western banks of the Three Mile River to Spring Street;
- Road** 34. Thence westerly along Spring Street to Summer Street;
- Road** 35. Thence northwesterly along Summer Street to its intersection with Forest Street and the point of beginning thus completing the boundary of the Three Mile River Watershed ACEC.

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

IV. Discussion of the Criteria for Designation

In the review process leading to the designation of a nominated area, the Secretary must consider the factors specified in 301 C.M.R. 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 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 written comments regarding the nomination submitted by the Massachusetts Department of Environmental Protection (MassDEP), there are significant drinking water resources present within the ACEC. These include all or portions of Zone II aquifer recharge areas for five of the Town of Norton's public drinking water wells (two within the ACEC, three without), two of the Town of Dighton's public wells, and three public wells at the Dever Developmental Center (formerly the Paul A. Dever School) in Taunton. The headwaters of the Segreganset River are classified as a Class A water, and as Outstanding Resource Waters, supplying the surface drinking water for the Somerset Reservoir. There are multiple medium-yield aquifers throughout the ACEC in Norton and Taunton, with a high-yield aquifer in Norton, and a small portion of the federally designated Canoe River Sole Source Aquifer. I find that a significant threat to the public health exists through potential inappropriate development of land and water uses with the potential to pollute these water supplies, and through other direct or indirect effects to the resources of the area.

Inappropriate development in the floodplains of the ACEC would also constitute a threat to public health. Potential adverse impacts to the water quality of the Three Mile River, a public fishing area, also constitute a threat to public health.

Protecting, restoring, and maintaining good quality and quantity inputs from these two tributaries to the Taunton River system is essential to helping maintain and restore water quality downstream. Thus inappropriate use or contamination of the Three Mile or Segreganset River watersheds could pose a threat in downstream communities as well.

(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 Norton, Taunton and Dighton. The extensive and diverse wildlife habitats of the Three Mile River watershed, including rare species habitat for 12 state-listed species as described by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), reflect the high quality of the natural characteristics of the ACEC. The presence of the two rare natural communities within the ACEC boundary, the Alluvial Red Maple Swamp and the Small-River Floodplain Forest, contributes equally to the high quality of the area's natural characteristics. This criterion alone would support designation.

The Nature Conservancy (TNC) stated in their comment letter,

Through TNC's 2002 ecoregional planning process for the North Atlantic Coast (NAC) ecoregion, which encompass[es] coastal areas of nine states from Delaware to Maine, the Taunton River and six tributary streams, including the Three Mile River, were identified as conservation priorities. The Taunton and its tributaries were selected because of their remarkable condition and concentration of regionally significant species and natural communities. TNC believes that the protection of quality habitat in these rivers is critical to the preservation of the full extent of native biodiversity of the North Atlantic Coast region.

(3) Productivity

As indicated in the Quality of the Natural Characteristics of the area, the Three Mile River Watershed is rich in hosting a high diversity of wildlife. The low level of development in the ACEC helps to preserve the unfragmented ecosystems which are key to supporting biodiversity and the productivity of native habitats in Massachusetts.

(4) Uniqueness of Area

The uniqueness of the area also strongly supports designation. According to written comments regarding the nomination submitted by the NHESP, the unique biological value of the area is highlighted by the unfragmented nature of much of the area. The final area included within the ACEC includes habitats for 12 state-listed species, including regionally significant, state-listed, and globally imperiled ones. Priority habitat covers approximately 1,999 acres, or 14% of the ACEC, but the Core Habitat and Supporting Landscapes for both upland and aquatic species cover an astonishing 95% of the ACEC, according to GIS mapping and data. NHESP submitted comments regarding the nomination with this conclusion:

The unique biological value of the nominated Three Mile River ACEC lies in the high concentration of wetland natural resources – the Three Mile River itself, the Taunton River into

which the Three Mile flows, palustrine natural communities, numerous vernal pools, and their dependent rare species. With the accelerated pace of human development and sprawl in the Greater Boston area in recent decades, the protection of such a rich area, through every means possible, becomes ever more needed. The designation of this area as an ACEC provides the opportunity for state and local agencies, officials, and citizens to educate themselves about the unique attributes of this area, to plan wisely for its sustainable development, and to protect its natural resources.

According to written comments regarding the nomination submitted by the Massachusetts Historical Commission (MHC), the ACEC includes a wide range of significant historic and archaeological properties. The MHC's Inventory of the Historic and Archaeological Assets of the Commonwealth lists more than 150 structures and historic areas and districts within the nominated area. MHC concludes that the ACEC contains significant historic and archaeological resources, and that it is likely that many other significant historic and archaeological resources are present within undisturbed and sensitive areas.

These two resource features substantiate this criterion alone as supporting designation.

(5) Irreversibility of Impact

The dependence of the natural systems in the Three Mile River ACEC upon the groundwater and wetlands, the high degree of interdependence of the ecosystems of the ACEC, and the sensitivity of the habitats, especially of state- and federally listed and globally imperiled species, to development and fragmentation speak to the irreversibility of impact that they are susceptible to without careful attention. The loss of the opportunity to preserve and manage the rich diversity and quality of these resources for present and future generations would be irreversible should habitat fragmentation replace interconnected ecosystems, or should rare species habitats disappear.

(6) Imminence of Threat to the Resource

During the public review the intense development pressures on the communities of Dighton, Norton, and Taunton were cited as reasons to work together, with the help and support of an ACEC, to preserve the resources of the Three Mile River Watershed. This area, located adjacent to I-495, indeed is facing strong and unrelenting growth and development pressures, and I find that these pressures are an imminent threat to the resources, character and quality of life of these communities and the region. The percentage of impervious surfaces within the ACEC based on MassGIS data is less than 10 %, which, according to the *2006 Taunton River Watershed Five-Year Action Plan* indicates a low potential for adverse water quality impacts from impervious surface runoff. However, impervious surfaces cover from 14 to 24% of the eastern portion of the larger Three Mile River watershed (areas to the northwest of the ACEC in the Robinson Brook and Rumford River sub-watersheds). These areas have some of the highest percentages of impervious area in the Taunton watershed, indicating the potential for water quality to be impacted by impervious surface water runoff, and the waters from these areas flow into the ACEC. According to statistics compiled by SRPEDD, Norton and Taunton also have exceptional growth rates within the region – in the last 50 years (1951 – 1999), Taunton saw a 114% increase in urban land, a 15% loss of forested areas, and a 49% loss of agricultural land. In Norton during the same period, there was a 358% increase in urban areas, 16% loss of forested areas, and 52% loss of agricultural land. While change and growth are constants in southeastern Massachusetts, these data indicate a need to work carefully to balance resource protection and development especially within the Three Mile River ACEC with its significant and sensitive resource complexes.

(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. The interconnections of hydrologically dependent resources have high threat levels posed by potential irreversible pollution impacts or development that is not managed sensitively. GIS maps show a total of 21 railroad crossings with streams and wetlands and 152 road crossings with streams and wetlands within the ACEC, indicating a large potential for alteration to the hydrology and associated resources. EEA supports Smart Growth, Low Impact Development, and other management tools to assist communities in developing their economic base while protecting their most important resources.

(8) Economic Benefits

The intrinsic natural, cultural and historic values of the area, and the wise preservation and management of these resources, can only help to support the quality of life of the communities of Dighton, Norton, and Taunton, and thus provide indirect long-term economic benefits to these municipalities. The recreational benefits afforded by the Three Mile River, the fishing and canoeing areas, and the municipally protected lands such as the Boyden Wildlife Refuge that offer passive recreation such as hiking and bird watching are significant to the region.

Maintaining a small-scale, locally owned and land-based economy in agriculture and forestry can provide 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 communities. The protection and preservation of surface watersheds and aquifers located within the ACEC that provide current public water supplies, as well as potential future supplies, will yield long-term economic benefits.

(8) Supporting Factors

The nominating committee for the Three Mile River Watershed ACEC was persistent in their convictions and goals by continuing with a nomination process that existed for over six years. The nearly unanimous outpouring of support for this nomination as indicated 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.

Five state legislators provided comment letters in support of designation. The area is also part of the proposal to federally recognize the Taunton River Wild and Scenic Designation, submitted to Congress in 2005, which passed the House of Representatives vote in July 2008 and is awaiting the Senate vote. The Wild and Scenic study area includes tributaries to the Taunton River such as the Three Mile River.

The ACEC is within three municipalities and can benefit from having more coordinated local and regional management for resources affected across municipal boundaries. Most of the protected open space within the ACEC is owned by municipalities, which is another supporting factor for preservation of these areas. In recent years, much attention has been given the Taunton River Watershed, of which the Three Mile River Watershed ACEC is a part. Partnering organizations to help protect and better manage the resources of the area include Taunton River Watershed Campaign, The Nature Conservancy, Mass Audubon Society, The Trustees of Reservations, Taunton River Watershed Alliance, Taunton Wild and Scenic River Stewardship Council, SPREDD, and other local and regional land trusts and alliances. The Three Mile River Stream Team's "recommendations for action" (included in the ACEC nomination appendix) offered the first printed recommendation for ACEC nomination of the Three Mile River and were prepared to supplement the goals and objectives of the Taunton River Stewardship Plan. 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.

Comments submitted by the Dighton Intertribal Indian Council summarize the stewardship intent:

By “designating” this river – a “new Path” to the future will be open. ... It is so important that we all work together to preserve what we have. We cannot change the past – but we certainly can do something about the future.

Summary of Comments

Approximately 106 comments were received in the course of the public participation and review process including 24 support letters appended to the nomination. Regarding municipal comment letters, in addition to the original letter of nomination that included nomination signatures from the Mayor of Taunton, the Taunton Water Department, and the Norton Conservation Agent, letters of support for the nomination were submitted by the Dighton Board of Selectmen/Board of Health and Conservation Commission; the Norton Board of Selectmen, Conservation Commission, Town Manager, and Open Space Committee; and the Taunton Mayor’s Office of Economic Development, Municipal Council, Conservation Commission, Planning Board, and School Committee; and the Somerset Conservation Commission. State Senator James E. Timilty, and Representatives Michael J. Coppola and Philip Travis had letters of support submitted with the February 2008 ACEC nomination. State Senators Marc R. Pacheco and James E. Timilty (again), and Representative James H. Fagan submitted subsequent letters of support. Representative Steven D’Amico spoke in favor of the nomination at the public hearing June 25, 2008.

Written comments were submitted by 4 regional and state agencies. Letters of support for ACEC designation were submitted by the Massachusetts Historical Commission; the Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife; the Southeastern Regional Planning and Economic Development District (SRPEDD), and the Dighton Intertribal Indian Council (these last two were also nominating parties). The Massachusetts Department of Environmental Protection Drinking Water Program, Department of Agriculture Resources Agricultural Preservation Program the Office of Cultural Resources, Office of Water Resources, and Office of Dam Safety of the Department of Conservation and Recreation; Division of Fisheries and Wildlife (DFW) Fisheries Program, DFW Riverways Program, and Division of Marine Fisheries all provided information about the importance of the resources within the nominated area during the review period.

Written comments were submitted by 12 organizations. Letters of support for the nomination were submitted by: the Land Preservation Society of Norton; Old Colony Historical Society of Taunton; Crane’s Landing Condominiums; Greater Westville Neighborhood Association; Natural Resource Trust of Mansfield; Canoe River Aquifer Advisory Committee; Taunton River Watershed Campaign; The Nature Conservancy; The Trustees of Reservations; Save the Bay – Narragansett Bay; the Massachusetts Audubon Society; and the Taunton River Watershed Alliance.

Approximately 37 individual letters of support for the nomination, including 25 form letters, were submitted. One letter opposing the nomination was submitted from a regional business. At the public hearing, 16 individuals representing municipal boards and commissions, legislators, organizations, and citizens provided written and oral support for the nomination, one individual provided oral testimony opposing the nomination, and one citizen provided oral testimony that was neutral.

Additional Factors Supporting Designation

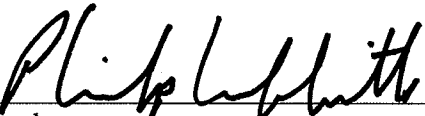
The ACEC is located in three communities, is adjacent to two other ACECs – the Hockomock Swamp and Canoe River Aquifer ACECs, and is part of the broader Taunton River Watershed. It is important to build upon the regional efforts for resource management and stewardship and to coordinate municipal and regional priorities for the area, establishing specific objectives that can be accomplished with partnerships. I strongly

encourage the formation of an ACEC stewardship group. The nomination document describes important stewardship goals and objectives for the area initiated by stream teams during the public review of the Taunton River Wild and Scenic River Study of tributaries to the Taunton River. These goals and objectives underscore the importance of coordination between the communities, and between all levels of government, community and environmental organizations, and residents. The ACEC designation can provide a framework and encourage this coordination and positive stewardship, and EEA and ACEC Program staff can provide technical assistance to a stewardship committee.

In addition, the Three Mile River Watershed ACEC can provide a regional planning framework for environmental resource and open space preservation and management to take advantage of many of the other initiatives ongoing in the region: Taunton River Wild and Scenic River Nomination, Save the Taunton Campaign, and other Taunton River Watershed outreach and scientific study proposals.

Conclusion

Therefore, I am pleased to exercise the authority granted to me pursuant to Mass. Gen. L. ch. 21A, § 2(7), to designate the Three Mile River Watershed 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: 
for Ian A. Bowles
Secretary of Energy and Environmental Affairs

Date: August 25, 2008
August 25, 2008

Three Mile River Watershed ACEC

Designated: August 25, 2008

Acreage: 14275 acres
 Dighton: 125 acres
 Norton: 5400 acres
 Taunton: 8750 acres

Massachusetts Department of Conservation and Recreation

Areas of Critical Environmental Concern (ACEC) Program

This map is intended to be used with the written boundary description contained in the ACEC designation document. The mapped boundary is not to be used by itself for definitive ACEC boundary delineation or regulatory interpretation. For review of site-specific projects within the ACEC boundary, determinations may need to be made in the field or in consultation with ACEC Program Staff.

For more information:
www.mass.gov/dcr/stewardship/acec

ACEC Boundaries by Type

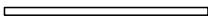
-  Road/Rail based
-  River based
-  Wetland based
-  Floodplain based
-  Tide based
-  Contour based
-  Political boundary
-  Property line based
-  Other
-  Digital update required

Areas not within this ACEC are shaded with a gray mask.

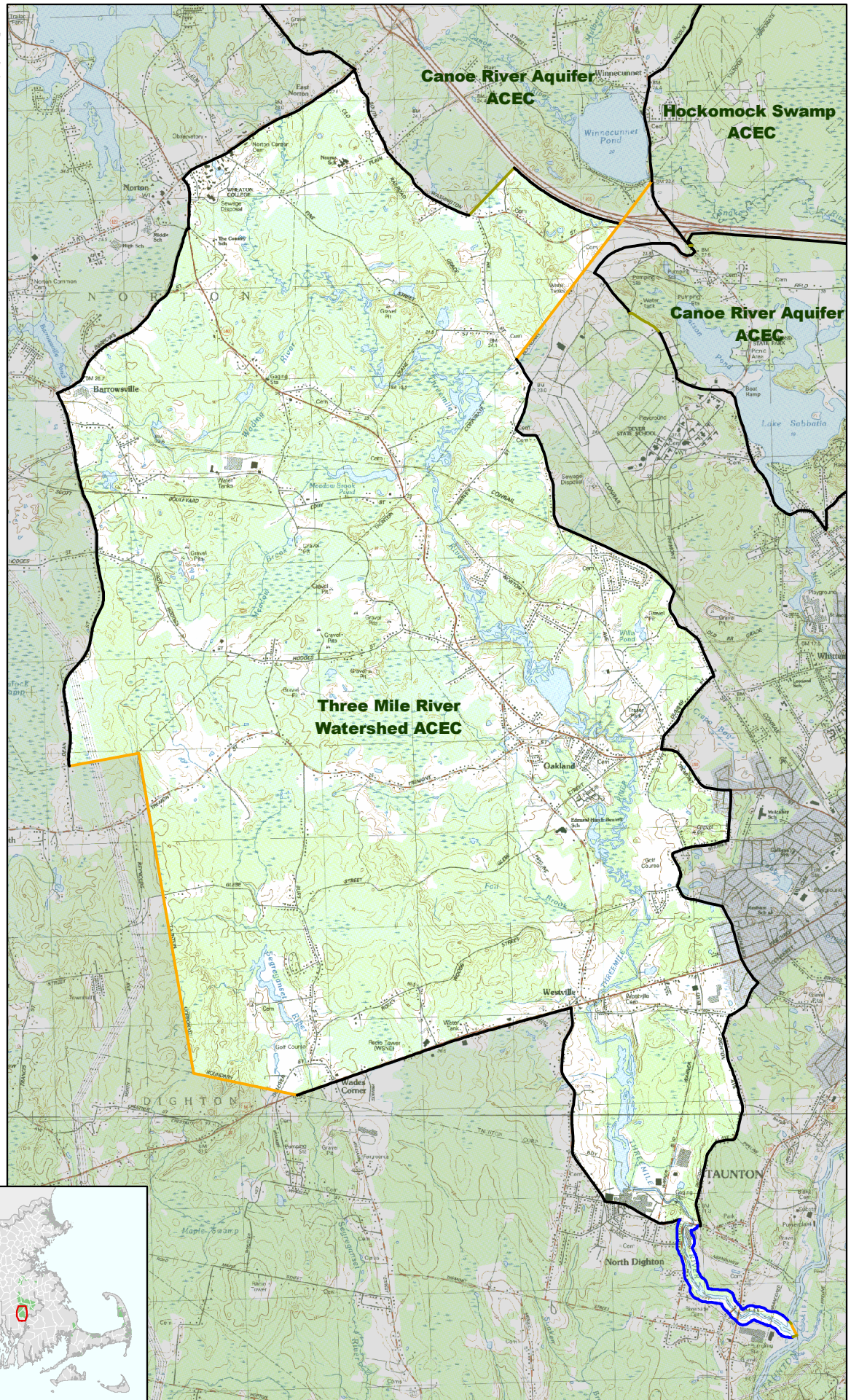
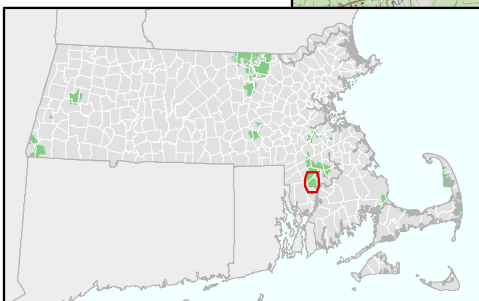
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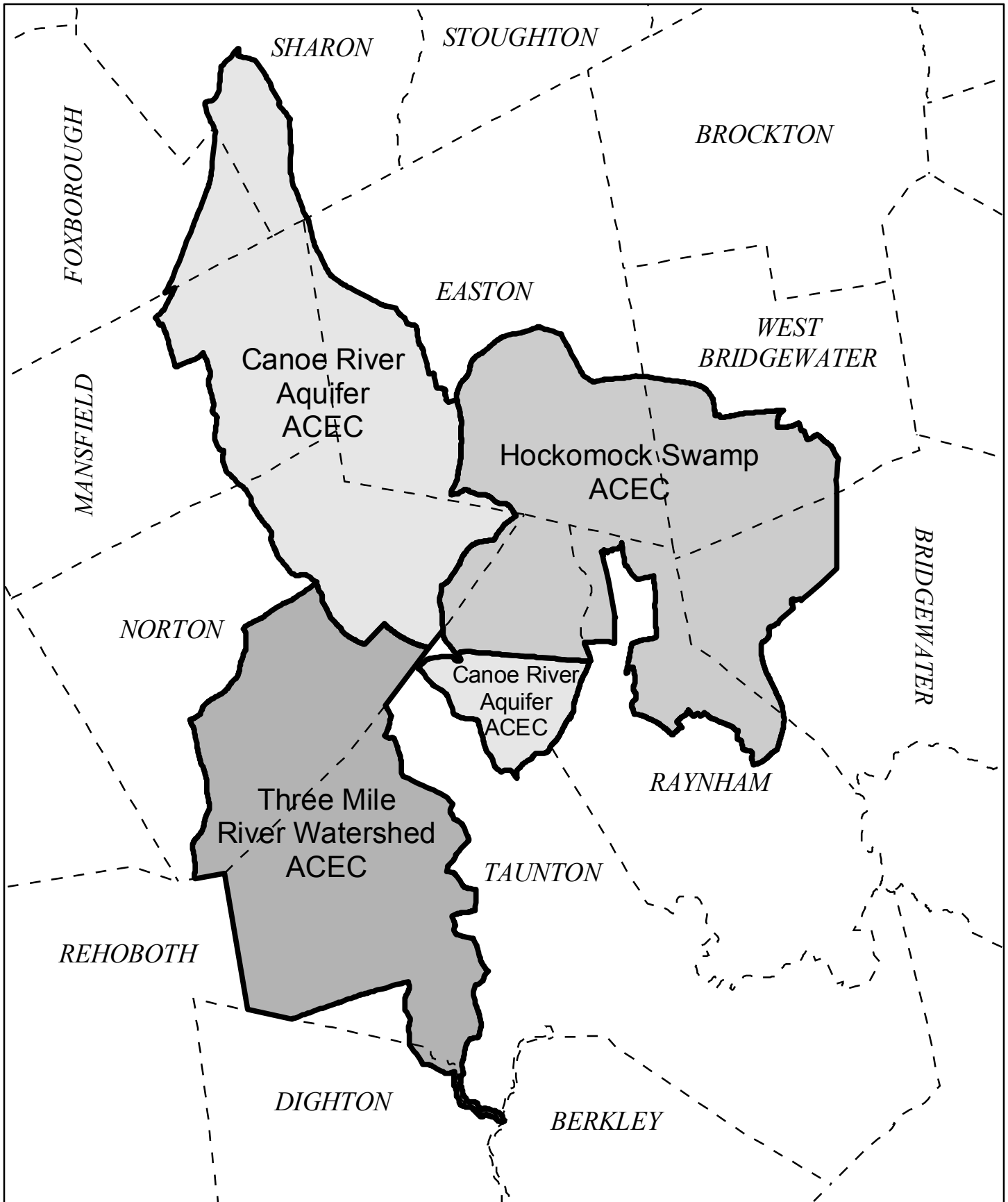


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mile





Areas of Critical Environmental Concern Program

<http://www.mass.gov/dcr/stewardship/acec/>