

# **THE MASCOMA RIVER**

## **A Report to the General Court**

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**New Hampshire Rivers Management and Protection Program  
Department of Environmental Services  
Office of the Commissioner  
January 2011**





# **The Mascoma River A Report to the General Court**

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## I. INTRODUCTION

The Mascoma River is a tributary of the Connecticut River and part of the Connecticut River drainage basin in western New Hampshire. The Mascoma River begins at Cummins Pond in the town of Dorchester and the river runs southwestward through the towns of Canaan, Enfield and Lebanon where the river joins the Connecticut River. The section of the Mascoma River nominated for designation into the Rivers Management and Protection Program (RMPP) is 25.3 miles long. As proposed by the nominating organization, the Mascoma River Nominating Committee with assistance of the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC), the designation would begin where the river becomes a fourth order stream in Canaan at the downstream confluence with the Canaan Street Lake outlet to the confluence with the Connecticut River in West Lebanon. The Department of Environmental Services (DES) has reviewed the nomination and is recommending the Mascoma River for designation into the RMPP.

The Rivers Management and Protection Act (RSA 483) was enacted in 1988. The act states in part that:

*It is the policy of the state to ensure the continued viability of New Hampshire rivers as valued economic and social assets for the benefit of present and future generations. The state shall encourage and assist in the development of river corridor management plans and regulate the quantity and quality of instream flow along certain protected rivers or segments of rivers to conserve and protect outstanding characteristics including recreational, fisheries, wildlife, environmental, cultural, historical, archeological, scientific, ecological, aesthetic, community significance, agricultural and public water supply so that these valued characteristics shall endure as part of the river uses to be enjoyed by New Hampshire people.*

The act directs DES to receive and evaluate nominations for the designation of rivers or river segments into the RMPP to protect outstanding values and characteristics. Nominations approved by the DES commissioner must be forwarded to the General Court for review and approval for the following legislative session. In fulfillment of this statutory directive, the nomination of the Mascoma River is hereby forwarded to the General Court.

DES recommends that the Mascoma River be designated as a protected river under the RMPP. DES further recommends that segments of it be variously classified as a “rural”, “rural-community”, or “community” rivers as described in the recommendations contained in this report, thereby affording it the full benefit of the applicable protection measures outlined in RSA 483. The outstanding statewide and local resource values and characteristics that qualify the Mascoma River for designation are described herein.

## II. THE MASCOMA RIVER NOMINATION

### A. DESCRIPTION

The Mascoma River is part of the Connecticut River drainage basin flowing near the boundary of Vermont and New Hampshire. The entire Mascoma River watershed is located entirely within New Hampshire. The headwaters of the Mascoma River originate in the town of Dorchester at the outlet of Cummins Pond and the water flows through the towns of Canaan, Enfield and the city of Lebanon before joining the Connecticut River. This nomination includes the section of the Mascoma River from the Canaan Street Lake outlet in Canaan, downstream through Enfield, including Mascoma Lake, to the confluence of the Mascoma River with the Connecticut River in West Lebanon.

### B. RIVER VALUES AND CHARACTERISTICS

The Rivers Management and Protection Program identifies a number of river-related values and characteristics that may qualify a river for designation. The Mascoma River supports many of these, including a variety of natural, managed, cultural, recreational and other resource values. Some are significant at the local level; others are significant at either the state or national level. The resource values that qualify the Mascoma River for designation include geology, wildlife, vegetation and natural communities, fish, water quality, natural flow characteristics, open space, impoundments, water withdrawals, wastewater discharges, hydroelectric, historic and archeological, community river resources, boating, other recreation, public access, scenery, land use, land use controls, water quantity, riparian/flowage rights, and scientific resources.

#### 1. Natural Resources

**a. Geologic Resources:** The Mascoma River has geologic resources that provide sites of natural history interest, scenery, and economic resources. The bedrock geology of the Mascoma River basin consists primarily of Paleozoic sediments that have been metamorphosed into schist, quartzite, slate, gneiss and other metamorphic rocks; Devonian and Carboniferous igneous rocks are also present. The surficial geology is primarily glacial till, with some stratified sediments at the sites of glacial lakes and streambeds. Glacial Lakes Hitchcock, Upham and Mascoma covered the lower-lying areas of the Mascoma River watershed. These areas now are underlain by stratified drift-aquifers, some being used as ground water sources. Glacial Lake Hitchcock clays have been used commercially for brick making in Lebanon at the Densmore Brickyard. Glacial lake deposits also provide good farmland and opportunities for sand and gravel mining. Slate deposits in East Lebanon were quarried in the late 18th and early 19th centuries. Stratified-drift aquifers are concentrated immediately along the Mascoma River; these valuable groundwater resources underlie only 14 percent of the state of New Hampshire, making these deposits valuable on a statewide level. Lebanon's largest aquifer is near the confluence of the Mascoma and Connecticut Rivers and was identified as a potential community water supply.

**b. Wildlife Resources:** The Mascoma River corridor provides critical wildlife habitat to a wide variety of species that depend on the habitat connectivity provided by the river and large,

unfragmented forest areas. The New Hampshire Fish and Game Department's *Wildlife Action Plan* indicates that there are four areas of wildlife habitat that rank as top-tier on a statewide level, as well as roughly a dozen areas of regionally important wildlife habitat. There are three large, potential wildlife travel corridors on or near the Mascoma River in Enfield. Riparian buffers cover over 1,800 acres along the Mascoma River in Enfield and connect to two large wetland complexes and adjoining upland habitat. In addition, a very large potential wildlife corridor has been identified just west of Mascoma Lake. The New Hampshire Natural Heritage Bureau has documented three occurrences of rare, threatened, and endangered wildlife within the Mascoma River corridor: two reptile species occurrences in Canaan and Enfield and one insect species occurrence in Enfield. In addition, common loons, a threatened species in New Hampshire, had two nests on Mascoma Lake during the summer of 2009.

**c. Vegetation and Natural Communities:** Within the Mascoma River corridor several exemplary natural ecological communities have been identified by the New Hampshire Natural Heritage Bureau, including red maple floodplain forest, rich mesic forest, rich red oak rocky woods, and northern hardwood-black ash-conifer swamp. A total of 62 plant species have been identified in the river corridor, including eight threatened or endangered plants known to occur in the river corridor.

**d. Fish Resources:** The Mascoma River provides critical and diverse habitat for many freshwater species. Twenty-eight species of fish are known to use the river including a mixture of warmwater, coldwater and non-game species. The Mascoma River and Mascoma Lake are stocked with eastern brook trout, rainbow trout, and brown trout; because of seasonal low flows, the fish populations in the river are dependent on stocking. Atlantic salmon are stocked in the lower Mascoma River, and are wholly dependent on stocking. Smelt, bass, walleye and other warmwater fish rely solely on natural reproduction. The lower Mascoma River is a viable anadromous fish resource and is at this time part of the New Hampshire Anadromous Fish Restoration Program. The Mascoma River is stocked with approximately 12,000 Atlantic salmon fry each spring.

**e. Water Quality:** The Mascoma River has been classified from its headwaters through to the outlet of the Mascoma Lake in Lebanon as Class B; from the outlet of Mascoma Lake to 1,000 feet south of the Lebanon Water Treatment Plant Intake as Class A, and to its confluence with the Connecticut River as Class B by the New Hampshire General Court. The 2008 *NH Section 305(b)/303(d) Surface Water Quality Report* lists Mascoma Lake as impaired for supporting aquatic life due to low dissolved oxygen, invasive plants and aluminum, and nine segments of the Mascoma River are impaired for safe swimming due to E.coli. The city of Lebanon is currently undertaking a sewer-separation project, which is expected to resolve the E.coli impairment. Additionally, the Mascoma Lake Association has been conducting an identification, containment, and eradication campaign against the invasive Eurasian milfoil for over ten years.

**f. Natural Flow Characteristics:** The flow of the Mascoma River is regulated by several dams, both on the river and on tributary ponds in the watershed. Between Canaan Center and the Connecticut River in West Lebanon, there are seven impoundments on the mainstem in Enfield and Lebanon, but the river is primarily free-flowing. Of particular significance is the free-flowing section below Mascoma Lake Dam in Lebanon, where the annual whitewater kayaking race is held every

spring. The Mascoma River flows freely through Canaan and into Enfield, where the Baltic Mill Dam impounds 20 acres. The river flows through Enfield's downtown and then empties into Mascoma Lake, which is a natural lake raised by a dam. The impoundment area of the Mascoma Lake Dam is 1,155 acres. Below Mascoma Lake, the river is again free-flowing to the Lebanon Water Treatment Plant Intake Dam (impounding 0.4 acres.) The river flows freely towards and through downtown Lebanon to the Rivermill Hydro Dam (impounding 20 acres) and the Plant No. 1 Dam (impounding 3 acres.) Then the river flows freely again for several miles toward West Lebanon, where the Mascoma River Dam (impounding 2 acres) and the Glen Road Hydro Dam (impounding 7 acres) shortly before entering the Connecticut River. With the exception of Mascoma Lake Dam, all other dams on the Mascoma River impound only small stretches of the Mascoma River.

The longest record of daily stream flow in the Mascoma River is derived from the Mascoma Lake Dam gage established in 1924. The average annual peak flow measured is 2,100 cubic feet per second (cfs). Another gaging station is located in West Canaan on the free-flowing section of the river, established in 1939 with an average annual peak flow of 1,741 cfs. The Mascoma River has experienced some large flooding events in the past, including the flood of 1936 when flows 5,840 cfs were recorded at the Mascoma Lake Dam, the highest on record.

**g. Open Space:** Open spaces either fully or partially within the Mascoma River corridor total 3,088 acres of conserved and/or open space. The Mascoma River corridor provides large areas of open space in the upper sections of the river, from Canaan Center through East Lebanon. Below East Lebanon, the corridor becomes more developed as it travels through downtown Lebanon, but there are a number of public parks, natural areas, and smaller open spaces even in the most developed sections. Notably, there are three Wildlife Management Areas in the river corridor.

## 2. Managed Resources

**a. Impoundments:** There are four active dams and nine dams in ruins or in breached condition located in the Mascoma River corridor. Of the four active dams, two are operated for recreational purposes (including the Mascoma Lake Dam and the Mascoma River Dam), one is operated for conservation (Plant No 1 Dam), and one dam, the Lebanon Water Treatment Intake, is operated as a public water supply.

**b. Water Withdrawals and Wastewater Discharges:** There are five registered water withdrawals from the Mascoma River. These withdrawals include the city of Lebanon public water supply, two withdrawals for industrial uses, one for mining (sand and gravel), and one for hydroelectric power. The largest withdrawal is the Lebanon public water supply which serves 3,406 connections. There are no point sources of wastewater that discharge directly to the Mascoma River.

**c. Hydroelectric Resources:** There are eight hydroelectric facilities located along the Mascoma River, with four currently active, one potential facility and three facilities that are either in ruins or breached. In 2009, a preliminary permit was granted by the Federal Energy Regulatory Commission (FERC) to Northeast Hydrodevelopment, LLC to study the feasibility of the Mascoma Lake Dam

Hydroelectric Project. There are three defunct dams in Lebanon, once used for hydroelectric production; these sites no longer carry a current FERC permit.

### 3. Cultural Resources

**a. Historic and Archaeological Resources:** The Mascoma River corridor has an extensive history starting around 9,000 B.C with use of the corridor by Native Americans as a trade route. European settlement of the area began in Lebanon near the confluence of the Connecticut and Mascoma Rivers, with settlement gradually moving eastward. The Mascoma River was used to first power grist and sawmills in the 1700s and 1800s, and eventually to power large textile mills in the early 20<sup>th</sup> century. The use of the river for power directly affected the population settlement in the river corridor, with the five current-day villages or town centers lie next to the Mascoma River: Canaan Center, West Canaan, Enfield downtown, Lebanon downtown, and West Lebanon. An additional settlement of note is the Enfield Shaker Village located on Mascoma Lake, included within the nominated river corridor; this settlement is listed on the National Register of Historic Places (NRHP). The area around Mascoma Lake later became a major tourist destination around 1900 and remains so today. In addition to the Enfield Shaker Village, there is one other listing on the NRHP within the river corridor along with four historic districts in all three riverfront communities. In recent years, the Mascoma River has transitioned to a river increasingly valued for its natural characteristics, scenic views and recreational opportunities.

**b. Community River Resources:** The importance of the Mascoma River as a community resource is reflected in the local master plans and protection efforts of the communities along the river. The Northern Rail Trail that runs through the river corridor is a community resource of statewide significance, connecting town and village centers via a multi-use path. Several other local community efforts within the river corridor exist with the purpose of enhancing the recreational use of the river corridor. The river is discussed in each municipal master plan and is recognized as a significant community resource in the most recent master plan update for each community. All three riverfront communities have identified the Mascoma River as a priority for protection efforts for their communities.

### 4. Recreational Resources

**a. Fishery:** Mascoma River, Mascoma Lake and its tributary streams are very popular, year-round fishing destinations for a variety of warmwater and coldwater species, including 13 warmwater species and four coldwater species. There are several special rules and fisheries on the Mascoma River, reflecting the unique and important fisheries resources of this river system that are significant on a statewide level. The Mascoma River has been identified as a river with high state-wide significance for its inland fisheries resource, particularly for its fly-fishing only section. The river has also been targeted for both Atlantic salmon restoration (lower section only) and eastern brook trout conservation.

**b. Boating:** The Mascoma River has been identified as a river with high state-wide significance for its whitewater boating resource. The Appalachian Mountain Club (AMC) River Guide describes

several sections of the Mascoma River with paddling potential. Between Canaan Center and Mascoma Lake in Enfield there are 12 miles of river good for quickwater paddling, with a one-mile section of Class II rapids. The “scenery is a mixture of alder swamps, meadows, fields, and the town of Enfield.” Below Mascoma Lake there are several sections of whitewater. From Mascoma Lake to downtown Lebanon there is a five and a half mile section of Class II/III rapids, which includes Excelsior Rapids. This section of whitewater is included in AMC’s Classic Northeastern Whitewater Guide. A slalom and wildwater race is held on this section each April. From Lebanon to the Connecticut River, there is a four mile section of quickwater and Class II rapids. In addition to river paddling, Mascoma Lake is very popular for boating, both motorized and non-motorized. The Dartmouth College sailing team and the Shaker Village Sailing Club both use the lake for training, racing, and pleasure.

**c. Other Recreation:** The Mascoma River offers an abundance of recreational opportunities year-round. Directly on the river, there is a swimming beach on Mascoma Lake, a public pool operated by the city of Lebanon, several parks and natural areas that offer picnicking and/or walking trails, the Northern Rail Trail and the Mascoma River Greenway, and three State Wildlife Management Areas. The New Hampshire Department of Transportation has designated all major roads along the Mascoma River and Mascoma Lake as bicycle routes, with the exception of Glen Road in Lebanon and Shaker Boulevard on the east side of Mascoma Lake; the Northern Rail Trail is also shown on their bike route map.

**d. Public Access:** There are eight public access sites for fishing, swimming, kayaking, canoeing, and boating that can be found along the Mascoma River in Canaan, Enfield and Lebanon. There are state and/or town-owned public access sites and boat launches in all three towns and some informal access. In Enfield, there is also a town beach open to residents and non-residents.

## 5. Other Resources

**a. Scenery:** Several viewing points are available along the entire length of the river with multiple wildlife viewing opportunities from walking trails or by boat. The Shaker Bridge provides a view of Lower Shaker Village and the Enfield Shaker Museum across Mascoma Lake and other historic Shaker buildings. The river corridor moves from largely rural in Canaan to more residential and developed downstream. There is increased commercial and industrial development in the western half of Lebanon, between downtown Lebanon and West Lebanon.

**b. Land Use:** The Mascoma River flows through six villages or town centers with a mixture of land uses surrounded by residential and rural development. Residential development patterns along the river follow a gradient, with Canaan being the least developed and Lebanon being the most developed. Canaan and Enfield also have more agriculture and forested areas, and larger areas dedicated to open space.

**c. Land Use Controls:** All corridor communities have master plans and subdivision regulations; Enfield and Lebanon have zoning ordinances. The New Hampshire Comprehensive Shoreland Protection Act applies to all of the nominated sections of the Mascoma River.

**d. Water Quantity:** There is a stream gage at the Mascoma Lake Dam that was operated by the U.S. Geological Survey from 1923-2004 and by the Department of Environmental Services (DES) from 2004 to the present, and a stream gage in West Canaan was operated from 1939-1978 and 1985-2004 by the U.S. Geological Survey and from 2004 to the present by DES.

**e. Riparian Interests/Flowage Rights:** Under New Hampshire common law, owners of frontage on surface waters have riparian rights to use surface waters as long as the use is reasonable with respect to uses of other riparian landowners and has no undue effect of public trust uses of surface waters. The City of Lebanon, Twin State Sand and Gravel, Timken Aerospace, Blaktop, Inc., and Mascoma Hydro Corporation are riparian landowners that have such rights; they also have registered water withdrawals from the river with DES under RSA 488, the Water Management Act. Rivermill Hydroelectric Inc. and Energetic Enterprises also utilize water for hydroelectric power generation from the Mascoma River, and are licensed for such activity with the Federal Energy Regulatory Commission.

### **III. CONSIDERATION FOR PROTECTION OF INSTREAM FLOW**

#### **A. INSTREAM FLOW RULE STATUS**

RSA 483 directs DES to implement instream flow protection on all designated rivers, and to adopt administrative rules for this purpose. In 2002, additional legislation authorized a pilot project to be developed on the currently designated sections of the Lamprey River (in Lee and Durham only) and Souhegan River. Rules were promulgated for these two rivers in 2003. No protected instream flows can be developed on other designated rivers until these pilot assessments are completed and the results assessed by the legislature, currently scheduled to be completed by 2012. Although excluded from instream flow protection by existing rules, future rules will include other designated rivers and additional river segments in the development and implementation of protected instream flows. The result will be water management plans for each affected water user and dam owner in a designated river watershed. These water management plans describe specific actions to be taken under certain river flow conditions so that the protected instream flows are maintained. Water management plans have three main components to protect flow: 1) conservation, 2) water use changes, and 3) operation of impoundments.

#### **B. INSTREAM FLOW ASSESSMENT**

As an indicator of instream flow conditions for this nomination, an existing tracking tool was used to assess water use versus stream flow. The existing instream flow rules include a requirement for assessing monthly water use in relation to mean monthly stream flow for all designated rivers. The method uses a general standard to compare the water use uniformly among all the designated rivers. The general standard is determined from the monthly stream flow and sets a standard for aggregate water use depending on that flow. The general standard is not a protected flow, but instead is a means for comparing the level of water use and identifying the locations of intense water use within a watershed and among the designated river watersheds.

The Mascoma River water use assessment for 2009 identified 11 active, registered sources reporting water withdrawals and 3 active, registered discharges reporting returns of water to the environment in 2009. There are four active hydropower facilities along the Mascoma River. During 2009, water use met the general standard on the Mascoma River during every month except September. In September 2009, a 6.5 mile portion of the river downstream of the Lebanon Water Works intake had water use that exceeded the general standard.

The general standard is not a limitation. Although the apparent exceedance of the general standard understandably raises concerns in the respective communities, an important point to understand is that the general standard only provides a framework for prioritizing watersheds through which designated rivers flow that are in need of additional study for establishing watershed-specific instream flow standards and development of a water use management plan.

Based on the analysis completed for the nomination, it is apparent that the Mascoma River would be

one of many designated river watersheds that does not meet the general standard under existing rules. Any changes in water usage by the Mascoma River corridor communities would not occur immediately upon designation, but in the future only after full study and public input.

#### **IV. LOCAL SUPPORT**

The communities of the Mascoma River watershed have expressed strong support for the river's ecological functions and services in their master plans as well as in ordinances and regulations that require river setbacks and buffers, limited uses and development disturbance near the river, and water quality standards. There is strong local support for the designation of the Mascoma River into the Rivers Management and Protection Program (RMPP). The Mascoma River Nomination Committee, with the help of the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC), initiated the effort to designate the Mascoma River into the RMPP. The UVLSRPC and the Mascoma River Nomination Committee notified the municipal officials of the riverfront communities of the merits and intent to nominate the Mascoma River as a designated river in the RMPP. These efforts culminated in June 2010, when the UVLSRPC and the Mascoma River Nomination Committee submitted its nomination to DES. Throughout the process all of public testimony and letters have supported the nomination. At the public hearing on the nomination, which was held in Lebanon on August 5, 2010, the testimony was overwhelmingly supportive.

## V. SUMMARY AND RECOMMENDATIONS

The Mascoma River supports a variety of significant state and local resources. To better protect and manage these resources, the Department of Environmental Services recommends the following actions.

***Recommendation 1: The General Court should adopt legislation that designates the Mascoma River for inclusion in the Rivers Management and Protection Program and designates the Mascoma River as follows:***

1. As a rural river from the downstream side of the confluence of the Mascoma River with the Canaan Street Lake tributary in Canaan to the upstream side of the railroad bridge east of the Baltic Mills Dam in Enfield (11.10 miles);
2. As a community river from the upstream side of the railroad bridge east of the Baltic Mills Dam in Enfield to the downstream side of the railroad bridge south of Main Street in Enfield (1.04 miles);
3. As a rural-community river from the downstream side of the railroad bridge south of Main Street in Enfield, including Mascoma Lake, to the upstream side of the Water Treatment Intake Dam in Lebanon (6.12 miles); and
4. As a community river from the upstream side of the Water Treatment Intake Dam in Lebanon to the upstream side of the confluence of the Mascoma River with the Connecticut River in Lebanon (7.01 miles).

Under the provisions of RSA 483, designation of the river will provide increased protection with respect to the construction of new dams, interbasin transfers and the application of sludge in the river corridor. Designation will also require the establishment of a protected instream flow to maintain water for instream public uses including water quality, fisheries, recreation and scenic values. A local river management advisory committee will be established to coordinate management and protection of the river at the local and regional levels, and will provide the residents in the riverfront communities with a direct avenue for formal input into state decisions affecting the river. The local river management advisory committee will provide the residents in the riverfront communities with a direct avenue for formal input into state decisions affecting the river. Finally, designation will result in the development of a long-range management plan for the river that coordinates state planning and management of fisheries, water quality and quantity, and recreation.

The Mascoma River is being recommended for the “rural river”, “rural-community river, and “community river” classifications. Rural rivers are defined under RSA 483:7-a, I (b) as “...those rivers or segments adjacent to lands which are partially or predominantly used for agriculture, forest management and dispersed or clustered residential development. Some instream structures may exist, including low dams, diversion works and other minor modifications.” The Mascoma River as it flows from Canaan to the Baltic Mills Dam in Enfield encounters forests, scattered housing, agricultural fields and open space, and the largely undeveloped areas of the river corridor which typifies the definition of a rural river.

“Rural-community rivers” are defined under RSA 483:7-a, I (c) as “... those rivers or segments which flow through developed or populated areas of the state and which possess existing or potential community resource values such as those defined in official municipal plans or land use controls. Such rivers have mixed land uses in the corridor reflecting some combination of open space, agricultural, residential, commercial and industrial land uses. Such rivers are readily accessible by road or railroad and may include impoundments or diversions.” The Mascoma River as it flows out of downtown Enfield and into Lebanon is flanked by a landscape ranging from open spaces, such as those around Mascoma Lake, to more developed areas along the river.

Community rivers are defined under RSA 483:7-a, I (d) as “... those rivers or segments which flow through developed or populated areas of the state and which possess existing or potential community resource values, such as those identified in official municipal plans or land use controls. Such rivers are readily accessible by road or railroad, may include existing impoundments or diversions, or potential sites for new impoundments or diversions for hydropower, flood control or water supply purposes, and may include the urban centers of municipalities.” The Mascoma River in downtown areas of Enfield and Lebanon is seen as a vital community resource with recreational trails and parks allowing residents to enjoy the river within the urban landscape that it flows through. The Mascoma River Nominating Committee, the Rivers Management Advisory Committee and DES have all determined that the river segments recommended above for “rural river”, “rural-community river” and “community river” classification meets the definition of a rural river and should be so designated.

Designation of the Mascoma River under the Rivers Management and Protection Program will express the intent of the General Court regarding its future management and protection, and will focus attention on the river as a natural resource of both statewide and local significance. This attention will help to ensure greater scrutiny of plans or proposals that have the potential to significantly alter or destroy those river values and characteristics that qualify the Mascoma River for designation.

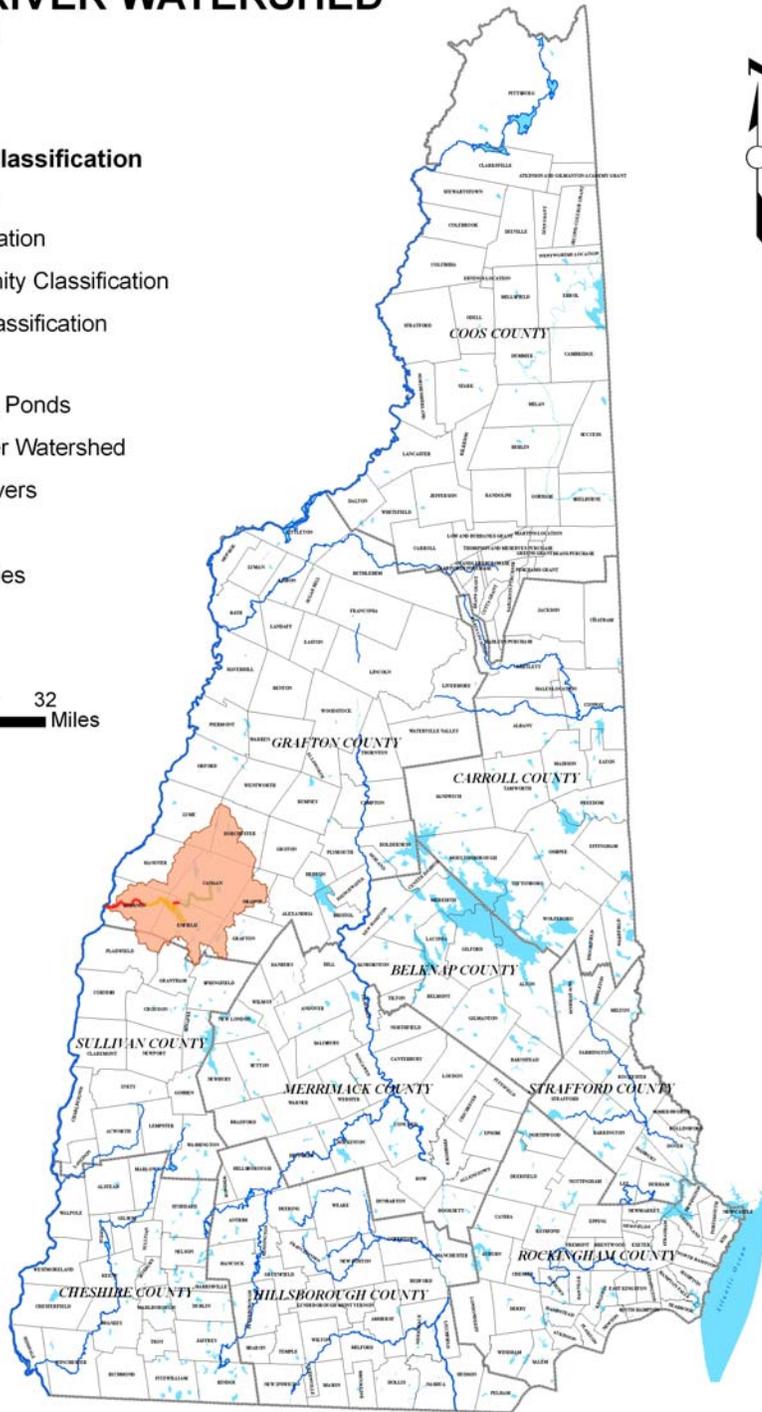
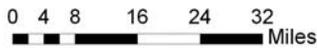
***Recommendation 2: The communities of Canaan, Enfield and Lebanon should continue to work together toward the protection of the Mascoma River through the adoption and implementation of a local river corridor management plan.***

While legislative designation of the Mascoma River will improve the protection and management of the rivers itself, continuing efforts at the local level will be needed to address the use and conservation of the river corridor (the river and the land area located within a distance of 1,320 feet of the normal high water mark or to the landward extent of the 100 year floodplain). A growing recognition by local citizens and officials of the Mascoma River’s valuable contribution to the overall quality of life in their communities is evidenced by their desire to see it designated into the Rivers Management and Protection Program. Citizen appreciation and concern for the river should be reflected in the decisions and actions of local officials. DES will provide technical assistance to the local river management advisory committee and to the local officials in the riverfront communities on the development and implementation of a local river corridor management plan.

In summary, the establishment of a clear policy and specific instream protection measures by the General Court, and a continuing commitment on the part of local governments and residents to protect and manage the river corridor through sound land use decisions will ensure that the outstanding resources of the Mascoma River will endure to be enjoyed by the people of New Hampshire for many years to come.

# MASCOMA RIVER WATERSHED LOCUS MAP

- Designated River Classification**
- Quarter Mile Buffer**
-  Rural Classification
  -  Rural Community Classification
  -  Community Classification
- Waterbodies**
-  Ocean, Lakes, Ponds
  -  Mascoma River Watershed
  -  Designated Rivers
  -  County
  -  Town Boundaries



The coverages presented in this map are under constant revision. They may not contain all of the potential or existing data available. NHDES is not responsible for the use or interpretation of this information. Not intended for legal purposes. October 2010  
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# MASCOMA RIVER WATERSHED BASE MAP

