

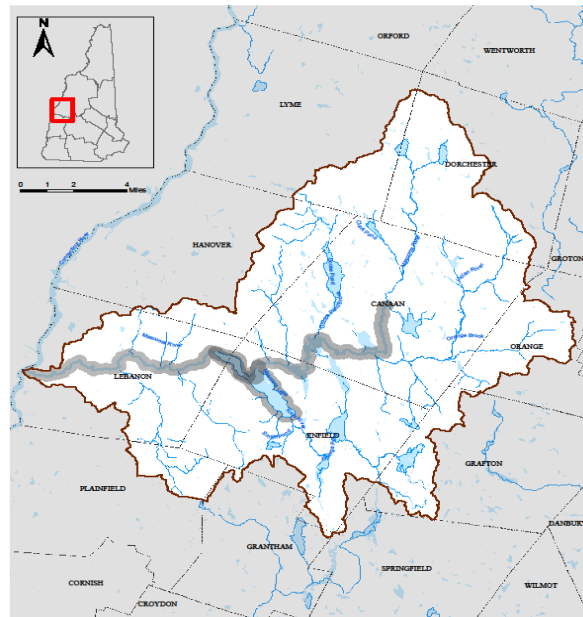
WD-R&L-26

2011

The Mascoma River

The Mascoma River is part of the Connecticut River drainage basin. Its headwater is Cummins Pond in Dorchester, and it travels through Canaan, Enfield and Lebanon before joining the Connecticut River in West Lebanon.

The part of the Mascoma River designated under the NH Rivers Management and Protection Program in May 2011, encompasses the last 25.3 miles of the river. The recently designated area 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. The river is regulated by seven impoundments but is largely free-flowing. The 2010 *NH Section 305(b)/303(d) Surface Water Quality Report* lists Mascoma Lake as impaired for supporting aquatic life due to low dissolved oxygen, non-native aquatic plants and aluminum, and nine segments of the Mascoma River were impaired for safe swimming due to *E.coli* bacteria.



Mascoma River and its Watershed

History

The Mascoma River was originally used as a trade route by Native Americans, and artifacts dating back to 9,000 B.C. have been found on its banks. European settlement of the river began in Lebanon during the 18th century. The river served as a highway for goods and a power source for grist and saw mills, fueling the towns that were founded on its banks. Several of the historic riverfront structures remain, with one listing on the National Park Service's National Register of Historic Places (NRHP) and four historic districts within the towns of Lebanon, Enfield and Canaan. Additionally, the Mascoma River was used for transportation and as a water source for the Enfield Shaker Village. The Enfield Shaker Historic District is of national significance; it is part of the Shaker Historic Trail, which connects the 15 Shaker communities on the National Register of Historic Places on the East coast of the United States.

Wildlife and Plant Resources

Within the Mascoma River corridor, the N.H. 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. It is home to several rare, endangered or threatened wildlife species, most notably the common loon, which has been known to nest on Mascoma Lake as recently as 2009. A total of 62 different plant species have been identified, including eight that are either threatened or endangered. The river is also home to a number of wildlife corridors that connect forests adjoining the river, allowing for safe passage of wild animals from one forest community to another. However, Mascoma Lake has recently been invaded by invasive plant species, most notably Eurasian milfoil.

Geology

The bedrock of the Mascoma River consists mostly of Paleozoic sediments, although Devonian and Carboniferous igneous rocks are also present. As the river was carved out by glaciers during the most recent ice age, its surficial geology is mostly glacial till, making the banks excellent for farming or gravel mining. The Glacial Lake Hitchcock clays have been used commercially for making bricks. There are a number of stratified-drift aquifers which border the river and may potentially be a future water source for the town of Lebanon.

Recreation, Boating and Fishing

There are numerous beaches where it is safe to swim on Mascoma Lake. The river is bordered by a number of parks and natural areas that offer picnicking and walking trails. The N.H. Department of Transportation has designated all major roads adjoining Mascoma Lake and the Mascoma River as bicycle routes, with the exception of Glen Road in Lebanon and Shaker Boulevard on the east side of Mascoma Lake. A portion of the Northern Rail Trail, the longest bicycle path in the state, runs along the eastern and northern shores of Mascoma Lake.

Low water level and biological sensitivity of the Mascoma River makes portions of it unsuitable for motorized boats. Such boats are prohibited on most of the river's free-flowing length, but are permitted in the impounded areas, most notably Mascoma Lake. Mascoma Lake is also used by the Shaker Village Sailing Club and the Dartmouth College Sailing Team, thanks to abundant winds. The river is very amenable to canoeing and kayaking, and the free-flowing section beneath the Mascoma Lake Dam is home to a yearly kayak race. There is also an annual race in the Excelsior Rapids. The river is home to a number of Class II and Class III whitewater rapids and is included in the Appalachian Mountain Club's *Classic Northeastern Whitewater Guide*.

The Mascoma River supports a large fishery, including smelt, bass, walleye and other warm water fish, which are abundant throughout the river. Other species are maintained only through stocking due to the presence of dams that inhibit spawning. Mascoma Lake and the upper Mascoma River are stocked with eastern brook trout, rainbow trout and brown trout. The lower Mascoma River is a viable anadromous fish resource and is stocked yearly with 12,000 Atlantic salmon fry.

For More Information

For further information about the NH Rivers Management and Protection Program, visit the DES website at: <http://www.des.state.nh.us/organization/divisions/water/wmb/rivers/> or contact Jacquie Colburn, Rivers Coordinator, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095; (603) 271-2959; jacquie.colburn@des.nh.gov.