

## **City of Marlborough**

### **Scenery**

Framed by wooded hills, the pastures and marshes along the Assabet in Marlborough and Berlin are valuable scenic resources.

In Berlin, along Bridge Road where the Assabet winds through rolling pastures and abandoned fields, the river appears especially beautiful. The peaceful scene belies the activity taking place over the boundary in Marlborough – on the other side of a screen of tall pines – where land has been cleared and developed into an industrial park and retail mall.

Although extensive development has occurred on the Marlborough section of the river, including a skating rink and regional mall, the view from the river has largely been preserved. The Berlin side of the river remains in agricultural use, with open fields and meadows.

### **History**

For more than a century, the City of Marlborough has been an employment center for the region. During the 1860s, the city was one of the largest shoe manufacturing centers in the country. Moving from shoe manufacturing into textiles, Marlborough became a blue-collar community by the 1960s. With its proximity to highways, well-developed sewer and water infrastructure, and proximity to Boston, Worcester, Cape Cod, and the mountains, Marlborough has remained a desirable city for residential, industrial and commercial growth.<sup>1</sup> In 1990, Marlborough's population was about 31,813 – having doubled from close to 16,000 in 1950. In 2000, Marlborough's population was 36,255.

The Assabet River has not played a major role in the history of Marlborough, running as it does at the periphery of the population center. Historically the river corridor was used primarily for agriculture and later for sand and gravel extraction. The intersection of Interstates 290 and 495 across the Assabet has stimulated commercial and industrial development. In 1995, the Solomon Pond Mall was constructed along the Marlborough/Berlin border and on the banks of the Assabet River. Another development on the banks of the river, the Donald Lynch Boulevard Industrial Park, begun in the 1980s, is now almost complete, with a few remaining lots still waiting to be developed.

During the preparation of an environmental impact statement for the industrial park development on Donald Lynch Boulevard (formerly Robin Hill Road) in Marlborough, four prehistoric sites were discovered and study of them was undertaken. Proximity to the river for fishing and the well-drained sandy soils of the kame terraces (deposited as a result of contact with glacial ice) provided ideal conditions for prehistoric people. The sandy soils provided dry areas for settlements, and storage pits could easily be dug.

Another prehistoric site was discovered at Flagg Swamp about a mile east of the Assabet River during construction of the I-290 extension in Marlborough. The well-preserved site provided researchers with clues to how prehistoric people used natural resources 4,200 years ago. The shelter under an overhanging rock ledge overlooked Flagg Swamp.<sup>2</sup> Harvard University undertook an extensive study of the site before it was destroyed in the process of constructing the highway.<sup>3</sup> With the development of the Jefferson at Wheeler Hill housing development in 2000, another prehistoric site was discovered, which will be protected with an Archaeological Preservation Restriction.

## **Recreation**

There are two informal canoe landings in Marlborough. Moving downstream, the first is at Boundary Street on the Marlborough/Northborough Border. Informal parking is available along Boundary Street, and access is on the east (downstream) side above the bridge.<sup>4</sup> The other is at Tyler Dam on Robin Hill Road; parking is along the road and access is in the slough below the dam.<sup>5</sup> Neither of these access points has been formalized; however, plans to make the Robin Hill landing more accessible are under way. A third canoe landing is proposed behind a new retail development on the west bank of the river below Donald Lynch Boulevard to be completed in 2003.

The first completed portion of the Assabet River Rail Trail stretches along the old Marlborough Railroad. Eventually the 12-mile trail will continue through Hudson, Stow, Maynard and Acton, following the course of the Assabet River. In Marlborough, however, it begins in the center of the city, and does not cross the Assabet until the trail reaches downtown Hudson (see map 11). The Marlborough and Hudson sections of the trail will be completed in 2002, and the Assabet River Rail Trail, Inc. expects that the remaining sections of the trail will be completed in the next five years. The Assabet River Rail Trail is so named because the old railroad line followed the riverbed, the lowest and flattest sections of the landscape.

The developers of the Donald Lynch Boulevard Industrial Park are considering including a trail system along the river and through the park, with the goal being to create more of a “park”-like feature to this development. The park would be open to employees and residents of the city and neighboring communities.

The City of Marlborough is currently working on an inter-community trail system that will link all city conservation lands, park lands, fields, schools and state and open spaces. This trail system will also integrate with open space trail systems in adjacent communities where this is appropriate. The system will be presented in the 2002 Open Space and Recreation Plan.

The City of Marlborough boasts several recreational resources for walking, hiking, cross-country skiing, bird watching and other passive recreation. The sites include Callahan State Park, Marlborough State Forest/Memorial Forest/Desert Conservation Land, Holts Grove, Cider Knoll, Felton, The Grove, Ghiloni Park, and Mt. Ward conservation lands.

## **Biodiversity**

The Assabet River flows through the northwest corner of Marlborough. From the Northborough border to Tyler Dam, the area is dominated by diverse woodland, interspersed with wetlands.<sup>6</sup> Millham Reservoir, with its 348 acres of protected watershed land and 68 acres of open reservoir, Millham Brook, and Howe Pond all provide a large interconnected forest and marsh habitat.

The landscape just below Tyler Dam is changing. Unfortunately, one large parcel of land to the west of the river, formerly a field, is being developed for an office park. The east side of the river remains the property of the Hillside School and is predominantly wooded with a small farm. The River Protection section of the Wetlands Protection Act allows for the protection of a 200-foot riverfront area that will provide some protection to the scenic, recreational and habitat value of the river corridor.

Marlborough provides habitat for a variety of indigenous species including the white-tailed deer, coyote, red tail fox, woodchuck, raccoon, skunk, gray squirrel, chipmunk, red squirrel, bats, porcupine, and the cottontail rabbit.<sup>7</sup>

Marlborough’s rivers, streams and reservoirs provide suitable habitat for a number of fish species including pickerel, large and small mouth bass. The city

has two of only three native brook trout streams in central Massachusetts.<sup>8</sup> They are Flagg Brook, which flows into Fort Meadow Reservoir and Cranberry Brook, which flows into the Sudbury River watershed via Hop Brook.

The city's diverse habitats are home to a wide variety of bird species including the cardinal, mourning dove, downy woodpecker, nuthatch, tufted titmouse, English sparrow, house wren, Baltimore oriole, owls, barred and barn owls, chickadee, mockingbird, purple finch, robin, goldfinch, flicker blue jay, wild turkey, grouse pheasant, woodcock, wood ducks, oven bird, cat bird and cuckoo. Warblers migrate through the city in their spring migration north. Many hawks – including redtails and broadwings – are common.<sup>9</sup>

## **Hydrology**

The primary sources for drinking water for the City of Marlborough are the active public water supplies of Lake Williams (city water supply), the Millham Reservoir (city water supply), and Sudbury Reservoir (Backup MWRA supply). The City of Marlborough Water Department and the MDC operate these reservoirs. City-operated systems (Williams and Millham) account for 25-30 percent of water utilization, while the MWRA water supplies fulfill the balance. Essentially 100 percent of the city is served by the public water supply system. The Millham Water Treatment plant has a capacity of 3.6 mgd (1,314 million gallons per year), but the average annual flow is closer to 1.2 mgd (438 million gallons per year). Increased development in the western part of the city will likely soon use the majority of this sewage capacity.

There are three aquifers underlying the city. The first one is capable of pumping 100-300 gallons/minute. The second, 100-300 gallons/minute and the third (shared with the Town of Berlin) is capable of pumping over 300 gallons/minute. However, none of these have sufficient volumes to be used for municipal uses. These were investigated in 1989.

In addition, three water bodies are protected for wildlife habitat and private uses: Hager (privately owned), Howe (wildlife habitat), and Muddy Ponds (wildlife habitat, privately owned).

Although only a small portion of the river flows through the city, a large portion of the city is in the Assabet watershed. There are four tributaries to the Assabet within city limits. In the northwestern and north central areas of the city the North Branch, Millham, Flagg, Fort Meadow Brook and Sheep Fall Brooks drain into the Assabet River. In the central and eastern part of city the

North branch of Mowry Brook, South Street, Beach Street, Walkers Street, Mowry, Broad Meadow and Hop Brooks drain to the Sudbury River watershed.

The larger wetlands in the city include Crane Swamp, Flagg Swamp, Howe Pond area, and the South Street swamp area and lands abutting the Sudbury Reservoir. Crane Meadow is owned by the MDC and managed as a watershed protection area. Flagg Swamp is located east of the I-290 interchange and is one of the few remaining large tracts of forested land within the city of Marlborough. Within the service area of the Westerly Wastewater Treatment Plant and along the Assabet, there are wetlands on the north side of Millham Reservoir, Howe Pond and Flagg Swamp. To strengthen protection afforded the city's wetlands under the MA Wetlands Protection Act, Marlborough adopted a 20-foot no disturbance buffer around all wetland resources areas in 1996.

Marlborough's high flood hazard areas lie along the major tributaries. The Tyler Dam on the Assabet River was built for flood control of downstream areas in Hudson.

In 2001, the Commonwealth of Massachusetts, contracting with Regional Planning Agencies, provided buildout analyses to each community analyzing their population projections and future infrastructure needs. The Metropolitan Area Planning Council (MAPC) performed Marlborough's analysis.

In 2000, Marlborough's population was 36,255, and the city's total water use was 4.5 mgd (1,642 million gallons per year). MAPC buildout statistics for Marlborough suggest that full buildout would result in a town population of 43,000. Water use in the city would be about 7 million gpd (2,555 million gallons per year).<sup>10</sup>

There are two wastewater treatment facilities in Marlborough; of these, the Westerly Wastewater Treatment Plant (WWTP) discharges into the Assabet River (the Easterly plant discharges into Hop Brook, and eventually to the Sudbury River). About 92 percent of the city is sewered. Of the sewered population, about 25,000 individuals are served by the Easterly plant, and about 4,000 are served by the Westerly plant. Average monthly flows to the Westerly plant for 1998-2000 were 2.12 mgd (774 million gallons per year) and its capacity is 2.89 mgd (1,055 million gallons per year). The WWTP also handles approximately 330,000 gallons from the Town of Northborough on a daily basis, and Marlborough has agreed to accept up to 800,000 gallons a day.

## **Lands in need of protection** (see map 12)

1. Hillside School is the last remaining undeveloped parcel of land directly along the Assabet River in Marlborough. Although the school has no immediate plans to develop this parcel, the community should seek the right of first refusal to protect the majority of this land as open space.
  2. The remaining parcels on Donald Lynch Blvd. should be protected with restrictions from future developers rather than outright ownership. Developers should be required to maintain a 200-foot buffer area along the river.
  3. A 52-acre parcel of land currently owned by the Massachusetts Highway Department contains a large portion of Flagg swamp that drains into Fort Meadow reservoir and ultimately into the Assabet River. The protection of this large parcel of open wetland and upland will help to improve water quality downstream and protect important habitat in this section of Marlborough.
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## **Recommendations**

These recommendations are specific to the City of Marlborough. Please also refer to the general recommendations at the end of the introduction.

## **Recreational Opportunities**

1. Improve existing and create new **walking and biking trails that provide access to the Assabet River**. This includes completing the Assabet River Rail Trail; ideally these trails would link to create a trail system in the Upper Assabet.

## **Regulatory changes**

1. **Site Plan Review** should include the following: automatic sprinkler bans, limitations on water-consumptive landscaping (grass), reduction of impervious surfaces, and tree-cutting regulations during site plan review.
2. **Site Plan Review for riverfront land** should have standard language requiring: invasive plant removal, a minimum 200-foot buffer along the river (or mitigation), consideration of the view from the river (including mitigation for any impact), planting of native plants if restoration is needed, and encouragement of conservation restrictions along the Assabet.

3. Marlborough should adopt the new **DEP stormwater regulations** city-wide (not just in wetlands or within 100-200 feet) as a local ordinance.
4. Marlborough should adopt a local **wetlands bylaw**. The bylaw should eliminate development on floodplains, and include the ability of the town to retain expert consultants at the developer's expense. A reference for a good wetlands bylaw is in the appendix.
5. The City of Marlborough should include the Assabet River and emphasize its conservation in all planning documents.
6. Marlborough should adopt the **Community Preservation Act** to raise funds for land preservation.

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<sup>1</sup> Marlborough Open Space and Recreation Plan. Marlborough Open Space Committee. Marlborough, Massachusetts, 1998.

<sup>2</sup> McAdow, Ron. The Concord, Sudbury and Assabet Rivers: A Guide to canoeing, wildlife and history. Bliss Publishing Company, Marlborough, Massachusetts, 1990.

<sup>3</sup> Massachusetts Historical Commission. MHC Reconnaissance Survey Report. Unpublished historical summary for each town in Massachusetts, MHC, Boston, Massachusetts. 1980.

<sup>4</sup> McAdow, Ron. The Concord, Sudbury and Assabet Rivers: A Guide to canoeing, wildlife and history. Bliss Publishing Company, Marlborough, Massachusetts, 1990.

<sup>5</sup> McAdow, Ron. The Concord, Sudbury and Assabet Rivers: A Guide to canoeing, wildlife and history. Bliss Publishing Company, Marlborough, Massachusetts, 1990.

<sup>6</sup> 1986 Upper Assabet Riverway Plan. New England Rivers Center and Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement.

<sup>7</sup> Marlborough Open Space and Recreation Plan. Marlborough Open Space Committee. Marlborough, Massachusetts, 1998.

<sup>8</sup> Marlborough Open Space and Recreation Plan. Marlborough Open Space Committee. Marlborough, Massachusetts, 1998.

<sup>9</sup> Marlborough Open Space and Recreation Plan. Marlborough Open Space Committee. Marlborough, Massachusetts, 1998.

<sup>10</sup> Buildout Analysis for the City of Marlborough. Metropolitan Area Planning Council. 2001.  
<http://commpres.env.state.ma.us/content/buildout.asp>.