

Town of Hudson

Scenery

The Assabet River is Hudson's greatest scenic asset. The broad, slow-moving waters above the Washington Street Dam, and the narrow, swifter-flowing stretch below the dam provide a variety of riverine views that lend beauty to the rural, residential, and commercial sections of the town.

The Assabet enters Hudson from Marlborough and Berlin to the southwest. From a narrow and swift-flowing stream, it gradually slows and broadens due to the impact of the Washington Street Dam. The stream flows through woods and meadows until it reaches the crossing of I-495. This area has recently undergone considerable development in Marlborough, Berlin and Hudson, including the Solomon Pond Mall, a large skating rink, and industrial buildings. While some of this development is sufficiently concealed from the river, other parts are visible from the river, resulting in a degradation of the scenery in this area.

After the I-495 bridge, the river meanders through marshy areas that provide habitat for birds and wildlife. The Assabet River passes under the Chapin Road bridge and continues to meander until reaching the double-arched Taylor Memorial pedestrian bridge connecting Wood and Apsley Parks. Wood Park has a band shell and is bordered by Victorian homes. It is a favorite spot for wedding pictures.

Past Wood Park the river continues to broaden until it reaches the dam at Washington Street in the center of town. A large picture window at the Hudson Public Library faces southwest across the dam impoundment towards Wood Park with a stunning view at sunset.

As in most mill towns, buildings and roads in the center of Hudson were built for industry rather than with the aesthetic enjoyment of the river in mind. The Washington Street dam provided waterpower for the textile and shoe factories that stood on both sides of the river. Today the Assabet is no longer used in this way, but many buildings still stand close to it.

Below the Washington Street dam, the river flows swiftly under several bridges and railroad trestles. Two of the trestles will form part of the Assabet River Rail Trail (see recreation section). The riverbanks become less developed farther from the center of town. From the Cox Street bridge in Hudson downstream

to the Gleasondale Dam in Stow, there is a beautiful two-mile stretch of river with few signs of civilization.

There are also scenic areas along the tributaries of the Assabet. Hog Brook and Tripps Pond offer scenic views from River Street, especially in the fall foliage season and in the winter, when the pond is frozen and used for skating. A handicapped-accessible path is being built around the pond.

Danforth Brook flows south from Bolton through the Danforth Lot conservation land and includes the scenic Danforth Falls. Danforth Brook continues through residential areas into Bruces Pond, which once powered a sawmill. After flowing over the dam at the end of Bruces Pond, the brook continues a short way into the Assabet. An area of wasteland where the brook meets the Assabet has recently been developed as a park.

Fort Meadow Reservoir (located between Hudson and Marlborough) empties into the Assabet via Fort Meadow Brook. Built to supply water to the mills further down the Assabet, the lake is surrounded by residential areas and has public beaches in both Hudson and Marlborough.

History

The Assabet River played a significant role in shaping the history of Hudson, especially the town center. From prehistoric to colonial times, the natural falls (where the Washington Street Dam now stands) attracted people to Hudson. During construction of the I-495 connector, a prehistoric Native American campsite was discovered. In the 1600s the eastern part of what is now Hudson was the Ockookangansett Indian Plantation.

An early settler in Hudson, Joseph Howe, operated both a gristmill and sawmill at the falls before 1700. The Mills, as the area was known in the 18th century, was then part of the town of Marlborough. By 1812, the village was known as Feltonville and was made up of a small cotton mill, a fulling mill, several tanneries, and a distillery which made brandy from local apples. In 1820 the introduction of waterpower in the manufacture of shoes launched the town into industrial development¹. In 1866, after acquiring additional land from Bolton, Berlin and Stow,² the town incorporated as Hudson and new industries were established, attracting railroad service and an influx of immigrant workers³.

Even prior to incorporation, Hudson always had an industrial component. The shoe industry was a major employer, and by 1860 there were 17 factories employing 975 men. Perhaps due to industry, Hudson has always enjoyed good access both by road and rail. Hudson was at the crossing of two rail lines, one of which ran from Marlborough to Concord and the other, the Massachusetts Central Railroad, which passed from Boston through Hudson and continued west. Although rail has been all but abandoned now, sections of the rights-of-way still exist.⁴

One monument to that prosperous period is the Mossman House on Park Street, now on the National Historic Register - an elaborate Queen Anne style building across Park Street from Wood Park, overlooking the Assabet. In 1894, a fire destroyed most of the buildings in the town center. Following the fire, the town launched a rigorous rebuilding campaign; all new buildings in the town center were required to be constructed in brick. Hudson's downtown area is recognized as the Silas Felton Hudson Historic District⁵.

Industry declined after World War II, but population in Hudson remained fairly stable due to metropolitan expansion accompanying construction of the interstate highways⁶. The Town of Hudson experienced significant growth between 1960 and 1970, when the population doubled to about 16,000. Since 1970, there has been steady population growth of about 10 percent annually. In 2001, Hudson's population was 17,921.

In 2001, the Commonwealth of Massachusetts provided each community with a buildout analysis showing current levels of development and projecting future growth. Hudson's buildout estimates the community's population capacity to peak at 22,016; therefore the town's 2001 population was at 81 percent of capacity. Hudson's water use in 2001 is 2,507,000 gallons per day, or 66% of buildout's projections.

There has been considerable building during the past 30 years, mainly single-family housing but also some multi-family housing and commercial development. The construction of the Route 85 connector between I-495/290 and Washington Street led to commercial and industrial expansion in the Washington Street area, including: Stop and Shop Plaza, WalMart, Applebees, and office and industrial developments along Technology Drive.

Recreation

Canoeing, fishing, bird watching, walkways, parks, and bike tours are all available along or near the Assabet River for those seeking recreation in Hudson.

There are a few **boat launches** in public locations in Hudson:

- Riverside Park off Chapin Road (newly designated an official boat launch and has a small parking lot)
- The municipal parking lot next to the public library (Canoes can be rented at this location from the Fishing Tackle Annex)
- The municipal parking lot on South Street
- The Hudson Department of Public Works property on Cox Street
- Wood Park

Discussion has begun to develop a canoe landing along the Assabet River Rail Trail in Hudson. The site is downriver from the Washington Street Dam at a pumping station site along Main Street. Improvements may be made during construction of the Assabet River Rail Trail, though there is some concern in town that the canoe landing would bring increased traffic to the site.

In order to run the length of the Assabet in Hudson, boats need to be portaged from the library parking lot, across the busy Route 62 rotary at the town center, down to the municipal parking lot on South Street — a long and awkward trip. Except for the narrow, urban segment between the Washington Street Dam and the Cox Street Bridge, boating on the Assabet in Hudson is a quiet and refreshing experience.

Wood Park lies along the Assabet, about a half-mile upstream from the center of town. It is a great asset to Hudson, hosting events such as an annual summer concert series. The Taylor Memorial pedestrian bridge connects Wood Park with Apsley Park across the river. The Town of Hudson has recently acquired additional open space adjacent to Apsley Park.

A new Hudson High School is being developed on the same site as the existing High School, adjacent to the Assabet River. The new building will be closer to the river and will result in some development on the adjacent Riverside Park and O'Donnell Field recreation property. The Town of Hudson's Recreation Director, Linda Ghiloni, hopes to develop an Assabet River Walkway through this area, where there is a significant amount of publicly owned land. The goal

is to create about a two-mile loop beginning at the Taylor Memorial Bridge in Wood/Apsley Park, going southwest along both banks of the Assabet River to the canoe landing at Chapin Road (see map 18).

The first completed portion of the **Assabet River Rail Trail** stretches along the old Marlborough Railroad. Eventually the trail will continue through Hudson, Stow, Maynard and Acton, following the river. In Marlborough, however, it begins in the center of town, and does not cross the Assabet until downtown Hudson. The Marlborough/Hudson section of the trail will be completed in 2003, and all the remaining sections of the trail should 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.

Another proposed regional rail trail, the **Wayside Rail Trail**, has been undertaken by a committee to create a biking trail—and possibly a bus line—along the former Central Massachusetts Railroad. It would travel in an east-west direction from Belmont through Waltham, Weston, Wayland, Sudbury, Hudson and Berlin. This project has been slowed by opposition from the MBTA, which wants to retain the right of way, and the Town of Weston, which has opposed the project.

Walking and cross-country skiing are available at Gates Pond, Danforth Falls and the State Forest. The State Forest connects to US Fish and Wildlife Service Assabet River Wildlife Refuge. Some of the State Forest land was formerly part of Fort Devens Sudbury Annex. This land may also provide a backup route for the Assabet River Rail Trail in some areas if it is not possible to use the old rail bed.

Biodiversity

The Assabet River is enclosed in a vegetated buffer for most of its length in Hudson, except for the town center area. Areas along the Assabet in Hudson that are largely undeveloped and covered with vegetation are concentrated to the northeast (Gospel Hill) and southwest where the Assabet River crosses the town boundaries. Farms and woodlands cover much of this undeveloped land. Here the mixture of wetland areas, upland mixed forest, cleared pasture and cropland provide excellent habitats for wildlife.

The 2000 Biodiversity Protection and Stewardship Plan for the SuAsCo Watershed⁷ identifies biodiversity areas that are significant on the watershed

scale and makes recommendations for their future protection. Three of the Biodiversity Protection and Stewardship Plan's biodiversity sites fall within Hudson. They are each partially protected (see map 19).

The **Assabet Marshes** (also in Stow) total about 900 acres. This area is the most winding stretch of the Assabet River with extensive marsh and bays. It provides excellent sites for migrating waterfowl, bank swallows, otter, and marsh and swamp sparrows. Unfortunately, the poor water quality of the Assabet fosters intense eutrophication in the water column.

The **Assabet River National Wildlife Refuge** and environs (in Stow, Maynard, Sudbury, and Marlborough as well) totals about 2600 acres. The Refuge is made up of a mosaic of different wetland and upland habitats overlaying glacial outwash. The Refuge is considered protected habitat for endangered species by the Natural Heritage and Endangered Species Program (NHESP) and is home to many focal species including grassland and interior forest birds, like whip-poor-wills.

The **Desert Natural Area/Memorial Forest/Hop Brook Marsh** (in Sudbury, Stow, and Marlborough as well), in the eastern corner of Hudson, totals close to 2000 acres and is made up of a mosaic of glacial outwash habitats. It is the only significant area of pitch pine/scrub oak in the SuAsCo watershed, and it provides corridor connections with the Assabet National Wildlife Refuge to the north. The Desert Area is considered protected habitat for endangered species by the NHESP and is home to significant species, including the whip-poor-will and goshawks.

A significant portion of open space in Hudson is found in the **Marlborough-Sudbury State Forest**, which is connected to the Desert Natural Area.⁸

The MA Division of Fish and Wildlife has annually stocked trout in Danforth Brook and Hogs Brook, which runs into Tripp's Pond. Recently, the Division of Recreation in conjunction with the International Order of Odd Fellows has stocked Tripp's Pond for an annual youth trout-fishing derby. There is cause to believe that some of the fish being caught are offspring of the stocked trout. Northern Pike are also coming into the lower Assabet from the Concord and some trout are coming from Assabet Brook.

The NHESP lists the spotted turtle and Eastern box turtle as species of special concern, and the climbing fumitory vegetation as threatened.⁹

Hydrology

The wetlands in Hudson and the Assabet flood plain follow a relatively narrow corridor along the river and its tributaries. The flood plain is broader at both the Marlborough and Stow town lines and where the tributaries converge with the Assabet.

The sources of Hudson's water system are six active supplies; Gates Pond surface water supply, and five water wells (Kane Well, Cranberry Well, Chestnut Wells 1, 2, 3). The water distribution system serves 9 percent of the town's population, with average daily withdrawals operating at 83 to 89 percent of the permitted average daily withdrawal of 2.90 mgd (1,058 million gallons per year). Residential water use comprises almost 50 percent of the total, followed by Intel of Massachusetts, which uses 22 percent of Hudson's daily withdrawals.

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 Hudson's analysis. In 2001, Hudson's population was 18,113. MAPC's buildout analysis projects that Hudson's population at buildout capacity would be 22,208. MAPC projects that at buildout, the Town of Hudson's water demand would grow to 3.7 mgd (1,350 million gallons per year).

Hudson's Wastewater Treatment Plant discharges effluent into the Assabet River. The Hudson WWTP has a NPDES permitted capacity of 3.0 mgd (1,095 million gallons per year), and currently flows to the plant are about 77 percent of design capacity. The most significant user of the WWTP is Intel of Massachusetts; Intel uses in excess of 500,000 gallons per day.

Hudson's sewer system has been challenged by infiltration and inflow problems, but these problems have diminished since the Town began addressing the issue in 1976. Hudson has an aggressive infiltration and inflow (I/I) program. Through a local bylaw, the Town is able to charge \$3 for every gallon of water a new hookup intends to put into the system. The Water and Sewer Department allocates the funds raised through the surcharge to fix infiltration and inflow problems throughout the Town's sewer and water system. Through videotaping and other measures, Hudson's I/I rates have decreased a great deal.

Lands in need of protection (see map 21)

1. In southwestern Hudson, there is a golf driving range on Brigham Street, abutting the Assabet River. This 24-acre parcel is enrolled in the state's Chapter 61 program, reducing the landowner's taxes in exchange for keeping the land in recreation. The town should explore ways to permanently keep this land as open space, perhaps with an easement.
2. Also in southwestern Hudson, just to the north of the driving range, is an 11-acre undeveloped parcel abutting the river. It has a steep wooded slope along the river's edge that provides a scenic border for the river. On an adjacent parcel just over the crest of the hill, a development of large houses, called Pheasant Run, is nearly complete. The town should explore ways to preserve the scenic view from the river with the owner.
3. The riverfront behind Hudson High School and the adjacent recreation fields should be protected.
4. South of the center of town, along the proposed Assabet River Walkway is a 9-acre parcel that is adjacent to the Portuguese Club. It has woods along the river and some open fields inland. The closest streets to this parcel are River Street (at this point River Street is actually in Berlin) and Port Street. However, the parcel does not abut either street. The Town should explore acquiring this property, perhaps with the help of a grant.
5. Along the proposed Assabet River Walkway there is an open parcel on Brigham Street between the Elks Club and Town soccer fields. The Town should explore acquiring this land to facilitate the development of the walkway and to provide additional recreation area.
6. There is a wooded 2.4-acre riverfront property adjoining Wood Park in downtown Hudson. The Town should explore acquiring this as a gift from the owner. There is another parcel adjacent to Apsley Park across the river. The Town should explore protecting this land with the owner also.
7. There are two parcels along the river downtown with paving and industrial structures. Cleaning up and protecting these properties

would enhance the river in the center of town. The EOEa Urban Rivers Vision 2002 study has just started in Hudson and several other communities. This initiative will seek ways to revitalize the riverfront area in Hudson. These parcels should be considered in this process.

8. There are 30+ acres along Wheeler Road, including frontage on the Assabet and wooded upland. Unfortunately, there is a hazardous waste site in this area. The Town should explore ways of acquiring this land as a riverfront buffer.

9. Near the center of town there is a wooded parcel of nearly 7 acres between the river and Water Street. It provides a valuable buffer along 1000 feet of riverfront. The Town should see if the owner would be willing to provide an easement or donate this land to the Town.

10. There are almost 4 acres of wooded riverfront land adjacent to the Cherry Street playground. The Town should see if the owner would be willing to provide an easement or donate this land to the town. The riverfront area of the Cherry Street playground should be protected.

11. There is a 4+-acre parcel on Priest Street bordering the river and the old railroad grade that might form part of the Central Massachusetts Rail Trail in the future. Ways to preserve a riverfront buffer should be discussed with the owner.

12. There is a 10-acre riverfront parcel on Cox Street across from the Public Works Department land and adjoining the Cox Street bridge. This area is largely wetland bordering the river. The Town should explore ways of acquiring or protecting this land as a riverfront buffer.

13. The Public Works Department has a large parcel of land on Cox Street bordering the river. This land contains the Hudson Sewage Treatment Plant and the Public Works Yard. The riverfront area of this land should be protected.

14. On Cox Street, across the Assabet River from the Public Works Department land, an old pig farm is for sale. The property may require cleanup, but could prove to be an excellent open space parcel along the river. The Town should discuss future plans for this land with the owner.

15. Gospel Hill is the largest undeveloped part of Hudson, and is worthy of protection from development. It lies on both sides of Route 62 and includes more than 100 acres with active farms, pasture and woodlands in several large parcels that are highlighted on the map for consideration. An 11-acre parcel owned by Sudbury Valley Trustees adjoins this area. The owners are interested in protecting this land, and there has been some preliminary discussion with some of them. Protection of this land should be pursued with a high priority. Grants for agricultural preservation and open space protection, as well as cooperation with conservation organizations like SVT, should be pursued.

16. There are three large parcels comprising more than 40 acres between Wilkins Street and the river, including the Hudson Rod and Gun Club. This land, along with the adjacent Hudson Public Works Department property, provides a wooded border along the river that should be preserved. This part of the river, between Cox Street in Hudson and the Gleasondale Dam in Stow is a beautiful area for canoeing. The Town should explore ways of protecting the riverfront area of these lands from development.

17. There are two areas along the river on the Stow border that should be considered for reforestation. The old Hudson-Stow dump on Old Stow Road has a band of wooded land along the river, but much of the site is open sand. The Chestnut Well area is Town-owned water supply land adjacent to Gospel Hill, much of which was once a sandpit. Ways to reclaim these areas should be explored.

Recommendations

These recommendations are specific to the Town of Hudson. 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, Wayside Rail Trail, and Hudson's downtown walkway. Ideally these trails would link to create a trail system.

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 impact), planting of native plants if restoration is needed, and encouragement of conservation restrictions along the Assabet.
3. Hudson should adopt the new **DEP stormwater regulations** town-wide (not just in wetlands or within 100-200 feet) as a local policy.
4. Hudson should adopt a **Cluster Subdivision bylaw** that provides incentives for developers to use it in place of traditional subdivision plans. The undeveloped land should be managed by a local land trust or other conservation entity. Hopkinton, Marlborough and Westborough all have good bylaws to look to as examples.
5. Hudson should adopt a local **wetlands bylaw**. The bylaw should eliminate development on floodplains, and include a wetlands setback, fines for violations, and the town's ability to retain staff at the developer's expense.
6. Improve municipal operations for conservation by **providing conservation commission with dedicated staff**.
7. The Town of Hudson should include the Assabet River and emphasize its conservation in all planning documents.
8. Hudson should try to adopt the **Community Preservation Act** to raise funds for land preservation.

¹ Zwinger, Ann and Edwin Way Teale. *A Conscious Stillness. Two Naturalists on Thoreau's Rivers*. University of Massachusetts Press, Amherst, Massachusetts. 1984.

² Town of Hudson Open Space and Recreation Plan. 1999 Update. Linda Ghiloni, Division of Recreation, Town of Hudson, Massachusetts.

³ Massachusetts Historical Commission. *MHC Reconnaissance Survey Report*. Unpublished historical summary for each town in Massachusetts, MHC, Boston, Massachusetts. 1980.

⁴ Town of Hudson Open Space and Recreation Plan. 1999 Update. Linda Ghiloni, Division of Recreation, Town of Hudson, Massachusetts.

⁵ *ibid.*

⁶ Massachusetts Historical Commission. *MHC Reconnaissance Survey Report*. Unpublished historical summary for each town in Massachusetts, MHC, Boston, Massachusetts. 1980.

⁷ Clark, Frances. *Biodiversity Protection and Stewardship Plan for the SuAsCo Watershed*. Massachusetts Riverways Program, Massachusetts Watershed Initiative. August 2000.

⁸ Town of Hudson Open Space and Recreation Plan. 1999 Update. Linda Ghiloni, Division of Recreation, Town of Hudson, Massachusetts.

⁹ *ibid.*