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Proposed Greenway of Hatfield, Massachusetts - LA497C - Senior Studio

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Proposed Greenway Plan Hatfield Massachusetts

University of Massachusetts Landscape Planning Studio 497C
Spring 2011



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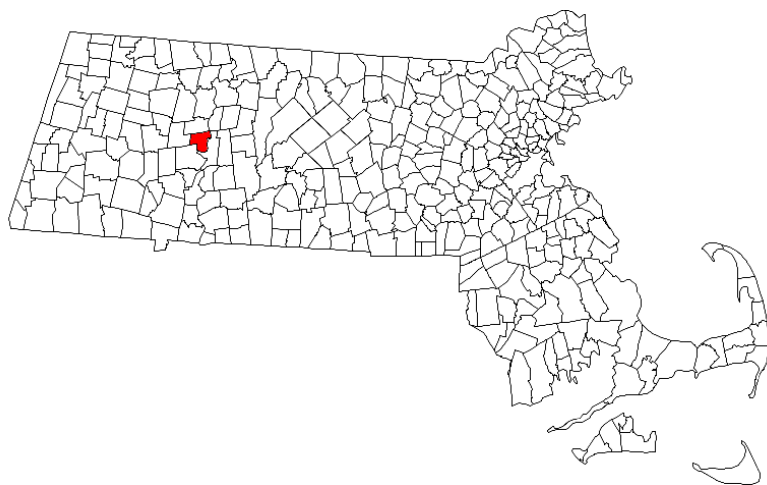
What is a Greenway?

When beginning to plan a greenway it is necessary to understand what a greenway is and why they are important. A greenway is a linear corridor or connection that connects people and other destinations of education and recreation together. These corridors can be both manmade and natural such as an old railroad track, an old dirt trail, or even a river corridor. Greenways are important not only for the recreation and education of the area, but can be vital to the success of native wildlife of the region. The goals of a Greenway are to provide land that is undeveloped for the safe movement and migration of wildlife while providing opportunities for the people living nearby to experience and learn about the town they live in and their surrounding environment. Greenways can also improve the natural features of a region, such as revitalizing the water front to improve water quality and re-vegetating areas of erosion to hold the land and help filter out harmful chemicals such as fertilizers. One way for people to benefit directly from a greenway is the implementation of trails through the greenway for not only recreation use but also for wildlife education (www.greenways.com).

This proposed greenway plan will be assessing the features of Hatfield such as, History, natural features, and open space within the town. After a thorough assessment of the towns features the report will cover the extensive proposed greenway plan, focusing mostly on the town center of Hatfield. The town center is the hub of the town where the major community buildings are such as the elementary and high schools, town hall, the town library, and most of the public recreation fields. Once the overall greenway plan has been analyzed, the report will cover more in depth specific areas of focus that are important when creating connections through the town center in the proposed greenway plan. These focus areas are, The Mill River Park, Education connection, and renovations to the Smith Academy Town Park. Each area of focus provides the residents and visitors to the town of Hatfield the benefit of safe recreation as well as an opportunity to learn about the history, wildlife, and natural features of Hatfield.

Introduction to Hatfield:

The town of Hatfield is nestled in Western Massachusetts Pioneer Valley where it has had a long rich history. Founded in 1670 and now occupying about sixteen and a half square miles, Hatfield’s rich soils and flat land became a catalyst for a booming agricultural industry.



One of Hatfield’s major crops was Tobacco and today many tobacco barns still stand as an icon to a large agricultural business. The agricultural market took off in Hatfield thanks to its rich soils. Much of the town resides along the Connecticut River which annually floods the earth and leaves behind rich minerals in the alluvium soils.

The topography of Hatfield steeply divides the town into east and west from the flat floodplains of the east to the steep mountainous western Hatfield. The population of Hatfield consists of about 3,500 people predominantly Caucasian with a median age of approximately forty (www.zip-codes.com). The town has a relatively low density for the size and the amount of people living there.



Much of the town is forested land and spread out residential streets with few sidewalks (once outside the town center).The town is divided through the middle by a large highway, route 91, which causes a large disconnect for the town, because there are only a few places people are able to cross the highway. The Greenway proposal helps to re-create some connections in the downtown and even a link from east to the west.

Existing Hatfield Planning Documents

Existing town planning documents are critical to the greenway planning process. They provide valuable information about the existing conditions in the town and insight to how a greenway can best be implemented. Hatfield has three existing documents that provide the background of the town as well as reveal some of the future goals of the town and its residents. The Hatfield Master Plan, 2010 Hatfield Town Center Revitalization Study and the Hatfield Open Space Plan provide solid base for planning Hatfield's greenway plan.

Hatfield Master Plan:

The Hatfield Master Plan begins by identifying three key areas of concern for the residents of Hatfield: growth management; preservation of agriculture, natural resources, open space, and historic neighborhoods—the “rural character of Hatfield;” and providing infrastructure (water, sewer, schools, and roads) or how the town will meet its responsibilities to residents. While the areas of concern have been separated, they ultimately work together to give Hatfield future direction. The main goals of Hatfield will be completed by accomplishing miles stones such as, adopting more commercial/industrial guidelines, acquiring greenway corridors, and improving recreation facilities to name a few.

The town of Hatfield's master plan in summation would like to expand residential development and to do so will need to rework their zoning laws and districts in order to protect their open space, agricultural heritage and allow for responsible future development. The new zoning regulations promote a balanced rural character and help move Hatfield towards a more modern community.

The proximity of Hatfield to major transportation networks, Hatfield is not only a popular place to live but also a popular place for business and industry. Similar to the revision of residential zoning regulations, the master plan identifies the need for reworking of the business and industrial zoning regulations. By controlling the location of development and guidelines for the appearance of the developments, Hatfield can strike a balance between their rural culture and ensuring continued economic development.

To meet the needs of future development, the Hatfield master plan identifies the need to update their current infrastructure. With the current infrastructure already insufficient to support existing development, it is important that it is updated to attract new residential and commercial uses that will be developed under the new zoning regulations. By controlling where the new infrastructure is placed, Hatfield can better control where specific developments are placed. For example, to maintain the qualities of the stream corridor, they may choose to locate infrastructure for new commercial developments in a different area.

In addition to identifying the areas for concern and proposing future action plans, the Hatfield master plan also provides a significant amount of background information. This information is useful when studying the problems that are proposed because evidence of existing conditions and recent trends can help inform the proposed solutions.

Open Space Plan:

The town open space plan for Hatfield addresses the issue of the towns need for more open space but not at the cost of losing some of the culturally important landscapes and town character such as the agricultural land, historic sites etc. The open space plan specifies five main goals for the town:

- 1) Protect the town water supply
- 2) Protect Farmland
- 3) Protect wetlands and flood plains
- 4) Protect woodlands
- 5) Provide adequate recreation spaces for town

These goals are to be achieved by the town by 2013.

The open space plan stresses that there is a strong need for more recreation spaces and establish *new* recreation opportunities such as picnicking, social events, ice skating, biking, passive water craft use, and hiking. It is important that not only does the town gain these opportunities but it is crucial that the town identify the important woodland corridors and promote the appropriate recreation activity to the land so as not to tarnish the land they are trying to protect. Currently Hatfield has the schools fields for a majority of recreation, and is in need of a town park so the school does not have to share its fields with the rest of the town.

Much of the forested areas, such as around Great pond are excellent for things like hiking/walking and biking. The open space plan also mentions that there is a need for a *system* of trails for the residents, while they have the dyke road. It is one of the few useable trails in the area and would be nice to have other trails that connect to it.

Over all the town of Hatfield wants to preserve the character of the town while providing more adequate recreation and open space for its residents.

Hatfield Town Center Revitalization Study- 2010

The town of Hatfield worked with the Pioneer Valley Planning Commission (PVPC) to study the future of the Town Center. By identifying the strengths, weaknesses and opportunities of the Town Center, Hatfield can more effectively plan future development and action plans to create a thriving Town Center.

Hatfield's Town Center is surrounded by "The Square", a two mile loop of roads that are popular with walkers. Within "The Square", which is bound by School, Maple, Prospect and Main Streets, the town identified eight important sites for the revitalization of the Town Center. With the help of the PVPC, Hatfield planned a public meeting to hear what the opinions of the residents. For each of the eight identified properties, those who attended the meeting identified the qualities, concerns and possible actions for each site. They expressed their desire for a thriving Town Center. Based on their discussion, Community Visions were developed for each of the sites:

- Hatfield Mill Area: A recreation and leisure destination
- Town Hall and Barn Buildings- An energy efficient Town Hall that makes greater use of existing space to the benefit of all town residents
- School Street School: An inhabited building that breathes new life into the center of Town
- Center Street School: An inhabited building and riverfront park that breathes new life into the center of Town
- Smith Academy Park: An inviting and accessible park capable of hosting small town events
- Connecticut River Dike Road: A beautiful, accessible and easy to navigate recreational resource.
- Hatfield Elementary School Grounds: A large open park with the capacity to host large town events.
- Parcel Behind Town Cemetery: A site for active leisure activity such as ice skating or community gardens until a different municipal purpose is needed.

The report synthesizes the findings from the community meeting into “Considerations” specific to each site. The report concludes with broad recommendations for moving forward as well as community partners, and sources of funding and technical data.

The Hatfield Town Center Study will be critical in the planning of a greenway in Hatfield. The data that has already been compiled and analyzed in the report is important because it includes input from local residents and recommendations regarding significant areas. While the report focuses on the Town Center and doesn’t address surrounding locations, the importance of the Town Center is proved and can be a good nucleus for a greenway. The identification of the eight parcels establishes nodes that will be important to connect and relate to one another. Recurring themes can be deduced from the public meeting regarding the town center and applied to the greenway planning process for the surrounding area. By working with the PVPC to establish the Town Center Report, there is existing data that can be referenced when planning the Hatfield Greenway.

The three documents of Hatfield provide information for future greenway planning. Each document builds upon the other to provide a comprehensive assessment of Hatfield. The master plan outlines current development and zoning guidelines and highlights the town’s desire to maintain their rural culture and open space. The open space plan expands upon this sentiment by giving more detailed information about the future direction of open space and recreation in the town. The town center study shows the significance of the area and the opportunities that it provides for future use. Together, all three reports provide a solid foundation for our greenway planning process.

Historic and Cultural Assessment

Hatfield is a quintessential example of a rural New England town. While many other early settlements have experienced growth and development and lost historic elements from the early colonial settlement, Hatfield has retained its historic appearance and artifacts. From the original alignment of Main Street to the historic cemeteries, agricultural land and buildings, Hatfield has an extensive past that can still be viewed today. As open space becomes more scarce and valuable, Hatfield's historic sites and rural character will continually be threatened. A comprehensive greenway plan can not only protect these objects of great importance but identify them to residents and visitors to be enjoyed for years to come.

Early History

Before the arrival of English settlers, the Capawonk and Nonotuck Native American tribes occupied the Hatfield area. In 1659, the English settlers bought the land that today includes both Hatfield and Hadley. Despite the colonials laying out their new town, the Native Americans remained in the vicinity until the late 1670's when King Phillip's War drove them from the area (Hatfield Reconnaissance Report, 5).

The English settlers began laying out Hadley and what would later become Hatfield in 1661 by defining the streets, common land and individual lots (Hatfield Reconnaissance Report, 4). Despite being one settlement at the time, Hadley was separated by the Connecticut River. Those who lived on the Hatfield side had to make regular trips across the river to attend church and town meetings until 1668 when a meetinghouse and cemetery were constructed on their side of the river. Soon after, in 1670, Hatfield became a separate town from Hadley (Hatfield Reconnaissance Report, 5).



Hatfield to Hadley Ferry across the Connecticut River

During the Civil War, Hatfield strongly supported the abolishment of slavery. In addition to harboring escaped slaves, they later sent teachers to the south to help educate the freed slaves. Other important events in the town's history include the establishment of the Village Improvement Society in 1885 that began planting trees along the main streets in Hatfield, some of which are still there today, and the electric railway that was installed in 1899 to connect Hatfield to Amherst, Hadley and Northampton (Hatfield Reconnaissance Report, 7).



Street trees lining Elm Street

Agriculture

Still evident today by the large plots of open land, Hatfield has an extensive agricultural history. The soil on the banks of the Connecticut River proved to be very fertile, up to 25 feet of topsoil in some areas (Hatfield Reconnaissance Report, 34), and led to successful harvests of a wide array of crops over the years. Early settlers in the 17th century focused on crops of wheat, corn, peas and cattle that were traded and sold in Boston and Springfield. The farmer's success continued into the 18th century as they not only added other produce crops to their repertoire but led to the establishment of other industries such as cider, saw and linseed mills and a tannery and blacksmith shop.



Hatfield Farmland, 2011

Around the time of the Revolutionary War, Hatfield became famous for their beef products. Not only were they selling their products in other towns and cities, Hatfield farmers became one of the largest suppliers of beef to the Continental Army. George Washington, the army's general, had someone stationed in the town to make the purchases (A History of Hatfield, 195).

The success of Hatfield's farming industry continued into the 19th century. During this time, there was not only an expansion in the crops that were produced but a tremendous increase in the number of immigrants coming to the area. The broomcorn crop led to a successful broom production and trade.

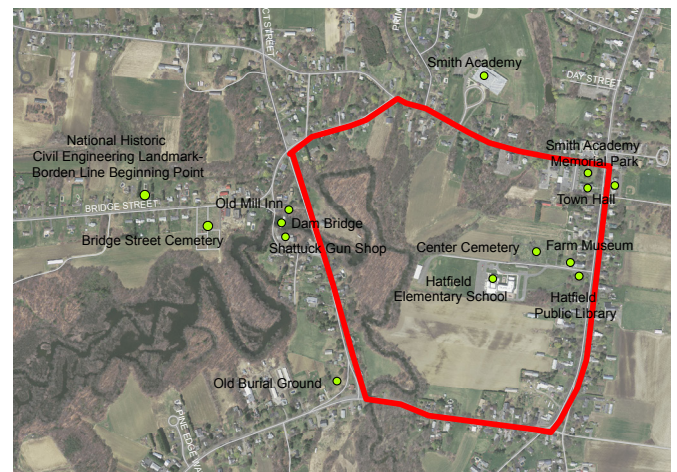
Canadian, Irish, and German immigrants came and began working on farms. In 1856, several farmers began growing tobacco. Not only did they become one of the largest tobacco producers in the area but it became the main economic force in Hatfield and is still a significant crop today.

Tobacco production continued into the 20th century along with other food crops such as onions and potatoes. Several floods and hurricanes in the 1930's covered the crops with dirt that had to be removed by hand and led to the construction of a dike to protect the crops in the future. Today, the predominant crops in Hatfield are tobacco, potatoes, pumpkins, and strawberries. Despite approximately 35% of the land in Hatfield being dedicated to agricultural use, only 1.1% of the local residents work in agriculture according to the 2006 census (Hatfield Reconnaissance Report, 8).

Historic Areas and Sites

Town Center

Hatfield's residents refer to the town center as "The Square." Bounded by School, Prospect, Maple and Main Streets, the town center is home to numerous historic sites and cultural centers. There are many opportunities to expand the cultural offerings and protect historic areas in the town center through greenway planning.



Hatfield Town Center

When the English settlers first began laying out the streets and property lines, they followed common English planning standards that can still be seen today. In addition to the original layout of the town still visible, the architecture in the town center tells a story about Hatfield's history. As farmers experienced tremendous success in the 18th century, they built homes that were congruent with this success. New homes were built while others were rebuilt in a wide array of architectural styles, many of which are part of the National Register of Historic Places. Federal style, Greek Revival, Italian Villas and other European style homes, as well as barns, were built in the town center. Later Queen Ann and Colonial Revival styles were later added, and this wide array of architectural styles can still be seen in the town center today (Hatfield Reconnaissance Report. 15).



Hatfield has seen numerous public buildings and churches come and go over the years. The separation from Hadley and the future separation of church and state led to numerous buildings being constructed. Today, there are three remaining civic buildings in the town center: the School Street school from 1894, the Center Street School of 1918 and the Town Hall from 1930. The Town Hall is the only inhabited building and it still serves its original purpose.



Center School



Town Hall

In addition to several churches in Hatfield's town center, the local library, farm museum and Hatfield Elementary School are located there as well. Clustered close together and in close proximity to the Town Hall, this is the centralized cultural hub of Hatfield. The Elementary School is relatively new and also has several athletic fields on the grounds. The addition of an adjacent open space expands the future possibilities. The Hatfield Farm Museum is housed in an old tobacco barn and has displays of old farming equipment and other local artifacts (pvhn.com).

Mill River District

The Mill River District is one of several National Historic registered districts in Hatfield. The falls on the Mill River were attractive to Native Americans for fishing and later to colonials for mills. Over the years, saw, linseed and grist (flour) mills were seen in the area. In the 19th century, blacksmiths, carpenters and broom makers moved to the area (Hatfield Reconnaissance Report, 21-22).

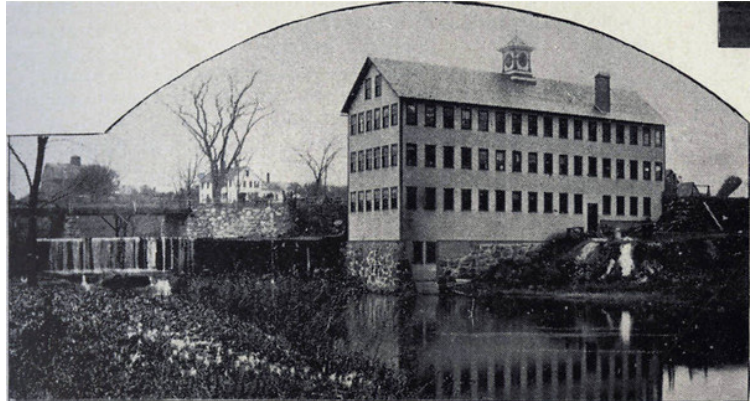


Sitting below the Mill River Dam

Today, there are several remaining artifacts in the area. The building that now houses the Old Mill Inn has an extensive history, ranging from a gun shop and grist mill to the headquarters for a regional newspaper. The dam at the Inn was constructed in 1875 and today is privately owned. While there are debates about whether it should be left as is or removed, the reinforced concrete sits on a red rock base that is known to be very strong and stable (Hatfield Reconnaissance Report, 22).



Old Mill Inn

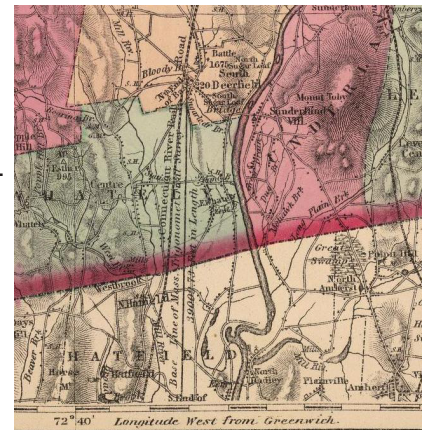


Mill Gun Factory

In 1830, Massachusetts began mapping the state. The Borden Baseline drawn from Hatfield to South Deerfield was named for one of the original surveyors, Simeon Borden. The Baseline was drawn using new technology that was more accurate than anything previously utilized. The Hatfield area was selected because of the flat land. The Baseline is part of the National Historic Civil Engineering Landmark registry and the starting point can be seen at 30 Bridge Street. (Hatfield Reconnaissance Report, 20),

Cemeteries

There are six cemeteries in Hatfield, with all but one of them still active. The one that is no longer used is Hill Cemetery, which was established in 1669, just before Hatfield separated from Hadley. The Hill cemetery has headstones dating from the 1690's-1930 and includes several Native American burials as well. The array of dates and types of cemeteries and headstones in Hatfield are important in the town's history.



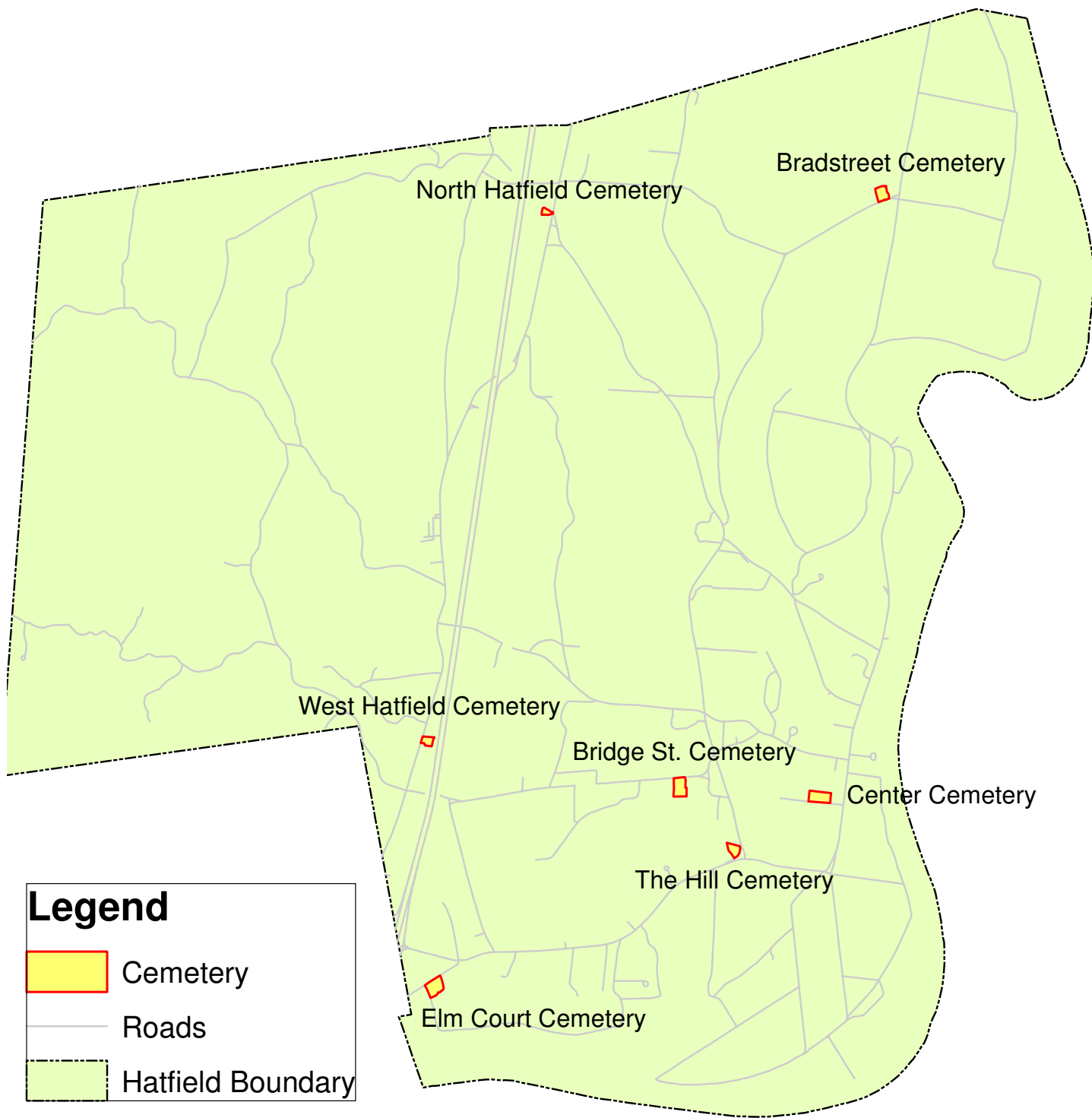
Borden Baseline



HatfieldCemeteryHeadstones

As development continues, space for burials is compromised. Despite the town's best efforts at maintaining the cemeteries, the age of the stones and other natural events are damaging the headstones (Hatfield Reconnaissance Report, 10-13). It is important to maintain them for future visitors and generations to see and learn from.

Hatfield Cemeteries



Sophia Smith

Hatfield native Sophia Smith inherited a small fortune from her father and siblings in the late 19th century. Being blind, she initially planned to open a school for the blind but changed her mind after one was opened near by in Northampton. She then decided to establish two schools- Smith Academy in Hatfield and the all girls Smith College in Northampton. Today, Hatfield students who graduate from Smith Academy can attend Smith College free of charge. Smith Academy was moved in 1982 from its original location next to the Town Hall and a memorial park was built in its place.



Original Smith Academy

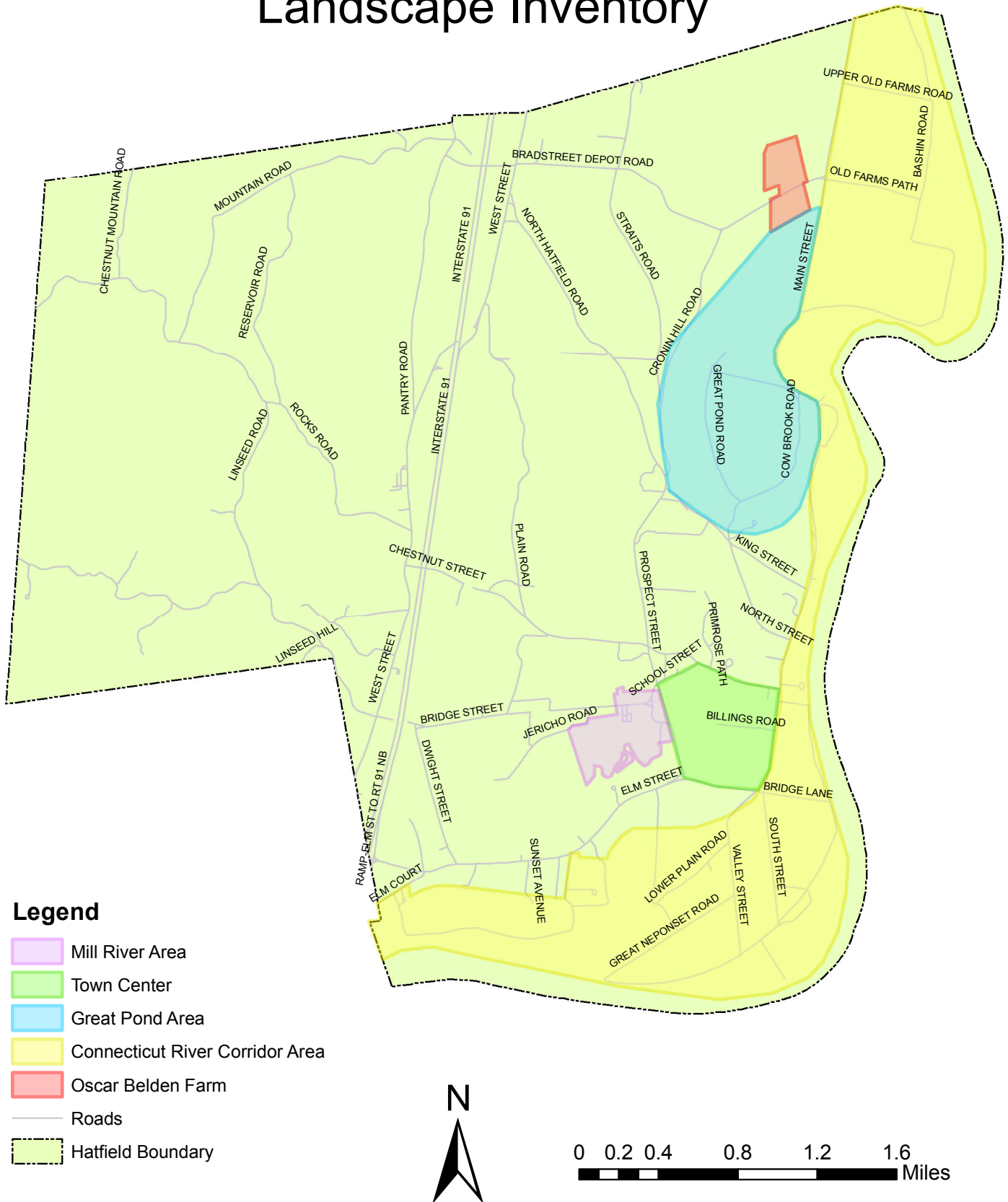


Sophia Smith's House

Heritage Landscapes Inventory

With such a wide array of historic sites, landmarks and areas in Hatfield, a Heritage Landscape Inventory was developed to label different areas of the town. The five designated areas encompass historic environmental areas, cemeteries, buildings, farmland and other sites. Currently, there are no special zoning restrictions on the land within the Heritage Landscapes, but the implementation of restrictions have been discussed. For example, establishing zoning guidelines to preserve the historic architecture and character of Main Street and protecting historic farmland.

Hatfield Heritage Landscape Inventory



Legend

- Mill River Area
- Town Center
- Great Pond Area
- Connecticut River Corridor Area
- Oscar Belden Farm
- Roads
- Hatfield Boundary

National Register of Historic Districts

In addition to the five Heritage Landscape areas, Hatfield has eight districts in the National Register of Historic Places. While there is some overlap between the Heritage Landscapes and National Districts, there are areas that are not included as well. Expanding these areas to include the Heritage Landscapes will create more congruent historic areas and will make the creation and enforcement of regulations more effective.

Conclusion

Like other historic New England towns, Hatfield is faced with the challenge of allowing for development and infill to take place while also maintaining their rural character. It is especially challenging in Hatfield where so much of the land is still open and used for agricultural purposes. As profits continue to decline for farmers, development may become an attractive option and the rural character and history will slowly be lost.

There are several ways in which Hatfield can combat this issue with the potential for a historic greenway being one of them. As outlined in the Hatfield Heritage Report that was compiled by the DCR, there are zoning and regulatory measures that can be enacted in Hatfield to help solve this problem. Creating Scenic Road Bylaws would maintain the historic corridors and views along areas such as Main Street. Historic Overlay districts could be established with a variety of different levels of control, ranging from zoning measure to advisory boards. Maintaining the character of Hatfield will revolve around preserving the historic architecture and agricultural areas.

Another way to preserve the rural culture of Hatfield is to teach not only tourists about the history of the town but local residents as well. By teaching both groups about the extensive history of the town people will be more aware and more likely to support preservation efforts. The establishment of a historic and cultural greenway can aid in this by creating connections between sites and areas of importance and educating people on the history. The installation and maintenance of a greenway will also help people see that there is a viable future for these historic sites as they become more visible and known.














There are opportunities for historic and cultural greenways in Hatfield on a variety of levels. The town center and mill area are obvious focus areas and are easily accessible. These areas can serve as the center point for a larger network that can span out into town to other sites and areas of importance either on foot, bicycle or car. The availability of central and external features in Hatfield will help attract an array of users.

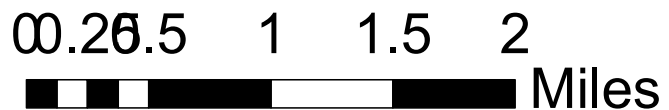
Hatfield has a tremendous opportunity to gain from a historic and cultural greenway system. Their wide array of historic features and sites are easily accessible and can teach residents and visitors a lot about the town's past, present and future. By protecting and promoting these sites and artifacts, Hat-

Hatfield Historic and Cultural Sites and Districts



Legend

-  Billings Way Tobacco Barn
-  Mill River Area
-  Town Center
-  Great Pond Area
-  Connecticut River Corridor Area
-  Oscar Belden Farm
-  Hatfield Center Historic District
-  Mill-Prospect Street Historic District
-  Bradstreet Historic District
-  North Hatfield Historic District
-  Elm Street Historic District
-  West Hatfield Historic District
-  Old Mill Historic District
-  Upper Main Street Historic District
-  Cemetery
-  Roads
-  Hatfield Boundary



Note: Boundaries are approximate

Natural Features Assessment

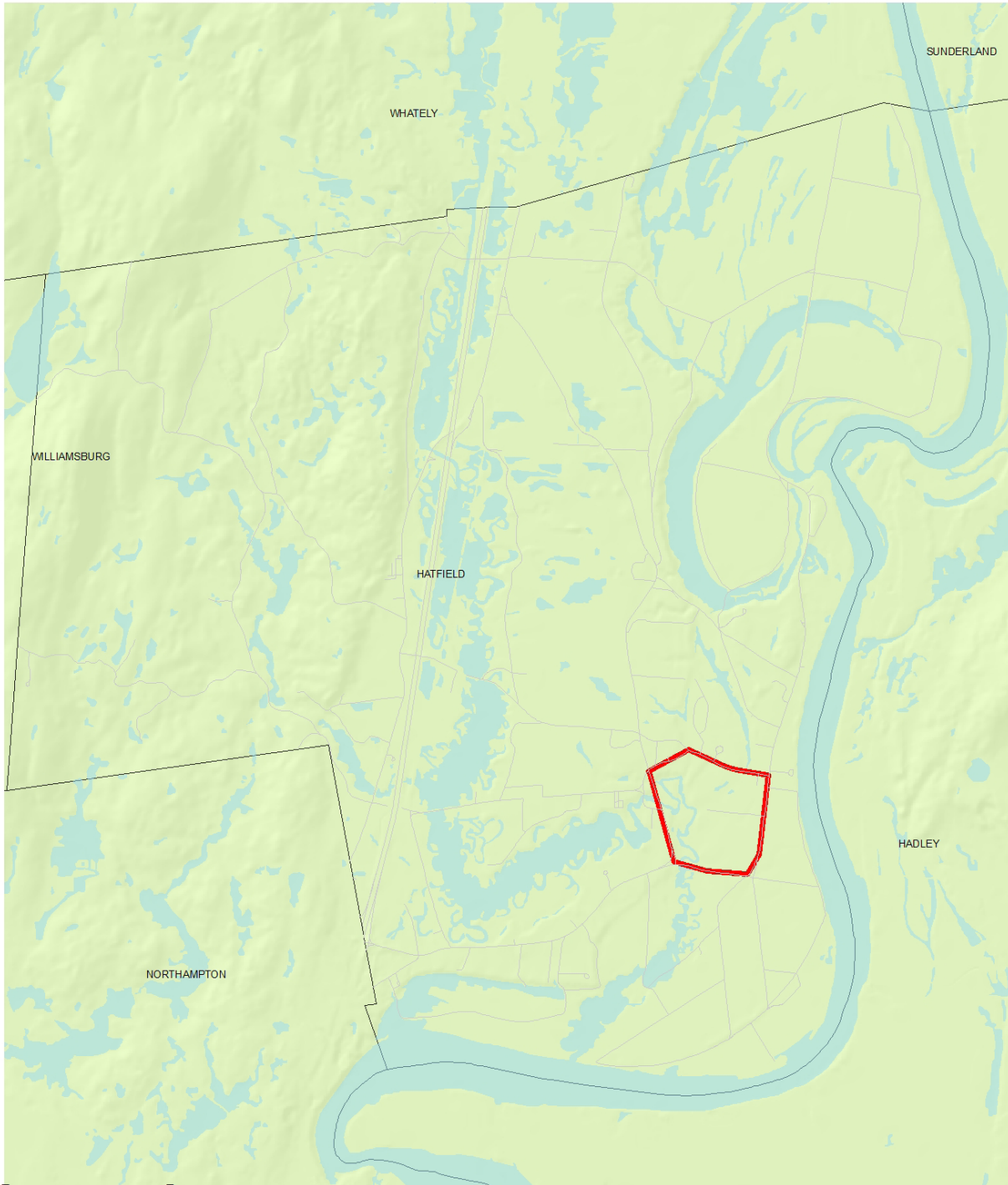
Hydrology:

Much of the water in Hatfield flows down towards the Connecticut River. Many habitats are created by the flowing waters of Hatfield. The Great Pond, Connecticut River, the Mill River, Running Gutter Brook, Mountain Brook, and Broad Brook all flow through Hatfield creating ox bows and other important habitats for endangered animals in Hatfield such as the fresh water Dwarf wedge mussel which is currently endangered (www.mass.gov).

The water in Hatfield has shaped much of the land in the east, with the Connecticut River forming the eastern boundary of the town. Much of the land near the rivers is used for agriculture and this has left narrow buffer zones along the rivers and streams. It is important for Hatfield to help protect these areas by creating a larger buffer between the agriculture (using some harmful chemicals such as fertilizers) and the rivers and streams. In creating larger buffers and protecting the waters Hatfield can help to save many native habitats. The quality of the water in the rivers, while it is not terrible, would stand to improve from wider buffers. The water would have more time to be filtered by the roots of trees and shrubs in a wider buffer. The agricultural land uses may fertilizers and pesticides that if they get to the water is detrimental to the aquatic life. Wider buffers would provide more filtration to help ensure that these toxins do not make it to the rivers.






Fresh water dwarf wedge mussel.
www.fhwa.dot.gov



Legend

Hydrology

-  river, pond, wetlands
-  Roads
-  Town Center



Note: Boundaries are approximate

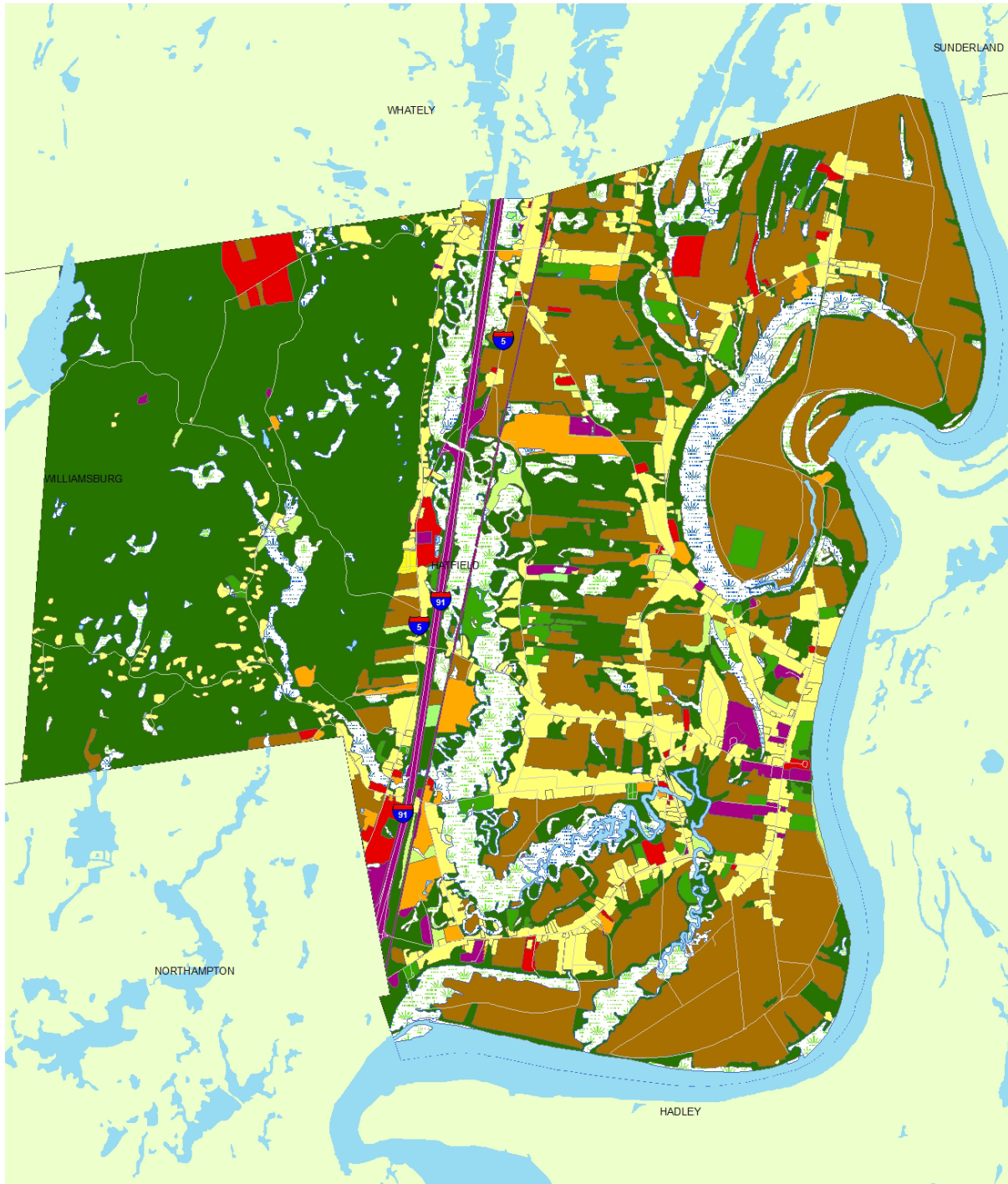
Land Use/ habitat in Hatfield:

Much of the land in Hatfield is used for croplands as the flood plains and rich glacial till provide ideal growing soils. There is also a large portion of land is devoted to forest and conservation land in West Hatfield. Most of the center of Hatfield has been developed and by residential, commercial, and institutional properties. Hatfield has done a nice job so far in protecting their rivers and streams (core habitat) and is considered one of the leading towns in protection of natural species. Even with a supportive community there are still many animals and plants that are endangered or threatened such as, the species listed in the table on page 24. It is important to protect these species that can be found in some of the core habitats in Hatfield. These habitats spread out into the surrounding towns and can be useful for some responsible wildlife recreation/protection. Much of the land use near the rivers, especially the Connecticut River, is used for agriculture. Agriculture is a key component to the town of Hatfield but there needs to be a larger buffer protecting the habitat near the river. In many cases the farmlands run right to the river which allows the harmful chemicals used in farming to seep into the river. By using a buffer it is possible to filter out much of the toxins before they reach the rivers. Other than farming there are other issues that can harm some of the natural features. New development, if not planned properly, can spread into natural wildlife habitats. It is important that during the planning of the greenway we take the measures necessary to protect key pieces of land so that they may not be developed. Certain large parcels of agricultural and grasslands are important to not only the town but also birds and animals such as the Vesper Sparrow which inhabits the grass and farmlands and is threatened in Hatfield (www.mass.gov). Protecting a significant amount of grassland/agricultural land will help the town to keep its heritage as a farming town and help the wildlife keep its habitat.

This land should be land near rivers, as well as near important connections to other wildlife corridors. Areas near route 91 pose an issue as well, because the highway cuts off wildlife movement across the town. Wildlife underpasses can help animals avoid the highway and make the safe migration across the town of Hatfield.









Threatened
Vesper Sparrow





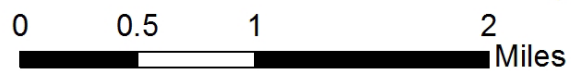
Legend

Hatfield Land Use

- | | |
|--|--|
|  Brushland/Successional |  Industrial |
|  Cemetery |  Low Density Residential |
|  Commercial |  Medium Density Residential |
|  Cropland |  Non-Forested Wetland |
|  Forest; Orchard |  Open Land |
|  Forested Wetland |  Urban Public/Institutional |
|  High Density Residential |  Pasture |
| |  Water |
| |  wetdep_conn1 |
| |  Roads |

Note: Boundaries are approximate

Land Use



List of threatened, endangered and animal species of special concern.

T= Threatened

E= Endangered

SC= Special Concern

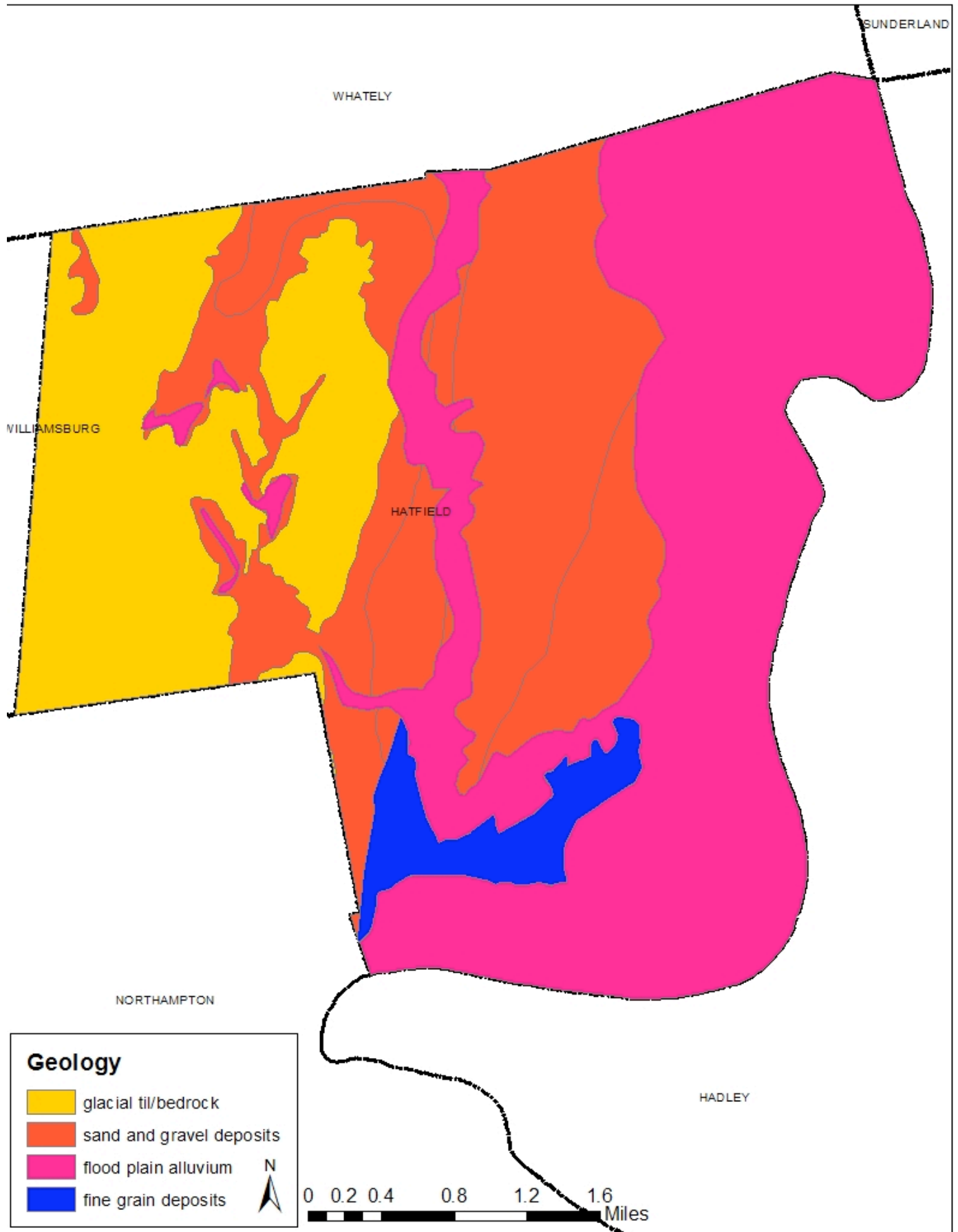
Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
HATFIELD	Amphibian	<i>Ambystoma opacum</i>	Marbled Salamander	T		2002
HATFIELD	Bird	<i>Haliaeetus leucocephalus</i>	Bald Eagle	E		2009
HATFIELD	Bird	<i>Ixobrychus exilis</i>	Least Bittern	E		1991
HATFIELD	Bird	<i>Pooecetes gramineus</i>	Vesper Sparrow	T		2007
HATFIELD	Dragonfly/Damselfly	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	E		2001
HATFIELD	Dragonfly/Damselfly	<i>Gomphus ventricosus</i>	Skillet Clubtail	SC		2001
HATFIELD	Dragonfly/Damselfly	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	SC		2001
HATFIELD	Dragonfly/Damselfly	<i>Ophiogomphus aspersus</i>	Brook Snaketail	SC		1998
HATFIELD	Dragonfly/Damselfly	<i>Stylurus scudderi</i>	Zebra Clubtail	SC		2001
HATFIELD	Dragonfly/Damselfly	<i>Stylurus spiniceps</i>	Arrow Clubtail	T		2005
HATFIELD	Fish	<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	E	E	1999
HATFIELD	Fish	<i>Hybognathus regius</i>	Eastern Silvery Minnow	SC		1978
HATFIELD	Mussel	<i>Alasmidonta heterodon</i>	Dwarf Wedgemussel	E	E	2006
HATFIELD	Mussel	<i>Alasmidonta undulata</i>	Triangle Floater	SC		2006
HATFIELD	Mussel	<i>Lampsilis cariosa</i>	Yellow Lampmussel	E		2005
HATFIELD	Mussel	<i>Ligumia nasuta</i>	Eastern Pondmussel	SC		1998
HATFIELD	Mussel	<i>Strophitus undulatus</i>	Creeper	SC		2006
HATFIELD	Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC		2004
HATFIELD	Vascular Plant	<i>Arisaema dracontium</i>	Green Dragon	T		1993
HATFIELD	Mussel	<i>Strophitus undulatus</i>	Creeper	SC		2006
HATFIELD	Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC		2004
HATFIELD	Vascular Plant	<i>Arisaema dracontium</i>	Green Dragon	T		1993
HATFIELD	Vascular Plant	<i>Deschampsia cespitosa</i> ssp. <i>glauca</i>	Tufted Hairgrass	E		1991
HATFIELD	Vascular Plant	<i>Eleocharis intermedia</i>	Intermediate Spike-sedge	T		1984
HATFIELD	Vascular Plant	<i>Eragrostis frankii</i>	Frank's Lovegrass	SC		1984
HATFIELD	Vascular Plant	<i>Hypericum ascyron</i>	Giant St. John's-wort	E		1974
HATFIELD	Vascular Plant	<i>Liatris scariosa</i> var. <i>novae-angliae</i>	New England Blazing Star	SC		1860
HATFIELD	Vascular Plant	<i>Salix exigua</i> ssp. <i>interior</i>	Sandbar Willow	T		1984
HATFIELD	Vascular Plant	<i>Tillaea aquatica</i>	Pygmyweed	T		1984

Geology:

The geological make up of the town of Hatfield is comprised of four major geological features. Glacial till is the majority of the west in the mountainous areas of the Fitzgerald lake Area Conservation land. Sand and Gravel deposits located mostly in the center strip of the town that has been left there by the flowing waters/wetlands of Hatfield. Thirdly, there are the alluvium deposits and the fine grain deposits from the winding Connecticut River, the Mill River, Running Gutter Brook, Mountain Brook, and Broad Brook and various wetlands. These deposits have been left behind by these flowing waters and provide excellent soils for agriculture. In looking at the Land use map listed above it is easy to see that Hatfield is taking advantage of the rich soils. The large mountainous region in west Hatfield provides a wonderful area for hiking and walking trails as well as great habitat for wildlife. It is important to protect these areas in the west at the same time allowing for proper recreational use. (Hatfield open space plan pg. 19).

Soils:

The soils in Hatfield are comprised of multiple types but the most common soils in Hatfield are the Hinkley-Merrimac Windsor and the Hadley-Winooski- Limerick soils. Hatfield is divided between the upper rocky and mountainous region to the west and low lying flood plains of the east. The rocky soils are thin and not good for development and should be preserved because they house many of the natural species in Hatfield, furthermore west Hatfield holds one of the towns drinking supplies. East Hatfield is home to some of the richest soils around. The alluvial floodplains consist of Pootatuck, Rippowam, Saco and Suncook soils. These are rich in minerals that are essential to growing crops. (Hatfield open space plan pg. 19)

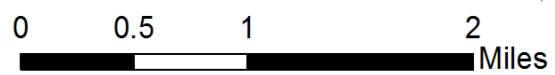




Legend

- Roads
- Town Center

Soils



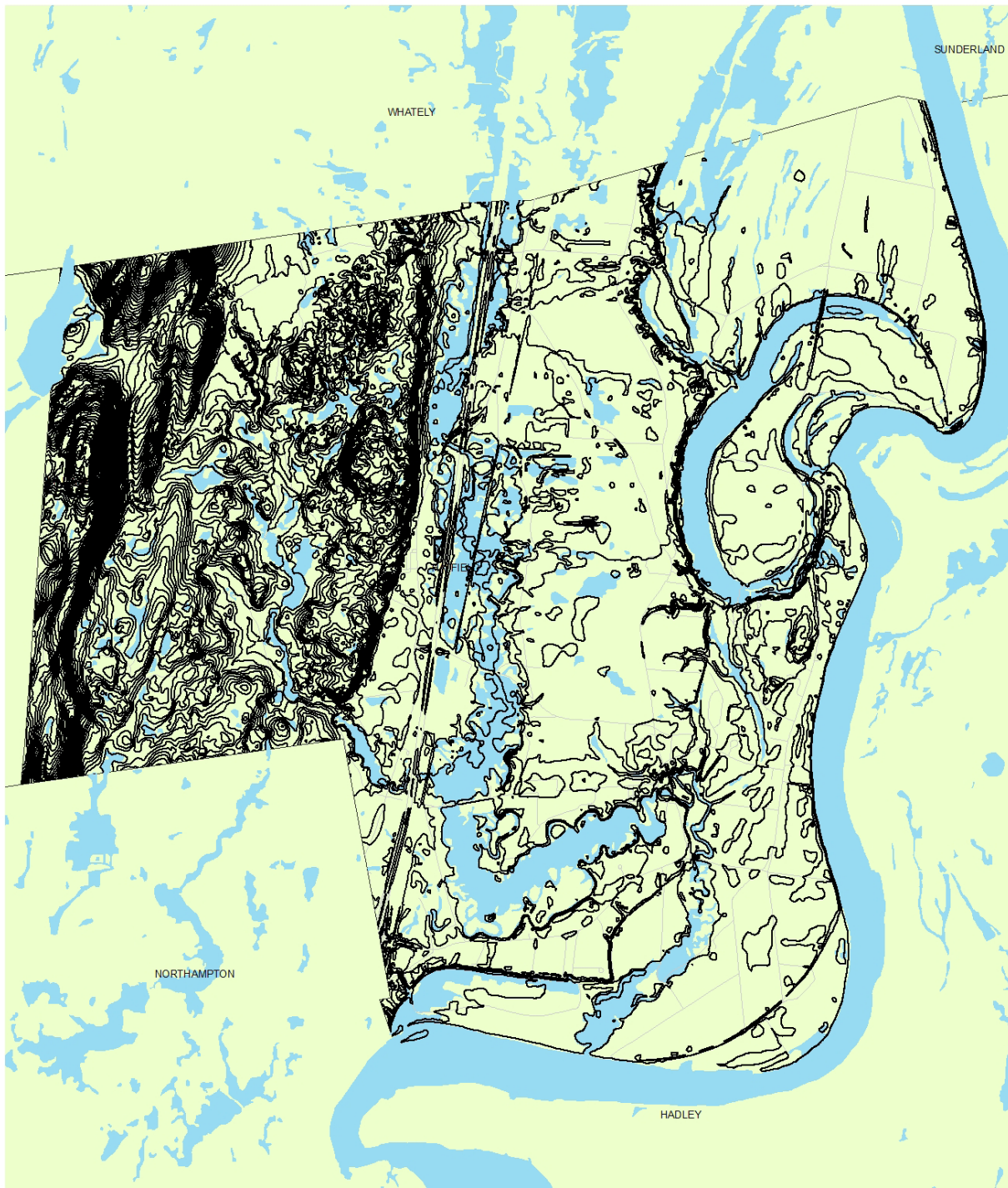
Note: Boundaries are approximate

Topography and Slope:

Hatfield is sharply divided by its topography. The low-lying flood plains of Hatfield are home to the flat topography of the town and much of the croplands. It is here that the lowest point in Hatfield is located at only 110 ft above sea level (Hatfield open space plan pg 20-21.) Just past route ninety-one the topography and slopes of the town move sharply upward into the Fitzgerald Lake Conservation area. The mountainous area of West Hatfield dominates with steeper slopes. The topography map shows the cluster of contours to the west which delineates the steep slopes. The highest point in the west is 840 feet above sea level that range from five percent to well above twenty-five percent slope. This area is the Horse Mountain area, which covers 3,100 acres (hatfield open space plan Pg. 20-21.) The mountain is covered by a hardwood forest with some conifers. Many impressive views can be had from on top the steep slopes of Horse Mountain. The other mountain in Hatfield is Chestnut mountain which is approximately 740 feet above sea level (Hatfield Open space plan pg 20-21). Chestnut mt. is located in the Northampton Mountain Street Reservoir. There is lots of hiking, snowmobiling, hunting and also important wildlife habitats here. The "Rocks" is a ridgeline that runs north to south that is comprised of much exposed rock which forms the steep eastern boundary of the western part of Hatfield. (Information on natural features provided by the Hatfield open space and recreation plan)

Summary:

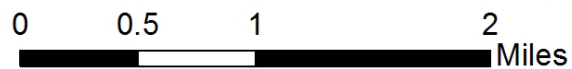
Over all, Hatfield has many wonderful natural features, but it is important that in our assessment we take into account areas of land that need protection. The most predominant land uses in Hatfield are agricultural lands and forested lands. For as much forested and grassland/agricultural land that Hatfield has, there are patches that impede wildlife movement across the town. It is necessary that these breaks in wildlife movement become protected from development so as to allow the connection of habitat corridors in Hatfield. Better connections create better wildlife movement through Hatfield. Also, more protected land in Hatfield will help to provide more outdoor access and recreation in Hatfield for the residents and visitors. Protecting important corridors, such as river corridors and forest patches, will help provide Hatfield residents with a better quality of open space and recreation and natural features, as well as provide adequate corridors for wildlife movement.



Legend

Topography

- Contours
- wetdep_connp1
- Roads



Note: Boundaries are approximate

Open Space and Recreation Assessment

Town-Owned Protected Land and Trails

The most significant portion of land owned by the town of Hatfield is in the northwest. The town owns 529 acres in the area, including the town reservoir, two wells, and the surrounding watershed. The area is heavily forested and serves as an important wildlife habitat, but also contains dirt roads and many informal trails that serve a recreational purpose. The land is permanently protected and is part of a Water Supply Protection Zoning District due to the fact that it is a critical recharge area for the town's water supply. The area is also physically well-protected due to its limited access and partial separation from the rest of the town by I-91 and routes 5 and 10.

The town also owns a significant portion of land near the center of town. Located on Billings Way off of Main Street, the Hatfield Elementary School grounds contain two ball fields, two soccer fields, and two playgrounds. The front half of the site is currently unused. The Lions Club Pavilion is located at the back end of the school grounds and hosts barbecues, dance festivals, and celebrations in good weather. A 4.6 acre parcel of unused open land and a town cemetery are located on the other side of Billings Way, immediately adjacent to the elementary school.

Next to Town Hall, at the corner of Main Street and School Street, is the Trustees of Smith Academy Park. It is the former site of Smith Academy and is now designated as a low intensity town park. It contains a few benches and is well maintained, but many town residents feel that it is uninviting and underutilized. The town has expressed a good deal of interest in turning the well-situated park into a town common.

Right across the street from Town Hall, the Old Center School ground is about 6 acres and contains a baseball and softball diamond and a field hockey field. The property is underutilized, but is well connected with the Connecticut River, with the dike running along its east edge.

Located on School Street right around the corner from Town Hall, Smith Academy's grounds contain two baseball diamonds, two softball fields, a soccer field, an outdoor basketball court, and a portion of undeveloped land.

The town also owns a 1.8 acre parcel located on Main Street just north of the town center. This property fronts the Connecticut River, and has great recreational potential for picnicking, water access, and scenic views over the water, but it is currently unused.

The most significant trail in town is along Dike Road, which connects to Main Street along the edge of the Old Center School property. The 2.3 mile dirt road runs along the dike, capturing views of the Connecticut River and some of the most scenic farmland in Hatfield. While it is technically a town road, it is also one of the most heavily used walking trails in town.

State-Owned Protected Land

The State Boat Ramp is located off of Kellogg Hill Road along the edge of the Connecticut River. The Commonwealth of Massachusetts owns about 5.7 acres of this area. It is one of the few access points along this edge of the river, and gets a good amount of users. Parking is available, and the site is large enough to accommodate even more facilities.

Just north of the State Boat Ramp, Bashin Beach is also owned by the Commonwealth of Massachusetts as part of the Connecticut River Greenway. The site offers access to the river for swimming, but it is not maintained, and almost completely undeveloped. The property has great potential as a recreational area, but is not sufficient in its current state. Both Bashin Beach and the State Boat Ramp are permanently protected under a recreation and conservation restriction.

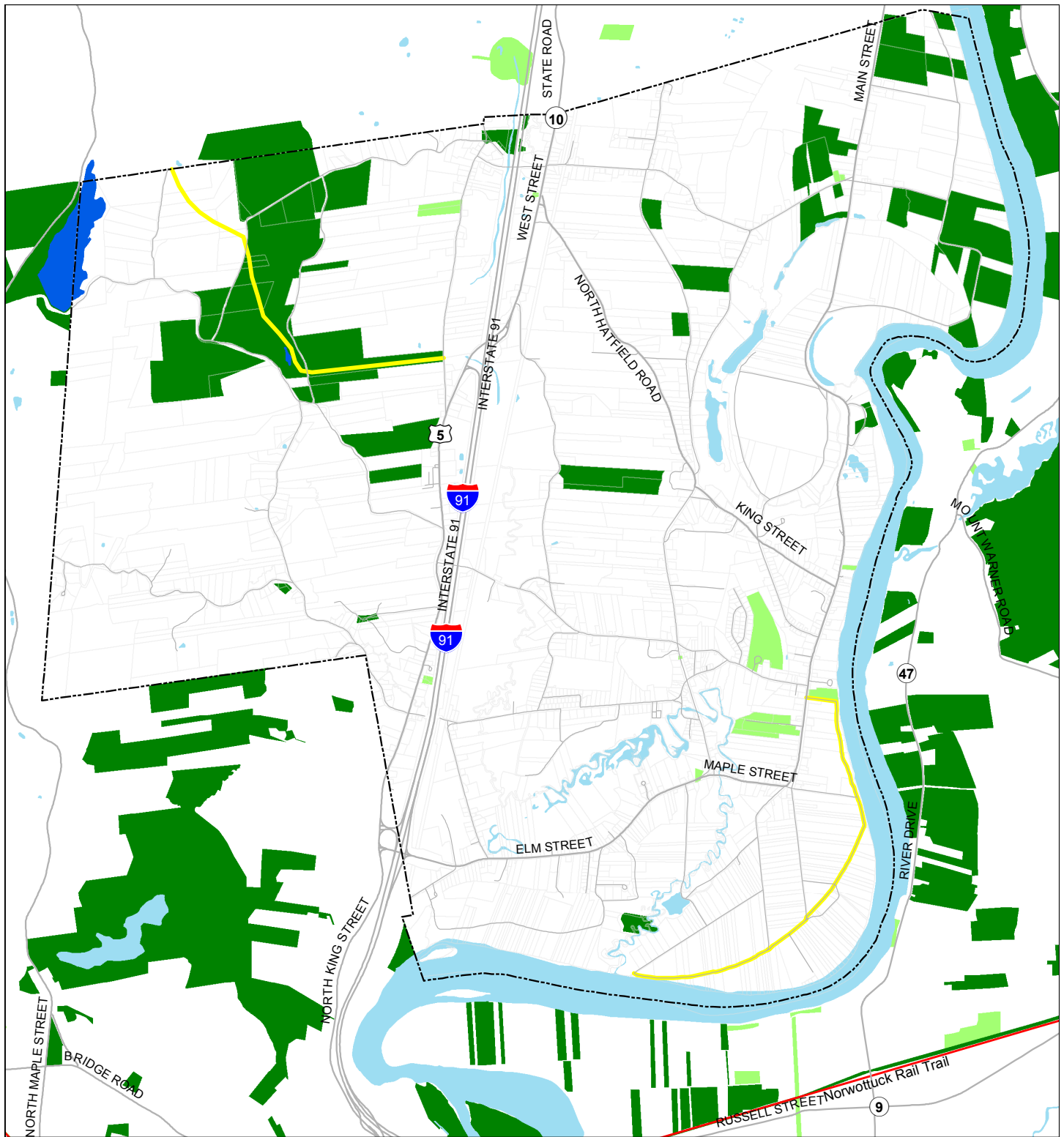
Privately-Owned Protected Land

There are about 2800 acres of privately owned land in Hatfield on which the owners have taken advantage of Chapter 61 programs. The owners have been given tax breaks in exchange for keeping the land for agricultural, managed forest, or recreational purposes. Most of these properties are agricultural land located in northeast Hatfield.

In the northwest portion of town, a privately-owned 71 acre parcel of land that reaches over the border into Whately is permanently protected under the Forest Legacy Program.

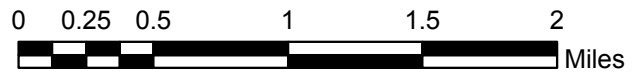
Conclusion

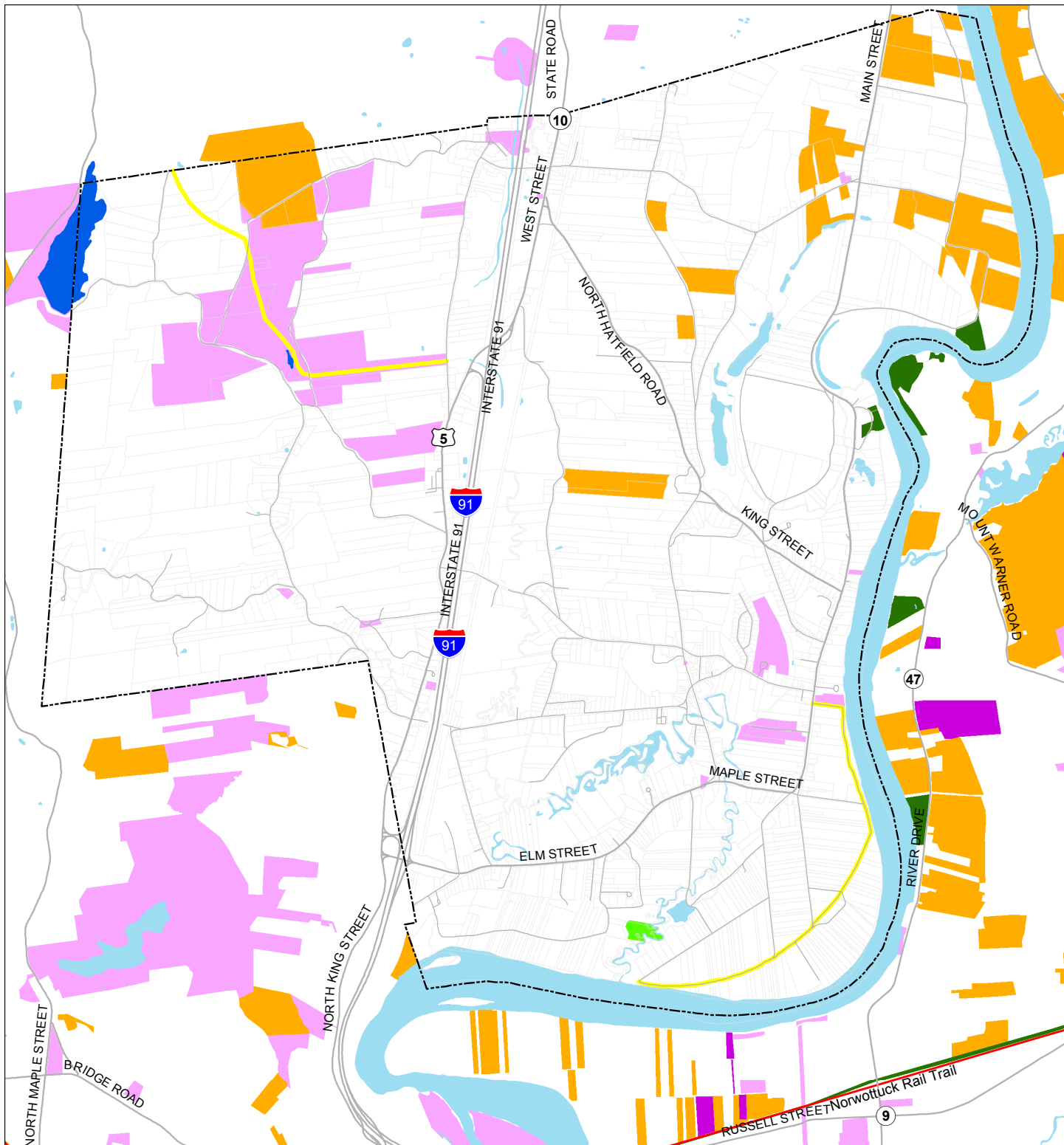
As described in Hatfield's Open Space and Recreation Plan in 2008, Hatfield needs to carefully manage the balance between preservation and new development: "while Hatfield enjoys a wide range of available open spaces, the pressures of change are great. The inexorable spread of residential and industrial development linked with rising land values, threatens to consume many areas of open space and to transform the nature of the Town."



Protected Open Space by Level of Protection

- Hatfield Boundary
- Roads
- Existing Trails
- Rivers and Ponds
- Reservoirs
- Open Space Level of Protection**
- In Perpetuity (permanent)
- Limited



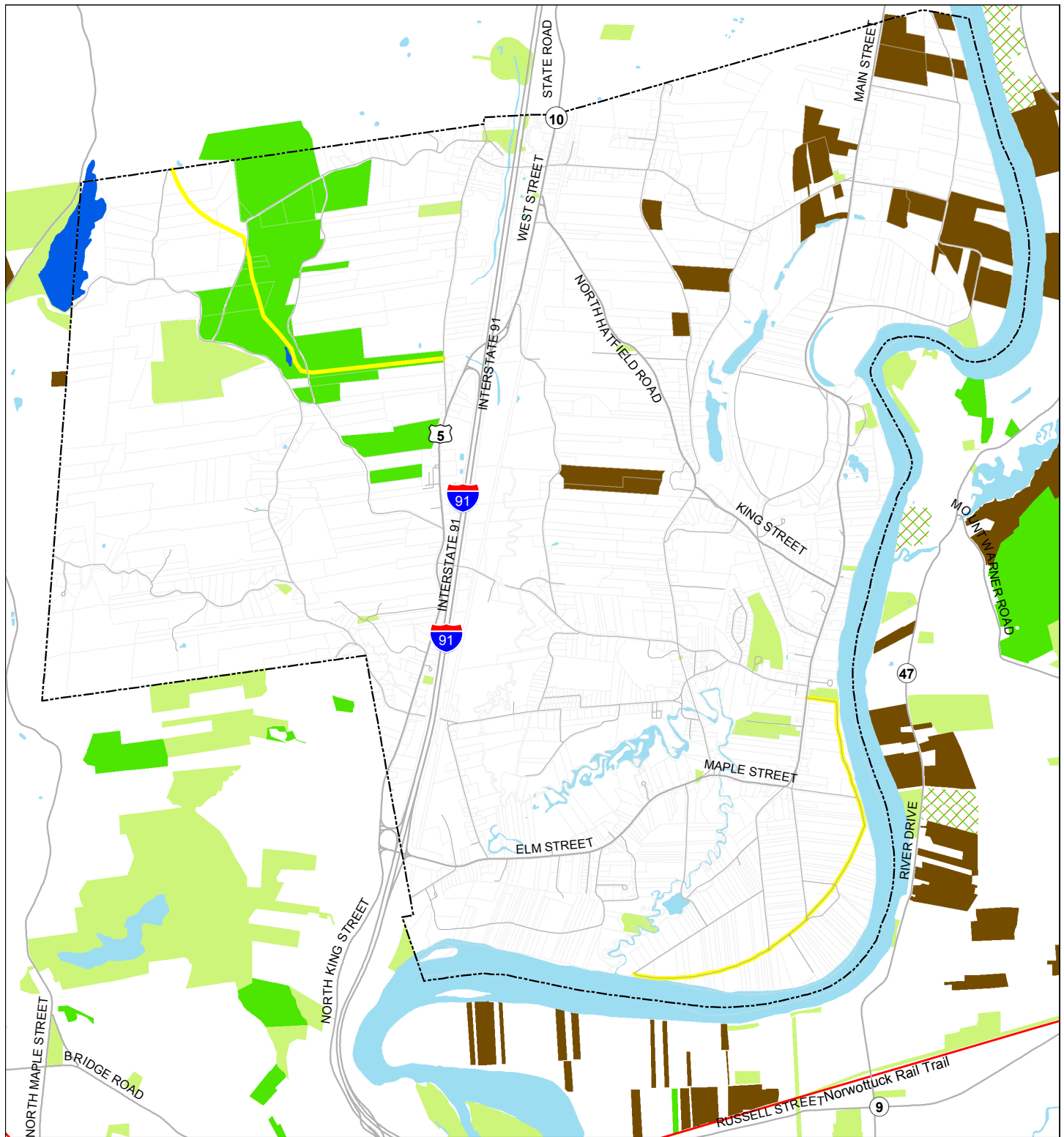


Protected Open Space by Ownership










- Hatfield Boundary
- Roads
- Existing Trails
- Rivers and Ponds
- Reservoirs

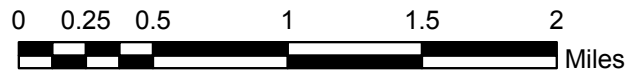
- OpenSpace Ownership**
- State Parks & Recreation
 - Department of Fish & Game
 - Municipal
 - Land Trust
 - Private

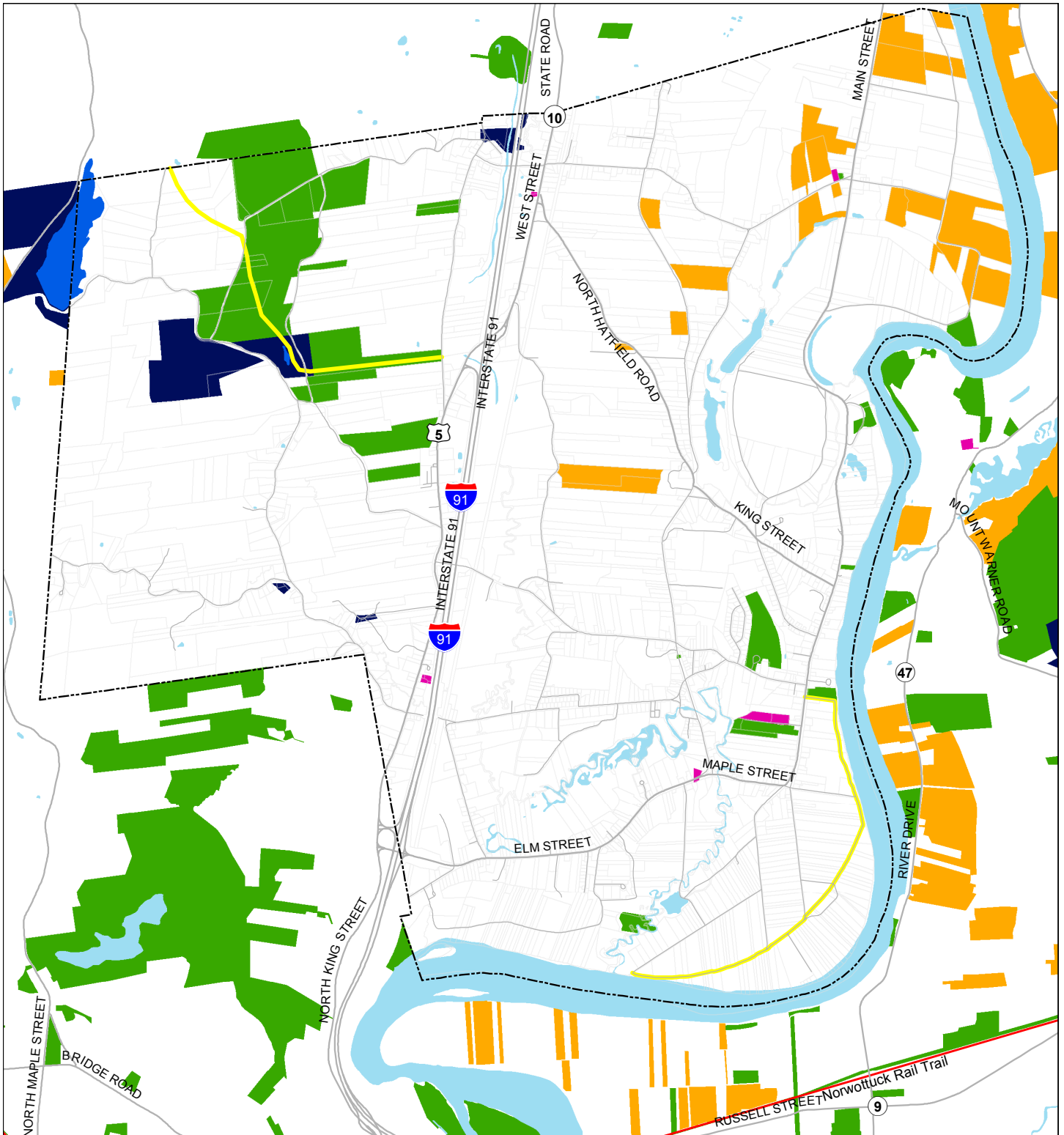
0 0.25 0.5 1 1.5 2 Miles












Protected Open Space by Type of Restriction

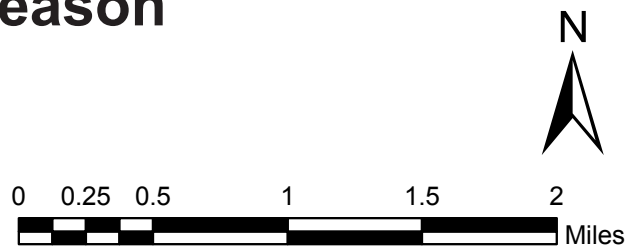
- | | |
|---|---|
|  Hatfield Boundary | OpenSpace Type of Protection |
|  Roads |  Agricultural Preservation Restriction |
|  Existing Trails |  Conservation Restriction |
|  Rivers and Ponds |  CR/APR |
|  Reservoirs |  Other |





Protected Open Space by Reason

- | | |
|---|---|
|  Hatfield Boundary | Open Space Reason for Protection |
|  Roads |  Recreation and Conservation |
|  Existing Trails |  Agriculture |
|  Rivers and Ponds |  Historical/Cultural |
|  Reservoirs |  Water Supply |



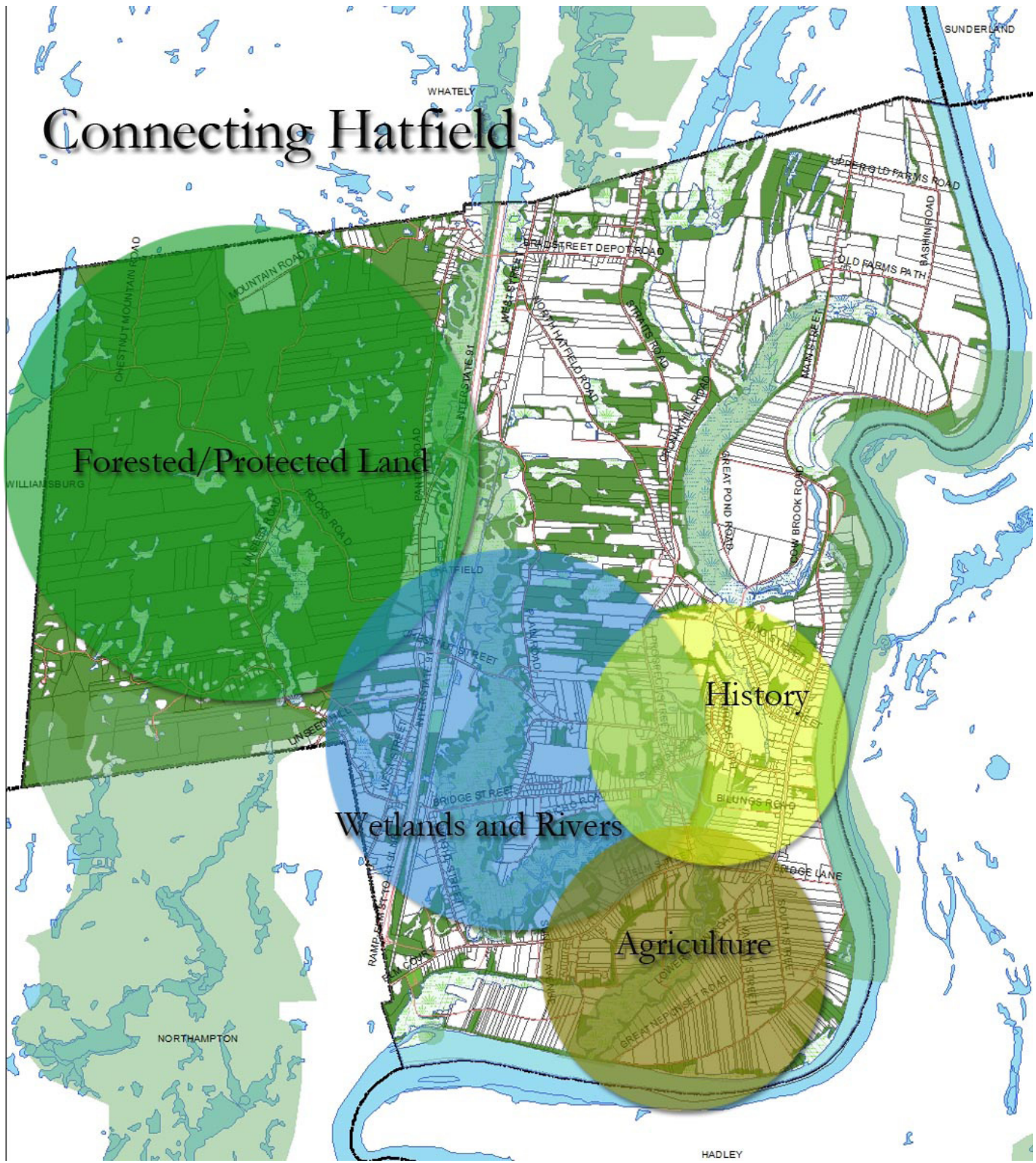
Proposed Greenway Plan



Concept:

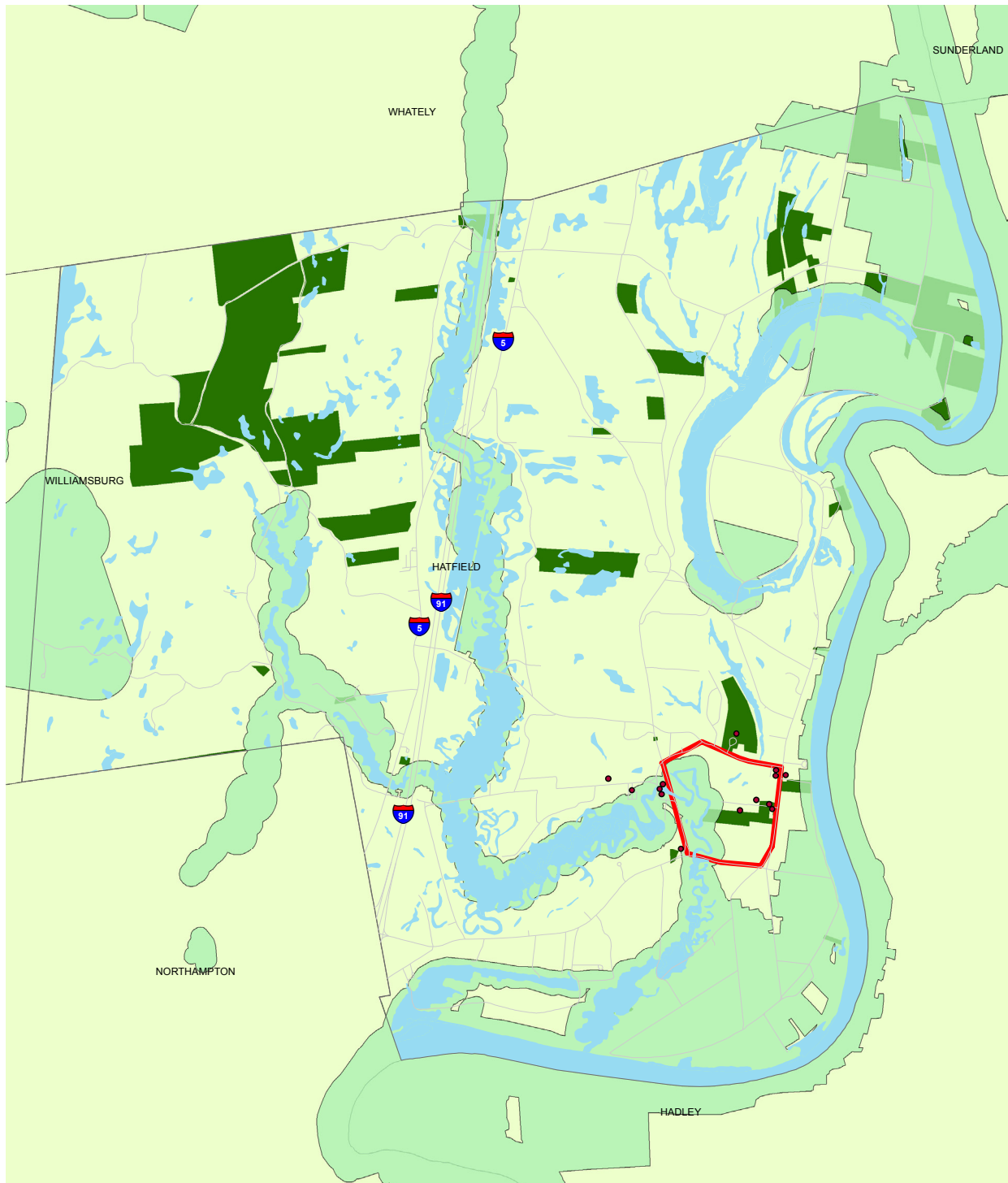
When considering land to conserve and areas to connect for recreational opportunities and wildlife movement, Hatfield can be broken down into four major attributes: history, agriculture, wetland, and forest. In the hilly western portion of town there is existing conservation land. There are many more acres of forested land that can be preserved for both wildlife habitat and recreation throughout the town of Hatfield. Between the Mill and Connecticut Rivers and the Great Pond area, Hatfield has an extensive amount of rivers and wetlands. In addition to being sensitive ecological areas, the floodplains greatly influence the development potential of much of the town. Despite encroaching developments, Hatfield has a large amount of agricultural land. While the crops, farmers and harvesting techniques have all changed over the years, the fertile land has remained. The agricultural industry has been a crucial part of Hatfield's economy and history, and is also a valued part of Hatfield's culture. More profitable development options will continually tempt landowners as agriculture becomes a less desirable and less profitable profession. This is why it is important to preserve some of the larger agricultural fields in Hatfield. Finally, Hatfield is full of historic and cultural attractions. While they are spread out all over town, the Town Center holds a high concentration of these built sites. From historic cemeteries and architecture to the Farm Museum, Hatfield's extensive history is waiting to be discovered by visitors and residents alike.

After identifying these significant elements and areas in Hatfield, connections become apparent. The intersections between the historic, agricultural, wetland and forested areas become critical connection points. These connections will later be detailed later in the report and show the recreational, practical and ecological benefits. By identifying these areas and elements of importance, the physical and conceptual connections become more apparent. The conceptual plan was used to develop the following Proposed Greenway Plan and was continually referenced throughout the planning process to ensure that each area and aspect of Hatfield was considered.



Existing Open Space:

Hatfield has a wide array of land uses and natural habitats. From the banks of the Connecticut and Mill Rivers, to the forests in West Hatfield to the extensive farmland, there are many types of land that would be suitable for permanent protection. Currently, there are approximately 3,200 acres of protected land in Hatfield. This includes farmland, cemeteries, civic areas such as Hatfield Elementary and Smith Academy, forested land and wetlands. The modes of protection vary between properties, with some land owners selling development rights to the state for tax breaks while others are privately conserved. In addition to the protected land, there is a large portion of Hatfield that is already unbuildable due to topography and wetland restrictions. Despite the existing conservation efforts, there is clearly more that can be done. Permanent protection can be added to the wetlands to preserve the critical wildlife habitats that they house. Wildlife movement can be ensured and encouraged through the protection of the primary habitat in Hatfield. The existing open space conservation effort in Hatfield will provide guidance for proposed protected land to preserve the habitats, farmland and character of Hatfield.



Protected Land and Sensitive Habitats

Legend

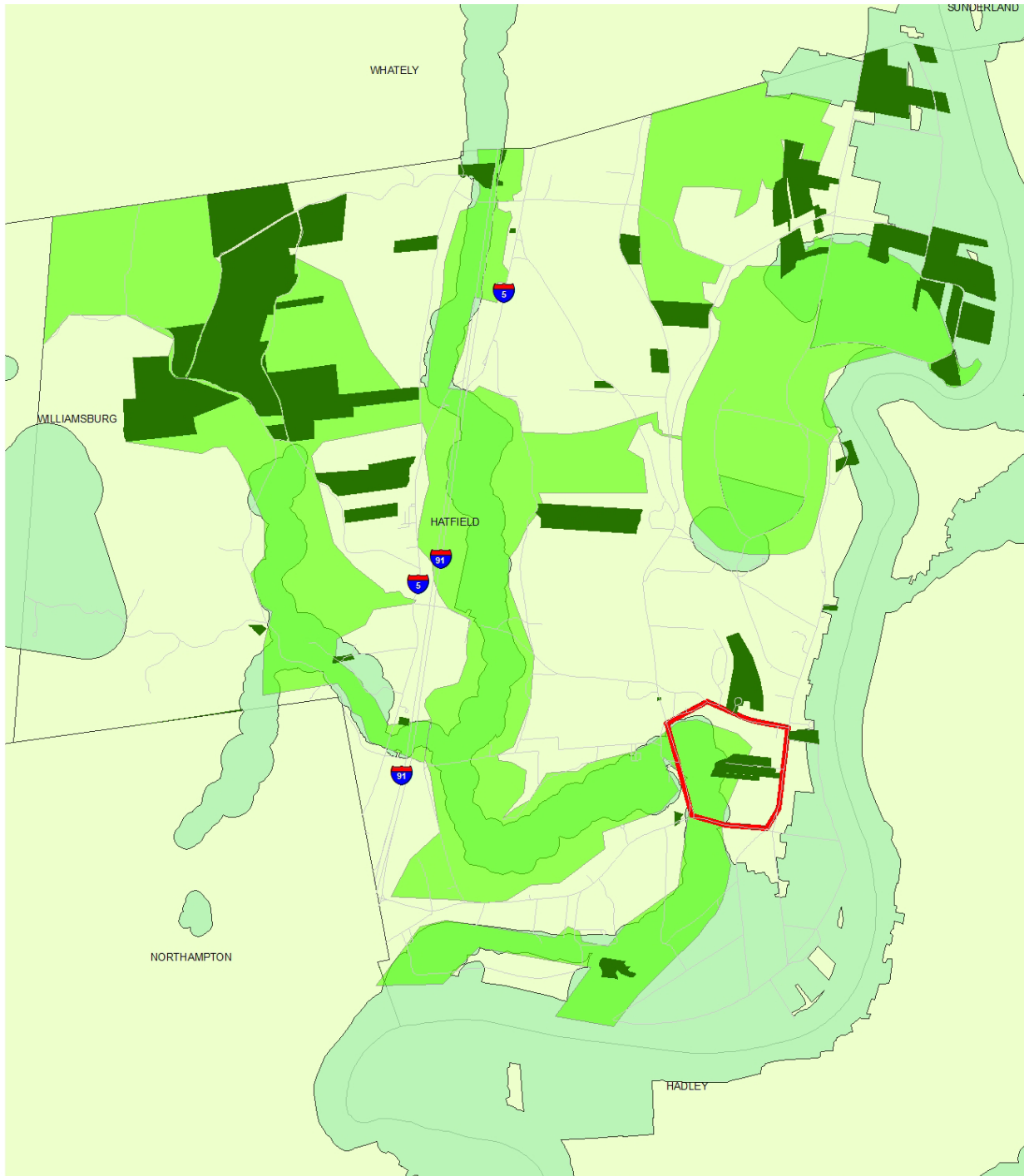
- Roads
- Existing Protected Open Space
- Primary Habitat
- Town Center

Note: Boundaries are approximate



Proposed Protected Land:

After looking into the assessment of the natural features, the history and the existing open and protected space, the proposed land overlay was derived from our synthesis of information. There is a large quantity of land in Hatfield that is already protected from development such as much of the agricultural lands because it resides in the floodplains. What our team wanted to show as being protected are the areas that should be saved from development and areas of wetlands; that while they have some protection because of wetlands laws on development, there are permits that can be obtained to build on wetlands. Bridging the gap of route 91 was important to our team in order to provide adequate lateral movement across the town for wildlife. For that reason an extension of the greenway juts out underneath route 91 where there is an underpass proposed for wildlife. Increasing the patch sizes of the protected land was also a goal of the proposed greenway. The greenway makes much larger patches that can accommodate larger variety of wildlife. Furthermore, it was important to protect land that can be used by the people, which means some agricultural land for economy but also recreational lands and places of important significance to the town's history, natural features, and open space. The proposed greenway plan would add 2500 acres of protected land to Hatfield's currently protected 3200 acres.



Legend

- Roads
- Town Center
- Proposed Protected Open Space
- Existing Protected Open Space
- Primary Habitat

Proposed Protected Land

Note: Boundaries are approximate



Composite Greenway Plan:

After studying the connections to be made in open space and land conservation, the greenway started to take shape. In addition to the ecological benefits of creating an open space network, recreational opportunities are created along these corridors as well. This map shows the composite greenway plan, including the existing and proposed open space and trails. In addition to placing trails where possible and necessary, the trail network connects areas and points of interest. The proposed trails are created in a multitude of ways, including following existing sidewalks, on new proposed sidewalks, off road trails, boardwalks and even on the Mill River on the proposed blue way. By creating connections between different parts of town, residents and visitors can use the trails for recreation or as practical ways to travel in town. Formalized trails and routes will allow residents and visitors to explore and discover Hatfield in ways that they currently cannot. Despite some trails following existing sidewalks, increased signage and the use of the Hatfield Greenway logo will direct users to their destination or help them discover a new one. In addition to providing information along the Greenway, having readily available maps will promote the use and discovery of Hatfield. Along with traditional paper maps, technology can be used as well to increase the effectiveness of the greenway. Smartphone applications can be developed that allow users to have “guided” interactive tours, with historic photos, information, and facts given at various points along the greenway. The composite greenway is a culmination of open space protection and networking efforts that promote recreation in harmony with the surrounding environment. The connections that are developed between different sites and areas of Hatfield will promote increased wildlife movement, create new recreational opportunities and help maintain the character and future of Hatfield.



Hatfield Composite Greenway

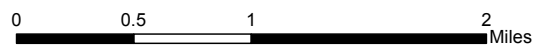
Legend

- ★ Trail Access
- Existing Trails
- - - Proposed Boardwalks
- - - Proposed Trails
- Roads

Hatfield Land Use

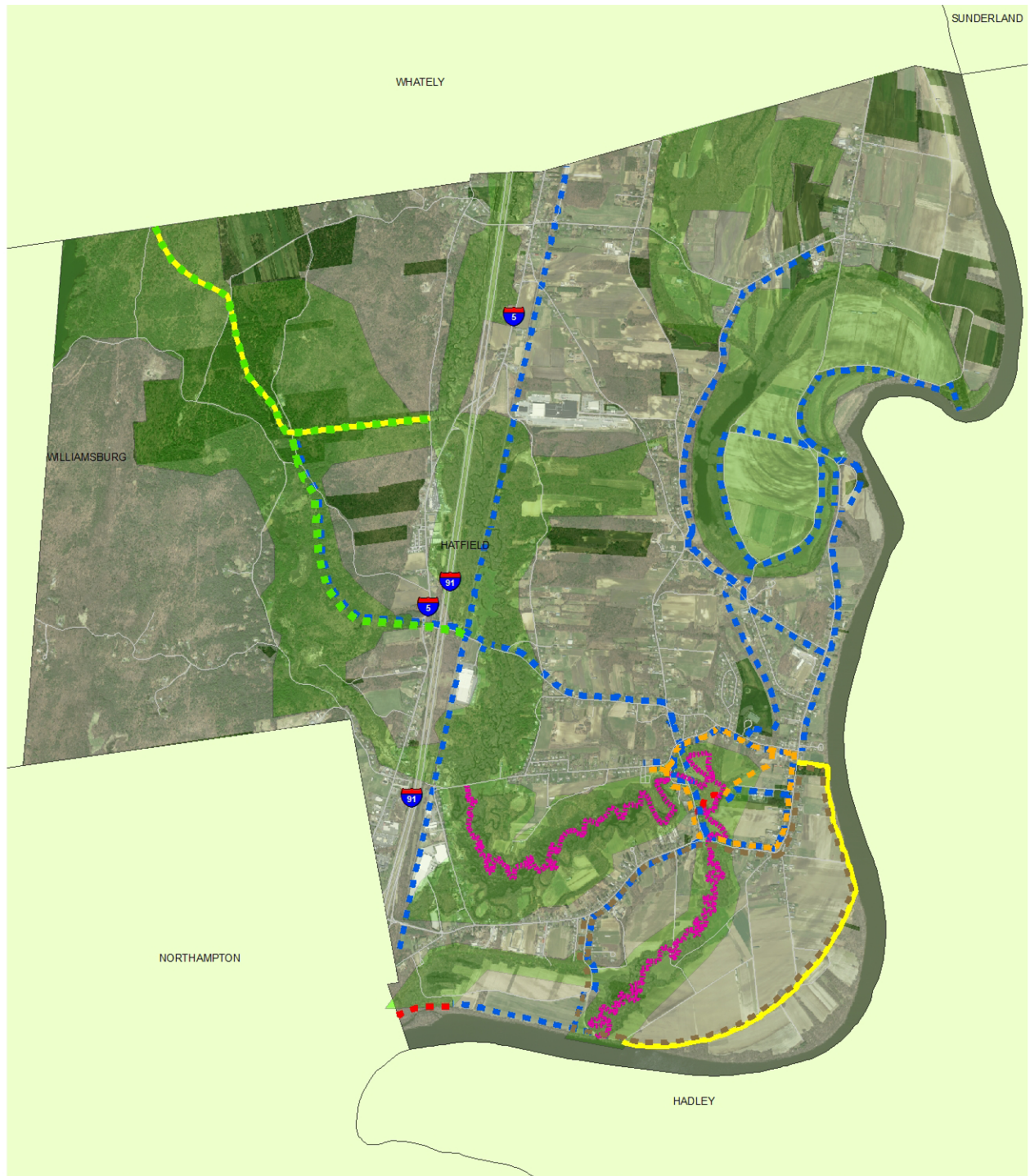
- Water
- Hatfield Open Space
- Proposed Protected Open Space

Note: Boundaries are approximate



Discovery Loops

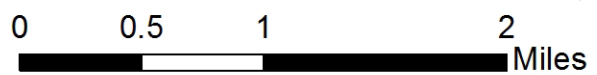
After using the conceptual plan to develop the greenway plan, a series of discovery loops and trails were proposed. These discovery trails were established to highlight the major elements in Hatfield that were outlined in the concept plan (history, agriculture, wetland, and forest). Most of the loops overlap one another, emphasizing the multi-use experience and making Hatfield more accessible for pedestrians. The remaining portions of the greenway system connect other areas of Hatfield to the greenway network. Creating these predefined routes, residents and visitors alike can quickly plan a trip that meets their recreational needs and desires, and allows them to discover the elements of Hatfield.



Legend

Greenway Composite

- Existing Trails
- Proposed Trails
- Historic Downtown Discovery
- Agricultural Encounter
- Forest Adventure
- Wetland Experience Trail
- Proposed Boardwalks
- Roads
- Proposed Protected Open Space
- Existing Protected Open Space



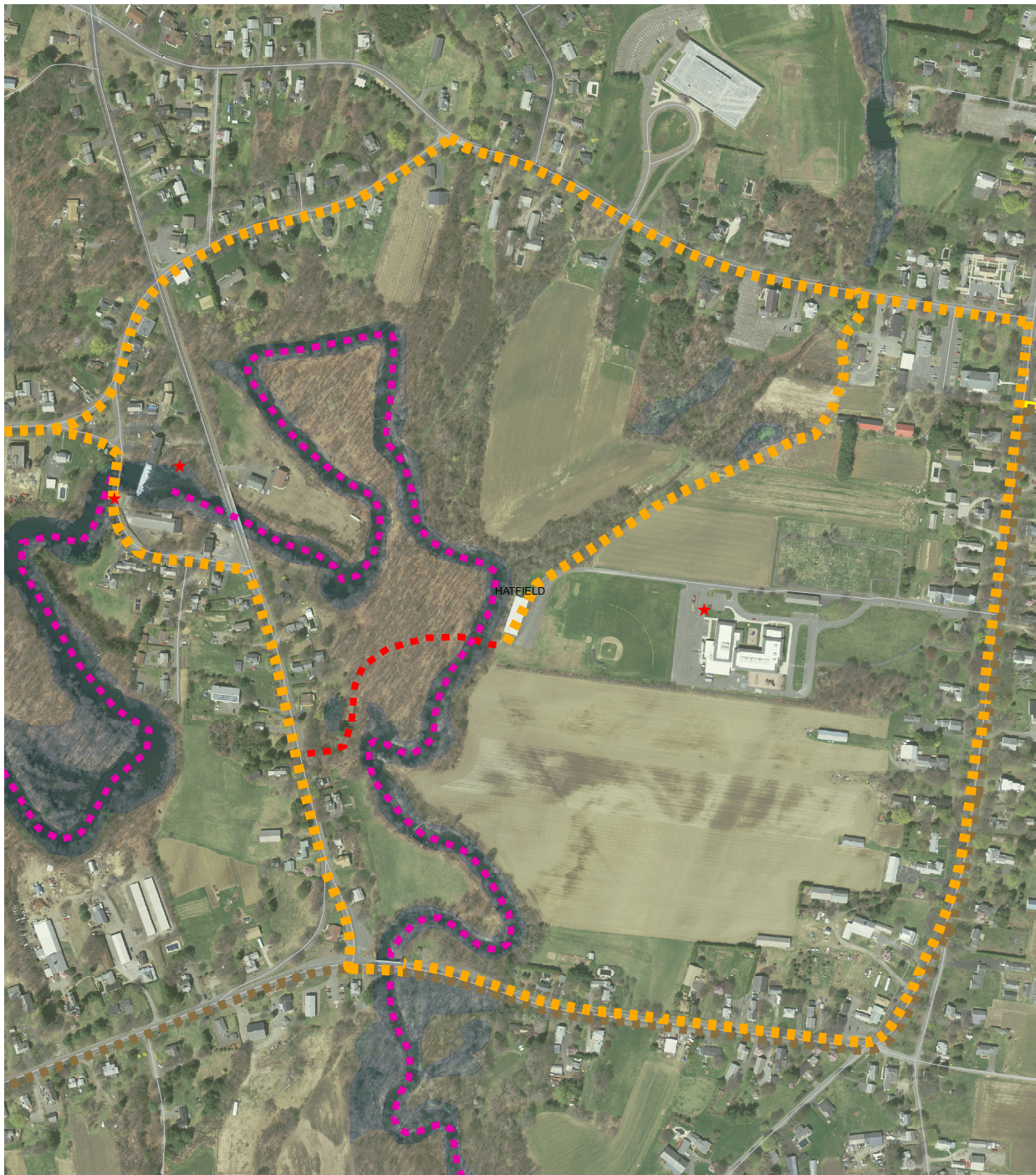
Note: Boundaries are approximate

Historic Loop:

Hatfield's Town Center, comprised of School St., Prospect St., Maple St. and Main St., is already a popular walking destination for many residents. With sidewalks already in place, the only infrastructure improvements needed would be the suggestion for a marked bike lane along those streets. Despite already being a popular walking loop, there are many historic sites along the walk that residents have shown interest in highlighting with signage. There are the obvious sites such as the Town Hall, Public Library, Hatfield Elementary School, and the Smith Academy Memorial Park, but there are others that are missed. Most importantly, there is the historic mill area. As it stands, there is not much to see and it is difficult to access. However, with the recommendations for the area, that will be discussed later, it becomes an easily accessible and highly valuable area for pedestrians to explore. The history that can be displayed there can teach residents and visitors a lot about the history of the site through the years.

On Billings Way, along with the Elementary School and Library, there is an active cemetery and the Hatfield Farm Museum. Both of these sites are fantastic opportunities for residents to learn about the history of the town and because of their close proximity to the school students can easily access them. There are two additional cemeteries along the trail that can be visited and integrated into the school's curriculum as well.

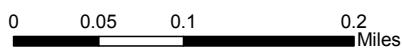
Additional signage along the trail system will help highlight important features in the area. For example, on Main Street there is a wide array of architectural styles due to changing social and political changes as the housing industry evolved. This history can be explained, along with showing examples of each type of architecture for visitors to look for. This information can be displayed on signs with a style that is repeated throughout the greenway, in readily available brochures or through more technological options such as a smart phone "app".



Legend

Historic Discovery

- ★ Trail Access
 - Existing Trails
 - Historic Downtown Discovery
 - Agricultural Encounter
 - Wetland Experience Trail
- Proposed Boardwalks
 - Roads
 - Water



Note: Boundaries are approximate

Agriculture Encounter:

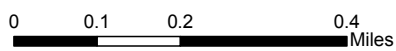
The Agriculture Loop is an important part of the Greenway plan because it passes through some of Hatfield's active farmland. Being such an integral part of Hatfield's history, this rich farmland is important to protect. The existing Dike Trail is an important part the Agriculture Loop. Running along the Connecticut River and through the active farmland, the trail gives wide reaching views over both landscapes. The trail gives its users the opportunity to be close to a working farm which gives them a chance to see the crops at different stages of growth. They might otherwise miss this if they were driving by. Many residents have expressed a desire for the current path material to remain in its natural compact dirt state. Therefore, improvements along the Dike Trail would be minimal and include the addition of signage about each farm, the history and the crops grown.



Legend

Agricultural Encounter Loop

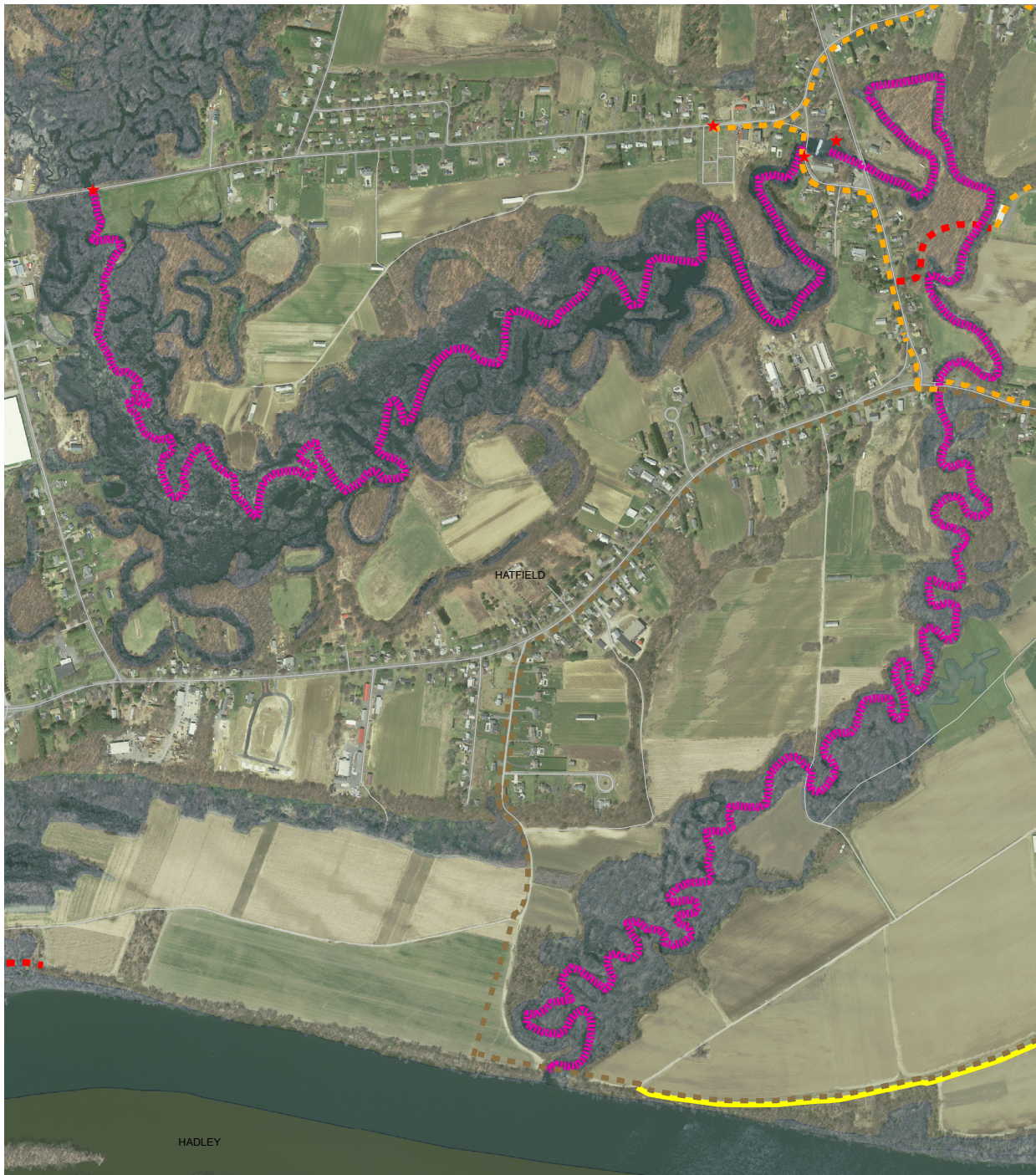
- ★ Trail Access
 - Existing Trails
 - Historic Downtown Discovery
 - Agricultural Encounter
 - Wetland Experience Trail
- Proposed Boardwalks
 - Roads
 - Water



Note: Boundaries are approximate

Mill River Blue Way:

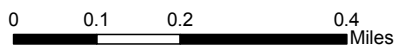
With both the Connecticut and Mill Rivers running within the town's boundaries, Hatfield has a tremendous amount of wetland and river habitat. Both rivers have played significant roles in the town's history and provide fantastic habitats for wildlife and also provide alternative recreational opportunities. The wetland discovery trail is actually a "Blue Way" as it takes place on the Mill River, allowing for people to experience the water in canoes or kayaks. There are several miles of river to be discovered, both up and down stream of the Mill River Dam. Starting at Bridge Street, users can travel downstream through the winding cuts of the river and see the surrounding floodplain, birds, and other natural species as they pass by. As users approach Prospect Street, they will either have to end their trip there or make the quick transition out of the water and around the dam to continue their journey toward the Connecticut River. It is there at the dam where people can stop for lunch at the proposed picnic area. The existing Mill River Storage building is to be renovated as a place to house educational classrooms combined with an outdoor pavilion for further enjoyment of the river. The renovations would also include areas to store rental equipment such as canoes, kayaks, paddles and life jackets. This blue way trail not only allows for recreational opportunities but significant educational opportunities as well. Establishing the trail with known entry and exit points would bring more attention to the river. Educational signs can be posted at these sites and along the way to teach users about the environmental importance of the river and about the historic impacts it has made as well. The close proximity to the Hatfield Elementary School could also allow for exciting field trip opportunities to be integrated into the curriculum. By promoting the use of the Mill River as a blue way, recreational and educational opportunities are created while the important wetland habitat is preserved. The opportunities are all already there; implementing this blue way simply highlights them and promotes the use of the Mill River as it becomes part of Hatfield's comprehensive greenway plan.



Legend

Wetland Experience Trail

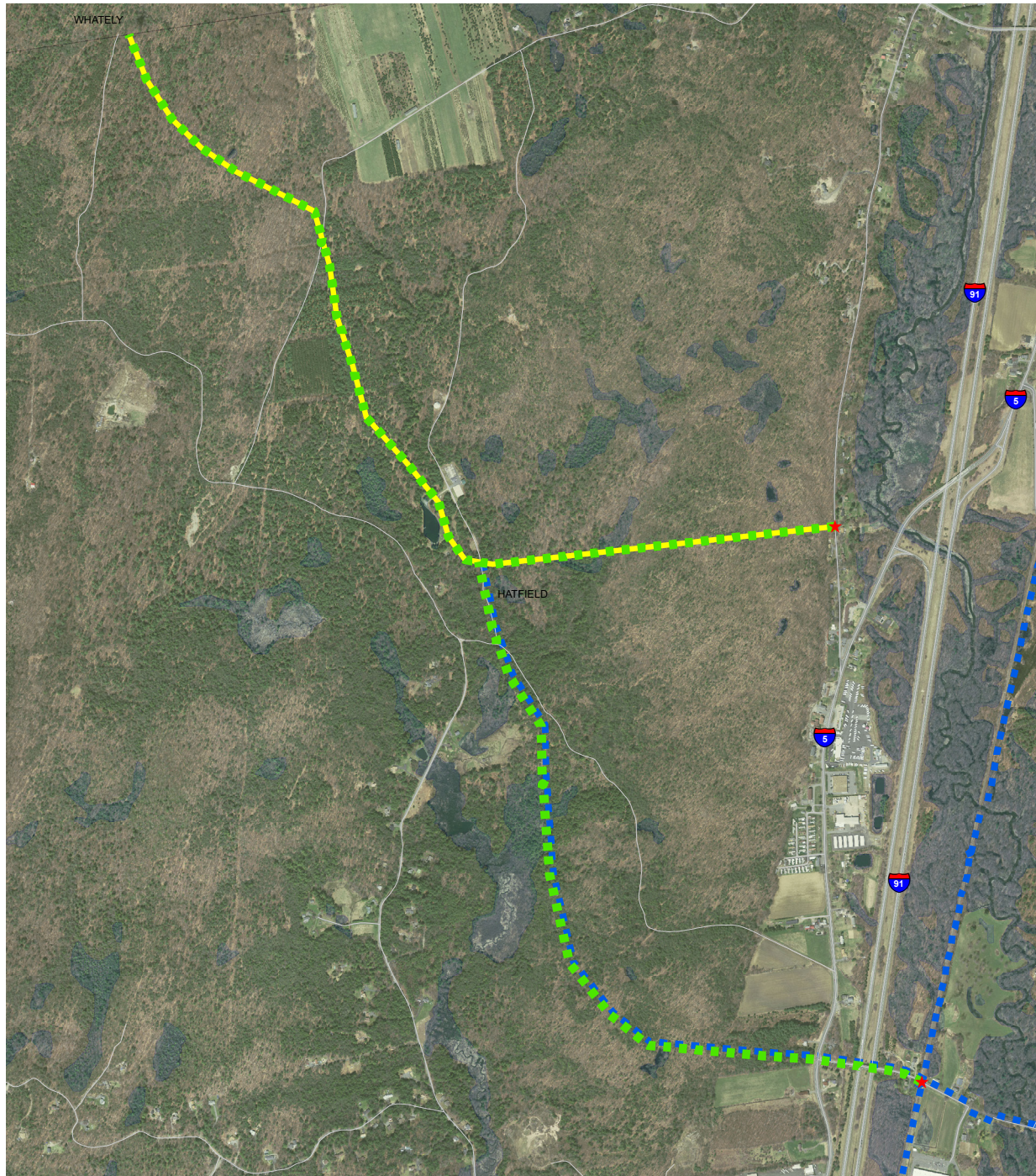
- ★ Trail Access
 - Existing Trails
 - - - Historic Downtown Discovery
 - - - Agricultural Encounter
 - ||||| Wetland Experience Trail
- Proposed Boardwalks
 - Roads
 - Water



Note: Boundaries are approximate

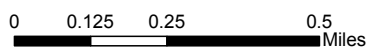
Forest Loop:

West Hatfield is largely undeveloped due to the hilly terrain. Instead, there is a large amount of forested land, some of which is already protected. This portion of the Greenway will serve as a pedestrian connection between West Hatfield and the Town Center and will provide different scenery and recreational opportunities from other portions of the greenway. Protecting additional land in West Hatfield will preserve what developable land remains and help promote wildlife movement in West Hatfield and to the rest of town. In addition to adding to the existing protected land, the existing informal trails will be mapped out and be connected to proposed trails. The most significant connection will be farther south where the trail will meet up with Chestnut Street just before I-91. From there, users can travel between West Hatfield and the Town Center easily. By expanding and promoting the trail system in West Hatfield, the Greenway allows for connections to be made in an environment different from the rest of Hatfield as well as making crucial connections that are vital for wildlife movement, expanding the quality of their current habitat.



Legend

- ★ Trail Access
- ■ ■ ■ Proposed Trails
- Existing Trails
- ■ ■ ■ Forest Adventure
- Roads
- Water



Note: Boundaries are approximate

Forest Adventure Trail

Town Center Focus Areas



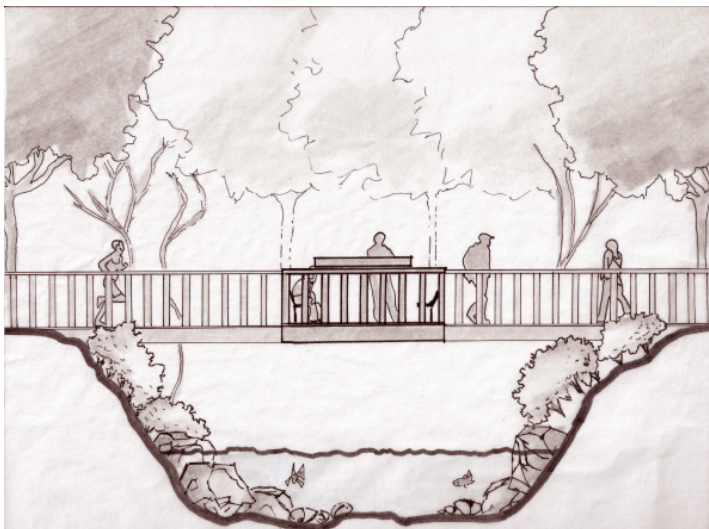
Education Connection:

The Hatfield Elementary School is centrally located within the historic Town Center. By creating connections between the school and the surrounding areas, students have safer ways to walk to school and the school can use the trails to expand educational opportunities. In the immediate vicinity of the school, the Mill River provides tremendous possibilities for learning about wetland habitats. The newly acquired parcel of land adjacent to the school and cemetery has potential for educational and community uses. Finally, the existing Farm Museum in the old tobacco barn has an immense amount of history within and would benefit greatly from increased exposure and signage. The students would be able to take what they learn in the museum and put into practice in the proposed town center garden.

Currently, there is little to no access to the Mill River from the elementary school. The river bank is extremely steep, the vegetation is overgrown, and there is no safe way to approach the river let alone cross it. Thinning some of the vegetation behind the Lion’s Club Pavillion would allow access to a new bridge that will provide access to the other side of the river (Sec. 1). In addition to spanning the river, there will be a lookout area added to the bridge as well (Sec 2). This will allow people to stop as they cross without impeding the movement of others. Built from timber



Lion’s Club Pavillion



Section 1- Mill River Pedestrian Bridge



Section 2- Mill River Pedestrian Bridge



to fit the character of the area, the bridge (Per. 2+3) will lead users to the floodplain of the river where simple boardwalks are added in areas along the trail as needed to keep the environment of the floodplain safe, as well as the people using the trail. Finally, to get pedestrians up the final grade change at Prospect Street a ramp system will be installed. This will allow for handicap accessibility through the area and the change in elevation will allow for a different relationship to the tree canopy. At the entrance to the ramp from Prospect Street there will be a small deck overlooking the woodland below (Per. 4). Not only will this serve as a resting area for visitors but it will also increase the visibility of the connection and make the transition from the sidewalk to the trail. In addition to creating off street access to the school from Prospect Street and making it easier to access the river and wetlands, this trail will create a direct connection to the Old Mill Inn area.

The parcel that was recently acquired by Hatfield between the cemetery and elementary school has a wide array of possibilities. In this plan, the area would be utilized in several ways. First, a portion adjacent to the cemetery would be preserved for future expansion of the burial ground. For the time being, that area can be part of the community space where various events and gatherings can be held. The area would work well for a farmer's market, social events hosted by the school, or local fundraising activities. Second, the western most portion of the plot will be used as a community garden (Per. 1). Unlike urban areas, Hatfield's residents have space to maintain gardens of their own at home. Therefore, this community garden will be geared towards the elementary school. Volunteers can come and help tend it, and the school can also integrate lessons on gardening, farming history and



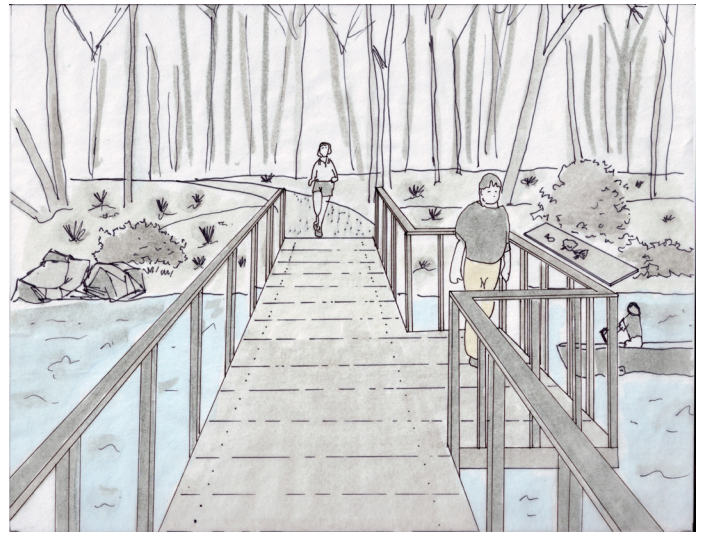
Existing Conditions



Perspective 1- Community Garden



Existing Conditions



Perspective 2- Mill River Pedestrian Bridge



Existing Conditions



Perspective 3- Mill River Pedestrian Bridge



Existing Conditions



Perspective 4- Prospect Street Overlook

the environment into their curriculum using the garden. Several crops could be selected and planted on a large enough scale so that the produce could be used in the school's cafeteria to help promote the use of healthy, local ingredients. The garden will be marked by an entrance way facing the school and will be surrounded by low lying fences that allow for climbing plants to grow on them.

In the winter months, there is a snowmobile trail that crosses the school grounds, passes by the Post Office, and then heads across School Street to a trail on private property. The owner currently allows the public to use this trail with the understanding that the property is to be respected. In addition to using this trail in the winter months, a trail following the same path will be added for use in the summer months. Using a permeable hard pack surface to pave the path will allow pedestrians to safely pass through the area. This trail will also connect to the river boardwalk past the Lion's Club Pavilion. The existing roadway down to the Pavilion will be converted from the existing asphalt paving to a more permeable surface that will discourage vehicular traffic but, still make it possible for event set up and necessary maintenance to take place.



Sign for Trail on Private Property

The Hatfield Farm Museum is located in an old tobacco barn between the cemetery and the Elementary School. It displays many artifacts about Hatfield's agricultural history. The Museum's current alignment is not only awkward but also doesn't allow visitors or people passing by to know what it is. Adding a small number of parking spots dedicated to the museum will help make it easier to access. Increased signage will also not only attract visitors but also make it more identifiable. Creating an outdoor space for the museum as well will allow for larger items to be displayed outside during the summer and create a resting place for visitors.

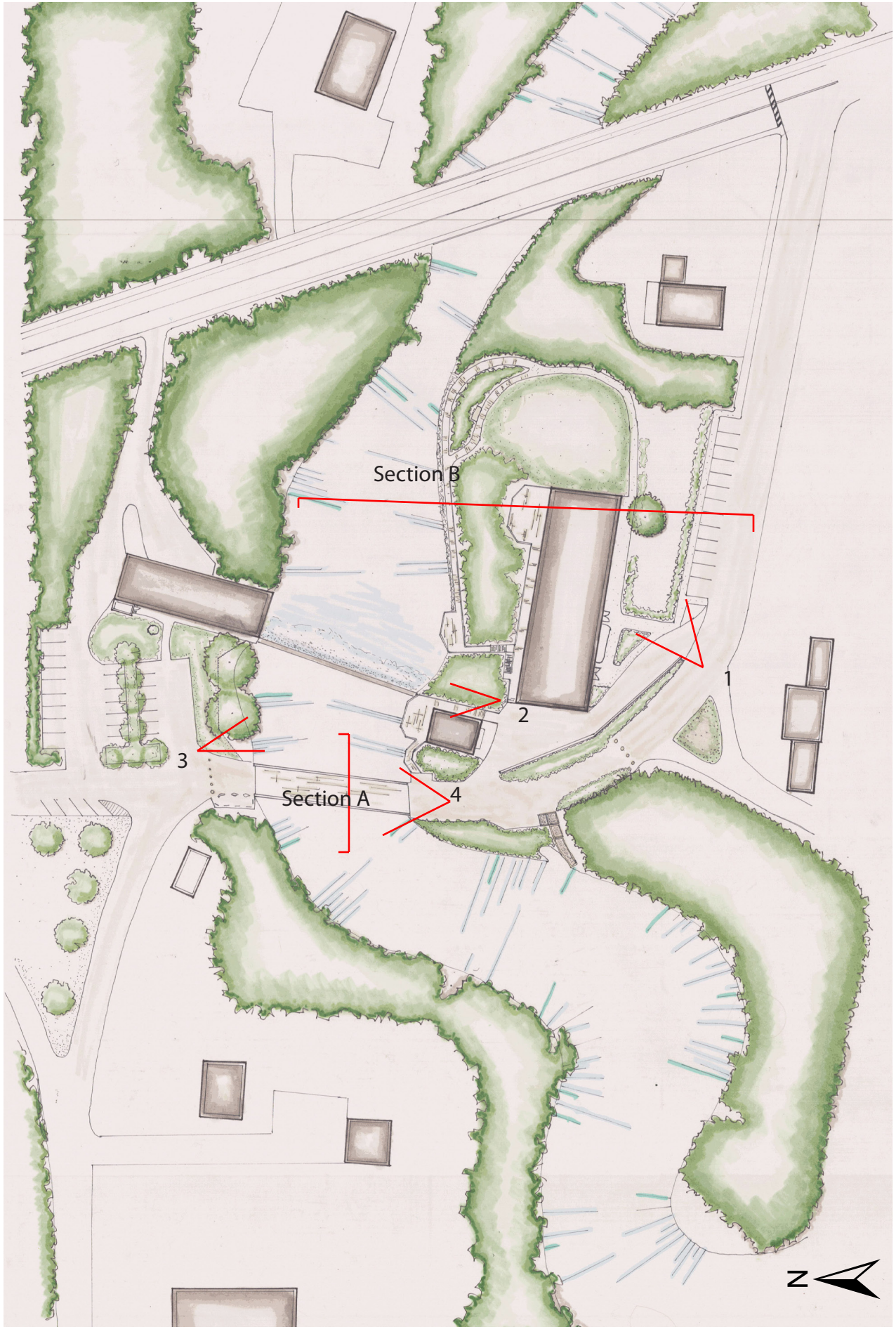
The connections that are made in this area are important on a variety of levels. Being located in the middle of the Historic Loop, there are many important sites to see and it will be a popular area for both residents and visitors. It is also an important civic area with the Elementary School at the center. The physical and educational connections that are made in this area will not only serve greenway users but will also create many educational opportunities for the Elementary School to take advantage of.

Mill River Park:

The Mill River is an important feature of Hatfield, running through a large part of the town. The Mill River blue way will give residents and visitors access to a large amount of native wildlife and habitat in Hatfield. The river will provide just over six miles of boating and wildlife observation. Many opportunities arise from the Mill River blue way, such as the boating and wildlife observations already mentioned but also possible fishing as well as educational benefits. Across from the Old Mill Inn we are proposing an educational center and small recreational park. There are also many wildlife benefits to protecting the Mill River Blueway, for instance protecting the Mill River will provide a corridor for safe wildlife movement. Furthermore, the park will help to re-vegetate the riverside which in turn will help the aquatic life and will help with any flooding that occurs along the river.

The Mill River park plan proposes that the original bridge crossing the Mill River be renovated for pedestrian access to allow residents to walk and bike over the dam and connect to the larger historic encounter trail. Allowing access over the bridge and through prospect court will be a safe alternative to having people walk down the busy Prospect St. and connect to the Education Connection. Bollards are proposed on both sides of the bridge to keep vehicular and pedestrian circulation separate near the boat launch area and educational facility. The parking for the area for people who bring canoes as well as people coming to use the community center is located along Prospect St. This will help to keep people and vehicles separate while having parking close to the boat launch and community center.

The current Mill River Storage building can be renovated to provide indoor and outdoor educational opportunities. Indoor classrooms can provide information on the animals, plants, and other wildlife for residents and town visitors. The outdoor pavilion can provide shelter from precipitation and sunshine, as well as a place to relax and picnic with family and friends similar to the Lion's club pavilion located near the elementary school. The Mill River Park will provide the town with access to the lower part of the historic dam of the Old Mill Inn and provide a space for safe recreation. The existing red building near the top of the dam can be renovated to house some weekend canoe rentals as well as life jackets and oars for the boats. The exposed foundation on the back side of the red hut can be renovated to have an observation deck located on the back connecting the bridge and the red hut. The railings of the deck will be made



to reflect the same geometric shapes found on the old bridge. The rails of the observation decks will also have information of the Old Mill Inn as well as information of the old Shattuck Gun shop to tell the history of the Mill and the surrounding land. The proposed boat launch at the park will give the residents of Hatfield a safe place to enter and exit the river with canoes and explore the existing wildlife along the river.



Picture 1: Before and After of the Educational Pavilion



Section A: looking across the bridge. Bolards stop vehicular access and provide safe pedestrian access

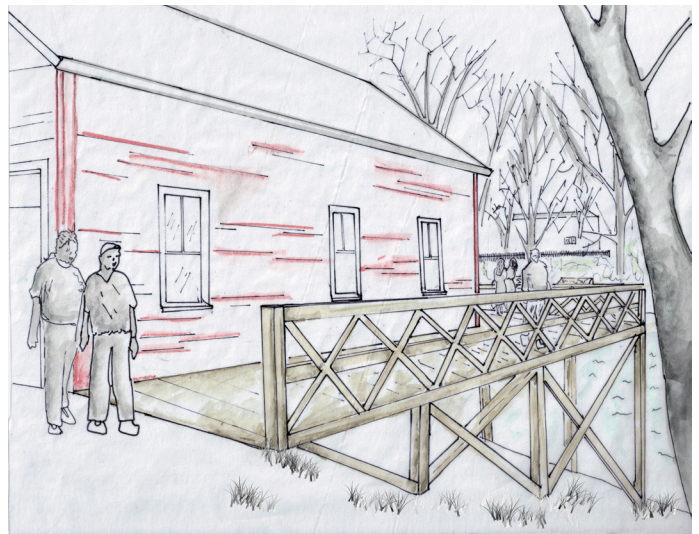
Before



After



Picture 2: Bridge

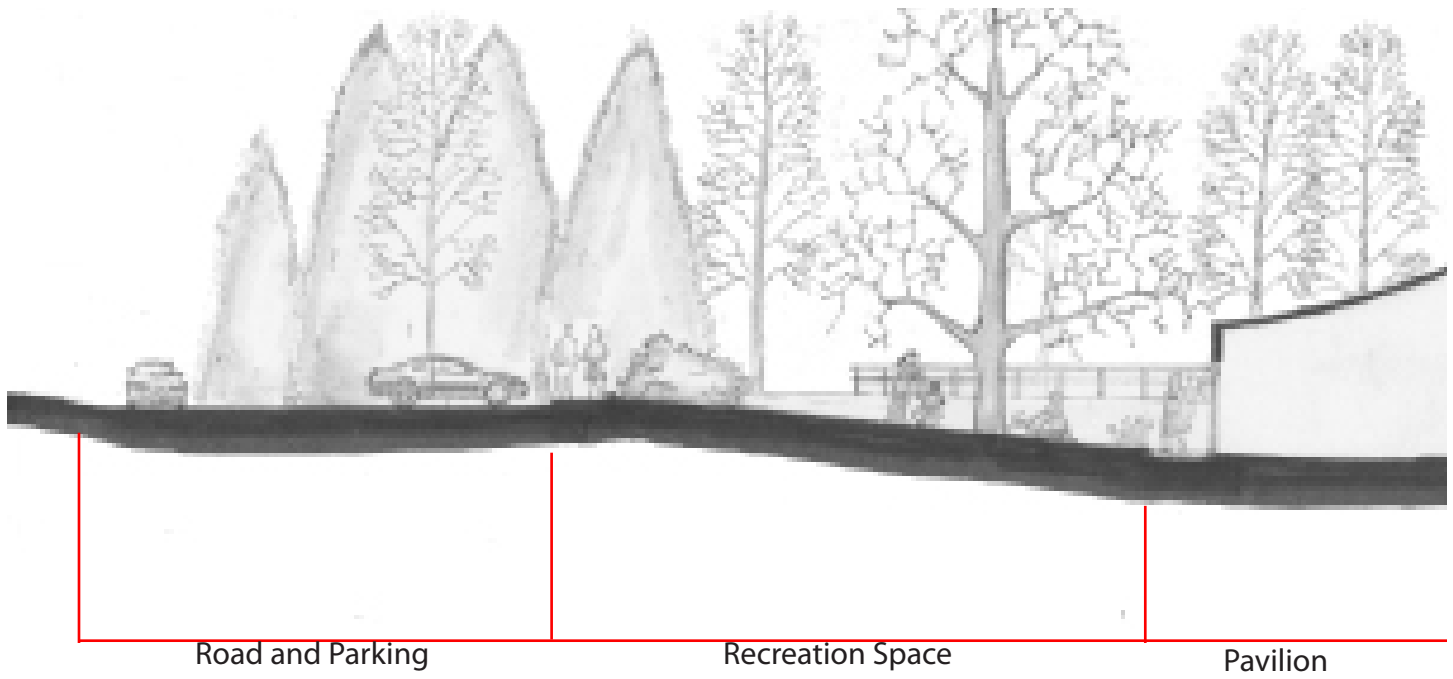


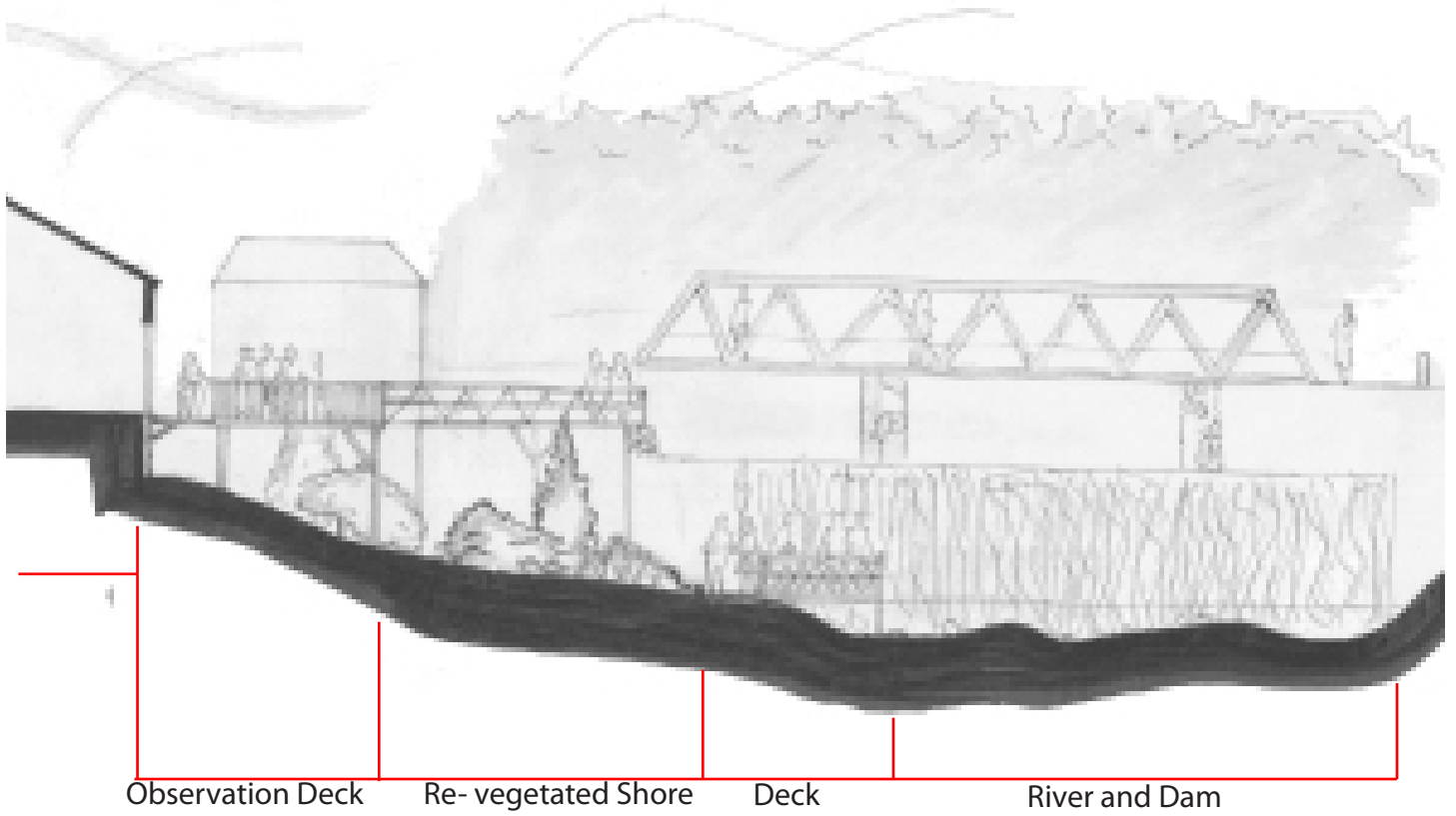
Picture 3: Top of Dam Observation Deck



Picture 4: Looking across the River at the back of the Red Hut

Section B: cutting through the site.





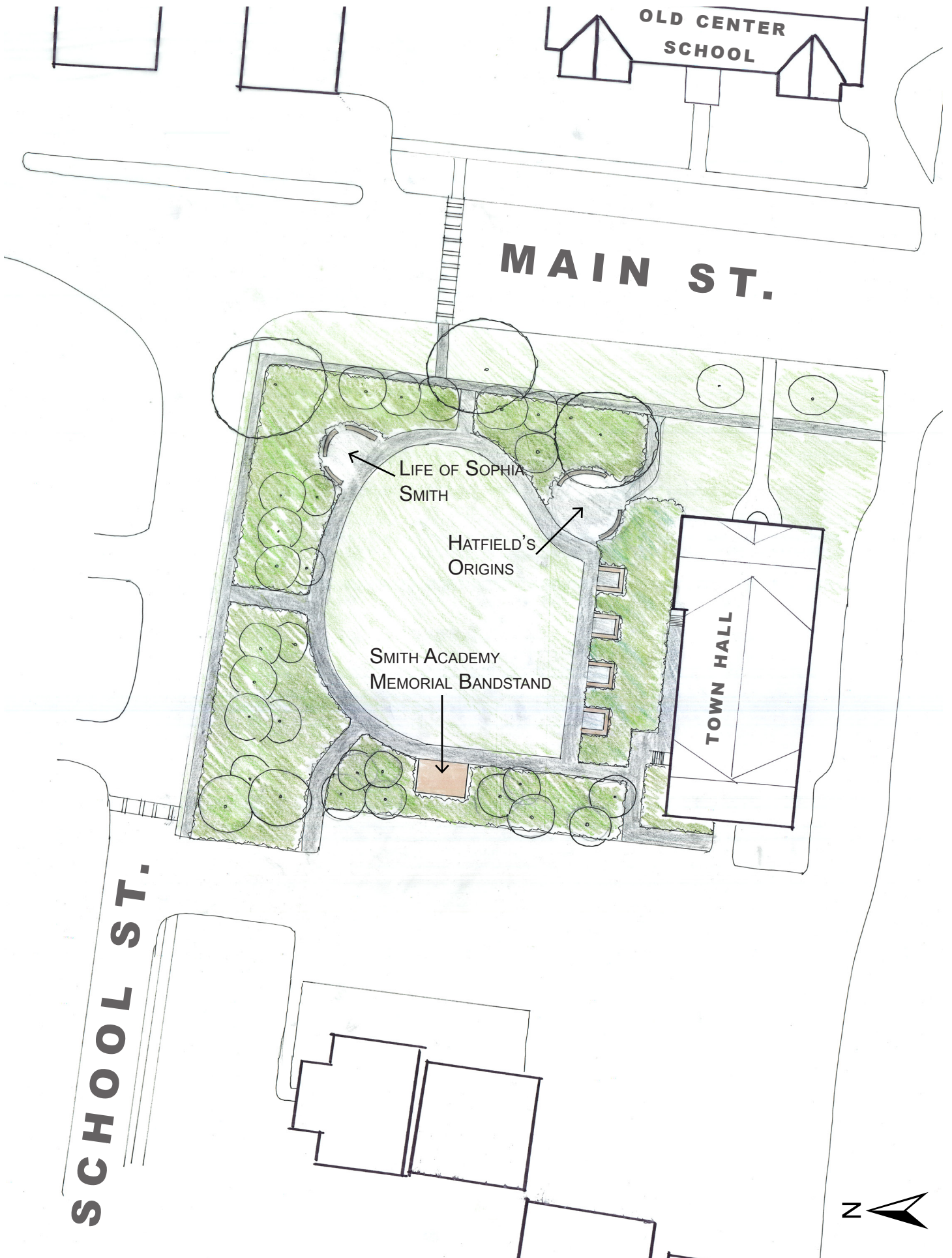
Trustees of Smith Academy Park

The Trustees of Smith Academy Park is the former site of Smith Academy. It is located right next to Town Hall at the corner of Main Street and School Street, and important spot on the proposed greenway plan. Right across Main Street is the Old School Street property and a connection to Dike Road. Heading north up Main Street leads to Bashin Beach and the Connecticut River State Boat Launch. Going west up School Street leads past Smith Academy and the Old Mill Inn.

As expressed in the town's 2008 Open Space and Recreation Report and the 2010 Town Center Revitalization Study, many Hatfield residents have a desire to transform this site into a more inviting and useful space that could function as a town common; something often found throughout many New England towns, but missing in Hatfield. There was also a good deal of interest in installing some type of small gazebo or bandstand.

The proposed design responds to the towns needs by recommending transplanting of shrubs and trees currently filling up the center of the park to the edges; creating a larger open space in the center. A historic walk would also be installed moving around the edges, with an entry space dedicated to celebrating Hatfield's origins. The next space on the walk would celebrate the birth and life of Sophia Smith, who founded Smith Academy. The last focus point on the walk would be the Smith Academy Memorial Bandstand, a structure that celebrates the architecture of the original Smith Academy building.

The new Trustees of Smith Academy Park would provide a town common for Hatfield that would not only be attractive and useful, but would celebrate and honor the rich history of the town and Smith Academy; ensuring that Hatfield remembers an important part of its past as it enters the future.





Proposed design for the Smith Academy Memorial Bandstand. Inspiration was drawn from the arch on the front side of the original Smith Academy building.



Source: History of the Connecticut valley, 1879

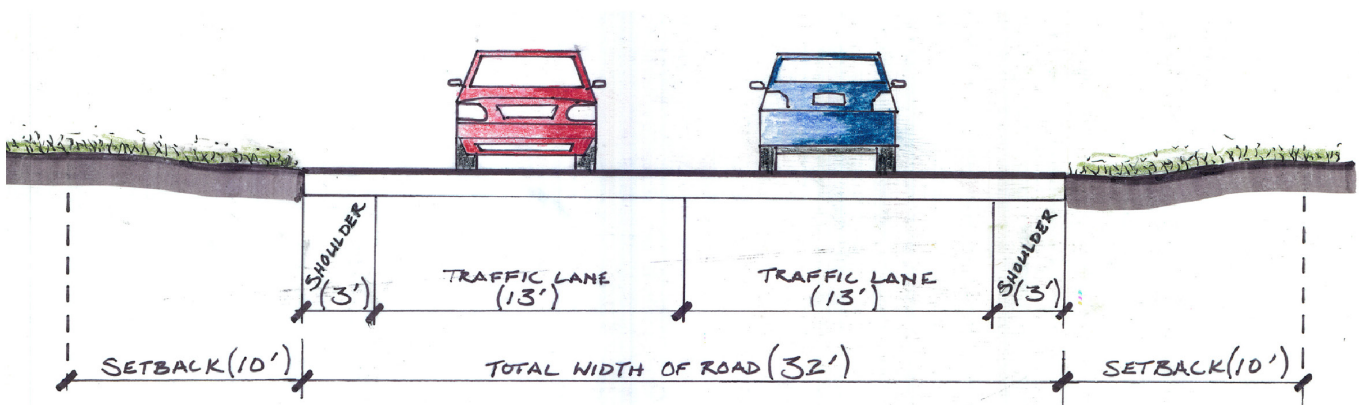
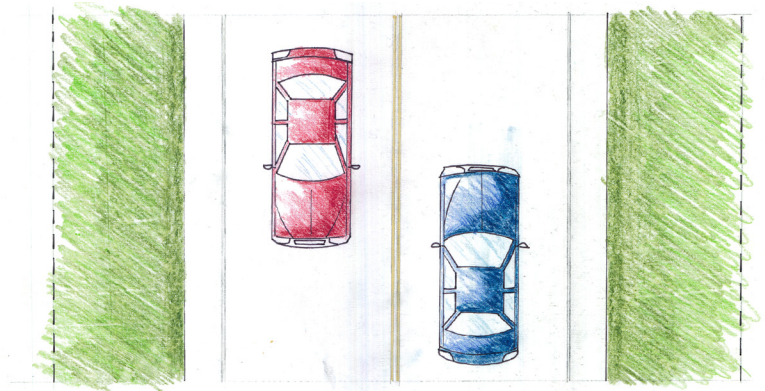
Historic drawing of the original Smith Academy building.

Main Street Improvements

One challenge in creating a greenway for Hatfield is the lack of sidewalks on the northern portion of Main Street. The southern portion of the road runs through the town center and is fairly wide with relatively slow traffic. There is also a sidewalk on at least one side of the road until just north of King Street, where the sidewalk ends and traffic begins moving much faster due to more wide open land on both sides of the road. This combination of conditions makes it very difficult for a pedestrian or bicyclist to use the road, limiting access to a very scenic section of town, which includes Bashin Beach and the Connecticut River Boat Launch.

Northern portion of Main Street existing conditions:

- Two 13-foot-wide traffic lanes
- 3 foot shoulder on each side
- 10 foot undeveloped town-owned setback on each side.



Based on the existing conditions, two possible options for improvement are suggested:

Option A: Bike Lane Improvement

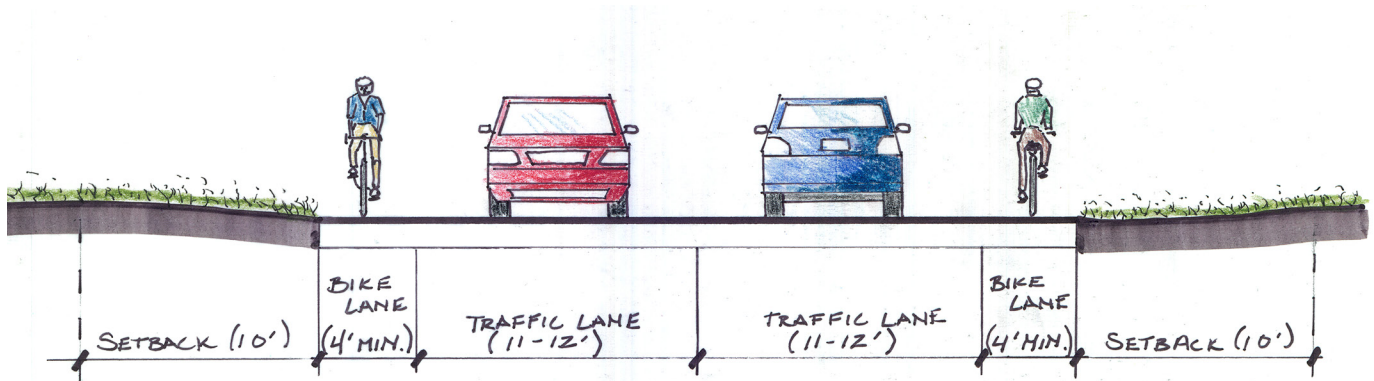
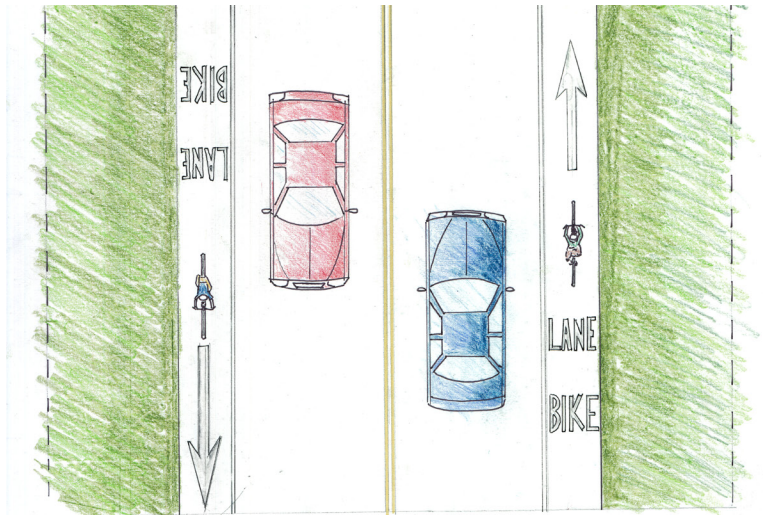
- Reduce traffic lanes to 11 to 12 feet each.
- Use extra shoulder space to establish one-way bike lanes on either side of road.

Pros:

- Improved bicycle safety and access.
- Less car-bicycle conflict.
- Cheap to implement; no construction required, only repainting of road.

Cons:

- Still no pedestrian access.



Option B: Multi-use Trail Improvement

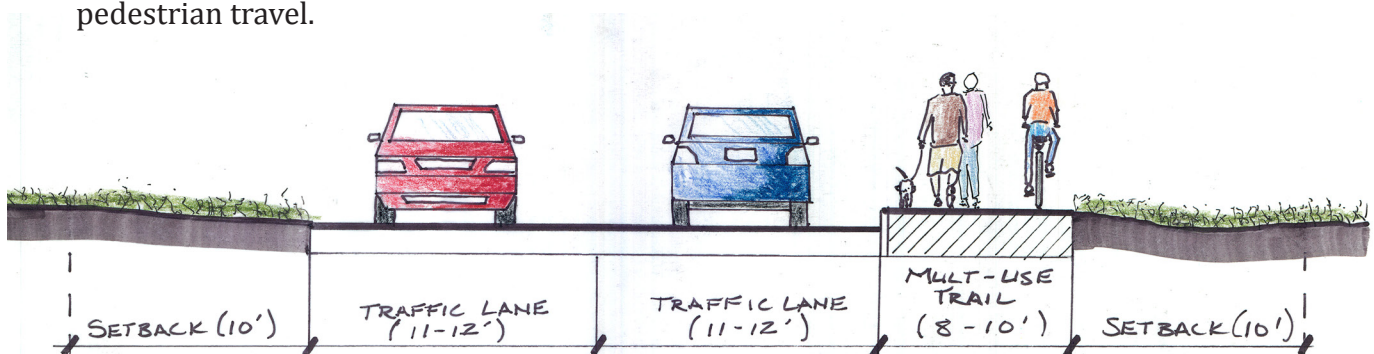
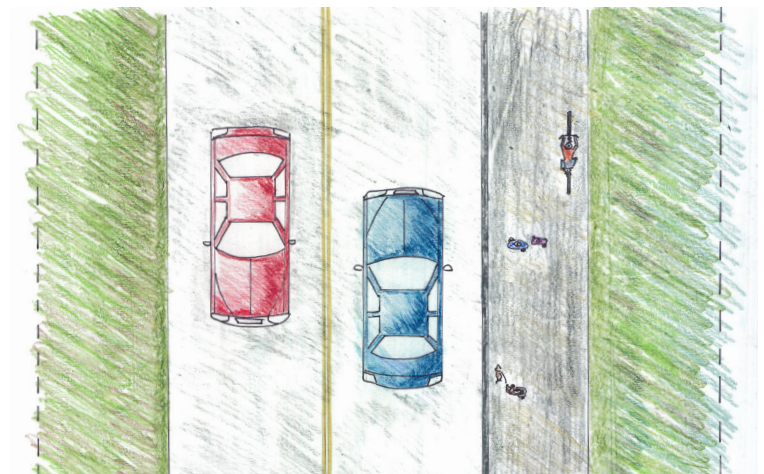
- Reduce traffic lanes to 11 to 12 feet each.
- Eliminate shoulder to build curb-elevated path.

Pros:

- Accommodates multiple forms of non-motorized travel.

Cons:

- More expensive; requires additional construction.
- Bicycle traffic conflicts with other forms of pedestrian travel.



Conclusion:

The town of Hatfield has many unique features, such as the large agricultural fields in the floodplains that have facilitated a thriving agricultural economy since the founding of the town in 1670. The histories of the people, architecture, rivers, wetlands, and forests have shaped Hatfield into what it is today, and the proposed plan combines them to create a greenway with overlapping trails for education and safe recreation. The greenway also promotes the enhanced movement of wildlife and larger habitat patch sizes to accommodate a variety of native species. The proposed greenway and its connected trail system aims to weave Hatfield's cultural and natural history into its future.

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