

Section 3: Community Setting

The diverse rural landscape of Gill—its rolling hills, river terraces, farmlands and upland forests—have been developed, utilized, and preserved by its human inhabitants thousands of years. Planning for open space and recreational opportunities in Gill must take into account the multifaceted relationships between people and the open spaces and natural resources upon which they and other living beings depend. If development occurs without consideration for natural resources such as drinking water supplies or wildlife habitats, the quality of life for current and future generations of Gill residents could be diminished over time.



Verdant farmland bordered by upland forest is a familiar scene in Gill.

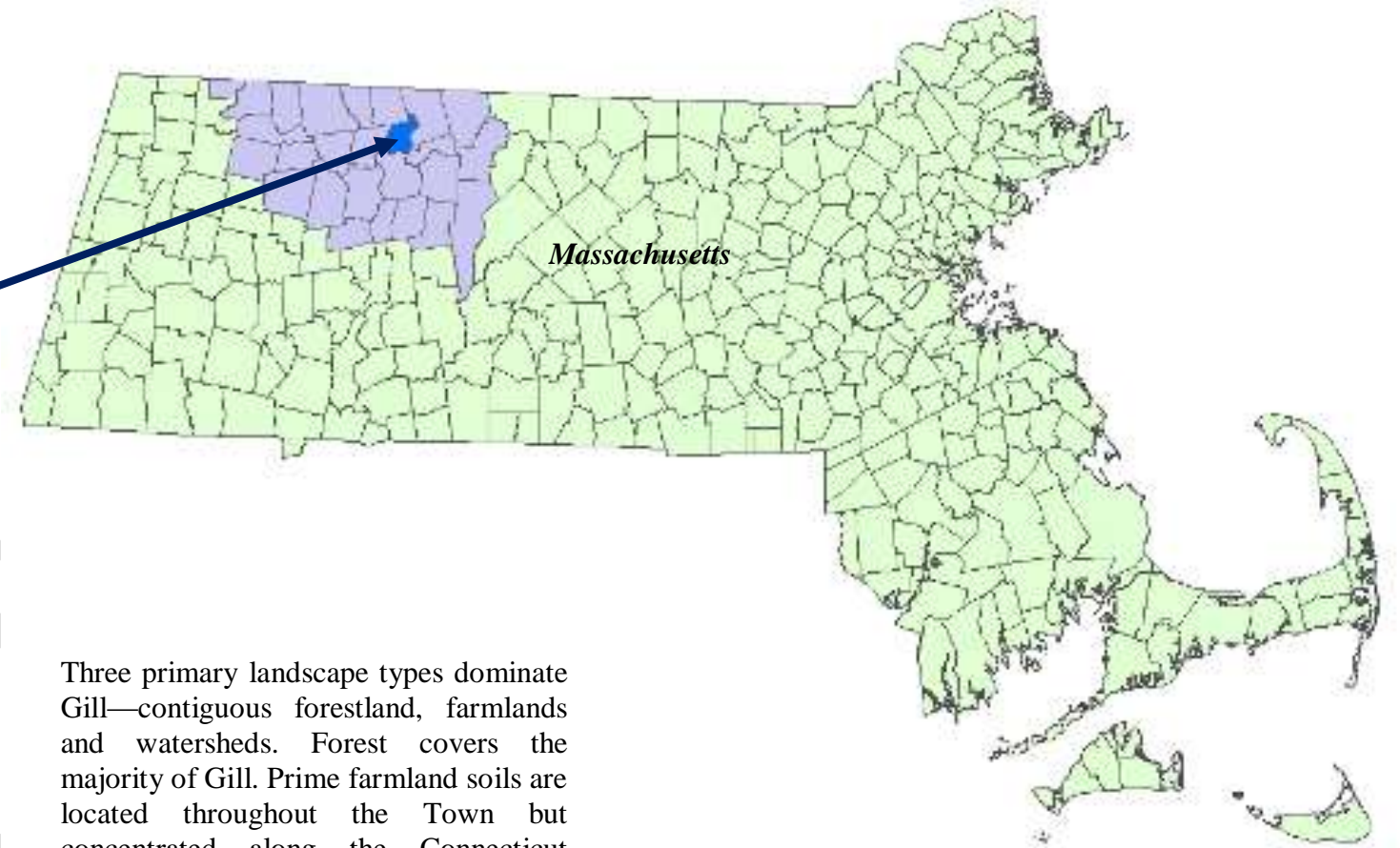
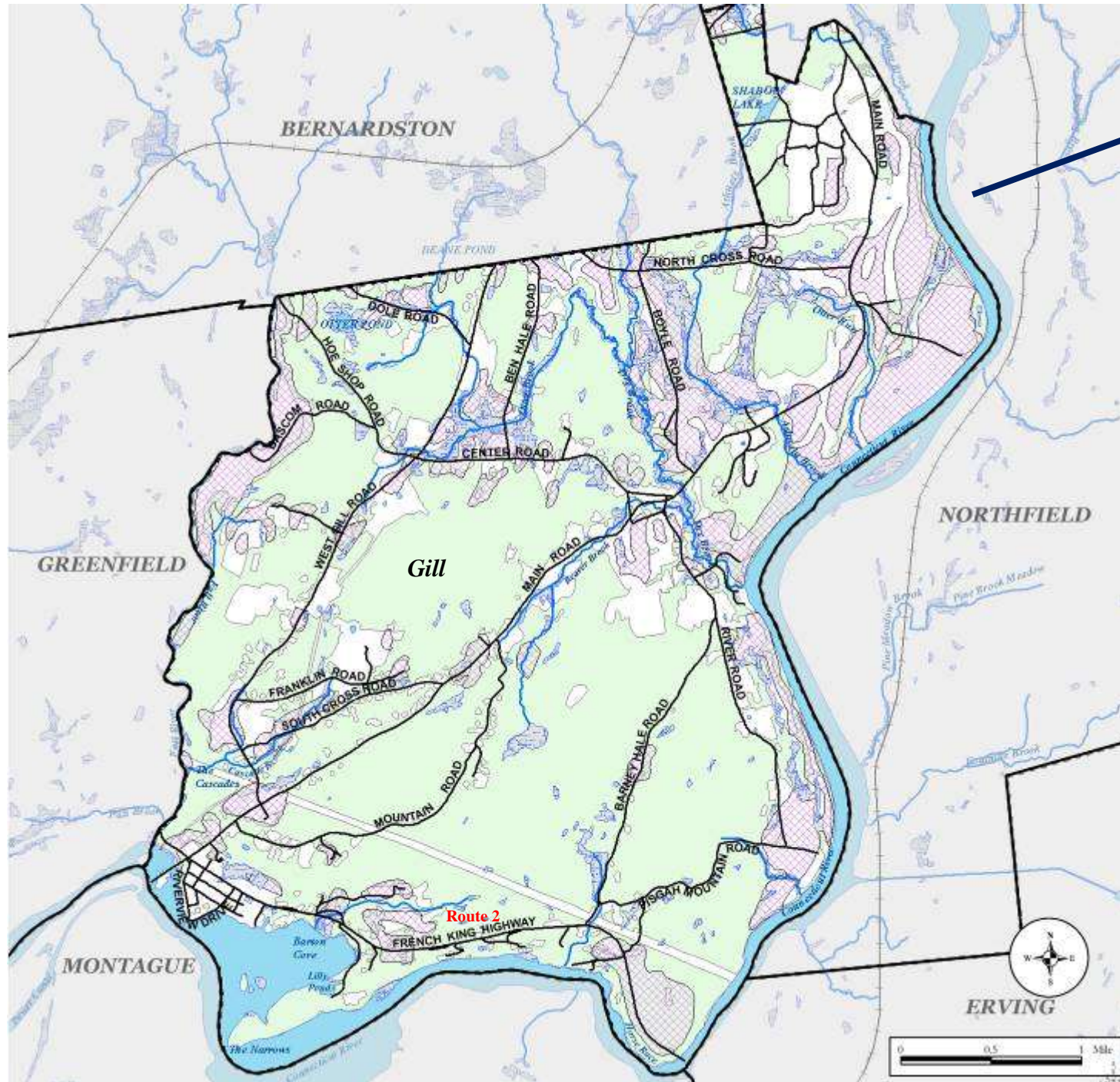
Context

Regional Context

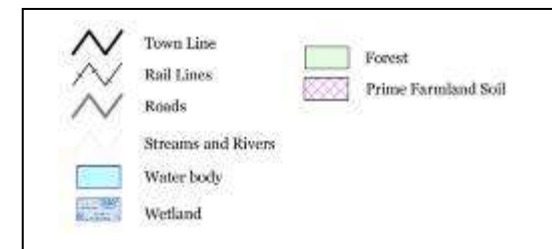
Gill is located in western Massachusetts, in the northern part of the Pioneer Valley region in Franklin County, approximately five miles south of the Vermont state line. Gill is situated in close proximity to three major transportation routes: Interstate 91 is two miles to the west, Route 2 runs along the southern portion of town, and Route 10, which accesses I-91 and Route 63 in Bernardston and Northfield, respectively, is just north of the Gill town line. See map 3-1.

Map 3-1: Regional Context

Located in Franklin County, Gill is bounded on the east and south by the Connecticut River and can be accessed easily via Routes 2 and 10. Neighboring towns include Bernardston to the north, Northfield to the east, Erving and Montague to the south and Greenfield to the west. Although Gill offers relatively easy access to nearby employment centers in Greenfield, Montague and Orange, Gill has not been subject to development pressures experienced in other parts of the State.



Three primary landscape types dominate Gill—contiguous forestland, farmlands and watersheds. Forest covers the majority of Gill. Prime farmland soils are located throughout the Town but concentrated along the Connecticut River. All of Gill is located within the Connecticut River watershed.



Gill is known, in part, for its water resources, particularly Barton Cove on the Connecticut River. Barton Cove draws visitors and residents alike for kayaking, birding, fishing, boating, and camping. Gill is also known for its excellent co-educational boarding and day school, Northfield Mount Hermon. And, in recent years, a revitalization of small, diversified farms has contributed to Gill being known throughout the region for its excellent farm products.

Local Context

Residents of Gill enjoy a wide range of recreational activities in their Town including hiking, skiing, snowmobiling, hunting, fishing and birding. Barton Cove is a popular spot for water recreation such as kayaking, canoeing, swimming and power boating. Barton Cove Campground, owned by FirstLight Power Resources GDF Suez, offers a picnic area and tent camping, and canoe and kayak rentals.¹ See the Appendix D for a FirstLight Power camping, canoeing and kayaking flyer.



Early morning mist shrouds distant views at Barton Cove.

Gill's Open Space and Recreation Plan aims to support the continued enjoyment of recreational activities and continued land protection efforts.

Natural Resources Context

In planning for open space and natural resource protection in the Town of Gill, residents should consider the role natural resources play across the region. Three regional landscape-level natural resources important in both Gill and in surrounding communities are abundant—contiguous forestland, farmlands and watersheds. The presence and relatedness of these significant resources present both opportunities and challenges to open space and recreation planning for Gill.

Forestlands

Forests constitute one of the most important natural resources in the Town of Gill and in the region. Forestland conserves water supplies by sustaining the soil's ability to receive precipitation and recharge ground and surface waters slowly. Woodlands and their changing foliage give residents gorgeous surroundings upon which to gaze and appreciate. Forests clean the air and provide cool air currents in warm months.

¹ <http://www.firstlightpower.com/northfield/camping.asp>

Large blocks of contiguous forestland that are not traversed or fragmented by paved roads, wide rivers, development, or by open fields are important regional resources for several reasons. Wildlife species that require a certain amount of deep forest cover tend to migrate out of fragmenting landscapes. New frontage lots and subdivisions can often result in a widening of human activity into habitats, an increase in the populations of plants and animals that thrive alongside humans (i.e. raccoons and squirrels) and a reduction in the species that have larger home ranges and unique habitat needs. Larger blocks of forest are more suitable for active forest management as well.

One significant mechanism that can be used to protect forestlands – as well as farmlands and recreational lands – in Gill is Chapter 61. Chapter 61 is comprised of three programs which require cities and towns to reduce assessments of farm, forest and open space lands, provided the owners make a commitment to keep their lands in one or more of those uses. These programs were developed in part due to rising property values, which were forcing farmers and forest landowners to sell their land because of the increasing tax burden.

These programs are known as Chapter 61—the Forestland Act; Chapter 61A—the Farmland Assessment Act; and Chapter 61B—the Recreational Land Act. Many states have similar programs to retain open space but only the three Massachusetts laws give municipalities a “right of first refusal” to purchase lands that have been enrolled in these programs.²

According to Mount Grace Land Conservation Trust’s *Land Use Planning under Massachusetts’ Chapter 61 Laws*, “most landowners classify their lands in Chapter 61, 61A and 61B to take advantage of reduced property taxes. Many of these lands are woodlots and small farms on the outskirts of expanding urban and suburban areas. As development increases around these properties, taxes rise to cover the costs of expanded town services. Without Chapter 61, 61A and 61B, these increases in taxes would force some landowners to sell their property. Today, many parcels have remained undeveloped as a direct result of the reduced annual property tax bills following enrollment in these programs.”³

More information on Chapter 61 land classifications can be found on the Town of Gill’s website at <http://www.gillmass.org/pdfs/Ch61%20Classification.pdf>.

Farmlands

Gill has a rich history of agriculture that has contributed to the Town as we know it today. Located in the Connecticut River Valley, much of the land is desirable for farming and contains prime farmland. In the late 18th century, grains – primarily wheat, rye and barley – were the primary cash crops. By the mid 19th century, broom corn and tobacco had replaced grain as a commodity in Gill and, by 1860 Gill had become one of the largest producers of butter and eggs in Franklin County, exporting them as far away as Boston. Milk became a major export after 1900 and, after World War II, most dairy farms began consolidating and increasing in size. Subsistence farming, once a way of life for many Gill residents, also declined.

² <http://www.mass.gov/dcr/stewardship/forestry/service/fortax.htm>

³ <http://mountgrace.org/publications/all>



Cattle graze at sunset on a grassy pasture bordered by woodland.

At present, only a few dairy farms remain in Gill, although out-of-town farmers rent much of the large tracts of river land to grow vegetable crops and forage. Gill currently boasts an active Agricultural Commission and, according to the Commission, the family farm is on the rebound in Gill. In 2011, the Gill Agricultural Commission's **Gill Farms: A Guide to Buying Gill Products and Supporting Agriculture in Our Community** lists 20 farms – sometimes as little as 5 or 6 acres but crammed with produce and know-how. Products from these farmers include eggs, herbs, cheese, emu meat, beef, berries, maple syrup, honey, alpaca fleece. Several have farm stores or farm stands. See the Appendix D for a copy of the guide.

In 2009, Gill adopted the Right to Farm Bylaw which essentially guarantees the right of farmers to conduct their agricultural activities as needed which may include the attendant incidental noise, odors, dust, and fumes associated with normally accepted agricultural practices. Whatever impact may be caused to others through the normal practice of agriculture is more than offset by the benefits of farming to the neighborhood, community, and society in general.⁴

Watersheds

Watersheds are the areas of land that drain to a single point along a stream or river. Sub-watersheds contain first and second order stream tributaries. These are the most extensive component of any watershed. They are also the most sensitive to land use, both the negative impacts of runoff and the positive effects of forest cover. Two of the most important things that

⁴ <http://gillmass.org/pdfs/AgComm/RightToFarmBylaw.pdf>

result from protecting forestland are maintaining the long-term integrity of wildlife habitats and water quality within the watershed's surface and ground waters. Gill is contained within the Connecticut River Watershed.

The Connecticut River Watershed is the largest river ecosystem in New England and spans four states: Vermont, New Hampshire, Massachusetts, and Connecticut. The river itself forms Gill's eastern border. Falls River forms the town's western border. It and other brooks and streams flow through the town on their way to the Connecticut River. From its beginnings on the Canadian border to its end in Long Island Sound, the Connecticut River drains a landscape that is 11,000 square miles in size, 410 miles long. The river drops 2,400 feet from its source to the sea and is one of the most developed rivers in the Northeast. It enters Massachusetts through the Town of Northfield and flows through forty-five communities before entering the state of Connecticut. The watershed is eighty percent forested, twelve percent agricultural, three percent developed, and five percent wetlands and surface waters.

The Connecticut River Watershed was designated the "Silvio O. Conte National Fish and Wildlife Refuge" by an act of Congress in 1991, the first refuge of its kind, encompassing an entire watershed ecosystem. The Connecticut River also received special attention in 1998 when it became one of only fourteen rivers in the U.S. designated as a National Heritage River. The Massachusetts Executive Office of Environmental Affairs has outlined watershed priorities for the Connecticut River which include: promoting and/or creation of riparian buffer zones along the waterways within the watershed; reducing barriers to migratory fish passages; reducing the negative effects of non-point source pollution, primarily storm run-off; and increasing the amount of water quality data available within the watershed. See Section 4 – Environmental Inventory and Analysis – for more detail on the Connecticut River Watershed, its tributaries and other water bodies in Gill.

Community History

The Town of Gill with its natural resources has attracted and sustained human settlements for thousands of years. Native Americans frequented the area to fish the waters of the Connecticut River and its tributaries and to farm the rich floodplain soils. European Colonists also used the Connecticut River for transportation, log drives, fishing, and relaxation.

Native American presence in the Town of Gill dates as far back as 5,500 B.C. Artifacts from that time period have been unearthed in Gill. The Great Falls area of Gill was a prime fishing area; tribes from as far away as Eastern New York would travel to the area to fish. This same area of the Connecticut River was the site of a brutal massacre of Native Americans by the British under Captain Turner in the King Phillip's War (1675-1677). Permanent Colonial settlements were not noted in Gill prior to approximately 1776.

Areas of Settlement

Gill was originally part of Deerfield in the seventeenth century, then part of Greenfield until Gill's incorporation in 1793. Over time, three distinct settled areas developed within the Town of Gill. They include Gill Center, Riverside, and Northfield Mount Hermon as described below.



Located in Gill Center, Gill Tavern – originally the Gill General Store – is a popular area eatery.

Gill Center

Gill was a major crossroads of travel on the western side of the Connecticut River. Organized around a town common, the Gill Center had a number of stores and manufacturing, several taverns as gathering spots and stagecoach stops. A local blacksmith shop and nearby grist mills and a pail factory made the Center a busy place. While fire and changes in industry have removed these landmarks, the Town Common is encircled by a number of historic buildings, including the Gill Meeting House which was erected in 1794, establishing Gill's civic center along this main transportation route. Other buildings near and around the Town Common include the Congregational Church (1803), a Federal period home in the style of Asher Benjamin, the original Meeting House and also the Town Hall (1867), the Slate Library (1921), and Gill General Store – now The Gill Tavern. This area still remains the focus of Gill's civic and social life and the Gill Town Common continues as a place where concerts, town picnics, and socials are held.

Village of Riverside

The Village of Riverside developed on the Gill side of Great Falls on the Connecticut River. A ferry connected Riverside with Montague as early as the 1760s. In 1798 a stone-filled crib dam was built to accommodate locks on the Montague side, allowing river traffic to bypass the Falls. A few farms, home and shops were established on the road from Gill Center to the ferry. Village growth accelerated in 1867 when a sawmill was built in Riverside and in 1878 when a suspension bridge was erected between Riverside and Montague. In the mid 1880s, a kindling

factory and pulp mill were constructed. The sawmill burned down in 1903, and the pulp mill exploded shortly thereafter.⁵

Riverside declined as a civic and commercial center, however today it remains a residential center - a quiet, peaceful haven of residential homes with a rural, close-knit neighborhood feel.



Photo courtesy of AdmissionsQuest, CreativeCommons, www.flickr.com/photos/boardingschool/4215240433/sizes/l/in/photostream/

Northfield Mount Hermon's Admission Office stands on the School's 640-acre parcel located in northeast Gill.

Northfield Mount Hermon

The Mount Hermon School for Boys founded in 1881 and The Northfield Seminary for Girls founded in 1879 were both known for their founder Dwight L. Moody. Now called Northfield Mount Hermon (NMH), the school consolidated its two campuses on the Mount Hermon property in Gill in September 2005. NMH is currently a coeducational boarding and day school for 650 students in grades 9 through 12 and postgraduate. NMH is the largest landholder in Gill, owning approximately 640 acres of property primarily in the northeastern portion of town.

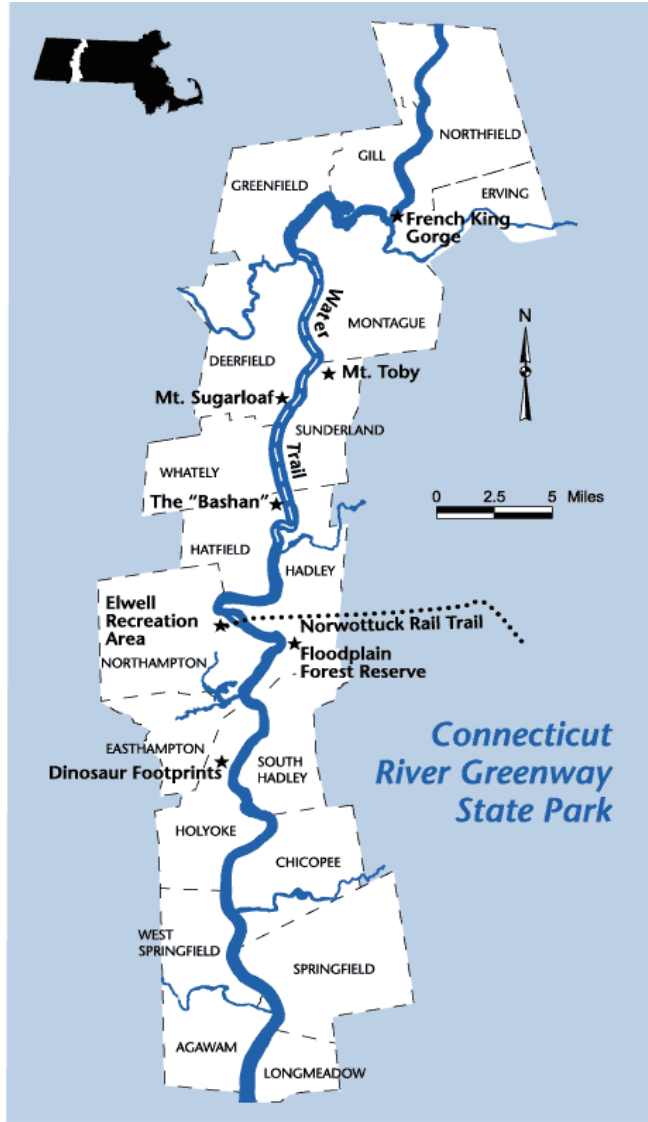
The Role of the Connecticut River in the Community's History

The Connecticut River played a prominent role in the history of the Town of Gill. The River has provided fish for food and was the main mode of transportation for Gill residents. Since transporting goods by boat was more efficient than transporting over land, nearly all trade prior to the development of the railroad occurred on or along the Connecticut River. Timber, ice and farm goods were just a few of the commodities transported via the river to and from the Town of Gill.

In the mid-eighteenth century, river crossings were important factors in a town's economic development and social life. Prior to the bridges, ferries were the primary means of crossing rivers. Gill had three major ferry crossings on the Connecticut River (starting from the south):

⁵ Landscape and Material Life in Franklin County

Map 3-2: Connecticut River Greenway State Park



Smith's, Stacy's and Munn's ferries. Smith's Ferry went out of operation with the installation of the Old Red Suspension Bridge. Munn's and Stacey's Ferries went out of operation in the 1930's due to lack of demand. The Town of Gill owns a one-acre parcel at Stacey or Morgan's Ferry, which has some potential for development as a small boat launch and recreation site.

In addition to the Suspension Bridge, Gill has another spectacular, award-winning bridge at French King Gorge between Erving and Gill. The French King Bridge, completed in 1932, received the Annual Merit Award as "the most beautiful steel bridge" from the American Institute of Steel Construction. Recently restored, the bridge is listed on the State Register of Historic Places.

The Connecticut River also delineates one of Massachusetts' newest state parks, the Connecticut River Greenway State Park. As shown in Map 3-2, the Park connects open spaces, parks, scenic vistas, and archaeological and historic sites along the length of the Connecticut River as it passes through the state. There are over 12 miles of permanently protected shoreline, and numerous access points to the river⁶.

The Role of Route 2 in the Community's History

In 1913, the portion of Route 2 between Erving and the New York State Line was designated as the Mohawk Trail Scenic Auto Route, in honor of the Mohawk Indians who frequented the area's fishing grounds. As a result of the designation, commercial development began along the route to supply tourists with food, gas, lodging and souvenirs. Route 2 continues to be the primary commercial and industrial corridor in Gill.

In 1953, Route 2 between Athol and Williamstown received a Scenic Byway designation. The Mohawk Trail Scenic Byway was one of the earliest Scenic Byways in New England. The corridor is rich in cultural, historic, scenic, natural, archeological, and natural resources. There are a number of historic villages and structures along the route that provide evidence of the Byway's history. The Byway also travels through some of the most beautiful scenic areas in Massachusetts.

⁶ <http://www.mass.gov/dcr/parks/central/crgw.htm>



The French King Bridge, at French King Gorge, offers among the most stunning views along the Mohawk Trail Scenic Byway.

Significant stretches of the Mohawk Trail follow the Millers River and cross the majestic Connecticut River. The Mohawk Trail East Scenic Byway Corridor Management Plan contains greater detail on the history and resources of this Byway.⁷ A Scenic Byway designation is important to Gill in part because the designation brings with it potential funding on the state and national level. See Appendix D for more information.



Gill Centers includes historic structures such as the Slate Library and a federal period home

⁷ Mohawk Trail East Scenic Byway Corridor Management Plan, FRCOG, June 22, 2009

Historical Resources in Gill

Along with the historical resources mentioned earlier in this chapter, other significant historical resources located in Gill include the following:

- Riverside Archeological District (National Register of Historic Places)
- Bascomb Hollow
- French King Bridge
- Water power mill sites
- Methodist Church
- Old Bridge Crossing
- Cemeteries
- Factory Hollow (formerly the main road to Greenfield)
- Capt. Turner Monument
- Old Red Bridge Anchor

Population Characteristics

Demographic Information

A snapshot of Gill’s population characteristics shows a town with a slightly declining population over the last twenty years, this after significant population growth in the 1970s and 1980s. Similar to the County’s population, baby boomers comprise the largest percent of the population, suggesting a potential for increasing demands for services for elderly over the coming decades. Income rates for Gill residents are similar to those for the County and about two thirds of Gill residents work outside of Town.

Population and Population Change

Demographics are useful for forecasting the need for open space and recreational resources that may be required by residents over time. According to the 2010 U.S. Census Redistricting Data, Gill had a population of 1,500 in 2010 (Table 3-1). In 2000, data gathered by municipal officials in the Town of Gill reported the population to be 1,620. This is different from the total population figure of 1,363 that the U.S. Census reported as of April 1, 2000. Gill municipal officials believe the 2000 U.S. Census figure was inaccurate due to miscalculation of staff and faculty housing on the Northfield Mount Hermon campus as well as to a shared zip code with Turners Falls. For the purpose of this Open Space and Recreation Plan, the 2010 Census population figure will be used.

In 2010, Gill’s population density was 101 persons per square mile, compared to the neighboring towns of Erving (125 persons per square mile), Northfield (88 persons per square mile), Bernardston (91 persons per square mile), Greenfield (796 persons per square mile), and Montague (269 persons per square mile).⁸

Table 3-1: Total Population from 1970, 1980, 1990, 2000 and 2010

| Geography | 1970 | 1980 | 1990 | 2000 | 2010 |
|-----------------|-----------|-----------|-----------|-----------|-----------|
| Gill | 1,100 | 1,259 | 1,583 | 1,620* | 1,500 |
| Franklin County | 59,223 | 64,317 | 70,092 | 71,535 | 71,372 |
| Massachusetts | 5,689,377 | 5,737,037 | 6,016,425 | 6,349,097 | 6,547,629 |

Source: U.S. Census Bureau – 1970 Census, 1980 Census, 1990 Census STF3A, 2000 Census SF3, and 2010 Census Redistricting Data. * Source: Town of Gill Census 2000.

Table 3-2: Population Change from 1970 to 2010

| Geography | 1970-1980 Change | 1980-1990 Change | 1990-2000 Change | 2000-2010 Change | 40 Year Trend (1970-2010) |
|-----------------|------------------|------------------|------------------|------------------|---------------------------|
| Gill | 14.5% | 25.7% | 2.3%* | -7.4%* | 36.4% |
| Franklin County | 8.6% | 9.0% | 2.1% | -0.2% | 20.5% |
| Massachusetts | 0.8% | 4.9% | 5.5% | 3.1% | 15.1% |

Source: U.S. Census Bureau – 1970 Census, 1980 Census, 1990 Census STF3A, 2000 Census SF3, and 2010 Census Redistricting Data. * Based on 2000 Town of Gill Census.

⁸ Calculated using 2010 U.S. Census Redistricting Data population counts, and 2005 MassGIS Land Use data

Population in Gill in recent decades has varied, with significant growth in the 1970s and 1980s and with growth slowing in the last two decades. From 1970 to 1980, the population in the Town of Gill grew over 14 percent, and grew significantly from 1980 to 1990 by another 26 percent (Table 3-2). This is dramatically higher than both the County and the State during the same decades. For Franklin County, the rate of population growth was fairly consistent from 1970 to 1980 and 1980 to 1990 with approximately a 9 percent growth rate for each of those time periods. In the 1990s, both the Town and the County grew by approximately 2 percent, less than the State growth of 5.5 percent. Between 2000 and 2010, the Town saw a 7.4 percent decrease in population, while the County's population remained stable and the State population grew modestly by 3.1 percent.

The overall 40-year trend for Gill shows a 36.4 percent increase in population, larger than both the County and State. This is attributable, however, to the large increase in the 1970s and 1980s. The trends of the last two decades show Gill's population leveling out and declining slightly. It is important for the Town to determine how these trends translate into demand for open space and recreational resources.

The age make-up of the population is also an important factor when considering open space and recreational needs in Town. In 2010 residents between the ages of 45-64 made up the largest percentage of the Town's population. Between 2000 and 2010, this age cohort grew by 9.5%, while the 25-44 age cohort declined by 7%. This is due to the aging of the Baby Boomers, those born between 1946 and 1964, a period that experienced a widespread population boom, who in 2010 were between the ages of 46 and 64.

Between 2000 and 2010, the percentage of residents age 19 and younger, and 75 and over, declined, while those between the ages of 20-24, and 65-74 increased slightly. Overall the population of Gill is aging, a trend consistent with the County and the State. Due to the large growth of residents between the ages of 45 and 64 it seems likely that in the years to come the 65 and older cohort will begin to grow, as the Baby Boomers continue to age and move into this category (Table 3-3).

Table 3-3: Age Distribution 2000 and 2010

| Geography | Total Population | 9 Years & Under | 10-19 Years | 20-24 Years | 25-44 Years | 45-64 Years | 65-74 Years | 75 Years & Over |
|------------------------|------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| Gill | | | | | | | | |
| 2000 | 1,363* | 12.3% | 14.5% | 3.4% | 26.8% | 30.2% | 5.9% | 6.8% |
| 2010 | 1,500 | 7.9% | 13.5% | 5.3% | 19.8% | 39.7% | 8.2% | 5.6% |
| Difference | 137 | -4.4% | -1.0% | 1.9% | -7.0% | 9.5% | 2.3% | -1.2% |
| Franklin County | | | | | | | | |
| 2000 | 71,535 | 11.5% | 14.3% | 5.4% | 28.5% | 25.9% | 6.7% | 7.5% |
| 2010 | 71,372 | 10.0% | 11.9% | 6.0% | 23.1% | 33.7% | 7.9% | 7.3% |
| Difference | -163 | -1.5% | -2.4% | 0.6% | -5.4% | 7.8% | 1.2% | -0.2% |
| Massachusetts | | | | | | | | |
| 2000 | 6,349,097 | 13.0% | 13.3% | 6.4% | 31.3% | 22.4% | 6.7% | 6.8% |
| 2010 | 6,547,629 | 11.5% | 13.3% | 7.3% | 26.5% | 27.7% | 7.0% | 6.8% |
| Difference | 198,532 | -1.5% | 0.0% | 0.9% | -4.8% | 5.3% | 0.3% | 0.0% |

*Gill Town officials believe the U.S. Census Bureau's 2000 data understates the actual total population.

Source: U.S. Census Bureau – 2000 Census SF3, 2010 Census.

The aging population may require different recreational facilities and services including accessible walking paths, arts, and leisure programs. It appears the Town of Gill needs to be concerned about providing for an aging population in its open space and recreation programming, while continuing to provide opportunities for all residents. As Baby Boomers age, they may also require different housing options than are currently available in Town. This demand for new housing could impact the available open space in Gill. The Town should proactively identify the types of housing this population group will need and determine the best locations for development, taking into consideration the needs of an older population while also working to protect open space and natural resources. Planning for growth before it happens will help to protect open space and recreation resources into the future.

Any development of new open space and recreation resources should take into consideration where the current population resides, where any potential new development will occur, and which parts of the local citizenry require specific needs. As shown in the fourth part of Section 3 - Growth and Development Patterns - the location of future growth depends in large part on zoning, slopes, soil and groundwater related constraints, and on which lands are protected from development. Proactively identifying key parcels in town that might be future parks and walking trails close to current neighborhoods, and in areas that could be later developed for residential uses, will help ensure these resources are available in the future. Town officials should continue to look for opportunities to conserve land in Gill that protects valuable scenic and natural resources and provides public access to trail networks and open spaces.

Economic Wealth of Residents and Community

Measures of the income levels of Gill’s residents as compared to the county and state are helpful in assessing the ability of the citizenry to pay for recreational resources and programs and access to open space.

Table 3-4: Per Capita Income, Median Household Income, and Percentage Below Poverty Level for Gill compared to Franklin County and the State, 2009*

| Geography | Per Capita Income | Median Household Income | Individuals Below the Poverty Level |
|------------------|--------------------------|--------------------------------|--|
| Gill | \$27,201 | \$56,066 | 4.6% |
| Franklin County | \$27,305 | \$52,185 | 12.1% |
| Massachusetts | \$33,460 | \$64,496 | 10.1% |

* In 2009 inflation adjusted dollars.

Source: 2005-2009 American Community Survey.

Table 3-4 describes the earning power of residents in Gill as compared to the county and the state. The Gill per capita income reported for 2009 was \$27,201, which was comparable to the county figure of \$27,305, and lower than the state figure of \$33,460. Gill had the 19th highest per capita income out of the twenty-six towns in the county in 2009. The median household income for Gill was \$56,066 in 2009, which was higher than the county (\$52,185) and lower than the state figure (\$64,496). The Gill median household income in 2009 was the 16th highest of the twenty-six towns in Franklin County. Another way to describe a community’s income and economy is the poverty rate. In Gill, 4.6 percent of residents were living below the poverty level in 2009. Gill’s poverty rate was significantly less than in the county (12.1 percent) and state (10.1 percent).

Although Gill's resources include both its people and its natural landscapes, the status of its finances could be affected by an interdependent relationship that exists between the two. The costs of the community services provided to residents are paid for with the tax revenues generated by different kinds of property, both developed and undeveloped. Some developed uses such as housing often require more services including education and road maintenance. The costs associated with one household are rarely paid for by the revenues generated by that same property.

One reason that towns encourage economic development is to have other types of property in town, other than residential, to share the tax burden. Protected open space on the other hand can cost towns very little in community services, provide a modest amount of tax revenues, and reduce the amount of housing that can ultimately occur in town. This relationship is explored in more detail in subsection D. Growth and Development Patterns.

Employment Statistics

Employment statistics like labor force, unemployment rates, numbers of employees, and place of employment are used to describe the local economy. Labor force figures can reflect the ability of a community to provide workers that could be employed by incoming or existing businesses. Unemployment rates can show how well residents are fairing in the larger economy while employment figures describe the number of employees in different types of businesses. Employment can be used as a measure of productivity. The number of people employed in each business can be used to determine the types of industries that should be encouraged in town. The town may decide to encourage business development to create more jobs and as a way of increasing taxable property values, which can help pay for municipal services and facilities, including recreational parks and programming as well as protected open space.



Wagon Wheel Restaurant on Route 2 is a popular small business – and breakfast spot - in Gill.

Labor Force: Gill Residents Able to Work

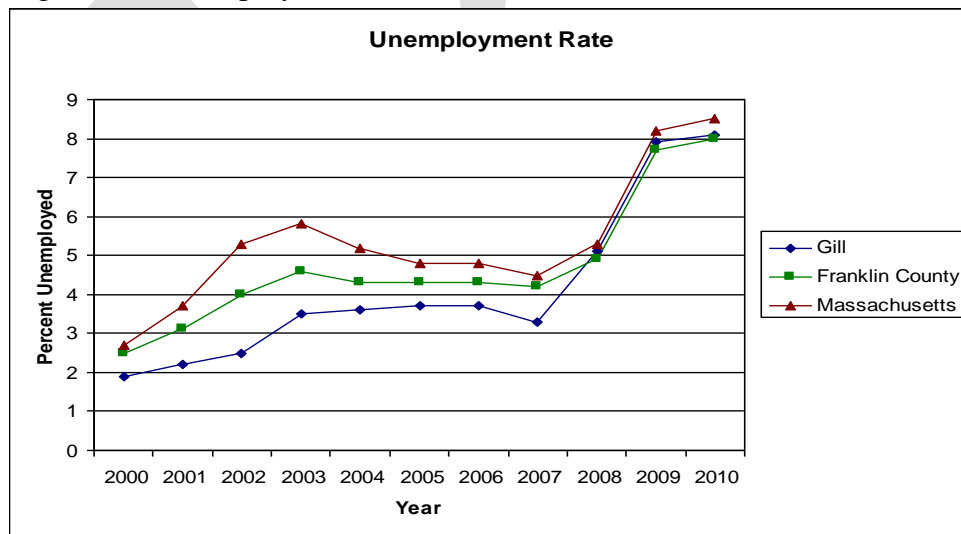
Table 3-5 displays Gill’s labor force from 2000 through 2010, and unemployment rate for the same period compared to the county and state. The labor force is defined as the pool of individuals 16 years of age and older who are employed or who are actively seeking employment. Enrolled students, retirees, stay-at-home parents and other persons not actively seeking employment are excluded from the labor force. Labor force and unemployment data are available on a monthly and annual basis from the Massachusetts Executive Office of Labor and Workforce Development. In 2010, the Town of Gill had a labor force of 810 with an unemployment rate of 8.1 percent (Massachusetts Executive Office of Labor and Workforce Development). Gill’s labor force increased by 23 people, or 2.9% from 2000 to 2010, though it has fluctuated over those years. Increases in the labor force may be from increases in the resident population’s participation in the labor force and/or overall population growth in a community.

Table 3-5: Labor Force and Unemployment Data, 2000-2010

| Year | Gill Labor Force | Unemployment Rate | | |
|----------|------------------|-------------------|-----------------|---------------|
| | | Gill | Franklin County | Massachusetts |
| 2000 | 787 | 1.9 | 2.5 | 2.7 |
| 2001 | 787 | 2.2 | 3.1 | 3.7 |
| 2002 | 799 | 2.5 | 4.0 | 5.3 |
| 2003 | 810 | 3.5 | 4.6 | 5.8 |
| 2004 | 808 | 3.6 | 4.3 | 5.2 |
| 2005 | 808 | 3.7 | 4.3 | 4.8 |
| 2006 | 806 | 3.7 | 4.3 | 4.8 |
| 2007 | 797 | 3.3 | 4.2 | 4.5 |
| 2008 | 805 | 5.1 | 4.9 | 5.3 |
| 2009 | 810 | 7.9 | 7.7 | 8.2 |
| 2010 | 810 | 8.1 | 8.0 | 8.5 |
| % Change | + 2.9% | N/A | N/A | N/A |

Source: Massachusetts Executive Office of Labor and Workforce Development.

Figure 3-1: Unemployment Rates from 2000-2010



Source: Massachusetts Executive Office of Labor and Workforce Development.

Gill’s unemployment rate in 2010 was slightly higher than the county’s rate of 8.0, and lower than the state’s rate of 8.5. From 2000 through 2008, Gill had a consistently lower rate of unemployment than the county and state. From 2008 through 2010, the Town’s rate has been slightly higher than the county, though it continues to be lower than the state. It is evident that Gill is influenced by the greater economy, as demonstrated by the highs and lows in Figure 3-1.

Employment in Gill: Residents and Non-Residents

The largest employer located within the Town of Gill is the Northfield Mount Hermon School, employing between 250 and 499 employees (Massachusetts Executive Office of Labor and Workforce Development). The next largest employers are Kuzmeskus Inc. bus company and Travel Kuz, each employing between 100 and 249 people. The Gill Elementary School, Gill Fire Department, and Renaissance Builders all employ between 20 to 49 people. It is not uncommon in rural communities for the town government and school to be major employers.

According to the 2000 Census and 2005-2009 American Community Survey, the percentage of Gill residents in the labor force who worked in town decreased from 13 percent to approximately 7 percent. The greatest increase during the decade occurred with commuters traveling to jobs in other counties, from 17 percent to 23 percent.

Table 3-6: Worker* Commute Patterns in 1990 and 2000 (ACS)

| Geography | Worked in Town of Residence | Worked out of Town but in County of Residence | Worked out of County but in State of Residence | Worked out of State of Residence |
|-----------|-----------------------------|---|--|----------------------------------|
| Gill | | | | |
| 2000 | 13.3% | 66.2% | 16.8% | 3.7% |
| 2009 | 6.7% | 64.8% | 22.9% | 5.6% |

* Employed workers 16 years and over. Source: U.S. Census Bureau –2000 Census SF3; 2005-2009 American Community Survey

Note: Gill Town officials believe the U.S. Census Bureau’s 2000 data understates the actual total population.

Context and Demographics of Environmental Justice Populations

No environmental justice populations have been mapped in the Town of Gill.

Growth and Development Patterns

Patterns and Trends

Like many towns in Franklin County, Gill's historic land use development patterns can still be seen today. Gill's land use patterns include:

- The more heavily settled Riverside, an area that once supported log drives, sawmills, and the wealthy mill owners of Turners Falls.
- Gill Center, where civic life has always been focused and where the Town Hall and the Slate Memorial Library can be found.
- Working farms and farmland including active dairy farms – and Upinngil Farm and Farm Store, Cold Spring Farm and Rolling Edge Sugarhouse, to name a few. Note: The recently formed Gill Agricultural Commission has produced *Gill Farms: A Guide to Buying Gill Products and Supporting Agriculture in Our Community*. See Appendix D for a copy of the guide.
- Forest land blankets much of the town and includes active sugarbushes and other forest industries.

Within this land of farms, forests and houses are two major linear elements: the Connecticut River and Route 2. The Connecticut River floodplain contains arable prime farmland soils and is actively farmed by small, diverse farms. Commercial properties are located primarily along Route 2 and on Main Road close to where it intersects Route 2. This trend began in the early part of the 20th Century following the designation of Route 2 as the Mohawk Trail Scenic Auto Route.

Over the past two hundred years, Gill residents developed their community using the productivity of the area's prime farmland soils as well as its proximity to the Connecticut River and the Mohawk Trail. Gill's population went through a series of expansions and contractions between 1800 and 2010. Gill's population in 2000 (though contested as too small by Town Officials) represented a 97 percent increase of its population in 1800. 2010 Census data puts Gill's population at 1,500. The most rapid growth has taken place over the last 30 years. In the 1970s and 1980s, the population of Gill increased by 44 percent.

Despite the population increase, in the late 1980s Gill experienced a reduction in the number of dairy farms due to several factors including low product prices, high production costs, aging farmers and smaller families, and a federal buy-out program of dairy herds to control pricing. Over the last century, Gill saw a reduction in the number of dairy farms and an increase in the development of residential uses outside of the historic village centers.

According to MassGIS computer mapping land use data, between 1985 and 2005, Gill experienced:

- A loss of 554 acres of forest (-3%)
- A loss of 157 acres of cropland (-6%)
- A loss of 105 acres of pasture (-18%)
- An increase of 484 acres in residential development (+62%)

Clearly, the conversion of forest and agricultural land to building sites for single-family homes is the dominant land use change in Gill and in Western Massachusetts. Future development patterns in Gill may depend on national and regional employment and population trends but also on local conditions that impact development and land use, such as growing demand for locally grown farm and forest products.



Single family homes stand adjacent to a rye field in Gill.

Infrastructure

Transportation Systems

The major transportation routes in and around Gill are:

- Interstate 91, approximately 2 miles west of the town line;
- Route 2, which runs through the southern portion of town; and
- Route 10, which connects Route 63 and I-91

According to the FRCOG Draft Regional Transportation Plan 2011, there is currently no transit service to or from this area of the county nor are there connections to other transit routes. Previous service was sporadic and based on the Northfield Mount Hermon School schedule, making it difficult for residents to use the route since the days and times of runs were inconsistent. Service was discontinued completely at the end of FY2009. The Franklin Regional Transportation Authority (FRTA) does provide demand-response transportation services for the elderly and people with disabilities in Gill.⁹

⁹ Draft 2011 Regional Transportation Plan, FRCOG.

Water Supply Systems

Except for those living on the Northfield Mount Hermon (NMH) School campus, or in the Riverside area, Gill residents rely on private wells for their water supply. NMH operates its own water supply system. The Riverside Water District manages its own water system and purchases its water from the Town of Greenfield. There is also a public well at Gill Elementary School. Prior to 1976, the Riverside area got its water from a neighborhood spring that is now privately owned.

Wastewater Treatment

NMH and Riverside have their own wastewater treatment systems. After discovering that its 1962 sewage lagoon facilities were inadequate during storm events, NMH recently updated its system at a cost of \$2 million. Following a typhoid outbreak in 1957, the Riverside community began to pursue a municipal wastewater treatment facility. After years of debate and discussions over how to pay for it, the project was finally launched in 1976 and was operational by October of 1980. The Town contracts with the Montague Wastewater Treatment Facility to treat sewage from Riverside homes and businesses.

Long-Term Development Patterns

Land Use Controls

Gill's Zoning Bylaws were last updated in June 2011 and their Rules and Regulations Governing the Subdivision of Land were updated in August 2009. According to the Zoning Bylaws, the Town of Gill is divided into the following types of districts:

- Village Residential
- Residential
- Residential-Agricultural
- Village Commercial

The Town of Gill Official Zoning Map, located at the end of this section, shows the location(s) of the four districts. The vast majority of land in Gill is zoned Residential/Agricultural, with a minimum developable lot size of 2 acres. The area known as Riverside is the only part of town with Village Residential, Residential and Village Commercial Zoning. Table 3-7 shows the minimum lot size, minimum lot frontage and maximum lot coverage for each district.

Table 3-7: Zoning Bylaws – Excerpt from Dimensional Schedule

| District | Minimum Lot Area in Acres | Minimum Lot Frontage in Feet | Maximum Lot Coverage* |
|--------------------------|----------------------------------|-------------------------------------|------------------------------|
| Village Residential | .25 | 100 | 50% |
| Residential | 2.00 | 200 | 50% |
| Residential-Agricultural | 2.00 | 200 | 30% |
| Village Commercial | 1.00 | 150 | 70% |

Conservation subdivisions are characterized by common open space and clustered compact lots. The purpose of a conservation subdivision is to protect farmland and/or natural resources while allowing for the maximum number of residences under current community zoning and subdivision regulations. In some cases a greater density (density bonus) may be offered in the

local ordinance to encourage this approach to residential development planning. Generally, this tool is used for parcels 40 acres or larger.

Along with the Dimensional Schedule, other elements of the Zoning Bylaws¹⁰ relevant to Open Space and Recreation Planning include:

- A Solar Overlay District, which, at the time of writing, is under consideration with the Town.
- Section 6: Conservation Development. The purpose of Conservation Development is, in part, to encourage the preservation of common land for conservation, agriculture, open space, forestry and passive recreational use; to promote more sensitive siting of buildings and better overall site planning; to promote better utilization of land in harmony with its natural features; and to allow more efficient provision of municipal services.
- Section 15: Flood Plain Regulations. The Flood Plain District is established as an overlay to all other districts but does not expressly limit or prohibit development, as long as the use is in compliance with Chapter 131, Section 40 of the Massachusetts General Laws and with related state building code, Wetlands Protection Regulations, DEP's related requirements.

The Zoning Bylaws do not prevent the town's prime agricultural land that is not currently under a conservation or agricultural preservation restriction from being developed for future residential use. Under the current bylaws, much of Gill's land is vulnerable to residential development. To protect the resource that is so vital to Gill's sense of community character - its farm and forestland - the Zoning Bylaws would merit a thorough review with a particular emphasis on protecting farm and forestland.

As part of the Subdivision Regulations the Planning Board, where appropriate, may require reservation of open space for up to three (3) years upon completion of the subdivision to provide an opportunity for the Town to purchase it for open space or recreation purposes. The Planning Board shall not require reservation of more than ten percent (10%) of the gross area of the subdivision for such purposes, and shall not require reservation of areas smaller than four (4) acres, except in extraordinary circumstances.¹¹

These same Rules and Regulations allow for endorsement rather than approval of the Planning Board for the division of a tract of land into two or more lots as long as every lot within the tract has acceptable frontage on a public way. For this type of development, a plan in any form may be submitted as long as it is acceptable to the Registry of Deeds or Land Court. The only stipulations are that centerline road profiles, drainage, utilities and road construction must be explicitly shown. In reviewing the Rules and Regulations Governing the Subdivision of Land, the community could consider incentives or other methods to more strongly encourage conservation development. This recommendation is included as an Action Item in this plan.

Another regulation in place in Gill is the Right to Farm Bylaw, adopted in 2009, discussed earlier in this Section.

¹⁰ Town of Gill Zoning Bylaws, <http://gillmass.org/pdfs/zba/Gill-Bylaws-updated-031610.pdf>

¹¹ <http://gillmass.org/pdfs/ZBA/SubdivisionRegulations-081309.pdf>

The Town of Gill completed a Community Development Plan (CDP) in June 2004.¹² Chapter One: Open Space and Resource Protection is particularly relevant to long term development patterns in this Plan. Selected maps from the CDP have been included at the end of this section. A mapping of development constraints including prime farmland and permanently protected open space was conducted. One noticeable pattern relevant to development patterns is a significant area of prime farmland is located in the northeast area of Town as well as along the Connecticut River on the eastern border of Town. This is shown in Map 3-4 at the end of this section.

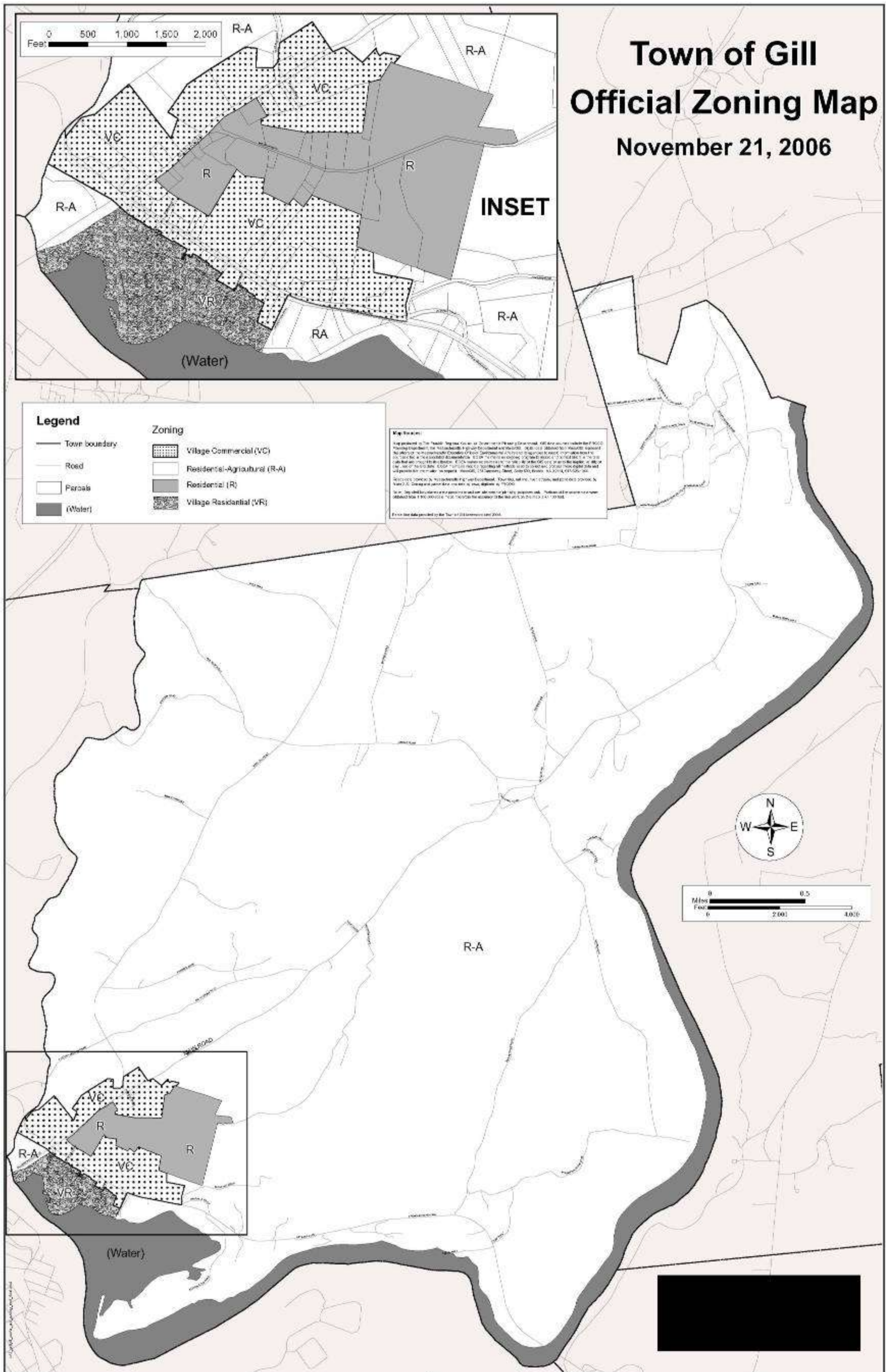
Another pattern is a large area of permanently protected open space in the southeast area of Town. Important information not contained in this map – but critical to the concept of conserving large blocks of contiguous forestland – is what lies beyond the town borders. Thinking about patterns on a more regional basis could help the Town in a goal of conserving large blocks of contiguous forestland, as well as permanently protected open space, prime farmland and other vital resources.

The other two maps from the Town's CDP (Maps 3-4 and 3-5) show potential and absolute constraints on development in Town. Potential constraints include such things as slopes of 15-25%, prime farmland soil, interim wellhead protection areas, and medium yield aquifers. Absolute constraints include wetlands, water bodies, Zone I recharge areas for public drinking water supplies, important habitat areas, steep slopes, and parcels that have been permanently protected as open space.

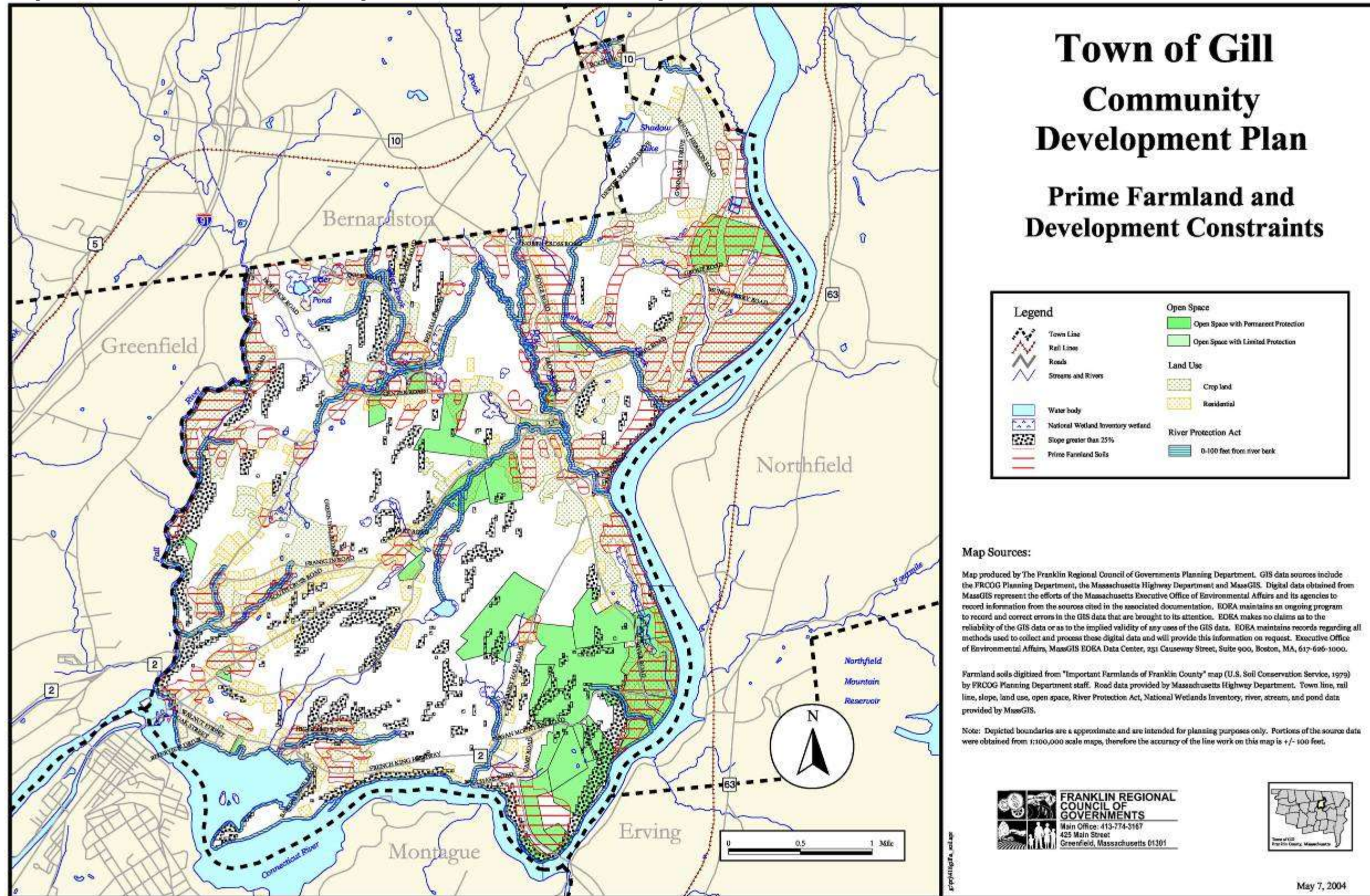
As stated in the CDP, these maps are an essential first step for prioritizing which parts of Town may be important to preserve and to protect from certain land uses, and for identifying which areas may be suitable for future development. Coupled with the methodology for determining which parts of Gill are potentially developable outlined in the CDP, this information is valuable to the work of this Open Space and Recreation Plan as well as any future master planning.

¹² <http://gillmass.org/pdfs/cdp/GILL%20CDP%20FINAL%20plan.PDF>

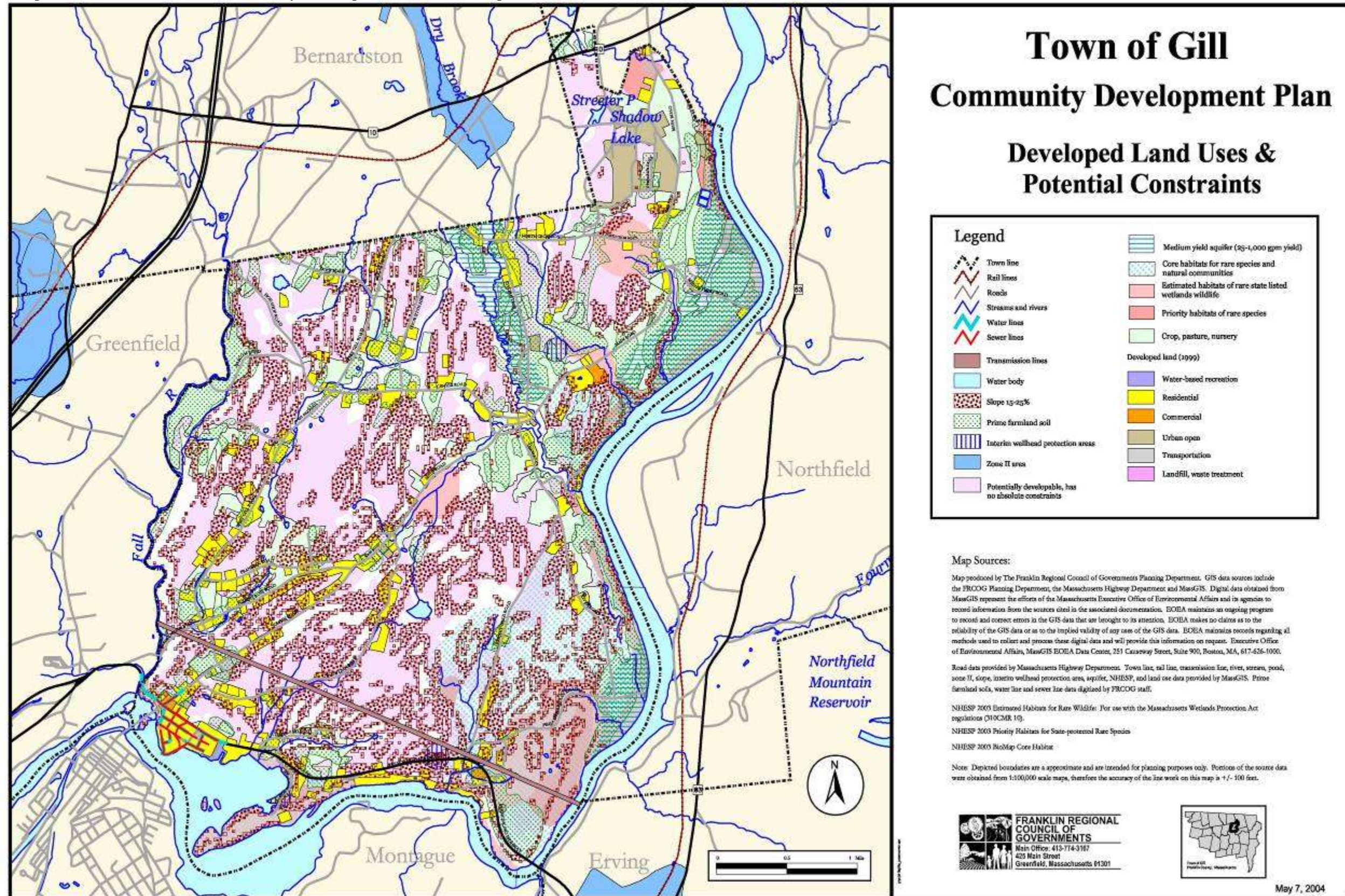
Map 3-3: Town of Gill, Official Zoning Map



Map 3-4: From Town of Gill Community Development Plan – Prime Farmland and Development Constraints



Map 3-5: From Town of Gill Community Development Plan – Developed Land Uses and Potential Constraints



Map 3-6: From Town of Gill Community Development Plan – Developed Land Uses and Absolute Constraints

