



OPEN SPACE AND NATURAL RESOURCES ELEMENT

TECHNICAL PAPER

The rural landscape of forests, fields, lakes and streams are the greatest assets to the town of Blandford. The land now called Blandford, Massachusetts, was Mohican and Pocumtuc Territory, where originally due to its rugged upland terrain and general absence of agricultural land suggests that this community was the site of small, seasonal fishing and hunting camps. Its proximity to natural ponds and streams, like Long and Blair Ponds and Wheeler and Bedlam Brooks would provide the food for the native people. In 1741, when Blandford was incorporated as a town, development along Route 23 sprung up, particularly homes and taverns due to its major traveling route between Albany and Springfield. In addition, Russell Stage Road served as the primary route between the Westfield River and Blandford Center, thus Blandford's place as an important pass through community has been secured. Now primarily a bedroom community for people working in the larger communities of Westfield and Springfield, Blandford continues to offer a rural landscape and peace and quiet of a small town. The community has also become an important recreation destination.

INVENTORY AND EXISTING CONDITIONS

Geology and Topography

The geology in Blandford is primarily characterized of a mix of limestone and other calcium-rich bedrock, schist, quartzite, and some gneiss. Some areas have dense glacial till, but the presence and amount of till is inconsistent. Variation in bedrock creates changes in terrain as well as soil type and stream alkalinity. Most of Blandford's slopes range from 8 to 15 percent, where 9,573 acres comprise slopes of 15 percent or greater. Slopes of 15 percent along with important water bodies have created natural limits to development in town.

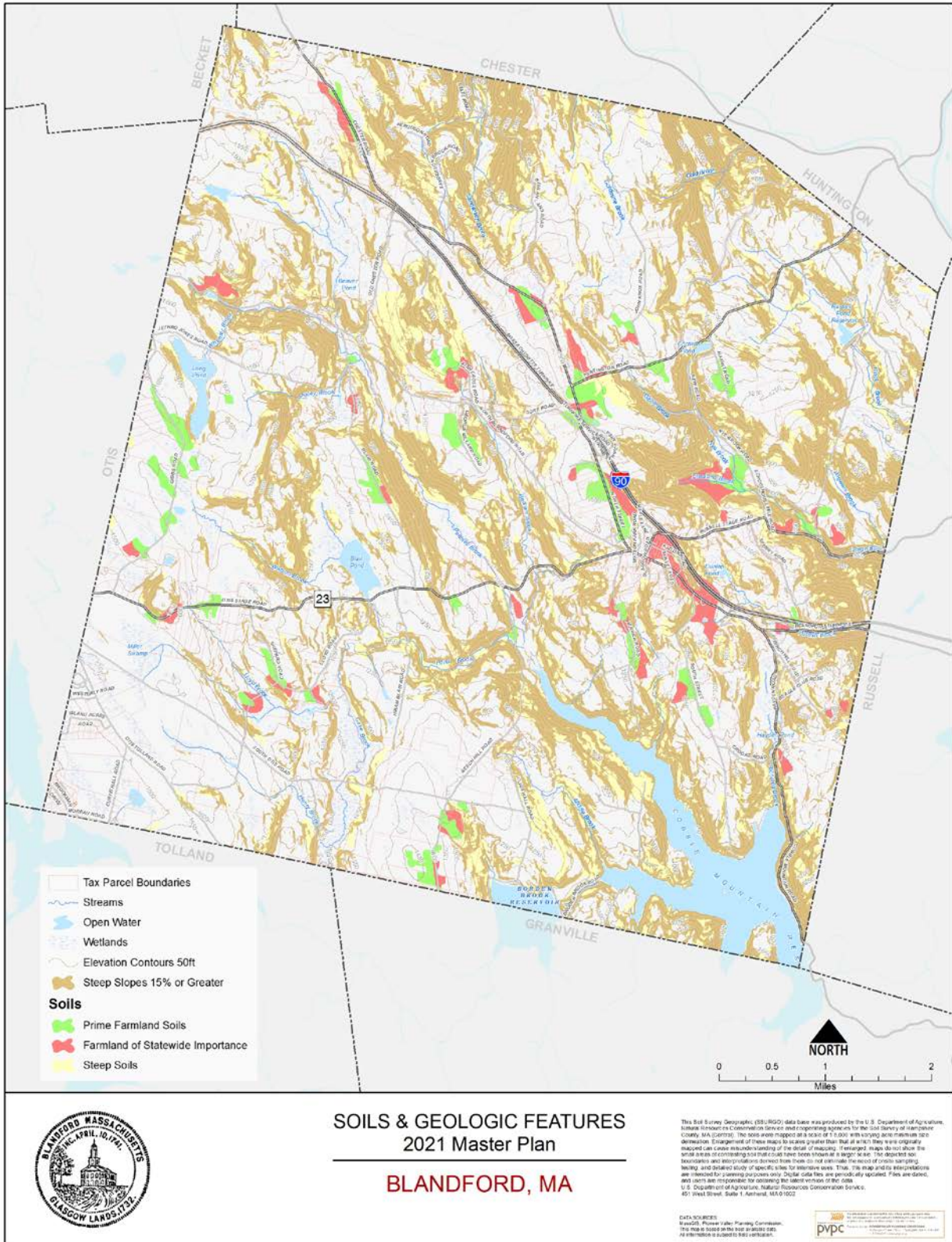
Agricultural Soils

In addition to supporting and constraining habitat and human development, soil characteristics also influence agricultural productivity. Natural Resource Conservation Service (NRCS) soil data contains a classification system for evaluating agricultural soil productivity. This system identifies soils as Prime farmland soils, Farmland of Statewide Importance and Farmland of Unique Importance. Prime Farmland is defined by the NRCS as "land that has the best combination of physical and chemical characteristics for economically producing sustained high yields of food, feed, forage, fiber, and oilseed crops, when treated and managed according to acceptable farming methods." Farmland of Unique Importance are defined as "land other than prime farmland or farmland of statewide importance that might be used for the production of specific high value food and fiber crops."

The soils that make up Blandford are Peru-Marlow, Lyman-Berkshire, Ridgebury-Muck-Whitman, and Merrimac-Sudbury.

Map 1 shows areas of prime farmland soils in Blandford. Areas of Prime Farmland Soils and Farmland Soils of Unique Importance are scattered throughout town. Also of note, are all the areas of Blandford that have steep soils in the steep slopes of 15 percent or greater.

Map 1 - Prime Farmland Soils



Wetland and Water Resources

Development in Blandford has historically been limited by wetlands, steep slopes, and forest. The town is intersected by many streams which flow into the Westfield River and down into the Connecticut River Valley. There are approximately 1,135 acres of wetlands in Blandford. Wetland habitats in town occur primarily along the streams and tributaries as well as in lands adjacent to the major ponds in Blandford. The wetlands, streams, rivers and lakes provide critical wildlife habitat and recreational opportunities. If open waters are included this accounting of lands to be protected, the total of wetlands in Blandford rises to 4,117 acres. Wetland habitats in town occur primarily along the streams and rivers as well as in lands adjacent to major ponds.

The Massachusetts Wetlands Protection Act (MGL 131, Section 40) protects wetlands, water sources, and adjoining land areas by preventing or minimizing impacts to these resources.

Anyone proposing to remove, fill, dredge, build upon, degrade, discharge into, or otherwise alter resources or areas within the areas listed below must submit an application to the Conservation Commission for review:

- 200 feet of any perennial stream or river
- 100 feet from any freshwater wetland, wet meadow, marsh, vernal pool, reservoir, pond of any size, or lands subject to flooding or inundation by ground or surface water
- 100-year floodplains

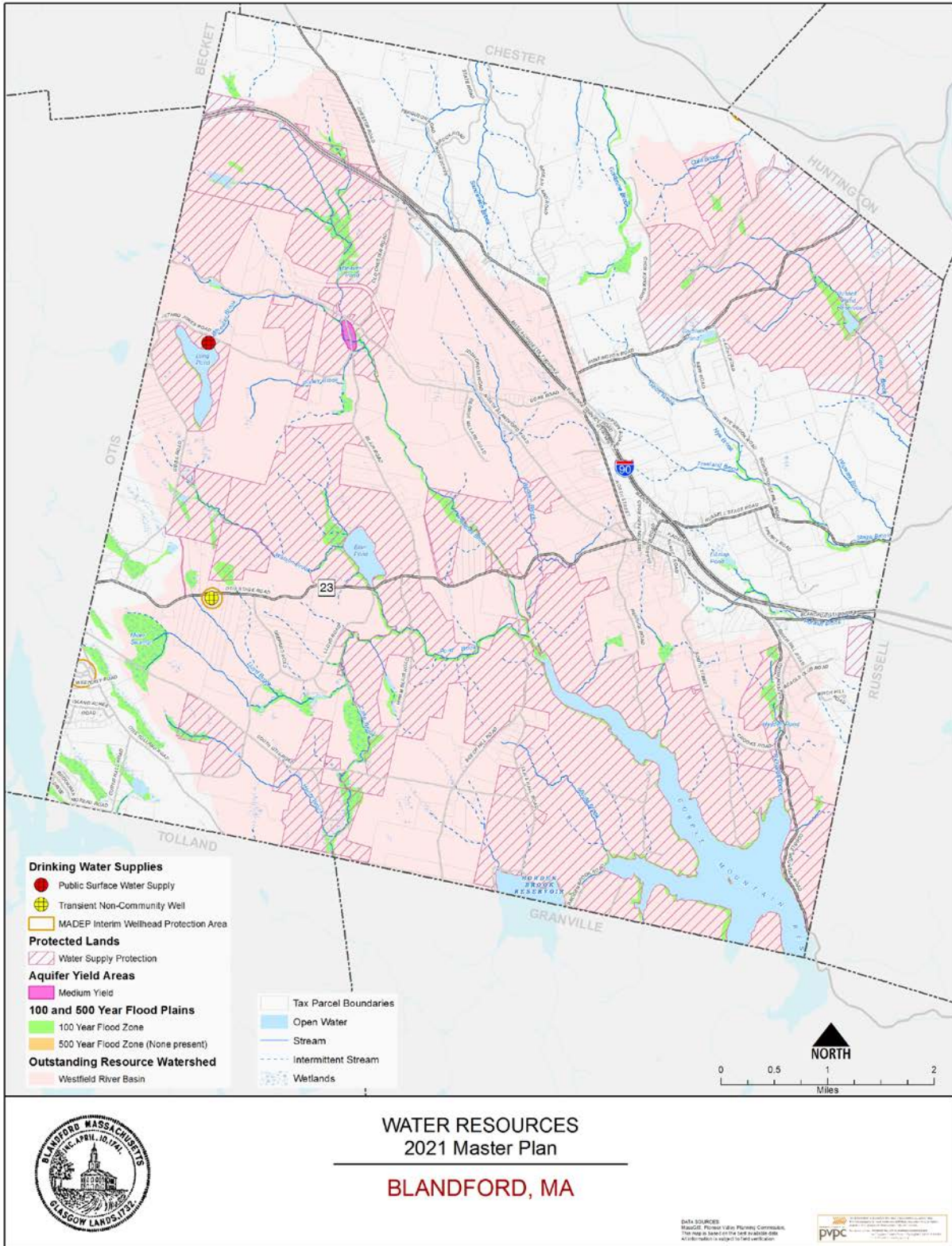
The Wetlands Protection Act does not permit development or disturbance within 25 feet of any of the above resources. Isolated wetlands that have not been delineated by the State are not protected unless they are certified vernal pools.

Flood plains and flood hazard areas are designated areas next to rivers, streams and lakes that are likely to flood during large storms. These areas should be left undeveloped so as to prevent damage to structures and other properties. Some flood plains are productive agricultural land, having accumulated sediment during flood conditions. This is demonstrated by some parts of towns where there is land in the flood zone area and also is designated as Farmland Soil of Unique Importance.

Over 61% of respondents to the Master Plan Community Survey agreed or strongly agreed that the town should prioritize energy efficiency, reducing emissions, and responding to the impacts of climate change. This could mean building further from waterways, limiting development in certain areas, using Low Impact Development (LID) to allow natural filtration of stormwater, and planning for natural disasters.



Map 2 Water Resources



Critical Habitat Areas

The State's Natural Heritage and Endangered Species Program (NHESP) is responsible for the conservation and protection of rare and endangered plant and wildlife species and the natural communities that make up their habitats. Map 3 shows areas in Blandford that are part of this inventory, as well as locations of certified vernal pools that are protected through the Wetlands Act, and locations of potential vernal pools that have not yet been verified. If a potential vernal is checked and meets the criteria (<https://www.mass.gov/service-details/vernal-pool-certification>), it can be certified in accordance with the Wetlands Protection Act. There are priority habitat areas along Peebles Brook and north of Wigwam Brook.

There have been seven species that are considered endangered, threatened, or of special concern identified in Blandford: Wood Turtle, Upland Sandpiper, Northern Harrier, Sedge Wren, Andrews' Bottle Gentian, Great Laurel, and the Slender Blue-Eye Grass. There is Blue Spotted Salamander observed near North Blandford Road near the brook.

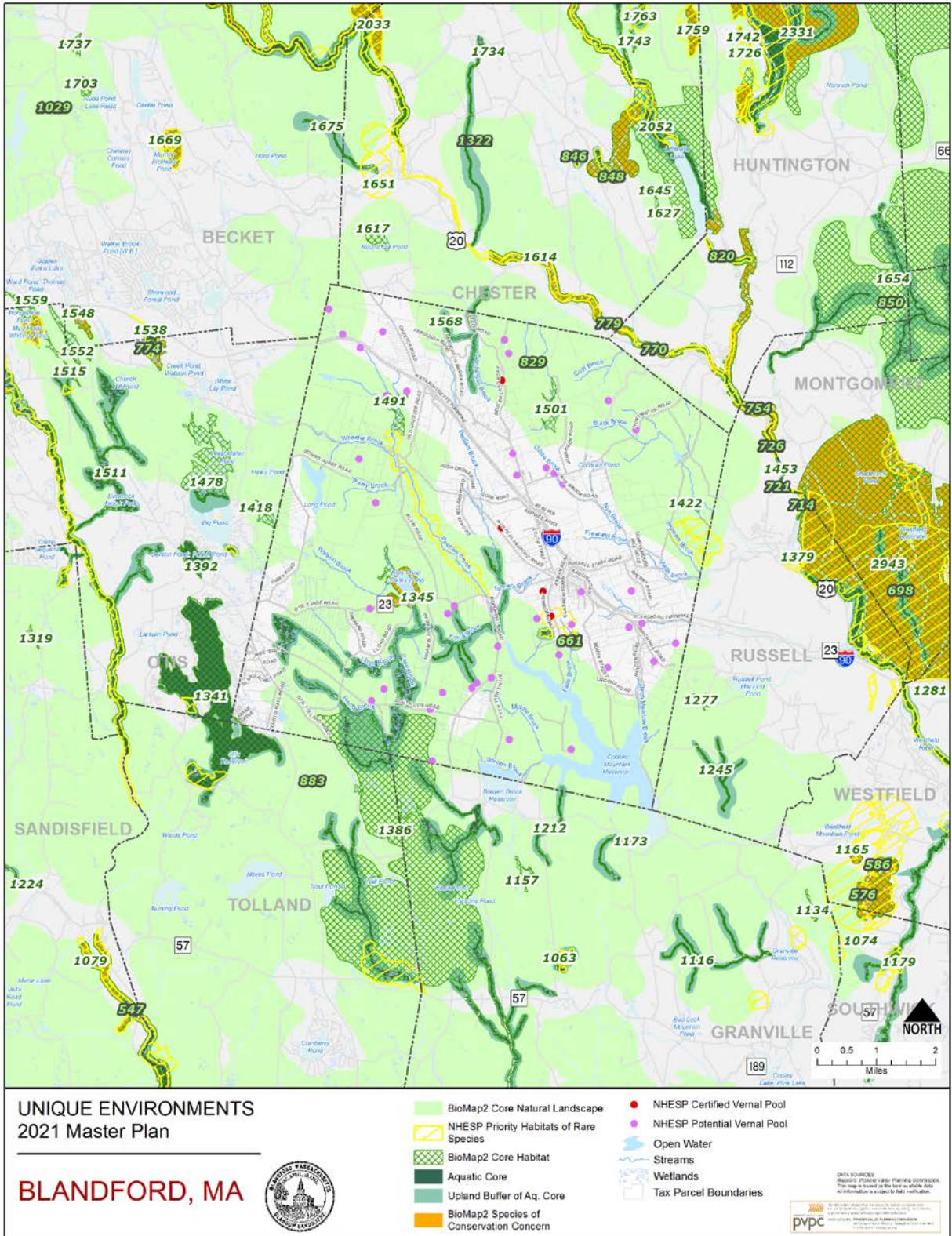
The NHESP has mapped Core Habitat and Critical Natural Landscapes throughout the Commonwealth that are significant for conserving biological diversity through the BioMap2, which classifies landscapes as Core Habitat (CH) or Critical Natural Landscape (CNL) as seen in Map 3.

Blandford contains 1,650 acres of core habitats (CH), which are located primarily along the riparian edges of the brooks and wetlands south of Route 23 and west of Cobble Mountain Reservoir, including Bedlam Brook, Pond Brook, Case Brook, Lloyd Brook, Henry Brook, and Miller Pond; a large forest core extends south from Henry Brook out of Blandford and along the boundary between Granville and Tolland. To the north, the land immediately around Blair Pond, Beaver Pond, Sanderson Brook, and Goldmine Brook are also considered CH. These landscapes, taken on the whole, provide vital habitat for species such as the Bridle Shiner, a small minnow and Species of Concern found in the clear water of still streams, rivers, lakes, and ponds; the Little Bluet, a very small damselfly which inhabits ponds and sparse aquatic vegetation and sandy substrate; and the Endangered American Bittern, a heron-like bird which nests primarily in large cattail, tussock, or shrub marshes, and is very sensitive to disturbance (BioMap2, 2012).

Furthermore, Blandford boasts a sizeable 23,584 acres of Critical Natural Landscapes (CNL), comprising pieces of two of the State's 20 largest CNLs, which are bisected by the Interstate 90 (Mass Pike) corridor and Blandford's Town Center. Landscape Blocks, the primary component of Critical Natural Landscapes, are large areas of intact and predominantly natural vegetation, consisting of contiguous forests, wetlands, river, lakes, and ponds...pastures and power line rights-of-way, which are less intensively altered than most developed areas, are also included since they provide habitat and connectivity for many species," (BioMap2, 2012). These large, forested landscapes provide invaluable wildlife habitat and a host of other ecosystem values, including clean drinking water, carbon sequestration, and more



Map 3 Natural Heritage Inventory



Open Space

A portion of the town of Blandford is protected from future development. There are a total of approximately 15,290.71 acres of land, or 44.67 percent of the town is afforded some level of protection. All of those lands of the town considered permanently protected from future development, minus 2.09 acres which is the North Blandford Cemetery, which is considered temporary/limited, per state statute. Most of the lands that are permanently protected are part of the Cobble Mountain Reservoir Land, owned by the City of Springfield Water Department, or approximately 25.3 percent of the town. Figure 6-4 shows the breakdown of open space ownership in Blandford. Open space landowners with the largest land holdings are shown in Figure 6-5.

Figure 6-4 Open Space Ownership in Blandford

Ownership	Acres	Percent of Open Space
State Owned	2,958	14%
Springfield Water and Sewer	10,270	48%
Owned by Town of Blandford	1,014	4.5%
Owned by Town of Russell	2,952	14%
Non-Profit Organizations	127	0.5%
Private	4,169	19%
Totals	21,484	100.00%

Figure 6-5 Significant Open Space and Recreational Land in Blandford

Name	Acres	Owner
Cobble Mountain Reservoir	8,692.45	City of Springfield Water Dept.
Russell Water Supply Land	2,768.47	Town of Russell
Chester-Blandford State Forest	1,637.56	MA Dept. of Conservation & Recreation
Tolland State Forest	731.46	MA Dept. of Conservation & Recreation
Long Pond Conservation Area	300.30	Town of Blandford Conservation Commission
Stage Brook WMA	148.32	MA Department of Fish & Game

Cobble Mountain Reservoir

Cobble Mountain Reservoir, the lands and waters that provide the supply drinking water to the City of Springfield, provides limited access to the residents of the Town of Blandford. Comprising of at least a quarter of the total land in Blandford, the town continues to seek important cross-town access and enjoy recreational opportunities that were once afforded prior to September 11, 2001. In order to access the southwest corner of town, referred to as “Land’s End,” one has to drive through the Town of Otis to get to this corner of Blandford.

Chester-Blandford State Forest and Tolland State Forest

Chester-Blandford State Forest is a scenic forest of deep woods, with moderate to steep slopes, and rough, stony landscapes. The forest offers stream fishing, hiking, horseback riding, hunting, and



State Forest woodland management. Destinations for visitors include views of streams and waterfalls, a mica mine, and a gold mine.

The Tolland State Forest, located in Otis on the border of Blandford, consists of approximately 730 acres of woodland and hardwood swamp land within Blandford. South Otis Road and Otis Tolland Road provide access to the forest, which offers hiking, horseback riding and hunting opportunities.

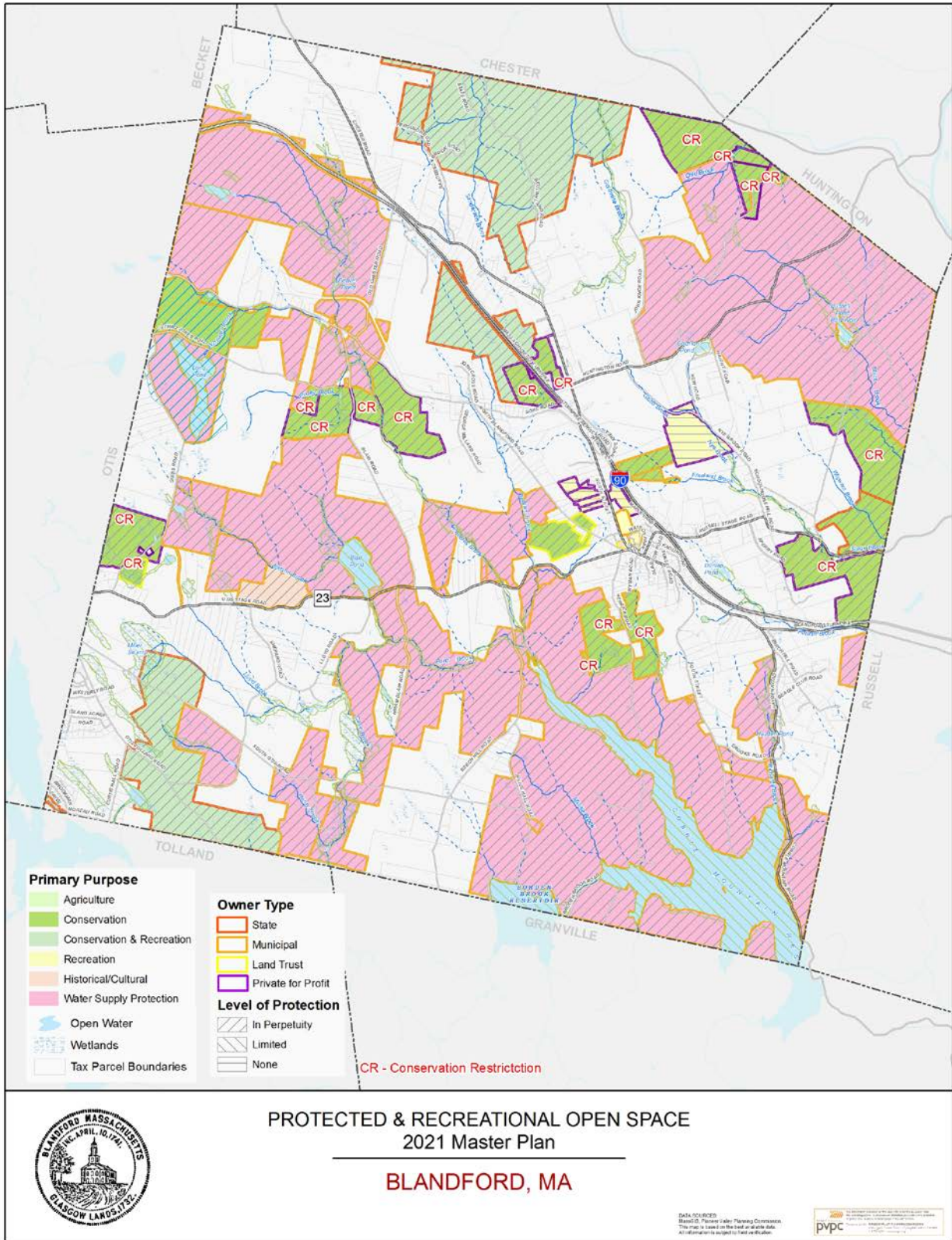
Long Pond Conservation Area

In 1985, the Town of Blandford purchased 234 acres surrounding Long Pond Reservoir to protect drinking water. A beaver pond along the edge of North Blandford Road attracts an abundance of wildlife. In the past, the Boy Scouts have worked on trails around the beaver pond and have added wood duck boxes to this area. This parcel was purchased with assistance from a Self-Help Grant; therefore, the public is encouraged to use the area for passive recreation such as hiking, ice skating, snowshoeing, cross-country skiing, birdwatching, photography, etc. In 1999, an additional 69 acres was purchased by the Town to continue efforts to protect the watershed and filtration plant.

As is the case with Cobble Mountain Reservoir, a stated priority action in the Summary of Finding of Blandford's Community Resilience Building workshop, was to engage and coordinate planning efforts with Springfield Water and Sewer Commission around Cobble Mountain Reservoir and Long Pond Reservoir watershed lands and continue to collaborate and build trust.



Map 4 – Protected & Recreational Open Space



Lands in Current Use

The Protected Recreational and Open Space (Map 4) shows private landowner parcels that have been enrolled in the Massachusetts Current Use program. Also known as Chapter 61 lands, they are taxed according to their use. Chapter 61 lands are managed for harvesting of wood, Chapter 61A lands for agriculture, and Chapter 61B for recreational use. Most of the land that is managed for recreational purposes allows access to trails and ponds. Several of the forest land parcels are located next to the Chester-Blandford State Forest, extending areas of forest land and wildlife corridors, owned by Hull Forestlands, LP. The town has identified that understanding the Chapter lands near the state forests and their operations could be helpful to assist with overseeing forestry practices.

Recreational Resources

In addition to the network of trails in Chester-Blandford State Forest, there are opportunities throughout town for recreation both on public and private property.

Blandford Walks

Identified through the community undergoing multiple processes at the time of writing this Master Plan, included an effort to provide for a walking map for those living and visiting town, drawing attention to various amenities the town provides. *Blandford Walks* was as an effort by the town to engage with Highlands Footpath, Healthy Hampshire, and the Hilltown Community Health Center, which identified a map and route descriptions for various levels of skill to traverse places in Blandford.

Watson Memorial Park

Watson Park is located north of Blandford Center on Blandford Road. The park has a gazebo, several picnic facilities, great views of the Connecticut and Westfield River Valleys, and roads suitable for jogging and hiking. The park is adjacent to recreational opportunities like a playground with several swings, two slides, jungle gyms; a little league ball field; several picnic tables with BBQ grills; a tennis court; extensive and well-maintained, rolling open lawn area; a single-lane, 5mph loop road with some mature Rhododendrons, other shrubs, and large shade trees; and a small gazebo. There are also two historic barns on the property. In the past, parts of the park have been purposefully flooded in the winter to accommodate ice skating. There are no curb issues and good access to all areas.

Veterans' Park at Town Common

At the corner of Route 23 and North Blandford Road, next to Highway Dept. Garage, Veteran's Park contains five commemorative stones honoring veterans of the Civil, Spanish, WW1, WWII, Vietnam, and Korean Wars, and seven flag poles. It is a memorial erected by the Commonwealth in 1927 to commemorate General Knox's march from Fort Ticonderoga to Boston to fight the British. General Knox came through Blandford during the winter of 1775-76 carrying canons and arms that were used to liberate Boston.



Blandford Fairgrounds

The fairgrounds have an annual exhibition event on Labor Day weekend, run by the Blandford Fair, a non-profit organization that was created by the Union Agricultural & Horticulture Society in 1867.

Blandford Ski Area

The country's oldest club-owned ski area, which sold in 2017 to Jeff Murdock of Ski Butternut. Blandford Ski Area had been in operation for eighty years, with 465 feet of vertical elevation gain, twenty-two trails, three chairlifts, one surface lift, two lodges, a terrain park, and a half pipe. The resort closed permanently in 2020 after failing to reopen in the 2019/2020 season due to equipment maintenance issues and the rising COVID-19 emergency, though it had been struggling financially since the Springfield Ski Club sold it in 2017. Just before closing, the new owner had made major renovations to the snowmaking system, chairlifts, and terrain park.

Blandford Country Club

The Blandford Country Club is a 9-hole course which features 2,722 yards of golf and tennis courts that are open to the public, for a fee, during the summer. It is a PGA-sanctioned. Members are offered discounts.

The majority of respondents to the Blandford Master Plan Community Survey (92%) responded that forest and wildlife was an important land use that they found important in town. However, 60 percent of the respondents were not in favor of a 1-3% surcharge on their property taxes to preserve open space, farmland, create affordable housing or preserve buildings and landscapes that would be required to adopt the Community Preservation Act (CPA), although it has not been determined whether or not residents are already burdened by property taxes or because they do not recognize the value of the CPA. The Community Preservation Act (CPA) is a municipal tool that helps communities preserve open space and historic sites, create affordable housing, and develop outdoor recreational facilities. CPA also helps strengthen the state and local economies by expanding housing opportunities and construction jobs for the Commonwealth's workforce, and by supporting the tourism industry through preservation of the Commonwealth's historic and natural resources. Over a decade of work went into the creation of the CPA; it was ultimately signed into law by Governor Paul Cellucci and Lieutenant Governor Jane Swift on September 14, 2000.

ISSUES AND OPPORTUNITIES

Although almost half of Blandford is permanently protected through ownership by various entities, like the state or Springfield Water, the land that is not conserved may be vulnerable to impacts from human use. In the Blandford Master Plan Community Survey, the top five land uses that are important to the quality of life in Blandford are forest and wildlife habitat, working farms/farm stands, water quality and water resources, open space for scenic value, and spaces for recreational use. This sentiment suggests that planning for the protection of natural resources and open space should be a priority for the Town.



Sustain high water quality

High-quality surface and groundwater are critical to all residents quality of life. Protecting lakes and streams and maintaining water quality and water resources was one of the issues ranked of highest importance in the Master Plan Community Survey. Additionally, approximately 250 homes are served by town water. The Town draws its water from one source, the Long Pond Reservoir. Water from the reservoir is processed at the Long Pond Water Filtration Facility, which has a maximum capacity of 250,000 gallons per day. Private wells provide water to some properties in town.

All properties have private septic systems, and attention to the type and proximity of development and wastewater systems is important. Failure of septic systems on these parcels could jeopardize drinking water wells and the quality of the water. To maintain and improve the quality of surface water in town, requiring buffer areas and updating regulations concerning development next to water bodies should be considered, along with stormwater management regulations.

Connect Wildlife and Trail Corridors

Trails and unmaintained roads are available for public use on public and some private lands throughout Blandford. A system of connected trails and corridors for wildlife habitat migration would add value to these resources. Continued maintenance of the town's Open Space and Recreation Plan would provide detailed information on the habitat and natural resource areas in town and would result in a plan for improvements or protections to these resources going forward. An update is running concurrent to this plan and is expected to be adopted and approved by the state in 2021.

Community Resilience

Protecting the natural resources in Blandford contributes to the Town's resiliency in a number of ways:

- Sustaining and improving water quality benefits the natural environment, wildlife, and residents who rely on safe, clean, and reliable drinking water and clean lakes for limited recreational activities.
- Minimizing disruption to natural ecosystems whenever possible helps to protect wildlife habitat, and promotes residents' wellness by increasing opportunities to experience nature. Undeveloped land can provide storage for floodwaters.
- Evaluating the potential impacts of climate change can help the Town better plan and adapt to changing climactic conditions and their effects on other natural and man-made systems. This evaluation and planning could lead to specific projects that Town may wish to undertake to adapt systems to future changes in conditions.
- Increasing awareness around best practices for reducing stormwater runoff and pollution will help to protect Water quality.
- Supporting viable wildlife and native plant populations helps maintain biodiversity. When protected land has covers variable terrain and contains multiple microclimates, it provides microhabitats which can help maintain species as the climate changes. Greenbelts and wildlife corridors facilitate migration.

