

# SECTION 7

## ANALYSIS OF NEEDS

This Open Space and Recreation Plan incorporates an inventory of natural, scenic, agricultural and recreational resources in Montague (Sections 3 and 4) and identifies the most important parcels of land that contain these resources (Section 5). Based on the community's general goals (Section 6) the plan compares the supply of land and resources with the demand for services related to those resources (Section 7).

This section summarizes the recreation and open space needs of residents, which are identified using the 2016 Open Space and Recreation Survey, data presented in Sections 3 and 4, and the Park and Open Space Equity assessment in Section 5. Finally, obstacles to effective fulfillment of these needs are addressed, including organizational barriers and the most significant land use conflicts concerning open space and natural resource use.

### **A. SUMMARY OF NATURAL RESOURCE PROTECTION NEEDS**

Montague residents value farms and forests, surface and groundwater resources, wildlife habitat, native plant communities, the Connecticut, Millers, and Sawmill Rivers, scenic views, and special publicly-owned conservation lands such as the Montague Plains. According to the 2016 Open Space and Recreation Survey, residents believe that the Town's highest natural resource protection priorities should include the following: 1) drinking water resources (69% of respondents); 2) productive farmland/ encouraging agriculture (59% of respondents); 3) land along rivers and streams (53% of respondents); and 4) land for wildlife habitat (53% of respondents).

Fortunately, these priorities are highly compatible. A significant amount of active farmland is located in or near the Connecticut River floodplain in southwestern Montague. Montague's forests help protect the quantity and quality of water in aquifers by providing water retention and by slowing the release of stormwater to streams to permit groundwater recharge. These priorities are also consistent with the Town's continued focus to protect prime farmland, riverfront areas, and contiguous forestland.

### A.1. Prime Farmland

Montague has implemented several important measures since the last OSRP to protect farmland in town. Montague re-activated the Agricultural Commission, adopted a Right-to-Farm bylaw, and maintains a Conservation Fund to help support Agricultural Preservation Restriction (APR) projects in town. The APR program offers to pay farmland owners the difference between the "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction, which restricts any use of the property that will have a negative impact on its agricultural viability.<sup>1</sup> The APR program also helps keep farmland affordable for the next generation of farmers, as the land must be sold for its agricultural value, rather than its development value.

Since the 2010 OSRP, approximately 161 acres of farmland in Montague have been permanently protected, adding to a total of roughly 1,388 acres of farmland in Montague permanently protected from development. This accounts for approximately 46% of farmland in town. Another 1,312 acres of farmland are enrolled in the Chapter 61A program, where the land is assessed at its agricultural value rather than its development value. While these lands are temporarily protected from development, they are still at risk for conversion to another use.

In particular, the Town has identified unprotected prime farmland along the Connecticut and Sawmill Rivers in the southwest section of town as a priority for protection. The easily developable soils and the relatively close commuting distance to Amherst make this area of town susceptible to residential development. The Town could establish a list of the parcels in this area currently under the Chapter 61 program, and work to take action if any were to become available for purchase through the Town's right of first refusal. The Town may also want to explore changing the zoning in this section of town to better support the protection of farmland.

In addition, the Mt. Grace Land Conservation Trust has identified a need to help smaller family-run farms with protecting their land. These farms may be too small for the APR program, but represent an important component of the regional farm and food system. A need also exists to assist farmers with farm transition and estate planning, which will ensure continued agricultural use of the land. Farms can also be "protected" by remaining economically viable. Local markets for farm products, including farmers markets, cafes and restaurants, and food

---

<sup>1</sup> Massachusetts Agricultural Preservation Restriction Program: <http://www.mass.gov/eea/agencies/agr/land-use/agricultural-preservation-restriction-program-apr.html>.

coops and grocery stores, help support farms while at the same time increase access to fresh food and contribute to the revitalization of the community.

## A.2. Riverfront Areas

Protecting land along rivers and streams provides multiple benefits. Riparian buffer areas help protect water quality by filtering and slowing stormwater runoff from adjacent land uses, and supports habitat for species that rely on cool water temperatures. Protecting floodplains allows a stream or river to flood without danger to property or infrastructure, and helps reduce flooding impacts downstream. Permanently protected land along rivers can also provide public access, depending on whether it is publically or privately owned, and the details of the restriction on the property. Improving and expanding river access in Montague is a priority for the Town, and was noted as a desire by many respondents to the 2016 Open Space and Recreation Survey.

While much of the land along the Connecticut River south of Montague City is permanently protected from development, almost all of the land along the river north of Montague City Road is owned by FirstLight Power Resources, and is subject to the utility's FERC license for operating hydropower facilities on the river. One of the Town's requests as part of the current FERC relicensing process is for an increase in water flows in the stretch of the Connecticut River that is bypassed by the power canal. Additional flow would better support migratory fish habitat, as well as recreational opportunities. The Town's priorities for river access and recreation are discussed in more detail in the Community Needs section below.

Evidence of extreme erosion in the "Turners Falls Pool" segment of the Connecticut River, which encompasses the length of the river from the Northfield Mountain Pumped Storage Facility to the Turners Falls Dam, prompted the creation of the Connecticut River Streambank Erosion Committee and the development of an Erosion Control Plan, completed in 1999. Since the Erosion Control Plan, FirstLight Power has been required to perform a regular inventory of riverbank conditions, which is published as the Full River Reconnaissance report. Working with the utility, the Connecticut River Streambank Erosion Committee uses this report to prioritize sites for repair. To date, approximately 19,000 linear feet of riverbank have been reconstructed and repaired. As part of the FERC relicensing process, the Franklin Regional Council of Governments and the Connecticut River Conservancy (formerly the Connecticut River Watershed Council) are pushing for modifications to how the hydropower facilities are operated to reduce erosion of the riverbank. The two organizations would like to see a comprehensive river management plan completed that would address erosion issues as well as habitat and recreation along the river. The Town should continue its involvement in the

regional Connecticut River Streambank Erosion Committee and collaborate in the development of a river management plan, if one is to be created.

Protecting land along the Millers River is a priority for the Town, as most of the river in Montague is not protected. Cabot Camp is a FirstLight Power Company property that the Town would like to see permanently protected. Located at the confluence of the Connecticut and Millers Rivers, this area has historic, scenic, and recreational value to residents. In addition to Cabot Camp, the Town is interested in protecting the oxbow on the Millers River located just west of Millers Falls. If protected, it is envisioned that public access to the site would be provided. The Town is also in the preliminary planning stages of creating a river access area in Millers Falls off of Newton Street that would include a boat ramp and fishing access to the river.

The Sawmill River provides an example of how a river may respond to alterations and encroachments on riparian areas. Development, road infrastructure, and agricultural activity in and around Montague Center, combined with past efforts to “fix” flooding problems through dredging and channelizing the river, have resulted in erosion, sedimentation, and continued flooding problems along the lower reaches of the river. Invasive species have also become a problem in recent years. In 2012 the Franklin Conservation District with support from the Montague Conservation Commission implemented an innovative restoration project that reconnected a portion of the river to its natural floodplain and implemented in-channel techniques which should reduce sediment transport and improve aquatic habitat, channel stability and floodplain sediment storage. The effectiveness of these techniques should be monitored to help inform future restoration projects on the river. In addition, protecting the riparian corridor and controlling development in the mostly forested upper reaches of the Sawmill River and its tributaries will help sustain fisheries, preserve wildlife habitat, improve water quality and prevent costly damage to public infrastructure and private property from flooding in the future.

### **A.3. Contiguous Forestland**

Montague is roughly 70% forested. Most of the permanently protected land in town is forested, and is either owned by the State or Montague Conservation Commission, is in private ownership, or is owned for water supply protection purposes. Large areas of contiguous forestland provide habitat for a wide variety of wildlife species, and offer opportunities for creating recreational trail networks, such as the Montague Plains or Dry Hill Conservation Area trails. Forests also protect the tributaries of the Town’s rivers, ponds, and lakes, provide clean air and drinking water, sequester carbon, and represent a significant scenic backdrop.

The Turners Falls Fire District owns and controls approximately 1,512 acres of land, roughly 8% of land in Montague. This watershed land provides a critical connection between protected forest east to the Quabbin Reservoir, and west across the Montague Plains to the Connecticut River. Depending on how these lands were acquired, some parcels may not be protected and could be sold. More research is needed to determine which parcels of Fire District land are permanently protected. An identified priority for additional protection is the forest land just east of Lake Pleasant and Green Pond, where the corridor of protected land is narrow and encompasses two railroad lines and Route 63. Broadening this area of protected land would help promote a more viable wildlife corridor and further protect the public drinking water supplies.

The Montague Plains is a unique forest ecosystem. According to the 2016 Survey, 52% of respondents use the Plains for recreational purposes. In addition to recreational value, the Plains provide extensive forest habitat, scenic views, and recharge for a large, high-yield aquifer. Illegal dumping degrades the value of all natural resources on the Plains, but is particularly problematic for groundwater quality. Dumped hazardous materials, including petroleum products and solvents, can contaminate groundwater. Erosion due to illegal use of ATVs on the Montague Plains has also been particularly severe. The Town needs to take a proactive role in helping the state Department of Fish and Game develop a management plan that addresses access and dumping issues on the Plains.

Engaging landowners in the stewardship of their forestland can help keep forests from being developed. Sustainable forest management can provide income to landowners while maintaining or improving the benefits those forests provide. Forest-based business activities like timber harvesting benefit landowners, foresters, loggers and buyers of wood products, as well as the Town, which receives tax revenues from timber sales. As forest landscapes become fragmented through residential development, however, commercial harvest of timber becomes more difficult. Access to remote parcels may be lost, and new residents who have moved to the area to appreciate the beauty of the forest may object to the use of chainsaws, skidders and other logging equipment. As timber harvesting becomes more difficult and less profitable, the incentive to sell land for development increases. The Town can collaborate with local land trusts, the MA Department of Conservation and Recreation, and MassWoods (UMass Amherst Extension Service) to provide information to forest landowners about the choices they have for managing and protecting their land.

Scenic views are also considered to be very important and their protection is included in the goals of this Open Space and Recreation Plan. Long-range scenic views in Montague include vast areas of forest in the eastern section of town in the vicinity of Quarry Hill and Dry Hill, and

of agricultural landscapes in southwestern Montague and off East Mineral Road. The quality of scenic views and Montague's rural character will likely be diminished if future development fragments these landscapes. (*See the Scenic Resources and Unique Environments map in Section 4*).

## **B. SUMMARY OF COMMUNITY'S NEEDS**

Planning for open space and recreation needs in Montague must satisfy the present population's desires for new facilities, spaces, and services, and interpret and act on the available data to prepare for the future needs of the citizenry. Although this Plan will be updated in seven years, the types of actions that are identified in Section 9 should take into account the needs of the next generation as well.

Presently, Montague's recreation needs fall into the following categories: 1) Maintain existing facilities and increase programs and the accessibility of these programs and facilities to all residents; 2) Develop an outdoor swimming area in town; 3) Improve river access; and 4) Develop bicycle and multi-purpose trails that connect villages, parks, and open spaces.

### **B.1. Maintain Existing Facilities and Increase Programming**

Many of Montague's existing parks and open spaces are well-utilized by residents. According to the 2016 Open Space and Recreation Survey, the Canalside Trail Bike Path, Unity Park, the Great Falls Discovery Center, and the Montague Plains Wildlife Management Area were all utilized by over 50% of survey respondents. Since the last Open Space and Recreation Plan, the Town has accomplished many improvements to parks and open spaces, such as the complete refurbishment of Unity Park and the creation of the Unity Skate Park. The Montague Parks and Recreation Department (MPRD) has completed a plan for improvements to Rutter's Park in Lake Pleasant, and applied for design funding through the Community Development Block Grant program in spring 2017. Planned improvements at the park include a new playground, picnic shelter, basketball court, community garden beds, and defined parking, as well as a large, open space and site amenities that include picnic tables and benches. The MPRD is also beginning a needs assessment for improvements to the Montague Center Park, and held a public meeting in spring 2017 to gather feedback from residents.

According to the 2016 Open Space and Recreation survey, 57% of respondents thought that maintaining existing recreational facilities should be the Town's highest recreation priority. Keeping existing recreational facilities in good shape makes sense, because it is less expensive to maintain infrastructure than it is to replace it. This is also consistent with feedback from the

2013 Turners Falls Livability Plan, which includes a summary of public feedback on open space and recreation in the village. According to the plan, many residents are happy with the existing parks, but feel there is a need to focus on more recreation programming and activities, especially for children. Thirty percent (30%) of respondents to the 2016 survey also felt that increasing recreational programming for children should be a high priority. Twenty seven percent (27%) of respondents felt that increasing programming for adults should be a high priority.

While maintaining existing facilities is important, feedback from youth during the Turners Falls Livability Plan revealed additional recreational needs, such as a desire for a teen club/coffee house and a YMCA-type recreation center. In addition, the need to create a safe outdoor swimming area continues to be a consistent message from residents.

## **B.2. Develop an Outdoor Swimming Area in Town**

Forty two percent (42%) of survey respondents identified developing an outdoor swimming facility in town as a top recreation priority. Developing a new outdoor swimming facility is likely to be difficult in the short term. There is no consensus on where such a facility should be located, and development and maintenance of a swimming area is likely to be expensive. This does not mean, however, that residents should give up on their desire for a safe outdoor public swimming area.

To try to meet this need, the Town provides swimming programs at the Turners Falls High School pool, and offers transportation to swimming areas in other towns during the summer months. A spray element was also added as part of the upgrades to Unity Park, and is very popular during the summer.

As a result of the survey feedback, the Montague Parks and Recreation Commission has formed a sub-committee to re-evaluate possible outdoor swimming opportunities in town. The Town may want to create a list of properties that could offer the potential for a public swimming area if one were to become available for purchase. According to the 2016 survey, if the Town had an outdoor swimming facility, 30% of respondents would be willing to pay \$50 or less a year for a family permit, 30% would pay between \$50 - \$99, 7% would pay between \$100 - \$149, and 3% would be willing to pay \$150 - \$200 a year.

### **B.3. Improve River Access**

Improving river access points was identified by 36% of respondents to the 2016 Open Space and Recreation survey as a top recreation priority. FirstLight Power Resources currently maintains a canoe launch at the end of Poplar Street in Montague City, a park and picnic area along the river in Turners Falls, and fishing access at Cabot Woods and Cabot Camp as part of the utility's Federal Energy Regulatory Commission (FERC) license to operate hydropower facilities on the river. Nevertheless, the company's control of a large amount of land along the Connecticut River in Montague constrains recreational opportunities for residents. The Poplar Street canoe launch has a very steep grade and limited parking, and is not accessible to older residents or people with disabilities. In addition, the Town would like to see the development of additional opportunities for non-motorized boating in appropriate areas along the Connecticut River in Montague.

Through the current FERC relicensing process, the Town has requested improved recreational access to the Connecticut River for residents. Specific improvements include: maintaining an acceptable minimum flow in the bypass reach of the Connecticut River for recreation, such as white water rafting, and to support fish habitat; and providing Montague residents with adequate, user friendly public access points to the Connecticut River for recreation, especially adding a put-in below the Turners Falls Dam, adding cartop boat access at Unity Park, providing foot access to the Rock Dam, implementing accessibility improvements to the Poplar Street boat launch, and adding cartop boat access at Cabot Camp.

These improvements would provide much needed recreational access to the Connecticut River. In addition, as noted previously, the Town is in the preliminary planning stages of creating a river access area in Millers Falls off of Newton Street that would include a boat ramp and fishing access to the Millers River.

### **B.4. Develop Bicycle and Multi-Purpose Trails**

It makes sense to locate parks and playgrounds near neighborhoods that have the highest densities. As the population of Montague continues to age, seniors may be looking for better access to green spaces and walking paths near village centers—hiking trails in remote areas of town do not meet the needs of all residents. Attention to linking parks to where people live and play could involve a greening of urban areas, improving livability for all residents. The Canalside Trail Bike Path in Turners Falls, completed in 2008, is a good example of a facility that provides a much needed recreational resource. Seventy four percent (74%) of respondents to

the 2016 Open Space and Recreation Planning Survey stated that they or their family use the path, making it the most heavily used outdoor recreation area in the Town.

Forty two percent (42%) of survey respondents identified developing walking trails as a top recreation priority. The Town has identified several areas where new trails could be developed within close proximity to residential neighborhoods. Town-owned land off of Turnpike Road is planned for a new industrial park and solar array. Trails could be developed within wooded areas around the perimeter of the site that will be preserved. The Town also would like to see the land surrounding the oxbow on the Millers River permanently protected with public access provided via trails.

Input from the 2013 Turners Falls Livability Plan also identified the need to improve existing pathways in the village, and to provide safer bicycle connections between villages and neighboring communities. Both off-road and on-road connections could be explored. Improving bicycling infrastructure throughout town would also further support bicycle tourism in Montague.

Trails traversing the Montague Plains, if formalized and marked, could connect the scenic farm landscapes of southwestern Montague to the breathtaking views from Dry Hill. Hiking and bicycle trails on the Plains could overlap and be tied to existing trails in the region and be used by both residents and tourists. Specifically, a need to connect the trails on the Plains to the Dry Hill Trail System on the eastern side of Route 63 was identified during the OSRP update process.

Montague has many existing trails, but does not have coordinated trail maps and information for residents and visitors. In addition, some areas of town do not have clearly marked trail heads. In particular, the southeastern corner of town, which encompasses a combination of the Montague State Forest and the Montague Wildlife Management Area, lacks clearly marked access points. Trailheads off of Ripley Road and West Chestnut Hill Road could be improved with signage, trail maps, and formal parking to encourage use of these outdoor recreational areas in Town.

Montague could facilitate the creation, maintenance, and promotion of trails in town by establishing a Trails Committee. The neighboring towns of Northfield, Leverett, and Sunderland each have committees working towards improving trail systems in their respective communities. These committees have been successful at applying for grants to create new trails, developing trail maps, and organizing trail events.

By providing safe access to the Town's major rivers as well as to some of the most scenic farm and forest landscapes in the region, Montague could provide for residents' recreational needs while at the same time establishing nature- and recreation- based economic development that could benefit farmers and create new economic opportunities for Bed and Breakfast facilities, stores, restaurants, and sporting equipment outfitters catering to visitors.

### **C. MANAGEMENT NEEDS**

Montague has a variety of management needs with respect to open space and recreation, some general and others very specific. The Turners Falls Airport completed an upgrade of various facilities and an extension to the runway. Portions of the airport site are culturally significant to Native Americans and environmentally sensitive. Any proposed reconstruction or future expansion of the runway will need to take these environmental and archaeological factors into consideration so that the project avoids impacting these areas. Public access for non-aviation purposes is not allowed and increased site security will be developed in accordance with FAA regulations. There is a public sitting area adjacent to the terminal which provides the opportunity for birding, picnicking, and plane watching.

Redevelopment of brownfields and former industrial sites continues to be a priority for the Town. Montague's Commercial Homesteading Program has been successful at encouraging investment in the rehabilitation of vacant or abandoned historic structures in Montague's village centers. In addition, the Town should also continue its work with the Franklin Regional Council of Governments and property owners to assess the extent of contamination at potential brownfield sites and promote industrial or commercial redevelopment of these areas.

The former industrial sites on the island between the power canal and Connecticut River are of prime concern for the Town. One major impediment to redeveloping these sites is access to the island, which is primarily controlled by FirstLight Power. As part of FirstLight Power's FERC relicensing process, the Town has requested that FirstLight provide public access to the Turners Falls Historic-Industrial Canal District by repairing and maintaining the Strathmore and IP bridges and Canal Access Road. Finally, the Town has plans to redevelop the former landfill and "burn dump" area off of Turnpike Road into a new industrial park and solar installation. The Town plans to cap the old "Burn Dump" as part of the redevelopment of the site. The Town currently monitors the leachate that runs off this site.

It is important to build consensus among local officials and community leaders on a vision for the future of land use, development and conservation in Montague. This process was advanced

by the 1999 Comprehensive Plan, the 2003 Open Space and Recreation Plan and subsequent OSRP updates, the 2013 Turners Falls Livability Plan, and the 2015 Montague Housing Plan, but more community discussion is needed to come to decisions about what parcels of land are critical to protect, and, just as important, how the Town should provide for housing, economic development and public services in the future. Without community consensus on what land should be protected and what land should be developed, decisions will continue to be made on a parcel-by-parcel basis, conflicts will emerge over the use of specific parcels of land, and the ability of the Town to protect its most important resources will be compromised.

In the past, land conservation efforts in Montague have largely been driven by landowners, citizen advocates, and state agencies. Specific parcels of land have been successfully targeted for protection. While the Town has supported these efforts, it has rarely taken a leadership role. To protect the land identified as important in this plan, the Town will need to be more aggressive in identifying land conservation opportunities, working with landowners, building community support for land acquisition, leading coalitions of residents, land conservation organizations and state agencies, and raising the funds needed to complete deals. Taking this leadership role will require increased cooperation between Town boards and commissions and special districts.

Because Montague has a Representative Town Meeting form of government, it is critical to educate elected Town Meeting members about the need for and benefits of land and resource conservation. Town Meeting endorsement of this Open Space and Recreation Plan would be an important policy statement. The Open Space and Recreation Planning Committee recommend that this plan be brought to a Special Town Meeting for Town Meeting endorsement. The goals and objectives of this plan will also be advanced by endorsement from the Board of Selectmen, Conservation Commission, Agricultural Commission, Parks and Recreation Commission, and Planning Board. Letters of endorsement from these groups are included in Section 10: Public Comment.

Primary leadership for implementation of this Plan could be delegated to a new Open Space Committee. Since the last OSRP, the Agricultural Commission was re-activated to address the specific needs of agricultural operations. The Conservation Commission has the ability to purchase land for conservation and manages all Town-owned conservation land, while also weighing in on other issues such as Agricultural Preservation Restrictions. The Planning Board can facilitate land and resource conservation through revision of the Zoning Bylaws and Subdivision Regulations, both to promote conservation of land with important natural resources, and to facilitate residential, commercial and industrial development in appropriate areas. It is important that these land use policies be clearly communicated to the Board of

Appeals, which enforces them. The Parks and Recreation Commission clearly has a major role to play in guiding development of recreational programs and facilities. Because decisions about taxation can determine the future use and disposition of land, the Town should work with the Board of Assessors to implement policies that promote farming, forestry and conservation of ecologically important land and resources. Finally, the Town needs to work closely with the Commissioners of the Turners Falls and Montague Center water districts to ensure protection of drinking water resources.

Increasing Town involvement in land and resource conservation will in itself require new resources and policies. Planning for conservation and the ability to educate residents about the need for land and resource protection would be greatly enhanced by a Geographic Information System (GIS). The Town currently has the latest GIS software and is working on connecting assessor data to parcel level data. Ongoing development of GIS capability should be a priority for the Town. **[update]**

Montague should work with the Conservation Commission, Planning Board, land trusts, and the State to identify the conservation value of Town-owned land, and decide how to protect lands of significant value. Land could be held by the Conservation Commission, or offered to a land trust or the State for permanent protection. If the Town decides to hold land for conservation, it needs guidelines outlining how the land will be used and maintained. Site-specific management plans should be developed for all Town-owned conservation land that address issues such as permitted uses, hours of public access, parking, signage, and a maintenance schedule.

Montague residents also need to think about future leadership for land and resource conservation. Environmental education in the schools, with an emphasis on local ecology, can help ensure that young residents of town develop an appreciation of the importance of the Town's natural resources as well as the information and skills needed to protect them.

Finally, efforts to protect Montague's natural resources should not stop at the town line. Town officials should continue to work with leaders and residents of abutting towns and the Franklin Regional Council of Governments to protect resources that span several communities. This is particularly important for aquifer protection, as part of the recharge area for the Turners Falls wells is located in the Town of Sunderland. Montague should continue to participate in regional natural resource-based planning and economic development efforts, such as the Connecticut River Scenic Farm Byway, the Franklin County Bikeway and planning efforts in the Connecticut and Millers River watersheds.