

7 ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs

Many of the town's existing natural resources are under threat from various sources. The entire town is under intense development pressure, especially large tracts of unprotected farmland. The sixty-eight acre Lake Warner is a significant habitat and recreation area, however, it is gradually being taken over by non-native species and eutrophication as a result of increasing water temperatures and phosphorous pollution.

A strategy for prioritizing and protecting these remaining important natural resources is highly supported by the citizens of Hadley as indicated by the 2013 community survey. However, the town does not have the financial resources to protect much of this undeveloped land. A comprehensive prioritization of existing open space, based on sound ecological principles, agricultural sustainability, and the values and priorities of the people should be a key strategy as the town moves forward with protecting these remaining resources.

Hadley's natural resources provide opportunities for passive recreation and nature study as well as protect water quality and floodwater storage. Active farmland is a vital part of the local economy, providing a good quality of life for many of Hadley's residents. Protecting natural resources and farmland were the top two goals identified in the 2013 community survey.

Rivers, Ponds and Watersheds

Hadley lies in the Connecticut River (a Federal National Heritage River) watershed and has nearly fifteen miles of river frontage. The Mill and Fort Rivers are two tributaries of the Connecticut within town. The Fort River lies to the southwest and is fed by numerous streams with headwaters in the Mount Holyoke Range. The Fort River provides important wildlife habitat, floodwater storage (nearly the entire length lies within the Flood Overlay district), and helps protect water quality (it is within the recharge area for the backup well field). Russellville Brook, a lesser tributary of the Connecticut River, has been identified by the Department of Environmental Management as the largest and most significant natural community found in Hadley along the Connecticut River. Lake Warner and the Hadley Reservoir are Hadley's major non-riverine waterbodies. Water rights and the dam to the popular sixty-eight acre Lake Warner belong to the Kestrel Land Trust, formerly Valley Land Fund, a private land trust operating in Hampden, Hampshire, and Franklin counties. In 2013 the Town voted to support protection and restoration of the dam, working in collaboration with Kestrel. Although finding solutions to prevent dam failure are important, addressing the source of sediment, bacteria and nutrient loading to Lake Warner are critical to its long term viability. Continued infilling of the lake will eventually lead to its succession as a wet meadow, no longer deep enough for small water craft.

Wetlands

Hadley has a range of wetland resources, including floodplain forests, forested swamp and wet meadows. Much of the wetlands lie in heavily forested areas along the Connecticut River and its tributaries. Wet meadows are more common along the Fort River near Hockanum Flat and Hadley Cove. Many wetlands and wooded swamps in Hadley were drained for agricultural use as Hadley once had many more wetland areas, specifically around Lake Warner, the Fort and Mill Rivers, along the Connecticut River riparian corridor and behind Campus Plaza. The remaining wetlands are a critical element in the habitat and storm water management systems of the town.

Continued collaboration with state, federal and nonprofit land trust to protect these resources should continue.

Rare and Endangered Species and Habitats

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) provides an inventory of rare and endangered species and their habitats throughout the Commonwealth. This program seeks to identify the habitat of plant and wildlife species that are becoming increasingly rare and are in danger of extinction. NHESP designated a number of Hadley areas as important wildlife habitats, including a 400-1,000 foot corridor along the Connecticut River, the Mill River Corridor, and the section between Route 116 and University of Massachusetts' Mullins Center as Estimated Habitat of Rare Wildlife, and Hadley Cove, Hockanum Flat and Great Swamp as High Priority Sites of Rare Species.

Farmland Protection

Hadley has some of the most fertile agricultural soils in the U.S. Most areas north of Route 9 are prime agricultural soil, often up to twelve feet deep. In particular, the Hadley-Winooski-Limerick soils, a deep, silty mixture found in Hadley Center, are prime agricultural soils for their low acidic value and high water capacity. Although still considered prime agricultural lands, the Hinckley-Merrimac-Windsor soils found at locations along Route 47 are not quite as productive as the previous soil association. The primary soil group in Hadley is the Amostown-Scitico-Boxford association which stretches from the base of the Holyoke Range into North Hadley. Continued use of Agriculture Preservation Restrictions, as mentioned under Goal 1, will help protect these rich agricultural soils.

Groundwater Resources

Groundwater resources in Hadley provide base flow for the streams and rivers in the town and provide potable water for the town's residences and businesses. The town water supply is drawn from groundwater wells and wellhead protection areas. Most Hadley residents are on the town water supply, although some farmers use private wells for irrigation and related purposes. The protection of the groundwater supply and quality are very important to Hadley residents.

B. Summary of Community Needs

Hadley has many recreational programs for a town its size. Activities include volleyball for adults, basketball for youths and adults, yoga classes, tae kwon do, and even sewing classes. Playing fields are available at the local schools, which are used for many of the youth programs coordinated by the town's Park and Recreation Commission. In addition, the Park and Recreation Commission sponsors special annual events, including a tomato growing contest, Easter egg hunt, and Halloween party.

New facilities have been built or upgraded in recent years, including a community ice skating rink on the North Hadley baseball field, with floodlights for night skating. The need for newer and accessible baseball fields was fulfilled by using interest money from the George Edwards Trust to redesign the fields behind the elementary school.

The town's recreational programs are listed on local community access cable television, a monthly newsletter, on the Hadley website, and on flyers distributed at town hall and elsewhere.

The community survey identified the Connecticut River, the Mount Holyoke Range, and the Hadley dike as the most used places for recreation in Hadley. There are publicly owned parcels in town that have recreation potential, such as beaches and riverfronts, but do not have any public access. Often, these parcels are separated from any road by private land. Other water resource areas have limited access. The only public access to Lake Warner is at a small heavily-used public boat ramp. The water department land at the Lower Reservoir is just starting to be developed for residents. Two marinas along the Connecticut River offer boating access for a fee; however, the nearest free river access is across the river in Northampton at the Elwell State Park.

According to the Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP), there is an especially strong demand for bikeways in the Connecticut Valley region (EOEA, 2000). Hadley is fortunate to have a large section of the Norwottuck Rail Trail, which is owned and managed by the state Department of Conservation and Recreation and currently under renovation. The nearby Hadley Dike is used by walkers, picnickers and artists. The dike needs better protection as a public asset, for both recreation and flood prevention.

C. Management Needs, Potential Change of Use

As recommended in the original Open Space and Recreation Plan, the Hadley Conservation Commission now has part-time help, funded by the wetland filing fees submitted by applicants for permits to do work controlled by the state Wetlands Protection Act. She serves as clerk for the Conservation Commission and provides much needed support but on a very limited basis because of the funding source. This funding cannot be used for open space and land conservation work for instance. The Conservation Commission is still a volunteer board, and limited time and resources are increasingly an issue. The Commission has had a budget of \$3,000 in recent fiscal years, but has an estimated need of staff for two days a week. About three-quarters of this time would be devoted to wetlands permit issues, including enforcement and the certification of vernal pools; the balance would service the acquisition and monitoring of Agricultural Preservation Restrictions and Conservation Restrictions.

The Park and Recreation Department has more resources, but still needs to pursue additional sources of funds to fulfill all of their goals. The Program Coordinator is only part-time, and the Commission is volunteer, so it is hard to keep up the high level of services they provide. The Community Preservation Act may assist in funding recreational area site improvements since the funds are primarily directed towards non-administrative purposes.

Since much of the open space preservation in Hadley is carried out by state or federal agencies, volunteers and non-profit land trust organizations, it is essential that these groups communicate well and often with the Hadley Conservation Commission. To facilitate the keeping of accurate records, it would be helpful if each of the groups active in Hadley sent copies of its finalized paperwork for new purchases or easements to the Conservation Commission and each other. This will help the open space inventory remain up to date between revisions of the Open Space and Recreation Plan. The proposed part-time coordinator position for this task cannot be funded from the wetlands-related filing fees; the money must come from some other source.

As recommended in the original Open Space Plan, a representative "all boards" meeting would be very helpful in coordinating action among the various municipal departments in Hadley. In this setting, town boards can identify common goals, set town-wide priorities, and pursue projects

with the assistance of other boards. This type of gathering could ensure town ordinances consistent with each board's work.