

WHATELY OPEN SPACE AND RECREATION PLAN

2021 – 2028



Prepared by the Whately Open Space Committee
with assistance from the
Franklin Regional Council of Governments

This project was funded by Town of Whately Community Preservation Act funding and the Mass Division of Conservation Services, Conservation Assistance for Small Communities Grant Program



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December 17, 2021

Tamsin Flanders
Franklin Regional Council of Governments
12 Olive Street, Suite 2
Greenfield, MA 01301

Re: Open Space and Recreation Plan

Dear Ms. Flanders:

Thank you for submitting the Open Space and Recreation Plan for Whately to this office for review and compliance with the current Open Space and Recreation Plan Requirements. I'm pleased to write that the plan has received final approval and the town is eligible to apply for DCS grants through November 2028. Please contact me at melissa.cryan@mass.gov if you have any questions or concerns.

Sincerely,

Melissa Cryan

Melissa Cryan
Grant Programs Supervisor

TOWN OF WHATELY

OPEN SPACE AND RECREATION PLAN

2021 – 2028

Prepared by the Whately Open Space Committee (OSC):

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SECTION 1

PLAN SUMMARY

The Whately Open Space and Recreation Plan (OSRP) coalesces the interest, effort, and motivation of community members to identify, prioritize, improve, and protect Whately's natural, recreational, and cultural resources. The purpose of the OSRP is to provide a framework for land use decisions and community planning efforts that may impact valuable natural resources and the lands that contain unique natural, agricultural, recreational, historic, and scenic values.

The 2021 Whately Open Space and Recreation Plan reflects the high regard Whately residents have for the forests, streams, wetlands, agricultural fields, scenic views, and significant historic and cultural resources that make the town unique. The OSRP illustrates the role that all undeveloped open spaces have in providing livelihoods, clean water, recreational resources, wildlife habitat, and climate mitigation and adaptation. It demonstrates how land use regulations and decisions that maximize open space and natural resource protect and appropriate economic development strategies can help maintain the characteristics of the town that its residents cherish.

The Seven-Year Action Plan gives concrete substance to the goals and objectives, which were developed from the results of the 2021 Open Space and Recreation Plan survey and from community members' understanding of their natural, recreational, scenic, and cultural resource base. The 2021 Whately Open Space and Recreation Plan prioritizes actions that will help ensure that the Town of Whately meets the following goals:

- Ensure that Whately protects farmland, forestland, scenic views, and other open space vital to sustaining the town's historic rural character and maintaining the quality of air, water, and wildlife habitats.
- Ensure that Whately maintains and improves the variety, quality, and accessibility of recreational facilities important in the twenty-first century for health and well-being of all residents, and promote the use of these facilities and any organized programming thereof.
- Coordinate effectively among Town boards, committees, community organizations, and volunteers, and with neighboring Towns, to achieve local and regional open space goals and keep the public well informed of goals, progress, and opportunities.

SECTION 2

INTRODUCTION

A. STATEMENT OF PURPOSE

The purpose of this plan is to provide an accurate and thorough basis for decision-making involving the current and future open space and recreation needs of the residents of Whately. This plan brings together and builds upon the planning efforts of the past several decades, and includes the 2006 Open Space and Recreation Plan (OSRP), the 2011 Land Use update of the Master Plan, the 2018 Complete Streets Prioritization Plan, the 2020 Hazard Mitigation Plan, the 2021 Municipal Vulnerability Preparedness community workshops and plan, and the 2021 Open Space and Recreation Plan survey.

While this 2021 OSRP is largely based on the 2006 OSRP, it has been revised and updated to reflect current thinking and consensus in town on the most important recreation and natural resource needs and the best solutions for addressing them. The collective knowledge of the Open Space Committee (the Committee) members and other Whately residents about the town's flora, fauna, forests and cultural and historical resources has produced an updated OSRP that embodies the Town's commitment to protecting and enhancing its recreational, scenic, cultural, historical and natural resources, while encouraging appropriate economic activity. The detailed Seven-Year Action Plan provides a step-by-step guide that, when carried out by the Committee and other town boards and commissions, will successfully implement the Town's open space and recreation goals and objectives.

B. PLANNING PROCESS AND PUBLIC PARTICIPATION

The process to update the 2006 Whately Open Space and Recreation Plan officially began with the first public meeting on November 17, 2020. Over the following seven months, the Committee met eleven times to review sections of the plan, maps, and to develop a public survey with staff from the Franklin Regional Council of Governments. The agendas and sign-ins for each of these meetings are included as *Appendix C*. Before each meeting, members were sent drafts of sections to read. This form of work review was a consistent vehicle for public participation in the development of the Open Space and Recreation Plan. Committee members represented different town boards, commissions and other groups, including:

- Select Board
- Recreation Commission
- Community Preservation Committee

- Historical Commission
- Energy Committee
- Conservation Commission
- Tri-Town Beach Commission
- Interested residents

A survey was sent to Whately residents and the results were used to develop Sections 6 – 9 of this Plan. The survey was mailed to 728 Whately households as an insert in the town newsletter—The Scoop—and posted on the Town’s website. The rate of return was 11 percent (82 surveys). Because Whately does not have any Environmental Justice populations or a significant population of non-English speaking residents the survey and outreach materials were not translated and enhanced outreach was not conducted. The survey and a summary of the survey results are included as *Appendix B*.

The Open Space and Recreation Plan Public Forum was held virtually on May 4, 2021. Six residents attended in addition to the Open Space Committee members present. The public forum was publicized on the Town website, via the town paper newsletter, the Greenfield Recorder, the Hampshire Gazette, and Open Space Committee members disseminated an announcement through their networks via email. Draft copies of the 2021 Whately Open Space and Recreation Plan and maps were provided via the Town website from May 4th to May 18th. A copy of the flyer advertising the Public Forum and the sign-in sheet and PowerPoint presentation given at the forum are included as *Appendix C*. Draft copies of the plan, maps and Seven Year Action Plan remained posted on the Town’s site through May 19, 2021 for public comment. Comments expressed at the public forum were recorded and included in *Section 10: Public Comments*. After review and discussion by the Open Space Plan Committee, all ideas, comments, and corrections received during the public forum and comment period pertaining to the different sections of the plan, maps and the action steps have also been included in the final version of the Whately Open Space and Recreation Plan.



Field and Tobacco Barn near the Mill River (*Pete Westover*)

SECTION 3

COMMUNITY SETTING

Whately contains rural landscapes that have been developed by its human inhabitants over thousands of years. Planning for open space in Whately must consider the complex relationships between people and the open spaces and natural resources upon which they and all other life forms depend.

The information provided in this section, Community Setting, inventories and assesses the human and land use components of the landscape, moving from the present, to the past, and then to the potential future based on current development trends. The Regional Context section presents an overview of Whately today, and identifies the ways in which the location of the town within the region has affected its growth and the quality of open space and recreational resources. The History of the Community section looks at the manner in which the human inhabitants settled and developed the landscapes in Whately. Population Characteristics reveals who the people of Whately are today and how population and economic trends that may affect the town in the future. Finally, Growth and Development Patterns describes specifically how Whately has developed over time and the potential impacts current land use regulations and infrastructure may have on open space, drinking water supplies, and municipal services. In writing this report, we reviewed a number of outside reports and have cited those that are pertinent to Whately.

A. REGIONAL CONTEXT

Whately, a historic agricultural and residential community, is the southernmost town in Franklin County in western Massachusetts. It is bordered by Hatfield to the south, Williamsburg to the southwest and west, and Conway and Deerfield to the north, and separated by the Connecticut River from Sunderland to the east. Whately is 11 miles south of Greenfield, 28 miles north of Springfield, and 99 miles west of Boston. The town encompasses a geographic area of 20.66 square miles, or approximately 13,223 acres, and lies in the heart of the Pioneer Valley (see *Regional Context Map* at the end of this section).

The Town of Whately contains two contrasting landscapes: a flat plain stretching between the Connecticut River and the Mill River in eastern Whately, and high hills with valleys carved by brooks in the western portion of town. This eastern half—the lowlands of the Connecticut River Valley—has a level, uniform topography, with deeply buried bedrock, that primarily supports agricultural land uses. The hilly western half is characterized by rugged topography, shallow bedrock, and supports forested woodlands. The predominant mountains in Whately are Mount Esther, Chestnut Mountain, Dry Hill to the west of the Northampton Reservoir, and four hills south of Williamsburg and Webber Roads.

Whately is located entirely within the Connecticut River Watershed. Historically, the river played an important role in the transport of goods to markets in Boston, Connecticut, and New York. The Mill River bisects the town, flowing north to south, and is a sub watershed of the Connecticut River Basin. The neighboring towns of Deerfield and Northampton take their water from Whately's two largest streams, West Brook and Roaring Brook. If adequately protected and enhanced, these waterways may continue to provide regionally important clean water and habitat.

Whately is conveniently accessed from the primary north/south transportation corridors in western Massachusetts: Interstate 91 (I-91) and Routes 5 and 10. Approximately four miles of I-91 bisect the town. The primary east-west transportation routes are local roads, including Haydenville Road, which many vehicles traverse every day between southern Franklin County and parts of Hampshire County.

Whately's settlement patterns originate with the Native Americans who settled along the Connecticut and Millers Rivers to hunt and to farm the fertile floodplain soil. The arrival of European immigrants on the land turned Whately first into an agricultural center for the region in the 17th century and then into an agricultural and manufacturing center in the 18th thru 20th century. Its close proximity to a key north/south transportation route and to major employment centers in Franklin and Hampshire counties led to an uptick in development from the 1950s through the 1990s. Throughout the centuries, however, Whately has maintained its historic ties to farming, with 15.1 percent (1,989 acres) of the Town's total area continuing as agricultural land, according to 2016 Massachusetts GIS Land Cover data.

Today Whately attracts and retains residents because of the attractive town, the agricultural history, the amenities of the five colleges, the lack of traffic, and access to open space and local food, among other reasons. In order to plan for the protection of open space and natural resources residents should consider the role natural resources, especially the large blocks of dense, contiguous farmlands and the prime agricultural soils, play across the region. Each of these characteristic landscapes is discussed in detail in *Section 4: Environmental Inventory and Analysis*. These interconnected resources present both opportunities and challenges to open space and recreation planning in Whately.



View of Mount Sugarloaf and Farmland along Long Plain Road (*Pete Westover*)

A.1 Regional Natural Resource Context

Containing a diverse mix of forested upland, river frontage, wetland, and fertile farmland, Whately constitutes an important component of the regional water and food systems and forest network. Whately's approximately 9,400 acres of forest are mostly found in the western hills. Much of the forest is protected by the MA Department of Fish and Game's (DFG) Division of Fisheries and Wildlife (MassWildlife) as Wildlife Management Areas (WMA), by neighboring municipalities to protect drinking water supply, or by private or non-profit landowners. The forested and protected areas connect to larger blocks of forest in Conway, Williamsburg, and Hatfield that extend almost uninterrupted into Northampton, Goshen, and Ashfield.

Soils within the Connecticut River Valley are considered to be the best in the state for agriculture, and some of the best in the country. Twenty-one percent of Whately is composed of these excellent soils, with 11 percent of that producing crops. As of 2021, there were 31 farms of varying size in Whately that produce food, medicine, flowers, hemp, and nursery plants for the local and regional market and tobacco for the international market:

Baystate Perennial Farm	Maiewski Farm
Beans Maple Distillery	Malkinowski Farms
Bear Path Farm	Manheim Farms
Belder Farm	Nasami Farm
Brookledge Sugarhouse	Nourse Farms, Inc.
Chamutka Farm	J.M. Pasiecznik Farms
Chang Farm, Inc.	Poplar Hill Farm
Fairview Farms, Inc.	Potash Hill Farm
Forest City Farm	Quonquont Farm
Full Bloom Market Garden	Sobieski's River Valley Farm
Funny Farm	Scott Farm
Golonka Farm	Tall Grass Farm
Harvest Farm	Teddy C. Smiarowski Farms
Kitchen Garden Farm	Warger Farm
LaSalle Florists	Whistling Meadow Farm
Long Plain Farm	

Whately residents steward a diversity of water resources. Northampton, a city of almost 30,000 people, draws its drinking water from the Ryan (also called Upper) and West Whately Reservoirs and water from the South Deerfield Water District's Whately Glen Reservoir serves 3,800 Deerfield residents. The Town borders roughly three miles of the Connecticut River, a principal scenic, ecological, and recreational asset in the region. Swamps are spread throughout the eastern lowland, including the Whately Great Swamp, providing important wildlife habitat and other ecosystem services. Over seven miles of the Mill River wind through town, fed by numerous brooks flowing west to east from the upland.

In 2014, the Harvard Forest published *Changes to the Land: Four Scenarios for the Future of the Massachusetts Landscape*, an evaluation of the consequences of four different trajectories for how land use could change in the state over the next 50 years, with a specific focus on the impacts to the region's forests.¹ The scenarios reflect different amounts and intensities of land development, timber

¹ Harvard Forest, *Changes to the Land*, 2014: <http://harvardforest.fas.harvard.edu/changes-to-the-land>

harvesting, farmland expansion, and forest conservation. Key findings from the study show that the “Forest as Infrastructure” scenario ranked first in terms of benefits to people and nature, thanks to the strategies of more target conservation, smart growth development,² and improvement forestry (cutting practices that preserve critical forest benefits while increasing local wood production). The majority of new development would be clustered and concentrated near existing cities and towns to minimize forest loss and reduce the impact of growth on water resources and forest habitat. The report also emphasizes how local land-use decisions can greatly influence the ability of the state’s forests to offset greenhouse gas emissions and moderate the effects of climate change. The overarching policy implications from the study are that there is much to gain by conserving forests and managing them well by:

- Recommitting to land conservation;
- Redoubling land-use policy and smart-growth efforts through local and state zoning reform that supports transit-friendly, walkable communities where new growth uses land efficiently, and limits impacts on natural resources; and
- Promoting sustainable forestry in the Commonwealth.

In 2017, Harvard Forest published an update to their vision for the protection of the Massachusetts landscape, titled *Wildlands and Woodlands, Farmlands and Communities: Broadening the Vision for New England*.³ The vision reaffirms the basic goal of protecting 70 percent of the New England landscape as forest and 7 percent of the New England landscape in farmland by 2060, “slowing and shifting development in a way that maintains the connection between communities and the land that sustains them.” The vision would manage most of the forest as working woodlands for wood products and other benefits, and 10 percent as wildland reserves.

Whately is home to a commendable amount of protected land, with over 5 percent of its land area as permanently protected farmland and around 26 percent of its forest under permanent protection as of 2021. However, much more of Whately’s abundant forest and farmland can still be protected in line with the goals of this regional land-use vision. Rural towns with undeveloped natural resources, like Whately, play a critical role in ensuring adequate protection to important habitat and corridors, water supply and quality, a robust food system, and carbon storage, to maximize benefits to people and nature.

A.2 Regional Planning Context

Forests, migrating species, water, and recreational opportunities are not bounded by town borders, so critical natural and recreational resources can only be fully protected by conserving and stewarding networks of land that cross town and state boundaries. A number of ongoing regional conservation partnerships and planning efforts encompassing Whately aim to optimize natural resource and recreation planning at the watershed and regional scale. Much of the county’s regional-scale planning and purchasing services are managed by the Franklin Regional Council of Governments (FRCOG). This section reviews recent regional projects involving Whately that have

² To learn more about Smart Growth, see the Massachusetts Executive Office of Energy and Environmental Affairs’ Smart Growth/Smart Energy Toolkit at http://www.mass.gov/envir/smart_growth_toolkit/.

³ Harvard Forest, *Wildlands and Woodlands, Farmlands and Communities Vision*, 2017: <http://wildlandsandwoodlands.org/vision/ww-vision-reports>

implications for open space and recreation planning.

In 2013, *Sustainable Franklin County: Franklin County's Regional Plan for Sustainable Development* (RPSD)⁴ was completed by the Sustainable Communities Consortium, which included Community Action, Franklin County Regional Housing and Redevelopment Authority, North Quabbin Community Coalition, Franklin County Community Development Corporation, and the Towns of Greenfield, Deerfield, Montague, and Orange. The RPSD is a long-term guide for Franklin County municipal governments, regional organizations, businesses, non-profits, and individuals. Individual residents and representatives of many organizations contributed to the creation of the plan. The plan identifies issues and constraints, goals, and recommendations and strategies in seven subject areas: housing, transportation, economic development, energy, natural resources, cultural resources, and land use and infrastructure. The overall sustainable development goals that came out of the public participation process are as follows:

- Increase and improve the housing stock, while focusing on affordability;
- Provide additional options for alternative transportation;
- Encourage economic development, by redeveloping vacant sites;
- Promote energy conservation and efficiency;
- Promote adoption of local, renewable energy production;
- Protect natural resources, including farmland and drinking supplies;
- Foster the growth of arts and culture;
- Concentrate new growth near town centers and focus on infill development; and
- Improve infrastructure, particularly high-speed internet.

The plan notes that the predominant residential development patterns in the county are converting farms and forests to residential lots and fragmenting the remaining farmland and forestland. When combined with large-lot zoning, the Approval Not Required (ANR) provision of the Subdivision Control Law or new subdivisions can result in widely disbursed residential development that fragments land and converts green spaces to development. The plan encourages instead the concentration of new growth near population centers and infill development in more highly developed areas.

The Franklin County Farm and Food System Project⁵ identifies the ways Franklin County stakeholders can map farmland resources that are vital to increasing production, a need demonstrated by regional food insecurity assessment and called for in the Food Solutions New England's 50-by-60 Vision (in which New England produces 50 percent of its food by 2060).

State agencies—primarily the Division of Fisheries and Wildlife (MassWildlife) and the Department of Agricultural Resources (MDAR)—protect and manage conservation land in the town of Whately. Two land trusts also include Whately in their service areas. The Kestrel Land Trust (Kestrel) works with individuals and communities to conserve and manage lands in Whately and east and south of Whately. Their Forever Farmland Initiative, a collaboration of land trusts, agricultural support organizations, and local and state agencies, is working together to increase the pace of farmland

⁴ <https://frcog.org/program-services/land-use-planning-zoning/sustainable-franklin-county-2013-plan/>

⁵ <https://frcog.org/wp-content/uploads/2015/10/FRCOG-FC-Farm-and-Food-System-Project-Final-Report-093015.pdf>

conservation in the Connecticut River Valley and raising public awareness of the critical importance of doing so.⁶ Kestrel recently purchased a 120-acre parcel, Whately Center Woods, containing magnificent specimens of old-growth forest that will be open to the public in 2021 for responsible hiking, skiing, and snowmobiling. The Franklin Land Trust serves Whately and towns to the north and west of Whately. In addition to holding conservation restrictions on a number of privately and publicly owned lands, the trust owns the publicly accessible 100-acre Damon Jr. property in West Whately.⁷

Town governments may also collaborate on specific open space and recreation projects. Though needs may differ, regional collaboration in general is a stated goal of many open space and recreation plans (OSRP) in the area and Towns can benefit from aligning their action plans with the efforts of other Towns. For example, Towns can collaborate on watershed protection, trail networks, and protection of wildlife corridors and large blocks of contiguous land. The Whately Open Space Committee is particularly interested in working with neighboring towns on trail connections, as outlined in *Section 9: Seven-Year Action Plan*.

A.3 Regional Recreation Planning

In 2017, the state published the State Comprehensive Outdoor Recreation Plan, “a planning document that discusses the available recreational resources in the Commonwealth, along with the needs of its residents, and identifies the gap between them.”⁸ The plan identifies four primary goals for recreation and open space opportunities statewide: increase access for underserved populations, support the statewide trail network, increase the availability of water-based recreation, and support the creation and renovation of neighborhood parks. Whately has the potential to further the state’s goals not only for local residents, but for residents of the region and state as a whole. Sections 7: Analysis of Needs and 8: Goals and Objectives will elaborate further on the relationship between statewide outdoor recreation goals and actions to take in Whately.

A number of regional recreational initiatives include routes in Whately. The Franklin County Bikeway totals approximately 240 miles in length and covers the entire county, with connections to bordering counties and states.⁹ Much of the Bikeway network consists of “on-road” or “shared roadway” sections that make use of predominantly low-traffic roads. There are several “off-road” bike paths as well that provide connections suitable for all riders. The 17.2-mile intermediate-level Whately-Conway loop crosses from the southeastern portion of Conway into Whately. At the southern point on this loop, it is possible to travel via Haydenville Road to connect to Hampshire County and the Pioneer Valley bicycling routes in Northampton. Additionally, the River Road Connector begins at the intersection of Route 116 and River Road and travels south into Whately, connecting to Hampshire County in Hatfield. Portions of these routes are marked with Franklin County Bikeway signs.

The FRCOG partnered with the YMCA in Greenfield, Baystate Franklin Medical Center, Greenfield Community College, and the Franklin County Chamber of Commerce to develop and launch *Walk Franklin County – for the Health of It!* This cooperative program promotes walking for

⁶ <https://www.kestreltrust.org/>; <https://www.foreverfarmland.org/>

⁷ <http://www.franklinlandtrust.org/>

⁸ Executive Office of Energy and Environmental Affairs, *State Comprehensive Outdoor Recreation Plan*, 2017: <https://www.mass.gov/files/massachusetts-scorp-2017-for-submission.pdf>

⁹ <https://frcog.org/program-services/transportation-planning/>

transportation, reduction of air pollution, and physical fitness and health. The project is a free program that allows participants to measure and record their walking progress and receive rewards for reaching their walking goals. The FRCOG has completed sets of walking maps for each town in Franklin County, including the Whately Center route through the historic Whately center.¹⁰

The Connecticut River Paddlers' Trail is a series of over 50 primitive campsites and hundreds of river access points starting at the river's headwaters in New Hampshire's Great North Woods all the way south to Long Island Sound. Paddlers may stop at the Whately Oaks Primitive Campsite,¹¹

Whately and its neighbors share recreational and natural resources. Whately can work cooperatively with nearby towns and regional planning partners to protect water quality, mitigate flood damage, protect farm and forestland, and support regional recreational projects. This plan will consider regional planning efforts and goals in its discussion of the community context (current section), natural resource inventory (Section 4), and in the analysis of needs (Section 7) and action planning process (Sections 8 & 9).

B. HISTORY OF THE COMMUNITY

Whately's first settlers were Native Americans, who lived in what is now Whately for thousands of years prior to settlement by European immigrants in the late 1600s. At the arrival of Europeans, the land is now called Whately was the territory of the Norwottucks, members of the Pocumtuc tribe, lead by Chief (Sagamore) Quonquont. Originally chartered as part of Hadley, the land in Whately was purchased by Hatfield in 1695 from Quonquont's widow and children by a deed that still exists. According to the Native Lands map, the Pocumtuc, Nipmuc, and members of the Wabanaki Confederacy share Whately as traditional territory.¹²

Whately was incorporated by European settlers as a unique Town on April 24, 1771, not long after 55 people living west of the Mill River petitioned for separation from Hatfield because of the long distance they lived from the center of Hatfield and resulting difficult travel. Hatfield agreed to set off the district at their town meeting in May, 1770, and the boundary lines were already carefully drawn and agreed upon. The Town held its first town meeting May 6, 1771 at the house of Daniel Morton, innkeeper. Many of Whately's first citizens were descended from those who settled Hadley and Hatfield.

Early colonial settlers grew crops on the fertile valley and uplands, hunted in the forests, and built mills along the many brooks. Pits of red clay common to most New England towns had enough granite and ferrous deposits to make good bricks and to provide material for the Whately potters, primarily members of the Crafts and Kellogg families, whose production between 1778 and 1861 was renowned. Beds of lead, potash, umber, and sienna supplied incomes for many in the late 1800s. Abundant streams allowed the development of numerous mills in the 18th and 19th centuries, first of grist and sawmills, later of woolen and furniture mills producing items such as chairs, brooms, and coffins. Whately was also the site of the first gin distillery in the state.

Whately includes some of the most fertile land in New England. For hundreds of years, land in town

¹⁰ <https://frcog.org/publication/walk-franklin-county-maps/>

¹¹ <https://www.connecticutriverpaddlerstrail.org/crpt7/node/5659>

¹² <https://native-land.ca/>

has been used to grow vegetable and small fruit crops, tobacco, animal feeds, hay, straw, herbs, tree fruits and field grown nursery plants. Animals are pastured in town, maple sap is collected in late winter to make syrup and other products, fiddleheads and ramps are wild harvested along riverbanks and several farms allow customers to pick their own tree fruit, berries, and vegetables. Currently there are 31 farms in town. Historically farm labor was largely provided by family and local residents, but most field work today is done by immigrants from Central America and the Caribbean.

Whately is home to an active livestock and feed auction and the Pioneer Valley Growers Association, a large cooperative that helps farms throughout the valley market their crops. Nasami Farm is the native plant nursery of the Native Plant Trust. Some farms wholesale their crops to supermarket chains, distributors and processors throughout the Northeast and beyond, while others sell retail.

In recent years more farms are growing specialty crops for specific markets and increasing the value of their raw crops by processing them into finished goods like salsas, hot sauces and jams, and consumer-friendly products such as peeled and cubed butternut squash. Whately is home to a state-of-the-art sprout farm, and numerous farms use both heated and unheated greenhouses to extend their season and to produce tomatoes, herbs and salad greens year round. While once home to many dairies, Whately currently has only a single farm producing milk. Historically, dairy farms have helped to keep marginal farmland open and in production while in use to produce feed or pasture. For more information on crops grown in Whately, see *Section 4.F.3: Farmland*.

Whately has two National Register Historic Districts, both of which were established in 2003. The first of these is the Whately Center Historic District, which runs along Whately's main street, Chestnut Plain Road. This district consists of historic buildings such as the Town Hall and the Congregational Church, as well as many historic houses noted for their Federal and Georgian architecture. With its large trees set back from the road, Chestnut Plain Road is said to be one of the finest main streets in New England. The district is significant in that, unlike many other national historic districts, it has incorporated a broad range of uses (agricultural, commercial, institutional, municipal, and residential) throughout its history. The second National Register Historic District is located in West Whately. This district is notable for its historical agricultural and residential uses. Buildings in this district are significant for their Greek Revival and Federal architecture and the West Whately District includes most of the Town's historic mill sites.

The Massachusetts Historical Commission lists nearly 300 Whately areas, buildings, objects and structures on the state's inventory of historical resources. These include historic homes, mill buildings and facilities, tobacco barns, bridges, schoolhouses, streetscapes, burial grounds, churches, archaeological sites, and many agricultural properties and structures. Some, but not all, of these listings are located in the two Historic Districts. A number of the most significant of these sites are described in greater detail below in *Section 4.H Scenic Resources and Unique Environments* (see also the *Scenic Resources and Unique Environments Map* at the end of Section 4).

C. POPULATION CHARACTERISTICS

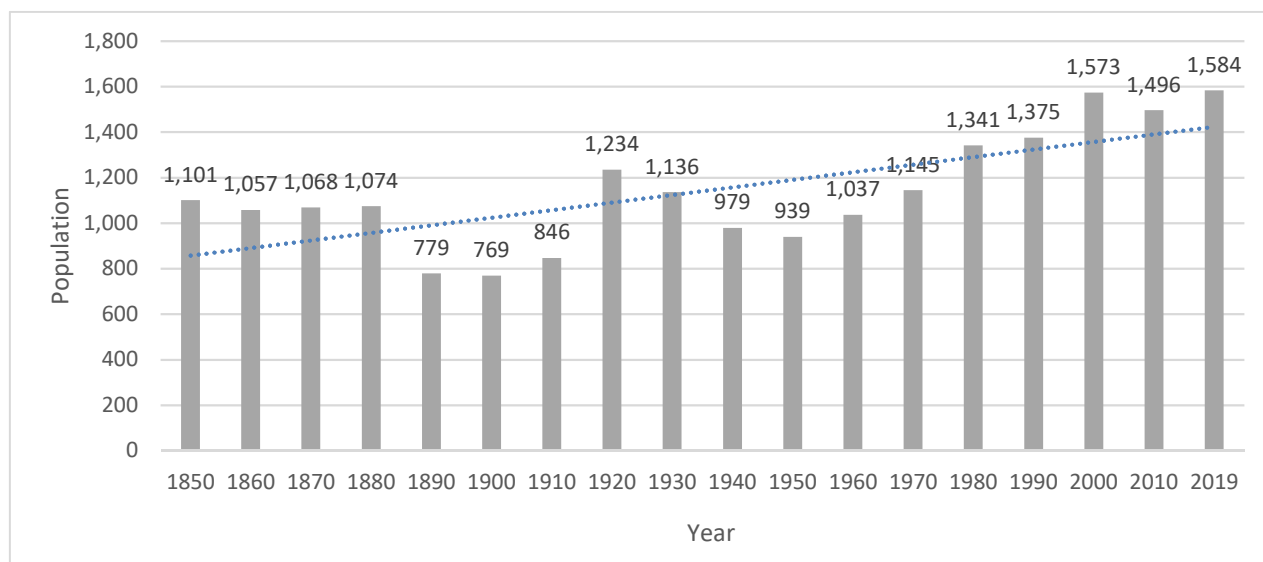
In order to identify the open space and recreation needs of the community, it is essential to know about the people who call Whately their home. The Population Characteristics section assesses Whately's needs for open space and recreational resources based on an analysis of demographic, economic base, and labor force statistics. The demographic information includes changes in total

population, age distribution, racial and ethnic composition, and economic characteristics of Whately residents. The labor force characteristics describe the occupation, sector, and commuting patterns of both Whately residents and non-residents who work in Whately. Population characteristics help identify the needs of the community regarding the type, quantity, location, and level of future investments in open space and recreation areas and facilities.

C.1 Demographic Information

According to the American Community Survey (ACS), a product of the U.S. Census Bureau, the Town of Whately had a population of 1,584 people in 2019. Figure 3-1 shows population change in Whately since 1850.

Figure 3-1: Total Population 1850 - 2019



Source: U.S. Census Bureau; ACS Five-Year Estimates 2015 - 2019

While Whately did not see the same population decline in the 1800s through mid-20th century as many of its neighbors, (Conway’s population, for example, peaked in 1850 at 1,831 people but by 1920 had plummeted to less than half of its 1850 population) the town has experienced some population volatility. Overall, Whately’s population has been increasing since 1950, especially in the 1970s and 1990s, and at a rate faster than the county as a whole (see Table 3-1 and Figure 3-2).

Table 3-1: Total Population by Decade, 1970 - 2019

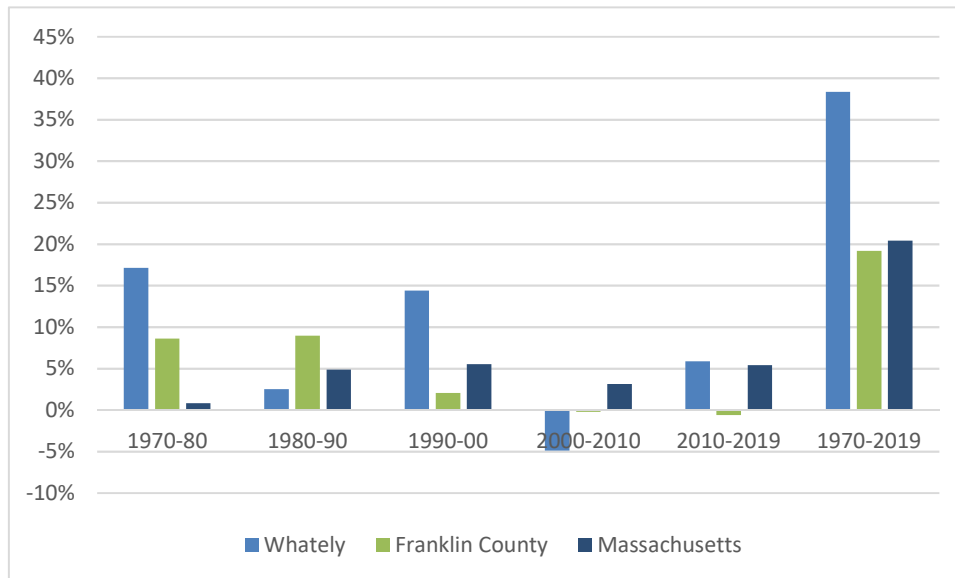
Geography	1970 Population	1980 Population	1990 Population	2000 Population	2010 Population	2019 Population
Whately	1,145	1,341	1,375	1,573	1,496	1,548
Franklin County	59,223	64,317	70,092	71,535	71,372	70,577
Massachusetts	5,689,377	5,737,037	6,016,425	6,349,097	6,547,629	6,850,553

Source: U.S. Census Bureau; ACS Five-Year Estimates 2015 - 2019

The 2019 population represents a 5.9 percent increase from the previous Census survey in 2010 and

a 38.6 percent gain since 1970 (Figure 3-2). This population increase over the past fifty years appears was nearly twice that of Franklin County (19.2 percent increase since 1970) and the state as a whole.

Figure 3-2: Population Change by Decade, 1970 to 2019



Source: U.S. Census Bureau; ACS 5-Year Estimates 2015 - 2019

With a median age of 45.8, Whately has a slightly younger population than the county (46.7) but one definitively older than the state (39.4). People aged 65 to 74 constitute the fastest growing age cohort over the last eight years, nearly doubling in size from 7.6 percent to 14.3 percent of the population (see Table 3-2). People 25 to 44 years of age were the second fastest growing population, increasing to 23.2 percent of the population. The portion of people ages 45 to 64 decreased dramatically, down 10.7 percentage points to 29.9 percent of the population. The proportion of school-age people, as well as the oldest age brackets, adjusted only slightly. Though age distribution is comparable to Franklin County, the increase in a younger working-age population (25 to 44 years) and decrease in older working-age population (45 to 64) was more dramatic than the county's.

Table 3-2: Population by Age Group, 2010 and 2018

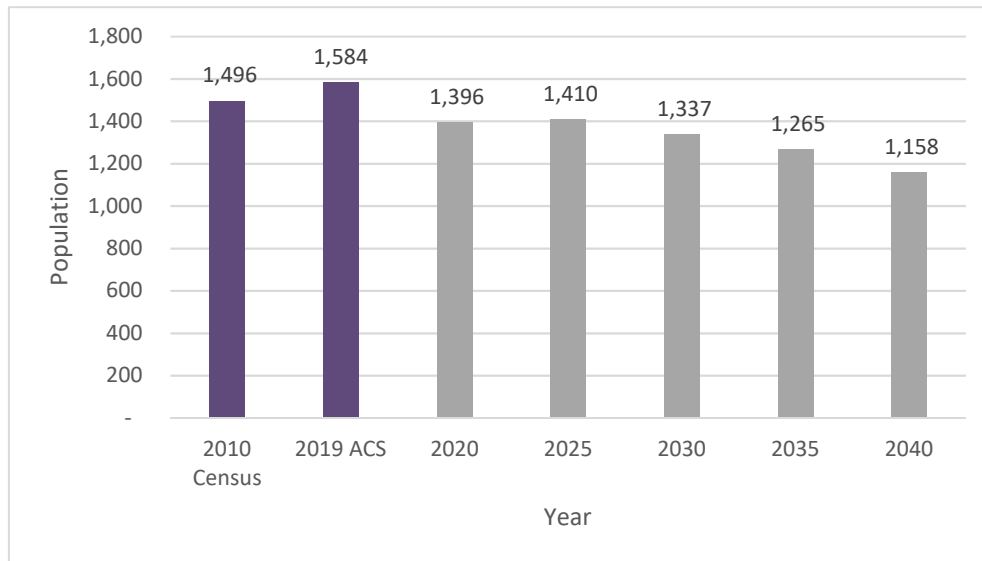
Geography	Total Population	9 Years & Under	10-19 Years	20-24 Years	25-44 Years	45-64 Years	65-74 Years	75 Years & Over
Whately								
2010	1,496	8.6%	11.6%	4.5%	19.7%	40.6%	7.6%	7.4%
2019	1,584	8.9%	11.0%	6.0%	23.2%	29.9%	14.3%	6.6%
Difference	+88	+0.3%	-0.6%	+1.5%	+3.6%	-10.7%	+6.7%	-0.7%
Franklin County								
2010	71,372	10.0%	11.9%	6.0%	23.1%	33.7%	7.9%	7.3%
2018	70,577	8.8%	10.6%	5.3%	23.4%	30.7%	13.3%	7.8%
Difference	-795	-1.2%	-1.3%	-0.7%	+0.3%	-3.0%	+45.4%	+0.5%
Massachusetts								
2010	6,547,629	11.5%	13.3%	7.3%	26.5%	27.7%	7.0%	6.8%
2018	6,850,155	10.6%	12.4%	7.1%	26.4%	27.2%	9.2%	6.9%
Difference	282,564	-0.9%	-0.9%	-0.2%	-0.1%	-0.5%	+2.2%	+0.1%

Source: U.S. Census Bureau 2010; ACS Five-Year Estimates 2015 - 2019

The UMass Donahue Institute began to publish population projections for all Massachusetts cities and towns in 2015, projected from 2020 to 2040 at five-year increments.¹³ Figure 3-3 shows that the town's population is expected to decrease modestly over the next 20 years. It is worth noting, however, that the Donahue Institute projection for 2020 is lower than Whately's 2019 ACS estimated population.

13 UMass Donahue Institute Population Estimates Program, 2018. A report describing the inputs and methods used for the V2018 series is available for download: www.pep.donahue-institute.org

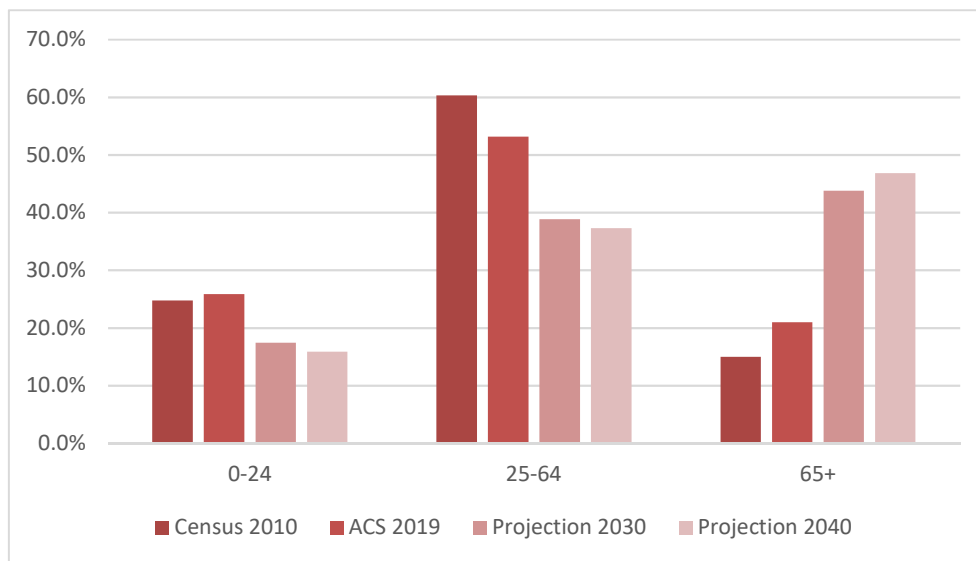
Figure 3-3: Population Projections for Whately, 2020 – 2040



Source: UMass Donahue Institute Population Projections, 2018

The UMass Donahue Institute projections shown in Figure 3-4 show a large drop of 25 to 64 year olds between 2019 and 2040 and a large increase in the 65-and-older population over the same period. However, while the general direction of the Donahue Institute projections may be accurate, and Whately should expect to be home to an increasingly aging population, that shift toward an older population may occur at a slower rate than represented in Figure 3-3.

Figure 3-4: Population Projections for Whately by Age Group, 2020 – 2040



Source: US Census 2010; ACS Five-Year Estimates 2019; UMass Donahue Institute Population Projections, 2018

Working-age people in the 25 to 64-year range represent the largest cohort of people in Whately with recreation needs. This group generally has access to transportation, fewer accessibility needs, and a wide range of recreational interests. Given that the proportion of adults in the traditional family-

raising age bracket rose by 3.6 percentage points between 2010 and 2019, and the number of young children also rose slightly, it is possible that Whately may see an increase in school-aged children in coming years. If that occurs, school-age populations often require adequate playground facilities and active sports programs. And though residents 65 years and above currently represent a small portion of the total population, if the large cohort of older (45 to 64) working-age residents remain in Whately, there could be an increased demand for elder services and recreational opportunities such as accessible walking paths and arts and leisure programs. According to the 2011 Land Use and Housing update to the Whately Master Plan, a demographic shift toward older residents will need to be accompanied by some kind of shift in housing that better accommodates elderly residents (e.g. smaller housing size, improved accessibility, and housing within walking distance of services). If more elderly-friendly housing is developed, open space and recreation planning should respond to where this development occurs. Age-friendly planning, now practiced by other municipalities and organizations within Franklin County, can help the Town plan long term to accommodate an aging population.

Overall, Whately's population is stable, but slowly aging. Given present uncertainty on the direction and speed of population change, Whately may need to plan for multiple possible futures: an increase or a decrease in total population, and a dramatically aging population or a population with an increase in both young and old residents. Residents of all ages will need recreational facilities and programs that provide safe spaces for recreation as well as access to open space.

C.2 Population Density

A large amount of Whately's land is devoted to agriculture and open space, resulting in a relatively low population density of 76.6 persons per square mile. This represents an overall increase of 38 percent since 1970, when it was 55 persons per square mile.

Whately is characterized by dweller-owned, single-family homes distributed at low density along main arteries, especially along parts of Long Plain Road and concentrated in the historic town center. Though a few dwellings have been divided into multiple units, there are no multi-unit housing or condo-style developments in Whately. There are therefore no high-density areas that stand out as being underserved by open space or recreational amenities. However, very few Whately residents live within walking distance of existing recreational amenities and those who do may not have pedestrian-friendly access to those amenities.

There are no Environmental Justice populations in Whately as defined by the state (for a greater discussion on environmental equity and justice, see Section 4.1.13 *Environmental Equity*).

C.3 Economic Wealth of Residents and Community

Measures of the income levels of Whately'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 for protection of and access to open space. Table 3-3 shows income estimates for Whately, Franklin County, and Massachusetts.¹⁴ Per capita income is determined by dividing the total amount of income earned in an area by the number of residents, including portions of the population that might not be generating income such as children and retired adults. According to ACS estimates, Whately's per capita income in 2019 was \$49,413—greater than the state's (\$43,761) and significantly greater than

¹⁴ ACS Five-Year Estimates 2015-2019

the county's (\$35,908). Whately per capita income was fourth highest of the twenty-six Franklin County towns.

Median household income describes an average income of Whately residents that is not influenced by outliers (either the very wealthy or very poor). Median household income is determined for each person aged 15 years and over in a household, including families and individuals living alone. Table 3-4 shows the median household income for Whately was \$74,688 in 2019, which was much higher than the county (\$60,950) but below the state (\$81,215) figures. The 2019 Whately median household income was the seventh highest of the twenty-six towns in Franklin County, down from the third highest twenty years ago in 1999.

Table 3-4: Per Capita Income, Median Household Income, and Percentage Below Poverty Level in 2019 for Whately compared to Franklin County and the State

Geography	Per Capita Income in 2019	Median Household Income in 2019	Individuals Below Poverty Level in 2019*
Whately	\$49,413	\$74,688	7.2%
Franklin County	\$35,908	\$60,950	9.7%
Massachusetts	\$43,761	\$81,215	10.3%

* For whom poverty status was determined.

Source: ACS 5-Year Estimates, 2015 - 2019

Table 3-4 also highlights another way to describe a community's income and income distribution, the poverty rate. Poverty status is established using federal income thresholds that vary according to family size and composition. Individuals are then determined to have income levels above or below these thresholds. In Whately, 7.2 percent of residents were living below the poverty level in 2019. This poverty rate was significantly less than in the county (9.7 percent) and state (10.3 percent), however it is an increase from the 3 percent poverty rate Whately experienced in 2000.

Eighty-three percent (532 out of 687 units) of occupied housing units in Whately were owner-occupied in 2019.¹⁵ This percentage is significantly higher than the 69 percent owner-occupied rate for Franklin County and 62 percent for the state as a whole. The average household size for these units was 2.5 persons. For renter-occupied units (155 units), the average household size was 2.7 persons. The median home price in Whately in 2019 was \$347,800, the most expensive in the county and more expensive than each of the neighboring Hampshire County towns Williamsburg and Hatfield. These various income and wealth measures indicate that there are no apparent concentrations of poverty that warrant additional attention in open space and recreation resource distribution. They also indicate that most Whately residents are resourced enough to be able to seek out their preferred recreational activities if they choose.

C.4 Employment Statistics

Employment statistics including labor force participation, unemployment rates, numbers of employees, and place of employment are often used to characterize the local economy. Labor force and employment figures reflect the town's and region's economy, which can help suggest what types of business might be encouraged in Whately or how vulnerable Whately businesses and residents are to economic trends. Unemployment rates show how well residents are faring in the larger economy.

¹⁵ ACS Five-Year Estimates 2015-2019

C.4.1 Labor Force: Whately Residents Who Are Able to Work

This section features employment information released by the Massachusetts Division of Employment and Training (DET). Statistics are generally provided for the year 2019, though 2020 data is provided in one instance to reflect differences in data at the time of writing because of the economic crisis brought on by the Covid19 pandemic. DET data are derived from statistical sources such as federal annual surveys and the unemployment insurance program.

The labor force is defined as the pool of individuals 16 years of age and over who are either 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. The unemployment rate describes the percentage of people in the labor force who are presently not employed but are actively seeking employment in a given time period. This statistic is often used as a gauge of economic prosperity or distress.

Rates of unemployment may be influenced by an overabundance, or a drastic decline, in the number of employment opportunities in an area. It is important to note that the unemployment rate does not reflect the issue of “underemployment”—individuals with jobs without benefits or individuals working multiple jobs. Data from the years 2008 through 2019 (Table 3-5) shows that the unemployment rate for Whately residents has been consistently lower than the unemployment rates of Franklin County and the Commonwealth. Table 3-5 also shows that the 2020 economic situation has impacted the unemployment rate in Whately. Still, Whately residents maintain a high level of employment. In October 2020, Whately had the low unemployment rate of 2.9 percent, much lower than the county’s 5.6 percent and state’s 6.9 percent.

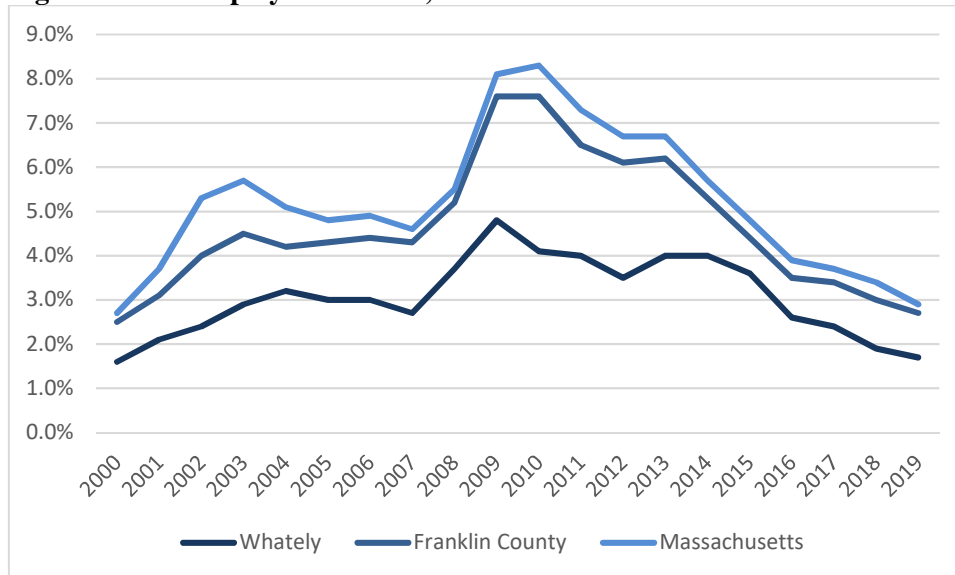
Table 3-5: Labor Force and Unemployment Data, 2019 annual and 2020 October

Geography	Labor Force		Employed Persons		Unemployed Persons		Unemployment Rate	
	2019	Oct 2020	2019	Oct 2020	2019	Oct 2020	2019	Oct 2020
Whately	1,082	979	1,064	951	18	28	1.7%	2.9%
Franklin County	41,318	39,053	41,318	36,858	1,111	2,195	2.7%	5.6%
Massachusetts	3,817,432	3,610,700	3,706,556	3,360,500	110,881	250,200	2.9%	6.9%

Source: Massachusetts Executive Office of Labor and Workforce Development Labor Force and Unemployment, accessed December 2019

At the same time, the unemployment rate of Whately residents has reflected trends in the greater economy, as demonstrated by the highs and lows in Figure 3-5. The higher unemployment rates in Franklin County suggest a regional labor force that could be accessed for new or expanding Whately business ventures.

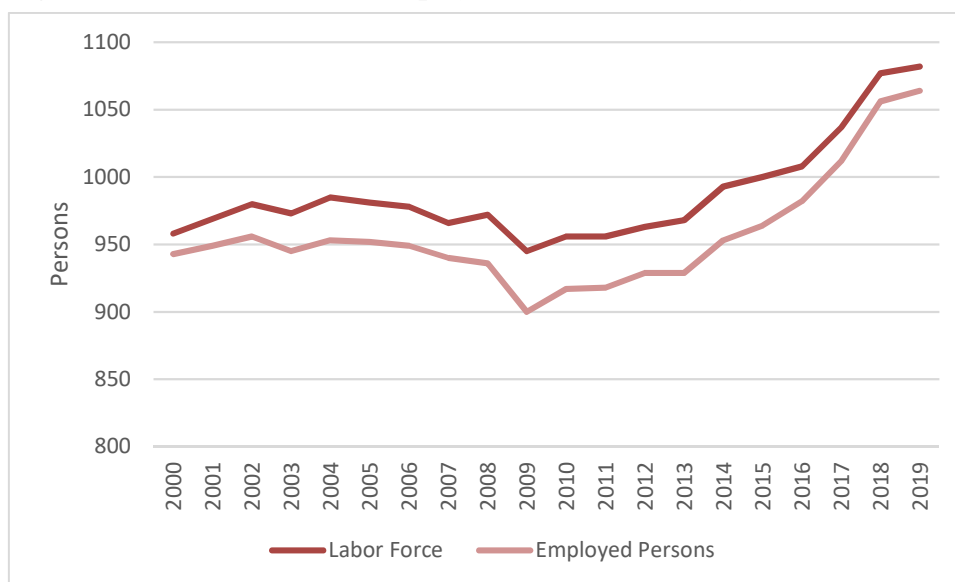
Figure 3-5: Unemployment Rates, 2008 to 2019



Source: Massachusetts Executive Office of Labor and Workforce Development Labor Force and Unemployment Data, accessed December 2019

As Figure 3-6 demonstrates, from 2000 to 2019 the Whately labor force and employed residents grew overall, particularly from 2009 to 2019. Generally, increases in the labor force result from a combination of increases in the number of residents participating in the labor force and overall population growth in a community. As of 2019, Whately's labor force was 1,082 with 1,064 people employed (18 people unemployed).

Figure 3-6: Labor Force and Employed Persons in Whately, 2000 to 2019



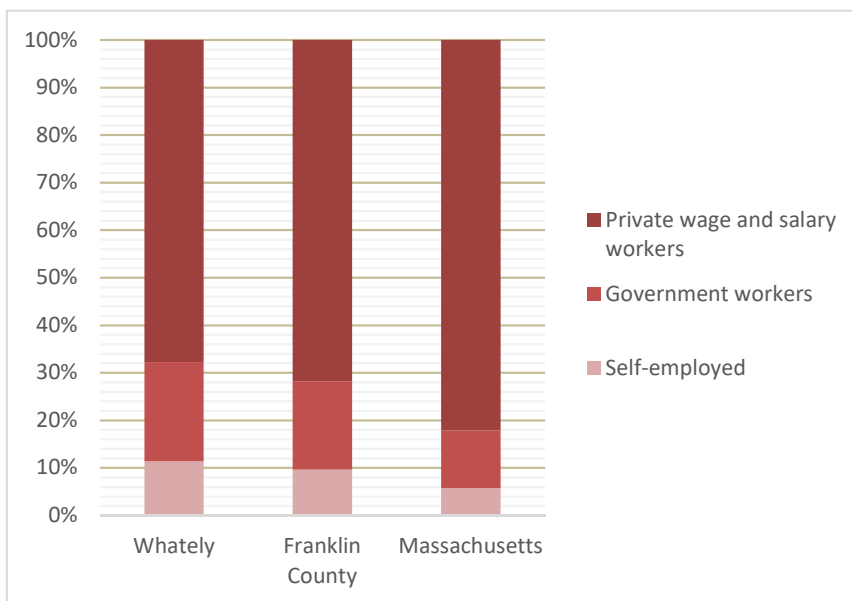
Note: Y-axis scale starts at 800 persons.

Source: Massachusetts Executive Office of Labor and Workforce Development Labor Force and Unemployment Data, accessed December 2019

C.4.2 Employment Characteristics of Whately Residents

An important element of the employment profile is the type of work done by residents. This section reviews the employment trends of Whately residents by class of worker, industry sector, occupation, and commuting patterns. According to 2019 ACS estimates, the majority of Whately workers (67.8 percent) were private wage and salary workers. However, the percentage of such workers in Whately was lower than in the county and state. Figure 3-7 shows that the percentages of Whately residents who worked for a governmental entity (20.8 percent) or were self-employed (11.4 percent) were greater than the county and state averages. Government workers includes employees of the University of Massachusetts in Amherst. It is not uncommon for rural areas to have higher proportions of self-employed, and the ratio of self-employed Whately residents compared to the state appears to reflect this.

Figure 3-7: Class of Worker, 2019



*Employed civilian population 16 years of age and over.

**Self-employed workers are in their own non-incorporated business.

***Unpaid family workers are individuals who work 15 or more hours without pay in a business or on a farm operated by a relative.

Source: ACS Five-Year Estimates 2015 - 2019

The employment profile for Whately is indicative of the employment opportunities available in the community and in the region. Due to easy access to I-91, the primary north-south transportation corridor for western Massachusetts, Whately residents are able to commute easily to several major employment centers. The Census Bureau has identified 13 distinct employment sectors that represent different economic industries. The 2019 ACS data indicates that the largest sector of employment is education and health & social services, employing 38.5 percent of Whately workers (Table 3-6). This is understandable given the presence of over a dozen higher-educational institutions, and private and public secondary schools nearby. This rate is somewhat higher than Franklin County, and over 10 percentage points higher than the state.

The second largest employment sector of Whately residents is manufacturing. Whately is home to the primary manufacturing facility for the Yankee Candle Company, the plastics manufacturer

Covestro, and few additional small manufacturing sector businesses. The Yankee Candle Company is the largest employer in Franklin County with manufacturing, retail, and office headquarters facilities located in Whately and Deerfield. Whately residents are also in convenient commuting distance to the several manufacturing employment centers, including Deerfield and Greenfield.

Table 3-6: Employment by Sector, 2019

Employment Sector	Whately	Franklin County	Massachusetts
Educational, health & social services	38.5%	33.7%	28.2%
Manufacturing	11.4%	10.2%	8.8%
Professional, scientific, management, administrative, & waste management services	7.8%	8.4%	14.0%
Construction	5.4%	6.0%	5.7%
Retail trade	8.1%	10.6%	10.3%
Public administration	1.8%	4.3%	3.8%
Arts, entertainment, recreation, accommodation & food services	8.2%	7.3%	8.7%
Finance, insurance, real estate and rental & leasing	5.3%	4.0%	7.3%
Agriculture, forestry, fishing and hunting, & mining	1.5%	2.6%	0.4%
Other services (except public administration)	4.0%	4.3%	4.5%
Wholesale trade	1.2%	2.0%	2.2%
Information	3.2%	2.6%	2.3%
Transportation & warehousing, and utilities	3.6%	3.8%	3.9%
Total Employed*	851	36,728	3,612,375

*Employed civilian population 16 years of age and over.

Source: ACS Five-Year Estimates 2015 - 2019

A high proportion of residents are also employed in retail trade, arts/entertainment/recreation/accommodation/food services, and professional and management services, as well as the information and finance sectors. This again may be related to the local educational sector, ease of transportation, and opportunities in nearby towns, and not necessarily reflective of Whately's own economy.

Another dimension of the employment profile is the occupation of residents. The employee's occupation describes the type of work they do regardless of the industry their work serves (for example, the plant manager at a factory has the occupation of management but is employed in the manufacturing sector). The occupational employment profile for Whately indicates a high percentage of management, professional, and related workers, which is not typical of small, rural communities (Table 3-7). Whately has a relatively high percentage of workers in natural resources, construction, extraction, and maintenance jobs compared to the state, but does not represent this industry to the same degree as Franklin County towns as a whole.

Table 3-7: Employment by Occupation of Whately Residents, 2019

Geography	Total Employed *	Management, Professional, & Related	Sales & Office	Service	Natural Resources, Construction, Extraction, & Maintenance	Production, Transport & Material Moving
Whately	851	45.8%	18.4%	18.7%	7.3%	9.8%
Franklin County	36,728	42.9%	19.4%	17.4%	9.6%	11.7%
Massachusetts	3,612,375	46.8%	19.9%	17.3%	6.7%	9.3%

*Employed Civilian Population 16 years of age and over.

Source: ACS Five-Year Estimates 2015 – 2019

According to the U.S. Census Bureau Work Destination Data, the top employment destinations for Whately residents are Northampton and Amherst, each with over 80 Whately workers.¹⁶ Greenfield and Springfield are also major work destinations for Whately residents, at 44 and 37 residents, respectively. Few Whately residents are employed by Whately businesses, but five percent of Whately workers work from home.¹⁷ Residents' mean travel time to work is 24 minutes.¹⁸

C.4.3 Employers and Employees in Whately

Most businesses in Whately employ less than 20 people. However, Whately is home to Yankee Candle, a major regional employer that, along with other manufacturing and agricultural operations, makes Whately itself a small regional employment center. In total, 676 people (43 percent of the population) leave Whately for work and 1,535 (a number nearly equal to the population of Whately) enter or come from Whately to work in Whately. This means there is an influx of around 859 people into Whately during the day.

The Yankee Candle Company's manufacturing facility on Christian Lane was purchased after Merillat Industries closed at that location in 1994. The manufacturing facility is one part of the multi-campus business, which includes the flagship store and corporate office headquarters in Deerfield. Just prior to Covid19-related layoffs, Yankee Candle Company employed around 1,800 employees on its Whately and Deerfield campuses. Yankee Candle does not provide any useable open space in Whately, although the Whately Mother's Day Race does use its parking lot. The 2011 Land Use and Housing Master Plan updates recommend that the Town consider developing a Mixed-Use Overlay District near the Yankee Candle factory building at or near the intersection of Routes 5 and 10 and Christian Lane and at the intersection of Christian Lane and Long Plain Road "to encourage a compact mix of small-scale commercial development and diverse housing options."

Other large employers in Whately include Covestro, EJ Prescott, Whately Elementary School, the Whately Inn, and the Northampton Cooperative Auction. In addition, a number of farms can have large crews of up to 100 or more, especially during the warm season.

Those who work in Whately commuting from outside of town come principally from Greenfield (107 people), Deerfield (81 people), Springfield (79 people), and Northampton (77 people), with more than 40 people each commuting from Easthampton, Turners Falls, and Chicopee. These inbound workers are principally employed in the manufacturing or agricultural sector, with some

¹⁶ U.S. Census Bureau Work Destination Data, <https://onthemap.ces.census.gov/>

¹⁷ American Community Survey Five-Year Estimates 2015 - 2019

¹⁸ American Community Survey Five-Year Estimates 2015 - 2019

also employed and retail trade and transportation services. When planning for open space and recreation development (and development generally), the needs of those who work in Whately (1,535 people), needs such as a place to walk at lunchtime or to gather outside after work, could be considered as well.

D. GROWTH AND DEVELOPMENT PATTERNS

Whately's most valuable resources are its people and land. The interdependent relationship between the two define both the town's character and finances. This section examines historical and future landscape and growth patterns through the lens of population, land use, infrastructure, and the Town's current land use regulations to help predict the future impact of development on the landscape. This section also explores the complexity of measuring the cost of community services in Whately.

D.1 Patterns and Trends

Growth and development in a community often reflects its history and values. Like their Native American predecessors, Whately's first European residents made use of the natural resources available through agricultural pursuits as well as the production of bricks and pottery. As mills took advantage of waterpower in the Mill River and other waterways, activities broadened to include industries like woolen and furniture manufacturing. Trails that began as Native American trails between encampments and hunting grounds were adopted by colonists and later paved. Farms spread throughout the town along floodplains of the Connecticut and Mill Rivers to take advantage of the prime soils and land previously cleared by Native American settlers.

The most recent land cover and land use data available through MassGIS maps are shown in Table 3-8. Land cover data is derived from 2016 statewide imagery and land use is derived from standardized assessor parcel information.

Table 3-8: Summary of Whately Land Cover, 2016

Land Cover Category	Acres	Percentage of Total Town Acreage
Bare Land	52	0.4%
Cultivated	1,355	10.3%
Deciduous Forest	3,799	28.7%
Developed Open Space	585	4.4%
Evergreen Forest	4,174	31.6%
Grassland	258	2.0%
Impervious	445	3.4%
Aquatic Bed	8	0.1%
Emergent Wetland	97	0.7%
Forested Wetland	1,395	10.5%
Scrub/Scrub Wetland	54	0.4%
Pasture/Hay	634	4.8%
Scrub/Shrub	53	0.4%
Water	314	2.4%
Total	13,223	100%

Source: MassGIS

Table 3-9: Summary of Whately Land Use, 2016

Land Use Category	Acres	Percentage of Total Town Acreage
Agriculture	1,450	11.0%
Commercial	153	1.2%
Forest	1,067	8.1%
Industrial	150	1.1%
Mixed Use, Other	473	3.6%
Mixed Use, Primarily Commercial	124	0.9%
Mixed Use, Primarily Residential	916	6.9%
Open Land	3,542	26.8%
Recreation	476	3.6%
Residential, Multi-family	365	2.8%
Residential, Single-family	2,070	15.7%
Right-of-way	451	3.4%
Tax Exempt	940	7.1%
Unknown	749	5.7%
Water	294	2.2%
Total	13,223	100%

Source: MassGIS

As Table 3-8 shows, the most obvious land cover characteristic in the town is the dominance of forestland. Overall, forestland represents 70.8 percent of the total land area in Whately. This area includes the forested Whately Great Swamp. Farmlands comprise the second largest type of land cover, at 15.1 percent of land cover. This high percentage of agricultural land cover is made possible by the deposits left by glacial Lake Hitchcock and centuries of flood silts left in the Connecticut River floodplain. Surface water and non-forested wetlands together comprise 1,868 acres, or 14.1 percent of the town's total land area. These resources include the Connecticut and Mill Rivers, West Brook, the Northampton Reservoir, the Whately Glen, associated brooks and wetlands, beaver ponds, and the manmade ponds constructed along Interstate 91. Grassland or shrub/scrub covers 2.4 percent of Whately and 0.4 percent is bare land with no vegetation present. Impervious material (e.g. residential, industrial, and commercial development and roads) covers 3.4 percent of town and 4.4 percent is developed open space (e.g. ball fields, playgrounds).

Table 3-9 shows designated land uses in Whately. It appears to demonstrate that less land is used for agricultural (11.0 percent) than is available (15.1 percent). As of 2016, forestland counted for 70.8 percent of land cover but was split between a variety of land uses: forest, residential, open land, recreation, and tax exempt. And 18.5 percent of land was in residential use (2.8 percent multi-family and 15.7 percent single family).

Cross-analysis of the two datasets illustrates the degree to which forested land cover is encompassed by residential parcels: given that 70.8 percent of Whately land cover is forested, but forest-related uses such as forest, open land, recreation, and tax exempt only add up to 45.6 percent of land use, some forest cover must be categorized under residential land use. Looked at another way, residential, commercial, and industrial uses make up 32.2 percent of land use, but impervious land cover only covers 3.4 percent of the land area, so a high percentage of land area for these particular uses is in forest or another natural state. This implies that a large amount of forest is owned privately, as is the case in Massachusetts generally,¹⁹ rendering family landowners primary principals in land use decisions and land protection.

The 1.2 percent of town in commercial land use is almost exclusively located along Routes 5/10. In the survey conducted for the 2011 Land Use and Housing Master Plan update, nearly 50% of respondents preferred a model for growth in which Whately was a mostly residential and farming community with commercial development on Routes 5/10 (as opposed to commercial development dispersed throughout town or in the town center). However, expansion of the commercial district along this corridor is difficult because much of the remaining land is wetland or in residential use.

Together, the Yankee Candle plant and Tea Guys factory on Christian Lane, the welding business on Long Plain Road, and the 41-acre Whately Industrial Park comprise 1.1 percent of town land area in industrial use; no other parts of town are home to industrial operations. As of 2021, there are approximately three undeveloped industrial parcels in Whately, one owned by Covestro in the Industrial Park, and two on Long Plain Road adjacent to the park. The 2011 updates to the Land Use and Housing sections of the Master Plan also identified Routes 5/10 as the preferred location of new industrial growth.

Due to a change in methodology and technology used to collect this data, the 2016 acreages cannot be compared to earlier sets of data (2005, 1999, 1985 and 1971). However, a comparison of the types of land uses in Whately and the changes in their acreages between 1971 and 1999 demonstrates which

¹⁹ <https://masswoods.org/monthly-update-tags/ma-forest-ownership>

resources are most susceptible to development pressures (see Table 3-10). During this 28-year period, Whately lost 224 acres of cropland and 212 acres of forestland. During the same time period, 232 acres of land were converted to residential parcels of a half-acre or larger. The development of individual single homes on one- or two-acre lots, often carved out of larger parcels, has been the dominant pattern for land conversion in Whately, though other types of development have occurred in recent decades. The open space/cluster zoning bylaw (see D.3.1 Land Use Controls) creates an option for developers that preserves open space within a lot or subdivision, but it has not been used since its adoption in 2010.

Table 3-10: Change in the Acreage for Different Land Uses in Whately, 1971-1999

Land Use	1971 Acreage	1999 Acreage	Change in Acreage 1971-1999
Forestland	8,935	8,723	-212
Cropland	2,744	2,520	-224
Pasture	248	167	-81
Non-Forested Wetland	53	53	0
Mining (Gravel, etc.)	22	16	-6
Open Land (abandoned fields, orchards)	181	273	+92
Participation Rec.	13	20	+7
Residential 1/4 – 1/2 acre	60	76	+16
Residential > 1/2 acre	419	651	+232
Commercial	5	24	+19
Industrial	12	73	+61
Urban Open Land	23	42	+19
Transportation	179	172	-7
Waste Disposal	0	11	+11
Surface Water	319	321	+2
Orchard, Nursery	14	85	+71
Total Area	13,227	13,227	

Source: Massachusetts GIS Land Use Data, 1971 and 1999.

Whately originated as three distinct, though not terribly compact, areas of development: West Whately (along Conway, Webber, and Haydenville Roads), Whately Center (along Chestnut Plain Road), and East Whately (along River Road). These early settlements were surrounded by rich agricultural lands and forests. Over time these three developed areas formed more compact centers. In the mid-19th century, the railroad depot Lane spurred a cluster of development on Christian Lane (formerly Depot Lane).

Over time, Whately has lost cropland and forestland to a variety of different kinds of development. Starting in the 1950s, more residences were constructed along existing roads where development through the approval-not-required (ANR) lot-division process is permitted by right as long as a parcel meets minimum road frontage requirements. Farm buildings also expanded their footprint and commercial development grew along Route 5/10. The Whately Industrial Park was built in the 1990s. And since the state's creation of a number of incentives for solar development in the early 2010s, around 85 acres of agricultural land has been redeveloped as ground-mounted photovoltaic solar arrays as of 2021.²⁰

²⁰ Whately Assessor, 2021

Based on data from the Franklin County Cooperative Inspection Program shown in Table 3-11, residential development appears to have accelerated since 2006, when the last open space plan was published. Since 2006, 70 residential building permits have been issued. Most of these permits were for new buildings rather than renovations or replacement of older structure. The data shows that the rate of building increased after 2011, following a development lull associated with the Great Recession. A significant number of these building permits were issued for the Pine Plains Estates subdivision off Long Plain Road (37 out of 60) and ANR development on Masterson Road.

Table 3-11: New Homes Permitted per Year in Whately, 2006-2020*

Year	New Homes	Replacement Homes	Accessory Units
2006	3		
2007	3	2	
2008	3		
2009			2
2010	1		
2011	4		
2012	3		
2013	6		
2014	6	1	
2015	7		
2016	11		
2017	4		1
2018	7		
2019	7		
2020*	5		
Total Permit Type	70	3	3
Total Permits	76		

*As of 12/18/2020

Source: Franklin County Cooperative Inspection Program

Many manifestations of ANR development and subdivision take the form of residential sprawl, in which large lots or new subdivision roads fragment forests and farmland, transforming community character and impacting wildlife habitat, water quality, and recreational opportunities. ANRs, however, play a different role in Whately than they would in a more densely populated area. Most ANRs in Whately permit creation of a new lot (‘carve out’) for a family member on a large privately owned parcel. This helps create affordable housing, helps keep young people in town, and may help provide support for aging family members in the adjacent lot. Some carve out a residential lot from a larger parcel that is protected by an APR.. In 2020, the Planning Board approved an ANR to improve the lot lines for the Kestrel Land Trust’s Whately Woods project, and another to transfer a large portion of a parcel from one landowner to another so that the portion transferred could be protected from development.

The Pine Plains Estate was built on a scrub pine forest containing very sandy soil adjacent to the railroad tracks—poor land for farmland and not ideal wildlife habitat. The Planning Board felt it

an ideal location for development. A 14-acre parcel was given to MassWildlife as part of the transaction that extends the Whately Wildlife Management Area and on which there are public trails and a small parking area.

The 60 building permits issued since 2011 developed an estimated 70 to 80 acres of land. In that time, funding from Community Preservation Act alone has helped protect 434 acres, and more acreage was protected outside of the CPA process.²¹ Based on these numbers, land protection in Whately has outpaced development, in the last decade at least.

Development patterns in Whately over the past decade have aligned fairly well with the land use and agriculture goals identified in the 2011 update to the Land Use and Housing sections of the Whately Master Plan. The update supports preserving agricultural lands and strengthening farm businesses in a way that provides living wage jobs and fresh food for Whately citizens and their neighbors. It also envisions focusing preservation efforts on areas that sustain the health of waters, forests, and wildlife, as well as Whately's most valued open spaces. In addition, it asks for more jobs and housing opportunities to be created using energy efficiency and affordability as guiding principles. The 2018 "Creating an Economic Development Vision for Whately" guide summarizes Whately's economic goals, in part, as "Encourage economic, industrial, and commercial growth to occur in an orderly manner consistent with the best interests of the community as a whole and to discourage uncoordinated and incompatible development that may overburden public investment or damage the Town's natural resources and rural character."²² While development pressure is largely determined by regional employment and population trends, the Town of Whately has infrastructure development and land use regulations as tools for steering development patterns and natural resource protection in alignment with the community's long-term goals.

D.2 Infrastructure

D.2.1 Transportation Systems

There are two perspectives when considering a community's transportation infrastructure: the level of ease and safety of moving people and goods *to and from* the community and the level of ease and safety of moving people and goods *within* the community. In terms of the greater transportation network, Whately is conveniently accessed from the primary north-south transportation corridors in western Massachusetts, I-91 and Routes 5/10. As Whately is bordered by the Connecticut River to the east and the hills to the west, the primary east-west transportation routes are local roads. Of the total 41 miles of road, approximately 35 miles are paved and 6 miles unpaved. Routes 5/10 in Whately are managed by the Massachusetts Department of Transportation (DOT) and the remaining roads by the Town Highway Department (excluding four miles of interstate and approximately eight miles of unaccepted roads).

Fixed-route transit service is available from the Franklin Regional Transit Authority's "Valley Route," which connects Northampton and Greenfield, stopping at major employers and other destinations along Routes 5/10. In addition, the Franklin Regional Transit Authority provides

²¹ Personal communication with Planning Board Member Judy Markland, February 2021

²² "Creating an Economic Development Vision for Whately," prepared for the Whately Selectboard by the Franklin Regional Council of Governments, 2018:

https://www.whately.org/sites/g/files/vyhlf5211/f/uploads/whately_econ_dev_vision_august2018.pdf

demand-response transportation services to Whately seniors and residents with disabilities.²³ The FRTA also facilitates the Med-Ride volunteer driver program, which provides rides for people aged 60 and older to medical appointments outside of the county.

Though a railway passes north-south through the middle of Whately, the nearest passenger rail stations are located 12 miles south in Northampton or 12 miles north in Greenfield. The north-south-running passenger rail services travel to Vermont, Springfield, New Haven, and New York City.

Historically, aside from limited sidewalks in the historic village center on Chestnut Plain Road, Whately has not provided much roadway accommodation or multi-use trails for bicycles and pedestrians. In 2018 Whately produced a Complete Streets Prioritization Plan that details a number of infrastructure priorities aimed at making Whately a safer place for bicycling and walking, including:²⁴

- Improved sidewalk, crosswalk, and pedestrian-scale lighting in the town center historic district;
- Better on-street parking at the library to make the street more bicycle friendly;
- A multi-use path along Long Plain Road to provide safe pedestrian access to the Whately Elementary School;
- A sidewalk, ADA ramp, crosswalk, and signage on the east side of River Road at Herlihy Field;
- A sidewalk on Christian Lane;
- Traffic-calming measures in West Whately; and
- Shared lane markings for bicycles on Haydenville Road.

A number of the priorities for Whately Center were completed in 2020, including sidewalks and crossing infrastructure. And while there are no bike accommodations along Whately roads, there is a 17.2-mile bike loop through Conway and Whately that encourages biking through some of the most scenic parts of town and also connects riders to Williamsburg and Hatfield (see A.3: *Regional Recreation Planning*).

D.2.2 Solid Waste Management

Solid waste and recycling can be disposed of in Whately at the transfer station. Trash is accepted at a cost per bag and recycling is free. The Town encourages composting through the transfer station collection program and compost bins for backyard composting can be purchased at the Solid Waste District office at a subsidized price. Whately residents may bring bulky items to the Greenfield Transfer Station year-round or to the Franklin County Solid Waste Management District's Clean Sweep events in May and October. Clean Sweep events also provide household hazardous waste collection. Whately has two closed landfills, capped in 1982 and 1998. Solid waste is now transported out of town.

D.2.3 Water Supply

About half of Whately households rely on private groundwater wells or springs. In addition, two

²³ <http://frta.org/getting-around/demand-response/>

²⁴ https://www.whately.org/sites/g/files/vyhli5211/f/uploads/complete_streets_project_details.pdf

public drinking water systems serve residents, businesses, and institutions in Whately.²⁵ The municipal Whately Water Department serves 395 households, as well as various commercial businesses, industries, and agricultural operations. The privately operated Whately Water District, incorporated in 1970, serves about 40 private residences as well as five municipal properties, the Congregational Church, and the Whately Inn in Town Center. In 2019, the Town voted funding to connect the Whately Water District to the water system operated by the Whately Water Department. That connection will be complete after Mass DEP approval is secured, probably in late 2021, at which point the Whately Water District will be formally dissolved as an operating entity.

The Whately Water Department operates two wells near Interstate 91 adjacent to the Mill River. Water pumped from these wells is stored in a water tower located off Dickinson Hill Road. In addition, three deep bedrock wells located off Haydenville Road are owned and used by the Whately Water District. Once the merger of the two systems is complete, these wells will likely be deactivated. A third, non-community drinking water supply source is operated by Smith College for the Bechtel Environmental Classroom at the college's MacLeish Field Station on Poplar Hill Road in West Whately. This well was installed around 2012. Despite the presence of an Aquifer Overlay District, both public water supply systems and private wells are vulnerable to contamination from a number of sources. According to MA DEP, the aquifer along I-91 has a high level of vulnerability to contamination from agricultural, commercial and residential activities on the ground surface (see *Section 4 E.3 Aquifer Recharge Areas* for details).

D.2.4 Wastewater Treatment Systems

The Town does not have a public sewer system. Residential and commercial uses are entirely served by private septic systems. There are no tight-tank septic systems in Whately; tanks lead directly to leaching fields on the property. The lack of a large-scale municipal sewer system may be considered by some businesses as a disadvantage for expanding their operations or moving their company to Whately. South Deerfield has a public sewer system which abuts Whately to the north, but there is no access to it.

According to the Board of Health, there is little to no history of septic systems failing in Whately; problems that do occur are site specific. The Town has a septic loan account available for residents' use that is seldom used.

D.2.5 Internet and Cell Service

Whately residents have access to cable internet through Comcast, with some lines planned but still unbuilt. Cell coverage is good in most of town but poor in parts of West Whately, which may limit the attractiveness of development and impact the perceived and real safety of recreation away from roads.

D.3 Long-term Development Patterns

Long-term development patterns in Franklin County towns depend on a combination of land use controls, slope and soil constraints, the amount of permanently protected land, access to jobs, population trends, the impact of development on quality of life issues, and the quality of internet

²⁵ As defined by the Massachusetts Department of Environmental Protection (DEP), public wells are those that serve 25 or more persons daily or possess 15 or more service connections for 60 or more days of the year.

service.

D.3.1 Land Use Regulations

According to the Whately Zoning Bylaws, as amended in June 2020, the Town of Whately has five primary zoning districts: Agriculture/Residential 1 (A/R1), Agricultural/Residential 2 (A/R2), Commercial (C), Industrial (I), and Commercial/Industrial (C/I) (see *Zoning Map* at the end of this section and *Timeline of Zoning Changes* in the *Section 3 Appendix* at the end of this section). A/R1 applies to areas extending 400 feet back from the right of way on any existing road providing lot coverage; A/R2 applies to all other areas beyond 400 feet from the right-of-way not zoned commercial or industrial. In addition, the town has a Flood Hazard Overlay District (which will be superseded in 2021 by the state's new Floodplain District bylaw) and two Aquifer Overlay Districts.

The Agriculture/Residential and Commercial districts allow a range of development types by right, some of which facilitate more open space preservation than traditional use regulations. These include detached dwellings, open space/cluster residential subdivision developments, and flexible residential development. Open space/cluster developments of single- or two-family dwellings allow reduced building lot sizes or road frontage in exchange for land in the development being permanently protected as farmland or open space. This bylaw was adopted in conjunction with the creation of the A/R2 district, which expanded residential lot sizes to three acres. The combined effect of the two measures is hopefully to create more open space and limit residential sprawl. Flexible development allows up to ten lots in which some lot sizes are decreased (to 60 percent of the required frontage and 80 percent of the minimum lot size) in exchange for commensurate increases in other lot sizes.

In addition, the Agriculture/Residential and Commercial districts also allow the following other residential uses by special permit:

- Two-family detached dwellings
- Multi-family structures of up to four dwelling units, with one unit required to be owner-occupied
- The conversion of single-family dwellings to two or three-family dwellings
- The conversion of two-family dwellings to three-family dwellings
- Accessory apartments in the main residence or accessory structures already in existence
- Short-term rentals, with no more than three bedrooms available for rent in an owner-occupied residence
- Short-term rentals in non-owner-occupied dwellings for up to 120 days per year
- Congregate elderly housing structures of up to four dwelling units

As of spring of 2021, the Planning Board is also advocating for an expansion to the accessory structures to encourage more affordable housing and help seniors to continue to reside at home. These additional uses enable parcels to accommodate more residents than the typical single-family dwelling, allowing open space to remain undeveloped in the case of increased need for housing.

All residential development in Whately must adhere to the Town zoning requirements regarding lot size, lot coverage, setbacks, parking, as well as Board of Health restrictions. Residential development allowed only by special permit may also need to meet additional requirements as specified in the Town's Zoning Bylaws, such as site plan review and environmental performance standards. Minimum lot sizes, coverage, frontage, and setbacks are outlined in Table 3-12.

Table 3-12: Whately Zoning Dimensional Requirements

	Minimum Lot Area (ft ²)	Minimum Frontage (ft.)	Front Yard (ft.)	Rear/Side Yard (ft.)	Maximum Lot Coverage (%)
AGRICULTURAL AND RESIDENTIAL DISTRICTS					
A/R1					
With public water	40,000	175	50	20	30
Without public water	60,000	200	50	20	30
A/R2					
With public water	80,000	200	50	20	30
Without public water	120,000	300	50	20	30
COMMERCIAL AND INDUSTRIAL DISTRICTS					
Commercial and Industrial	60,000	200	50	20	50
Noncommercial/Nonindustrial					
With public water	40,000	175	50	20	30
Without public water	60,000	200	50	20	30

Dimensional requirements differ depending on the district and whether or not the parcel has public water, so the impact of septic systems is considered. Lots with public water can be smaller because the septic system need not be distanced from the well. The lack of a sewer system makes apartment houses and other large-scale housing development considerably more expensive because they must install a self-contained sewerage treatment system, of which there currently are none in Whately.

The Zoning Bylaws outline additional special bylaws that impact open space:

- The Aquifer Protection Overlay District specifically regulates uses, lot size, and lot coverage in each of the Zone I, Zone II, Zone III and Interim Wellhead Protection Areas that comprise the district.
- The Flood Hazard Overlay District prohibits encroachment (including fill, new construction, substantial improvements to existing structures, or other developments) without compensatory action, within Zones A or A1-A30 on the Town's 1979 Flood Insurance Rate Map.
- The Planned Industrial District permits a mix of land uses, densities, and building types in one development with the goal of encouraging high-quality industrial development that fits well into the landscape, provides open space, and includes commercial uses in part to limit strip development.
- The Solar Electric Generating Facilities bylaw regulates new large-scale ground-mounted solar electrical installations, providing standards for the placement, design, construction, operation, monitoring, modification, and removal of installations to optimize public safety and minimize impacts to environmental, scenic, natural, and historic resources. No ground-mounted solar facilities over 10 kW are permitted in A/R1. However, in all other districts, facilities between 10 and 500 kW are allowed by right and facilities greater than 500 kW are allowed by special permit. Whately's solar bylaw is designed to be reversible, so that the land can be returned to farming or forestry at the end of the effective life of the facility. The bylaw dictates that there can only be minimal disturbance of the land; use of concrete is discouraged. Revisions in 2020 added a requirement for a Resource Replacement Fee on every acre used

by the facility that had been in Chapter 61 or 61A; fee revenue goes to the CPA open space fund for preservation of farm and forestland. There are currently no pollinator-friendly requirements in the bylaw.

Whately has developed primarily as an agricultural community with single-family homes on generous parcels of land and with commercial properties generally located along Routes 5/10 and industrial businesses in its industrial park. This is a model for growth residents continue to support based on the results of survey and forum for the 2011 Whately Master Plan Land Use and Housing section. Whately's current land use controls direct commercial and industrial development to appropriate areas of town, give a strong measure of protection to critical water resources, and provide options to minimize the negative effects of development on the character of the town. Nonetheless, this model of development might not sustain itself indefinitely and while most residential and commercial development in the past decade has happened in A/R1, it is possible that development pressure, including solar development, will increase in the A/R2 district that contains Whately's character-defining farmland and forest.

D.3.2 Cost of Community Services

Whately's finances are affected by an interdependent relationship between its people and the natural landscape. 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. Permanently protected open space, residential, and commercial /industrial development each have a different fiscal impact depending on the relationship of property tax revenues generated to municipal services consumed. Studies have shown that for municipalities, typically open space and commercial lands had a lower expense to revenue ratio than residential development.²⁶ Open space, while not generating the same tax revenues as other land uses, require fewer public services and result in a net tax gain for a community. Residential uses require more in services than they provide in tax revenues compared to open space, commercial, and industrial land uses. When this occurs, communities are balancing their budgets with the tax revenues generated by other land uses like open space and commercial and industrial property.

However, if a community has an excess in service capacity, new residential growth is not necessarily a strain on the budget. In Whately's case, excess school, water, and transfer station capacity suggest that development may actually contribute, (though not necessarily if school enrollment does not go up), to keeping its under-enrolled school open and government services supported. Adding more students to the Whately school system wouldn't increase the costs of educational services in Whately; it would spread the existing fixed costs of schooling over a larger number of students

Low vacancy rates in Franklin County suggests there is a pent-up housing demand in the county as a result of the slow housing market during and following the 2008 recession. In Whately, protecting land in balance with new housing development will help maintain the open space that provides a net revenue gain to the town, and at the same time help meet the future housing needs of the population.

It is also important to note that the commercial, industrial and personal property component of the

²⁶ Helena Murray and Paul Catanzaro, "Fiscal Impacts of Land Use in Massachusetts," 2019:

<https://masswoods.org/sites/masswoods.org/files/pdf-doc-ppt/cost%20of%20community%20services%20for%20four%20towns.pdf>

American Farmland Trust, 2016: https://conservationtools.org/library_items/352-Farmland-Information-Center-Fact-Sheet-Cost-of-Community-Services

Town's tax base is quite healthy in its diversification in comparison to other Massachusetts communities. According to municipal officials, residential properties constitute 79 percent of the tax base, and open space 1.0 percent, although many open space parcels pay a reduced tax rate through the state's current use tax program (Chapter 61). Whately's commercial, industrial and personal property tax revenues total 20 percent of its tax base (7.9, 7.5, and 4.6 percent respectively). Often municipalities that have such a high mix of property class revenues also have a split tax rate. Whately has not implemented a split rate, as it would force non-commercial properties in commercial districts to pay a commercial rate.

While most communities recognize the value of open space resources, they are often at a loss for how to fund it. One mechanism for funding the preservation of and development of important resources available in Whately is the Community Preservation Fund. Adopted in 2008 with a 3% surcharge, the Community Preservation Act (CPA) raises money through a surcharge of the tax levy on real property for open space protection, recreation, historic preservation, and the provision of affordable housing, which is then matched through a state CPA fund. This funding source has already fully or partially funded 17 open space and recreation projects in the town, including 434 acres of land protection, renovation of the Town's softball fields, and development of recreation trails off Chestnut Plain Road. Early adoption of the maximum surcharge and the use of the funds demonstrate that Whately already prioritizes open space, recreation, scenic, and historic resources.

Given that it is unclear whether population will increase or decrease in Whately over the next few decades, the challenge for its residents will be to find a sustainable development model that sustains and enhances the community's agricultural, rural, and historic character and promotes a stable and equitable property tax rate. An approach that encompasses both appropriate business development with conservation of natural resources will best satisfy the desires of residents to maintain their community character while off-setting the tax burden. This approach must also be adaptable to recreation and open space needs that change over time as the composition of the community changes. By continuing to pursue growth management strategies that include active land conservation and zoning measures that balance development with the protection of natural resources, Whately will be better positioned to maintain a high quality of life for its residents.

Furthermore, the success of any plan must reflect the will of the people it affects. Whately citizens must have a plan they can readily access, understand, and be able to change as conditions affecting town change over time. Creation and implementation of a successful plan requires robust public input, as outlined in Sections 6 through 10, and true shared governance.

Section 3 Appendix



TOWN OF WHATELY Whately, Massachusetts

Planning Board

Mailing address:

4 Sandy Lane, So Deerfield, MA 01373

February 1, 2021

to: Tamsin Flanders
Planner, Land Use & Natural Resources Planning Program
Franklin Regional Council of Governments

The following commentary is designed to give some background on the development of Whately's zoning bylaws and their impact that can't readily be derived from the bylaws themselves. Hopefully it will be useful for the zoning section of the Open Space Report.

I. Bylaw Timeline

- 1963: first bylaws enacted. Presumably the zoning districts were limited to two basic ones: an Agricultural/Residential District encompassing most of the town, and a commercial one along Routes 5 & 10, which then was the major north/south artery.
- Commercial/Industrial and Industrial Districts were created by the early 1990's for the Merillat plant (now Yankee Candle) and the Industrial Park.
- 2006: The Aquifer Overlay Districts were added to protect the aquifer feeding the town's wells. In addition to creating a list of prohibited uses that might generate pollution, the bylaw increased the size of a residential lot permitted in the districts to 3 acres and limited the lot coverage ratio to 10%.
- 2010: In an attempt to reduce sprawl, the town enacted three related bylaw changes. The Agricultural/Residential District 2 district was created, expanding the minimum required lot sizes for land areas 400' back from the town right of way. And the Cluster Development and Flexible Development bylaws were added to encourage efficient use of space and to promote open space. There was minimal opposition to the package. No cluster or flexible development applications have been received.
- 2010: An accessory apartment use was added to the Table of Use and use expanded to allow accessory apartments in existing outbuildings, as well as residences. This was intended to increase density, provide affordable housing units, and provide aid to seniors in large homes who might wish to have an apartment for income or for a caretaker.
- 2011: The Large-scale Ground-mounted Solar Bylaw was adopted as part of the town's Green Communities initiative. While most communities have created overlay districts for these solar

facilities, Whately opted to allow their construction everywhere except Ag/Res 1, our primary residential area, by special permit. Smaller facilities are allowed by right due to their exemption from local zoning restrictions by the state.

The solar bylaw specifies that there be minimal impact on agricultural land and is designed to be totally reversible at the end of the facilities' lifespan. Concrete is to be minimized and farming is encouraged under and in conjunction with the solar panels.

- 2013: Two commercial/industrial parcels totaling 10 acres were created on Long Plain Road across from the Industrial Park. These remain undeveloped. In addition, the lot containing Zononi's Garage and the site of the former Di Maio restaurant (now owned by the town) were converted to Commercial Zoning in recognition of their long-term use as commercial properties. The town has not marketed the Di Maio site since it was rezoned and it remains empty. One lot on Christian Lane was rezoned from Commercial/Industrial to Ag/Residential after an APR was placed on it.
- 2018: Farmer breweries were added to the Table of Use and allowed by special permit in all zoning districts except Ag/Res 1 to encourage agritourism and provide an additional source of income for farmers.
- 2018: Marijuana cultivators and retailers were added to the Table of Use. Outdoor cultivation is allowed by special permit in Ag/Res2. Indoor cultivation is allowed by special permit in all districts except Ag/Res1 and permitted in Ag/Res1 if the greenhouses and agricultural buildings were in existence at the time the bylaw was passed. To prevent large, warehouse type cultivation and processing buildings, the bylaw restricts building size to 4000 square feet (roughly the size of a tobacco barn) in the Ag/Res districts and 5000 square feet in the other districts. [Marijuana is excluded by the state from the agricultural exemption from local zoning restrictions.]
- 2019: The town passed an adaptive re-use bylaw for historically significant buildings with a history of being open to the public, that allows specified commercial and residential uses and relaxes dimensional requirements to encourage creative re-use of older public and private buildings.
- 2020: The solar bylaw was amended to cap the size of facilities at 10 acres, with additional acreage allowed when the facility is out of public view or on unproductive land, add safety and monitoring provisions for large-scale storage batteries, require more screening, and impose a remediation fee²⁷ for the loss of farmland or timberland.
- 2021: Town meeting will be asked to approve rezoning two lots on State Road from Agricultural/Residential to Commercial and the adoption of the state's new Floodplain Bylaw, which establishes new permitting requirements for building in the floodplain.

II. Agricultural Exemption

MGL Chapter 40A, section 3 exempts most agricultural and horticultural activities from municipal bylaws except those relating to health, safety, and environmental protection. This effectively means that the town has little control of farming and forestry operations related to the size and placement of buildings, lighting, etc. The 49,000 square foot Chang farm sprout facility on River Road is illustrative, as is the proliferation of large greenhouse buildings in many parts of Whately.

²⁷ The Attorney General has questioned the enforceability of this fee. Case law stipulates that the fee must be directly related to the cost of the act requiring it. The Resource Replacement Fee established by the bylaw assesses a per acre charge on every acre used by the facility, with the money to go to the Community Preservation Act Open Space Fund. The Planning Board feels that this would be defensible in court, and also that the cost of lawsuits might well outweigh the size of the remediation charge.

The impact of this exemption going forward is unclear. Most farming operations to date, with the exception of marijuana which is not covered by this exemption, have not relied heavily on large-scale buildings. The growing trend towards the use of greenhouses may signal a change with significant potential impacts on both groundwater water and electricity usage, as well as drainage.

It should also be noted that any large-scale solar facility whose output goes to a farm is also exempt from local zoning regulations.

III. Commercial activities in the Agricultural/Residential Districts

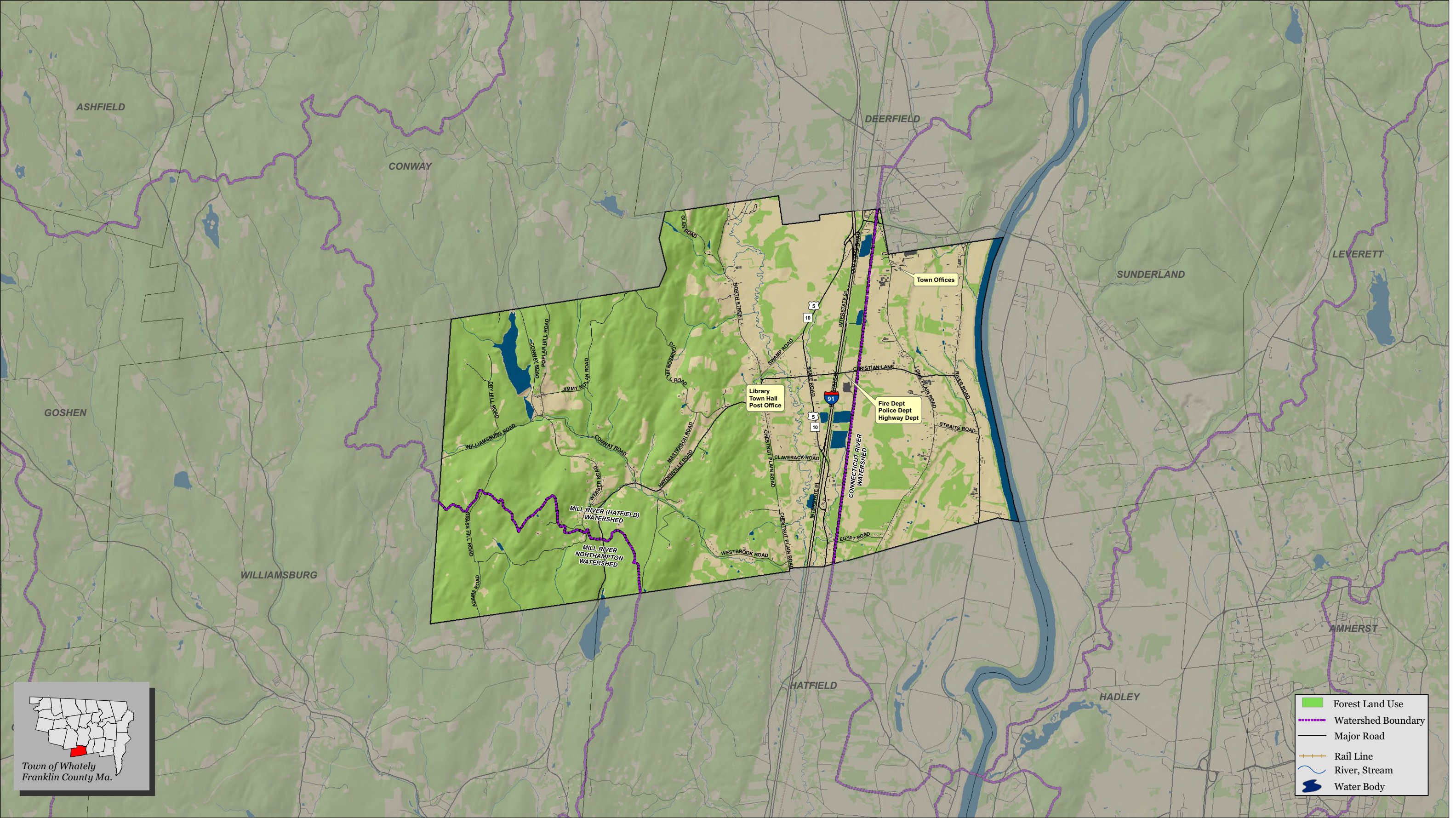
There is a tendency to think that business activities in these two zoning districts are limited to raising crops and animals and timbering. In fact, there are quite a few commercial activities permitted.

The state agricultural exemption permits retail sales of farm products on farmland as long as at least 25% of the amount sold by either volume or value is produced on land owned or rented by the farmstand owner. Golonka's and Pasiecznik's are two prime examples. There are also businesses processing farm and forest products, such as making maple sugar products and kiln-drying timber.

Home occupations are permitted as an accessory residential use by right as long as the business occupies less than 50% of the building area on the property, certain parking and traffic limitations are observed and the residential character of the site is maintained. The Planning Board has identified 30 home businesses (including two B&B's) currently in operation and there are undoubtedly more.

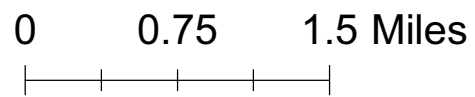


Judy Markland

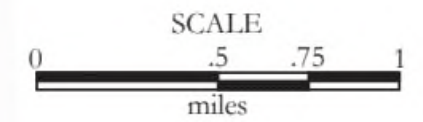
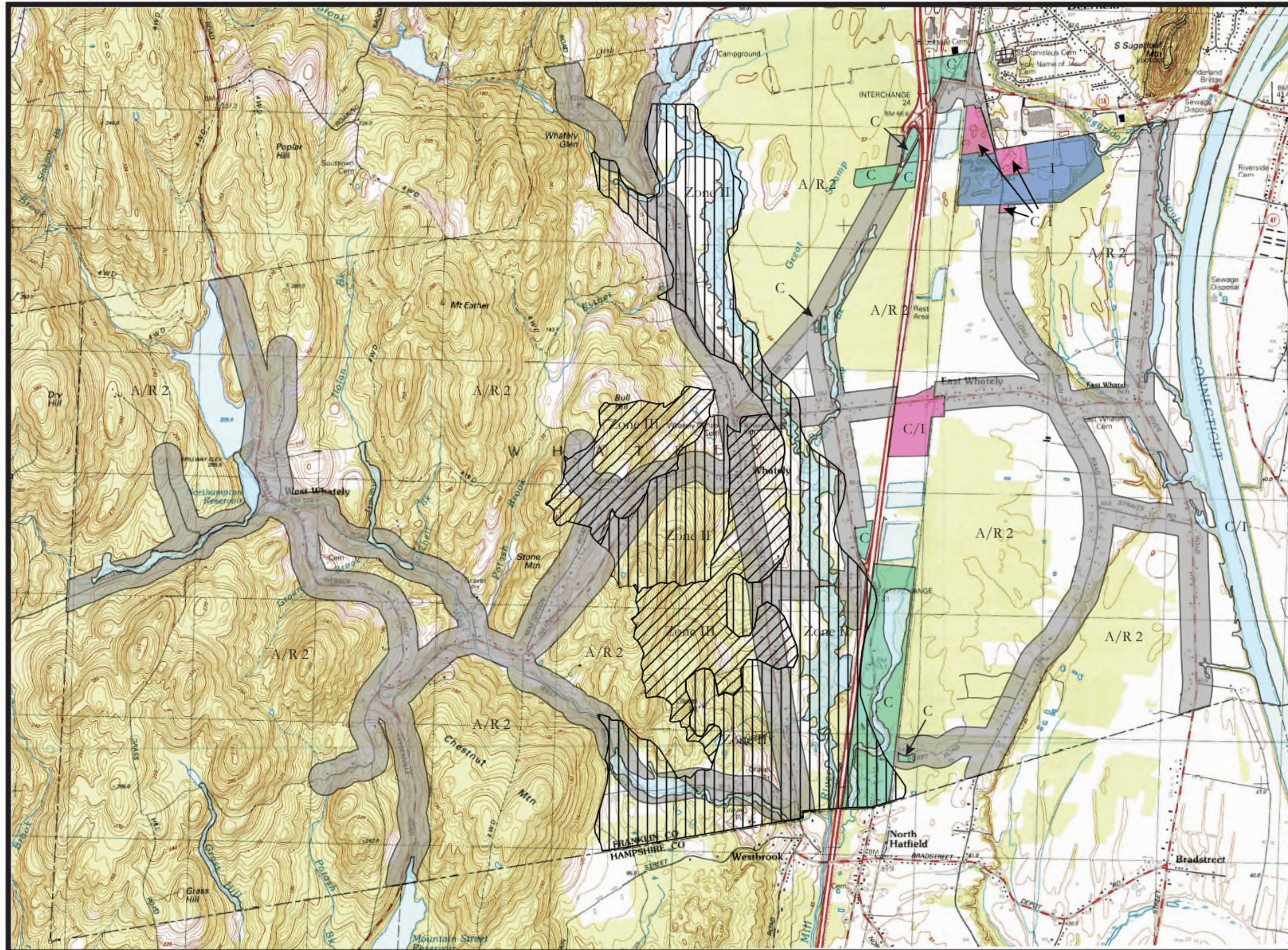


Town of Whately
Open Space &
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
Context Map



WHATELY, MASSACHUSETTS ZONING MAP



LEGEND

-  A/R 1 - Agricultural & Residential
-  A/R 2 - Agricultural & Residential
-  C - Commercial
-  C/I - Commercial & Industrial
-  I - Industrial
-  Aquifer Overlay District Zone II
-  Aquifer Overlay District Zone III

Note: Depicted boundaries are approximate and for planning purposes only.

UPDATED JULY 1, 2021 to add zoning changes and corrections, change background map, and to add three new streets.

SECTION

4

ENVIRONMENTAL INVENTORY AND ANALYSIS

This section of the Whately Open Space and Recreation Plan provides a comprehensive inventory of the natural resources, ecological function, and significant cultural assets within the town. The purpose of this section is to provide a factual basis upon which assessments of open space and recreational assets in Whately can be made. The *Climate Change Impacts* subsection provides down-scaled climate data and identified municipal vulnerabilities to climate change that may impact the town's cultural and natural assets. The *Documenting and Mapping Ecosystems* subsection provides a guide to tools available for prioritizing parcels of land based on biological and physical attributes that make land high value for conservation. The *Soils, Geology, and Topography* subsection provides a general understanding of the ways different soil characteristics can impact land use values. *Landscape Character* provides an overall scenic context. *Water Resources* describes all of the water bodies in town, above and below ground, including their recreational value, public access, and any current or potential quality or quantity issues. In the subsection *Vegetation*, Whately's forest, farmland, and wetlands are documented, and in *Fisheries and Wildlife*, wildlife habitat and rare, threatened, and endangered species are discussed. Whately's *Scenic Resources and Unique Environments* section identifies special natural and constructed places, trails, and views. Finally, *Environmental Challenges* addresses current and potential problems that may influence open space or recreation planning.

We analyze the town's natural and cultural resources and ecological function from two perspectives. First, the Town's natural resources provide Whately residents with basic ecosystem services and cultural amenities. Ecosystem services are benefits to humans provided by ecological systems, such as drinking water filtration, flood storage capacity, species diversity, carbon sequestration and climate change mitigation, and soil nutrient processes. Cultural ecosystem services include the recreational use of open spaces; the quality of life benefits that are maximized by maintaining the area's rural character and scenic beauty; and the direct and indirect beneficial impacts that well-conserved natural resources, such as good drinking water and open spaces, have on the local economy. Second, it is important to determine whether Whately's water and land require conservation and management so that the quantity and quality required by the citizenry is sustained.

A. CLIMATE CHANGE IMPACTS

A changing climate is impacting natural resources, including wildlife and habitats in Massachusetts, and will continue to have an impact as temperatures rise and precipitation amounts change over the coming decades. According to the Massachusetts Wildlife Climate Action Tool,

warming is occurring in all seasons, with the greatest changes in winter, at higher latitudes, and potentially at higher elevations.¹ Seasonal warming is extending the growing season, particularly with more frost-free days occurring earlier in spring. Precipitation amounts are increasing, especially in winter. Warmer winters are also resulting in more precipitation falling as rain instead of snow, leading to reduced snowpack, though stronger blizzards may lead to locally higher snowpack in Massachusetts and New England. In the summer, heavier downpours combined with longer dry periods are expected, increasing the risk of both floods and drought.

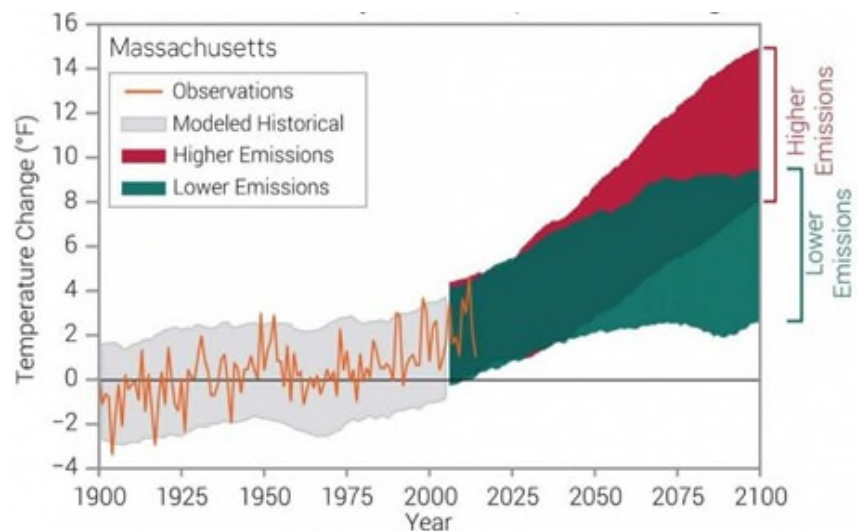
Natural resources play an important role in mitigating future climate change, but are also vulnerable to its impacts. Local decisions about how natural resources are managed and conserved will play an important role in the ability of people, habitats, and wildlife species to cope with future climate changes. The following is an overview of the two major impacts of climate change for Massachusetts and Whately: changes in temperature and changes in precipitation. More information about specific climate change vulnerabilities due to these impacts as well as adaptation strategies are incorporated into relevant sub-sections, especially *I. Environmental Challenges*.

A.1. Temperature Changes

The northeast United States has experienced an increase in annual temperatures of 1.6°F over the last century, with the greatest warming happening in the winter.² Depending on future global greenhouse gas (GHG) emissions scenarios, average annual temperatures in Massachusetts are expected to be 2.8°F to 6.2°F warmer by 2050 than in the past several decades (when the average annual temperature was observed to be 47.5°F). By 2090, the average annual temperature in the state is expected to increase by 3.8°F to 10.8°F, depending on varying emissions scenarios.³

The Resilient MA climate change data clearinghouse provides climate projections at the watershed level.⁴ Within the Connecticut River Basin, overall

Figure 4-1: Observed (1971-2005) and Projected temperature Average for Massachusetts



Source: Resilient MA: Climate Change Clearinghouse for the Commonwealth

¹ Massachusetts Wildlife Climate Action Tool <http://climateactiontool.org/content/learning-about-climate-change>

² Massachusetts Wildlife Climate Action Tool: <http://climateactiontool.org/content/temperature-changes>

³ Resilient MA: Climate Change Clearinghouse for the Commonwealth: <http://www.resilientma.org>. Accessed November 9, 2020.

⁴ Ibid.

observed average annual temperature between 1971 and 2005 was 47.0°F. Average annual temperatures in the watershed are expected to increase between 2.2°F and 4.5°F by 2050 depending on future GHG emissions levels (Figure 4-1); by 2090, average annual temperatures in the watershed could increase by 4.0°F to as much as 10.9°F, depending on global emissions.

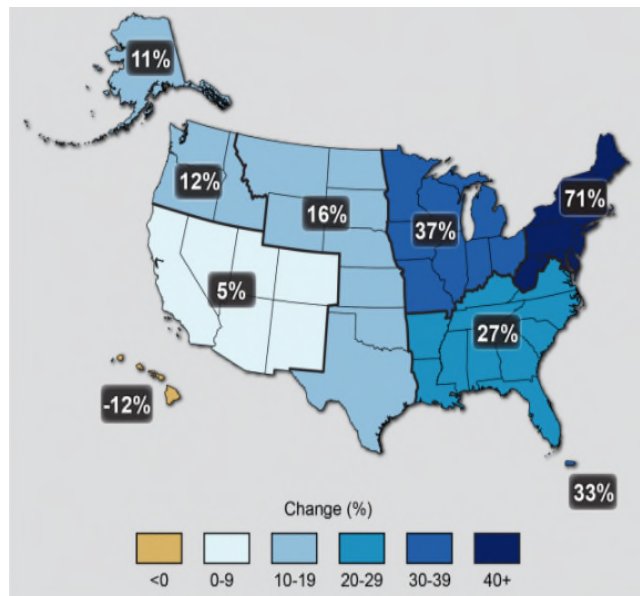
In addition to overall warming temperatures, it is expected that an increase in extreme high temperatures will occur. In the Connecticut River Watershed, it is expected that by 2050, there will be anywhere from 10 to 35 more days with temperatures over 90°F. From 1971 to 2000, the watershed averaged 6 days per year when temperatures reached over 90°F. Conversely, the watershed is expected to experience 19 to 37 fewer days in which temperatures drop below freezing (32°F) by 2050.

A.2. Precipitation Changes

In Massachusetts, annual precipitation amounts have increased at a rate of over 1 inch per decade since the late 1800s and are projected to continue to increase largely due to more intense precipitation events.⁵ The Northeast has experienced a greater increase in extreme precipitation events than the rest of the U.S. in the past several decades (Figure 4-2). Although overall precipitation is expected to increase, it will occur more in heavy, short intervals, with a greater potential for dry, hot, drought conditions in between.

Observed annual precipitation in Massachusetts for the last three decades was 47 inches.⁶ Total annual precipitation in Massachusetts is expected to increase between 2% to 13% by 2050, or by roughly 1 to 6 inches.⁷ In the Connecticut River Watershed, annual precipitation has averaged around 46.4 inches in recent decades. By 2050, the annual average could remain relatively the same (but occur in more heavy, short intervals) or increase by up to around 6 inches a year.⁸ In general, precipitation projections are more uncertain than temperature projections.

Figure 4-2: Observed Change in Very Heavy Precipitation, 1958-2012



The northeast has seen a greater increase in heavy precipitation events than the rest of the country.

Source: updated from Karl et al. 2009, Global Climate Change Impacts in the United States.

⁵ Massachusetts Wildlife Climate Action Tool: <http://climateactiontool.org/content/temperature-changes>

⁶ Ibid.

⁷ Ibid.

⁸ Resilient MA: Climate Change Clearinghouse for the Commonwealth: <http://www.resilientma.org>. Accessed November 9, 2020.

A.3. Effects of Climate Change

Climate change is already altering natural habitats and impacting communities in various ways. Ecosystems that are expected to be particularly vulnerable to climate change include coldwater streams and fisheries, spruce-fir forests, hemlock forests, northern hardwood forests (including sugar bushes), vernal pools, and street trees in town centers. Warming temperatures and changes in precipitation will push plant and animal species northward or to higher elevations. Higher temperatures, along with changes in stream flow, will degrade water quality. Despite increased precipitation, higher temperatures will also lead to more frequent and prolonged drought and coldwater species will decline. An increase in stronger storms will lead to more flooding and erosion. A shift to winter rains instead of snow will potentially lead to more runoff, flooding, and greater storm damage along with less spring groundwater recharge.

An increase in extreme weather events, including heavy rains, ice storms, microbursts and hurricanes will impact natural features and functions, and human communities. The region has already experienced loss of roads, bridges, culverts, buildings, farmland, and crops from the impact of more extreme weather.

A Community Resilience Building workshop (CRB)⁹ was held in January of 2021 in which Whately residents identified the current concerns and challenges presented by climate hazards. These concerns are fully highlighted in the forthcoming Whately Municipal Vulnerability Preparedness (MVP) Resiliency Plan and include flooding, drought, and severe wind/microbursts, and invasive species. Specific climate-related environmental challenges concerning Whately residents and Town employees include tree stress from invasive species, drought risk in the public water supply, undersized culverts and poor aquatic connectivity, river bank erosion, and wind erosion in farm field (see *Section 4.I Environmental Challenges* for more details).

While climate change will continue to be a major challenge globally, local efforts and decisions have a real and lasting impact on mitigating and adapting to future climate change. One of the most effective, and least costly, strategies is to preserve existing natural areas and manage them for increased resilience to climate change.

B. DOCUMENTING & MAPPING ECOSYSTEMS

Residents have cherished the natural resources and scenic landscapes in Whately for generations. This Open Space and Recreation Plan is intended to help residents protect the town's scenic value and natural resources in the face of potential increasing development and changes in land use, while recognizing that people need places to live, learn, work and play. These needs—when sited in areas previously unsettled rather than as infill in already developed areas—can require infrastructure such as roads, power, water, and wastewater systems. These collective needs, in turn, both depend upon and impact critical natural systems. One way to understand the impact of development on natural resources is to understand the ecosystems of the town and the region. This section begins with a definition and discussion of ecosystems—their value and the mapping

⁹ A community-driven planning process developed by The Nature Conservancy and used for municipal vulnerability planning: <https://www.communityresiliencebuilding.com/>

available for Whately to use in its open space and recreation planning and decision-making processes.

An ecosystem is a geographically specified complex relationship between organisms, including humans, their environment, and the processes that control their dynamics.¹⁰ These relationships can occur at different scales; for example, a large forest and a decayed tree trunk are both ecosystems. The health and function of ecosystems depend on the relationship between living beings and their environment. All ecosystems are vulnerable to any changes to the environment, whether naturally occurring or human made. Understanding the complexity of the systems in which we live can help Whately residents to consider the impact of actions and land uses on the environment and on their quality of life.

B.1 Massachusetts BioMap2

In 2010, the Massachusetts Department of Fish and Game (DFG) and The Nature Conservancy launched BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World. This project, produced by the Natural Heritage and Endangered Species Program (NHESP), is a comprehensive biodiversity conservation plan for Massachusetts that endeavors to protect the state's biodiversity in the context of the projected effects of climate change.¹¹ BioMap2 data replace the former BioMap and Living Waters data.

BioMap2 seeks to document and conserve lands and waters that are considered to be the most important for maintaining biodiversity and enhancing ecological resilience to climatic change, and targets for preservation large, intact, well-connected ecosystems and landscapes. Global climate change will affect species migrations and dispersal events, uncouple symbiotic relationships, uncouple predator-prey relationships, cause interactions with new pathogens and invasives, increase the frequency and intensity of insect infestations, change species distribution ranges, result in habitat losses, result in changes in fecundity and population structure, cause changes in sex ratios, result in changes in competitive abilities, and cause increased physiological stress causing direct mortality or decreased disease resistance. To offset these climate-change-induced effects, the BioMap2 prioritizes the protection of larger habitats, natural communities, and ecosystems (such as wetlands, forests, and river systems) because they support larger populations of native species and greater numbers of species and are, thereby, better able to help plants and animals survive extreme conditions.

To do this, BioMap2 combines NHESP's 30 years of rare species and natural community documentation with the Division of Fish and Wildlife's State Wildlife Action Plan (SWAP). It also integrates The Nature Conservancy's assessment of ecosystem and habitat connections across the state and incorporates ecosystem resilience in the face of anticipated impacts from climate change. BioMap2 data focuses on two types of composite habitat: Core Habitat and Critical Natural Landscapes.

B.1.1 Core Habitat

Core Habitat consists of 1,242,000 acres statewide that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural

¹⁰ http://ecosystems.noaa.gov/what_eco.htm

¹¹ <http://maps.massgis.state.ma.us/dfg/biomap2.htm>

communities and intact ecosystems across the Commonwealth. Core Habitat includes:

- Aquatic Cores;
- NHESP Priority Natural Communities;
- Forest Cores;
- Exemplary cold-water and cool-water stream habitats;
- Habitats identified in DFG's Comprehensive Wildlife Conservation Strategy, and habitats for species identified under Massachusetts Endangered Species Act (MESA);
- Habitats for rare, vulnerable, or uncommon mammal, bird, reptile, amphibian, fish, invertebrate, and plant species;
- High-quality wetland, vernal pool, aquatic, and coastal habitats; and
- Intact forest ecosystems.

Aquatic Cores were mapped to protect fish and other species of Special Conservation Concern. Forest Cores were selected as the best examples of large, intact forests that are least impacted by roads and development (i.e., traffic, pollution, agriculture, etc.) and provide critical habitat for numerous woodland species, such as certain neotropical migrating bird species, that are dependent upon relatively pristine forest interior habitats for survival. Wetlands were selected from the least-disturbed, high-quality wetlands in undeveloped landscapes, having intact buffers and little fragmentation or other stressors associated with development. Vernal Pool habitat is considered to be important to the survival of those amphibian and invertebrate species inhabiting the pools and the surrounding upland forests provide important habitat for amphibians foraging, overwintering, and migrating between pools.

B.1.2 Critical Natural Landscapes

Critical Natural Landscapes (CNL) consists of 1,783,000 acres statewide, complementing the Core Habitat and include large natural Landscape Blocks that provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience. The areas include buffering uplands around coastal, wetland, and aquatic Core Habitats to help ensure their long-term integrity. CNL, which can overlap with Core Habitat, includes:

- The largest Landscape Blocks (areas of intact, predominately natural vegetation consisting of contiguous forests, wetlands, rivers, lakes, and ponds) in each of 8 ecoregions, and
- Adjacent uplands that buffer wetland, aquatic, and coastal habitats.

Together, BioMap2 Core Habitat and Critical Natural Landscapes make up 2.1 million acres,¹² or 40% of the land in Massachusetts. Less than half (an estimated 41%) of the BioMap2 landscape in the State has been permanently protected from development. Reports are available detailing the BioMap2 Core Habitat and Critical Natural Landscapes in each Massachusetts community.¹³

¹² Approximately 925,000 acres of Core Habitat and Critical Natural Landscape overlap.

¹³ <https://www.mass.gov/service-details/biomap2-town-reports>.

B.2 The Nature Conservancy's Resilient Sites

In 2016, The Nature Conservancy (TNC) released a report entitled “Resilient Sites for Terrestrial Conservation in the Northeast and Mid-Atlantic Region.”¹⁴ According to the report’s introduction, climate change is expected to alter species distributions. As species move to adjust to changing conditions, federal, state, and local agencies and entities involved in land conservation need a way to prioritize strategic land conservation that will conserve the maximum amount of biological diversity despite shifting species distribution patterns. TNC’s approach aims to identify key areas for conservation based on land characteristics that accommodate diversity and resilience. The analysis identifies the most resilient examples of key geophysical settings (landscapes with characteristics such as desirable bedrock types, elevation change, or water features that buffer against climate effects) to provide conservationists with locations where conservation is most likely to succeed over centuries. An online mapping tool allows users to view the analysis and assess specific areas for conservation on the basis of resilience, connectivity, recognized biodiversity value, and a combination of frameworks.¹⁵

B.3 MassAudubon's Mapping and Prioritizing Parcels for Resilience (MAPPR)

Mass Audubon, in partnership with The Nature Conservancy and LandVest, developed Mapping and Prioritizing Parcels for Resilience (MAPPR 2.0) to allow Massachusetts conservationists to rapidly identify specific parcels that, if protected, could contribute the most to achieving land protection goals.¹⁶ MAPPR compiles the previous work of BioMap2 and TNC’s Resilient Sites, along with other digital parcel information into one online mapping tool. The MAPPR 2.0 tool maps parcels within an area of interest that are the highest priorities for protection based on habitat quality, climate change resilience, conductance (the importance of land for connecting areas of high ecological integrity),¹⁷ and other metrics such as parcel size and adjacency to existing protected parcels. The higher the number and darker the color, the more critical that parcel is for conservation based on selected inputs (see Figure 4-3).

¹⁴ <https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/terrestrial/resilience/Pages/default.aspx>.

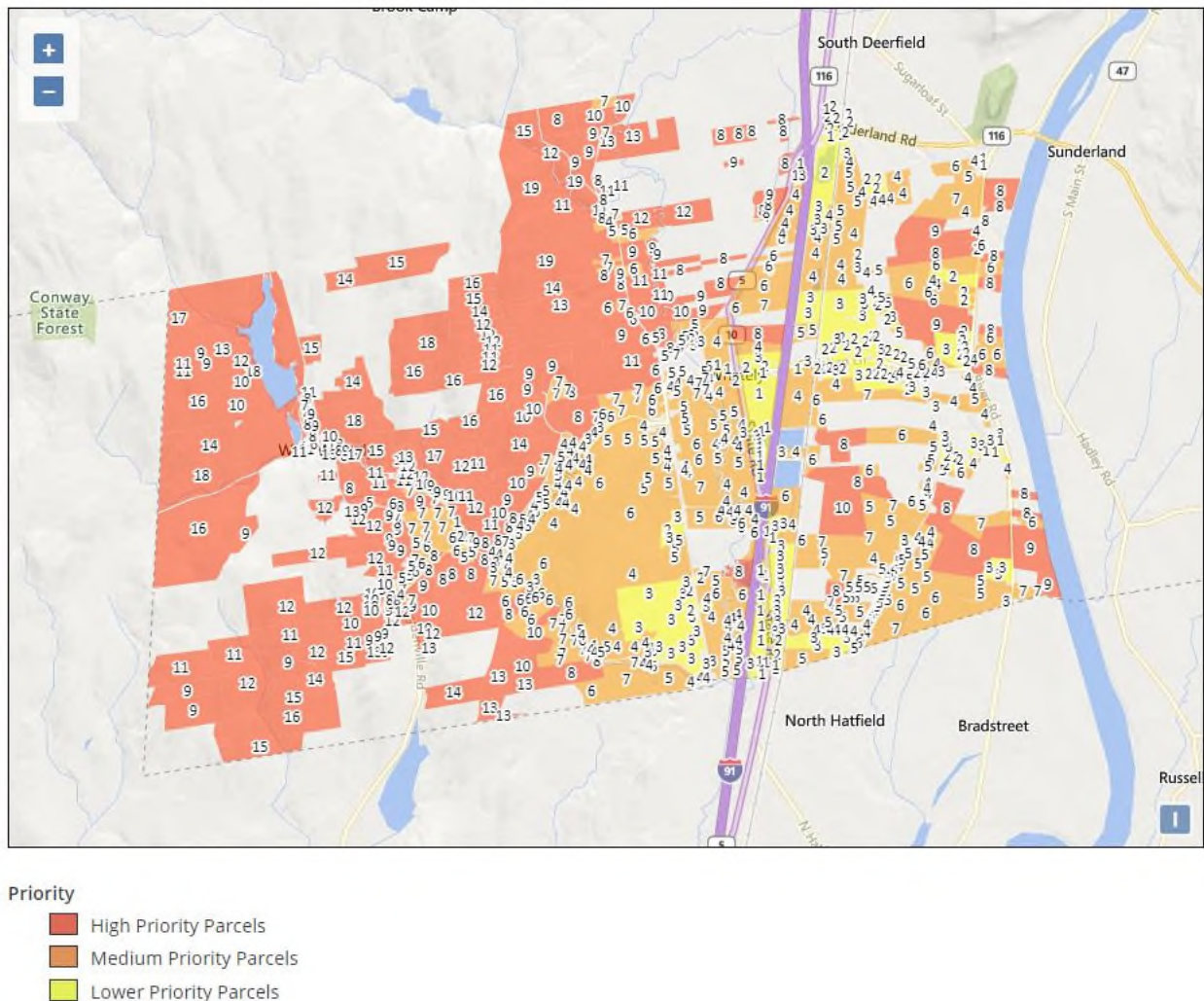
¹⁵ Nature Conservancy Resilient Sites Mapping Tool:

http://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/terrestrial/resilience/resilientland/Pages/Mapping_Tool.aspx.

¹⁶ MassAudubon MAPPR: <https://www.massaudubon.org/our-conservation-work/advocacy/shaping-the-future-of-your-community/current-projects/mappr-project>.

¹⁷ Critical Linkages is an assessment that yields a score for *Conductance*, a metric that quantifies the importance of land for connecting areas of high ecological integrity. Where connecting habitat occurs as narrow corridors between high valued areas, they may be particularly important even if they are not identified by CAPS, Biomap2 or TNC’s Resilient and Connected Landscapes. You can also view Critical Linkage data for *Conductance* in the MA Wildlife Climate Action Tool: <http://climateactiontool.org/content/protect-land-strategic-land-protection>. For more information, go to: http://jamba.provost.ads.umass.edu/web/lcc/dsl/technical/DSL_documentation_connectivity.pdf.

Figure 4-3: Example Map Created Using Mass Audubon’s MAPPR Tool “Balanced Model”



Source: MassAudubon MAPPR tool

B.4 Nature’s Network

Nature’s Network, developed by the USFWS and UMass Amherst, is a suite of decision-support tools and datasets the identify opportunities for conserving and connecting intact habitats and ecosystems and supporting imperiled species.¹⁸ The application depicts land and water networks across the 13-state Northeast region considered the best places to begin strategic conservation planning to support a sustainable future for both human and natural communities. Links to the Northeast Conservation Planning Atlas allows users to see shared priorities across the region.

¹⁸<http://naturesnetwork.org/>

C. GEOLOGY, SOILS AND TOPOGRAPHY

The character of a community is often greatly influenced by its geology, topography, and soils. Decisions relating to open space and recreation planning should take into consideration the inherent suitability of a site for different uses. Bedrock, surficial geology, soils, and topography are essential in determining potential sites for future residential, commercial, and industrial development and for new parks, hiking trails, and open space.

C.1 Topography

Whately's eastern half is a level plain extending from Chestnut Plain/North Street to the Connecticut River. Level land is traditionally more easily developed than land with steep slopes. This explains why Whately primarily developed agricultural, industrial, commercial, and residential uses in the more level, low-lying areas of town.

The topography of Whately is also characterized by a series of floodplain terraces, all of which afford very good medium- and long-range views to the east. Historic Whately Center is perched on one of these terraces where the Connecticut River lowland meets the steep upland of the western half of Whately.

Rugged, hilly terrain predominates the western half of town. This terrain constrains widespread residential development, helping to keep development away from waterways and to preserve large blocks of forestland. The highest points in Whately are found in the Western Highland, and include Mount Esther (elevation 980 feet), Chestnut Mountain (elevation 770 feet), and four hills south of Williamsburg Road in the southwestern corner of town, each with an elevation of over 1,000 feet.

C.2 Geology

The geological history of the region and the mountains surrounding Whately begins about 220 million years ago during the Triassic Period, when a huge fault system running north and south appeared as the earth's crust stretched. Over the next forty million years, the land west of the fault sank as molten magma erupted from the crust to cover the valley floor. The Connecticut Valley thus falls within a down-faulted rift basin formed during the Mesozoic Age, characterized by Jurassic and Triassic arkosic sandstones and mudstones intermixed with basaltic lava flows. During the last glaciation, the mile-thick Laurentide ice sheet gouged its way across the landscape. As it melted, meltwater streams from the receding glacier deposited sands and gravels over the bedrock.¹⁹

Whately's western upland area is composed of Ordovician, Silurian, and Devonian Age detrital and carbonate rocks that were folded and faulted during tectonic episodes. Unconsolidated materials, especially in areas where rock outcroppings are absent, are usually the result of deposits of glacial till—a dense mixture of clay, silt, sand, gravel, and boulders. The topography of the western half of Whately is rugged and hilly, with narrow, steep-sided stream valleys due to the erosion-resistant nature of the underlying bedrock. The West Brook and its tributaries eroded the

¹⁹ Information for this section was adapted from the book *Dinosaurs, Dunes and Drifting Continents: The Geohistory of the Connecticut Valley* by Richard D. Little, 2003.

surrounding hills over the millennia to produce the deep valley through which the brook still travels.

In Whately's lowland, pre-glacial streams cut deep channels into the soft sedimentary rock. During the most recent glaciation, which ended around 15,000 and 11,000 years ago, a layer of till was deposited directly over the bedrock. Later, a temporary dam of glacial debris near the present location of Rocky Hill, Connecticut created a glacial meltwater lake that stretched to northern Vermont. Meltwaters deposited materials into the lake, known as Glacial Lake Hitchcock, creating deep layers of silts and clays in the central portion of the lake with sands and gravels along its edges. In some places, meltwater eroded till and deposited glacio-fluvial sand and gravel to form artesian aquifers. After the dam broke, the remaining flow began to channel into the lake bottom. That meandering channel became the Connecticut River.

C.2 Soils

Soil is the layer of minerals and organic material that covers the rock of the earth's crust. All soils have characteristics that make them more or less appropriate for different land uses. Scientists classify soils according to their characteristics, which include topography; soil structure, particle size, stoniness, and depth to bedrock; drainage or permeability to water, depth to the water table, and susceptibility to flooding; behavior or engineering properties; and biological characteristics such as the presence of organic matter and fertility.²⁰ Soils are classified and grouped into associations (groups of soils forming a pattern of soil types characteristic of a geographical region) that are commonly found together.

According to the U.S. Department of Agriculture's 2009 Franklin County Soil Survey, the three main soil associations in Whately are the rocky Chatfield-Hollis soils in the western uplands and the Windsor, Walpole, Hinckley, and Merrimac sandy loams and loamy sands in the lowland and a mix of very fine sands and silt along the Connecticut River. The soils in the valley lowland were formed by water-sorted materials like glacial outwash. These soils are usually located in valleys, on nearly level to rolling terraces, deltas, kames, and eskers, which are all land formations created through glacial movement thousands of years ago. The large percentage of sand and gravel in these soils means that water can permeate through the surface layers easily, creating important groundwater recharge areas. These soils are often suitable for agriculture, with droughtiness their only limitation. Soils in this association are used for dairying and vegetable crops, as well as for residential, commercial, and industrial development.

The characteristic upland Chatfield-Hollis/Hollis-Chatfield soils are found on rolling to steep rocky hills and in narrow valleys. These soils support dairy farming, apple orchards, and woodlands, and development is often severely restricted by poor drainage, depth to bedrock, and steep slopes. Only some soils offer a moderate limitation for development of septic systems, if slopes are not over 15 percent.

Soil types are critical for determining the capacity of a parcel of land to filter septic leachate. Soils in Whately's lowlands and floodplain terraces (Chestnut Plain/North Street and east) where not hydric (wet), are typically well-sorted sand and gravel that are conducive to building as long as the water table is not high. Soils in the uplands are characterized by more surface bedrock and glacial till and the cost of septic systems on slopes or rocky terrain is a significant barrier to growth. While

²⁰ Natural Resource Inventory for Franklin County, University of Massachusetts Cooperative Extension; 1976

not precluding large-scale or dense development in Whately, the density and total amount of new development in the near future are in large part determined by soils and their ability to pass percolation tests.

Communities in the Connecticut River Valley are aware of the value that soils play in determining which land is considered prime for agriculture. Almost 3,000 acres of these soils, or 21 percent of Whately, are Prime Farmland soils and contain the best combination of physical characteristics for producing food, feed, forage, fiber, and oilseed crops.²¹ In addition, the soils are highly permeable and not stony, so they are easily worked. Over the centuries, flooding has deposited ten or more feet of the well-drained silty soils on glacial Lake Hitchcock's clay layers, creating some of the most productive agricultural soils in the world. This area of Whately has been extensively farmed and is highly productive, yielding cash crops that include corn, tomatoes, cucumbers, carrots, winter squash, tobacco, berries, and nursery plants. The flat, well-drained character of these soils also makes them attractive to residential and commercial development.

The University of Massachusetts has developed productivity categories for forest soils, including Prime 1, 2, and 3, Statewide Importance, Local Importance, and Unique. Prime Forestland soils support a production of wood fiber at a rate greater than eighty-five cubic feet per acre per year. Only forestland with Prime 1, 2, and 3 soils are worthwhile to manage intensively for wood products. Soils of statewide and local importance also have the potential for producing wood products but the possible financial return of such production is not as high. Much of Whately's forests are on Prime Forestland soils in the Western Highland area. In fact, 6,860 acres, or 52 percent of the forest, was soils rated as Prime Forestland soils.²² Prime Forestland soils are not the only criteria for choosing land to manage for timber production: forest condition, access, and slope are other important factors to consider. Ultimately, determining which lands to manage for timber requires an on-the-ground analysis of all of these factors.

D. LANDSCAPE CHARACTER

Despite increasing development on former agricultural lands, the farming tradition remains strong in Whately. Woodlands blanket the western upland area. These farmlands and large contiguous blocks of forest are among the most significant landscape features that define the character of Whately (see also the *Scenic Resources and Unique Environments Map* at the end of this section and subsection *H. Scenic Resources and Unique Environments* below for more detailed information on these features).

There are 1,989 acres (15.1 percent) of cropland and pasture in Whately according to 2016 Massachusetts GIS Land Cover data (see Tables 3-8 and 3-9 in Section *3.D Growth and Development Patterns*). The soil suitability and the topographical characteristics of the landscape determine the locations of the two primary farmland uses. In Whately, cropland is located where the topography is more level, and where the soils have a higher silt content—spanning between the Connecticut River and the valley walls. Agricultural activity also takes place along Masterson Road, Jimmy Nolan Road, Conway Road, and in scattered sites where glacial deposition has left

²¹ Prime Farmland soils: MassGIS data 2020

²² Prime Forestland soils: MassGIS data, 2020

rich soils with more gentle terrain. Agricultural activity in the Western Highlands is more often pasture and hay production than crops.

Another important natural resource that defines the character of Whately and the region is forestland. In 2016, forestland accounted for 70.8 percent of the total land area of Whately, according to MassGIS data. Though a portion of Whately's forestland is forest fragmented by residential development, there does remain a number of large blocks of contiguous forests along the borders of Williamsburg and Conway. Large blocks of contiguous forestland not traversed or fragmented by paved roads, wide rivers, development, or by open fields are important regional resources for several reasons. Intact, interior forests in Massachusetts may allow forest ecosystems to recover from changes and disturbances, provide habitat for certain species dependent on interior forest, and allow species richness to be maintained. Large blocks of forestland protect water quality by filtering contaminants through the soil and conserves water supplies by sustaining the soil's ability to receive precipitation and recharge ground and surface waters slowly. Larger blocks of forest are more suitable for active forest management as well.

Whately is also marked by historic neighborhoods and historical agricultural landscape features such as stonewalls, maple allees, and historic barns. A number of Whately's roads are unimproved. However, a mix of uses—residential, agricultural, commercial, industrial, and civic—also distinctly characterize parts of town. Because Whately takes on so many landscape forms, it is important that the community continue to engage in land use decision-making that preserves unique and cultural landscapes and resources while also recognizing the diversity of land uses that Whately already sustains.

E. WATER RESOURCES

Extensive water resources are another of the unique features that define Whately's rural character. 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. The entire Town of Whately is located within the Connecticut River Watershed. Most of Whately is in the sub-watershed for the Mill River that drains into the Connecticut in Hatfield. The southwest corner of Whately has a different Mill River that drains into the Connecticut in Northampton. To avoid confusion, this document refers to the northern Mill River sub-watershed as the Mill River-Hatfield Sub-Watershed, and the southern Mill River sub-watershed as the Mill River-Northampton Sub-watershed.

Water moves within a watershed in a particular way, following the hydrologic cycle. Precipitation delivers water in the form of rain, sleet, or snow to the watershed's surfaces. This precipitation collects on vegetation, slowly entering the soil, or drains off less permeable surfaces. The water in the soil and underlying rock formations is called groundwater. The groundwater flows down gradient, and sometimes enters small and large streams. Groundwater can also enter channels in the bedrock or sections of gravel and sand that contain large bodies of water underground. These underground bodies of clean drinking water are called aquifers. Appropriate protection of surface water resources and groundwater recharge areas, along with other resources that help protect water for quality, supply, habitat, and flood hazard is the focus of this section.

It may be difficult to imagine running out of water in Whately with all of its bountiful water resources. However, water resources are quite vulnerable to impairment. The *Water Resources Map* at the end of this section illustrates the information pertinent to the OSRP, including water quality impairments and regulated protection areas. When thinking about potential projects and action items, particularly projects that increase the town's climate resiliency, the information on the *Water Resources Map* can inform discussions about project location, type, and priority.



View North to Mount Sugarloaf on Connecticut River Gravel Bar between Whately and Sunderland (Allison Bell)

E.1 Watersheds and Surface Waters

E.1.1 Connecticut River Watershed

The Connecticut River forms the Town of Whately's eastern boundary. The Connecticut River Watershed is the largest river ecosystem in New England and spans four states, including Vermont, New Hampshire, Massachusetts, and Connecticut. From its beginnings near the Canadian border to its end in Long Island Sound, the Connecticut River drains a landscape 11,000 square miles in size and 410 miles long. It is also one of the most developed in the northeastern United States.

The Connecticut River has Class B designation from the New Hampshire-Vermont border south to Holyoke and is classified as a warm water fishery. Class B waters provide suitable habitat for fish and other wildlife, and to support recreational activities such as fishing and swimming. The water should also be suitable for irrigation and other agricultural uses. The Connecticut River is home to numerous anadromous fisheries: American shad, blueback herring, and shortnose sturgeon spawn within this stretch of the river. Mammals like bobcat and moose may use the riparian forests as a migratory corridor to move between habitat areas. The river also offers a wide variety of

recreational opportunities, ranging from wildlife viewing and canoeing to fishing and camping, and has the potential to be a recreational greenway. There is no public access to the Connecticut River in Whately at this time. The Whately Oaks canoers' tent site is a recreational site on the river near Herlihy Park managed by the Appalachian Mountain Club, but it cannot be reached from a road in Whately.

In 1999, President Clinton declared the Connecticut River one of ten American Heritage Rivers in the United States. Under the American Heritage River Program, communities within the Connecticut River Watershed enjoy special access to Federal programs that will help to conserve, protect, and enhance the resources of the watershed. To coordinate and administer the various fisheries and wildlife programs taking place within the watershed, an act of Congress in 1991 formed the Silvio O. Conte National Fish and Wildlife Refuge (Conte Refuge). The Connecticut River Conservancy (CRC) serves as the local watershed association for the Connecticut River.²³ The CRC works through policy advocacy, collaboration, public education, monitoring, restoration, and cleanup to restore the river's function and clean water.

Years of deforestation, industrialization, and widespread dumping have taken their toll on the river's water quality, resulting in a mass disruption of ecological processes. The effects are more pronounced in the urban sections of the river, although pollution and erosion are concerns in all areas of Franklin County. The river's water quality fluctuates in connection with surface runoff and other factors; therefore, water quality must be periodically measured to detect for trends.

Water that is determined to be safe for one use may be unacceptable for another purpose or species. Pollution occurs in many different forms and can impact the natural environment in many ways. Point source pollution is broadly defined as any discernible, confined, and discrete conveyance from which pollutants may be discharged and can be easily identified and managed. Non-point source (NPS) pollution is contaminated runoff that is deposited into surface and ground waters. NPS pollution is caused by rainfall or snowmelt that flows over the surface of the landscape, picking up and carrying away natural and human-made pollutants and depositing them into lakes, rivers, wetlands, and groundwater aquifers. Non-point sources of pollution are harder to identify and, thus, to remedy. There are four main sources of NPS pollution: sediments, nutrients, toxic substances and pathogens. NPS pollution loads are closely associated with land use types, particularly agricultural and industrial uses. Loss of wetlands and increases in impervious surfaces also contribute to increases in polluted runoff from NPS sources. Erosion along riverbanks is a major source of sedimentation that can have a negative impact on water quality.

The Connecticut River Forum report, *The Health of the Watershed*, published in January 1998 by the New England Interstate Water Pollution Control Commission (NEIWPCC), listed bioaccumulation and toxicity as specific water quality problems for the entire length of the Connecticut River in Massachusetts, and specifically identified polychlorinated biphenyls (PCBs) in fish as a problem. The 2020 Public Health Freshwater Fish Consumption Advisories report cites PCBs as the reason that children younger than 12, pregnant women, women of childbearing age who may become pregnant, and nursing mothers should not eat any fish from the Connecticut River.²⁴ In addition, the advisory warns the general public not to consume channel catfish, white catfish, American eel, or yellow perch from the Connecticut.

²³ <https://www.ctriver.org/>

²⁴ <https://www.mass.gov/doc/public-health-freshwater-fish-consumption-advisories-2020/download>

A 1998 publication issued by the U.S. Geological Survey (USGS) as part of the National Water Quality Assessment Program identified various pesticides used by agricultural operations as NPS pollutants in the Connecticut River in Franklin County.²⁵ While current drinking water standards were not exceeded in the river, the report noted that existing drinking water standards do not include some pesticides detected in the river or their breakdown products. In addition, current drinking water standards do not consider the cumulative impacts of more than one pesticide in the water. As a result, the actual health risks posed by the river's current water quality is uncertain.

More recent published water quality information for the Connecticut River is limited. Dramatic funding cuts to the Massachusetts Department of Environmental Protection (Mass DEP) water-quality monitoring program since the early 2000s continues to result in a paucity of comprehensive water quality sampling data for the main stem of the Connecticut River. In the absence of regular water quality monitoring by the state, the CRC consolidates and produces a yearly report card of E.coli levels at various sample locations throughout the watershed.²⁶ Mass DEP's recent 2016 Integrated List of Waters lists the stretch of the Connecticut River through Whately as a Category 5 water due to E.coli contamination and PCB in fish tissue. Category 5 waters are polluted waters that require the state to establish Total Maximum Daily Load (TMDL), the amount of pollutant a water body can carry from all identified sources and still meet the water quality standards for its designated uses.

Monitoring and follow-up investigations regarding the source and extent of pollutants are urgently needed. There are numerous point sources of pollution along the Connecticut River, such as wastewater treatment plants and industries, with National Pollution Discharge Elimination System (NPDES) permits. Mass DEP had documented toxic and bioaccumulative effects on fisheries resulting from these historic discharges or waste sites.²⁷ While a listing of NPDES permit holders exists, there is no published analysis of the water quality testing required of the permit holders. According to the Mass DEP NPDES Public Data Viewer, all NPDES permits in Franklin County have expired.²⁸ Clearly, additional water quality testing and an evaluation of existing NPDES permits testing results is needed to determine the health of the Connecticut River ecosystem and to better identify which uses along the river may affect its water quality.

Despite those challenges, over the decades the water quality of the Connecticut River has improved. Fish and wildlife that virtually disappeared from the region twenty years ago have returned, including the American shad, the peregrine falcon, and the bald eagle. Nonetheless, threats to the river remain.

E.1.2 Mill River-Hatfield Sub-Watershed

The Mill River-Hatfield Sub-Watershed is located in Conway, Deerfield, Whately, Hatfield, Williamsburg, and Northampton. The Mill River has six main tributaries, two (West Brook and Roaring Brook) of which have water supply reservoirs. In the Town of Whately, the West Brook is dammed for the Northampton Reservoir and experiences no-flow conditions during dry periods. Roaring Brook is dammed in Conway and Whately for the South Deerfield Water Supply District.

²⁵ USGS Circular 1155, Water Quality in the Connecticut, Housatonic, and Thames River Basins

²⁶ <https://connecticutriver.us/index.php/it-clean>

²⁷ Massachusetts Department of Environmental Protection, *Connecticut River Watershed Assessment and Management Report*, 1995

²⁸ <https://eeaonline.eea.state.ma.us/DEP/NPDESePublicViewer/DataViewer.aspx>

Brooks and other surface waters also play an important role in Whately.

From its headwaters in Conway, the Mill River first flows southeast, then south through Deerfield, Whately, and Hatfield to the confluence with the Connecticut River. The topography of the watershed is rugged at the headwaters in Conway's uplands and along the banks of three tributary streams (Roaring Brook, Esther Brook, and West Brook). Once the Mill River reaches the plain of glacial Lake Hitchcock, the topography is flat and the river slows to meander across the landscape. Glacial deposits of till, sand, and gravel also help shape the course of the river in the lowland. The Mill River is 24.6 miles long.

Although the northwestern region of the sub-watershed is rural and forested, the majority of it is influenced by adjacent agricultural, residential, and commercial development, as well as channelization and the Interstate 91 transportation corridor. The disruption of habitat and vegetation, with the influence of stormwater runoff on water quality, poses fundamental threats to the ecological viability of this system. Water quality is poor in the two tributaries (Bloody Brook and Great Swamp Brook) that drain across agricultural parcels in the lowlands.²⁹ The 2016 Integrated List of Waters lists Bloody Brook as a Category 5 waterway—in need of a TMDL—due to impairments from E.coli, dissolved oxygen, phosphorus, and turbidity. The source of pollution in this area is poor containment of septic effluent, NPS runoff from residential, agricultural, and commercial development, and fluvial erosion that results from the stream's passage through a heavily developed and agricultural portion of South Hadley. Because of the origin of the impairments, there is little the Town of Whately can do to reduce the pollution. These land uses may lead to the runoff of sediments, pesticides, fertilizers, chlorides, effluent and hazardous wastes into water bodies.

The Mill River has been designated a Class B river by the DEP with support of aquatic life and aesthetics, even though trash and debris in localized areas have caused an "Alert Status" to be issued. Fish consumption, primary contact (swimming), and secondary contact (boating) uses have not yet been assessed. It supports a diverse population of wildlife, along with federally listed endangered species and several state listed species of special concern. The main stem of the Mill River contains one of the most significant, viable populations of the dwarf wedgemussel (*Alasmidonta heterodon*) in the country. The river corridor also supports two other state listed rare freshwater mussels as well as state-listed plants and invertebrates. In addition, the Smith College Environmental Science and Policy Program documented 22 species of fish in 1998.

The Mill River continues to experience erosion. There is agricultural erosion from livestock breaking down the Mill River banks east of North Street. The Town placed sheet piling in the riverbank farther downstream in 1987 and 2001 to protect the public wells from erosion along the Mill River. Heavy rains during 2011's Tropical Storm Irene caused flood flows and erosion on the Mill River that threatened the drinking water wells and pumps. Sections of sheet pile were disconnected from each other and began leaning into the Mill River, putting the wells in jeopardy of being destroyed by floodwaters.

The Town applied for assistance under FEMA's Hazard Mitigation Grant Program (HMGP) to help fund a project to move the river into a former river meander channel to further the distance between the river and the wells.³⁰ In 2015, the river was successfully rerouted into a former river

²⁹ MA DEP, *Connecticut River Basin 1998 Water Quality Assessment Report*, 1998

³⁰ https://www.fema.gov/media-library-data/1444748682968-d0db41dc30f10260669919dc53c5b4cc/DRAFT_EA_Mill-River-Whately_508.pdf

meander channel. In 2016 an emergency Mill River Bank Stabilization project was funded to again protect the adjacent public water source. The project was approved by the Natural Heritage and Endangered Species Program for its design to establish new habitat for the dwarf wedgemussel and the monkey flower. As of 2020, the project permit has closed but the Town is required to continue monitoring the project for an additional two years.

In addition to providing habitat for wildlife species, surface water and groundwater is withdrawn from the Mill River-Hatfield Sub-watershed by three public water suppliers (see E.2 Protected Surface Waters and Wetlands and E.3 Aquifer Recharge Areas). Therefore, water withdrawal permits are an important consideration in this watershed.

Another issue of concern for the Mill River-Hatfield Sub-watershed is dam safety. Northampton's Francis P. Ryan and West Whately Reservoir Dams in West Whately, as well as South Deerfield's Roaring Brook Dam on the Conway Reservoir just over the Town boundary in Conway, are all rated high hazard dams. The South Deerfield Water Supply Dam in Whately is rated as a significant hazard. Failure of any of these dams will result in the loss of critical wetland habitat, especially for the endangered freshwater mussels. Based on these locations, flooding has an "Isolated" area of occurrence, with less than 10% of the town affected.

E.1.3 Mill River-Northampton Sub-watershed

A small percentage of Whately's southwest Corner drains into the southerly Mill River via Potash Brook and Grass Hill Brook. Potash Brook feeds into Northampton's Mountain Street Reservoir, the northern end of which lies in Whately. There is little ecological and infrastructural information available for this part of the Mill River-Northampton Watershed.

E.2 Protected Surface Waters and Wetlands

E.2.1 Surface Water

There are a number of public drinking water surface water intake points within or just outside of Whately. The City of Northampton owns the Ryan and West Whately Reservoirs, located in West Whately. It also owns the Mountain Street Reservoir, whose dam and primary intake point are located in Hatfield and Williamsburg but whose northernmost point is located in Whately. The safe yield of the three combined reservoirs is around 5.043 million gallons per day.³¹ The South Deerfield Water Supply District operates one public drinking water supply surface water intake in Whately at the Whately Glen Reservoir and a second one just over the Conway town line at the Conway Reservoir. The Whately Glen Reservoir holds 6.7 million gallons of water.³²

These public drinking supply watersheds are regulated by the Massachusetts Drinking Water Regulations (310 CMR 22.00). Drinking water regulations designate three surface water protection areas (Zones A, B, and C) in which certain activities are prohibited. Together, these protective zones encompass all of the watershed boundary, which includes areas west of Conway Road in West Whately, along the Haydenville Road north of the Williamsburg border, and around the

³¹ Water Supply System Asset Management Plan, Northampton, Massachusetts, 20013:

<https://www.northamptonma.gov/DocumentCenter/View/14491/Northampton-Water-Supply-Asset-Management-Plan>

³² South Deerfield Water Supply District 2019 Water Quality Report:

https://www.deerfieldma.us/sites/g/files/vyhlf3001/f/uploads/2019_water_quality_report.pdf

Whately Glen Reservoir (see *Water Resources Map* for public drinking water supply watershed boundaries). The 2003 Mass DEP surface water assessment and protection report (SWAP) determined the South Deerfield Water Supply District to have a moderate risk level of contamination and the Northampton Reservoirs a high level of risk. The South Deerfield Water Supply District no longer withdraws water from its public well on Sunderland Road on the Deerfield-Whately border due to poor water quality.

Approximately 1,261 acres of these watershed lands are owned and protected by the water districts. For lands not under the limited protection of water district ownership, water supply owners are required to monitor lands regulated by the Massachusetts Drinking Water Regulations for compliance. Northampton's Policy for Public Access on Watershed Land is available online.³³ As there is little to no development in these watershed areas except roads, there are currently no major threats to water quality for these watersheds posed by land use activity in Whately.

E.2.2 Wetlands

Wetlands help ensure good water quality. According to MassGIS land cover data, there are 1,554 acres of wetland in Whately (11.7 percent of land area). Both inland wetlands and floodplains represent unique and special habitats that provide numerous ecosystem. In Whately, large tracts of forested wetland areas and some emergent wetlands are found in the eastern half of town.

Historically, wetlands have been viewed as unproductive wastelands, to be drained, filled and "improved" for more productive uses. Since the 1950s, scientists have recognized that wetlands perform a variety of extremely important ecological functions. They absorb runoff and prevent flooding. Wetland vegetation stabilizes stream banks, preventing erosion and trapping sediments that are transported by runoff. Wetland plants absorb nutrients, such as nitrogen and phosphorus, which would be harmful if they entered lakes, ponds, rivers, and streams. They also absorb heavy metals and other pollution. Finally, wetlands are extremely productive, providing food and habitat for fish and wildlife. Many plants, invertebrates, amphibians, reptiles, and fish depend on wetlands to survive. Wetlands have economic significance related to their ecological functions. It is far more cost-effective to maintain wetlands than build treatment facilities to manage stormwater and purify drinking water, and wetlands are essential to supporting lucrative outdoor recreation industries including hunting, fishing, and birdwatching.

In recognition of the ecological and economic importance of wetlands, the Massachusetts Wetlands Protection Act is designed to protect eight "interests" related to their function: public and private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, land containing shellfish, fisheries, and wildlife habitat. To this end, the law defines and protects "wetland resource areas," including banks of rivers, lakes, ponds and streams, wetlands bordering the banks, land under rivers, lakes and ponds, land subject to flooding, and "riverfront areas" within two hundred feet of any stream that runs all year.

Local Conservation Commissions are responsible for administering the Wetlands Protection Act. The Wetlands Protection Act requires a permit for any alteration of wetland areas or for any landscape disturbance within 100 feet of lakes, ponds, streams, and bordering vegetated wetlands if a local Conservation Commission concludes that such activity will alter a resource area (wetland

³³ City of Northampton, Policy for Public Access on Watershed Land, 2018:

<https://www.northamptonma.gov/DocumentCenter/View/14361/Public-Access-Policy?bidId=>

or waterbody). Permits are also required for landscape alterations within 200 feet of rivers and perennial streams.

The conversion of wetlands for development can be a serious problem with high-priced consequences. Watersheds with degraded or destroyed wetlands experience substantially higher flood peaks. Moreover, wetlands replicated with engineered solutions do not function nearly as well ecologically as undisturbed natural wetland systems because the hydrology is hard to get correct and the soils take a long time to develop. Wetlands also provide vital habitat to a diverse range of wildlife including game species and songbirds. In addition, wetlands and other types of surface water are connected to groundwater and drinking water supplies. Due to this connectivity, the contamination of any one wetland in Whately could degrade the quality of the public drinking water supply. Many Massachusetts towns choose to adopt more comprehensive municipal wetland ordinances. However, according to the Conservation Commission, there is no known history of development projects in which a wetland ordinance would have been needed to adequately protect a resource; there has thus far been ample room in Whately parcels under development review that the applicant can accommodate the request for conservative wetland buffers. If there comes a time where projects are not meeting the Town's ideal wetland protection parameters, there may be public support for adoption of a municipal wetlands ordinance.

E.2.3 Vernal Pools

Vernal pools are temporary bodies of freshwater that provide critical habitat for many vertebrate and invertebrate wildlife species. Vernal pools are found across the landscape; anywhere that small woodland depressions, swales, or kettle holes collect spring runoff or intercept seasonally high groundwater tables. They can be shallow or deep, and range in size from fewer than 100 square feet to several acres. Many species of amphibians and vertebrates are completely dependent on vernal pools to reproduce; vernal pools are relatively safe from predation because the absence of inlets and outlets prevents thereby from being a population of fish. Loss of vernal pools can endanger entire populations of these dependent species.

Certified Vernal Pools—those that meet the criteria established by the Natural Heritage and Endangered Species Program—are protected to some extent by the Massachusetts Wetlands Protection Act and also are protected by additional state and federal regulations. Landowners are not required to report the existence of vernal pools on their property and landowner permission must be obtained prior to any person attempting to certify a vernal pool on private property. According to NHESP data, there are 11 certified vernal pools in Whately and roughly 45 potential vernal pools (see *Water Resources Map*).³⁴

E.3 Aquifer Recharge Areas

Whately residents either get their drinking water from public water wells if they reside in a water district and opt in, or from personal wells or springs. The public water distribution systems and private wells both pump water from groundwater aquifers—either large sand and gravel deposits or bedrock fractures. Underground aquifer levels are maintained by groundwater flow from aquifer recharge areas. When rain falls in the area's hills, some of it ends up in the small streams that course down to the Mill River, but much of it enters the soil to become groundwater. Protecting

³⁴ <http://maps.massgis.state.ma.us/>.

groundwater and aquifers from contamination by hazardous materials, sewage, salts, pesticides, and other pollutants is critical to maintaining the quality of both public and private drinking water sources.

Four community public supply wells serve residents and businesses in Whately. One non-community public well is located at Smith's College's MacLeish Field Station. Two deep bedrock wells are located off Haydenville Road. Two other wells are located in the Mill River watershed between Chestnut Plain Road and Interstate 91, approximately 0.3 miles north of the Hatfield town line. The community approved funding to connect the two public water systems in 2019, but they have not yet been connected.

The two wells along the Mill River overlay a high-yield aquifer system that can produce between 25 and 1,000 gallons per minute. They are located approximately 40 feet from each other and are screened at depths of about 200 feet in a confined sand and gravel aquifer, known locally as the lower aquifer. Well #1 is a 6-inch diameter gravel-packed well and serves as the backup well for the Water Department. Well #2 is a 12-inch diameter gravel-packed well that serves as the main water supply. The DEP has established approved pumping rates of 100 gallons per minute (gpm) for Well #1 and 150 gpm for Well #2 and has an approved safe yield of 360,000 gallons per day.

A thick layer of glacial lake clay lies above portions of the sand and gravel deposits of the lower aquifer. However, this clay layer is not of a uniform thickness and becomes thinner, especially along the flanks of the West Whately upland. Above the clay is the upper aquifer, a thin sandy gravel layer that varies from 1 to 25 feet in thickness. In 1983, this shallow upper aquifer, which served as water supply to numerous private wells in town, was found to be contaminated by the pesticides ethylene dibromide (EDB) and aldicarb (Temik). In response to this contamination, the Town solicited an engineering study, the Whately Water Department was formed, and Wells #1 and #2 were developed in 1985.

The type of public water system determines the level of testing required by the Massachusetts Department of Environmental Protection. Transient, non-community water sources must test for coliform bacteria, sodium, nitrates, and nitrites, but not for pesticides. Non-transient, non-community water sources must test for a more extensive list of contaminants because people drink from these sources for longer periods of time. Community groundwater sources (i.e. wells) are required by the DEP to be thoroughly tested for a comprehensive list of organic and inorganic compounds including pesticides.

Mass DEP prepared a study, Source Water Assessment and Protection (SWAP) Report for Whately Water Department in 2003. Its conceptual Zone II delineation used modeling techniques that analyzed historic pumping tests and hydrological and geological surveys. This methodology was used instead of using a full-capacity pumping test during an extended dry period based on the notion that the aquifer boundary would most likely exist between the low-yielding, bedrock till areas and the water bearing unconsolidated materials. The delineated Zone II recharge area for Whately's Well #1 and #2 extends north along the Mill River in Whately and south into Hatfield and includes the West Brook Delta. The majority of Zone II lies within the Agriculture/Residential zoning district with a small area along State Road, west of Interstate 91, within the Commercial district. Approximately 1.5 miles of Interstate 91 and a small section of the railroad tracks are located within the Zone II recharge area as well. The aquifer's Zone III extends west into the sub-watershed for the West Brook and contains most of Whately, including the Interstate 91 corridor

and the Great Swamp.

According to the DEP's 2003 Source Water Assessment Program (SWAP) Report, Whately's Water District is ranked "moderate" for susceptibility to contamination. While a protective clay layer provides some protection to the aquifer from land uses in the wellfield itself, the confining layer of clay is not contiguous throughout the entire Zone II area. Due to the absence of a complete hydrogeologic barrier that can prevent contamination where the clay layer is thought to "pinch out", the aquifer is considered vulnerable.

Key land use issues that could lead to contamination in the district include a nonconforming Zone I, which allows for passive recreation and is not wholly owned by the district, the presence of residential homes near the wells, and the location of septic systems within the wells' Interim Wellhead Protection Area (IWPA). These conditions could lead to the introduction of contaminants such as microbes, pesticides, and household hazardous wastes and chemicals. In addition, a transformer has been located near the town's wells, which may threaten to pollute them with oil and possible PCBs.

The 2003 SWAP report for Whately wells' Zone II recharge area also identified a number of potential sources of contamination. Agricultural threats include forestry operation, nurseries, dairy farms, and farms with fertilizer and pesticide use. Commercial threats include the railroad tracks, a former gas station/body shop, and sand and gravel mining/washing. Residential threats are fuel oil storage, lawn care pesticides, and leaking septic systems. Miscellaneous threats include transportation corridors, electric line maintenance, and oil and hazardous waste sites. The DEP list of potential high-risk threats includes the railroad tracks, a former gas station/body shop, and seven farms that handle fertilizers and pesticides. Each of these activities uses materials that present a potential risk to the continued high water quality in the aquifer if potential contaminants are managed improperly.

Recently, in 2014, testing indicated higher levels of naturally occurring minerals iron and manganese than is allowed by state regulations. The Water Department initially installed a pilot filtration system in late 2016 to improve the Town's drinking water. In March of 2019, Whately obtained a loan from the Drinking Water State Revolving Fund to install a permanent filtration treatment system for removing excess minerals and contaminants from surface activities. There continue to be contamination threats to the Mill River wells as long as heavy precipitation events continue to inundate the Mill River near the wells (see *E.1.2 Mill River-Hatfield Sub-watershed* for more information).

Aquifers are replenished by precipitation, groundwater, and by rivers and streams. The quality and quantity of the area's drinking water can therefore be sustained by four main actions, some of which could be applied more broadly in Whately. First, Whately's Aquifer Protection Overlay District manages development in the most immediate area of aquifer recharge. Second, identify and then seek to minimize the amount of impervious surfaces within the recharge area. Impervious surfaces, such as asphalt, prevent precipitation from permeating into the soil, entering the groundwater, and recharging the aquifers. Third, remove potential toxic hazards from the recharge area and reduce the use of pesticides and other nonpoint-source pollution. Fourth, ensure that rivers and streams within the watershed are free from contamination through regular monitoring and healthy river geomorphic functioning.

E.4 Flood Hazard Areas

Flooding of rivers and streams is a natural occurrence. Floods happen when the flow of water in a river exceeds the carrying capacity of the channel. Some areas along rivers flood every year during the spring, while other areas flood during years when spring runoff is especially high, or following severe storm events. The most recent Federal Emergency Management Agency (FEMA) maps for Whately (developed in 1979) determine the 100-year flood zones. The term “floodplain” refers to the land affected by flooding from a storm predicted to occur at a particular interval. For example, the “100-year floodplain” is the area predicted to flood as the result of a very severe storm that has a one percent chance of occurring in any given year. Similarly, the 500-year floodplain is the area predicted to flood in a catastrophic storm with a 1 in 500 chance of occurring in any year.

Undeveloped floodplains in Whately serve multiple functions. Floodwaters help to protect and regenerate public water sources by recharging and filtering groundwater. They also replenish mineral-rich soils in the floodplain, where much of Whately’s agricultural activity occurs. Finally, they also provide space for lateral movement of river and stream channels to find their dynamic equilibrium and minimize damaging fluvial erosion.

FEMA-mapped 100-year floodplains appear along the Mill River, Roaring Brook, and Great Swamp Brook. However, because of the datedness of the FEMA flood map and the changing nature of flood risk, Whately’s flood map may not reliably delineate flood risk. FEMA has identified no flood control structures within the Town of Whately. Floods on the Connecticut River and portions of its major tributaries that are prone to backwater effects are controlled by nine flood control reservoirs located upstream in Massachusetts, New Hampshire, and Vermont. For details on chronic flooding in Whately, see *I.4 Chronic Flooding*.

Rivers and streams are dynamic systems in a constant state of change. Fluvial erosion is a natural process of wearing away of soil, vegetation, sediment, and rock through the movement of water in rivers and streams. While erosion is a natural process, the rate of erosion is affected by human alterations of river channels or land as well as a changing climate. Sometimes buildings and roads are located too close to riverbanks and areas of active river processes, placing them at risk to erosive forces while at the same time increasing the rate of erosion within the river corridor due to loss of flood storage in the floodplain. Valuable farmland and infrastructure can also be threatened by eroding riverbanks.

The most severe fluvial erosion events in recent years have resulted from heavy rain, such as Tropical Storm Irene in 2011, which washed out roads across Franklin County and destroyed several buildings. The risk of flooding and fluvial erosion of the Mill River and contamination of the public water supply wells remains an ongoing concern. Even after work was done to the river after Tropical Storm Irene, this risk remains given the more frequent and intense storm events due to climate change and the unstable geomorphology of the river due to historic river channel straightening downstream.

River corridor mapping delineates the areas vulnerable to fluvial erosion, including the river, its banks, and the land close to the river that carries floodwaters and accommodates the meander pattern or movement of the river. Land within and immediately abutting a river corridor is therefore likely to be at higher risk to fluvial erosion during floods. As of 2021, only a few communities in Franklin County had mapped river corridors.

The Franklin Regional Council of Governments (FRCOG) has developed a draft model bylaw that

can be used in conjunction with river corridor mapping in a community. The objective of a River Corridor Protection Overlay zoning bylaw is to guide and encourage measures and improvements within the active river area that provide increased property and infrastructure protection, while maintaining and restoring the health of river systems. Communities that have completed river corridor maps can assess their risk to fluvial erosion hazards and consider adopting a River Corridor Protection Overlay Bylaw using the model as a guide.³⁵

F. VEGETATION

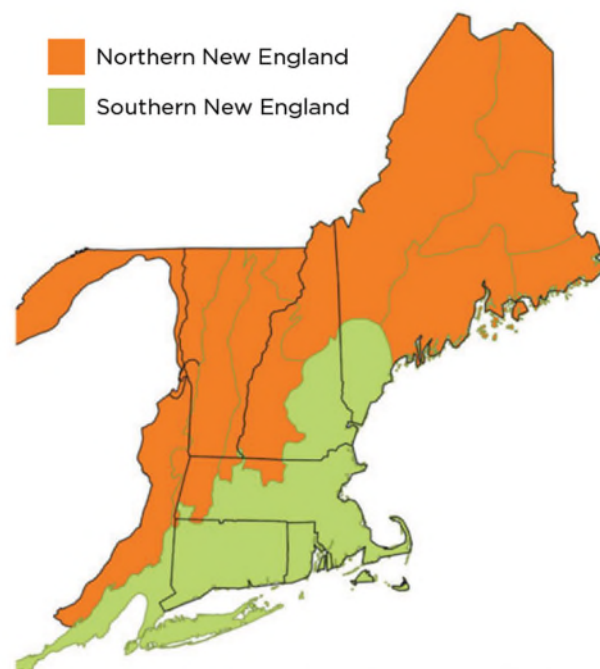
The soils and water resources in Whately create ecosystems that support a broad range of vegetation types. Whately is rich in a variety of plant life, including coniferous and deciduous forests, meadows, cropland, wetlands, and riparian vegetation. Soil type, slope, elevation, and climate largely determine the location and type of vegetation present.

Plants and animals together make up natural communities, defined as interacting groups of plants and animals that share a common environment and occur together in different places on the landscape. Over the past decade, ecologists and conservationists in Massachusetts have devoted increasing effort to studying and protecting these natural communities, rather than focusing only on individual species. This section and the following section will address both natural communities and their component species.

F.1 Forest

Approximately 70.8 percent of the total land area of the Town of Whately is forested. The forests in Whately can differ by age, density, height and diameter, and species of trees in different locations, based on soil, temperature, elevation, hydrology, and land-use history. On the large scale, Whately is in the transition zone between southern and northern New England forest types (see Figure 4-4). The northern forest species include northern

Figure 4-4: Northern and Southern New England Ecoregions



Whately is located in the Northern New England ecoregion, on the border of the Southern New England ecoregion.

Source: Increasing Forest Resiliency for an Uncertain Future. Catanzaro, Paul, Anthony D'Amato, and Emily Silver Huff. 2016. <https://masswoods.org/sites/masswoods.net/files/Forest-Resiliency.pdf>.

³⁵ For more details, see <https://frcog.org/river-corridor-toolkit-released/>

hardwoods such as maples, white ash, beech, aspen, and birch, as well as eastern hemlock. Southern species include oaks, hickories, and white pine.

Upland areas support coniferous species such as eastern hemlock in the moist sites with the drier sites dominated by hardwood species such as northern red oak, white ash, sugar maple, and white birch. For nearly one hundred and fifty years, the hills have been recovering from a sequence of clearing and heavy lumbering that had been the historic use of the landscape. Nearly all forest cover in Whately is considered to be second and third growth forest; some forestland is still in the process of regenerating. Younger tree communities are comprised of quaking aspen and white and grey birch. Occasionally eastern hemlock, yellow birch, and American beech (which typify the original northern hardwood forest type) are found on these sites.

Of particular note is a large block of relatively unfragmented forest in the western portion of Whately that spans portions of Hatfield, Williamsburg, Conway, Goshen, and Ashfield. This important area has been targeted for protection by several organizations. The Nature Conservancy has identified part of this tract and neighboring tracts as a Tier 1 forest matrix focus area.³⁶ Matrix forests are large blocks of contiguous forest that are able to maintain ecological processes and are viable habitat for different sized forest communities and species populations. If allowed to regain their natural condition, these forests would serve as critical source areas for interior-forest-requiring species. Interior forest is essential for wildlife that are sensitive to edge predators and brood parasites (cowbirds), range widely and occur at low densities (bears, bobcats, fishers), or require large tracts of interior forest for nesting. The Commonwealth of Massachusetts in its BioMap2 designated the center of this tract a Forest Core, a large, intact forest that is the least impacted by roads and development of large forests in the state and one that provides critical habitat for numerous woodland species. In Whately, the designated Forest Core lies west of the Conway Road in West Whately.

Riparian corridors often have sandy flats along their banks called floodplain forests, which support silver maple, cottonwood, and ash, among other more generalized species. Vegetation along the banks of the Connecticut and Mill Rivers and their tributary streams provides several important benefits. Forested buffers of the rivers and streams purify water by filtering out harmful nutrients from road run-off and lawns, therefore reducing the amount of suspended solids and phosphates that enters the rivers. Vegetation also adds to the organic matter content of local soils, shelters and feeds wildlife, and cools water temperatures, which prevents the excessive growth of algae and aquatic vegetation. Vegetation also acts like a sponge that absorbs, holds, and slowly disperses water toward rivers. This function is particularly important during major storm events and the springtime thaw, when flooding may be an issue.

³⁶ <https://databasin.org/datasets/68c240fb9dc14fda8ccd965064fb3321/>



Floodplain Forest along Connecticut River (*Allison Bell*)

F.2 Public Shade Trees

Public shade trees are defined by the state as “all trees within a public way or on the boundaries thereof.”³⁷ Although public shade trees are found throughout Whately, the large, old shade trees along Chestnut Plain Road are the most striking. Trees on Town-owned land such as cemeteries and parks, though not by definition public shade trees, are also a public asset. Public shade trees lend important character to Whately’s civic and residential areas, and although they completely blend in with the forest along some rural roads, they contribute to rural character along others.

According to the 2019 Whately Annual Report, the Town’s Tree Department tries to remove public shade trees before they become a hazard. Whenever possible, the Town works with Eversource to trim and remove trees that pose problems to their power lines. Trees that are removed are cut and split to heat the highway garage and are made available for sale to residents. Firewood proceeds go towards the purchase of new public trees and their care. The Town aims to refrain from applying salt or sand to the sidewalks in Whately Center to avoid further stressing large roadside maples with chlorides.

F.3 Farmland

Whately’s abundant farmland has historically grown a wide range of vegetables, supported dairy farms, and been a hub for tobacco growing. Two types of tobacco have been grown in Whately. Shade grown tobacco was produced under enormous tents to increase humidity, which when coupled with the town’s climate and soils mimicked the growing conditions in Sumatra. This type

³⁷ M.G.L. Chapter 87: <https://malegislature.gov/laws/generallaws/parti/titlexiv/chapter87>

of tobacco is used to make the finest cigars in the world. Field tobacco, which has been grown in town for hundreds of years and is still grown today, is used as wrapper leaves for very fine cigars. Currently several farms are authorized to produce marijuana, although none are yet operational. In the last ten years some farmland has been consumed by the installation of large ground based solar arrays (around 85 acres since the early 2010s).

F.4 Meadows and Wetland Vegetation

Wetlands in Whately are mostly forested (10.5%), but there is some emergent (0.7%) and scrub wetland (0.4%). Forested swamps are predominantly mixed deciduous swamps that include red maple, Eastern hemlock, and white pine. Whately does contain the rarer black gum/pin oak/swamp white oak wetland community type. *E.2 Protected Surface Waters and Wetlands* elaborates further on the importance of wetlands.

Grassland and scrub/shrub habitat together constitute 2.4% of Whately. This once-common habitat type is increasingly rarer as hayfield and abandoned farmland reforest. Uncultivated open land provides breeding and feeding habitat for uncommon birds, butterflies, and other insects, and forage and hunting ground for numerous animal and insect species. Meadows require regular mowing or grazing to keep from turning into forest; mowing with regard to grassland bird breeding schedules helps protect the species for which meadows are valued.

F.5 Rare Plants and Natural Communities

Whately provides habitat for plant and wildlife species that are endangered or considered to be of special concern by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) and the Federal government. In recent years, the NHESP analyzed data on rare species and uncommon natural communities in Massachusetts. The BioMap2 project, published in 2015, has identified core habitat for rare terrestrial and wetland species and identified the location of uncommon natural communities. The BioMap2 information and mapping provided by NHESP are of particular importance for the town of Whately as it works to develop growth strategies that prioritize for protection critical tracts of unprotected open space necessary for preserving biodiversity and for sustaining surface and groundwater quality and quantity.

Whately contains several areas that NHESP has determined are the most critical to protect in order to maintain the biodiversity of the town, the region and the state. The Mill River and Great Swamp and surround areas comprise BioMap2 core habitat (Core 2943G). This core contains wetland and aquatic core, the black gum-pin oak-swamp white oak perched swamp, and high-terrace and small-river floodplain forest. This black gum swamp plant community is also present in the large wetland area between Long Plain Road and I-91 (Core 2083). Immediately west of the Great Swamp, in the Whately Glen and Mount Esther areas, as well as the forestland west of Conway Road, another large area of core habitat includes forest, wetland, and aquatic core (Core 2943E). East of the Great Swamp, halfway between I-91 and the Connecticut River, is situated a string of wetland cores (Cores 2131, 2137, and 2096). Finally, BioMap2 the riparian lands along the Connecticut River north of Chestnut Plain Road form Biomap2 core habitat (2943N). Critical Natural Landscapes (CNL) map almost directly onto mapped Core Habitat.

Very little of the Whately Glen- and Mount Esther-area Core (2943E) or the wetland core between

I-91 and Long Plain Road (Core 2083) has been permanently protected and should be targeted for protection. These areas may be a good direction to focus protection efforts. Connecting and protecting land adjacent to already protected parcels within the BioMap2 core and CNL can help maintain the viability of rare species populations and biodiversity in the long term. Continuing to conserve land along the Connecticut River to create an unfragmented corridor serves to preserve the integrity of the river's diverse habitats.

As of 2020, the NHESP has identified 259 native plant species as rare in the Commonwealth. Several rare species and uncommon natural communities have been documented in Whately (Table 4-1). While these species may be small and relatively unknown, they all play a crucial role in Whately's ecosystems. Permanently protecting the habitat areas of these species should be a top priority.

Table 4-1: Rare Plant Species Documented in Whately as of 2020

Scientific Name	Common Name	Status	Most Recent Year Seen
<i>Adlumia fungosa</i>	Climbing Fumitory	Special Concern	2017
<i>Carex tuckermanii</i>	Tuckerman's Sedge	Endangered	2018
<i>Corallorhiza odontorhiza</i>	Autumn Coral-root	Special Concern	2018
<i>Eleocharis intermedia</i>	Matted Spike-sedge	Threatened	2012
<i>Juncus filiformis</i>	Thread Rush	Endangered	2017
<i>Lipocarpha micrantha</i>	Dwarf Bulrush	Threatened	2012
<i>Lobelia siphilitica</i>	Great Blue Lobelia	Endangered	2017
<i>Sanicula odorata</i>	Clustered Sanicle	Threatened	1934

Note: This list does not include data sensitive species. The Pendulous Bulrush (Scirpus pendulus) has been delisted but remains on the unofficial Plant Watch List.

Source: Massachusetts Division of Fisheries and Wildlife, NHESP; 2020³⁸

G. FISHERIES AND WILDLIFE

Whately's landscape consists of an eastern lowland and a western highland region blanketed with mixed hardwood-evergreen forests, with large patches of cultivated fields, pasture, and a few developed areas along the transportation corridors. The region's wildlife travels across the landscape in patterns that disregard the political boundaries of towns. Rivers, wetlands, forests, open meadows, croplands, and mountain ridges all provide food and water, mating grounds and places to raise young, and cover to the wildlife who dwell within them.

Whately's forests support a diverse mix of upland species, including red and grey fox, snowshoe hare, bobcat, beaver, deer, porcupine, and black bear. Wild turkey, grouse, and birds of prey are also found in Whately's woodlands. The forests provide a north-south corridor for moose and bear. Many species rely on a variety of habitats during different periods within their life cycles and species populations and diversity are often greatest in ecotone areas—areas where several different habitat types meet. Thus, the protection of all habitat types is vital for maintaining and enhancing biodiversity in Whately. In addition to areas with a large amount of ecotone, there also tends to be more wildlife in large undeveloped areas, around undeveloped waterways and wetlands, and in

³⁸ <https://www.mass.gov/info-details/rare-species-viewer>

places where food is abundant (including farms, forest with abundant hard mast, shrubland and young forest with soft mast, and areas where prey species are abundant).

There are three general paths to follow in conserving the health of wildlife populations. One way is to protect the habitats of specific species that are rare, threatened, or endangered. It is thought that protecting the habitats of these species will also benefit other species. A second path is to conserve certain landscape-level resources such as large contiguous forests or riparian habitats along rivers. Large areas of unfragmented forest serve as wildlife corridors for large animals having large home ranges that need to move between habitat types or climate zones. There are no forested blocks in MA large enough on their own to provide habitat for sustainable populations (500+ individuals) for species found in low densities (black bears, bobcats, fishers). However, large core areas of unfragmented habitat connected via corridors/connectors can create interconnected networks of high-quality habitat. Large blocks of 200+-acre forest (as long as they are not long, narrow blocks) also provides interior forest habitats for a variety of birds and mammals. This approach helps to conserve the habitats of a large number of species, but it might lose sight of some rare and endangered species. The third method is a combination of the first two. Conserving the long-term biodiversity of the Whately area requires efforts to protect unique habitats, networks of habitats that assist population dynamics, and landscape-level resources like large contiguous forest patches and riparian areas.

Interconnected networks of high-quality habitat help sustain populations of animals who require diverse habitats over time and space. The Critical Linkages *Conductance* index is particularly useful for identifying important connecting habitat.³⁹ Whately is fortunate in that there are two uninterrupted blocks of forestland/corridors with some level of protection in the western part of town (see discussion of importance of forest core in *E.I Forest*). The first of these blocks lies west of Webber/Conway Road and is permanently protected as the Whately Wildlife Management Area, Northampton Reservoir lands, and Mass Audubon's Graves Farm Wildlife Sanctuary. To the north, the 2,242-acre Conway State Forest links to the Reservoir lands to form a significant wildlife corridor. A second large landscape block lines the eastern side of Conway/Poplar Hill Road and is protected as the MacLeish Field Station, Mt. Esther Wildlife Management Area, and South Deerfield Water Supply District land. There are also small public and private parcels protected by area land trusts.

Protecting large tracts of forest will also help to protect the first and second order streams that feed the Connecticut and Mill Rivers and West Brook. Several of these streams are important for providing coldwater habitat for fish like brook trout, as well as spring salamanders. Protecting first and second-order streams is also important for tributaries within the Zone II and Zone III recharge areas for Whately's aquifer. By protecting the Zone III recharge area to the aquifer, the Town of Whately will also be helping to maintain its community drinking water supply.

Periodic logging of forestland can create early successional habitats favored by deer and certain bird species. The Massachusetts Division of Fisheries and Wildlife (MassWildlife) uses a percentage of the income derived from hunting and fishing licenses to purchase wildlife habitat and for important research into wildlife management. On some of its properties, MassWildlife reclaims old fields to create habitats for wildlife that require the young tree and shrub communities common to early successional landscapes.

The Connecticut River and its tributaries play dual roles for the region's wildlife. Riparian

³⁹ <http://climateactiontool.org/content/protect-land-strategic-land-protection>

corridors often contain a greater degree of species diversity than any other portion of the landscape. NHESP considers the riparian areas along the Mill and Connecticut Rivers to be critical habitats for endangered, rare, threatened species, or those of special concern. The rivers also serve as important regional migration corridors. In 1996, the Conte Refuge sponsored a survey of migratory birds along the Connecticut River that revealed that 133 species, mostly woodland species, use the riverside habitat as a migratory corridor.

The rivers also provide habitats for native freshwater fisheries as well as anadromous fish species (defined as those which are born in fresh water, migrate to salt water to mature, and return to freshwater to spawn), including striped bass, sea lamprey, blueback herring, American shad, Atlantic salmon, and shortnose sturgeon. The Conte National Fish and Wildlife Refuge is responsible for restoring migratory fish to the Connecticut River Watershed and funds a number of projects to enhance fish populations. In addition to these functioning fisheries and restoration programs, MassWildlife stocks a variety of trout species for sport fishing in the Connecticut River and its tributaries. Resident fish species in the Connecticut River include walleye, northern pike, small and largemouth bass, and pickerel.

Unfortunately, dams along the Connecticut River threaten many species—especially Atlantic salmon, blueback herring, and American shad—by blocking fish passage and altering natural river flows. During spawning season, fluctuating water releases sweep away fish eggs and larvae. Dams also have a detrimental effect on young fish and place stress on older fish that must constantly alter their feeding and resting areas due to habitat changes resulting from fluctuating flows. In addition, fish may be killed by turbines or stranded in isolated pools when high flow releases recede. Fisheries in the Massachusetts portion of the Connecticut River Watershed are also threatened by sedimentation, erosion, toxicity, bacterial contamination, elevated stream temperatures, bioaccumulation, and low flow due to damming for hydroelectric operations.

The construction of fishways at key points on the Connecticut River has reduced some of the harmful effects of dams. Regular stocking has led to increased populations of American shad but failed to restore Atlantic salmon to the river, though evidence of successful wild salmon breeding in Connecticut in 2016 provides some hope.⁴⁰ Lamprey numbers have also increased significantly, which indicates improved water quality throughout the Connecticut River Watershed and more effective fish passage installations.

⁴⁰ <http://america.aljazeera.com/articles/2016/2/23/presumed-dead-wild-atlantic-salmon-return-to-connecticut-river.html>

According to participants in the 2021 MVP community workshop, there is a need to improve aquatic connectivity for fish and other aquatic life and to restore riparian buffers. Culvert replacements for improving aquatic connectivity have the co-benefit of reducing the risk of erosion and blowout during high precipitation events. The high priority for replacing a culvert on Mitchell Brook in Whately was identified using the Critical Linkages analysis tool.⁴¹ West Brook and Roaring are key coldwater streams that could also be targeted for improvements.



Culvert replacement on Mitchell Brook (Scott Jackson)

There are a total of 173 species of animals and insects in Massachusetts that are protected by the state. The NHESP has identified the rare species in Whately that depend upon the different habitats present in the town (Table 4-2). Permanently protecting the habitat areas of these species should be a top priority.

Table 4-2: Rare Wildlife Species Documented Whately as of 2020

Scientific Name	Common Name	Status	Most Recent Year Seen
Vertebrates			
<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	Endangered	2018
<i>Ambystoma jeffersonianum</i>	Jefferson Salamander (complex)	Special Concern	2018
<i>Ambystoma opacum</i>	Marbled Salamander	Threatened	1995
<i>Botaurus lentiginosus</i>	American Bittern	Endangered	2018
<i>Glyptemys insculpta</i>	Wood Turtle	Special Concern	2016
<i>Myotis lucifugus</i>	Little Brown Bat	Endangered	2017
Invertebrates			
<i>Bombus pensylvanicus</i>	American Bumble Bee	Endangered	2006
<i>Boyeria grafiana</i>	Ocellated Darner	Special Concern	2006
<i>Ophiogomphus asperses</i>	Brook Snaketail	Special concern	1998
<i>Alasmidonta heterodon</i>	Dwarf Wedgemussel	Endangered, Federal Endangered	2019
<i>Ligumia nasuta</i>	Eastern Pondmussel	Special Concern	2016
<i>Strophitus undulates</i>	Creeper (or Squawfoot)	Special Concern	2016

Note: This list does not include data-sensitive species (species highly susceptible to public collection).

Source: Massachusetts Division of Fisheries and Wildlife, NHESP; 2004. This list does not include data sensitive species.

Both the Jefferson Salamander and the Marbled Salamander generally reside in upland hardwood

⁴¹ <https://climateactiontool.org/content/maintain-habitat-connectivity-retrofit-or-replace-culverts>)

forests within several hundred feet of wetlands or vernal pools, where breeding occurs. The NHESP has documented areas in West Whately that provide habitat for these salamanders. The Wood Turtle also migrates between breeding and non-breeding season. Slower moving mid-sized streams with sandy bottoms and heavily vegetated stream banks are required for hibernation, breeding, and nesting, though Wood Turtles can also spend their spring and summer in deciduous forests, fields, hay fields, and riparian wetlands. The NHESP has documented an area of the large wetland between Long Plain Road and I-91 that provides habitat for Wood Turtle.

The American Bittern is a medium-sized bird in the heron family that spends most of its time foraging hidden among marshland vegetation. Freshwater marshes, meadows, fens and bogs dominated by emergent vegetation such as cattails, bulrushes, sedges, and grasses provide the bittern's best habitat. The Mill River between Swamp Road and the Deerfield town line provide bittern habitat.

In warmer months, Little Brown Bats occupy small caves, buildings, trees, rock crevices, and piles of wood. The Little Brown Bat population, though widespread and adaptable to many habitats, is in steep decline due to the fungus-caused White Nose Syndrome.

The Shortnose Sturgeon uses several different habitats throughout the year. The sturgeons in Whately are part of the Connecticut River population that migrates predominantly between the Holyoke Dam and the lower Connecticut River and estuary in Connecticut.

Whately is also home to several rare state-listed freshwater mussels: Eastern Pond Mussel, Creeper (or Squawfoot), and Dwarf Wedgemussel. The Eastern Pond Mussel lives in protected parts of lakes and in slack water areas of rivers. This species of mussel prefers slow-moving or still water and sand/sand-silt or gravelly substrates. Conversely, the Creeper prefers small streams and brooks, although it has been found in large rivers and occasionally in lakes and ponds. Most often, the Creeper mussel is found in cobble/gravel or sand/cobble/gravel substrate, sand and fine gravel. This mussel tolerates a range of flow conditions but is rarely found high-gradient streams. The Dwarf Wedgemussel is never found in still waters: it prefers slow to moderate streams with little silt deposition. This species prefers well-oxygenated streams and rivers with sand/muddy sand, and gravelly substrates. According to the NHESP, all three of these rare freshwater mussels have been documented in the Mill River in Whately.

The endangered American Bumble Bee is a long-tongued bumblebee species that requires plants with long, tubular flowers, favoring grasslands, fields, pastures, and other farmlands, as well as suburban areas. These bees need access to blooming flowers all summer long and are very sensitive to pesticides and pathogens. Ocellated Darner nymphs inhabit clear, shallow, rocky, swift-flowing streams and rivers, such as the Mill River and some of its tributaries.

H. SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

This section identifies the scenic resources and unique environments that most town residents would agree represent the essence of Whately's character, as well as others that may be lesser known. The history of Whately—how people came to settle the land, to use the trees and soil, and enjoy its forests, hills, and streams—is revealed by landscapes that retain a sense of the past. Two of Whately's oldest roads (Long Plain, formerly Straits Road, and River Road) follow the trails

originally used by the earliest Native American settlers to travel between Pocumtuck (Deerfield) and Norwottuck (Northampton).⁴² Inventorying scenic resources and unique natural environments in Whately provides a basis for the Town's priorities for resource protection. The *Scenic Resources and Unique Environments Map* at the end of this section identifies the key locations for these various resources so that they can be better preserved and protected from development.



Hay Bales and Tobacco Barns along Mill River Looking South to Holyoke Range (Allison Bell)

H.1 Heritage Landscapes and Scenic Resources

Whately has a number of historic and scenic resources, assets that contribute significantly to the community's character and quality of life. In 1982, the Massachusetts Department of Environmental Management (now the Department of Conservation and Recreation) and the Nature Conservancy conducted a "landscape inventory" that classified rural landscapes of the Commonwealth's six physiographic regions as Common, Noteworthy, and Distinctive. According to the report, the Pioneer Valley (of which Whately is a part) "covers the largest area of relatively unspoiled Connecticut River Valley scenery" and "contains more vestiges of the 18th century landscape than anywhere [else] in the Commonwealth." Looking south from Mount Sugarloaf in

⁴² Peter Thomas, "Native Trails, Early Roads, and Changing Landscapes in Deerfield," *Historic Deerfield Magazine*, Autumn 22 Issue 18, pp. 14-23.

South Deerfield one can see many miles of East Whately's farm fields and forest patches along the Connecticut River. This view of the valley, with Whately and Sunderland in the foreground and the Holyoke Range in the background, is the most iconic image of the valley and is used often for promotion.

Distinctive landscapes are larger than one square mile and typically exhibit the following attributes (noteworthy landscapes have the same characteristics but are of lesser, although important, visual quality): openness; high relative relief (hills, mountains and valleys); historic structures and land uses; agriculture; surface water; significant vegetation; important geological features; low population density; and a lack of contemporary development. Three areas of Whately are recognized in the landscape inventory: the historic development, farms, wetlands and forest from Whately Center along North Street (Distinctive), the farmland, wetlands, and floodplain terrace topography along River Road and Long Plain Road (Noteworthy), and areas of farmland along the Connecticut River (Distinctive). Other notable views include the Connecticut River Valley view to the east from Chestnut Plain Road; the view to the east from Poplar Hill Road near the MacLeish Field Station; and the view from Haydenville Road headed west along the Northampton Reservoir.

Heritage landscapes are special places created by human interaction with the natural environment that help define the character of the community and reflect its past. In the 2009 Whately Heritage Landscape Inventory Reconnaissance Report, the town identified five heritage landscapes as most worthy of preservation, each of which is representative of the Town's history. They are listed below and shown on the *Scenic Resources and Unique Environments Map*.

- Whately Town Center is notable as the site of the original Town common, with its double row of stately trees (originally chestnuts, but now sugar maples) and panoramic views of the Connecticut River Valley. Many original houses, most built between the 1760s and 1840s, remain. Town Center is the site of twin structures designed by architect Isaac Damon, Town Hall and the Congregational Church, as well as the Whately Inn.
- The Whately Cemeteries are located in East Whately, West Whately and Town Center, each of which contains headstones and monuments dating to the eighteenth century and retains its historic character.
- The North Street Corridor contains several of Whately's oldest farms and offers lovely views over farmland, primarily hayfields, and forest of Mount Sugarloaf in South Deerfield. Although newer houses, primarily capes dating to the 1950s and 1960s, have been built along North Street, a number of 18th and 19th century houses, barns and outbuildings remain.
- Tobacco Barns. Much of Whately's farmland is dotted with long, low tobacco barns that retain original structural details, including exterior walls constructed of alternating boards that can be opened to allow ventilation for drying the large tobacco leaves used for cigar wraps, tiered interior cross beams for hanging the drying tobacco stalks, hand-carved wooden chocks to close the hinged boards, and original hardware. Many of these barns are still in use.
- West Brook Mill Corridor. Although none of West Whately's historic mills are still in use, remnants of several mill structures remain, and their placement along the steep drop of West Brook serves as a tangible reminder of the Town's 18th and 19th century

manufacturing history.

The North Street Corridor and Tobacco Barns priority landscapes may be particularly vulnerable to development pressures if farms in these areas are not able to continue viable agricultural production in the future. Most of this land is in private ownership. Some parcels have been permanently protected with APRs, or temporarily protected under the Chapter 61A program, but others could still be developed.

Today, scenic roads allow residents and visitors to access both historic landscapes and scenic viewsheds. Roads that are officially designated as local scenic roads may also afford some protection to the historic and scenic resources along its route. The Town adopted the Massachusetts Scenic Roads Act, General Laws Chapter 40, Section 15C in 1973, which is particularly attentive to the presence of trees and historic stone walls in the public right-of-way, by designating three scenic roads: Chestnut Plain Road (which, at the time, included present-day North Street), Haydenville Road, and Conway Road. The Town passed a Scenic Roads Bylaw in 2020. In 2021, Poplar Hill, Strippe, and Webber Roads were designated scenic roads at Annual Town Meeting. Scenic roads are shown on the *Scenic Resources and Unique Environments Map*.

H.2 Historic and Archeological Resources

Whately's historic character may be ascribed not so much to the presence of specific iconic historic structures, but more to the Town's distinctive mix of residential and agricultural properties. Many Whately farms have maintained their historic outbuildings, including their tobacco barns, some of which now serve as purely residential properties. Whately Town Center and West Whately were listed on the National and State Registers of Historic Places in 2003.⁴³ In 2019, the Town adopted an amendment to its zoning bylaws "to facilitate the preservation of historically important municipal, religious, and commercial buildings and to allow for their adaptive reuse." This new bylaw, which pertains to buildings that "have served the general public and been in existence for at least 50 years," enables the waiver of dimensional requirements if such buildings have been deemed "historically significant" by the Historical Commission. This designation was awarded to the 1910 Center School in 2020.

A portion of one of the oldest archeological sites in the eastern United States is located within Whately's borders, attesting to the people who occupied the area for more than 10,000 years. The DEDIC (Deerfield Economic Development and Industrial Corporation) site contains artifacts from the Paleo-Indians (Old Indians) who inhabited the area 9,000 to 12,000 years ago and is named on the National Register of Historic Places. The site now enjoys greater protection since the Massachusetts Department of Environmental Management (now the Department of Conservation and Recreation) purchased a 30-acre parcel in 1997. The exploration rights for the remainder of the site were granted to the University of Massachusetts.⁴⁴

H.3 Unique Natural and Geologic Features

Having once been the bottom and edges of glacial Lake Hitchcock, Whately contains a number of

⁴³ The National Register of Historic Places designation is honorific and does not provide protective measures for the heritage landscapes and historic buildings within these districts.

⁴⁴ Gramly, *The Sugarloaf Site: Paleo-Americans on the Connecticut River*, 1998

unique features formed in the glacial and post-glacial periods. The silt and clay lake bottom deposits of glacial Lake Hitchcock, combined with millennia of sediment deposits from Connecticut River floods, created the fertile, loamy soils that make Whately a good place for farming. There are at least three broad, flat terraces that stretch north-south parallel to the river that were former floodplains from when the Connecticut river was flowing a higher levels. To illustrate, River Road runs along the lowest terrace, Long Plain Road the middle terrace, and Chestnut Plains road the highest terrace.

Great Swamp is a 5.5 km² geological “bowl” with a groundwater-based hydrology. It formed in sandy glaciofluvial deposits that overlie the glaciolacustrine silt and clay deposited by glacial Lake Hitchcock. The resulting system of a permeable sand unit over impermeable clay is an excellent hydrologic resource, and a number of residents around Great Swamp use wells screened in this shallow aquifer. There is concern of contamination of the aquifer, specifically from road salting and agricultural practices.⁴⁵

The Mill River meanders and varved silt/clay deposits. The Mill River is a classic, meandering E-type stream channel. However, where the channel cuts through varved silt/clay deposits left by meltwater deposits into glacial Lake Hitchcock, the river is more stable and thus, provides important habitat for the federally endangered dwarf wedgemussel.⁴⁶

I. ENVIRONMENTAL CHALLENGES

A number of environmental challenges continue to impact natural resources, the economy, and the social fabric of Whately, including the loss of farmland and fragmentation of large blocks of forestland; climate and other stressors’ impact on forest health; water issues such as water quality, chronic flooding, fluvial erosion and sedimentation, and drought; the decline of pollinator species; hazardous materials; and environmental equity. All of these problems are interrelated and all are impacted by land use and development. In the coming years, the Town must contemplate what actions to take in order to resolve these pressing problems and plan for a future that preserves Whately’s rich agricultural, cultural, and natural heritage.

I.1 Farm and Forestland Fragmentation

Though stable overall, the population of Whately has gone through a number of periods of growth over the last fifty years that has created demand for single-family detached housing in Whately. Most of this development has taken place on farm- and forestland. Taking other constraints into consideration, including conservation restrictions, wetlands and buffer areas to surface waters, there remain thousands of acres of land in town could still be developed. There are currently more than 3,000 in Chapter 61 programs that could be developed if taken out of chapter, and thousands more developable acres not currently in chapter.

⁴⁵ Bauman, Joel, “Salt and Nitrate Contamination of the Shallow Unconfined Aquifer at Great Swamp, South Deerfield, Massachusetts, 1999: <https://keckgeology.org/files/pdf/symvol/12th/MillRiverMass/bauman.pdf>

⁴⁶ McLain, David C. and Michael R. Ross. “Reproduction based on local patch size of *Alasmidonta heterodon* and dispersal by its darter host in the Mill River, Massachusetts, USA,” 2005: [https://doi.org/10.1899/0887-3593\(2005\)024<0139:RBOLPS>2.0.CO;2](https://doi.org/10.1899/0887-3593(2005)024<0139:RBOLPS>2.0.CO;2)

Much of what has been developed in the last half century has been large, flat farmland parcels. These open, working lands contribute enormously to the town's rural character: their expansiveness, textures, historic buildings, and generally uninterrupted viewsheds maintain Whately's scenic pastoral quality. The viability of agricultural and forest-product-based businesses is thus intrinsically linked to the preservation of open space for its scenic and historic value. Farmland preservation and policies that support and promote the viability and diversification of agricultural enterprises can help counter the economic forces that put pressure on agricultural land for development.

Converting forests to other uses can reduce the benefits the forest provides. Much of the forest in Whately and New England was cleared in the 1800s for farming and timber. Over the past 100 - 150 years, forests in the region have regrown. More recently, however, the amount of forestland in New England has begun to decline again due to development. Fragmentation of forestland for development has both scenic and ecological consequences. Forest fragmentation contributes to flooding and erosion, water quality impairment, and species loss, among other ecological issues, and contributes to the loss of rural character. In essence, though a forest may appear "still there," highly fragmented forests do not carry the same ecological, recreational, or scenic value as intact forests. Conserving resilient forests and the linkages between them will help plant and animal species move to more suitable habitats as the climate changes. Large, intact forest areas will also be more likely to recover from extreme events such as droughts, windstorms, ice storms, and flooding. Although individual parcel sizes may be small, conserving critical connections between larger core habitat areas can make a big difference in species migration. In addition to land protection, communities can implement land use regulations that encourage natural resource conservation and minimize forest fragmentation and land clearing for development.

As most forestland in New England is owned by families and individuals, the decisions these family forest owners make about their land moving forward will likely be the most important drivers of forest change. The average age of family forest owners is over sixty, meaning the near future will see a very large intergenerational transfer of land ownership. It is important for these landowners to make formal plans for the future of their land. Landowners can work with a local land trust or conservation organization to investigate options for conserving their land.

I.2 Forest Health

Climate change and related impacts from increasing temperatures poses a major threat to the health of Whately's forests. Impacts include change in forest structure, droughts, invasive plants and insects, and diseases. The hemlock woolly adelgid has been present in Whately for more than two decades without significant impact, though trees see higher rates of mortality when co-infected with elongate hemlock scale, also present in Whately. Emerald ash borer, an insect that can kill ash trees in 3 to 10 years, has not been confirmed in Whately but by 2019 had reached nearby towns of Goshen and Amherst. Beech bark disease, a disease-insect complex, has infected the majority of Whately's beech trees, though research has found that some beech trees are resistant. Other potential threats to Whately's forests include the Asian longhorn beetle, an invasive wood-boring insect that attacks hardwood trees that at the moment is contained in eastern Massachusetts, gypsy moth, whose recent cyclical (5- to 10-year) outbreak has increased oak mortality over the past few years, and sudden oak death disease, which is present in parts of southern New England.

Climate change is impacting forests in many ways. A longer growing season and increasing temperatures are shifting habitat conditions for trees northward and to higher elevations. Over time, the birch-beech-maple forests typical of New England will decline while oak-hickory forests more typical in areas south of New England will thrive. An expected increase in periods of drought between intense precipitation events may weaken trees, leaving them more susceptible to insects and diseases. Warmer temperatures may favor invasive plants over native species and are already resulting in more widespread damage from pests and diseases that in the past were kept in check by colder temperatures. A number of resources exist for climate-adapted trees appropriate for the region, including the FRCOG's Climate Resilient Trees for Streetside Tree Belt Planting.⁴⁷

The 2016 publication "Increasing Forest Resiliency for an Uncertain Future" focuses on addressing the impacts of various stressors on New England's forests and offers recommendations for foresters, conservation groups, landowners, and municipal officials on how to increase forest resiliency in an uncertain future.⁴⁸ The main stressors highlighted in the report include forest conversion, invasive plants, invasive insects and disease, over-browsing from deer, and climate change. These stressors interact with one another to increase their negative impacts, making it all the more important to address them as part of a larger whole.

Maintaining healthy forests well into the future will necessitate addressing these stressors in an effort to increase forest resiliency. Forest resiliency is the capacity of a forest to respond to a disturbance by resisting damage or stress and recovering quickly. The authors break down forest resiliency into four goals: keep forest forested and connected (addressed above in *I.1 Farm and Forestland Conservation*), reduce stressors, reduce vulnerability, and provide refuge. Depending on the forest type, location, history, and surrounding landscape, forests will have varying degrees of vulnerability and resiliency.

Reduce Stressors

There are many steps forest landowners can take to limit the number of stressors that forests face to increase overall vigor and health. Invasive plants can out-compete native plants and decrease overall plant diversity by dominating forests and reducing regeneration of native trees and plants. Invasive insects, like the hemlock woolly adelgid or the Asian long-horned beetle, have no natural predators and are significantly affecting species composition as trees susceptible to these insects are selectively killed. Landowners can work with foresters to prevent the introduction of invasive species, remove small populations of existing ones, and learn to manage extensive areas of infestation. Deer browse can be so intense in some areas that regeneration of certain species can be inhibited. Limiting the impacts of deer browse can be accomplished through allowing deer hunting to control deer populations, leaving tree tops whole that have fallen to the ground in order to provide enough light for seedlings to grow while also sheltering them from browsing, and protecting seedlings using temporary fencing or deer repellants.

Forest landowners can also take steps to maintain or restore soil and water health by ensuring that forestry best management practices are used when conducting a timber harvest to reduce soil compaction and erosion and to promote soil fertility. Recreation on forestland can be directed away from easily erodible soils or other environmentally sensitive sites. Maintaining or restoring

⁴⁷ <https://frcog.org/wp-content/uploads/2018/06/Climate-resilient-trees.pdf>

⁴⁸ *Increasing Forest Resiliency for an Uncertain Future*. Catanzaro, Paul, Anthony D'Amato, and Emily Silver Huff. 2016. <https://masswoods.org/sites/masswoods.net/files/Forest-Resiliency.pdf>

forested riparian buffers around water resources will help filter out sediment and contaminants and keep water temperatures cooler.

Reduce Vulnerability

A forest's vulnerability is its susceptibility to undesired change from stressors. Forests with high complexity are more likely to withstand stressors and recover from disturbances. Complex forests have a diversity of tree species, including trees that are likely to do well in future climate conditions, a variety of tree sizes, ages, and tree arrangements, and enough standing deadwood and logs on the ground. Forests with existing high complexity can be monitored over time for signs of vulnerability. Forests that are lacking in high forest complexity in one or more areas can become more resilient through forest stewardship activities such as creating openings of different sizes to promote regeneration of well-adapted species, thinning of forests to promote growth, and selectively felling trees to increase the amount of deadwood on the ground.

Provide Refuge

Conserving areas of diverse topography, geology, and local connectivity to provide options for threatened and endangered species can provide refuge for these species as the climate changes. Forested areas that contain endangered and threatened species and the conditions that sustain them should be prioritized for conservation and may be most appropriate to designate as forest reserves where a passive management approach is taken. Natural communities in Whately (and a portion of the surround towns) that support rare, endangered, and threatened species are identified as Core Habitat and Priority Habitats for Rare and Endangered Species the *Plant and Wildlife Habitat Map* and discussed more in *Section G. Fisheries and Wildlife*.

1.3 Invasive Plant Species

Whately, like many towns in Massachusetts, is threatened by the rapid growth of invasive plants. In particular, residents have noted the following plants as particularly noxious: Japanese knotweed, which thrives along the roadsides, clogging culverts and dwarfing native plants; Oriental bittersweet, a powerful vine that can destroy full-grown trees with its weight, often taking down power lines and damaging property in the process, and is found throughout public and private forestland in town; and multiflora rose, an insidious shrub that flourishes along forest edges and in hayfields, spreads broadly and has no natural predators.

According to Whately residents, invasive plant species have become a greater threat over the last decade. Climate change is changing the growing conditions for native species and extending the range of non-native species. Non-native problem species were introduced as ornamental species, medicinal species, or are escapees from shipped material arriving from abroad. Non-native invasive species become a problem when they out-compete our native plants or animals and disrupt our ecosystems. Some non-natives, such as dandelions, have become naturalized and although scattered on our landscape, do not represent a threat to the natural ecosystems. During the 2021 MVP workshop, Highway Superintendent Keith Bardwell identified that trees sometimes come down onto Whately roads due to the stress from bittersweet vines, especially during high wind events. Additionally, Japanese knotweed is plugging up the drainage systems in town.

Although some invasives have beneficial qualities, including aesthetic value, their overall impact on the biodiversity, habitat value, and agricultural output is seen as detrimental. Table 4-3 lists the

non-native invasive plant species within town, all of which are listed as “prohibited” by the Massachusetts Department of Agriculture.

Table 4-3: Non-native Plant Species Found in Whately and Neighboring Towns⁴⁹

Latin Name	Common Name	Observed in Whately
<i>Acer platanoides</i>	Norway maple	Y
<i>Aegopodium podagraria</i>	Bishop's goutweed	Y
<i>Ailanthus altissima</i>	Tree of heaven	N
<i>Alliaria petiolata</i>	Garlic mustard	Y
<i>Berberis thunbergii</i>	Japanese barberry	Y
<i>Cabomba caroliniana</i>	Carolina fanwort	N
<i>Celastrus orbiculatus</i>	Oriental / Asian bittersweet	Y
<i>Cynanchum louiseae</i>	Black swallow-wort	N
<i>Elaeagnus umbellata</i> var. <i>parvifolia</i>	Autumn olive	Y
<i>Euonymus alatus</i>	Burning bush	Y
<i>Fallopia japonica</i> var. <i>japonica</i>	Japanese knotweed	Y
<i>Ficaria verna</i> ssp. <i>bulbilifer</i>	Lesser celandine / Fig buttercup	N
<i>Frangula alnus</i>	European / Glossy buckthorn	Y
<i>Heracleum mantegazzianum</i>	Giant Hogweed	N
<i>Hesperis matronalis</i>	Dame's rocket	Y
<i>Iris pseudacorus</i>	Yellow iris	Y
<i>Lonicera ×bella</i>	Bell's honeysuckle	N
<i>Lonicera japonica</i>	Japanese honeysuckle	N
<i>Lonicera morrowii</i>	Morrow's honeysuckle	Y
<i>Lysimachia nummularia</i>	Creeping jenny / moneywort	Y
<i>Lythrum salicaria</i>	Purple loosestrife	Y
<i>Microstegium vimineum</i>	Japanese Stiltgrass	N
<i>Myriophyllum heterophyllum</i>	Variable water-milfoil / Two-leaved water-milfoil	Y
<i>Myriophyllum spicatum</i>	European water-milfoil / spike water-milfoil	Y
<i>Persicaria perfoliata</i>	Mile-a-minute vine or weed / Asiatic tearthumb	N
<i>Phalaris arundinacea</i>	Reed canary-grass	Y

⁴⁹ Sources: Whately Open Space Committee Members and Bertin et. al., Vascular Plants of Franklin County, MA, 2000: <http://www.rhodora.org/specialpublications/pdf/Bertin-et-al-Vascular-Flora-Franklin-County-Massachusetts.pdf>

<i>Phragmites australis ssp. australis</i>	Common reed	Y
<i>Potamogeton crispus</i>	Crisped pondweed	Y
<i>Rhamnus cathartica</i>	Common buckthorn	N
<i>Robinia pseudoacacia</i>	Black locust	Y
<i>Rosa multiflora</i>	Multiflora rose	Y
<i>Trapa natans</i>	Water-chestnut	N

Source: Conway Open Space Committee, January 2021.

I.4 Maintaining Adequate Streamflow

The flow in Roaring Brook and West Brook, two tributaries of the Mill River, is severely impacted by upstream impoundments for public drinking water supplies, negatively affecting downstream stream ecology. The state Water Resources Commission has set minimum streamflow standards that should be used to determine appropriate streamflow and whether the City of Northampton and South Deerfield Water Supply District are required to conform to those standards as part of their permits.⁵⁰ The Town will need to work with the City of Northampton, the South Deerfield Water Supply District, and the MA DEP to determine the best management for stream flow standards.

I.5 Chronic Flooding

Roads navigating West Whately's steeper elevations—Westbrook Road, Williamsburg Road, State Road, Christian Lane, and the north end of North Street—experience chronic flooding. Roadside ditches are also prone to flooding in areas of steeper elevation after heavy rain events. The key factors in flooding are the capacity of water bodies and waterways, the regulation of waterways by flood control structures, and the preservation of flood storage areas (like floodplains) and wetlands. As more land is developed, more flood storage is demanded of the town's waterways and remaining floodplains. When those systems cannot accommodate inundation and sometimes damage to personal and public property can occur. The potential for inundation flooding of the Mill River to affect the public drinking water supply wells is a noted concern; parcels with older septic systems may no longer be properly capped.

The Town of Whately has adopted several land use regulations that serve to limit or regulate development in floodplains, to manage stormwater runoff, and to protect groundwater and wetland resources, the latter of which often provide important flood storage capacity. The Town of Whately 2020 Multi-Hazard Mitigation Plan recommends the following to address flood and stormwater issues:

- Reviewing and amending the Floodplain District Overlay Zoning Bylaw to align with the state's 2020 Model Floodplain District Bylaw or stricter standards;
- Updating the Zoning Bylaws to add stormwater management and flood prevention and mitigation to the criteria for Special Permit and Site Plan Review to reduce flood risk and

⁵⁰ 2008 Index Streamflows for Massachusetts, Prepared by Massachusetts Department of Conservation and Recreation Office of Water Resources For Massachusetts Water Resources Commission:
<https://www.mass.gov/files/documents/2017/12/08/Index%20Streamflows.pdf> presentation

damage; and

- Amending the Zoning Bylaws and Subdivision Regulations to include provisions for stormwater management and climate resilience.

I.6 Erosion and Sedimentation

As noted in *E.3 Aquifer Recharge Areas*, a recent project used nature-based solutions to address the erosion threat that the Mill River posed to the public water supply wells, so the issue is no longer an immediate concern. However, given increased frequency of heavy precipitation events and the unstable geomorphology of the river, the risk of fluvial erosion to the wells should stay on the Town's radar. Private wells along the Mill River floodplain are vulnerable to contamination and erosion caused by flooding, particularly if they are not properly capped.

Several farms that abut the Mill River contribute to erosion by grazing cattle up to the river and by leaving only minimal riparian buffers. The 2021 Whately MVP planning process identified working with farmers to limit erosion as a potential strategy for limiting these impacts. However, it has also been noted that the floodplain of the Mill River is so extensive that a fence installed to keep cattle away from the river's edge would either be destroyed by high flows or ice damage or would need to be placed so far from the river bank much of the pastureland would be lost.

Unpaved roads are prone to erosion during heavy rains and freeze and thaw cycles, leading to sedimentation of adjacent waterways. This is occurring most notably on West Brook, Roaring Brook, and Sanderson Brook. Road infrastructure such as culverts and bridges are in place to manage the flow of water, but some of this infrastructure is aging or undersized, making it incapable of handling the heavier flows the region is experiencing due to climate change and causing severe erosion and infrastructure damage during high flow events. Many of these culverts are also poorly designed for the passage of terrestrial and aquatic life, so upgrading culverts can have the co-benefit of restoring aquatic connectivity. The Town identified in the 2020 hazard mitigation plan the need to evaluate culverts at road-stream crossings and prioritize upgrades.⁵¹ Culvert replacements should be prioritized using results from Critical Linkages analyses where available.⁵²

Finally, Whately is also experiencing wind erosion of agricultural soils where fields are not overwintered in cover crop. Participants in the 2021 MVP workshop identified that farmers appear to be using cover crops less frequently, possibly because of lack of funding or due to the later growing season. Combined with more frequent high-wind events, the lack of cover crop means more soil is blown around and deposited outside of farm fields in winter and spring. More research is needed to understand this trend and make recommendations.

I.7 Drought

The 2020 Whately Multi-Hazard Mitigation Plan found Whately to have a medium vulnerability to drought. The Northeast is generally considered a moist region with ample rain and snow, but

⁵¹ Town of Whately Multi-Hazard Mitigation Plan, Prepared by the Whately Hazard Mitigation Committee and Franklin Regional Council of Governments, 2020:

https://www.whately.org/sites/g/files/vyhlf5211/f/uploads/final_whately_2020_hmp.pdf

⁵² <http://umasscaps.org/applications/critical-linkages.html>

droughts are not uncommon. Widespread drought has occurred across the region as recently as 2019 and 2016, and before that in the early 2000s, 1980s, and mid-1960s. More frequent and severe droughts are expected as climate change continues to increase temperatures, raise evaporation rates, and dry out soils, despite more precipitation and heavier rainfall events. Periods of prolonged drought could affect the supply of private wells and possibly public wells (the vulnerability is unknown at this time), cause severe economic hardship in the agricultural industry, make Whately's forests more vulnerable to wildfire and pressure from other stressors, and compromise firefighting ability in areas of town reliant on surface water sources for fire suppression. Whately farms, with the exception of Chang Farm's sprouting operation, draw water from surface water supplies rather than the public ground water supply.

Participants in the 2021 MVP workshop expressed particular concern about Whately's primary public supply wells: both wells draw from the same aquifer and are located close together. There is no backup source of water. The Town is connected to Hatfield & Deerfield's water system, meaning water could hypothetically be drawn from their supply during an emergency, but the connection is not a long-term solution and would not serve residents in West Whately.

The primary mitigation strategy currently in place is the regulation of uses within the aquifer recharge area of the public water supply well through Whately's Aquifer Protection District. Whately also requires environmental controls for any project allowed by right or requiring a Special Permit. Whately could also consider promoting or requiring drought and heat-tolerant grass, plants, and trees in new development, to limit the amount of irrigation needed. The hazard mitigation plan recommends a drought management plan to help prepare the Town for such an event. Forest landowners in town can also be encouraged to conserve and manage their forests for climate resiliency. Strategies for promoting a resilient forest are reviewed in *I.2 Forest Health*.

I.8 Water Quality

The Mass DEP has identified water quality issues in both the Connecticut River and the Mill River Sub-Watershed (see *E.1.2 Mill River-Hatfield Sub-Watershed*) and in the public drinking water supply (see *E.3 Aquifer Recharge Areas*). To curb deterioration of Whately's water supplies, concerted public action need to be taken both to address the issue of fluvial erosion and to minimize these non-point sources of pollution. In the past five years, a farm in Whately has incurred fines for exceeding effluent discharge limits defined by its NPDES permit. Action to reduce the quantity of point-source pollution released by this farm falls under the jurisdiction of the MA DEP and the Environmental Protection Agency, not the Town.

A number of Whately's wetlands and water bodies are threatened by road salt, especially Great Swamp, which lies west of the state-managed Routes 5/10 and I-91. The confined basin that contains the Great Swamp is experiencing salt contamination.⁵³ Though the salt water is currently below the root zone of the swamp, as salting continues on the state highway and interstate, the salt could rise to a level where it starts to kill trees in the Great Swamp, which boasts trees over three feet in diameter.

The erosion of unpaved roads and subsequent sedimentation of streams, as mentioned in *I.6 Erosion in Sedimentation*, is also a concern for water quality.

I.9 Loss of Cold Water Fisheries

As air temperatures rise over time, so will water temperatures. Coldwater streams are areas or reaches of streams and small rivers with water that stays cold enough all year long to support coldwater fish such as the native brook trout and non-native rainbow and brown trout. Other species dependent on coldwater streams include slimy sculpin, blacknosed and longnose dace, and white suckers. Whately's West Brook, Roaring Brook, Sanderson Brook, and Avery Brook's coldwater fisheries will likely be affected by warming temperatures. Actions that would address this threat include restoring riparian buffers, disconnecting stormwater runoff from impervious surfaces, and removing barriers to aquatic connectivity (e.g., improving culverts and removing remnant dams).

I.10 Pollinator Decline and Pesticide Use

Natural plant communities rely on pollinators such as bees, wasps, moths, butterflies, and birds to produce genetic diversity in the plants they pollinate and are therefore critical to the biodiversity and resilience of whole ecosystems. The most common and prolific pollinators are bees. Many species of native bee are much more effective than honey bees at pollinating flowers on a bee-per-bee basis, so agricultural growing practices that support native bees tend to be good for crop pollination, increasing yields, and farm profit.⁵⁴ Parasitic wasps and native bees, especially bumblebees, are important for insect-pollinated crops such as tomatoes, particularly in organic

⁵³ Bauman, Joel, "Salt and Nitrate Contamination of the Shallow Unconfined Aquifer at Great Swamp, South Deerfield, Massachusetts, 1999: <https://keckgeology.org/files/pdf/symvol/12th/MillRiverMass/bauman.pdf>; Rhodes, Amy L., Robert M. Newton, and Ann Pufall, "Influences of Land Use on Water Quality of a Diverse New England Watershed," 2001: <https://pubs.acs.org/doi/pdf/10.1021/es002052u>

⁵⁴ The Xerces Society, "Farming For Bees: Guidelines for Providing Native Bee Habitat on Farms," 2015: <https://www.xerces.org/publications/guidelines/farming-for-bees>

greenhouse settings. Whately's Fairview Farms has had great success with introducing hives to supplement the wild population.⁵⁵ A major research project out led by Robert Gegear, Ph.D., out of UMass Boston is collecting and sharing important information about the role of native bees in pollination and the plants and trees that support them.⁵⁶

In the 2017 *Massachusetts Pollinator Protection Plan*, MDAR identified the need to evaluate, sustain, and enhance pollinator populations in the state. Both managed agricultural pollinators (honeybees) and wild native pollinators have declined in numbers in recent decades and are experiencing significant challenges to their survival.⁵⁷ The widespread use of insecticides is one of the most significant risks to pollinators; many insecticides, such as permethrin, are heavily marketed for one purpose but are lethal to all insects. Many residential and agricultural pesticides do not include bee toxicity information on the label, and products that do list this threat only mention danger to honey bees. Many native bees are smaller than honeybees and vulnerable to spraying practices that might not affect the larger honeybees. Even products approved for organic gardening, such as rotenone and spinosad, are dangerous to bees. Some researchers believe that widespread use of systemic pesticides results in death or harm (such as impaired brood production) to insects like bees and butterflies when sequestered in flower nectar. One group of insecticides, the neonicotinoids, have been shown to be particularly dangerous for bees and have been carefully regulated or banned entirely in some places for this reason, and legislation to this effect in Massachusetts is now before the legislature.

Hundreds of acres of farmland in crop production are sprayed with pesticides and pesticides are used at some residences, as well. The impact of pesticide use in Whately on insects is unknown and pesticide use is regulated at the state, not town, level. However, the safest course of action is to avoid pesticides entirely.

An important consideration is that the same landscape features that support healthy pollinator numbers also support other beneficial insects. Widespread planting of native species in intentional "pollinator pathways" can have a measurable impact in a short period of time. The Western Massachusetts Pollinator Network⁵⁸ is working with a number of towns in Berkshire, Franklin and Hampshire Counties to educate landowners on ways to modify landscaping on their properties to provide safe nesting and feeding spots for beneficial pollinators. The FRCOG is working on a regional pollinator plan, to be published in 2021.

I.11 Hazardous Waste and Materials

Hazardous waste sites are areas contaminated by chemical pollutants, usually a result of dumping or accidental leaking. The DEP identifies 32 Hazardous Waste/Reportable Release Sites in town, the majority of which were oil spills. One release on State Road in 2018 holds Tier I status because it was not closed out within a year. An incident in 2013 at the Whately Truck Stop was assigned Tier II status because the quantity of oil released met a certain threshold. Finally, an oil spill in 1990 at the Whately Truck Stop created an Activity and Use Limitation (AUL). A 2012 audit found the site to comply with the terms of the AUL.

⁵⁵ <https://www.buylocalfood.org/local-hero-profile-fairview-farms-inc/>

⁵⁶ Beecology.wpi.edu

⁵⁷ <http://www.mass.gov/files/documents/2017/06/zw/pollinator-plan.pdf>

⁵⁸ www.massbees.org

The Town of Whately 2020 Multi-Hazard Mitigation Plan notes also that many farms and other industry in Whately have large, aboveground propane storage. Tanks within the flood plain are at risk of becoming untethered during a flood event. Whately has two closed landfills, capped in 1982 and 1998, that have no identified issues.

Continuous education of landowners about proper hazardous waste disposal is essential to protecting the water supply. Some of Whately's businesses handle hazardous materials or generate hazardous wastes (such as pesticide, solvent and waste oil disposal, etc.), and all are presumably operating within the law. Homeowners, and possibly some of the cottage businesses, are not as likely to be aware of their responsibility to protect groundwater.

I.12 Landfills

There is a capped inactive landfill at 100 Long Plain Road in Whately that is unlined. There is a capped inactive stump landfill on Webber Road that is unlined. There are no active landfills in Whately.

I.13 Environmental Equity

Environmental Justice (EJ) is based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment. The policy defines environmental justice as "the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits" and states that "no group of people, because of race, ethnicity, class, gender, or handicap bears an unfair share of environmental pollution from industrial, commercial, state and municipal operations or have limited access to natural resources, including greenspace (open space) and water resources." EJ populations are "those segments of the population that the Executive Office of Energy and Environmental Affairs (EOEEA) has determined to be most at risk of being unaware of or unable to participate in environmental decision-making or to gain access to state environmental resources." EJ communities are defined as being low income, having a high minority population, and/or to have a high rate of English language isolation.

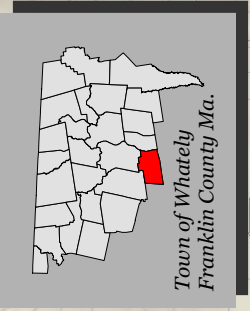
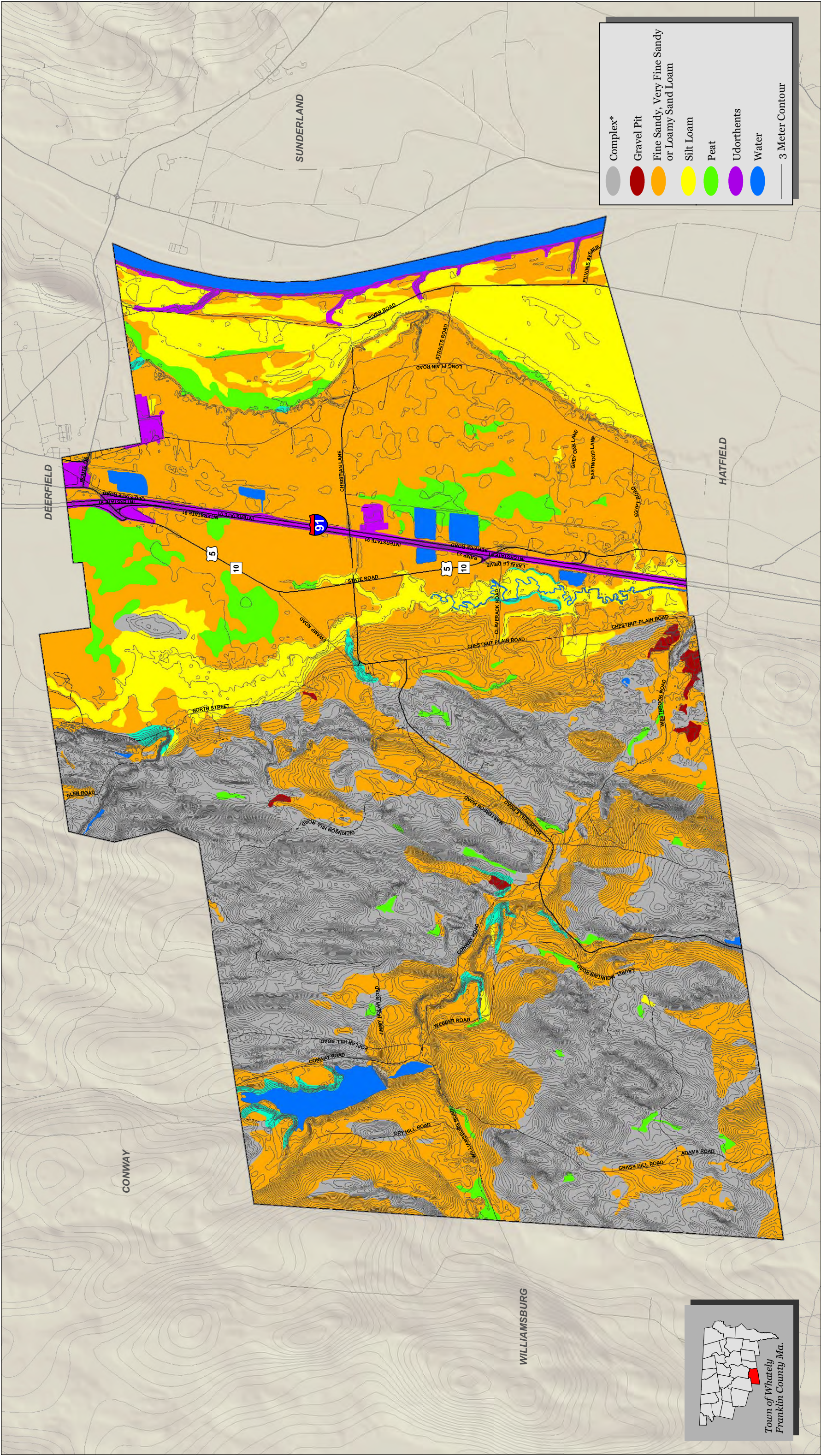
Based on the 2015-2019 ACS 5-Year Estimates, Whately's population is predominantly white, with around 4.5 percent minority representation. With a very small minority population, no census tract-based concentrations of low-income residents, and very few residents speaking English "less than very well," there are no EOEEA-designated environmental justice communities in Whately. However, the demographic profile of Whately farmworkers likely includes a high proportion of people whose annual median household income is equal or less than 65 percent of the statewide median, who identify as a race other than white, and who speak English "less than well" (census-defined), who therefore could meet the criteria of Environmental Justice populations in their town or city of residence. Even though these workers do not reside in Whately and thus do not fall under the technical definition of environmental justice populations, these workers may endure environmental challenges such as chemical exposure at their place of work and should be considered in discussions agricultural chemical use in Whately.

I.14 Solar Development

Solar energy production in Massachusetts has exploded since the early 2000s, thanks in part to a

robust incentive program. Much of the increase in solar capacity has occurred as forest and farmland conversion because it is cheaper (and less risky), at this time, than brownfields, solar canopy, or in some cases large-scale roof development. Between 2001 and 2019, 23 percent and 50 percent of ground-mounted solar development by acreage was installed on cropland and forestland, respectively, according to the early results of research out of Clark University.⁵⁹ Solar development in Whately get reviewed under the Large-Scale Ground-Mounted Solar Bylaw (2011, 2020), which includes many provisions that discourage large-scale farmland conversion (i.e., a 10-acre cap, specification that there be minimal impact on agricultural land and minimal concrete, encouragement of dual-use farming, and the requirement that the installation be totally reversible at the end of the facilities' lifespan). However, the bylaw permits solar by special permit in every district except A/R1, so the Town has limited power over where installations that meet the standard go; however, the Zoning Board of Appeals has denied permission for two installations in the past three years, demonstrating that the Town is exercising some discretion. Given the complex costs (loss of farmland, carbon storage, and habitat) and benefits (greenhouse gas reduction and income diversification) of solar development, especially on farmland and forests, the Town should continue to seek out and consider best practices in the regulation of renewable energy land uses.

⁵⁹ Rogan, John and Shiqi Tao, Clark University, "Solar Siting Reform for Rhode Island and Massachusetts", presented 3/17/2021: <https://www.youtube.com/watch?v=TkZ4H83TgHo>

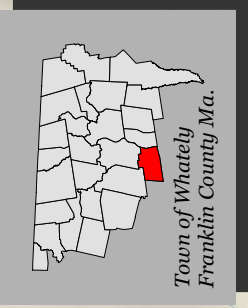
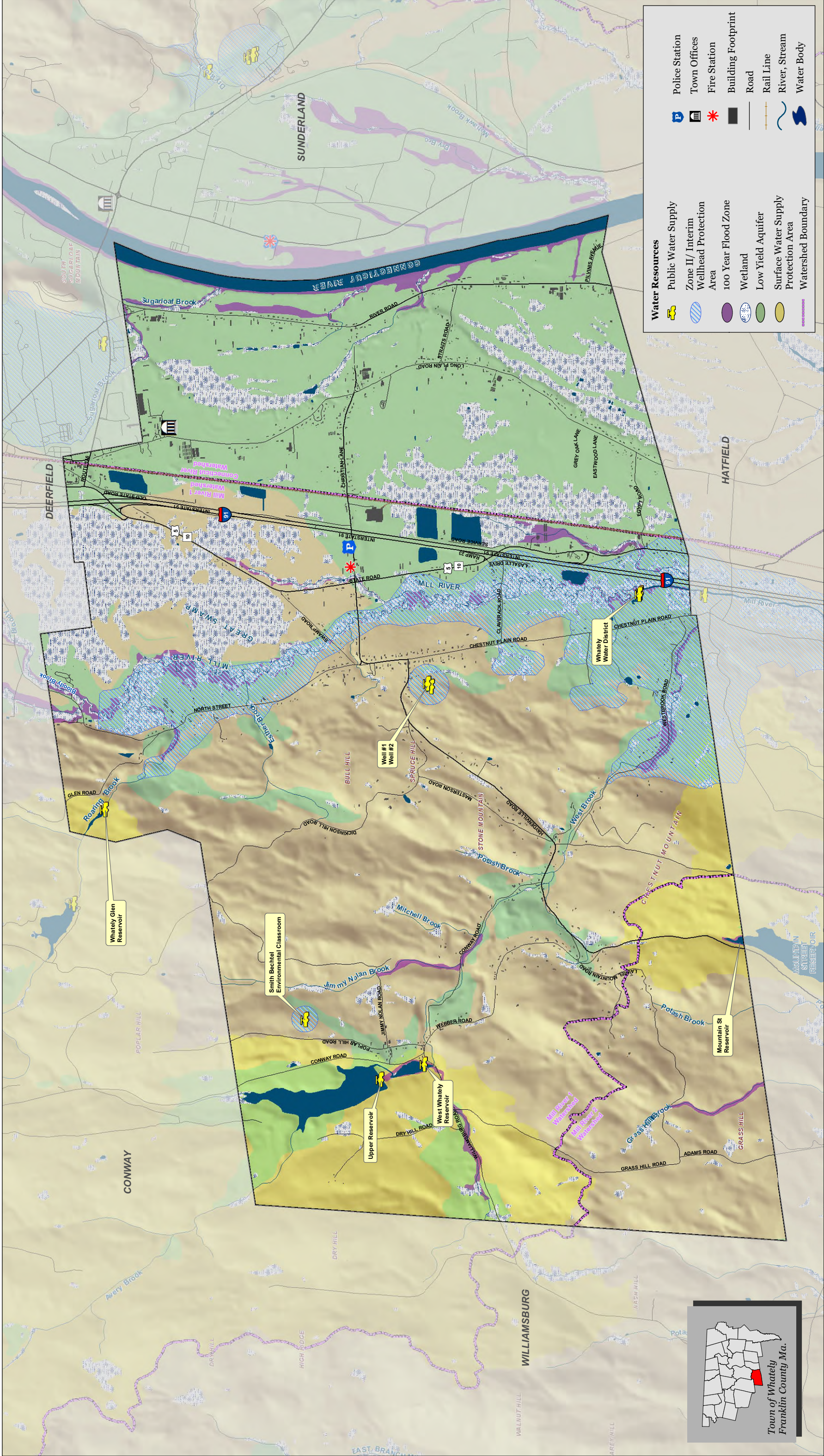


Town of Whately Open Space & Recreation Plan 2021

USDA - NRCS Soil Composition

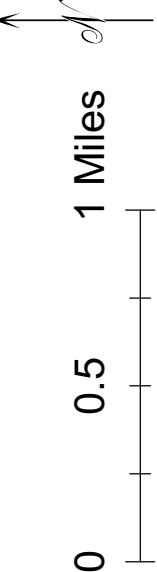


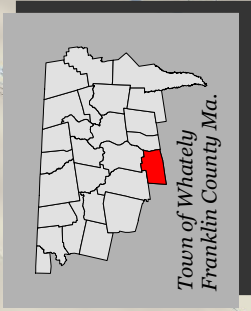
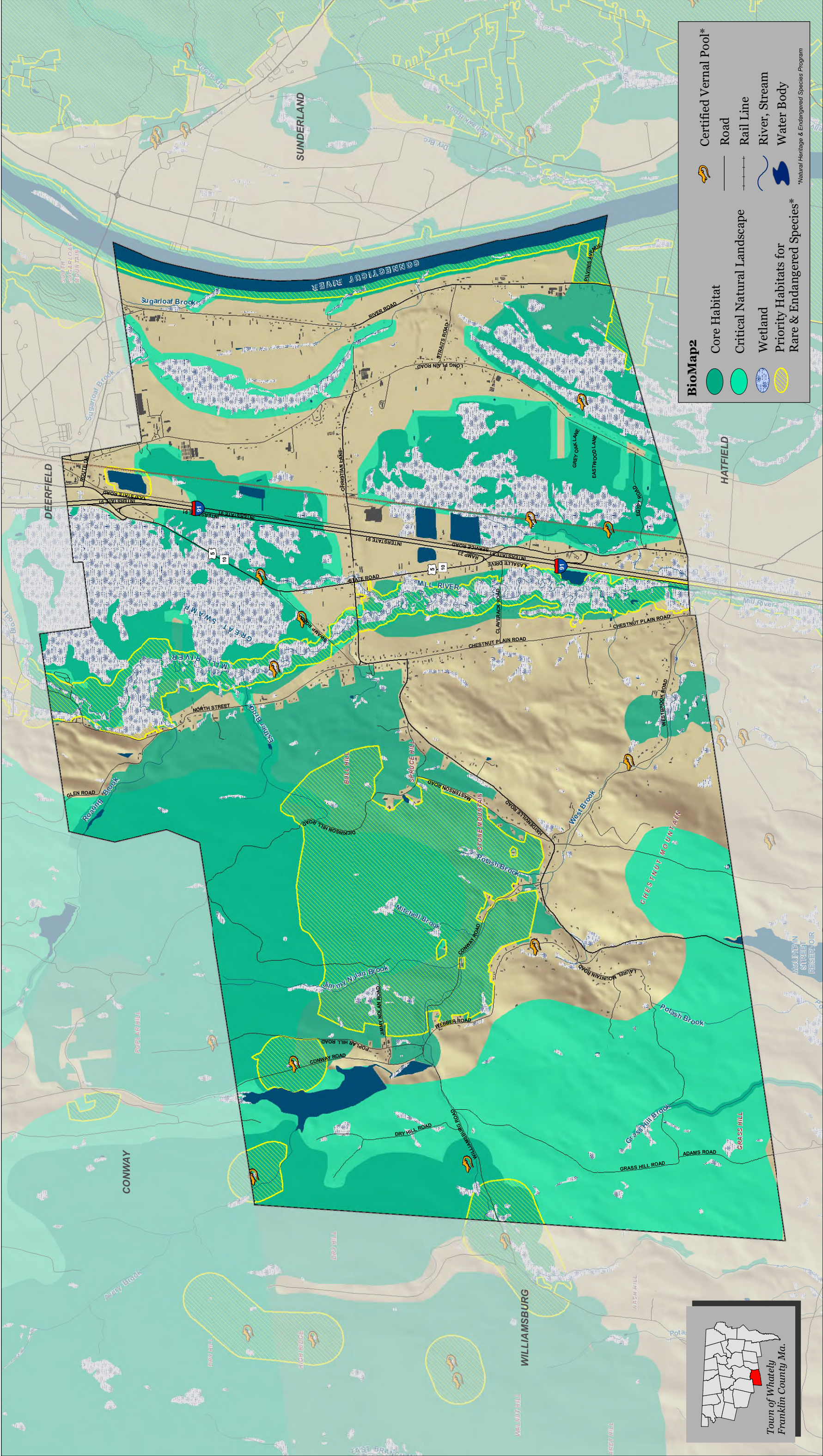
Sources: Map produced by the Franklin Regional Council of Governments. GIS data sources include MassDOT, MassGIS and FRCOG. Depicted boundaries are approximate and are intended for planning purposes only. Not to be used for survey.



Town of Whately Open Space & Recreation Plan 2021

Water Resources





BioMap2

Core Habitat

Critical Natural Landscape

Wetland

Priority Habitats for Rare & Endangered Species*

Certified Vernal Pool*

Road

Rail Line

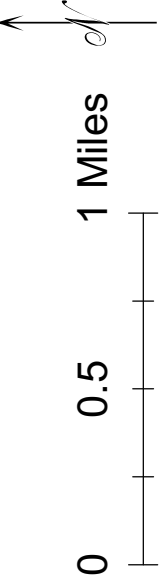
River, Stream

Water Body

*Natural Heritage & Endangered Species Program

Town of Whately Open Space & Recreation Plan 2021

Plant & Wildlife Habitat



Sources: Map produced by the Franklin Regional Council of Governments. GIS data sources include MassDOT, MassGIS and FRCOG. Depicted boundaries are approximate and are intended for planning purposes only. Not to be used for survey.

SECTION 5

INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

A. INTRODUCTION

The previous sections of this plan have identified areas within the town of Whately that are significant for their cultural, scenic, or ecological values. This information is helpful for understanding the character of Whately and for outlining issues that may be of particular interest in open space and recreation planning decisions. Lands of conservation interest are those parcels of land that are considered important because they are already protected from development or because they could be a priority for protection. This section provides an inventory of existing undeveloped land containing these significant values. It identifies public and private parcels, current land use, the degree of protection, and where possible, existing land management practices.

Open space is generally defined as undeveloped land. In Whately, open space includes large tracts of forested land, open upland ridges, streams, rivers and wetlands, public water supply watershed land, agricultural fields and barns, and significant historical structures and landscapes. These natural resources and landscapes are what make Whately unique. The appearance of Whately, its “sense of place,” and the condition of the town’s natural features and functions require active stewardship and thoughtful planning. Planning for the protection of Whately’s environment and recreation resources will enable the town to proactively manage growth, protect wildlife habitat, ensure the integrity of drinking water supplies, continue to provide residents and visitors with a variety of outdoor recreation opportunities, and, at least in part, provide for residents’ livelihoods.

One focus of an Open Space and Recreation Plan is undeveloped land, valued by residents because of what it provides: actively managed farm and forestland, wildlife habitat, important plant communities, protection and recharge of groundwater, flood control, public access to recreational lands and trail systems, structures and landscapes that represent the community’s heritage, and scenic views. Open space can be publicly or privately owned, and can be publicly accessible or not publicly accessible. The second focus of a plan is recreational facilities, which can include community park, picnic areas, and developed areas like tennis courts, golf courses, and swimming pools. Open space and recreation plans typically identify recreational resources and areas of undeveloped land that have value to the community and prioritize them for protection, maintenance, and improved access.

Approximately 7,577 acres in Whately are open space with some level of protection from development. This represents nearly 57 percent of the total land area of the town’s total 13,233 acres (see Table 5-1). Land protected in perpetuity represents a third (33 percent) of the town’s

total acreage. Given the local and regional importance of Whately's agricultural soils, forests, and public water supply watersheds, residents, water supply managers, and Town officials have done well to have placed over half of the town's land area under some level of protection. However, the community's long-term open space and climate resilience goals require that the Town identify parcels with conservation value that only the Whately community may see as important—parcels the state conservation agencies and the water districts are not focused on protecting. Whately's long-term recreation goals also necessitate that the Town continue to work for improved access to open space via a trail network and recreation for a variety of users, which may require further land protection as well as improvements to existing public-access parcels.

A.1 Permanent Protection

Land is considered permanently protected when it is under fee ownership by a conservation organization or subject to a legal restriction under Article 97 prohibiting certain acts and uses for the purpose of protecting conservation values present on the land in perpetuity. Permanently protected land enjoys the highest degree of protection from development. In Massachusetts, there are a number of ways in which land can be considered permanently protected from development:

- a conservation restriction is attached to the deed;
- land owned by a state conservation agency, a non-profit conservation organization, or a conservation land trust;
- water supply land owned by a municipality or water district containing language in the deed that references water supply protection or Article 97;
- state or Town-owned land designated and used as a public park; and
- Town-owned land managed and controlled by its Conservation Commission.

The only way that permanently protected land can be developed is if two-thirds of the State legislature were to vote to change the use of the land as outlined in Article 97 of the Amendments to the Massachusetts State Constitution. The "permanent protection" conveyed by Article 97 does have its limits; the state legislature can vote to release this protection at the request of local communities so that conservation land can be used for schools, roads, economic development, or other public projects not related to resource protection, though this rarely happens.

Parcels that are considered permanently protected include those owned by the Commonwealth of Massachusetts under the management of two state conservation agencies: the Department of Conservation and Recreation (DCR) and the Department of Fish and Game Division of Fisheries and Wildlife (MassWildlife). Permanently protected parcels also include those that are under the authority of the Whately Conservation Commission (of which there are currently none) and those owned by private conservation land trusts like Kestrel Land Trust and MassAudubon. Parcels owned by private citizens who have sold or donated their development rights to the state, a land trust, or other conservation organization are permanently protected.

Farmland can become permanently protected from development when the landowner sells the development rights for a parcel to a land trust or state agency. The Massachusetts Department of Agricultural Resources (MDAR) purchases the development rights of farmland in Franklin County regularly through its Agricultural Preservation Restriction (APR) Program. The program offers to

pay farmland owners the difference between the "fair market value" and the "agricultural value" of their farms in exchange for a permanent deed restriction that precludes any use of the property that will have a negative impact on its agricultural viability.¹ The APR program requires a local match that can come from any combination of three sources: the municipality, a non-governmental organization such as a land trust, or bargain sale allowed by the landowner. The local match requirement is typically 20 percent, but this portion is reduced to 5 percent in Whately because the Town meets the three requirements: a standing Agricultural Commission, a right-to-farm bylaw, and an APR tracking system. Since 2008, the Town has used CPA funds to meet the local match requirement. As of 2021, around 20 Whately farms have taken advantage of the APR program.

A.2 Temporary Protection

Parcels enrolled in Massachusetts Chapter 61 Current Use Tax Programs—61 (forestry), 61A (agriculture) and 61B (open space/recreation)—are considered to be “temporarily protected” from development. These programs offer landowners reduced local property taxes in return for maintaining land in productive forestry, agricultural or recreational use, or in a wild condition for a period of time. These “chapter lands” provide many public benefits, from maintaining wildlife habitat and recreational open space to sustaining rural character and local forest and farm-based economic activity.

A benefit of the Chapter 61 programs is that they offer Town governments the opportunity to protect land. When a parcel that is currently enrolled in one of the Chapter 61 programs is proposed for conversion to a use that would make it ineligible for the program, the Town is guaranteed a 120-day waiting period during which it can exercise its right of first refusal to purchase the property. After signing a Purchase and Sale Agreement, the municipality has ninety days to complete the purchase if it elects to buy the property (or assign the right).

Exercising the right of first refusal is difficult, however, unless there is an active program in place to acquire land. Towns looking to act on their right of first refusal benefit from having criteria by which they identify ahead of time priority protection lands. Important characteristics that could motivate the Town to consider acting on its right include the presence of prime farmland soils, pasture, wetlands, aquifer, rare or endangered species habitat, or the parcel’s potential as link between two other segments of protected land or a trail network.

A Town is also likely to be more successful in taking advantage of the right of first refusal opportunity when partnering with a land trust or DCR and MassWildlife. These organizations can often fundraise much more quickly than a Town and don’t have to bring the decision to purchase the land to a Special Town Meeting. The Town can work on these relationships ahead of time so that it is able to assign its right of first refusal to the land trust as soon as the landowner expressed interest in selling the land to a developer.

Currently 23.0 percent of land in Whately, or roughly 3,041 acres, is enrolled in one of the Chapter 61 programs and is considered to have temporary protection from development. Following are details on each program.²

¹ <https://www.mass.gov/service-details/apr-program-objectives-benefits>

² More information can be found on the UMass Extension’s MassWoods website: <https://masswoods.org/landowner-programs/chapter-61-current-use-tax-programs>

A.2.1 Chapter 61 - Forestry

The forestry program is intended for landowners interested in long-term, active forest management. Enrollment of forestland under Ch. 61 is based on the landowner's commitment to improving the quality or quantity of timber on the land. Wildlife, aesthetics, and recreation can also be incorporated into property management goals with DCR's Forest Stewardship Program. Program requirements include 10 or more contiguous acres, a state-approved forest management plan developed by a licensed forester or landowner, and periodic forest management as recommended by the forest management plan. Landowners must renew their Ch. 61 enrollment every ten years with the local assessor's office.

A.2.2 Chapter 61A - Agriculture

The agricultural program is intended for landowners engaged in agricultural or horticultural use. Enrollment is based on the land's ability to produce the agricultural or horticultural product being grown. There is a five-acre minimum to enroll land in Ch. 61A. Forestland may be enrolled in this program and qualification is based on the land's ability to grow timber. Assessments and program requirements for Ch. 61A forestland are the same as they are in the Ch. 61 program. Landowners must renew their Ch. 61A enrollment annually with the local assessor's office.

A.2.3 Chapter 61B – Open Space and Recreation

The open space and recreation program is intended for landowners interested in maintaining the land for public and private recreation purposes, or as open space in a substantially natural, wild, or open condition. Landowners must include at least five contiguous acres of land. Forest management under Ch. 61B is not mandated. However, landowners do have the option of managing their forests if they develop a state approved forest management plan. Landowners must renew their Ch. 61B enrollment annually with the local assessor's office.

Lands in Chapter 61A and 61 (forestry) are not required to provide public access. Chapter 61B lands in the "natural, wild, or open" category can post their land to exclude public access; however, "recreation" lands must be open to the public unless the landowner is an organization with paying members.

A.3 Limited Protection

Land considered to have limited protection includes any Town-owned open space not under the authority of the Conservation Commission that could be developed through a decision by the Select Board or by Town Meeting vote. In Whately, the Tri-Town Beach District, a distinct entity from the Town, also owns land in limited protection. Roughly 1 percent of land in Whately, or 119 acres, is considered to be under limited protection

A.4 Summary and Open Space Map

Summary Table 5-1 lists land as under permanent, temporary, or limited protection, and within those categories as private, non-profit, or public. These types of open space are also identified on the *Open Space Map* found at the end of this section. The inventory that follows in Sections B thru D lists parcels by ownership type (private, non-profit, or public), and then by level of protection.

The *Open Space Map* shows that there are potential linkages between existing permanently protected lands that could be made for ecological or recreational purposes. These potential linkages are likely to be owned by private citizens. Landowners interested in protecting land can work with the Town, state conservation agencies, Franklin Land Trust, Kestrel Land Trust, and other conservation-minded organizations invested in protecting farmland and forest in the Connecticut River Valley. Franklin Land Trust currently holds a handful of conservation restrictions in Whately and has assisted a number of farms who have enrolled in the APR program. Kestrel Land Trust and Hilltown Land Trust both hold CRs on properties that span Whately's borders.



Farmland in APR (*Pete Westover*)

Table 5-1: Summary of Protected Open Space in Whately

Level of Protection	Acres	percent of Land in Whately (13,223 acres)
Permanently Protected Land		
Publicly Owned		
Commonwealth of Massachusetts	1,603	12.1 percent
Water Districts	1,261	9.5 percent
Public Cemeteries	6	0.0 percent
<i>Total Publicly Owned</i>	<i>2,871</i>	<i>21.7 percent</i>
Privately Owned		
Conservation Restrictions (CR)	554	4.2 percent
Agricultural Preservation Restrictions (APR)	710	5.4 percent
Private Cemeteries	1	0.0 percent
<i>Total Privately Owned</i>	<i>1,265</i>	<i>9.6 percent</i>
Non-Profit Owned		
Conservation Organizations	262	2.0 percent
<i>Total Non-Profit Owned</i>	<i>262</i>	<i>2.0 percent</i>
TOTAL PERMANENTLY PROTECTED LAND	4,397	33.2 percent
\		
Land Under Limited Protection		
Publicly Owned		
Town of Whately	86	0.6 percent
Tri-Town Beach District	33	0.2 percent
<i>Total Publicly Owned</i>	<i>119</i>	<i>0.9 percent</i>
TOTAL LAND WITH LIMITED PROTECTION	119	0.9 percent
Temporarily Protected Land		
Privately Owned		
Chapter 61	669	5.3 percent
Chapter 61A	1,921	14.5 percent
Chapter 61B	421	3.2 percent
<i>Total Privately Owned</i>	<i>3,161</i>	<i>23.9 percent</i>
TOTAL TEMPORARILY PROTECTED LAND	3,161	23.0 percent
TOTAL OPEN SPACE WITH SOME LEVEL OF PROTECTION	7,557	57.1 percent

Source: Town of Whately Assessors Department, 2021

B. PRIVATE PARCELS

Approximately 33.6 percent of the land in Whately with some degree of protection is privately owned. Nearly all of this land is owned by private individuals (for the purposes of this plan, water districts that are technically private entities are considered public because they deliver public water supply) and two thirds (63 percent) is in agricultural use. Of that 33.6 percent of private protected parcels, about one quarter is permanently protected because a private landowner voluntarily placed a development restriction on their land (CR or APR). The other three quarters are temporarily protected from development through the Massachusetts Ch. 61 programs. Many landowners have taken advantage of the Chapter 61 programs as is evidenced by the fact that there are 3,041 acres of open space in the 61, 61A and 61B Programs combined. Current Chapter 61 enrollment represents a decrease of 1,508 acres since the 2006 Open Space and Recreation Plan, which could be attributed to the increase in the amount of permanently protected land (primarily through APR) and the conversion of farmland acreage to ground-mounted solar. There is one acre of private cemetery in Whately also listed as a private protected parcel.

Public access to private land is not guaranteed and subject to change. State conservation agencies often require some level of public access before paying for, or accepting, conservation restrictions. Public access is not a requirement for enrollment in any of the Ch. 61 programs except with some participants in the Chapter 61B program.³ Privately owned land that is unprotected may or may not allow public access.

In the following tables, privately owned protected parcels are categorized first as agricultural land and forest, then are listed by level of protection from development. The ownership of the land, assessors' map and lot number, and acreage are provided.

B.1 Privately Owned Farmland

B.1.1 Privately Owned Permanently Protected Farmland

According to the Whately Assessor's records, there are 710 acres of agricultural land permanently protected in Whately. This represents 5.4 percent of the town's total acreage, though an estimated 11 percent of the town's total acreage is currently used for agricultural purposes (*see Section 3.D.1 Patterns and Trends*). Most agricultural land that is protected from development in the region becomes so only after being prioritized by the Massachusetts Department of Agricultural Resources (MDAR) APR program, which is the main source for farmland preservation funds statewide. MDAR normally requires the land to be actively farmed and to contain prime farmland soils. Since the intention of the APR program is to attain a fair distribution of lands throughout Massachusetts, priority is given to areas suffering from intense development pressure.

Whately farmland owners have permanently protected 399 acres of agricultural land through the APR program since the 2006 Open Space and Recreation Plan. To ensure that Whately's agricultural heritage is preserved, the town must continue to look for opportunities to protect

³ Land enrolled in Ch. 61B as "recreational" must be open to the public or to members of a non-profit organization. "Open space" enrolled in Ch. 61B does not require public access.

farmland if and when development pressures mount.

All of the parcels in Table 5-2 are permanently protected from development and are currently used as agricultural land. The zoning of the parcels is Agricultural-Rural 1 and 2 (A/R1 and A/R2).

Table 5-2: Privately Owned Farmland Permanently Protected from Development

Owner(s)	Map/Parcel	Total Protected Acres	Present Holder of Rights
CASEY	12-0-04	26.00	MDAR, FLT
CLANCY IRENE	33-0-04	6.60	MDAR
FARM SERVICE AGENCY, USDA	14-0-24	9.60	MDAR
FARRICK IRREVOCABLE REAL ESTATE TRUST	21-0-09-1	11.92	MDAR
FARRICK IRREVOCABLE REAL ESTATE TRUST	20-0-38	1.30	MDAR
FARRICK IRREVOCABLE REAL ESTATE TRUST	20-0-39	1.50	MDAR
FULL BLOOM MARKET GARDEN LLC	21-0-06	24.21	MDAR
HARVEST FARM OF WHATELY	14-0-20	33.18	MDAR
HELSTOWSKI WANDA R LIFE EST	21-0-34	11.00	MDAR
HELSTOWSKI WANDA R LIFE EST	21-0-38	8.50	MDAR
HELSTOWSKI WANDA R LIFE EST	21-0-39	20.00	MDAR
HUTKOSKI WAYNE	26-0-23	17.00	MDAR
JOHN G SAVAGE REALTY CORP	33-0-05	13.00	MDAR
MAIEWSKI PAUL	13-0-11	31.92	MDAR
MAIEWSKI PAUL	13-0-11-1	14.00	MDAR
MAIEWSKI PAUL	27-0-13	20.00	MDAR
MAIEWSKI PAUL	14-0-21	71.54	MDAR
MAIEWSKI PAUL	14-0-12	9.80	MDAR
MANHEIM HUGH	20-0-10-1	15.00	MDAR
NEW ENGLAND WILDFLOWER SOC INC	31-0-07	44.00	MDAR
NOURSE REALTY LLC	07-0-12	10.00	MDAR
NOURSE REALTY, LLC	26-0-20	17.00	MDAR
NOURSE REALTY, LLC	26-0-29	9.33	MDAR
NOURSE REALTY, LLC	26-0-35	38.83	MDAR
NOURSE REALTY, LLC	07-0-04	1.10	MDAR
OBEAR WILLIAM & JANE	17-0-08-4	16.00	MDAR
PASIECNIK JAMES	21-0-35	10.79	MDAR, FLT

SADOSKI GERALD	27-0-25	12.00	MDAR
SADOSKI GERALD	27-0-26-1	6.00	MDAR
SMIAROWSKI EDWARD R	26-0-24	17.60	MDAR
SMITH RICHARD	21-0-05	13.20	MDAR, FLT
THE KITCHEN GARDEN LLC	33-0-07	8.30	MDAR
WOJCIECHOWSKI DAVID	13-0-13-1	27.58	MDAR
WOJCIECHOWSKI DAVID	13-0-15	13.50	MDAR
PAM CAROLINE	20-0-31	5.70	MDAR
WW FARM, CAROLINE WYKOWSKI	21-0-01	25.50	MDAR, FLT
WW FARM, CAROLINE WYKOWSKI	21-0-02-1	87.74	MDAR, FLT
TOTAL		710.24	

Source: Town of Whately Assessors Department, 2021

B.1.2 Privately Owned Temporarily Protected Agricultural Land

There are 1,921 acres of farmland in the Ch. 61A Program in Whately. This current enrollment, as of 2021, is 877 fewer acres than enrollment at the time the 2006 Open Space and Recreation Plan was written. Again, this is likely attributable to an increase in permanent protection (primarily through APR) and the conversion of farmland acreage to ground-mounted solar.

Chapter 61A parcels must be at least five contiguous acres, must be “actively devoted” to agricultural or horticultural uses, and must earn at least \$500 in annual gross sales. These lands are integral to Whately’s economy and to the livelihoods of Whately residents, and are valuable as food sources, as scenery, and for how they create a sense of place for the community. Some parcels may also be especially important because they contain unique values such as stream corridors, prime farmland soils, wetlands, and areas that have been identified as containing key wildlife habitats and plant communities.

All parcels in Table 5-3 are in the Ch. 61A Program and the protection of these parcels is short term. The owner does receive an annual tax break. The zoning of all parcels is A/R1 and A/R2.

Table 5-3: Agricultural Land with Temporary Protection from Development through Enrollment in the Chapter 61A Land Classification and Taxation Program

Owner(s)	Map/Parcel	Total Parcel Acres
ASHMAN 2014 REVOCABLE TRUST	13-0-10	33.7
BARONAS MARY	35-0-02	40.01
BECHTA MICHAEL & GRETCHEN	20-0-23-1	12.68
BELDER BRIAN & CHRISTINE	25-0-05	47.50
CHANG FAMILY TRUST, TSO-CHENG & ROSE CHANG	33-0-09	47.00
CHANG SIDNEY	21-0-21	0.82

Owner(s)	Map/Parcel	Total Parcel Acres
CHANG SIDNEY	21-0-20-1	5.00
CHANG SIDNEY	27-0-28	5.00
CHANG SIDNEY	21-0-20	6.00
CHORAK MELANIE	18-0-15-1	19.51
CLEMONS BRENDA	35-0-02-1	7.62
DENEHY DANIEL JR	38-0-02	15.00
DENEHY DANIEL JR & MICHAEL	12-0-08	15.91
DERESTIE MARY ANN C/O TRADEMARK REAL ESTATE	07-0-06	13.00
FULL BLOOM MARKET GARDEN LLC	19-0-11	40.60
FULL BLOOM MARKET GARDEN LLC	21-0-07	2.49
GARLICK RAYMOND & ROBERTA	25-0-05-1	5.50
GEMME GARY	06-0-23	15.09
GEMME GARY	06-0-12	26.41
GRYBKO GARY	26-0-23-4	4.25
HANNUM RICHARD	18-0-11	25.00
HANNUM RICHARD	11-0-07	26.00
HANNUM RICHARD	18-0-09	91.20
HANNUM RICHARD	18-0-18	30.00
HASLETT ASHLEE & ETHAN	07-0-13	6.90
HUTKOSKI WAYNE & SCOTT	20-0-27	6.00
KELLOGG GERALD	27-0-14	9.50
LASALLE FLORISTS INC	12-0-20	0.70
LASALLE FLORISTS INC	12-0-26	14.40
LASALLE JAMES & ANN	36-0-04	16.00
LOMELI ANN FUTTER	12-0-11	36.60
MAHAR PETER & BETHANY DRAKE	16-013-1	13.76
MAHAR THOMAS	16-0-13	53.24
MANHEIM HUGH	33-0-08	6.44
MEUNIER SHARRON LIFE ESTATE	05-0-14-3	7.69
MEUNIER SHARRON LIFE ESTATE	05-0-19	9.53
NELSON WAYNE	18-0-17-1	0.79
NELSON WAYNE	18-0-15	37.07
NELSON WAYNE & SUZANNE	18-0-17	15.50
NICKERSON JOSEPH	04-0-05	9.20
NICKERSON JOSEPH III	05-0-21	10.30
NICKERSON JOSEPH III	05-0-22	16.80
NICKERSON RANDALL	04-0-05-1	10.75

Owner(s)	Map/Parcel	Total Parcel Acres
NOURSE MARY C	07-0-15	7.16
NOURSE REALTY, LLC	14-0-31-1	5.50
NOURSE REALTY, LLC	07-0-08	8.10
NOURSE REALTY, LLC	07-0-14	47.00
NOURSE REALTY, LLC	07-0-15-1	87.80
PASIECNIK JAMES	27-0-22	52.00
PASIECNIK JAMES	21-0-17	73.60
PASIECNIK JAMES	27-0-17	32.00
PASIECNIK JAMES	27-0-21-1	33.71
POPLAR HILL FARM INC., THOMAS MAHAR	23-0-01-1	1.67
QUONQUONT FARM LLC, ANN BARKER	19-0-02	137.00
RUSSO GABRIEL & ALLISON	14-0-29-1	30.96
SANDERSON BEVERLY, ALAN & BRADLEY	25-0-01	53.50
SANDERSON BROS REALTY LLC	26-0-36-1	0.81
SANDERSON BROS REALTY LLC	26-0-21	8.70
SANDERSON BROS REALTY LLC	40-0-03	14.46
SANDERSON BROS REALTY LLC	26-0-36	26.71
SANDERSON BROS REALTY LLC	26-0-21-1	1.03
SANDERSON BROS REALTY LLC	32-0-46-3	5.30
SCOTT DAVID	25-0-08	38.00
SCOTT DAVID	31-0-11	53.00
SCOTT DAVID	31-0-13	144.90
SMIAROWSKI BROTHERS LLC	19-0-12-1	19.42
SMIAROWSKI EDW/ALBERTA LIVE ESTATE	20-0-28	4.10
SOBIESKI FRANCIS	27-0-15	13.50
STUART MARY ELLEN	39-0-04	8.00
SZAWLOWSKI REALTY INC	25-0-28	9.42
SZAWLOWSKI REALTY INC	25-0-29	30.58
THE CHANG FAMILY TRUST	33-0-10	25.00
THE CHANG FAMILY TRUST	07-0-02	40.00
WALKER BRUCE	10-0-48	34.00
WARGER CAROLYN & TRICIA	20-0-26	6.50
WASILEWSKI JONATHAN	26-0-27-4	6.47
WOJCIECHOWSKI DAVID	13-0-15-3	1.41
WOJCIECHOWSKI DAVID & JANET	13-0-15-1	2.28
WROBLEWSKI CHESTER F JR	25-0-02	36.00
ZAIKOWSKI MICHAEL	27-0-16-1	5.00

Owner(s)	Map/Parcel	Total Parcel Acres
Total		1921.05

Source: Town of Whately Assessors Department, 2021; MassGIS 2021

B.2 Privately Owned Forestland

Forest landowners can impact the forest beyond their property lines through development and management choices. Large blocks of contiguous forest form the basis for sustaining biological diversity in forested regions. Contiguous forestland in Whately both creates and helps to buffer interior forest habitats that span the towns of Whately, Conway, Williamsburg and important large forested blocks in Goshen and Ashfield.

The following inventory includes privately owned forestland at different levels of protection from development. Forestland that is permanently protected through ownership in fee or CRs preserves the valuable attributes of forestland in perpetuity. Forestland enrolled in the Ch. 61 and 61B Programs is under temporary protection.

B.2.1 Privately Owned Permanently Protected Forestland

Permanently protected forestland exists when landowners have donated or sold their development rights to a state conservation organization or a land trust. The landowners retain the other rights of ownership and continues to pay property taxes, albeit a reduced tax rate due to the reduced value of their land.

There are approximately 554 forested acres in Whately (see Table 5-4) that are privately owned and permanently protected from development, which constitutes 4.2 percent of the total land area in Whately. The owner may have received payment for the restriction from public funds or private fundraising source. The zoning of the parcels is A/R1 and A/R2.

Table 5-4: Privately Owned Forestland Permanently Protected through a Conservation Restriction

Owner(s)	Map/Parcel	Total Parcel Acres	Present Holder of Rights
CASEY RICHARD J	12-0-03	171.00	Franklin Land Trust
CASEY RICHARD J	12-0-04	41.00	Franklin Land Trust
COONEY	23-0-03	8.80	Franklin Land Trust
COONEY	23-0-05-1	5.90	Franklin Land Trust
DEPREE	40-0-14	0.90	DCR
CARLONI JUDITH, GRAVES NICOLE	01-0-03	13.01	Hilltown Land Trust
CARLONI JUDITH, GRAVES NICOLE	01-0-05	2.11	Hilltown Land Trust
CARLONI JUDITH, GRAVES NICOLE	08-0-01	119.00	Hilltown Land Trust
SMITH COLLEGE	23-0-04-1	74.00	Kestrel Land Trust

Owner(s)	Map/Parcel	Total Parcel Acres	Present Holder of Rights
SMITH COLLEGE	29-0-02	12.00	Kestrel Land Trust
SMITH COLLEGE	23-0-05	106.00	Kestrel Land Trust
TOTAL		553.72	

Source: Town of Whately Assessors Department, 2021; MassGIS 2021; Kestrel Land Trust

As of early 2021, a conservation restriction was also in the works for approximately 40 acres of land owned by Bill Obear at his farm, Bearpath Compost.

B.2.2 Privately Owned Temporarily Protected Forestland

Parcels in Whately enrolled in the Chapter 61 Forestry and Open Space and Recreation Programs are primarily forested lands temporarily protected from development. Chapter 61 applies to forested parcels of ten or more contiguous acres that are managed under a 10-year forest management plan. Chapter 61B lands are a minimum of five acres and are devoted to open space or recreational uses.

Table 5-5 lists parcels in the Ch. 61 forestland program, which totals approximately 699 acres and comprise 5.3 percent of the total land area of Whately. The owner does receive a property tax break over a ten-year period. The zoning of the parcels is A/R1 and A/R2.

Table 5-5: Forestlands with Temporary Protection from Development through Enrollment in the Chapter 61 Forestland Classification and Taxation Program

Owner(s)	Map/Parcel	Total Parcel Acres
BOONE ROBERT & SUSAN L	01-0-06	25.01
BOONE ROBERT & SUSAN L	02-0-06	28.01
BOONE ROBERT & SUSAN L	02-0-07	25.01
CHAMLIN FLORA J	11-0-04-1	83.11
COOK RICHARD L	23-0-06	99.01
COWLS W D INC	03-0-11	34.01
DEROSE JEFFREY	04-0-03-1	1.51
DEROSE JEFFREY	04-0-03-5	12.35
MARCIA L NICKERSON LIVING TRUST	05-0-23	4.50
MASON EDWARD J	17-0-10	57.92
MASON MARY E	17-0-10-6	44.49
NICKERSON JOSEPH H III	04-0-10-7	17.56
NICKERSON JOSEPH H III	05-0-24	34.10
NICKERSON JOSEPH H III	05-0-24-2	0.92
OWENS GEORGE	10-0-01-7	100.00

Owner(s)	Map/Parcel	Total Parcel Acres
SCHRADER ROBERT	04-0-01	50.00
SYMANSKI WILLIAM D & SUZANNE M	02-0-10	24.39
TERRY HOWARD P	02-0-08	19.01
VIISE RIINA	04-0-04	24.10
WOJCIECHOWSKI DAVID	13-0-15	13.50
TOTAL		698.51

Source: Town of Whately Assessors Department, 2021

All of the parcels in Table 5-6 are in the Ch. 61B Recreational Open Space Lands Classification and Taxation Program, and total 421 acres, or 3.2 percent of the total land area of Whately. Owners of Chapter 61B lands in the “natural, wild, or open” category can post their land to exclude public access; however, “recreation” lands must be open to public access unless the landowner is an organization with paying members. The zoning for these parcels is A/R1 and A/R2.

Table 5-6: Forestlands with Temporary Protection through Enrollment in the Chapter 61B Recreational Open Space Lands Classification and Taxation Program

Owner(s)	Map/Parcel	Total Parcel Acres
BARKER ANN	39-0-15-1	3.42
BARKER ANN	39-0-16	3.96
BARONAS JAMES J JR	34-0-04	11.00
CHORAK MELANIE ANNE	24-0-08	13.65
DENEHY DANIEL	36-0-05	26.00
GRASS HILL REALTY TRUST	02-0-03	53.01
MAIEWSKI PAUL R	13-0-11-1	14.00
REED BICH-THUY	35-0-03	44.2
SANDERSON BROS REALTY LLC	24-0-03	27.00
SANDERSON BROS REALTY LLC	24-0-05	22.00
SANDERSON BROS REALTY LLC	26-0-10	6.86
SANDERSON BROS REALTY LLC	26-0-21-1	1.03
SOTIRION DEBORAH	30-0-05	161.89
SOTIRION DEBORAH	30-0-06	33.00
TOTAL		421.02

Source: Town of Whately Assessors Department, 2021

B.3 Privately Owned Cemeteries

There is one privately owned cemetery parcel in Whately belonging to the South Deerfield Cemetery Association. The 1-acre parcel is located on Long Plain Road on the border with

Deerfield, adjacent to other cemetery parcels located in Deerfield. This property is assumed to be under permanent protection even though it is currently undeveloped.

Table 5-7: Cemeteries in Private Ownership with Permanent Protection

Owner(s)	Map/Parcel	Total Parcel Acres
SOUTH DEERFIELD CEMETERY ASSOCIATION	32-0-28	1.00
TOTAL		1.00

Source: Town of Whately Assessors Department, 2021

C. NON-PROFIT PARCELS

Whately contains a number of open space parcels owned by non-profit conservation organizations, totaling 262 acres, or 2 percent of the town's land area. Conservation organizations often prefer to steward land as the holder of a conservation restriction on private land rather than through land ownership; however, they will sometimes elect to own a property in-fee, which they may or may not choose to make publicly accessible.

The permanently protected non-profit parcels include 135 acres of Mass Audubon's Graves Farm Wildlife Sanctuary, most of which is located in Williamsburg. The Native Plant Trust (formerly the New England Wild Flower Society) owns a 4 acres that is separate from their 44-acre APR parcel. Kestrel Land Trust owns a small 1.8-acre parcel in Whately that adjoins their Horse Mountain parcels in Hatfield and Williamsburg. In 2021, Kestrel Land Trust acquired the 120-acre Dauchy property for a public conservation and recreation area named Whately Woods. The property is intended to serve as a community park that is open to all and immediately accessible to residents of Whately Center. The land was purchased in part with a \$85,000 Conservation Partnership Grant from the Division of Conservation Services.

Table 5-8: Permanently Protected Parcels Owned by Private Non-Profit Organizations

Owner/Manager	Map/Parcel	Location	Total Parcel Acres	Site Name/Current Use	Condition	Public Access	Recreation Value	Level of Protection
MassAudubon	01-0-01	W/S Adams Rd	85.01	Graves Farm Wildlife Sanctuary	Excellent	Yes	High	Permanent
MassAudubon	01-0-04	W/S Grass Hill Rd	50.20	Graves Farm Wildlife Sanctuary	Good	Yes	High	Permanent
Native Plant Trust	31-0-05	Off E/S North St	4.20	Nasami Farm Nursery	Good, wet	No	Low	Permanent
Kestrel Land Trust	12-0-09	E/S Chestnut Plain Road	120.40	Whately Center Woods	Good	Yes	High	Permanent
Kestrel Land Trust	03-0-13	Off Chestnut Mtn near Mtn	1.81	Horse Mountain	Excellent	Limited	High	Permanent

Owner/ Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Value	Level of Protection
		Rd Hatfield		Conservation Area				
TOTAL			261.62					

Source: Town of Whately Assessors Department, 2021

D. PUBLIC PARCELS

State conservation agencies, water districts, and the Town of Whately own a significant portion of Whately's land area. Much of this land is permanently protected from development, but some, notably Town-owned land, is considered to have only limited protection from development. In total, there are 2,990 acres of publicly owned land, 22.6 percent of the total land area of Whately. Of this protected public land, 97 percent is considered protected in perpetuity because it is owned by the state, by water districts for the purpose of water supply protection, or is a cemetery.

D.1 State-Owned Land

Two agencies manage lands in Whately owned by the Commonwealth: the Department of Conservation and Recreation (DCR) and the Department of Fish and Game Division of Fisheries and Wildlife (MassWildlife). DCR manages two small parcels in the northeast corner of town that are part of the Connecticut River Greenway State Park. Though neither parcel provides public boat access in Whately, the Greenway is an assemblage of protected "parks" along the Connecticut that protects the function of the natural resource and provides public access to the river.

MassWildlife lands are located in the Great Swamp, in the wetland complex between I-91 and Long Plain Road, and throughout the forested western half of Whately. MassWildlife lands are managed for multiple uses, but hunting and fishing enthusiasts are more likely to utilize these sites as they do not have as many established trails and facilities.

Table 5-9 lists permanently protected public parcels of land owned by the Commonwealth of Massachusetts. DCR or by MassWildlife manages a total of 1,603 acres or 12.1 percent of the total land area of Whately. The zoning of the parcels is A/R1 and A/R2.

Table 5-10: Permanently Protected Commonwealth Land in Whately by Conservation Agency

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condi- tion	Public Access	Recreation Value	Level of Protection
DCR	27-0-24- 2	Sugarloaf Brook E of River Rd near CT River	7.62	Connecticut River Greenway SP	Good	Yes	Med/High	Permanent
DCR	27-0-24- 3	E of River Rd near CT River	5.93	Connecticut River Greenway SP	Good	Yes	Med/High	Permanent
DCR	6.M 1101 103.1	Off River Rd	28.70	Archeological site	N/A	No	N/A	Permanent
MassWildlife	06-0-25- 23	W/S Long Plain Rd	18.78	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	06-0-31- 23	W/S Long Plain Rd	13.78	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	25-0-16	N/W State Rd	6.00	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	26-0-11	W/S I-91	7.99	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	26-0-04	E/S State Rd	2.90	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	26-0-06	E/S State Rd	6.00	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	26-0-07	E/S State Rd	5.20	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	26-0-08	E/S State Rd	7.00	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	32-0-07	W/S State Rd	12.99	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	32-0-22	W/S State Street	6.42	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	35-0-04	E/S North Street	12.80	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 101.4	W/S Williamsburg Rd	258.20	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 104.0	Off State Rd	38.22	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105	E/S North St	9.12	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105.1	Off North St	10.70	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105.2	Off North St	10.34	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105.3	Off Christian Ln	14.70	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105.4	North St	49.92	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105.5	Off North St	168.80	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 105.6	Off North St	15.56	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 106.7	Off North St	24.00	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 107.7	Off North St	8.60	Great Swamp WMA	Wet	Yes	Med	Permanent

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condi- tion	Public Access	Recreation Value	Level of Protection
MassWildlife	6.Q 1101 108.7	Off North St	8.00	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 109.7	Off North St	33.20	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 110.8	Off North St	33.99	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.Q 1101 115.3	Off Long Plain Rd	9.00	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.A 1101 0112.3	E/S B+M RR	6.60	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.A 1101 0113.3	W/S State Rd	12.90	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	6.A 1101 0114.3	W/S State Rd	4.20	Great Swamp WMA	Wet	Yes	Med	Permanent
MassWildlife	23-0-08	Off Mt Esther Rd	90.00	Mt Esther WMA	Good	Yes	High	Permanent
MassWildlife	30-0-01	SW/S Mt Esther Rd	37.00	Mt Esther WMA	Good	Yes	High	Permanent
MassWildlife	30-0-02	NE/S Mt Esther Rd	28.00	Mt Esther WMA	Good	Yes	High	Permanent
MassWildlife	6.Q 1101 0016.3	S/S Mt Esther Rd	100.95	Mt Esther WMA	Good	Yes	High	Permanent
MassWildlife	6.A 1101 0117.3	E/S Jimmy Nolan Rd	86.00	Mt Esther WMA	Good	Yes	High	Permanent
MassWildlife	09-0-01	E/S Grass Hill Rd	33.00	Whately WMA	Good	Yes	High	Permanent
MassWildlife	10-0-10- 2	W/S Mt Laurel Road	57.87	Whately WMA	Good	Yes	High	Permanent
MassWildlife	16-0-18	Webber Rd	258.00	Whately WMA	Good	Yes	High	Permanent
MassWildlife	16-0-18- 1	Webber Rd	17.00	Whately WMA	Good	Yes	High	Permanent
MassWildlife	6.Q 1101 102.4	W/S Williamsburg Rd	16.99	Whately WMA	Good	Yes	High	Permanent
MassWildlife	6.A 1101 0111.3	SW/S Webber Rd	20.08	Whately WMA	Good	Yes	High	Permanent
TOTAL			1,494					

Source: Town of Whately Assessors Department, 2021

D.2 Land Owned by the Town of Whately

The Town owns a total of 92 acres that can be considered open space, recreation, or historic resources. Many of these Town-owned parcels have buildings on them.

D.2.1 Town-owned Cemeteries Permanently Protected

Cemeteries are considered to be in permanent protection, even if land is designated as future

cemetery. Whately has three active cemetery parcels and one future cemetery parcel, totaling 6.5 acres.

Table 5-11: Permanently Protected Cemeteries Owned by the Town

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Potential	Zoning	Level of Protection	Grants Received
Whately Cemetery Commission	39-0-28	Chestnut Plain Rd	2.09	Center Cemetery	Good	Yes	None	A/R1	Permanent	N/A
Whately Cemetery Commission	21-0-14	Christian Ln	1.03	East Cemetery	Good	Yes	None	A/R1	Permanent	N/A
Whately Cemetery Commission	17-0-23	Webber Rd	2.33	West cemetery	Good	Yes	None	A/R1	Permanent	N/A
Town of Whately	32-0-27-1	E/S Long Plain Rd	0.47	Cemetery	Good	Yes	None	A/R1	Limited	N/A
Whately Cemetery Commission	39-0-31-1	W/S of Chestnut Plain Rd	0.56	Future cemetery	Good	Yes	None	A/R1	Limited	Donated
TOTAL			6.48							

Source: Town of Whately Assessors Department, 2021

D.2.2 Town-owned Land with Limited Protection

All non-cemetery parcels under the authority of a Town board or commission other than the Conservation Commission are subject to land conversion based on a Town Meeting vote and therefore are considered to have limited protection. This totals 86 acres, or .6 percent of the town's total land area. Important Town-owned properties with limited protection include the 10-acre Herlihy Park and the 7-acre Dickinson Library lawn. All municipal park and conservation areas and programs in Whately have been evaluated for accessibility for people with disabilities as part of this plan. The results of this evaluation are included in Appendix B: ADA Access Self-Evaluation.

Town-owned open space in Whately, shown in Table 5-12, takes the form of forestland, small roadside parcels, cemeteries, and the yards of public offices and institutions. Of all the Town-owned public open space in Whately, the Herlihy Recreation Field is the most comprehensive, updated recreation facility. There are currently no Town-owned open space parcels designed for public-access passive recreation, such as hiking and picnicking. All of the Town-owned lands are considered to have limited protection from development.

Table 5-12: Town-Owned Land with Limited Protection

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Potential	Zoning	Level of Protection	Grants Received
Whately Water District	05-0-19-1	Off E/S of Long Plain Rd	3.51	Water well site	Good	No	None	A/R2	Limited	None

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Potential	Zoning	Level of Protection	Grants Received
Whately Water District	05-0- 35	Off E/S of Long Plain Rd	3.71	Water well site	Good	No	None	A/R2	Limited	None
Town of Whately	05-0- 39	State/ Egypt Rd	0.10	Open	Good	Yes	Low	C/I	Limited	None
Whately Water District	05-0- 42	Off E/S of Long Plain Rd	1.50	Water well site	Good	No	None	A/R2	Limited	None
Town of Whately	06-0- 39	Long Plain Rd	1.92	Open, roadside	Good	Yes	Low	A/R1	Limited	None
Town of Whately	06-0- 41	Off E/S of Long Plain Rd	4.71	Closed landfill	Good	No	Low	A/R2	Limited	None
Town of Whately	06-0- 43	Off E/S of Long Plain Road	1.00	Closed landfill	Good	No	Low	A/R2	Limited	None
Town of Whately	10-0- 26	Off E/S of Weber Rd	8.70	Stump Dump	Good	Yes	Medium	A/R1	Limited	None
Town of Whately	10-0- 28	Webber Rd	0.08	Open, roadside	Good	Yes	Low	A/R1	Limited	None
Town of Whately	19-0- 09	Christian Ln	5.68	Whately Fire Dept. ice skating rink & ball field	Good	Yes	High	A/R1	Limited	None
Town of Whately	20-0- 09	Corner I-91 & Christian Ln	0.30	Open, roadside	Good	Yes	Low	A/R1	Limited	None
Town of Whately	25-0- 25	State Rd	4.00	Open, roadside	Good	Yes	Low	A/R1	Limited	None
Town of Whately	26-0- 12	State Rd	0.40	Open, roadside	Good	Yes	Low	A/R1	Limited	None
Rec Commission	27-0- 24-1	E/S of River Rd	10.3 3	Herlihy Rec Field baseball, softball, and soccer fields	Excellent	Yes	High	A/R1	Limited	CPA
Town of Whately	31-0- 04	North Street	7.70	Open	Good	Yes	Medium	A/R2	Limited	None
Town of Whately	32-0- 09-1	Off State Rd	3.50	Great Swamp	Good	Yes	Low	A/R2	Limited	Tax taking
Town of Whately	32-0- 21	I-91 Interchange	4.80	Great Swamp	Good	Yes	High	A/R2	Limited	None
Town of Whately	32-0- 46-4	Sandy Ln	3.35	Town Offices	Excellent	Yes	Low	A/R1	Limited	None
Town of Whately	38-0- 03	N/S of Haydenville Rd	0.04	Old Town Pound	Good	Yes	Low	A/R1	Limited	None

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Potential	Zoning	Level of Protection	Grants Received
Town of Whately	38-0-06	Off N/S of Haydenville Road	1.00	Water tower	Good	Yes	Medium	A/R2	Limited	None
Town of Whately	39-0-17	Chestnut Plain Rd	0.75	Center School Offices	Good	Yes	Low	A/R1	Limited	None
Frontier Regional School District	26-0-26	Long Plain Rd	10.40	Whately Elementary School playground, ballfield, basketball court and school gardens	Good	Yes	High	A/R1	Limited	None
Dickinson Library	39-0-22	Chestnut Plain Rd	7.00	Dickinson Library lawn	Excellent	Yes	Medium	A/R1	Limited	None
Town of Whately	39-0-24	Chestnut Plain Rd	0.17	Smikes House	Good	Yes	Low	A/R1	Limited	None
Town of Whately	39-0-25	E/S Chestnut Plain Rd	0.04	Post Office	Excellent	Yes	Low	A/R1	Limited	None
Whately Historical Society	39-0-25A	Chestnut Plain Rd	1.00	Post Office	Excellent	Yes	Low	A/R1	Limited	None
Town of Whately	39-0-26	Chestnut Plain Rd	0.30	Whately Old Town Hall tot lot	Poor	Yes	Medium	A/R1	Limited	CPA
TOTAL			86							

Source: Town of Whately Assessors Department, 2021

D.2 Land Owned by Tri-Town Beach District

The 33-acre parcel that is home to Tri-Town Beach, located on Old State Road near the Deerfield town border, is owned by the Tri-Town Beach District Commission (see Table 5-13). The independent district was formed by the Towns of Deerfield and Whately through a special act of the legislature. Two commissioners from each town form the commission, but the district is not considered part of either Town's government.

Table 5-13: Tri-Town Beach District Land with Limited Protection

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Value	Zoning	Level of Protection	Grants Received
Tri-Town Beach Dist.	32-0-48	Old State Road	33	Recreation, swimming	Okay – infrastructure failing and pond	Yes	High	A/R2	Limited	N/A

Manager	Map/ Parcel	Location	Total Parcel Acres	Site Name/ Current Use	Condition	Public Access	Recreation Value	Zoning	Level of Protection	Grants Received
					not always useable in summer					
TOTAL			33							

Source: Town of Whately Assessors Department, 2021

D.3 Land Owned by Water Districts

Table 5-14 shows that 1,261 acres, or nearly 10% of the town, is under permanent protection as water supply protection land owned by water districts. The City of Northampton Department of Public Works, the South Deerfield Water Supply District, and the Whately Water District own much of the land in Whately surrounding their water sources. Because many of these properties are adjacent to other large state- or conservation organization-owned lands, and by law not accessible to the public, they contribute significantly to the value of the area as connected wildlife habitat.

By law, a parcel of land is permanently protected under Article 97 if it was conveyed to the town for the purpose of public water supply or if it references Article 97. It was not within the scope of this plan to research the deeds of the City's land in Whately to determine their exact legal status. This plan assumes that the parcels are permanent, and is not concerned about the conversion of any of these parcels, but for Whately to know for certain whether City of Northampton watershed forest parcels owned by the City could ever come out of protection it is necessary to complete further deed research.

Table 5-14: Water District Land with Permanent Protection

Manager	Map/ Parcel	Location	Total Acres	Site Name/ Current Use	Public Access	Recreation Value	Zoning	Level of Protection
Northampton Public Works	03-0- 04	W/S Laurel Mt Rd	86.01	Public supply watershed	No	Low	A/R2	Permanent
Northampton Public Works	03-0- 05	W/S Haydenville Rd	41.17	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	03-0- 06	W/S Haydenville Rd	50.01	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	03-0- 07	E/S Haydenville Rd	138.6 3	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	03-0- 08	W/S Haydenville Rd	2.14	Public supply watershed	No	Low	A/R1	Permanent

Manager	Map/ Parcel	Location	Total Acres	Site Name/ Current Use	Public Access	Recreati on Value	Zoning	Level of Protection
Northampton Public Works	03-0- 09-2	E/S Haydenville Rd	4.13	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	03-0- 09-3	E/S Haydenville Rd	4.13	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	03-0- 14	E/S Haydenville Rd	21.01	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	16-0- 01	E/S Grass Hill Rd	13.50	Public supply watershed	No	Low	A/R2	Permanent
Northampton Public Works	16-0- 02	S/S Williamsburg Rd	224.0 0	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	16-0- 03	N/S Williamsburg Rd	106.0 0	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	16-0- 05	N/S Williamsburg Rd	298.0 0	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	16-0- 06	S/S Williamsburg Rd	1.50	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	16-0- 06-2	S/S Williamsburg Rd	3.70	Public supply watershed	No	Low	A/R1	Permanent
Northampton Public Works	22-0- 06	W/S Dry Hill Rd	108.0 2	Public supply watershed	No	Low	A/R2	Permanent
Northampton Public Works	28-0- 01	Williamsburg / Conway Townline	113.0 0	Public supply watershed	No	Low	A/R2	Permanent
South Deerfield Water Works	34-0- 05-1	Off Whately Glen Rd	3.10	Public supply watershed	No	Low	A/R1	Permanent
South Deerfield Water Works	34-0- 01	Whately Glen Rd	37.00	Public supply watershed	No	Low	A/R1	Permanent
Whately Water District	36 0 06	Haydenville Rd	6.00	Public water supply/old town pound	No	Low	A/R1	Permanent
TOTAL			1,261					

Source: Town of Whately Assessors Department, 2021

E. RECREATIONAL RESOURCES AND OPEN SPACE EQUITY

One dimension of environmental equity is the distribution of open space. This is somewhat difficult to evaluate in a town like Whately, where most residences are spread out along the rural roads in town. Whately's public recreation areas are predominantly located in East Whately (Whately Elementary School on Long Plain Road and Herlihy Park on River Road). The Whately Center Woods and field behind the library offer mid-sized open space recreation areas in the center of town. In West Whately, large tracts of publicly accessible land allow a diversity of active and passive recreational activities. The vast majority of residents own cars with which to reach those open space and recreation resources. A number of town residents live within walking distance of those amenities via roadways, however very few pedestrian accommodations exist on Whately roads. While there is an abundance of public land, much of that land requires driving and hiking out to, is swampy, or is water supply protection land and does not provide public access. Given these limitations, there is minimal access to open space in Whately for residents unable to drive or hike.

F. OPPORTUNITIES FOR FUNDING OPEN SPACE AND CONSERVATION PROJECTS

The opportunities for the Town of Whately to procure funding for open space projects can be a challenge. Whately is a small town with limited financial resources available for funding open space projects. The following paragraphs provide a brief description of some available resources for funding open space and conservation projects, with applicant type noted below the grant name. Many of these grants are offered by the Department of Conservation Services and Towns are eligible for the funding with an approved and updated 7-year Open Space and Recreation Plan. In addition, two reports from the Highstead Foundation and Harvard Forest provide additional information on recent trends in private and public funding of land conservation in New England:

Foundation Funding for Land Conservation in the Northeast: Trends in Grant Making between 2004 and 2014 - [https://www.wildlandsandwoodlands.org/sites/default/files/Foundation percent20Report percent202019 percent20- percent20FINAL.pdf](https://www.wildlandsandwoodlands.org/sites/default/files/Foundation%20Report%202019%20-%20FINAL.pdf)

Public Conservation Funding in New England: Recent Trends in Government Spending on Land Protection - [https://www.wildlandsandwoodlands.org/sites/default/files/Public percent20Funding percent20LR.pdf](https://www.wildlandsandwoodlands.org/sites/default/files/Public%20Funding%20LR.pdf)

F.1 Regional and Statewide Conservation Organizations

Local and statewide conservation organizations exist to conserve and steward land in partnership with municipalities and landowners. In addition to providing various paths toward protecting land from development, they are also experienced partners in many of the following funding opportunities.

In addition to Franklin Land Trust (<http://www.franklinlandtrust.org/>) and Kestrel Land Trust

(<https://www.kestreltrust.org>; <https://www.foreverfarmland.org/>), several other regional and statewide conservation organizations are available for partnership conservation projects, including the New England Forestry Foundation (<https://newenglandforestry.org/>), The Trustees of Reservations (thetrustees.org), Massachusetts Audubon Society (<https://www.massaudubon.org/>), and The Nature Conservancy (<https://www.nature.org/en-us/>). Some of the conservation organizations identified above have access to no-interest or low-interest loan funds to assist in the conservation of significant natural resources through the Norcross Wildlife Foundation's loan program and the Open Space Institute's funding programs.

F.2 Grant Opportunities

Local Acquisitions for natural Diversity (LAND) Grant Program **(formerly the Self-Help grant program)**

Municipal conservation and agricultural commissions

The Commonwealth of Massachusetts offers a grant program through the Executive Office of Energy and Environmental Affairs, Division of Conservation Services, to assist municipalities with open space projects. This program was formerly known as the "Self Help" grant program and is now entitled the LAND grant program (Local Acquisitions for Natural Diversity). Conservation or Agricultural Commissions from communities with up-to-date Open Space and Recreation Plans are eligible to apply for reimbursement grants to acquire land for conservation and passive recreation in fee or for a conservation restriction. The grant supports the purchase of forests, fields, wetlands, wildlife habitat, unique natural, cultural, or historic resources, and some farmland. The public must have reasonable access to the land. Reimbursement rates are between 50 and 70 percent, with a maximum grant award of \$400,000.

<https://www.mass.gov/service-details/local-acquisitions-for-natural-diversity-land-grant-program>

PARC Grant Program

Municipalities

The Parkland Acquisitions and Renovations for Communities (PARC) Grant Program, offered by the Executive Office of Energy and Environmental Affairs, Division of Conservation Services, was established to assist cities and towns in acquiring and developing land for park and outdoor recreation purposes. These grants can be used by municipalities to acquire parkland, build a new park, or to renovate an existing park. Applications are open to all municipalities that have submitted an up-to-date Open Space and Recreation Plan; however, the number of residents in a town may affect the grant amount. Reimbursement rates are between 52-70 percent, with a maximum grant award of \$400,000.

<https://www.mass.gov/service-details/parkland-acquisitions-and-renovations-for-communities-parc-grant-program>

Massachusetts Land and Water Conservation Fund Grant Program

Municipalities

The Massachusetts Land and Water Conservation Fund Grant Program is offered through the Executive Office of Energy and Environmental Affairs, Division of Conservation Services, and is

funded by the Federal Land and Water Conservation Fund. The program provides up to 50 percent reimbursement for the acquisition of parkland or conservation land, creation of new parks, renovations to existing parks, and development of trails. Municipalities with up-to-date Open Space and Recreation Plans are eligible to apply.

<https://www.mass.gov/service-details/massachusetts-land-and-water-conservation-fund-grant-program>

Conservation Partnership Grant Program

Non-profits

This is a State grant program that is designed to help land trusts and other non-profit conservation organizations acquire interests in land for conservation or recreation purposes. Potential projects fall into one of two categories: acquisition of the fee interest in land or a conservation restriction; or due diligence for land or a conservation restriction that was donated to the organization. The maximum reimbursement amount available for a single project is 50 percent of the total eligible project cost up to the grant award maximum of \$85,000. This is a resource that could be helpful to Whately because there are several parcels in Town with high conservation value and only temporary protection status that organizations such as FLT would be interested in working with the Town to conserve. The challenge will be finding funds for the remaining 50 percent of the project.

<https://www.mass.gov/service-details/conservation-partnership-grant-program>

Landscape Partnership Grant Program

Federal, state, local governments and non-profits

This State grant program provides funding for large-scale (minimum of 500 acres), joint conservation projects completed in partnership with federal, state, and local governments, and non-profits. The grant is a reimbursement for up to 50 percent of the project cost with a maximum grant award of \$1,250,000. Eligible projects include purchase of land in fee simple for conservation, forestry, agriculture, or water supply purposes; purchase of a Conservation Restriction, Agricultural Preservation Restriction, or Watershed Preservation Restriction; and construction of a park or playground in communities with less than 6,000 residents. Applications must be submitted jointly by two or more applicants including municipalities, non-profits, and State agencies.

<https://www.mass.gov/service-details/landscape-partnership-grant-program>

Agricultural Lands Conservation Program / Wetlands Reserve Easements

Landowners

This is a federal funding program through the United States Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS). The program provides financial and technical assistance to help conserve agricultural lands and wetlands. Under the Agricultural Land Easements component of the program, NRCS helps state and local governments and conservation organizations protect working agricultural lands and limit non-agricultural uses of the land. NRCS provides up to 50 percent of the fair market value of the agricultural land restriction. Under the Wetlands Reserve Easements component of the program, NRCS helps to restore, protect and enhance wetlands. Depending on the length of the restriction, NRCS may pay up to 100 percent

of the cost of the restriction as well as wetland restoration costs.

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ma/home/?cid=nrcs143_008419

MDAR Stewardship Assistance and Restoration on APRs

APR landowners

This grant is intended to help APR landowners restore APR land that was once in agricultural production to allow it to be put back into production. In addition, funds may be used to restore farm resources that have been negatively impacted by flooding, erosion, storms, tornadoes and other natural disasters or for restoration on land impacted by a third party.

<https://www.mass.gov/service-details/stewardship-assistance-and-restoration-on-aprs-sara>

Recreational Trails Program

Municipalities, non-profits, and landowners

This grant is a federal assistance program of the United States Department of Transportation's Federal Highway Administration (FHWA), administered at the State level through MassTrails, part of the DCR. It provides funding for the development and maintenance of both motorized and non-motorized recreational trail projects.

<https://www.mass.gov/guides/recreational-trails-program>

Complete Streets Funding Program

Municipalities

Technical assistance and construction funding to municipalities that have passed a Complete Streets Policy and developed a Prioritization Plan.

<https://gis.massdot.state.ma.us/completestreets>

Community Forest and Open Space Conservation Program

Municipalities, non-profits, federally recognized Indian tribes

This grant provides funds to establish community forests through fee simple acquisition of private forest land from a willing seller. The program aims to establish community forests by protecting forest land from conversion to non-forest uses and providing community benefits.

<https://www.mass.gov/guides/community-forest-grant-program>

Partners for Fish and Wildlife

Municipalities, non-profits, landowners, and tribal organizations

This grant program supports fish and wildlife conservation projects on private lands. Eligible projects include restoring trust with local communities, modernizing fish and wildlife infrastructure, conservation projects near National Wildlife Refuge lands, expansion of priority habitats and wildlife corridors, and regional strategic conservation plans. Awards of up to \$750,000 are available. Consult with your Regional Partners for Fish and Wildlife Program office before submitting an application.

<https://www.fws.gov/partners/>

Clif Bar Family Foundation Small Grants Program

Non-profits and other small- or medium-sized organizations

The Foundation supports innovative small and mid-sized groups working to protect the Earth's beauty and bounty, create a healthy food system, increase opportunities for outdoor activity, reduce environmental health hazards, and build stronger communities.

<http://clifbarfamilyfoundation.org/Grants-Programs/Small-Grants>

MassWildlife Habitat Management Grant Program

Municipalities and landowners

This provides funds to owners of conserved lands to enhance wildlife habitat, while promoting public access for outdoor recreation. The grant encourages landowners to engage in active habitat management on their properties to benefit many types of wildlife, including game species and species of greatest conservation need. Over the past 5 years, the MHMGP has awarded over \$1.9M in funding for 74 habitat projects.

<https://www.mass.gov/guides/masswildlife-habitat-management-grant-program-mhmgp>

Municipal Vulnerability Preparedness Action Grants

Municipalities

This grant offers financial resources to municipalities that are seeking to advance priority climate adaptation actions to address climate change impacts resulting from extreme weather, sea level rise, inland and coastal flooding, severe heat, and other climate impacts. Municipalities that have received designation as Climate Change Municipal Vulnerability Preparedness (MVP) Communities map apply. All projects are required to provide monthly updates, project deliverables, a final project report, and a brief project summary communicating lessons learned. The municipality is also required to match 25 percent of the total project cost using cash or in-kind contributions.

<https://www.mass.gov/service-details/mvp-action-grant>

Community Preservation Act

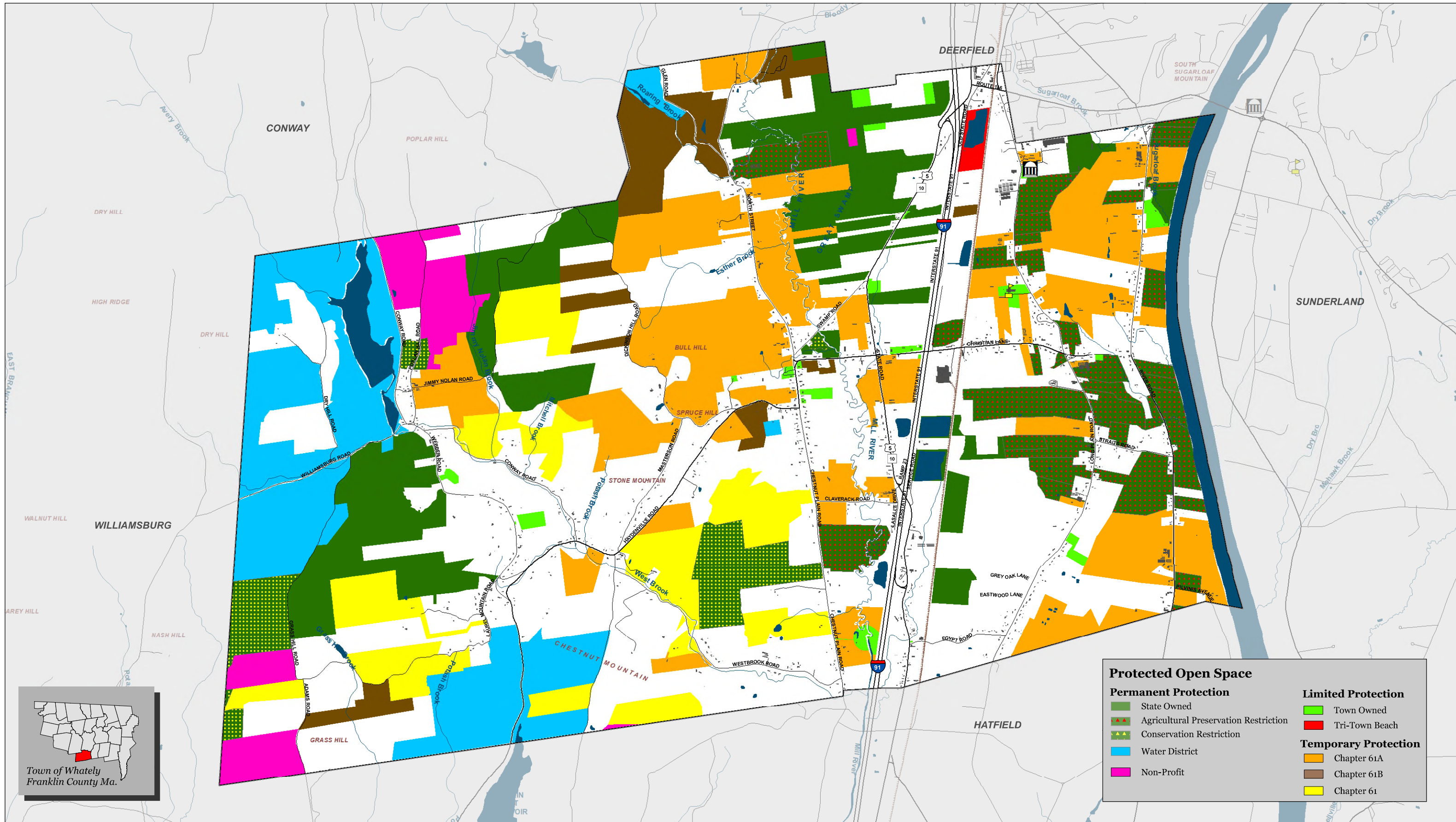
Municipalities and Non-profits

The Community Preservation Act is legislation that allows cities and towns to raise funds for use in local open space, historic preservation, community housing, and outdoor recreation projects. The Community Preservation Act (CPA) provides new funding sources which can be used to address three core community concerns:

- Acquisition and preservation of open space
- Creation and support of affordable housing
- Acquisition and preservation of historic buildings and landscapes

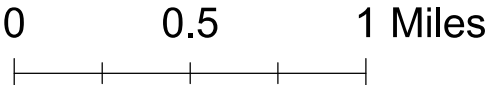
A minimum of 10 percent of the annual revenues of the fund must be used for each of the three core community concerns, and up to 5 percent may be used for administrative expenses of the Community Preservation Committee. The remaining funds can be allocated for any combination

of the allowed uses, or for land for recreational use. This gives each community the opportunity to determine its priorities, plan for its future, and have the funds to make those plans happen.
<https://www.communitypreservation.org/about>



Town of Whately Open Space & Recreation Plan 2021

Open Space



Sources: Map produced by the Franklin Regional Council of Governments Planning Department. GIS data sources include MassDOT, MassGIS and FRCOG. Depicted boundaries are approximate and are intended for planning purposes only, not to be used for survey.

SECTION 6

COMMUNITY GOALS

A. DESCRIPTION OF PROCESS

The Town of Whately's open space and recreation goals were developed through the following planning process:

- In 2021, Whately completed an Open Space and Recreation Plan Update to reflect existing conditions in Whately and public consensus.
- In 2019, Whately completed an Americans with Disabilities Act (ADA) self-evaluation and transition plan that identified physical barriers, policies, practices, or procedures that may limit or exclude participation by people with disabilities in municipal services, programs, or activities.
- From November 2020 to June 2021, the Whately Open Space Committee and the Franklin Regional Council of Governments Planning Department developed and updated the Open Space and Recreation Plan using several methods for involving public participation:
 - The March 2021 Open Space and Recreation Survey results were used to support the development of Section 8 Goals and Objectives as well as the overall open space and recreation vision. The 81 total survey responses represent 5.6 percent of the population of Whately over the age of 10 years old (see Appendix A for the survey and survey results).
 - 11 public meetings were held by the Open Space Planning Committee that were open to the public.
 - Drafts of each section of the plan reviewed by Open Space Planning Committee members and other readers representing key town boards and community groups.
 - A public forum was held on May 4th, 2021 in which residents reviewed and discussed the inventory, analysis, community goals, objectives, and seven-year action plan. All public comments were recorded and incorporated into the plan.

B. STATEMENT OF OPEN SPACE AND RECREATIONAL GOALS

Whately residents have a deep appreciation for the town's historic buildings, forests, waterways, agricultural lands, and breathtaking scenery. Whately's landscape—its working farms, extensive forests, steep hillsides and broad, flat floodplain corridors—gives the town its unique character and charm.

Whately's large blocks of forested land and farmland will be protected as a result of cooperative efforts between the Town, private landowners, local and state agencies, and private non-profit organizations. These lands will remain largely under private ownership and control, continuing to provide income to the Town via property taxes. Whately will be a place where people utilize an improved network of trails for a variety of recreational uses, especially for hiking on trails, walking and biking on flat, accessible trails, and cross-country skiing or snowshoeing. Whately's water resources and habitat will continue to be protected and improved. In the coming years, Whately will also have improved options for swimming and improved access to the Connecticut River will be explored by the Town.

Recreation will include a wide range of passive activities, such as trail walking/running, hiking, nature observation, boating, and road walking/running, cross-country skiing and snowshoeing, road biking, and swimming. These pastimes are possible thanks to safe roads for pedestrians and bicyclists, well-maintained recreation areas with adequate parking, maps, and signage, and an extensive trail system that connects Whately center to both West and East Whately and to trails in neighboring towns. Active recreation, such as organized sports and playground visitation will continue to be supported by high-quality, accessible facilities that accommodate a range of ages.

The Town will increase its education and outreach efforts to better inform residents about land use practices and recreational opportunities in town. Residents will lead each other in public, walks/rides, talks, town-wide celebrations or friendly competitions that utilize and/or celebrate open space resources.

Whately will apply to all of its planning and development activities the latest Massachusetts guidelines on climate change resiliency planning, including priorities from the 2020 Whately Hazard Mitigation Plan and 2021 Whately Municipal Vulnerability Plan. Together, these achievements will enhance biodiversity, protect drinking water, create more resilient land use and development, and improve both public and private open spaces for the enjoyment of people locally and regionally.

SECTION 7

ANALYSIS OF NEEDS

The Whately Open Space and Recreation Plan (OSRP) incorporates the inventory of land-based natural, recreational, scenic and cultural resources in town (Section 4), identifies parcels under some level of protection that contain these or other recreational resources (Section 5), articulates the community's general goals (Section 6), and makes connections between the needs of the community, the resources available, and opportunities for improvement (Section 7). The following section identifies the open space and recreation needs of both the natural environment and the community using the 2021 Open Space and Recreation Survey, community feedback from the Public Forum, the ADA Self-Evaluation and Transition Plan, data from Sections 3, 4, and 5, and the results of the Town's recent hazard mitigation and municipal vulnerability preparedness planning. Finally, this section addresses obstacles to the effective resolution of these needs, including organizational barriers and the most significant land use conflicts concerning open space and natural resource use.

In 2017 the Commonwealth completed the Statewide Comprehensive Outdoor Recreation Plan (SCORP), *Massachusetts Outdoors 2017*, an update of the SCORP 2012 five-year plan. SCORP plans are developed by individual states to be eligible for Federal Land and Water Conservation Fund (LWCF) grants and serve as a tool for states to use in planning for future needs and uses of outdoor resources for public recreation and relaxation. Informed by their survey of Massachusetts residents' desires and needs for outdoor recreation, as well as priorities identified in municipal open space and recreation plans, the SCORP identified the top four outdoor recreation goals for the state as

- 1) Access for underserved populations,
- 2) Support the statewide trails initiative,
- 3) Increase availability of water-based recreation, and
- 4) Support the creation and renovation of neighborhood parks.

Though Whately has developed its own distinct set of priorities, a few priorities intersect with some of the themes represented by these statewide goals. The SCORP identifies trails as important for connecting communities, providing a non-vehicular mode of transit, improving public health, and increasing the value of homes and businesses in the area. According to 2021 Whately OSRP survey results, residents are also strongly interested in expanding the trail network in town. The Town could therefore support both the needs of Whately residents and the statewide goal by adopting similar trail network objectives as the state: supporting the acquisition of land and development of new open spaces that can provide a trail network,

connecting existing trails to create a trail network, and ensuring that there are trails that are fully accessible to people with disabilities. The SCORP recognizes the dual benefit of protecting water to the environment and society, including increased opportunities for water-based recreation. Whately survey respondents, like those across the state, also expressed strong interest in having better access to and/or higher-quality water-based recreation resources; the recommendation in this plan that the Town of Whately investigate options for expanded and improved recreational access to water thus comes from the survey, but also reflects a statewide need. Finally, the SCORP outlines a statewide need to develop outdoor recreation areas close to where people reside. The recent efforts of Kestrel Land Trust and the Town to acquire and protect Whately Center Woods aligns with this goal, as Kestrel has been explicit that it was in part an effort to create a community park within reach of a Whately neighborhood (Whately Center).¹

As the climate crisis continue to unfold, the present and potential impacts of climate change on the environment, people, and the local economy are coming into focus in small communities like Whately. A recent update to the Town's Hazard Mitigation Plan (HMP)² and Municipal Vulnerability Preparedness (MVP)³ plan has helped raise awareness and bring the community together to talk about climate change and its effects on Whately. Although the Open Space and Recreation survey did not explicitly ask about climate change, a number of respondents mentioned climate mitigation and resilience in their open-ended responses. As was detailed in *Section 4. Environmental Inventory and Analysis*, natural systems can play an important role in mitigating future climate change, but some ecosystems and species are also vulnerable to its impacts. Local decisions about how land use and ecosystems are managed, and lands protected, will profoundly affect how Whately adapts to the challenges of climate change. Opportunities to promote and improve mitigation and resilience are described throughout this section, where relevant.

A. SUMMARY OF NATURAL RESOURCE PROTECTION NEEDS

The previous sections of this OSRP examined the variety of natural and cultural resources that give Whately its distinctive rural and agricultural character. Whately residents documented in the 2006 OSRP the high value they place on farmland, forests, wildlife, water resources, and the quality of the air and drinking water in town. When asked in the 2021 Open Space and Recreation survey to identify the top three categories of projects they would prioritize for open space, respondents picked their priorities in the following order:

¹ <https://www.kestrreltrust.org/community-rallies-to-save-whately-woods/>

² 2021 Whately Hazard Mitigation Plan:
https://www.whately.org/sites/g/files/vyhlf5211f/uploads/final_whately_2020_hmp.pdf

³ To be published by the FRCOG summer of 2021

1. Improving the trail network (45%)
2. Protecting farmland (42.5%)
3. Protecting wildlife habitat (41%)
4. Protecting floodplains, lakes, streams, ponds and wetlands (37.5%)
5. Protecting drinking water supply (36%)
6. Protecting scenic views (27.5%)
7. Protecting forests (26%)
8. Improving access to the Connecticut River (25%)

Some of these objectives are compatible with each other, while others may, to some degree, be in conflict. The challenge for Whately is to find the right balance among the various land use values and the most appropriate areas of town to promote those uses.

The following section outlines key natural resource protection needs listed in the order they were selected by survey respondents as priority. Trail network and improving access to the Connecticut River will be addressed in *7.B: Summary of Community Needs*, below. Strategies for addressing natural resource needs are described in *Section 8: Goals and Objectives* and *Section 9: Seven - Year Action Plan*.

A.1 Farmland

Apart from improving the trail network, farmland protection ranked as the highest priority among open space projects, likely because protected farmland not only helps to ensure that Whately retains its scenic character and cultural identity, but also contributes to Whately's economy and to regional food security. Active farming (and silviculture—management of the growth and health of forests) support the economic vitality of Whately by being a part of its diversified economy. According to the 2015 Whately Community Food Assessment, in 2015 farms in Whately employed 425 workers (full time, part time, and seasonally) and created \$32 million in regional economic impact annually.⁴ In addition to its present value, Whately's farmland could be an extremely critical resource in the future if climate change negatively impacts viability of agricultural production in other parts of the country.

Farmland protection was a high priority in the 2006 OSPR. Since the adoption of the Community Preservation Act, Whately's CPA funds have provided local match for twelve Agricultural Preservation Restriction (APR) projects that have preserved 300 acres of Whately agricultural land. Based on public opinion gathered in the 2021 survey and recognition that Whately contains much of the best farmland in the state, the Whately Community Preservation Committee should continue to support APR projects.

⁴ Prepared by the Franklin Regional Council of Governments for the Town of Whately and the Whately Agricultural Commission, 2015: <https://frcog.org/whately-food-assessment-released/>

Many bylaw revisions since the 2006 plan further encourage conservation of both farm and forestland. The 2010 revisions created the A/R2 district which, according to the Planning Board, increased residential lot sizes to three acres to encourage cluster development. In that year, allowances for accessory apartments also expanded to encourage density and provide more flexibility for aging residents to stay in their homes, and the Planning Board has recently proposed another expansion of the accessory apartment use. Commercial and industrial uses, when expanded, were kept adjacent to the existing Industrial Park or along commercial roads. The Large-Scale Ground-mounted Solar Bylaw (2011, revised in 2020 with extensive public input) includes provisions that discourage conversion of prime farmland to solar. It should be noted, however, that this bylaw does not include a solar overlay district but permits solar by special permit in every district except A/R1. Given the multiple values of undeveloped land the Town should continue to investigate how it may structure incentives for rooftop solar and disincentives for siting solar installations on forestland. The Town could also consider install rooftop solar on Town-owned buildings as a model and inspiration.

The preservation of high quality farmland in Whately is highly dependent on the financial viability of farming, which can be challenged by natural hazard events and times of economic uncertainty. Members of the Agricultural Commission cited the rising cost of production and the inconsistent commitment of local wholesale buyers to local producers as major concerns for their businesses. Local farm owners may benefit from increased promotion of locally grown products and from farm income diversification, which can provide more security during periods of economic instability. The Whately Planning Board could therefore continue to consider adopting zoning bylaws, such as the farm brewery tasting room use that was added in 2018, that encourage agritourism and diversification of on-farm businesses.

Flooding, fluvial erosion, wind erosion, and drought have been increasingly common challenges for Whately farm businesses. The financial impact of natural hazards on farms points toward a need to increase measures that reduce risk and increase adaptation, such as increased riparian buffers, cover cropping and wind breaks, and drought-resilient farming techniques. Related to this, the 2020 Hazard Mitigation Plan recommends that the Town of Whately conduct public education and outreach requesting farmers to track damages from natural disasters and report them to the Town. Farmers should be encouraged to use the best management practices (BMPs) to support soil health, protect water quality, and provide habitat for pollinators and other wildlife. Whately should consider the potential of using a river corridor easement tool or other incentives to secure more effective riparian buffers along the Connecticut and Mill Rivers, and their tributaries.

Whately supports the use of land for solar energy production, but given the complex costs (loss of prime farmland and food sources) of solar development on farmland, it is the hope of the Town that land can be returned to agriculture or open space when the clean energy use is no longer viable. The Town could investigate a mechanism to facilitate a return to open space upon decommission of a solar installation. The Town should also further investigate solar siting parameters and stay up to date with research on impacts, opportunities (such as dual use of land for solar installations and agriculture), and state or regional solar siting planning efforts.

A.2 Wildlife Habitat and Forests

Wildlife abounds in Whately thanks to the town's large areas of contiguous forest, wetlands, and open agricultural land. About 71 percent of Whately's land is forested and those forests provide habitat for a diversity of wildlife while also helping maintain clean drinking water for multiple towns. West Whately has a significant amount of uninterrupted forestland, which is essential for wildlife that are sensitive to edge predators and brood parasites (cowbirds), range widely and occur at low densities (bears, bobcats, fishers), or require large tracts of interior forest for nesting. Swamps, marshes, vernal pools, rivers, and streams are very important wildlife habitats; farmland and other open areas, especially grasslands and shrublands, also serve as valuable habitat in Whately. The importance of wetlands, streams, and waterbodies as habitat is addressed in the following section.

Healthy forests improve air and water quality, provide safe natural habitat, and provide forest products (maple sap, timber). Whately encourages landowners to use good forest stewardship and silvicultural practices aimed at achieving long term goals of healthy productive forests. The forest in Whately Center Woods, the new conservation area in Whately Center owned by Kestrel Land Trust, has a history of forest management for long-term health and could serve as a "demonstration forest" for other Whately landowners. The very strong interest in natural history talks and walks among survey respondents demonstrates community interest in Whately's forests as an educational resource.

Although 33 percent of Whately is permanently protected, there are still a number of valuable unprotected private parcels in Whately. By the Whately Conservation Commission's analysis, nearly every remaining unprotected open space parcel has conservation value (scenic, aquifer protection, wildlife and biodiversity, historic, and agricultural resources). Therefore, it is important that Whately identify the most appropriate land for development as well as priorities for land conservation to protect its natural resource values. The state's conservation agencies, MassWildlife and Department of Conservation and Recreation, as well as the Northampton and South Deerfield water districts, are likely already prioritizing the protection of priority habitats or watershed land adjacent to their current land holdings. The Community Preservation Committee and Town of Whately could therefore prioritize protection of areas important to town residents that are not likely to be protected by other public entities: areas of open land between Westbrook Road and Mountain Street, between Westbrook, Haydenville, and Chestnut Plain Roads, and the wetland east of Long Plain Road. Additionally, although the more than a thousand acres owned by the City of Northampton and South Deerfield Water Supply District are under no threat of being sold or converted at this time, their exact legal protection status is unknown. Deed research is needed to know for certain the protection status of these forests.

As an agricultural community dependent to an extent on insect pollination, the widespread decline of pollinator species is a major concern for Whately. But farmland and other habitats also present opportunities to mitigate pollinator decline. Solar installations in particular are great opportunities to encourage large-scale pollinator-friendly plants because, with limited need for mowing, vegetation can be managed for staggered bloom times and all pollinator life stages. A requirement to plant pollinator habitat could be added to Whately's solar bylaws or community host agreements. Other widespread planting of native species in intentional

“pollinator pathways” can have a measurable impact in a relatively short period of time. The Western Massachusetts Pollinator Network⁵ is working with a number of towns in Berkshire, Franklin and Hampshire Counties to educate landowners on ways to modify landscaping on their properties to provide safe nesting and feeding spots for beneficial pollinators.

The public input process also identified concerns about invasive species impacting roadside trees, drainage, and trail access, especially at some of the state-owned Wildlife Management Areas (WMAs). Invasive plant species are increasingly killing or damaging trees along the roadside and clogging drainage, leading to hazardous road conditions and flooding. While invasive species are an ecological concern throughout Whately, the Town should consider prioritizing roadside invasives, where they have jurisdiction, because of their potential financial impact to the Town.

Whately is home to a great many large, mature, healthy trees, in forests and also along roadsides. These trees provide a variety of ecosystem services, including storm water management, pollinator habitat, and shade. However, climate change, invasives, and road salt are all impacting the health and longevity of mature trees. Conducting a baseline public tree inventory would identify the species and health of public trees (and private, if possible) and opportunities to enhance the benefits they provide. Any incentives for tree protection and planting on public and private land should be pursued.

A.3 Floodplains, Lakes, Streams, Ponds and Wetlands

Protecting land along water bodies—riparian buffers, floodplains, and mapped river corridors—provides multiple benefits. Riparian buffers and floodplains help protect water quality by filtering and slowing stormwater runoff from adjacent land uses and help to recharge groundwater. Floodplains and river corridors help to stabilize stream channels, reduce bank erosion, and provide water and sediment storage during flood events. Riparian buffers also support habitat for fish and other organisms that rely on cool water temperatures and increase habitat connectivity for aquatic, semi-aquatic, and terrestrial species. Permanently protected land along water may provide some opportunities for public access, depending on ownership and the terms of the protection agreement.

In addition to protection, rivers, streams, and wetlands need a number of management improvements in Whately:

- Much of Whately’s stream crossing infrastructure, such as bridges and culverts, are undersized for increasing extreme precipitation events and are barriers that disrupt aquatic connectivity. Assessment of bridges and culverts for aquatic connectivity, terrestrial passability, and condition will provide important information needed to prioritize crossings for repair or replacement to improve habitat and reduce risks of failure during severe storms.
- Good stormwater management and flood prevention and mitigation provisions in zoning

⁵ www.massbees.org

and subdivision regulations would help to improve stream health, reduce flood risk, and generally improve climate resilience.

- Bloody Brook is Whately's most highly impaired water body. However, because the sources of the impairment are mostly outside of Whately's Town borders, there is little Whately can do but advocate to the Town of Deerfield to decrease stormwater runoff and other sources of nonpoint source pollution (pollution resulting from many diffuse sources) in the brook's watershed.
- Even after receiving attention in the 2006 Open Space plan, the negative impacts of the upstream operations of the drinking water reservoirs owned by the City of Northampton and the Town of Deerfield on the natural flow regimes of West Brook and Roaring Brook have not yet been addressed. The Town should continue to seek an agreement with those municipalities on maintaining minimum flow and ensure that those water departments are complying with any state minimum streamflow requirements.
- Headwater streams in Whately are already being affected by warming temperatures and the Town should pursue actions that would address this threat, including restoring riparian buffers and disconnecting these streams from stormwater runoff from impervious surfaces.
- Road salt application along Routes 5/10 and Interstate 91 is a serious threat to the health of trees in Whately's Great Swamp. The Town should negotiate with the MA Department of Transportation for salt reduction on highways in the vicinity of the Great Swamp.
- The Whately Planning Board can be commended for its current effort to adapt the state's 2020 model floodplain bylaws for Whately—a revised floodplain bylaw would bring it into compliance with FEMA's National Flood Insurance Program's regulations. A subsequent step for increasing river health in Whately and reducing flood hazard risk would be to conduct a geomorphic study of Whately's streams and rivers to map the river corridor and priority areas for erosion mitigation.
- Whately still contains around 45 potential vernal pools that would receive a greater level of protection under the Wetlands Protection Act were they certified.

A.4 Drinking Water Supply

Whately's water supply comes from private wells and public water supply wells located in the south central part of Whately. Participants in the 2021 MVP workshop expressed particular concern about the town's primary public supply wells operated by the Whately Water Department: both wells draw from the same aquifer and are located close together. Given the history of groundwater contamination in Whately, there are ongoing concerns about protecting the quality of water provided by public and private sources. The aquifer that supplies public sources of drinking water is vulnerable to contamination along the edge of the Mill River valley where it meets the hills of West Whately. There is also concern that homes and farms along the Mill River (North Street) are at risk of contamination due to inundation and erosion caused by flooding.

Climate change projections that predict more severe droughts in the future have heightened concerns about water quantity to go along with issues of water quality. Whately currently lacks a reliable backup source of drinking water should anything happen to the current water supply. The Town is connected to Hatfield & Deerfield's water system, so could hypothetically draw from their supply during an emergency, but this is not a long-term solution and would not serve residents in West Whately. The 2020 Hazard Mitigation Plan recommends that Whately develop a drought management plan for all three types of water users: private, public, and agricultural water users. The Whately Water Department and other Town boards (Board of Health, Planning Board, ZBA, and Conservation Commission) should continue to work diligently to ensure access to clean and sustainable supplies of drinking water through continued enforcement of the Aquifer Protection Overlay District and Wetlands Protection Act, land conservation. Demand management, such as the promotion of drought and heat-tolerant grass, plants, and trees in new development, can also limit the need for irrigation.

A.5 Scenic Views

Scenic areas in Whately provide opportunities to observe wildlife, explore the Town's geologic and cultural history, or simply appreciate long-range views. Many of the town's most treasured scenic vistas are vulnerable to loss unless these areas are permanently protected. The North Street corridor and tobacco barns priority landscapes, two of five heritage landscapes recognized in the 2009 Whately Heritage Landscape Inventory Reconnaissance Report, are particularly vulnerable and may be important protection priorities for the Town.



S. White Dickinson Memorial Library and Lawn (*Pete Westover*)

B. SUMMARY OF COMMUNITY NEEDS

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

The survey asked what respondents would most like the opportunity to do more of in Whately. Four activities garnered over 50 percent support: trail walking or running (74%), hiking (71%), nature observation (55%), and boating (51%). The Open Space Committee agreed that overall, the survey identified the following as the community's major priorities for open space and recreation planning:

- 1) expanding the trail network;
- 2) improving pedestrian and bike infrastructure;

- 3) improving existing facilities/recreation areas and access (especially for swimming); and
- 4) improving access to the Connecticut River.

In addition to discussing these top priorities, this section also considers opportunities for more open space or recreation-related programming and events and community needs related to the town's infrastructure.

B.1 Trail Network

Survey respondents indicated a high level of interest in improving and expanding the trail network for walking, hiking, running, and biking. Participants in the public forum pointed out that they would like to be able to make more use of land in town, to feel safer traveling by bike or on foot, and to more easily be able to know what recreation trails are available in town. Some Whately residents are concerned that creating easy access to trails may attract an unmanageable number of out-of-town users. It will be important to work with willing landowners to address their concerns about overuse or negative impacts of public access, yet ensure that informal trail systems that are currently used by Whately residents are not lost.

When asked about multi-use trails, 85 percent of respondents indicated they wanted to be able to hike on these trails, reinforcing the fact that expanding access to the existing trail network for Whately residents should be a top priority of the Town. However, the next most requested activities were walking on flat, accessible trails (63%), cross-country skiing and snowshoeing (56% and 50% respectively), and biking on flat, accessible trails (53%). While walking and biking on flat trails can be partially accommodated by improving pedestrian and bike infrastructure near or along roadways, some trail network planning should take into consideration the interest in flat, accessible trails and trail grades friendly to cross-country skiing.

Survey respondents expressed interest in a wide variety of trail connections. The most frequently cited inter-town off-road trail connections were the linkages of Whately Center Woods to other trails, of Mount Esther to the Town Center, and of trails to places to swim. Other popular ideas included connections to the Northampton Rail Trail, to the Conway State Forest, and to Mount Sugarloaf.

Quite a few survey respondents expressed frustration about what they perceived as a lack of parking, wayfinding, and mapping at existing conservation/recreation properties in Whately. The Trails Working Group will no doubt need to address these three factors when planning expansion of the trail network. A number of survey takers also requested that the Town provide more information about outdoor recreation opportunities in Whately. The need for better access to information about recreational opportunities is evidenced by the high proportion of respondents who reported that they did not know about Whately's recreation resources. The top five such areas were the Whately Oaks CT River Paddlers' Tentsite (58%), the Mount Esther WMA (53%), the Whately WMA (47%), Whately Center Woods (41%), and the Graves Sanctuary (41%).

There was a lively discussion at the public forum about the opportunity for open space and

recreation amenities to invite sustainable growth in town. Good open space resources could be tied to commercial activity in town, including outfitting stores and destinations for food and refreshments. Open space could also function as a connector between economic activity in neighboring towns such as South Deerfield and Sunderland. For this to be possible, Whately would need to collaborate with neighboring towns to envision long-term development of open space destinations and connections.

B.2 Pedestrian and Bike Infrastructure

Survey respondents also strongly favored improving pedestrian and bike infrastructure throughout town, with Whately Elementary School and continued expansion of pedestrian facilities in Whately Center the most-cited improvements in the survey and throughout the OSRP planning process. Residents are also concerned about increasing bike and pedestrian safely through the 5/10 corridor and pressed the Town to consider off-road pedestrian connections between important destinations. In 2018, the Town of Whately and the FRCOG completed a Complete Streets Prioritization Plan that identifies twenty-one areas for pedestrian and bike improvements. Bike and pedestrian access to the. These priorities should figure strongly into future applications for Complete Streets funding, as the Town works toward community-wide access to areas for walking and biking. The Town could also look at the process for making Whately a “bike-friendly” community.⁶

B.3 Facilities and Access

Overall, Whately residents feel that there is not enough access to undeveloped open space, but with one or two exceptions, there are enough developed facilities. However, a number of facilities need additions or an upgrade, including ADA improvements.

Whately residents who responded to the survey are more likely to use undeveloped conservation areas than the Town’s recreation facilities. Whately Center Woods, the MacLeish Field Station, and the Connecticut River (via an out-of-town access point) ranked as the top three most-used recreation resources. However, the top three unfamiliar recreation resources are also areas for passive recreation: the Whately Oaks CT River Paddlers Tent site, the Mount Esther WMA, and the Whately WMA. Among those who used WMA properties, several noted that access to all WMAs is poor and the condition of the Great Swamp WMA trails (including a bridge) needs improvements. None of the recreation/conservation areas available for public use in Whately are owned by the Town, leaving few options for the Town to improve access to these areas.

The Town of Whately manages seven recreational facilities: the gymnasium, playground, and ballfields at the Whately Elementary School, Herlihy Park, the baseball field and ice rink at the Whately Fire Station, and the tot lot at the Center School. Tri-Town Beach is owned and managed by the public, non-municipal entity the Tri-Town Beach District Commission. Of these public recreation facilities, over half of survey respondents found Herlihy Park and the

⁶ <https://bikeleague.org/bfa>.

playground at the elementary school to be in excellent or okay condition. Even though the public generally approved the quality of these facilities, Town officials have been actively discussing opportunities to improve the ADA accessibility at both facilities, as well as various ideas for expansion at Herlihy Park and Connecticut River access.

Tri-Town Beach and the Center School tot lot ranked as the two poorest quality facilities in Whately. In the case of Tri-Town Beach, of those who responded to the question 49 percent reported it to be in okay condition and 41 percent that it is in poor condition. In the case of the tot lot at the Center School, 65 percent said it was in okay condition and 31 percent in poor condition. At the time of writing, the Town of Whately was in the process of exploring outside (non-municipal) involvement in the use and management of the Center School, so the Town is not likely to want to invest in upgrades to the Center School tot lot. Alternative locations for a toddler play structure should therefore be considered. The unavailability bathrooms at Town recreation facilities, as well as throughout town where cyclists tend to stop, also emerged as a concern among survey respondents and the Open Space Committee.

Several comments on the survey underscored the importance of a public swimming area, including its value to families with young children, as a community meeting spot, and for cooling off in the summer. Frustration with the quality of the water at Tri-Town Beach, the length of its open season (the beach is often not open in late summer due to water temperature and water quality issues), and its lack of accommodation for adults looking to distance swim came through in the survey from both residents who use the beach and those who do not. Aside from Tri-Town Beach, Whately has no official or commonly used unofficial swimming holes. Given its location and the fact that it is filled by groundwater (rather than flowing water), the Tri-Town Beach District Commission has few options for improving the quality of the pond itself. However, an engineering study could identify some options for improvement. Survey results may indicate that the Beach's structures should be examined for needed upgrades. The Town is aware of the need for improvements at Tri-Town Beach and discussion is already underway of how to best approach the problem.

Participants in the public forum were also strong proponents of developing a dog park in Whately, ideally adjacent to playgrounds, to meet the needs of families. Participants noted that dog parks help keep dogs out of wildlife areas, are good for building community, and could be a regional draw.

All age groups and populations should be considered when planning for the recreational needs of a community. Since Whately currently has no community parks, the main public recreation facilities are the trails in central and west Whately, and Herlihy Park and the Elementary School in east Whately. Since these facilities are outside of or lacking pedestrian infrastructure from any of Whately's villages, they are roughly equally accessible to all residents who have a means of transportation. However, lack of vehicular access may further exclude both younger and older residents who do not drive.

B.4 Needs of Special Groups

The Whately community composed of a higher percentage of older residents than in the past,

making aging residents perhaps the population with the greatest unmet needs. There are no universally accessible trails in Whately for less mobile citizens. Any future development of land or facilities for open space and recreation should include careful consideration of access for older citizens, including handicap parking, smooth, flat trails, and accessible seating areas for resting. One way to plan for an aging population is to complete the age-friendly planning process facilitated through the Age Friendly Communities Network.⁷ The Town could also aim to locate any new senior housing in pedestrian-friendly areas that provide access to green space.

The South County Senior Center provides daily indoor programming to Whately, Sunderland, and Deerfield residents. Seniors can get to the Center through the Franklin Regional Transit Authority's "Demand Response" pick-up service. The 2021 OSRP survey identified walks, hikes, exercise classes, outdoor ceremonies, and history talks as desired activities for seniors, many of which are already hosted by Whately's Dickinson Memorial Library.

Handicapped residents may benefit from improvements identified in the Whately 2019 ADA Self-Evaluation and Transition Plan (see Appendix A). Elements of the parking and playgrounds at the Whately Elementary School require some improvements to come into ADA compliance (the Center School, also out of compliance, will no longer be used for municipal purposes). The assessment identified the Whately Elementary School playground as a priority for upgrade. Because there are no Town-owned conservation areas or trails, the Town could consider partnering with landowners and other stakeholders to address the need for accessible trails in Whately. Other options include land acquisition, trail easements, or partnerships with conservation organizations such as Kestrel Land Trust.

Whately teens have access to facilities and programming through the Frontier Regional School District. There was limited discussion of the needs of Whately teenagers in the public engagement process. A total of nine teenagers completed the survey and no teens attended the public forum. Respondents who did identify desired activities for teenagers pointed to nature-based activities, boat safety training, and outdoor concerts and movies. Given the lack of information about the needs of teenagers garnered from this plan's outreach process, the Town may consider conducting further outreach to teens to understand how they want to recreate and engage with open space.

B.5 Access to the Connecticut River

Although Whately has extensive frontage along the Connecticut River, there currently are no public access points or riverbank trails. The nearest boat launches are in Hatfield and Sunderland. A quarter of survey respondents chose access to the Connecticut River as one of their top three priorities for open space planning in Whately, and a number elaborated on this desire in other sections of the survey. At the moment, there are no river-side parcels with obvious potential to be designated public access. It is unclear whether there are areas bordering the river that could accommodate river access; there is concern that there may be few areas (if any) along

⁷ <https://lifepathma.org/news/stories/1131-lifepath-s-new-initiative-aims-to-make-our-communities-more-age-friendly>

the river with appropriate riverbanks and river bottom substrate to effectively serve as a public swimming option. However, before dismissing the development of river access entirely, given the public interest, it is important that the Town thoroughly study the options for access, perhaps as a component of a broader study of water recreation access throughout town. In addition, the Town or Trails Working Group could consider obtaining easements for walking trails along portions of farmland that abut the Connecticut River.

B.6 Recreation Programming

Whately's Recreation Commission oversees youth sports, including basketball, soccer, baseball and softball, other organized extra-curricular sports available to Whately children through the Frontier School District. Survey respondents did not identify a need for any more organized sports programming sponsored by the Town, other than seasonal friendly competitions.

Survey respondents provided a wide-ranging set of ideas for the enhancement of outdoor programming in Whately, but the most popular programming ideas were guided walks, local history and natural history talks, town-wide celebrations, outdoor entertainment (music, movies, dances), and fun runs/races (see Table 7-1). Additional suggestions (that garnered fewer than four suggestions) can be found in the survey results in Appendix B.

Table 7-1: Outdoor Programming Desired by Whately 2021 Survey Respondents

Programming	# of Interested Survey Respondents
Sponsored/guided walks, including: <ul style="list-style-type: none"> • Seasonal local flora and fauna identification • Natural history • Local history • Birding • Walks for seniors • Farm tours 	16
Local history talks, including: <ul style="list-style-type: none"> • Pre-colonial history and indigenous land attribution • History of the area • Natural History 	9
Town-wide celebrations, such as: <ul style="list-style-type: none"> • Annual BBQ • 4th of July picnic • Town party • Earth Day celebration • Fall/harvest festival • Parades • Tree lighting at library 	8
Outdoor music (more), dances, movies	6
Fun runs, trail races	4
Seasonal events with sports competitions for kids	4

Source: 2021 Open Space and Recreation Plan Survey

A number of committees and entities, including the Dickinson Library, could coordinate many of these kinds of programming. Whately residents are knowledgeable on a variety of history and natural history topics and could be tapped for talks and guided walks. Whately may not have the capacity to host all of the suggested programs, but should consider developing a few more outside town-wide events that provide opportunities for community gathering, especially given the uncertainty of large-scale indoor events in the wake of the 2020 Covid-19 pandemic.

C. SUMMARY OF MANAGEMENT NEEDS

This section addresses opportunities for improvement in the way that open space and recreation areas are managed and maintained by the Town of Whately.

C.1 Coordination

Whately is fortunate to have a great number of organizations interested in the environment in and around the community. State and regional conservation organizations are responsible for the majority of natural resource protection in town. The Conservation Commission will continue to work with these organizations on new land protection projects in Whately and should report to the Open Space Committee when there are opportunities for the Town to review conservation activities so that they most benefit local residents and ecosystems. Furthermore, if Town officials are kept abreast of these local and regional efforts, there would be more opportunities for cooperation with adjoining towns.

The implementation of the Whately OSRP will require that the Open Space Committee coordinate with other Town boards and committees the need and expectations of the action plan. It has also been suggested that members of other Whately committees be invited to Open Space Committee meetings on a semi-regular basis to facilitate more efficient coordination between Town leadership.

In 2018, the Whately Selectboard approved the formation of a Whately Trails Working Group. The Trails Working Group will facilitate the establishment, maintenance, and mapping of trail systems and access points for seasonal non-motorized uses. Information gathered by the OSRP survey will provide guidance to the working group, but further public input, as well as communication with neighboring towns, will likely be needed before trail designs are implemented.

C.2 Conservation Process

The Town of Whately recently developed a protocol for considering land for the APR program. To achieve its conservation goals for all types of land, the Town would benefit from prioritizing potential areas for protection that can be distributed to the Selectboard, Conservation Commission, Open Space Committee, and local land trusts and acted on expediently. This prioritization list should probably be developed by a committee represented by all of these parties, and could be led by the Open Space Committee or Conservation Commission.

C.3 Communication

Given the number of survey respondents who did not know about various existing recreational resources in Whately, or desired more information about Whately recreation resources, the Open Space Committee should consider working with the Recreation Commission to create a guide to publish on the Town's website, via The Scoop, or other Town-run media. The listing could include public open space areas and local trails, parking options, access rights, use restrictions, and private facilities available for public use. Any avenue the Whately Open Space Committee establishes for publicizing open space and recreation resources in town could also be used for communicating important information for the community to know about environmental stewardship, climate resilience, and other topics related to open space protection.

C.4 Stewardship

Keeping the places Whately residents love accessible and in good condition may require the engagement of residents as volunteer stewards. Use of and care for outdoor places tend to reinforce each other. Even though the Town of Whately does not own many of its recreational resources, it does not mean that Whately residents cannot act as stewards of the places they presently rely on for quality of life. Volunteering with the Kestrel Land Trust on the Whately Center Woods property, with the Trails Working Group on trail development and maintenance, with the Appalachian Mountain Club on maintaining the paddler's tent site, and generally helping to reinforce the use guidelines of other public properties are all valuable contributions to open space in Whately.



Winter Whately Scene (*Pete Westover*)

SECTION 8

GOALS AND OBJECTIVES

The following goals and objectives were formulated from the results of the 2021 Whately Open Space and Recreation Plan Survey and reviewed and modified through the public meetings of the Open Space Planning Committee, the public forum process, and associated public comment. All of the goals and objectives will be pursued and implemented within the context of increasing and strengthening Whately's resiliency to climate change.

OPEN SPACE GOAL: *Ensure that Whately protects farmland, forestland, scenic views, and other open space vital to sustaining the town's historic rural character and maintaining the quality of air, water, and wildlife habitats.*

PLANNING

Use planning tools such as mapping, consultants, public engagement, and land use regulations to preserve open space, and improve environmental health and climate resilience outlined in this plan and other relevant Town plans.

CONSERVATION

Work to preserve areas of Whately that are most important to protect, recognizing the reality of climate change.

STEWARDSHIP

Engage Whately residents and staff in practices that protect and enhance public open space areas, environmental health and climate resilience.

RECREATION GOAL: *Ensure that Whately maintains and improves the variety, quality, and accessibility of recreational facilities important in the twenty-first century for health and well-being of all residents, and promote the use of these facilities and any organized programming thereof.*

PLANNING

Use planning tools, such as mapping resources, consultants, public engagement, and land use

regulations, to meet the recreation needs of the community.

PROGRAMMING

Provide Whately residents with structured programming that supports use and enjoyment of Whately's natural environment, open space resources, and history.

TRAILS & PEDESTRIAN INFRASTRUCTURE

Promote the use of new and existing trails in Whately, ensure good public access, and develop and/or improve trail systems throughout the town.

FACILITIES

Work with the Recreation Committee to create and improve recreational facilities of public interest.

ENGAGEMENT GOAL: *Coordinate effectively among Town boards, committees, community organizations, and volunteers, and with neighboring Towns, to achieve local and regional open space goals and keep the public well informed of goals, progress, and opportunities.*

COMMUNICATION

Improve public awareness of environmental issues, natural resource protection, and open space, recreation, and multi-use trail opportunities.

TOWN-WIDE COORDINATION

Work with town committees and other organizations to achieve Open Space and Recreation Goals.

REGIONAL COLLABORATION

Collaborate with neighboring towns to protect and manage natural resources and recreational offerings.

SECTION 9

SEVEN – YEAR ACTION PLAN

The Seven-Year Action Plan fulfills the Open Space and Recreation Plan (OSRP) objectives. The objectives are listed in the far left column of Table 9-1 and are followed by recommended actions, responsible board or group, start date, and potential funding sources. By implementing the recommended actions, each objective will be closer to realization.

Implementing the OSRP will not only require the participation of the Open Space Committee, but it will also necessarily involve many other town groups, including the Selectboard, Planning Board, Conservation Commission, Agricultural Commission, Highway Department, Board of Health, Recreation Commission, Community Preservation Committee, and Tri-Town Beach District Commission. In addition, Kestrel Land Trust, Smith College, and Nasami Farm are listed as potential partners in this Action Plan.

Many of these actions may be constrained by a lack of volunteer time, in addition to funding limitations. Where money is required, such as with open space protection, it does not have to be provided by the Town alone. State and federal agencies, private non-profit conservation organizations, individual donors, and private foundations are potential sources of funding. Many are more likely to invest in projects that have a broad base of community support.

Despite being a small town relying on a small staff and dedicated volunteers, Whately has accomplished a number of action items that support the goals of the Town's previous OSRP. The following list summarizes Whately's accomplishments since 2006:

- In 2006, passed a Right to Farm bylaw
- In 2008, adopted the Community Preservation Act
- In 2017, adopted a policy for considering lands for protection under the APR program, including those coming out of Chapter 61 and 61A
- With the help of CPA funds and state financing, farmers conserved over 300 acres of farmland via the Agricultural Preservation Restriction (APR) program
- Passed a number of zoning bylaws that support the protection of open space:
 - 2006: Creation of an Aquifer Overlay Districts to protect the aquifer feeding the town's wells. In addition to creating a list of prohibited uses that might generate pollution, the bylaw increased the size of a residential lot permitted in the districts to three acres and limited the lot coverage ratio to 10%
 - 2010: Creation of an Agricultural/Residential District 2 district, expanding the minimum required lot sizes to support the use of newly added Cluster Development and Flexible Development bylaws that aim to encourage efficient use of space and

to promote open space

- 2010: An accessory apartment use was added to the Table of Use and use expanded to allow accessory apartments in existing outbuildings, as well as residences; intended to increase density, provide affordable housing units, and provide aid to residents in large houses who might wish to have an apartment for income or for a caretaker
- 2011: Creation of a Large-scale Ground-mounted Solar Bylaw that specifies that there be minimal impact on agricultural land and that the site is designed to be totally reversible at the end of the facility's lifespan
 - Amended in 2020 to cap the size of facilities at 10 acres, with additional acreage allowed when the facility is out of public view or on unproductive land; add safety and monitoring provisions for large-scale storage batteries; require more screening; and impose a remediation fee for the loss of farmland or timberland
- 2018: Farmer breweries were added to the Table of Use and allowed by special permit in all zoning districts except Ag/Res 1 to encourage agritourism and provide an additional source of income for farmers
- 2018: Marijuana cultivators and retailers were added to the Table of Use. Outdoor cultivation is allowed by special permit in Ag/Res2 that site growing and processing in appropriate zoning districts and restricts building size to fit in with historic scale of agricultural buildings
- 2019: Creation of an adaptive re-use bylaw for historically significant buildings with a history of being open to the public, which allows specified commercial and residential uses and relaxes dimensional requirements to encourage creative re-use
- In 2007, coordinated with Franklin Land Trust to protect 239 acres of agricultural and forest land at Maple Hill Farm on both sides of Chestnut Plain Road south of town center
- In 2011, completed an update to the land use and housing sections of the Master Plan
- In 2015, completed a community food assessment¹
- Since 2016, implemented two nature-based solutions projects on the Mill River since 2016 to protect town wells from contamination driven by fluvial erosion
- In 2019, commissioned an ADA assessment of Town recreation properties with structures
- In 2019, reconvened the Open Space Committee and convened a Trails Working Group
- Commissioned a Complete Streets Plan² and in 2020 completed Phase I of the project, with new sidewalks and traffic-calming measures along Chestnut Plain Road in Whately Center
- In 2020, with CPA funding, updated Herlihy Field with a new softball field and storage
- In 2020 and 2021, coordinated with Kestrel Land Trust to protect the 120-acre Dauchy

¹ <https://frcog.org/wp-content/uploads/2016/01/Whately-Comm-Food-Assessment-Farmland-Preservation-Posters-Final-123015.pdf>

² <https://frcog.maps.arcgis.com/apps/MapTour/index.html?appid=6af82a590ea445279d138c3455088194>

property as a community conservation and recreation area known as the Whately Center Woods, adjacent to the Maple Hill protected land

- In 2020, applied for Age-Friendly Communities Network designation to be eligible for age-friendly planning grants
- Reviews Community Preservation Committee Plans every 2 years

In addition, private non-profit entities have contributed to Whately's open space and recreation goals:

- The Snowmobile Club has maintained trails throughout Whately and installed seasonal signage for snowmobile use.
- The Commonwealth of Massachusetts, primarily through the Department of Fish and Game Fisheries and Wildlife Division (MassWildlife), but also the Department of Conservation and Recreation (DCR), continue to protect land for their wildlife management areas and parks.
- Smith College placed over 100 acres of forestland at the MacLeish Field Station under a conservation restriction and continues to welcome the community to their trails and educational facility.
- Researchers at the College of the Holy Cross and UMass Amherst³ conducted an inventory of species diversity in Whately and Whately resident Calla Jones⁴ inventoried plant species at Whately Center Woods and throughout Town Center in 2018.
- The Appalachian Mountain Club installed Whately Oaks Tent Site, a paddlers campsite, along the Connecticut River.
- The regional farm advocacy organization Community Involved in Supporting Agriculture (CISA) publishes an annual directory of farm-based businesses throughout the Pioneer Valley, including those in Whately.
- Franklin Land Trust has held multiple sessions for local landowners on ways to protect their property and facilitate generational transfer.
- Nasami Farm holds regular classes on native plants, identifying invasives and planting for pollinators.
- The Grange has sponsored programs and a video series highlighting Whately farms and farmers.

Two recent planning efforts undertaken by the Town provide important points of leverage and overlap with the OSRP. Whately updated its five-year Hazard Mitigation Plan, which was approved by FEMA on November 27, 2020. Concurrent with this effort, the Town also engaged in the planning process to become designated a Municipal Vulnerability Preparedness (MVP) community. Both the Hazard Mitigation Plan and the MVP Plan include a discussion of climate

³ Bertin et. al., *Vascular Flora of Franklin County, MA*, 2020:

<http://www.rhodora.org/specialpublications/pdf/Bertin-et-al-Vascular-Flora-Franklin-County-Massachusetts.pdf>

⁴ Jones, Calla, *Memories of the Land*, 2019: <https://whatelyhistorical.org/wp-content/uploads/2019/05/Memories-of-the-Land.pdf>

change and the natural hazards that are increasingly impacting Whately's natural environment and the important ecosystem services that floodplains, rivers, wetlands and forests provide. These plans include strategies and action items to address and mitigate the impacts from climate change and natural hazards and protect and restore the Town's natural resources. A number of actions identified in the MVP and Hazard Mitigation Plans align with the OSRP's goal of protecting farmland, forestland, scenic views, and other open space vital to sustaining the Town's historic rural character and maintaining the quality of air, water, and wildlife habitats. The relevant action items from the MVP and Hazard Mitigation Plans are included in the OSRP Seven-Year Action Plan. Thinking creatively and designing a project to achieve multiple objectives and provide multiple benefits can expand the opportunities for funding. Some projects could be funded by the MVP Action Grant program, the FEMA hazard mitigation grant program, and possibly a grant program administered by the Division of Conservation Services if open space preservation and/or recreation amenities are included in the project design.

For an Open Space and Recreation Plan to succeed, it is important to establish priorities for the first seven years. The Open Space Committee has prioritized action steps categorized by the goals and objectives listed in the previous chapter. Prioritized action steps are represented on the Seven-Year Action Plan Map and are outlined in detail in Table 9-1. The most important action steps for Whately in the next seven years include:

1. Review Whately's zoning bylaws, subdivision regulations, and general Town bylaws and suggest updates for open space protection, stormwater management, habitat (including pollinator habitat), water resource protection, drought tolerance, and other open space priorities.
2. Conduct a geomorphic assessment of the Mill River Watershed and identify flooding and fluvial erosion threats to Whately's public water supply wells and other critical infrastructure (culverts, roads, utilities) within the watershed.
3. Create an invasive plant management plan to inventory sites, prioritize areas for treatment and provide recommendations for treatment and ongoing maintenance activities.
4. Develop programming responsive to the results of the 2021 OSRP survey, including lectures, workshops, and outdoor activities, with an emphasis on history, natural history and the environment.
5. Create a Town Trail Plan, including an assessment of existing trail conditions and potential trail routes.
6. Coordinate with the Town of Deerfield and the Tri-Town Beach District Commission to determine how Tri-Town Beach can meet the needs of a greater number of residents and present as more welcoming.
7. Provide information to the Whately community about open space and recreation (including trail information), and resource protection (e.g., drought and heat-tolerant landscaping, pesticide use, good forest stewardship practices).
8. Convene annual meetings to discuss progress on OSRP action items.

NOTE: The ‘responsible board/group’ is suggested as the Town group that would take the lead in working on the action, responsible for shepherding the project and coordinating with other involved groups. The start date is the suggested start date, knowing that start dates can adapted as needed. Potential funding sources are suggested starting places for funding; more details and urls for each grant program can be found in *Section 5.F: Opportunities for Funding Open Space and Conservation Projects*. Priority actions are highlighted in blue.

Table 9-1: Recommended Actions of the 2021 Whately Open Space and Recreation Plan

OBJECTIVE	ACTION	RESPONSIBLE BOARD/GROUP	START DATE	POTENTIAL FUNDING SOURCES
<u>OPEN SPACE GOAL</u> Ensure that Whately protects farmland, forestland, scenic views, and other open space vital to sustaining the town’s historic rural character and maintaining the quality of air, water, and wildlife habitats.				
PLANNING				
Use planning tools such as mapping, consultants, public engagement, and land use regulations to	Work with Conservation and Agricultural Commissions to map high priority areas for the Town’s conservation efforts based on priorities identified in the open space plan, ecological mapping tools, and pre-existing Town work	Open Space Committee	2021	Volunteer time

OBJECTIVE	ACTION	RESPONSIBLE BOARD/GROUP	START DATE	POTENTIAL FUNDING SOURCES
preserve open space, and improve environmental health and climate resilience outlined in this plan and other relevant Town plans.	Request technical assistance from the FRCOG to assist with a review Whately's zoning bylaws, subdivision regulations, and general Town bylaws for best practices for open space protection, stormwater management, habitat (including pollinator habitat), water resource protection, drought tolerance, climate-resilient landscaping, and other open space priorities to ensure Whately continues to update its land use regulations to protect natural resources and to increase resilience to climate change	Planning Board	2021, ongoing	MVP, District Local Technical Assistance (DLTA)
	Work with Energy Committee and Open Space Committee to periodically review for needed updates that respond to changes in the technology used for renewable energy generation and solar siting best practices that ensure the economic health and sustainability of farms and forestland.	Planning Board	2021, ongoing	DLTA, MVP, Town funds for Town Counsel help
	Work with Agricultural Commission and Board of Health to review zoning bylaws for opportunities to further encourage agritourism and diversification of on-farm businesses to help ensure the economic health and sustainability of local farms.	Planning Board	2022	MVP, DLTA
	Work with the FRCOG to create a Town Pollinator Action Plan that coordinates with the Franklin County Regional Pollinator Plan	Open Space Committee	2023	EEA, MVP, DLTA

OBJECTIVE	ACTION	RESPONSIBLE BOARD/GROUP	START DATE	POTENTIAL FUNDING SOURCES
CONSERVATION				
Work to preserve areas of Whately that are most important to protect, recognizing the reality of climate change.	Work with the Selectboard to hire a consultant to conduct a geomorphic assessment of the Mill River Watershed and identify flooding and fluvial erosion threats to Whately's public water supply wells and other critical infrastructure (culverts, roads, utilities) within the watershed. Identify new priority nature-based solutions to mitigate these threats. Prepare conceptual designs and cost estimates for projects that increase climate resiliency and mitigate flood and fluvial erosion hazards.	Whately Water Department	2022	MVP
	Use existing or emerging tools, including land use regulations, to incorporate Best Management Practices for River Corridor areas (FRCOG's River Corridor Toolkit) to secure more effective riparian buffers along the Connecticut and Mill Rivers and their tributaries.	Planning Board Conservation Commission	2022	NRCS EQIP, Agricultural Lands Conservation Program/Wetlands Reserve Easements,
	Assess road salt impacts on the health of waterways and trees town-wide, with special attention to the Great Swamp. Secure funding for remediation options. Enlist help of state legislators to advocate for beneficial measures under the jurisdiction of MassDOT.	Conservation Commission	2023	Legislative earmark, MassDOT

OBJECTIVE	ACTION	RESPONSIBLE BOARD/GROUP	START DATE	POTENTIAL FUNDING SOURCES
	Tap into local expertise or hire a consultant to complete an assessment of all culverts and drainage systems in Town for hazard mitigation and resilience that also considers which culverts are in need of repair to strengthen coldwater critical linkages. The assessment should include an evaluation of the physical state of the culverts and GIS data to have record of where culverts are located. Based on the results of the inventory, prioritize repairs and replacements.	Highway Department	2023	MVP, 3C Transportation funding from FRCOG, DLTA
	Tap into local expertise or hire a consultant to assess stormwater drainage on gravel roads, with an emphasis on impacts to adjacent coldwater fisheries and wetlands. Develop stormwater BMP concept designs such as those developed by FRCOG as part of the 2021 Franklin County Stormwater Pilot Project.	Highway Department	2024	MVP, 3C Transportation funding from FRCOG, DLTA

OBJECTIVE	ACTION	RESPONSIBLE BOARD/GROUP	START DATE	POTENTIAL FUNDING SOURCES
	Conduct a baseline tree inventory on public and private land to identify species and health, and opportunities to enhance the public tree canopy to provide climate resilience benefits, such as carbon sequestration, forest health, storm water management, pollinator habitat, and biodiversity, and to enhance recreation areas by providing additional shade and native landscaping. Follow up with creation of tree planting plan and installation based on inventory's findings. Reference FRCOG's Climate Resilient Trees for Streetside Tree Belt Planting list. ⁵	Tree Warden	2025	MVP, DCR, DCS
	Tap into local expertise or hire a consultant to identify riparian areas in the greatest need of restoration along West Brook, Roaring Brook, and other tributaries and develop/implement restoration projects to improve the health of coldwater streams.	Selectboard	2025	MVP

⁵ <https://frcog.org/wp-content/uploads/2018/06/Climate-resilient-trees.pdf>

STEWARDSHIP				
Engage Whately residents and staff in practices that protect and enhance public open space areas, environmental health and climate resilience.	Tap into local expertise or hire a consultant to create an invasive plant management plan to inventory sites, prioritize areas for treatment and provide recommendations for treatment and ongoing maintenance activities. To help slow the spread of invasives in the interim, research best practices for controlling invasives, especially in at stream crossings. ⁶	Conservation Commission, Highway Department	2023	MVP, Town
<u>RECREATION GOAL</u> Ensure that Whately maintains and improves the variety, quality, and accessibility of recreational facilities important in the twenty-first century for health and well-being of all residents, and promote the use of these facilities and any organized programming thereof.				
PLANNING				
Use planning tools, such as mapping resources, consultants, public engagement, and land use regulations, to meet the recreation needs of the community.	Investigate potential for environmentally responsible means of access to the Connecticut River in Whately and in surrounding towns.	Selectboard	2022	MVP, DCS
PROGRAMMING				

⁶ E.g., “Preventing the Spread of Japanese Knotweed,” New Hampshire Department of Agriculture, Markets & Food: <https://www.agriculture.nh.gov/publications-forms/documents/japanese-knotweed-bmps.pdf>

Provide Whately residents with structured programming that supports use and enjoyment of Whately's natural environment, open space resources, and history.	Work together and with the Agricultural Commission, Conservation Commission, Recreation Commission, local land trusts, and Smith College to develop programming responsive to the results of the 2021 OSRP survey, including lectures, workshops, and outdoor activities, with an emphasis on history, natural history and the environment	Open Space Committee, Historical Commission	2021 and ongoing	Mass Cultural Council, Volunteer time
	Work with Nasami Farm on programming related to native plants, mature trees, pollinator habitat, and invasives identification and management	Open Space Committee	2022 and ongoing	Greenfield Garden Club Grants, Volunteer time
	Consider creating a new, annual town-wide outdoor celebration responsive to the results of the 2021 OSRP survey	Recreation Commission	2022	Mass Cultural Council, Volunteer time
	Encourage Kestrel to host/allow programs, including good forest stewardship programs, at Whately Center Woods	Open Space Committee	2022 and ongoing	Kestrel Land Trust, DCR, Volunteer time
TRAILS & PEDESTRIAN INFRASTRUCTURE				
Promote the use of new and existing trails, ensure good public access, improve and/or develop trail systems throughout town.	Work with Town Boards and local volunteers to maintain and improve trail network	Trails Working Group	2021 and ongoing	Volunteer time, CPA funds, DCS
	Create a Town Trail Plan, including an assessment of existing trail conditions and potential trail routes.	Trails Working Group	2022	Volunteer time
	Consult 2021 OSRP survey results to prioritize next round of Complete Streets funding request	Town Administrator, Highway Department	2023	Complete Streets program
	Improve access points for the trail network	Trails Working Group	2023 and ongoing	Recreational Trails Program, DCS, Volunteer time

	Improve mapping and wayfinding for the trail network	Trails Working Group	2024 and ongoing	DCS, Volunteer time
FACILITIES				
Work with the Recreation Committee to create and improve recreational facilities of public interest.	Coordinate with the Town of Deerfield and the Tri-Town Beach District Commission to determine how Tri-Town Beach can meet the needs of a greater number of residents and present as more welcoming. Conduct a site analysis and feasibility study of water quality and infrastructure improvements to the Tri-Town Beach facilities.	Selectboard	2021	MVP, CPA, PARC MA Land & Water Conservation Fund
	Work with the Board of Health and Recreation Commission to improve availability of and access to bathrooms at Town-owned properties for bicyclists and hikers	Selectboard	2021	DCS
	Explore the feasibility of various improvements to Herlihy Park, including the addition of a playground for children of different ages, ADA improvements, park expansion into adjacent parcels, and Connecticut River access.	Selectboard	2022	CPA, PARC, MA Land & Water Conservation Fund
	Work with the School Committee to build the planned play area for very young children and bring the Whately Elementary School playground into ADA compliance as prioritized by the 2019 ADA self-assessment and transition Plan. Prioritize and implement remaining tasks related to recreational areas in ADA transition plan.	Selectboard	2022	Massachusetts Office on Disability Implementation Grants (retrofits) PARC (new or replacement)
	Conduct more outreach to teenage residents to better understand the needs of the population.	Recreation Commission	2023	Volunteer time

	Establish a dog park adjacent to playgrounds. Survey community members to determine support and recruit volunteers for construction and maintenance.	Selectboard	2023	DCS
<u>ENGAGEMENT</u> Coordinate effectively among Town boards, committees, community organizations, and volunteers, and with neighboring Towns, to achieve local and regional open space goals and keep the public well informed of goals, progress, and opportunities.				
COMMUNICATION				
Improve public awareness of environmental issues, natural resource protection, and open space, recreation, and multi-use trail opportunities	Identify community organizations and volunteers (including students), to develop materials and use existing communication systems (e.g., the Town website, <i>The Scoop</i>) to provide information to the Whately community about open space and recreation (including trail information), and resource protection (e.g., drought and heat tolerant landscaping, pesticide use, good forest stewardship practices). Work with the Conservation Commission and Agricultural Commission to identify topics.	Open Space Committee	2021 and ongoing	Volunteer time, Town funds for staff time
	Create guide to recreation resources in Whately to be posted to Town website and social media.	Recreation Commission	2023	Volunteer time, Town funds for staff time

	Encourage forest owners to use the USFS Adaptation Workbook ⁷ and other resources to determine best management practices and climate adaptation efforts would be right for their property. Encourage the Highway Department and private property owners to plant climate resistant trees, including in the road right-of-way.	Open Space Committee	2024	Town funds for staff time
TOWN-WIDE COORDINATION				
Work with town committees and other organizations to encourage continued engagement with Open Space and Recreation Goals	After approval of the 2021 OSRP, send a list of action items specific to each committee	Open Space Committee	2021 and ongoing	Volunteer time, Town funds for staff time
	Convene annual meetings to discuss progress on OSRP action items and share general news and ideas regarding open space and recreation.	Open Space Committee	2022 and ongoing	Volunteer time, Town funds for staff time
REGIONAL COLLABORATION				
Collaborate with neighboring towns to protect and manage natural resources and recreational offerings	Work with neighboring towns and regional partners on trail development.	Trails Working Group	2021 and ongoing	Volunteer time
	Discuss opportunities for linking protected open space and recreational resources with Sunderland and Deerfield to expand local and regional open space protection, recreation opportunities and economic development	Selectboard	2021	DLTA

⁷ <https://adaptationworkbook.org/>

	Work with the City of Northampton, the South Deerfield Water Supply District, and the MA DEP to determine the best management for stream flow standards (min or max) if it is determined that there are minimum stream flow requirements for West Brook and Roaring Brook that are part of the permits for these public water supplies.	Conservation Commission	2022	Volunteer time and Town funds for staff time
	Research deeds of land owned by the City of Northampton and South Deerfield Water Supply Protection District (Table 5-14) to determine level of protection. If needed, identify if there is a path toward permanently protecting properties.	Selectboard	2023	Volunteer time and Town funds for staff time and Town Counsel time

Acronyms:

3C	MassDOT funding to FRCOG for continuing, cooperative, and comprehensive (3C) planning process
ADA	Americans with Disabilities Act
BMP	Best Management Practices
CPA	Community Preservation Act
DCR	Department of Conservation and Recreation
DCS	Department of Conservation Services
DEP	Department of Environmental Protection
DFG	Department of Fish and Game
DLTA	Direct Local Technical Assistance program
EQIP	Environmental Quality Incentives Program
MVP	Municipal Vulnerability Preparedness program
NRCS	Natural Resources Conservation Service
PARC	Parkland Acquisitions and Renovations for Communities Grant Program
MassDOT	Massachusetts Department of Transportation

Review Whately's zoning bylaw and subdivision regulations and suggest updates for open space protection, stormwater management, habitat, water resource protection, drought tolerance, and other open space priorities.

MILL RIVER: Conduct a geomorphic assessment of the Mill River Watershed and identify flooding and fluvial erosion threats to Whately's public water supply wells and other critical infrastructure within the watershed.

TRI-TOWN BEACH: Coordinate with the Town of Deerfield and the Tri-Town Beach District Commission to determine how Tri-Town Beach can meet the needs of a greater number of residents and present as more welcoming.

Develop programming responsive to the results of the 2021 OSRP survey, including lectures, workshops, and outdoor activities, with an emphasis on history, natural history and the environment.

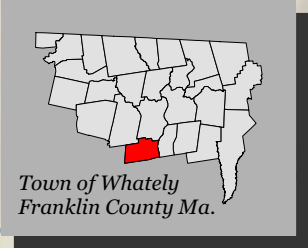
Create a Town Trail Plan, including an assessment of existing trail conditions and existing and potential trail routes.

Provide information to the Whately community about open space and recreation (including trail information), and resource protection (e.g., drought and heat-tolerant landscaping, pesticide use, good forest stewardship practices).

Create an invasive plant management plan to inventory sites, prioritize areas for treatment and provide recommendations for treatment and ongoing maintenance activities.

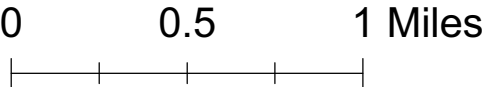
Convene annual meetings to discuss progress on OSRP action items

■ Permanently Protected Open Space



Town of Whately Open Space & Recreation Plan 2021

Action Plan



Sources: Map produced by the Franklin Regional Council of Governments Planning Department. GIS data sources include MassDOT, MassGIS and FRCOG. Depicted boundaries are approximate and are intended for planning purposes only, not to be used for survey.

SECTION 10

PUBLIC COMMENT

Public feedback was sought throughout the entire open space and recreation planning process. The text and maps included in the Plan reflect these enhancements. A more direct request for feedback on the maps and 5-Year Action Plan was made at the virtual Public Forum held on May 4th, 2021 via Zoom. Ten people attended the forum. A lively discussion followed the PowerPoint presentation. Comments from the forum participants were recorded by staff from the Franklin Regional Council of Governments.

Following the forum, draft copies of the maps and all sections were made available for review on the Town of Whately website. Comments received during the forum and the review period after the forum have been incorporated into the plan and are summarized below.

Copies of the final version of the Whately Open Space and Recreation Plan were sent to the following boards and organizations for review and comment:

- Massachusetts Division of Conservation Services (DCS)
- Whately Town Administrator
- Whately Selectboard
- Whately Conservation Commission
- Whately Planning Board
- Whately Recreation Commission

Letters of comment are included in *Appendix D: Letters of Support*. The letters reflect a broad base of support for the research, analysis, outreach, and recommendations developed by the Whately Open Space Committee.

Forum Discussion Topic 1: How do we maintain the town's character & open spaces we all love?

Comments:

- Use recreation and recreation additions to invite growth, be a revenue generator, but not exhaust resources
- As South Deerfield and Sunderland develop and improve, let open space be the connector from those neighboring towns to Whately economic development areas
- Try to best utilize what already exists and see what the gaps are
- Better ability to get around—bike paths and sidewalks throughout

- Connect Whately to well-utilized trails on Mount Sugarloaf

Forum Discussion Topic 2: How do we best address the recreational needs of everyone in Whately?

Comments:

- Be able to use more land in Town
- Feel safer on roads
- More hiking trails—one or more long trails and a number of 20-minute loops
- Diversification of the types of trails available
- Ability to know where it is possible to go, what is available
- Better kiosks, public facing entrances, and good clear parking
- Dog park
- Complete makeover of Tri-Town Beach with a walking trail

Comments received after the forum were addressed or incorporated unless otherwise noted. Where the comment was not applied in full, an explanation is given in italics.

Section 1 – 8 Comments

Comment: p. 3-26 *****This is misleading as written. We approved a Complete Streets Plan in 2018, understanding that priorities could change over time We began with the project to add safe sidewalks and crosswalks to Town Center and added more parking at the Library. The other items on the list may be undertaken over time, but none of them have 'commenced,' and some would be so cost-prohibitive that they are unlikely to be realized.

Comment: D.2.3 ***The Water Supply section is confusing. Questions and comments below:
What is the 'water supply district'?

The Whately Water Department is not a 'privately owned public drinking water system.' It's a municipal system. The Whately Water District, using the definition you provide, is indeed a 'privately owned public drinking water system.'

The Whately Water District has not yet been merged with the Whately Water Department. The Town approved the merger and associated funding in 2019, but it hasn't happened yet. It's confusing to call it 'the Whately Center district'; its legal name is the Whately Water District. (Just fyi: the WWD required approval by the State Legislature when it was incorporated in 1970. It's not just a bunch of people sharing a few wells.)

Comment: Figure 4-3. *****Maybe I'm missing it, but I can't find a link to this map in the text or an explanation of what the label "Example Map" or the numbers littered all over the map mean. If we're going to include it, we need to explain it.

Comment: F-2. Public Shade Trees. *****The only sidewalks in Town are those in Town Center, which were improved last year (2/3 of them so far). The sentence about sidewalks

might make more sense to Town residents if it were rewritten in the future tense.

Comment: F.3 Farmland ***Last sentence: the revised solar bylaws prevent installation of large-scale installations on prime farmland. (As that is a technical term, I'd avoid using 'premium land' as an alternate.) Can you be specific about how many acres of Prime Farmland were lost to large-scale solar installations before the 2020 bylaw was passed?

Comment: I-13. Solar Development. ****Please make it clear that the five large-scale installations were reviewed under the first version of the Solar Bylaw, not the strengthened version that we approved in 2020. I think the ten-acre cap was added at that time.

The sentence about 'special permit' possibilities is misleading. They are not at all a given, and the ZBA has denied permission for two in the past three years.

Comment: Section 5, B 1-2 ****It seems dangerous and trivializing to identify the value of farms as "scenery" and place setting. This appears elsewhere in the report. Perhaps we should discuss it.

The reference to scenery was left here and throughout the document to acknowledge that although scenery is not farms' only positive quality (and other qualities are listed that demonstrates that), it is an important one to members of the community.

Comment: Table 5-8 ****As I wrote in notes about the Maps, you've picked up the 4.2 acre parcel owned by Native Plant Trust, but missed the main 75+ acre parcel.

In both the Open Space map and Section 5, the 75-acre parcel in question was already included as permanently protected farmland, rather than non-profit owned permanently protected, though only the 44 acres of APR were counted.

Comment: Section 7, A-1 Farmland paragraph 2 ****the Whately CPC does not 'prioritize' any of the four areas of potential funding. In fact, I think that would be a violation of state guidelines. We invite proposals for eligible projects, consider each on its own merits, and if designated funds are insufficient, we draw on the unallocated reserve to complete approved funding. Furthermore, as Judy Markland wrote last week, the recommendations in the 2015 CFAP either could not be implemented under state CPC guidelines or would have an effect counter to their intent. May we please remove this reference??

Comment: B-1 Trail Network, p 7-8 ***I don't know why comments by one person each (who may be the same person) warrant calling out in the text, let alone the second sentence of this section. Aren't you appending all the free-form comments to the report?

Comment: B-2, Pedestrian and Bike Infrastructure ****edit last sentence to refer to "future" applications for Complete Streets funding. A proposal was submitted last week, and the next one will be in 2024, I believe.

Section 9 comments

Comment: "Continue to prioritize APR..." ...Priority should be removed, as it makes no sense. *Action was removed.*

Comment: One general comment is that the chapter doesn't fully credit the role of the state (Mass Fish and Game, MDAR) and local non-profits in helping preserve and maintain Whately open space. I've inserted some references and questions (e.g. the acreage acquired by Fish and Game) and I'm sure there must be more. Similarly the task list doesn't try

sufficiently to leverage the help of these groups going forward and should. They're an invaluable resource.

Comment: 9-1 “Developed a policy...” Is this true? How are they protected?

Comment: “Installed signage marking the boundaries of the Town’s two National Historic Districts”... This is a nice action, but I’m not sure how it supports the OSRP goals. ?????

Comment: “Request technical assistance from the FRCOG to assist with the review Whately’s zoning bylaw and subdivision regulations...” Why is this limited to zoning? There are many other town bylaws, regulations and policies with an equally direct impact on things like stormwater management, runoff, Board of Health regulations, etc.-

Comment: “Identify volunteer(s), including students, to develop materials and use existing communication systems...” These recommendations neglect the benefits of involving valuable volunteer groups like the Snowmobile Clob, regional 4H clubs, and the Grange.

Comment: “Work with neighboring towns and regional partners on trail development...” Shouldn’t an assessment of the current state of town trails come before development of new ones? The closure of the trail through the Great Swamp area to snowmobiling, skiing and horseback riding is one example of inadequacy and there must be others.

Comment: “Investigate if there are minimum stream flow requirements...” Shouldn’t this include assessments of flood risks, dam resiliency and flood mitigation? Flood is an equivalent risk to drought for these streams, and capable of more destruction.

Comment: “Work with Energy Committee to periodically review for needed updates...” This is ongoing. The PB has DLTA funding for FRCOG’s assistance in researching large-scale battery storage risks

Comment: “Work to preserve areas of Whately that are most important to protect, recognizing the reality of climate change...” One timberland manager told me that his biggest problem was bearing the cost to keep his timber roads open without being forced to harvest the lumber sooner than he wanted to. There should be a recommendation to locate funds to assist in this effort

I’d expected to see a recommendation that Whately join the other neighboring towns developing a pollinator trail habitat.

Comment: “Enlist help of state legislators to advocate with DFG and MassDOT for measures to contain road salt impacts on the health of Great Swamp...” Why are the salt mitigation efforts limited to impact on the Great Swamp as opposed to the whole river shed area?

Comment: “Investigate potential for environmentally responsible means of access to the Connecticut River in Whately and in surrounding towns...” Why are surrounding towns included?

Did not delete “surrounding” towns as the Open Space Committee found it important to demonstrate to Whately residents that river access may be most feasible and responsible in surrounding communities.

Comment: “Provide Whately residents with structured programming that supports use and enjoyment of Whately’s natural environment, open space resources, and history.” There’s wonderful ongoing research at Macleish about historic land use, geology, etc. Shouldn’t the

town be working with them to share it and on other programs? It would benefit the students as well as townspeople.

Could Nasami and Smith and local farmers work with local students?

Comment: “Bring the Whately Elementary School playground into ADA compliance as prioritized by the 2019 ADA self-assessment and transition Plan.” Has the playground for the very young children been completed? That’s been a priority for the school.

Comment: “Identify volunteer(s), including students, to develop materials and use existing communication systems (e.g., the Town website, *The Scoop*) to provide information ...” Shouldn’t this include programs for the elementary school?

Comment: We would like to see these four topics emphasized/added: mature trees, walk/bike infrastructure, rooftop solar, and a dog park. We also have several suggestions regarding existing wording.

Mature trees

Whately is home to a great many large, mature, healthy trees. Create a town map of all notable trees, including those on both public and private land. Create incentives for tree protection on public and private land. Make celebration of trees part of proposed town celebration, for example the historic double row of maples on Chestnut Plain Road and the massive oak at Herlihy park.

Incorporated comments into Section 7; did not add as an action item as it was already mostly covered by the action item that recommends conducting a baseline tree inventory and the action item related to town-wide programming. Did not address the creation of incentives for tree protection on public and private land.

Walk/bike infrastructure

Work toward community-wide access to areas for walking and biking. Create infrastructure that allows for and encourages walking and bicycling for both recreation and transportation. Allow all Whately children to safely walk or bike to school. Look for opportunities to create protected bike paths that allow travel through the 5/10 corridor between Northampton and Greenfield. Consider using not only town land, but also collaborate with business and property owners who might allow right-of-ways through industrial areas and alongside fields or parking lots. Install traffic-calming central island along Chestnut Plain Road in town center, improving pedestrian and cyclist safety and reducing noise pollution. Provide public toilet facilities at key pedestrian/cyclist locations, ideally with composting toilets. Make Whately a “bike-friendly” community: <https://bikeleague.org/bfa>.

Incorporated comments into Section 7; did not add as an action item as it was already covered by the action item related to Complete Streets and to bathroom facilities.

Rooftop Solar

Create incentives for rooftop solar and disincentives for siting solar installations on forestland. Install rooftop solar on town buildings as a model and inspiration.

Incorporated comments into Section 7; did not add as an action item as it was already covered by the action item that recommends the Town respond to changes in solar-siting

best practices.

Dog park

Create a dog park. Assess possible dog park locations, ideally adjacent to playgrounds. Survey community members to determine support and recruit volunteers for construction and maintenance.

Added as an action item under Recreation – Facilities.

Wording suggestions (new wording appears in red)

Under “Conservation,”

- “Assess road salt impacts on the health of waterways and trees town-wide”
- “Conduct a baseline tree inventory on public and private land”
- “climate resilience benefits, such as carbon sequestration and forest health, storm water management, pollinator habitat, and biodiversity“

Under “Stewardship”

- “Tap into local expertise and create an invasive plant management plan to inventory sites, prioritize areas for treatment and provide recommendations for treatment and ongoing maintenance activities. ”
- *Wherever consultants are recommended, consider local experts first. This saves money, encourages volunteerism, and makes knowledgeable amateurs feel (and be) useful.*

Under “Programming”

- “Work with Nasami Farm on programming related to native plants and mature trees”

SECTION 11

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APPENDIX A

ADA Self-Evaluation

TOWN OF WHATELY



AMERICANS WITH DISABILITIES ACT (ADA) SELF-EVALUATION & TRANSITION PLAN

October 2019

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Appendix A: Transition Plan

ADA Self-Evaluation & Transition Plan Ad Hoc Committee

The following individuals worked diligently to complete this ADA self-evaluation and transition plan:

Donald Sluter, Chairperson, Whately Commission on Disability & Whately Planning Board

Brian Domina, Whately Town Administrator & ADA Coordinator

Keith Bardwell, Whately Highway & Buildings Superintendent

Jim Ross, S. White Dickinson Library Trustee

Larry Ashman, S. White Dickinson Library Trustee

1. Introduction

Title II of the Americans with Disabilities Act (ADA) prohibits discrimination on the basis of disability in all services, programs, and activities provided by municipalities. Title II also requires that municipalities conduct a review of all municipal services, programs, and activities to identify any physical barriers or policies, practices, or procedures that may limit or exclude participation by people with disabilities. The review process and accompanying report is called an ADA self-evaluation. The Town of Whately has conducted a number of self-evaluations over the past 35 years (1984, 1993, 2004, 2007); however, the most recent self-evaluation is now twelve years old so a new self-evaluation is necessary.

The Town of Whately has made substantial progress since the Town's first self-evaluation was completed in 1984. For example,

- In 1990, the Town constructed a new elementary school in compliance with the accessibility standards in place at that time.
- In 1993, the Town installed an accessibility ramp to the front entrance of the S. White Dickinson Library.
- In 2009, the Town renovated its community and youth center into an ADA compliant building for its police station.
- In 2016, the Town moved all of its administrative offices to an ADA compliant building that was constructed in 2004.
- In 2018, the Town completed a \$1.5 million renovation of its, circa 1844, historic Town Hall making the building fully ADA accessible to all persons.

While the Town has made substantial progress in meeting its obligations under the ADA there is still room for improvement. The results of this new self-evaluation will help the Town refocus its efforts on providing services and programs available to all persons. The findings of the self-evaluation have led to the development of a new transition plan for the Town. A transition plan is a written plan that identifies the physical modifications that need to be made to make a building or facility accessible. The transition plan includes estimated timelines for completing the modifications and planning level cost estimates. The transition plan for the Town of Whately is provided as Appendix A to this self-evaluation.

2. Regulatory Context

Title II of the Americans with Disabilities Act (ADA) applies to state and local governments. Title II prohibits discrimination on the basis of disability in all services, programs, and activities provided by municipalities. Thus, people with disabilities must have an equal opportunity to participate in and benefit from a municipality's services, programs, and activities.

To accomplish this objective, the ADA sets requirements for existing municipal facilities, for the construction and alteration of municipal facilities, for communications with the public, and for the policies and procedures that govern municipal programs, services, and activities. A summary of the requirements is provided below:

Existing Facilities: Program Accessibility

When programs, services, or activities are located in facilities that existed prior to January 26, 1992, the effective date of Title II of the ADA, municipalities must ensure that they are also available to persons with disabilities, unless to do so would fundamentally alter a program, service, or activity or result in undue financial or administrative burdens. This requirement is called program accessibility. When a service, program, or activity is located in a building that is not accessible, a municipality can achieve program accessibility in several ways. It can:

- relocate the program or activity to an accessible facility;
- provide the activity, service, or benefit in another manner that meets ADA requirements; or
- make modifications to the building or facility itself to provide accessibility.

Thus, to achieve program accessibility, a municipality need not make every existing facility accessible. It can relocate its, programs, services and activities to an accessible facility, avoiding expensive physical modifications of all municipal facilities.

New Construction and Alterations

ADA requirements for new construction have been in effect since January 1992. New buildings and facilities must comply with the new construction provisions of the ADA Standards for Accessible Design. This requirement includes facilities that are open to the public and those that are for use by employees.

When a building or facility is renovated or altered or added to for any purpose, the alterations or additions must comply with the ADA Standards. In general, the alteration provisions are the same as the new construction requirements except that deviations are permitted when it is not technically

feasible to comply. Additions are considered an alteration, but the addition must follow the new construction requirements. When existing structural and other conditions make it impossible to meet all the alteration requirements of the ADA Standards, then they should be followed to the greatest extent possible. Any alteration that affects the usability of a building or facility must comply with the requirements of the ADA Standards unless technically infeasible to do so.

Maintenance of Accessible Features

Municipalities must maintain in operable working condition those features that are necessary to provide access to services, programs, and activities -- including elevators and lifts, curb ramps at intersections, accessible parking spaces, ramps to building or facility entrances, door hardware, and accessible toilet facilities.

Effective Communication

Municipalities must take appropriate steps to ensure that communications with members of the public, job applicants, and participants with disabilities are as effective as communications with others unless it is an undue financial or administrative burden to do so or it would result in a fundamental alteration in the nature of its program or activity. Achieving effective communication often requires that municipalities provide auxiliary aids and services. Examples of auxiliary aids and services include qualified sign language interpreters, assistive listening devices, open and closed captioning, notetakers, written materials, telephone handset devices, qualified readers, taped texts, audio recordings, brailled materials, materials on computer disk, and large print materials.

Policies, Practices and Procedures

Municipalities must make reasonable modifications to policies, practices, and procedures to avoid discrimination against individuals with disabilities. While this requirement applies to all policies, practices, and procedures of the municipality, the municipality does not have to make modifications that would result in a fundamental alteration in the program, service, or activity or result in a direct threat to the health or safety of others. A direct threat is a significant risk that cannot be eliminated or reduced to an acceptable level by the municipality's modification of its policies, practices, or procedures, or by the provision of auxiliary aids or services. The public entity's determination that a person poses a direct threat to the health or safety of others may not be based on generalizations or stereotypes about the effects of a particular disability.

** Information in this section was taken from the ADA Guide for Small Towns, published by the U.S. Department of Justice Civil Rights Divisions, first printing March 2000, available at <https://www.ada.gov/smtown.htm>.*

3. Processes for Complying with the ADA & Compliance Status

In addition to the general requirements discussed in Section 2 above, the Town of Whately must also fulfill the other specific obligations listed below. The Town has fulfilled all of these obligations as discussed below.

Perform and Retain a Self-Evaluation

Municipalities that have not already conducted a self-evaluation or updated a previous self-evaluation conducted under Section 504 of the Rehabilitation Act must do so. The self-evaluation is a review of all municipal services, programs, and activities to identify any physical barriers or policies, practices, or procedures that may limit or exclude participation by people with disabilities. The self-evaluation should identify changes to policies to be implemented. It should also identify any discriminatory policies, practices, and procedures that cannot be reasonably changed without resulting in a fundamental alteration. The self-evaluation also identifies problems with the accessibility of facilities and establishes recommendations for providing program accessibility (which may include relocation to an accessible facility). It may also suggest short-term and long-term strategies to provide access to people with disabilities.

Status: This obligation has been met by the completion of this self-evaluation.

Disseminate Notice to the Public About ADA Requirements

A municipality must provide notice to the public about its ADA obligations and about accessible facilities and services in the town. The notice must inform the public about the ADA's nondiscrimination requirements. It may also describe how the public or employees may contact specific municipal officials about problems with accessibility and the need for effective communication. The information must be accessible to the public, including people who have disabilities that affect communication, such as blindness, low vision, deafness, and hearing loss. Although no specific method is required to reach the public, notice can be provided in more than one format and by using more than one type of media, such as the town's website, print, radio, or television.

Status: This obligation has been met by the posting of a Notice of Non-Discrimination in the Town Offices and on the Town's website at www.whately.org.

Designate an Individual to Oversee ADA Compliance

The Town of Whately as an employer with more than fifty employees must designate an individual to coordinate ADA compliance. Responsibilities for the ADA coordinator may include conducting

the self-evaluation and developing the transition plan (see below), handling requests for auxiliary aids and services, providing information about accessible programs and services, and serving as a local resource to the town. The ADA coordinator may also have responsibility for working with the Selectboard to ensure that new facilities or alterations to town facilities meet ADA requirements. In some communities, this individual also receives complaints from the public and works to resolve them.

Status: This obligation has been met. The Selectboard has appointed Brian Domina, Town Administrator as the ADA Coordinator for the Town of Whately.

Develop a Transition Plan

The Town of Whately as an employer with more than fifty employees must develop a written plan that identifies the physical modifications that will be made. The plan should include timelines for completing these modifications. Interested parties, including people with disabilities and organizations representing people with disabilities, must at a minimum have an opportunity to participate in the development of the plan by submitting comments. A copy of the plan and a copy of the self-evaluation must be available for public inspection for three years after completion.

Status: This obligation has been met with the completion of the attached Transition Plan.

Develop a Grievance Procedure

The Town of Whately as an employer with more than fifty employees must have an ADA grievance procedure. A grievance procedure provides people who feel they have been discriminated against because of their disability, or others who feel they have been discriminated against because they have a friend or family member with a disability, with a formal process to make their complaint known to the municipality. This procedure encourages prompt and equitable resolution of the problem at the local level without having to force individuals to file a Federal complaint or a lawsuit.

Status: This obligation has been met. The Selectboard adopted an updated ADA grievance procedure on November 8, 2017.

4. Self-Evaluation Process & Public Input

The ADA Coordinator formed a five-person ad hoc committee to assist with completing the self-evaluation. The ad hoc committee used templates developed by the New England ADA Center to complete a comprehensive review of the Town of Whately's programs, activities and services as well as the Town's building and facilities.

Programs, Services and Activities

To assess the accessibility of the Town's program, services and activities the ad hoc committee distributed the general non-discrimination survey and effective communication survey, developed by the New England ADA Center, to all department heads and the chairpersons of the Town's boards, committees and commissions. The completed surveys were collected and the results tabulated to assess the general level of awareness that Town representatives have about ADA requirements and obligations. A total of twenty-four (24) Town representatives were asked to complete the surveys and eleven (11) Town representatives completed surveys for a 46% response rate.

The Town of Whately provides the following programs, services or activities.

Program, Service or Activity	Responsible Official(s)
Administration	Selectboard – Town Administrator
Agricultural Resource Planning	Agricultural Commission
Assessing	Board of Assessors
Cemeteries	Cemetery Commissioners
Cultural Events	Cultural Council
Education	School Committee
Finances/Accounting	Treasurer/Collector – Accountant
Historic Resource Protection	Historical Commission
Housing Planning	Housing Committee
Inspections	Building Commissioner
Land Use Planning	Planning Board, Zoning Board of Appeals
Libraries	Library Commissioners
Public Health	Board of Health, Health Agent, Animal Control Officer
Public Safety	Police Department, Fire Department
Records Administration	Town Clerk
Recreation	Recreation Commission
Senior Services	Council on Aging, South County Senior Center
Streets & Utilities	Highway Department, Water Department
Transfer Station	Solid Waste Committee
Wetlands Protection	Conservation Commission

Website

To assess the accessibility of the Town's website the Town's ADA Coordinator completed the survey developed by the New England ADA Center to assess website accessibility. The results from the survey are summarized the next section.

Buildings & Facilities

To assess the level of accessibility of the Town's buildings and facilities the ad hoc committee used the ADA Checklist for Existing Facilities – based on the 2010 ADA Standards for Accessible Design, provided by the New England ADA Center. The checklist focused on four priorities of accessibility: accessible approach and entrance, access to goods and services, access to public toilet rooms, and access to other items such as water fountains and public telephones. The ad hoc committee met numerous times during the month of September to assess the Town's buildings and facilities. The results from each assessment are summarized in the next section and when necessary an entry was included in the transition plan.

Public Input

The Selectboard held designated comment periods during its meetings on August 21, 2019 and September 5, 2019 to give interested persons the opportunity to comment on the self-evaluation process. No comments were received during these meetings.

The draft self-evaluation and transition plan were presented to the Selectboard on September 25, 2019 and a seven-day public comment period opened on September 30, 2019. Comments received by the Town were incorporated into the self-evaluation and transition plan as appropriate.

5. Self-Evaluation Summaries

a. Assessment of Policies and Practices in Programs, Services and Activities

To assess the accessibility of the Town's program, services and activities the ad hoc committee distributed the general non-discrimination survey and effective communication survey, developed by the New England ADA Center, to all department heads and the chairpersons of the Town's boards, committees and commissions. The findings from these surveys are summarized below along with recommendations for improvements.

General Non-Discrimination

Overview

- Most respondents believe that the Town's current policies and practices provide an equal opportunity for all to participate in the services and programs offered by the Town.
- Most respondents indicated that persons with disabilities would not be excluded from the services and programs offered by the Town. Those who indicated a person may be excluded cited valid reasons why a person may not be allowed to participate (i.e. safety reasons where no alternative exists).
- Respondents were not aware of any separate programs or services offered by the Town to persons with disabilities.

Comment: Respondents have a general understanding of the Town's obligation to provide services and programs in a non-discriminatory manner.

Contracting with External Organizations

- Very few of the respondents were aware that the ADA requirements still apply when the Town contracts with a private individual or organization for a service to be performed on behalf of the Town.
- Based on the survey results the Town does not:
 - notify contactors of its responsibilities to provide the contracted service in a non-discriminatory manner,
 - require assurances that the service is provided in a compliant manner, and
 - have any procedures in place to ensure that the service is provided in a compliant manner.

Comment: The Town should consider adopting procedures to notify contractors and require assurances of ADA compliance and then follow-up with contractors to ensure services are provided in a non-discriminatory manner.

Reasonable Modifications

- Most of the respondents were aware that the Town has an obligation to make reasonable modifications in its policies and practices when necessary for a person with a disability to participate.

Service Animals

- Most of the respondents were aware that service animals are to be allowed where people without service animals are allowed to go.
- Very few of the respondents were aware that only limited questions may be asked about a service animal and that it is inappropriate to require certification or evidence that the animal is trained as such.
- Very few of the respondents were aware that a miniature horse qualifies as a service animal.

Comment: The Town should consider holding a training for Town employees, boards, commission and committee members to review their obligations under the ADA as representatives of the Town of Whately.

Wheelchair and Other Devices

- Most respondents were aware that people with mobility disabilities may use wheelchairs, scooters and other manually-powered mobility aids in any areas open to pedestrian use.
- Approximately one-half of respondents were aware that people with a mobility disability may use other power-driven mobility devices (e.g. golf carts) unless the Town can demonstrate that the class of devices cannot be operated in accordance with legitimate safety requirements.
- Where other mobility devices are used, approximately half of the respondents were aware that they could not ask about the nature and extent of the disability, but could ask the person to provide credible assurance that the mobility device is required because of the person's disability.

Comment: The Town should consider holding a training for Town employees, boards, commission and committee members to review their obligations under the ADA as representatives of the Town of Whately and to review likely scenarios where these situations might arise and how to respond appropriately.

Surcharges and Costs

- Nearly all respondents were aware that the Town may not impose a surcharge or fee on people with disabilities to cover the cost of providing the auxiliary aids.

Effective Communication

Overview

- Most respondents were aware of the Town's obligation to provide auxiliary aids for people who are hard of hearing or deaf; however, very few respondents know how to obtain and provide the auxiliary aids.
- Very few respondents know how to obtain and provide documents in alternative formats for people who are blind or visually impaired, with the exception of providing documents in large print.
- The Town does not have a policy or procedure to handle requests for auxiliary aids or services.

Comment: The Town should consider putting together a policy and guidebook for Town employees, boards, commissions and committees that lists where to obtain auxiliary aids and for assistance with preparing alternative documents.

- Very few respondents knew that it would be inappropriate to request that a family member or friend of people who are deaf serve as sign language interpreters, except in emergencies.
- Very few respondents were aware that a companion of a program participant has the right to auxiliary aids and services if the companion has a communication disability and is an appropriate person with whom the Town would communicate.

Comment: The Town should consider holding a training for department heads, boards, commission and committee members to review their obligations under the ADA as representatives of the Town of Whately as it relates to providing auxiliary aids.

- The Town does not have a policy or procedure to determine if an auxiliary aid or service would be an undue financial or administrative burden.

Comment: The Town should consider putting together a policy with objective criteria to determine when an undue financial or administrative burden exists such that refusing to make the accommodation is warranted.

- Very few respondents know how to respond to telephone calls made through the Video Relay Services (VRS) and Telecommunication Relay Services (TRS).

Comment: The Town should consider holding a training for department heads, boards, commission and committee members to familiarize themselves with how to use the VRS and TRS.

b. Assessment of Website

To assess the accessibility of the Town's website (www.whately.org) the Town's ADA Coordinator completed the survey developed by the New England ADA Center to assess website accessibility. The results from the survey are summarized below.

- The Town does not have a policy that the Town's webpage will be accessible that is, in compliance with the W3C Web Content Accessibility Guidelines 2.1 or Section 508 Standards.
- The Town has not tested the Town website to determine compliance with these standards
- The Town currently has no plan for making the existing or future web content accessible.

Comment: The Americans with Disabilities Act does not include specific regulations on website accessibility; however, the Town has a general obligation to provide individuals with disabilities equal access to its programs, services or activities unless doing so would impose an undue burden. The W3C Web Content Accessibility Guidelines (WCAG) are the generally accepted best practices for website accessibility.

Comment: The Town should consider working with its website design and hosting company to conduct a detailed assessment of the Town's website's compliance with the most recent WCAG standards.

Comment: The Town should consider adopting a policy that the Town's webpage will be accessible to meet the WCAG standards and then create and implement a plan for achieving compliance with those standards.

c. Assessment of Buildings & Facilities

To assess the level of accessibility of the Town's buildings and facilities the ad hoc committee used the ADA Checklist for Existing Facilities – based on the 2010 ADA Standards for Accessible Design, developed by the New England ADA Center. The findings from these assessments are summarized below for each town-owned building or facility listed in the table.

Building/Facility	Address
Town Offices	4 Sandy Lane, Whately, MA
Town Hall	194 Chestnut Plain Road, Whately, MA
Highway Garage – Transfer Station	71 Christian Lane, Whately, MA
Fire Station	63 Christian Lane, Whately, MA
Police Station	77 Christian Lane, Whately, MA
Whately Elementary School	273 Long Plain Road, Whately, MA
S. White Dickinson Library	202 Chestnut Plain Road, Whately, MA
Pumphouse & Office	38 Chestnut Plain Road, Whately, MA
Herlihy Park	271 River Road Whately, MA
Center School	218 Chestnut Plain Road, Whately, MA

Town Offices

The Town Office building is a 14,000 square foot steel framed metal building consisting of administrative offices, meeting rooms, toilet rooms, kitchenette, storage space and a three-bay garage. The single-level building was constructed in 2004 and purchased by the Town of Whately in 2015. The Town Offices building is the main administrative building for the Town of Whately.

Approach & Entrance: The parking lot is flat and has an asphalt surface. The accessible approach and entrance begin in the level parking lot with 73 parking spaces and 3 accessible spaces. 2 of the 3 accessible spaces are van accessible spaces, but are not marked as such. In addition, the bottom of the existing accessible signage is only 54" in height. The curb ramp from the parking lot to the sidewalk meets all appropriate slope, cross slope and width requirements. The Town Office building does not have any ramps. The main entrance to the building is accessible, however it lacks signage indicating such and the inaccessible side entrances do not have signage indicating where the nearest accessible entrance is located. The entrance dimensions, thresholds, door hardware and door operation all meet the appropriate requirements.

Access to Goods & Services: Access to all public spaces are provided along one accessible route and any protrusions into the route meet all appropriate requirements. As the building is a single level there are no ramps, elevators, limited use/limited access (LULA) lifts or platform lifts. Signage in most locations

meets the applicable requirements; however, since the purchase of the building by the Town some compliant signs need to be installed to reflect changes in use of certain rooms. As it relates to interior doors, the dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. The entire service counter for the Town Clerk/Treasurer Collector is at a height of 41" without any portion at a height lower than 36" making it difficult for those in a wheelchair to use the counter.

Toilet Rooms: The toilet rooms are accessible, signage is compliant and the entrance dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. The location, height and operation of the toilets, grab bars, lavatories and soap dispensers all meet the applicable requirements. One area to address, while not out of compliance because of the date of construction of the building, the accessible coat hook is installed at a height of 54" above the floor.

Additional Access: The location, height and operation of the two water fountains in the building comply with the applicable requirements. The building has no public telephones. The fire alarm system has both flashing lights and audible signals.

Town Hall

The Town Hall building is an historic two-story, 4,700 square foot wooden framed building consisting of a 175-seat meeting hall on the second floor and a meeting room, historical museum, toilet rooms and kitchenette on the first floor. The building was constructed in 1844. In 2016, the Town invested \$1.5 million to make the building and site fully accessible and to improve the energy efficiency of the building. The Town Hall is used by the Town and other community groups as a meeting and activity space.

Approach & Entrance: The parking lot is flat and has an asphalt surface. The parking lot has 21 parking spaces with 2 van accessible parking spaces with appropriate signage. The side entrance provides the shortest accessible route into the building from the marked accessible spaces; however, both entrances are fully accessible. The exterior accessible route is a concrete sidewalk that is level from the parking lot to the entrance with no cross slope and no curb cuts and with tactile pads installed. The entrance dimensions, thresholds and door hardware meet the appropriate requirements; however, the door closes too quickly (3.19 seconds) and needs to be adjusted to meet the (> 5 second closing requirement).

Access to Goods & Services: Access to all public spaces are provided along one accessible route and any protrusions into the route meet all appropriate requirements. Immediately upon entering the building through the side entrance is a limited use/limited accessibility (LULA) lift. The dimensions and controls of the LULA all meet applicable requirements in terms of location, raised characters and braille; however,

there are no signs on the door jambs at each floor identifying the floor location. The signage throughout the building meets all applicable requirements. As it relates to interior doors, the dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. Building controls such as light switches meet all applicable requirements. The second-floor meeting room can be setup with wooden folding chairs in any configuration to allow for wheelchair spaces and companion seating.

Toilet Rooms: The building has two toilet rooms, one for men and the other for women. Both toilet rooms are accessible, signage is compliant and the entrance dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. The location, height and operation of the toilets, grab bars, lavatories and soap dispensers all meet the applicable requirements. Both toilet rooms are equipped with motion activated lights.

Additional Access: The location, height and operation of the single water fountain in the building complies with the applicable requirements. The building has no public telephones. The fire alarm system has both flashing lights and audible signals.

Highway Garage – Transfer Station

The Highway Garage is a 3,300 square foot cinderblock building consisting of six garage bays, a small office, storage areas and a toilet room. The single-level building was constructed in 1960 and has not been significantly renovated since its initial construction. The building houses the operations of the Town's Highway Department.

Approach & Entrance: The parking lot is relatively flat and has an asphalt surface. The parking lot has no lines striped for parking spaces so there is no designated accessible space and no signage. The exterior approach to the building has no curb ramps and no other ramps. The building has two exterior entrances, one in the front and one in the rear. The approach to the front entrance from the parking lot is a paved surface without a cross slope. The front entrance does not meet the applicable requirements for door width and threshold height.

Access to Goods & Services: The only public space in the Highway Garage is immediately inside the front entrance in the Office of the Highway Superintendent. Public access is not allowed in the garage bays, storage areas nor the single toilet room as the operation of heavy vehicles and equipment in and around these areas poses a safety risk to the general public. As the building is a single level there are no ramps, elevators, limited use/limited accessibility (LULA) lifts or platform lifts. There is no compliant signage in the building. As it relates to interior doors into the garage bays and the toilet room, the dimensions, thresholds, door hardware and door operation all do not meet the appropriate requirements. Building controls such as light switches meet all applicable requirements.

Toilet Rooms: The building has a single occupancy, gender neutral toilet room for use by employees only, which is not available to the general public. The toilet room is not located on an accessible route, there is no signage and the entrance dimensions, thresholds, door hardware and door operation all do not meet the appropriate requirements. The location, height and operation of the toilet does not comply, grab bars are not installed, and the lavatory does not meet the applicable requirements in terms of height and location.

Additional Access: The building has no water fountain, no public telephones and no fire alarm system.

A note on the Transfer Station: The Transfer Station is located immediately adjacent to the Highway Garage. The recycling and trash hauling containers are located at the top of a short, steep sloped asphalt driveway. There is no flat, level surface which makes it difficult for people with disabilities to safely navigate and use the Transfer Station.

Fire Station

The Fire Station is a 4,000 square concrete/metal building consisting of three garage bays, a small office, storage areas and a toilet room. The single-level building was constructed in 1968 and has not been significantly renovated since initial construction. The building houses the operation of the Town's Fire Department.

Approach & Entrance: The parking lot is relatively flat and has an asphalt surface. The parking lot has no lines striped for parking spaces so there is no designated accessible space and no signage. The exterior approach to the building has no curb ramps and no other ramps. The building has two entrances, both on the side of the building. The approach to one of the side doors is accessible via a paved sidewalk with a slope of less than 1:20. The entrance meets the applicable standards for width and threshold height, but does not meet the applicable standards for door hardware and operation. In addition, the area immediately outside the door is sloped and not level.

Access to Goods & Services: The Fire Station has no interior spaces that are open to the public. Public access is not allowed in the garage bays, storage areas nor the single toilet room as the operation of heavy vehicles and equipment in and around these areas poses a safety risk to the general public. As the building is a single level there are no ramps, elevators, LULA or platforms lifts. There is no compliant signage in the building. As it relates to interior doors into the office and meeting space, the dimensions, thresholds and door operation all meet the appropriate requirements. The door hardware requires twisting to open several of the doors.

Toilet Rooms: The building has a single occupancy, gender neutral toilet room for use by employees only, which is not available to the general public. The toilet room is located on an interior accessible

route. There is no compliant signage. The entrance dimensions, thresholds and door operation all meet the appropriate requirements; however, the door hardware requires twisting. The location, height and operation of the toilet does not comply, grab bars are not installed, and the lavatory does not meet the applicable requirements.

Additional Access: The building has no water fountain nor public telephones. The fire alarm system has both flashing lights and audible signals.

Police Station

The Police Station is a 2,200 square foot cinderblock building consisting of a small lobby, several offices, a booking room, storage room, toilet room, kitchenette and conference room. The building also has a small attached garage. The single-level building was constructed in 1976 as a community youth center and was renovated in 2009. The building houses the operations of the Town's Police Department.

Approach & Entrance: The parking lot is flat and has an asphalt surface. The parking lot has no lines striped for parking spaces, but there is an accessible parking sign. There is one exterior accessible approach to the front entrance without the use of a curb ramp or ramp. The front entrance is accessible, but is not marked as such. Inaccessible entrances are also not appropriately marked. The front door width, threshold, hardware and operation all meet the applicable requirements.

Access to Goods & Services: The only public space in the Police Department is immediately inside the front entrance in the front lobby, which is fully accessible. As the building is a single level there are no ramps, elevators, limited use/limited accessibility (LULA) lifts or platforms lifts. The building includes some signage designating permanent spaces; however, the signage is not mounted in the appropriate locations. As it relates to interior doors, the dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. The location and operation of the building's switches and controls meet the applicable requirements.

Toilet Rooms: The building has a single occupancy, gender neutral toilet room for use by employees only, which is not available to the general public. The toilet room is located on an accessible route. The signage is not mounted in the appropriate location. The entrance dimensions, thresholds, door hardware and door operation meet the appropriate requirements. The location, height and operation of the toilet, grab bars and lavatory all meet the applicable requirements, except that the side wall grab bar does not extend at least 54" from the rear wall.

Additional Access: The building has no water fountains and no public telephones. The fire alarm system has both flashing lights and audible signals.

Whately Elementary School

The Whately Elementary School is a single level 29,500 wood-framed brick building consisting of offices, classrooms, a cafeteria/kitchen, storage areas, a library, toilet rooms and a gymnasium. The building was constructed in 1990. The building was constructed in compliance with the accessibility requirements in effect at the time. There have been no significant renovations or upgrades since the initial construction of the building. The building houses the Town's only elementary school.

Approach & Entrance: The parking lot is flat and has an asphalt surface. The accessible exterior approach begins in the level parking lot with 40 parking spaces and 2 marked accessible spaces; however, neither of the spaces qualify as van accessible. The existing handicapped parking signs are installed too low. The curb ramp is too steep and has no flares. The entrance dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. Inaccessible entrances are not appropriately marked. There is a curb cut in front of the main entrance; however, there is no safe accessible path from the accessible parking spaces to the curb cut.

Access to Goods & Services: Access to all public spaces are provided along one accessible route and any protrusions into the route meet all appropriate requirements. As the building is a single level there are no ramps, elevators, limited use/limited access (LULA) lifts or platform lifts. Signage in the building does not meet the applicable requirements. The signage does not have raised characters, does not have braille and is not installed in the required locations. As it relates to interior doors, the dimensions, thresholds, door hardware and door operation all meet the appropriate requirements; however, some doors have locks that require forceful twisting to operate. Building controls such as light switches meet all applicable requirements. The "seating pit" in the school library is not accessible. The cafeteria seating and service areas meet all applicable requirements except that the tray slide is located too high above the floor.

Toilet Rooms: Toilet rooms for both men and women are located on accessible routes. There is a sign identifying these toilet rooms as accessible; however, the signage does not have raised characters, no braille nor is it installed in the appropriate location. No signs exist at the other toilet rooms giving directions to the accessible ones. The entrance dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. The mirror installed over the sink is too high. The location, height and operation of the toilets, lavatories and soap dispensers all meet the applicable requirements. In the women's accessible stall there is no rear grab bar installed and the flush handle is on the closed side of the toilet. In the men's accessible stall both the rear and side grab bars have been installed and the flush handle is on the open side of the toilet.

Additional Access: The location, height and operation of the water fountains in the building comply with the applicable requirements. The building has no public telephones. The fire alarm system has both flashing lights and audible signals.

A note on the Playground: There is no accessible exterior route from the building to the playground area. The route from the nearest side door of the building to the playground areas includes a steep paved slope. The surface of the play area is mulch. No accessible routes exist within the playground area to reach different ground level or elevated play components. There are no accessible ground level nor elevated play components.

S. White Dickinson Library

The S. White Dickinson Library is an historic two-story, 4,000 square foot brick building consisting of book stacks, offices, computer space, storage space, conference room, kitchenette and toilet rooms. The building was constructed in 1950 and has not been significantly renovated since that time.

Approach & Entrance: The parking lot is relatively flat and has an asphalt surface. The parking lot has no lines striped for parking spaces, but there is a handicapped parking sign that needs to be installed at a lower height. The approach to the front entrance includes a flat concrete sidewalk and wooden ramp that is firm and stable, but it does not meet the applicable requirements as to the dimensions of the landings and handrails. The front door width, threshold, hardware and operation all meet the applicable requirements. The front entrance is accessible, but is not marked as such. Inaccessible entrances are also not appropriately marked. The front door has a push button automatic opener installed to assist patrons with opening the door.

Access to Goods & Services: Once inside the building only the top floor of the building is accessible. The lower level of the building is only accessed by stairs. The building has no ramps, elevators, limited use/limited access (LULA) lifts or platform lifts. There is no signage in the building that meets the applicable requirements. As it relates to interior doors the dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. The aisles between the book stacks are only 32" wide and do not meet the applicable requirements. The location and operation of the building's switches and controls meet the applicable requirements for buildings constructed prior to 2012. The computer tables do not meet the applicable requirements related to knee space below the tables.

Toilet Rooms: The toilet rooms are not located along an accessible route as there is no accessible route to the lower level of the building. The building has two toilet rooms, one for men and the other for women. Signage does not meet the applicable requirements. The entrance dimensions, thresholds, door hardware and door operation all do not meet the appropriate requirements. The location, height and

operation of the toilets, grab bars, mirrors lavatories and soap dispensers all do not meet the applicable requirements.

Additional Access: The building has no water fountains, no public telephones and no fire alarm system.

Pumphouse & Office

The Water Department pumphouse is small 500 square foot cinderblock building consisting of a small office, storage area and water treatment/filtration plant. The building was constructed in 1975 and has not been significantly renovated since that time. No portion of the pumphouse building is open to the public and a gate across the driveway blocks access

Approach & Entrance: The parking lot is relatively flat and has a sandy gravelly surface. The parking lot has no lines striped for parking spaces so there is no designated accessible space and no signage. The building has no curb ramps and no other ramps. The approach to the entrance into the office is at the same level as the parking lot; however, the threshold is too high. Otherwise the office entrance dimensions, thresholds and door hardware meet the appropriate requirements;

Access to Goods & Services: There is no public space in the building. As the building is a single level there are no ramps, elevators, limited use/limited accessibility (LULA) lifts or platforms lifts. There is no compliant signage in the building. As it relates to interior doors into the treatment/filtration plant the dimensions, thresholds, door hardware and door operation all meet the appropriate requirements. Building controls such as light switches meet all applicable requirements.

Toilet Rooms: The building has no toilet rooms.

Additional Access: The building has no water fountain and no public telephones. The building has no fire alarm system.

Herlihy Park

Herlihy Park is a recreational park consisting of athletic fields (baseball and soccer), concession facilities and toilet rooms.

Approach & Entrance: The parking lot is relatively flat with a hard-packed sandy gravel surface. The parking lot has no lines striped for parking spaces so there is no designated accessible space and no signage.

Athletic Fields: The parking lot is level with the field surfaces so there are no curb ramps or other ramps. There are no designated walkways to the different fields and the surface is grass, which in wet

conditions may make it difficult to navigate. At the fields themselves there are routes to both sides; however, the surface is either grass or dirt which in certain weather conditions may make it difficult.

Concessions: There are no designated walkways to the concession service area and the surface is grass, which in wet conditions may make it difficult to navigate. The concession service area is not level with the field and there is a step-up required to walk onto the cement floor.

Toilet Rooms: There are no designated walkways to the toilet rooms and the surface is grass, which in wet conditions may make it difficult to navigate. The toilet rooms are not level with the playing field and there is a step-up required to walk onto the cement floor.

Access to Goods & Services:

Athletic Fields: There is room for wheelchairs where permanent player seating exists, except for in the two wooden dugouts on the northernmost field. There is also a step up required to enter into these dugouts.

Concessions: The height of the service counter is 37.5" which does not meet the requirements of the ADA

Toilet Rooms: The toilet rooms are not accessible and compliant signage has not been installed. The entrance width and threshold meet applicable requirements. The soap dispensers, paper towel dispensers and toilet all meet applicable requirements. The toilet room has no grab bars installed and the pipes below the sink are not properly insulated.

Center School

(Note: The Center School is permanently closed)

The Center School is a 4,000 square foot split-level brick building consisting of classrooms, toilet rooms and storage areas. The two-story building was constructed in 1975 and is currently vacant.

Approach & Entrance: The parking lot is relatively flat and has a broken asphalt surface. There is no accessible exterior approach to the building. The approach to the front entrance and the side entrance involves the use of stairs.

Access to Goods & Services: There is no public space in the building as it is no longer used by the Town. There are no ramps, elevators, limited use/limited access (LULA) lifts or platform lifts to the lower level – only a narrow staircase. There is no compliant signage in the building. As it relates to interior doors the dimensions, thresholds and operation of most doors are compliant, but the door hardware is not compliant as many of the interior doors require forceful twisting to open. Building controls such as light switches do not meet the applicable requirements.

Toilet Rooms: The toilet rooms are not accessible and compliant signage has not been installed. The entrance width and thresholds do not meet applicable requirements. The soap dispensers, paper towel dispensers and toilet do not meet applicable requirements. The toilet room has no grab bars installed and the pipes below the sink are not properly insulated.

Additional Access: The building has several non-compliant water fountains and no public telephones. There is no fire alarm system in the building

A note on the Playground: There is no accessible exterior route from the building to the playground area. There is no accessible route between the play components and there are no accessible play components installed.

6. Key Findings & Recommendations

The Town continues to make progress towards meeting its obligations under the ADA to ensure that people with disabilities have an equal opportunity to participate in and benefit from the Town's services, programs and activities. The key findings and recommendations from the self-evaluation are provided below:

Policies & Practices in Programs Services and Activities & Effective Communication

Finding # 1: Town employees and board, commission and committee chairpersons have a good general understanding of the obligations required of them as representatives of the Town; however; most people do not know what a reasonable accommodation would be and how to obtain or make that reasonable accommodation

Recommendation:

- (1) *The Town should consider holding a training focused on ADA requirements open to all Town employees and board, commission and committee members.*
- (2) *The Town should consider putting together a guidebook for Town employees, boards, commissions and committees that lists where they can obtain information about making reasonable accommodations which would include how to obtain auxiliary aids and for assistance with preparing alternative documents.*

Finding # 2: The Town does not communicate with contractors about the contractor's obligations under the ADA when working on behalf of the Town, nor require assurance, nor follow-up with contractors.

Recommendation:

- (1) *The Town should consider including standard language in all its procurement documents and contracts to remind contractors of their ADA obligations.*
- (2) *The Town should consider adopting a requirement that all contractors working on behalf of the Town sign a standard written assurance of compliance with the ADA.*
- (3) *The Town should follow-up with contractors on a regular basis to monitor compliance.*

Finding # 3: Town employees, and board, commission and committee chairperson do not know how to use alternative telecommunication services.

Recommendation

- (1) *The Town should consider holding a training open to all Town employees, boards, committees and commissions that is focused on how to use alternative telecommunication services such as VRS and TRS.*

Website Accessibility

Finding 1: The Town is not familiar with the level of accessibility of its website (www.whately.org).

Recommendation

- (1) The Town should consider working with its website design and hosting company to conduct a detailed assessment of the Town's website's compliance with the WCAG 2.1 standards.*
- (2) The Town should consider adopting a policy that the Town's webpage will be accessible to meet the WCAG standards and then create and implement a plan for achieving compliance with those standards.*

Buildings & Facilities

The findings and recommendations for the Town's buildings and facilities discussed below are general in nature with more specific details provided in the Transition Plan (see Attachment A).

Finding # 1: The Town owned buildings and facilities where the Town provides most of its administrative services (Town Offices and Town Hall) are very accessible and nearly 100% compliant with ADA requirements.

Finding # 2: The Town's two public safety buildings (Police Station and Fire Station), Highway Garage, and the Pumphouse/Office while not open to the public (except for the Police Station lobby and Highway Superintendent's office) are not fully ADA compliant, but as single-level buildings achieving compliance shouldn't be a significant financial burden on the Town.

Finding # 3: The Town's library is open to the public and is not ADA compliant. As a two-story building there is no accessible interior route to the lower level of the building where the toilet rooms are located. This project should be a priority of the Town to address as this barrier significantly impacts the services that the library can provide to the public, especially those with a disability.

Finding # 4: The elementary school is mostly accessible and as a single-level building achieving compliance shouldn't be a significant financial burden; however, the playground area is not accessible. This project should also be a priority of the Town to address as this barrier could significantly impact the ability of students to access the playground area in a meaningful way.

Finding # 5: The facilities and amenities at Herlihy Park are not entirely ADA compliant. The installation of an exterior accessible route and modifications to the concession stands, player seating areas and toilet rooms would bring the facilities into compliance.

Finding # 6: The Center School, currently vacant and not used by the Town, is the Town's least accessible building and will be the costliest building to renovate and make fully accessible.

Recommendation:

- (1) As part of the Town's continuing capital improvement planning process the Town should consider programming accessibility improvements each fiscal year to ensure that the improvements are made while allowing the costs of the improvements to be spread out over a number of years.*
- (2) The Town should consider the future of the Center School and decide whether it makes sense to invest a significant amount of money into the building to make it fully accessible.*



Town of Whately - Transition Plan

This transition plan has been prepared to assist the Town in planning for the modifications necessary to make its buildings and facilities accessible to the public and employees with disabilities.

Information about the transition plan's headings and responses is provided below.

Location: means the location of the building element

Issue: identifies the area of non-compliance

Recommendation: suggests a proposed modification to the building or facility to address the area of non-compliance

Priority: identifies the order in which solutions should be implemented as follows:

Low = the area of non-compliance does not deny a person the opportunity to participate in a program, service or activity provided by the Town and the area of non-compliance is not a safety concern.

Medium = the area of non-compliance does not deny a person the opportunity to participate in a program, service or activity provided by the Town because the Town is implementing a programmatic solution and the area of non-compliance is a not a safety concern.

High = the area of non-compliance is a safety concern or the non-compliance denies a person the opportunity to participate in a program, service or activity provided by the Town and there is no reasonable programmatic alternative.

Timeframe: means the amount of time it will reasonably take to complete the proposed solution

Cost: planning level cost estimate as follows:

Minimal = less than \$1,000

Low = \$1,000 to less than \$5,000

Medium = \$5,000 to less than \$50,000

High = greater than \$50,000

Programmatic Alternative: identifies whether a programmatic solution is available to address the issue in lieu of or until modifications can be made to the building or facility



Town of Whately - Transition Plan

Facility Name: Town Offices

Address: 4 Sandy Lane

Responsible Department: Selectboard

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Parking Lot	Accessible parking sign is installed too low	Reinstall sign at appropriate height	Low	0 to 3	Minimal	
Parking Lot	No van accessible signage	Replace signs at van accessible spaces with compliant van accessible parking signs	Low	3 to 6	Minimal	
Exterior Front Entrances	No compliant signage at accessible entrance indicating that the entrance is accessible	Install compliant entrance sign	Low	3 to 6	Minimal	
Exterior Side Entrances	No directory signage at inaccessible entrances	Install compliant directory signs	Low	3 to 6	Minimal	
Access to Goods & Services						
Interior Entrances	No compliant signage at permanent interior spaces	Install compliant room signs	Low	3 to 6	Minimal	
Town Clerk/Treasurer Collector Service Counter	Service window and counter is too high	Lower the height of the service window and counter	Medium	9 to 12	Low	Town employees to meet members of the public in the hallway to transact business at a lower table.
Toilet Rooms						
Other						



Town of Whately - Transition Plan

Facility Name: Town Hall

Address: 194 Chestnut Plain Road

Responsible Department: Selectboard

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Exterior Side Entrance	Door closes quicker than five seconds	Adjust door closing settings	High	0 to 3	Minimal	
Access to Goods & Services						
Limited Use/Limited Access Lift	No signs on the door jambs at each floor identifying the floor locations	Install compliant signs at each floor	Low	3 to 6	Minimal	
Toilet Rooms						
Other						



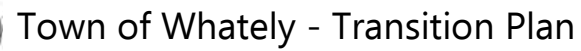
Town of Whately - Transition Plan

Facility Name: Highway Garage & Transfer Station

Address: 71 Christian Lane

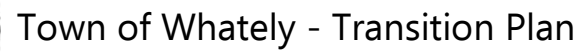
Responsible Department: Highway Department

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Parking Lot	No accessible spaces marked	Paint lines on the asphalt parking lot to designate accessible spaces and paint accessible route	Low	3 to 6	Minimal	
Parking Lot	No accessible signage	Install compliant signs at the accessible spaces	Low	3 to 6	Minimal	
Exterior Front Entrance	No accessible front entrance	Install compliant door and signage	Low	9 to 12	Minimal	
Access to Goods & Services						
Interior Entrances	No compliant signage at permanent interior spaces	Install appropriate signs	Low	3 to 6	Minimal	
Toilet Rooms						
Toilet Room	Toilet room is not compliant	Install compliant toilet room to include (toilet, lavatory, grab bars, dispensers, etc.)	High	12 to 24	Medium	
Other						
Transfer Station	Asphalt driveway to trash and recycling containers is too steep	Excavate the asphalt driveway and replace with a level surface or install steps and compliant ramp to containers if needed	Medium	12 to 24	Medium	Transfer station attendants to provide services to those needing assistance



Responsible Department: Fire Department

[illegible]



Responsible Department: Police Department

[illegible]



Town of Whately - Transition Plan

Facility Name: Whately Elementary School

Address: 273 Long Plain Road

Responsible Department: School Committee

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Parking Lot	No van accessible spaces	Paint lines on the asphalt parking lot to designate van accessible spaces	Low	3 to 6	Minimal	
Parking Lot	Existing accessible parking signs are too low	Reinstall signage at correct height	Low	0 to 3	Minimal	
Sidewalk	Nearest sidewalk ramp is too steep and has no flares	Install compliant curb ramp	High	6 to 9	Low	
Exterior Front Entrances	No signage at accessible entrance indicating that the entrance is accessible,	Install compliant signs	Low	3 to 6	Minimal	
Exterior Side Entrances	No directory signage at inaccessible entrances	Install compliant signs	Low	3 to 6	Minimal	
Access to Goods & Services						
Interior Entrances	Signage to permanent spaces is not compliant (no braille, no raised characters)	Install compliant signage for all permanent spaces	Low	3 to 6	Low	Seat students in other seating areas
Library Reading Pit	Carpeted below grade seating area is not accessible	Install accessible seating area in the reading area	High	12 to 24	Low	
Interior Entrances	Some door locks require twisting	Install compliant locks	Medium	3 to 6	Low	
Cafeteria	Tray slide counter is too high	Lower tray slide counter to compliant height	Low	0 to 3	Minimal	
Toilet Rooms						
Interior Entrances	Signage is not compliant and not located in the correct location	Re-install compliant signage in the appropriate locations	Low	3 to 6	Minimal	
Toilet Rooms	No directory signage at inaccessible toilet rooms	Install directory signs to compliant toilets	Low	3 to 6	Minimal	
Women's Accessible Stall	No rear grab bar	Install rear grab bar	High	3 to 6	Minimal	
Women's Accessible Stall	Flush handle is located on the closed side of the toilet	Install flush handle on the open side of the toilet	Low	3 to 6	Minimal	
Mirrors	Mirrors installed over sinks are too high	Re-install mirrors at compliant height	Low	0 to 3	Minimal	
Other						
Playground	No compliant exterior route to the playground	Install accessible exterior route to the playground and between play components	High	12 to 24	Medium	Provide alternative play space and activities
Playground	Insufficient number of accessible play components	Install and maintain the required type and amount of accessible play components	High	12 to 24	Medium	Provide alternative play space and activities



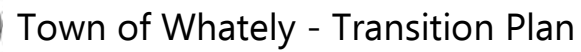
Town of Whately - Transition Plan

Facility Name: S. White Dickinson Library

Address: 202 Chestnut Plain Road

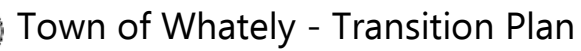
Responsible Department: Library Commissioners

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Parking Lot	No accessible spaces	Paint lines on the asphalt parking lot to designate accessible spaces and paint accessible route	Low	3 to 6	Minimal	
Wooden Ramp	Ramp is not wide enough	Modify ramp to include compliant landings, handrails and of a proper width.	High	12 to 24	Medium	
Exterior Front Entrances	No signage at accessible entrance indicating that the entrance is accessible,	Install compliant signs	Low	3 to 6	Minimal	
Exterior Side Entrances	No directory signage at inaccessible entrances	Install compliant signs	Low	3 to 6	Minimal	
Access to Goods & Services						
1st Floor	Only route to the first floor includes stairs	Install Limited Use/Limited Access lift	High	9 to 12	High	
Interior Entrances	No compliant signage at permanent interior spaces	Install compliant signs	Medium	3 to 6	Minimal	
Book Stacks	Width between book stacks is too narrow	Expand distance between book stacks to comply	Medium	9 to 12	Medium	Library staff to provide assistance in retrieving books in the non-compliant book stacks
Computer Tables	Knee room beneath tables is non-compliant	Raise height of computer tables to compliant height	Low	0 to 3	Minimal	
Toilet Rooms						
Toilet Room	Toilet room is not compliant	Install compliant toilet room to include (toilet, lavatory, grab bars, dispensers, etc.)	High	9 to 12	Medium	
Other						



Responsible Department: Water Commissioners

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Parking Lot	Parking and exterior route is not a firm, stable surface	Install asphalt parking space for accessible space and route to the entrance	Medium	9 to 12	Low	
Parking Lot	No accessible spaces	Paint lines on the asphalt parking lot to designate accessible spaces and paint accessible route	Low	9 to 12	Minimal	
Parking Lot	No accessible signage	Install compliant signs at the accessible space	Low	3 to 6	Minimal	
Exterior Front Entrance	No accessible front entrance	Install compliant door and appropriate signage	Medium	9 to 12	Minimal	
Access to Goods & Services						
Interior Entrances	No compliant signage at permanent interior spaces	Install compliant signs	Low	3 to 6	Minimal	
Toilet Rooms						
Other						



Responsible Department: Recreation Commissioners

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance						
Parking Lot	Parking and exterior route is not a firm, stable surface	Install asphalt parking space for accessible space and route to the entrance	High	9 to 12	Low	
Parking Lot	No accessible spaces	Paint lines on the asphalt parking lot to designate accessible spaces and paint accessible route	Low	9 to 12	Minimal	
Parking Lot	No accessible signage	Install appropriate signs at the accessible spaces	Low	9 to 12	Minimal	
Access to Goods & Services						
Walkways	No designated walkways to toilet rooms, concessions or fields - only grass	Install firm and stable surface to create accessible routes to the park amenities and play seating (dugouts)	High	9 to 12	High	
Dugouts	Dugouts on the northerly field do not have accessible player seating	Create a space for accessible player seating	Medium	6 to 9	Low	Provide temporary compliant ramp to access dugouts
Toilet Rooms						
Toilet Room	Toilet room is not compliant	Install compliant toilet room to include (toilet, lavatory, grab bars, dispensers, etc.)	High	12 to 24	Medium	
Other						



Town of Whately - Transition Plan

Facility Name: Center School

Address: 218 Chestnut Plain Road

Responsible Department: Selectboard

<u>Location</u>	<u>Issue</u>	<u>Recommendation</u>	<u>Priority</u>	<u>Timeframe</u> (months)	<u>Cost</u>	<u>Program Alternative</u>
Approach & Entrance			The Center School is permanently closed and the Town has no plans to reopen the building.			
Parking Lot	No accessible spaces	Paint lines on the asphalt parking lot to designate accessible spaces and paint accessible route				
Exterior Front Entrance	No accessible front entrance	Install compliant door and appropriate signage				
Exterior Front Entrance	Main entrance is between floors with stairs up and down	Install Limited Use/Limited Access lift				
Access to Goods & Services						
Interior Entrances	No compliant signage for permanent interior spaces.	Install compliant signage in the appropriate locations				
Interior Entrances	Several rooms include a step up to enter the room	Install compliant thresholds				
Building Controls	Not all building switches and controls are at compliant heights	Install building switches and controls at compliant heights				
Toilet Rooms						
Toilet Room	Toilet room is not compliant	Install compliant toilet room to include (toilet, lavatory, grab bars, dispensers, etc.)				
Other						
Playground	No compliant exterior route to the playground	Install accessible exterior route to the playground and between play components				
Playground	Insufficient number of accessible play components	Install accessible play components				

APPENDIX B

2021 Open Space and Recreation Survey and Results



The Town of Whately wants to know what you think!

Town of Whately is working with the Franklin Regional Council of Governments to update Whately's Open Space and Recreation Plan—a tool through which Whately plans for the future of its conservation and recreation resources. Once approved by the state, the plan also makes the community eligible for Department of Conservation Services grant funds for conservation and recreation projects for up to seven years.

Please take 10 minutes to fill out the survey below or online to help make sure the plan's recommendations reflect the needs of the community. Your response is an essential part of the Town's ongoing work to identify, prioritize, and develop projects that 1) meet the recreation needs of its residents, 2) protect our natural, scenic, historic, and recreation resources, 3) plan future land use, and 4) help make our community more resilient to a changing climate. Your participation is important!

Deadline: Wednesday, March 24th

How to complete the survey:

Online: www.surveymonkey.com/r/WhatelyOSRP

Return by mail: Whately Town Hall, 4 Sandy Lane, South Deerfield MA 01373

Drop off: Whately Town Offices or Dickinson Memorial Library

Check the Town website for details about the Open Space and Recreation Community Forum coming up in May.

Open Space Committee meetings are open to the public. For more information or to join a meeting, please contact Jonathan Edwards at j.edwards@whately.org or Kimberly Noake MacPhee at kmacphee@frcog.org.

1. Which of the following recreational activities would you like the opportunity to do more of in Whately?

- | | |
|---|--|
| <input type="checkbox"/> Baseball and softball | <input type="checkbox"/> Mountain biking |
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Nature observation (birdwatching, botanizing) |
| <input type="checkbox"/> Boating (canoeing, kayaking, motor boating) | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Camping | <input type="checkbox"/> Road biking (cycling) |
| <input type="checkbox"/> Cross-country skiing and snowshoeing | <input type="checkbox"/> Road walking or running |
| <input type="checkbox"/> Frisbee golf | <input type="checkbox"/> Skateboarding |
| <input type="checkbox"/> Fishing | <input type="checkbox"/> Sledding |
| <input type="checkbox"/> Field team sports (football, soccer, lacrosse, ultimate frisbee) | <input type="checkbox"/> Snowmobiling |
| <input type="checkbox"/> Gardening | <input type="checkbox"/> Swimming |
| <input type="checkbox"/> Hiking | <input type="checkbox"/> Tennis |
| <input type="checkbox"/> Horseback riding | <input type="checkbox"/> Trail walking or running |
| <input type="checkbox"/> Hunting | Other: |
| <input type="checkbox"/> Ice skating | |

2. Tell us about up to three recreation programs (walks, talks, seasonal events, celebrations, etc.) you would like to see provided in Whately. Please specify the target age group.

3. How often do you use the following open space and recreation resources per year?

	10+ times/year	1–9 times/year	Never	I don't know about this resource
Herlihy Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tri-Town Beach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playground at Whately Elementary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ballfield at Whately Elementary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gym at Whately Elementary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tot Lot at Center School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field behind library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skating rink at firehouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Great Swamp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mass Audubon Graves Sanctuary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whately Center Woods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smith College's McLeish Field Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whately Oaks CT River Paddlers Tentsite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whately Wildlife Management Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mount Esther Wildlife Management Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connecticut River	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify):

4. How do you perceive the quality of the following open space and recreation resources? Leave blank if no opinion.

	Excellent	Okay	Poor
Herlihy Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tri-Town Beach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playground at Whately Elementary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ballfield at Whately Elementary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gym at Whately Elementary School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tot Lot at Center School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field behind library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skating rink at firehouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Great Swamp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mass Audubon Graves Sanctuary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whately Center Woods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smith College's McLeish Field Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whately Oaks CT River Paddlers Tentsite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whately Wildlife Management Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mount Esther Wildlife Management Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connecticut River	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify):

5. Do you choose not to use any of the resources listed in Questions 3 and 4 because of poor quality or lack of access? Please identify the place and explain.

6. Imagine Whately has received \$1 million from an anonymous donor that can be spent only on open space projects. Choose the top three categories you recommend the Town prioritize when allocating this money.

- ☐ Protecting farmland
- ☐ Protecting drinking water supply
- ☐ Improving access to the Connecticut River
- ☐ Protecting wildlife habitat
- ☐ Protecting scenic views
- ☐ Protecting floodplains, lakes, streams, ponds and wetlands
- ☐ Improving the trail network
- ☐ Protecting forests

Other (please specify):

7. Over the past few years, the Town of Whately has helped to preserve agricultural land, updated Herlihy Park, and established the Whately Center Woods public conservation and recreation area. What open space and recreation project do you think the Town should prioritize next? Feel free to explain why.

8. The Open Space Committee is exploring developing a multi-purpose trail network with connections to trails in adjacent towns. Are there particular routes or destination points that you would like to see connected by a trail?

9. Which of the following activities would you like to be able to do on multi-use trails? Select all that apply.

- ☐ Biking on flat, accessible trails
- ☐ Cross-country skiing
- ☐ Hiking
- ☐ Horseback riding
- ☐ Mountain biking
- ☐ Running on flat, accessible paths
- ☐ Running on trails
- ☐ Snowshoeing
- ☐ Walking on flat, accessible paths

10. How do you prefer to get your information about open space and recreation matters (or other Town information)? Select all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Town website | <input type="checkbox"/> Public events (speakers, forums) |
| <input type="checkbox"/> Town Facebook page (pending) | <input type="checkbox"/> Paper handouts available at school, Town Hall, Town Meeting, etc. |
| <input type="checkbox"/> <i>The Scoop</i> | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Other social media (Twitter, Instagram) | |
| <input type="checkbox"/> Newspaper | |
| <input type="checkbox"/> Word of mouth | <input type="checkbox"/> None of the above |
| <input type="checkbox"/> Public committee meetings | |

11. What is your age?

- ☐ Under 18 years old ☐ 45 to 64 years old
☐ 18 to 24 years old ☐ 65+ years old
☐ 25 to 44 years old

12. How many years have you lived in Whately?

- ☐ Less than 5 years
☐ 5 to 15 years
☐ 15+ years

13. How many people in your household in each age group, including yourself?

_____ Under 18 years old _____ 45 to 64 years old
 _____ 18 to 24 years old _____ 65+ years old
 _____ 25 to 44 years old

14. Do you own property in Whately?

- ☐ Yes ☐ No

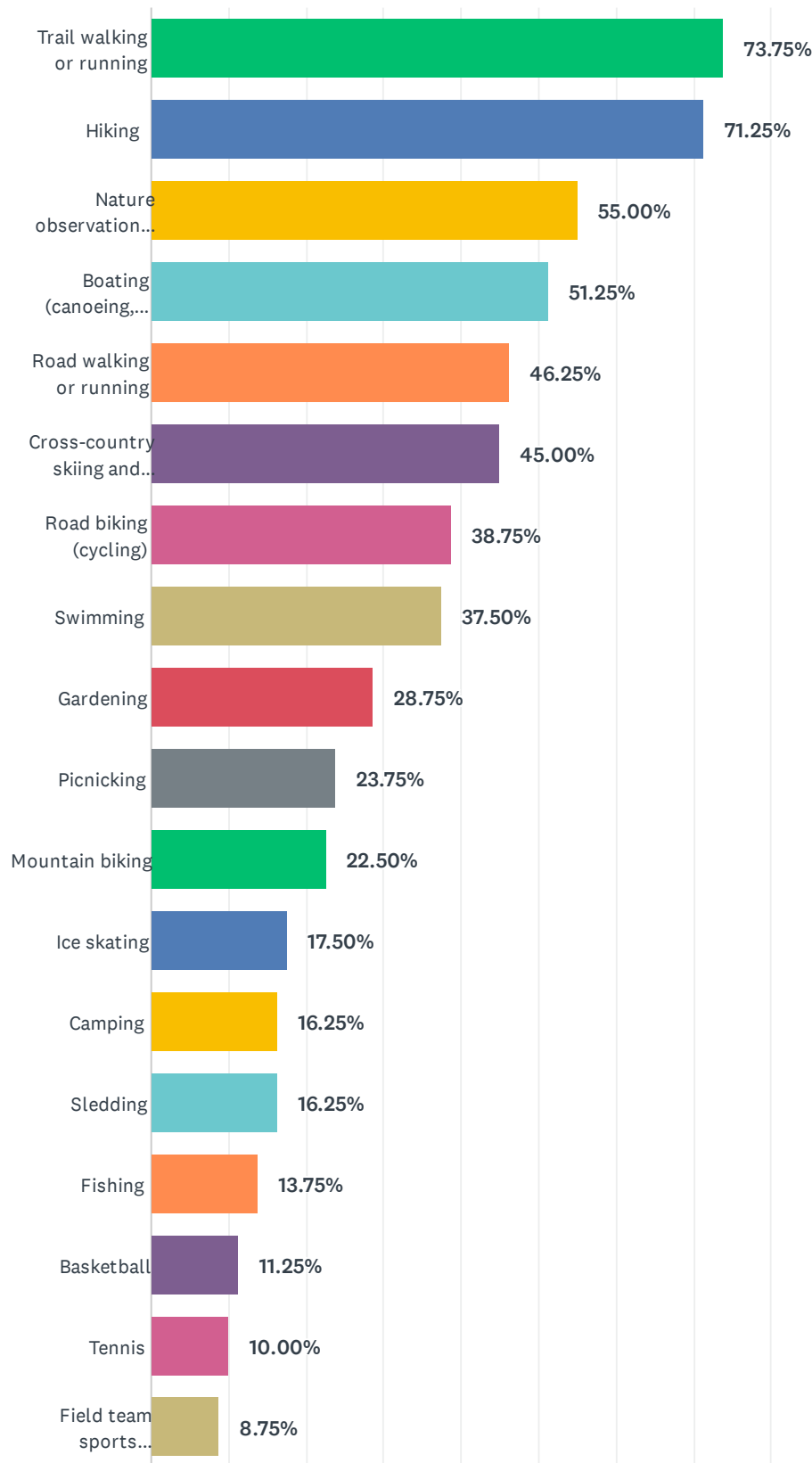
15. If yes, How many acres do you own in Whately?

- ☐ Less than 2 acres
☐ 2 to 25 acres
☐ Greater than 25+ acres

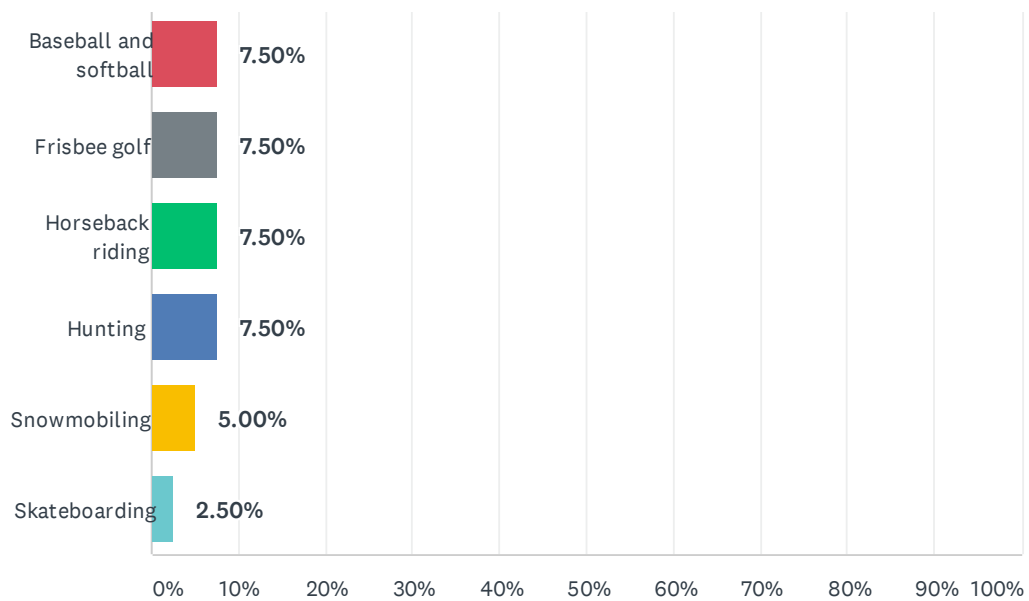


Q1 Which of the following recreation activities would you like the opportunity to do more of in Whately? Check all that apply.

Answered: 80 Skipped: 2



2021 Whately Open Space and Recreation SURVEY



2021 Whately Open Space and Recreation SURVEY

ANSWER CHOICES	RESPONSES	
Trail walking or running	73.75%	59
Hiking	71.25%	57
Nature observation (birdwatching, botanizing)	55.00%	44
Boating (canoeing, kayaking, motor boating)	51.25%	41
Road walking or running	46.25%	37
Cross-country skiing and snowshoeing	45.00%	36
Road biking (cycling)	38.75%	31
Swimming	37.50%	30
Gardening	28.75%	23
Picnicking	23.75%	19
Mountain biking	22.50%	18
Ice skating	17.50%	14
Camping	16.25%	13
Sledding	16.25%	13
Fishing	13.75%	11
Basketball	11.25%	9
Tennis	10.00%	8
Field team sports (football, soccer, lacrosse, ultimate frisbee)	8.75%	7
Baseball and softball	7.50%	6
Frisbee golf	7.50%	6
Horseback riding	7.50%	6
Hunting	7.50%	6
Snowmobiling	5.00%	4
Skateboarding	2.50%	2
Total Respondents: 80		

#	OTHER (PLEASE SPECIFY):	DATE
1	dog park; town swimming pool	3/30/2021 10:15 AM
2	Too old for these activities	3/30/2021 9:44 AM
3	ATV/UTV trails	3/23/2021 7:25 PM
4	Gravel cycling on dirt roads / trails - create a resource guide	3/22/2021 9:57 AM
5	gravel cycling aka dirt road cycling This is the fastest growing segment in cycling and places like Whately Glen are totally amazing for it!	3/19/2021 8:44 AM
6	River walking	3/16/2021 9:33 PM

Q2 Tell us about up to three recreation programs (walks, talks, seasonal events, celebrations, etc.) you would like to see provided in Whately. Please specify the target age group.

Answered: 48 Skipped: 34

ANSWER CHOICES	RESPONSES
1.	100.00% 48
2.	85.42% 41
3.	58.33% 28

#	1.	DATE
1	wilderness education and nature skills building for youth and adults	3/30/2021 11:27 AM
2	Vegetable gardening workshops	3/30/2021 11:06 AM
3	July 4th fireworks	3/30/2021 11:00 AM
4	annual BBQ	3/30/2021 10:48 AM
5	basketball court	3/30/2021 10:32 AM
6	What I would most like to see is the annual road clean-up (April?). There is so much trash, beer cans, nips, etc. on many roads, in the irrigation ditches along the streets, etc. It definitely taints the "open spaces"	3/30/2021 10:25 AM
7	Movies at the library -- all ages	3/30/2021 10:20 AM
8	Intro to gardening (adult)	3/30/2021 10:15 AM
9	Toddler play groups	3/30/2021 10:01 AM
10	Publish a schedule for youth sports games, in case seniors would like to watch (for not computer folks)	3/30/2021 9:50 AM
11	Tree lighting at library (seniors)	3/30/2021 9:44 AM
12	road biking -- all ages	3/30/2021 9:39 AM
13	history of the area	3/30/2021 9:25 AM
14	Summer seasonal event--at the Tri Town Beach- with water sports competitions for kids	3/25/2021 9:30 AM
15	Trail walking	3/24/2021 1:01 PM
16	Natural History	3/24/2021 9:04 AM
17	Harvest festival in the fall - all ages	3/24/2021 8:50 AM
18	More free outdoor music	3/23/2021 9:25 PM
19	Walking tours of Whately to learn about the history - not just architecture, but where former settlements were.	3/23/2021 9:23 PM
20	Organized ATV/UTV ride	3/23/2021 7:25 PM
21	Walks for seniors	3/23/2021 5:11 PM
22	Well marked and cleared trails through diverse habitats with good access to reasonable parking (all ages)	3/23/2021 8:49 AM
23	Guided woodland walk; teens-adults	3/23/2021 8:47 AM

2021 Whately Open Space and Recreation SURVEY

24	guided nature hikes - all age groups	3/22/2021 9:57 AM
25	I love the idea of programs that educate on whately's history	3/19/2021 8:44 AM
26	Seasonal Events	3/18/2021 8:23 PM
27	gardening talks (any age)	3/17/2021 11:17 AM
28	Nature walks aound/in Whately conservation areas..	3/16/2021 9:33 PM
29	Outdoor concerts/movies teen-adult	3/16/2021 1:54 PM
30	The skating rink is nice! Please keep that going.	3/16/2021 5:16 AM
31	Volleyball	3/15/2021 6:14 PM
32	Maybe a basketball court at Herlihy	3/15/2021 4:00 PM
33	walking area - age 18+	3/14/2021 12:40 PM
34	Town Party	3/13/2021 8:55 AM
35	canoeing on the Connecticut river (adults, young adults)	3/13/2021 12:18 AM
36	Community invasive plant information and removal days (teen-adult)	3/12/2021 9:36 PM
37	Birding-all ages	3/12/2021 8:03 PM
38	Guided Hikes (any age)	3/12/2021 3:51 PM
39	bird watching trails and talks	3/12/2021 3:42 PM
40	Guided hikes. All ages	3/12/2021 1:28 PM
41	Senior hiking	3/12/2021 10:45 AM
42	Native tree identification, adults	3/12/2021 10:41 AM
43	Natural history talks/walks (adults)	3/12/2021 10:38 AM
44	Earth day--all ages	3/12/2021 10:09 AM
45	Guided bird walks on protected land and forest (all ages)	3/12/2021 8:56 AM
46	Swimming (all ages)	3/11/2021 11:12 AM
47	Trail running and hiking for all ages. Possible trail races.	3/10/2021 9:24 AM
48	Conservation education (ex. invasive plant management) for adults	3/2/2021 12:28 PM
#	2.	DATE
1	seasonal local flora and fauna identification	3/30/2021 11:27 AM
2	Talks	3/30/2021 11:06 AM
3	Kids parades	3/30/2021 11:00 AM
4	annual fun run	3/30/2021 10:48 AM
5	walks	3/30/2021 10:32 AM
6	Nature/natural history walks -- all ages	3/30/2021 10:20 AM
7	Nature walks (K-6)	3/30/2021 10:15 AM
8	Senior exercise classes	3/30/2021 10:01 AM
9	Publish info about how to rent Herlihy Park for celebrations	3/30/2021 9:50 AM
10	Talks about history of town (seniors)	3/30/2021 9:44 AM
11	picnicking - all ages	3/30/2021 9:39 AM
12	walks -- any age	3/30/2021 9:25 AM

2021 Whately Open Space and Recreation SURVEY

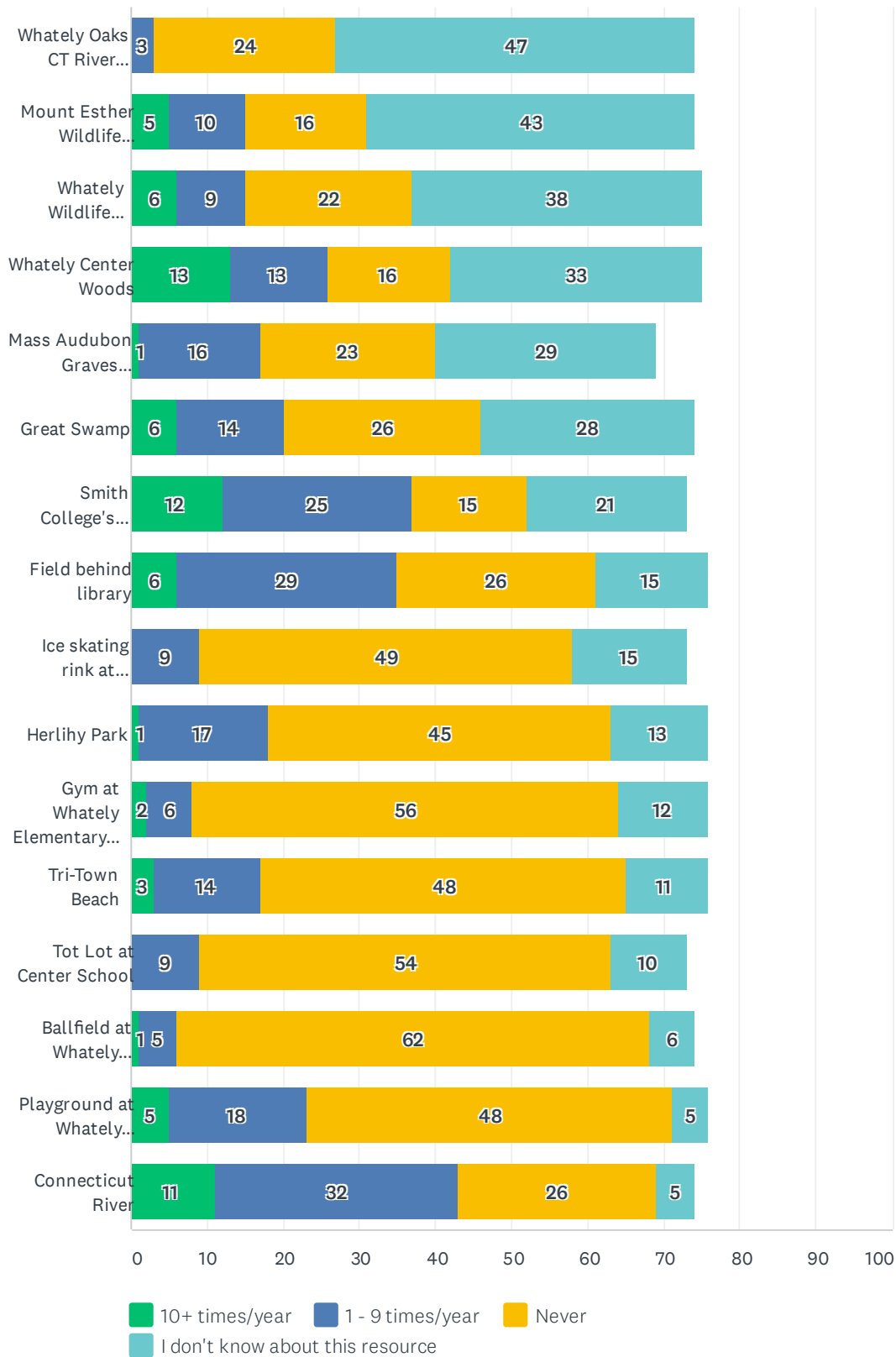
13	Winter seasonal event- snow shoe/hike on Greater Whately snowmobil trail area with sports competitions for kids	3/25/2021 9:30 AM
14	Covered pavilions w/abilities to have activities such as horseshoe,	3/24/2021 1:01 PM
15	Fourth of July celebration	3/24/2021 8:50 AM
16	a Whately Garden Tour	3/23/2021 9:25 PM
17	Whately garden tours	3/23/2021 9:23 PM
18	Fishing Derby	3/23/2021 7:25 PM
19	Good access to banks and trails along the Connecticut River (all ages)	3/23/2021 8:49 AM
20	Boat safety for human-powered boats (kayaks or canoes); teens-adults	3/23/2021 8:47 AM
21	start a cycling club - adults	3/22/2021 9:57 AM
22	Celebrations	3/18/2021 8:23 PM
23	self-guided nature walks (any age)	3/17/2021 11:17 AM
24	Food truck event	3/16/2021 1:54 PM
25	Organized road races like Mother's Day half marathon create fun community days. I would be interested in a few more of those.	3/16/2021 5:16 AM
26	Walking trail	3/15/2021 6:14 PM
27	swimming - age 3+	3/14/2021 12:40 PM
28	Parade	3/13/2021 8:55 AM
29	team sports (all ages)	3/13/2021 12:18 AM
30	Farm tours and talks	3/12/2021 9:36 PM
31	Tree identification-all ages	3/12/2021 8:03 PM
32	Road & Trail Races (8+)	3/12/2021 3:51 PM
33	'EARTH DAY"	3/12/2021 3:42 PM
34	Birding groups. most ages	3/12/2021 1:28 PM
35	Talks on history	3/12/2021 10:45 AM
36	Native flora identification, along with a hike/walk, adults	3/12/2021 10:41 AM
37	Solstice--all ages	3/12/2021 10:09 AM
38	Lectures about the historic landscape (forest to farmland) (high school to adult)	3/12/2021 8:56 AM
39	Hiking (dogs on leashes)	3/11/2021 11:12 AM
40	Outdoor concerts / dances	3/10/2021 9:24 AM
41	Native plant walks	3/2/2021 12:28 PM
#	3.	DATE
1	local pre-colonial history and indigenous land attribution	3/30/2021 11:27 AM
2	Youth sports jamboree w/ 5 towns	3/30/2021 11:00 AM
3	luminary lighting	3/30/2021 10:48 AM
4	4th of July picnic and fireworks	3/30/2021 10:15 AM
5	Guided nature walks for all age groups	3/30/2021 10:01 AM
6	Memorial Day parade (seniors)	3/30/2021 9:44 AM
7	trail walking - all ages	3/30/2021 9:39 AM

2021 Whately Open Space and Recreation SURVEY

8	outdoor yoga -- any age	3/30/2021 9:25 AM
9	Pot luck dinners	3/25/2021 9:30 AM
10	Putting greens	3/24/2021 1:01 PM
11	Winter carnival	3/24/2021 8:50 AM
12	Playground near the library (12 and under)	3/23/2021 8:49 AM
13	History of Whately's natural spaces; all ages	3/23/2021 8:47 AM
14	Guided History Walks	3/18/2021 8:23 PM
15	Holiday skate/sing/bonfire/horse wagon rides	3/16/2021 1:54 PM
16	N/A	3/15/2021 6:14 PM
17	hiking trails - age 3+	3/14/2021 12:40 PM
18	concerts	3/13/2021 8:55 AM
19	baseball and softball (high school)	3/13/2021 12:18 AM
20	Guided nature walks for flowers, trees, tracks, etc.	3/12/2021 9:36 PM
21	Local history walks-all ages	3/12/2021 8:03 PM
22	Harvest Fair (move back to Milk Bottle)	3/12/2021 3:51 PM
23	History tours	3/12/2021 1:28 PM
24	Talks on native plants	3/12/2021 10:45 AM
25	discussion on how our community can become carbon zero--all ages	3/12/2021 10:09 AM
26	River Front picnics	3/11/2021 11:12 AM
27	History talks about Whately	3/10/2021 9:24 AM
28	Other natural history presentations/workshops	3/2/2021 12:28 PM

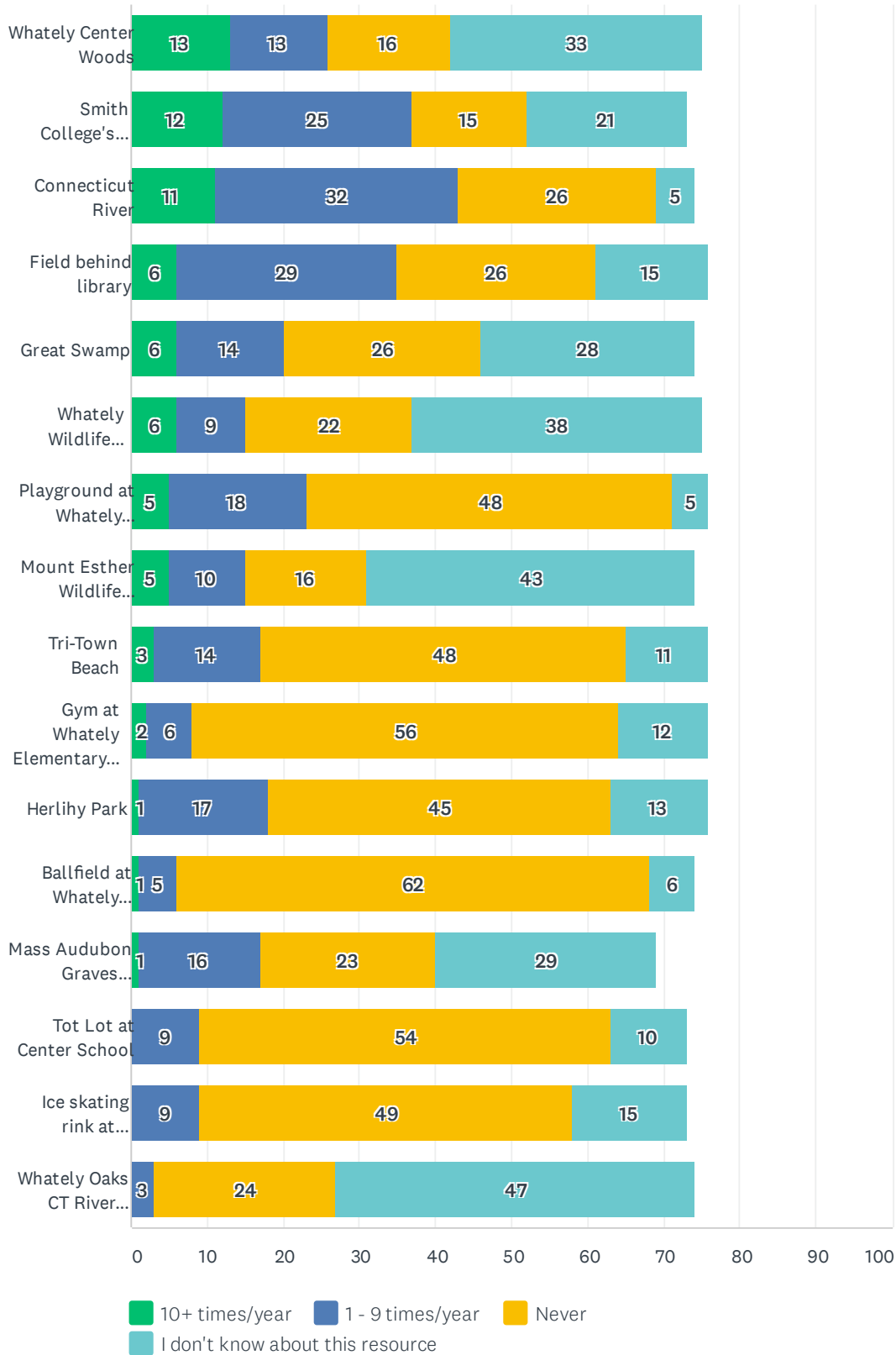
Q3 How often do you use the following open space and recreation resources per year?

Answered: 80 Skipped: 2



Q3 How often do you use the following open space and recreation resources per year?

Answered: 80 Skipped: 2



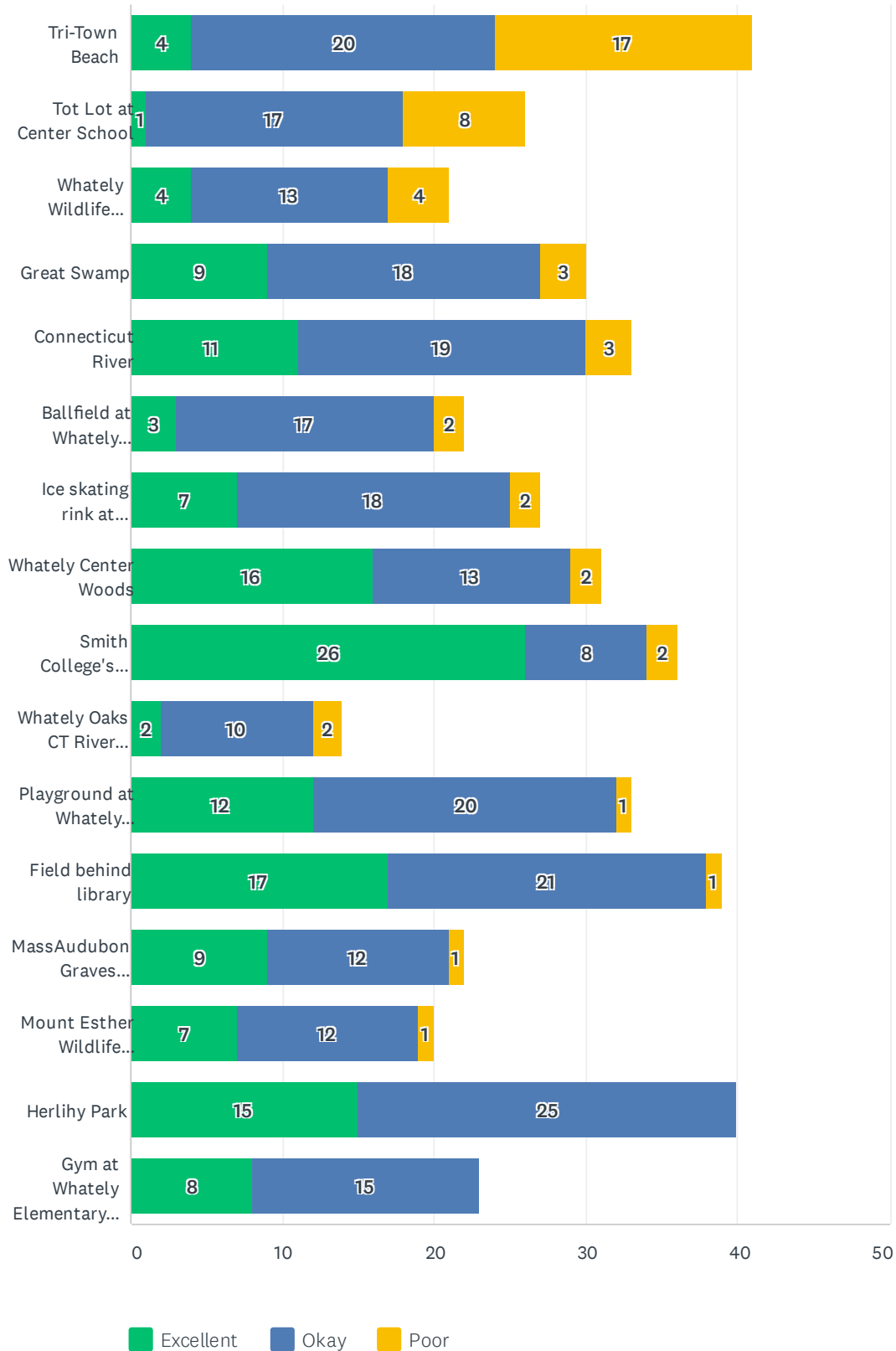
2021 Whately Open Space and Recreation SURVEY

	10+ TIMES/YEAR	1 - 9 TIMES/YEAR	NEVER	I DON'T KNOW ABOUT THIS RESOURCE	TOTAL RESPONDENTS
Whately Center Woods	17.57% 13	17.57% 13	21.62% 16	44.59% 33	74
Smith College's McLeish Field Station	16.44% 12	34.25% 25	20.55% 15	28.77% 21	73
Connecticut River	14.86% 11	43.24% 32	35.14% 26	6.76% 5	74
Field behind library	8.11% 6	39.19% 29	35.14% 26	20.27% 15	74
Great Swamp	8.22% 6	19.18% 14	35.62% 26	38.36% 28	73
Whately Wildlife Management Area	8.11% 6	12.16% 9	29.73% 22	51.35% 38	74
Playground at Whately Elementary School	6.76% 5	24.32% 18	64.86% 48	6.76% 5	74
Mount Esther Wildlife Management Area	6.85% 5	13.70% 10	21.92% 16	58.90% 43	73
Tri-Town Beach	4.00% 3	18.67% 14	64.00% 48	14.67% 11	75
Gym at Whately Elementary School	2.70% 2	8.11% 6	75.68% 56	16.22% 12	74
Herlihy Park	1.33% 1	22.67% 17	60.00% 45	17.33% 13	75
Ballfield at Whately Elementary School	1.37% 1	6.85% 5	84.93% 62	8.22% 6	73
Mass Audubon Graves Sanctuary	1.45% 1	23.19% 16	33.33% 23	42.03% 29	69
Tot Lot at Center School	0.00% 0	12.33% 9	73.97% 54	13.70% 10	73
Ice skating rink at firehouse	0.00% 0	12.50% 9	68.06% 49	20.83% 15	72
Whately Oaks CT River Paddlers Tentsite	0.00% 0	4.11% 3	32.88% 24	64.38% 47	73

#	OTHER (PLEASE SPECIFY):	DATE
1	Whately Glen - 10+ times/year	3/30/2021 11:06 AM
2	don't know about access to many places	3/30/2021 9:25 AM
3	I am new to the area and have not heard about many of these resources; would be great if there was a guidebook or website links	3/22/2021 9:57 AM
4	I like to get out into the woods 5-7 times a week. I would like to be more aware of the recreation areas available to me as a Whately resident.	3/19/2021 8:44 AM
5	Dry Hill Rd.	3/16/2021 9:33 PM
6	how about Whately produce a guide on-line to the above resources	3/14/2021 12:40 PM
7	Kids grown older, no longer use Tri-Town nor playgrounds much	3/12/2021 8:03 PM
8	This would be my pre-covid counts	3/11/2021 11:12 AM

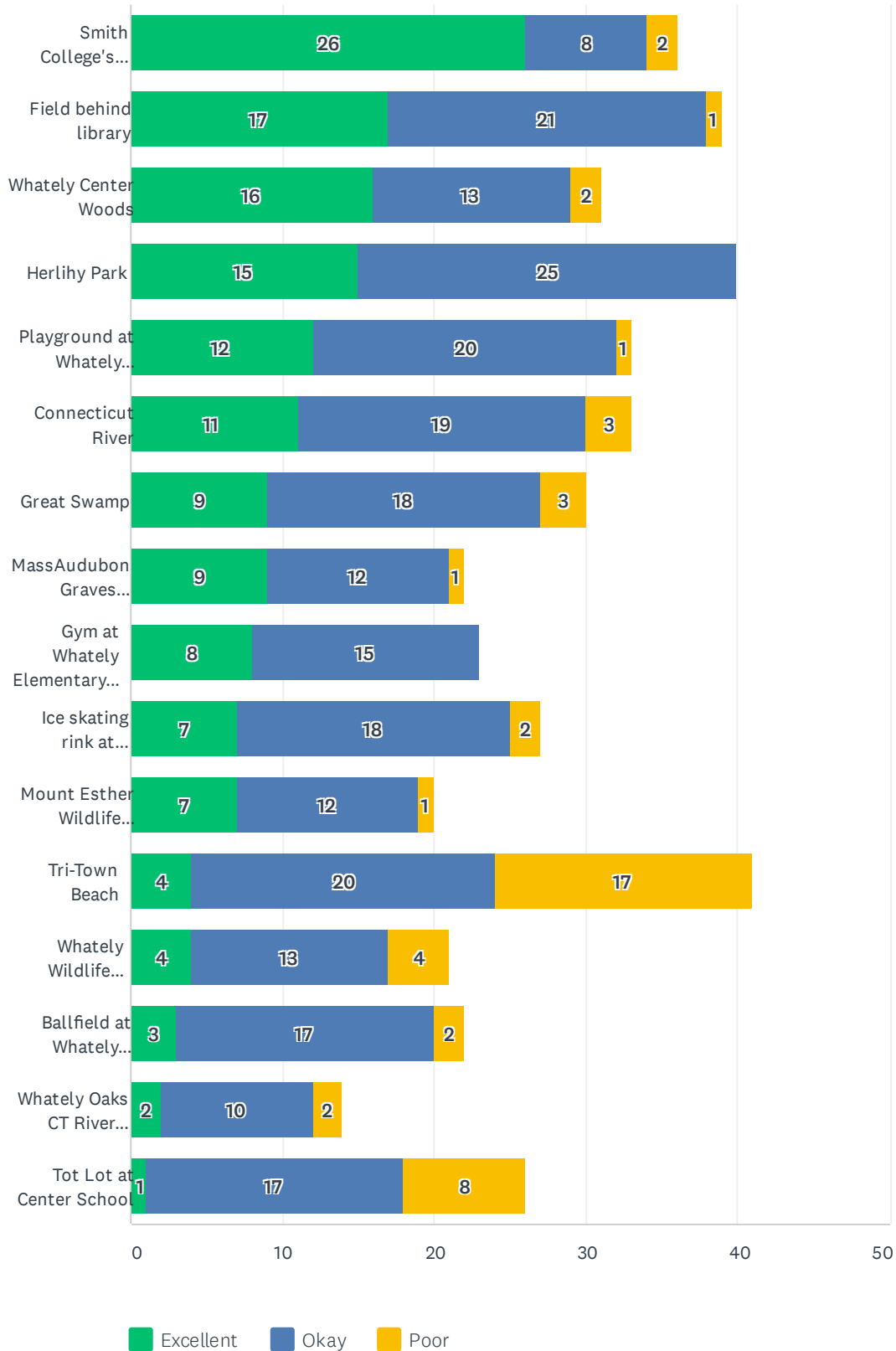
Q4 How do you perceive the quality of the following open space and recreation resources? Leave blank if no opinion.

Answered: 67 Skipped: 15



Q4 How do you perceive the quality of the following open space and recreation resources? Leave blank if no opinion.

Answered: 67 Skipped: 15



2021 Whately Open Space and Recreation SURVEY

	EXCELLENT	OKAY	POOR	TOTAL RESPONDENTS
Smith College's McLeish Field Station	72.22% 26	22.22% 8	5.56% 2	36
Field behind library	43.59% 17	53.85% 21	2.56% 1	39
Whately Center Woods	53.33% 16	43.33% 13	6.67% 2	30
Herlihy Park	37.50% 15	62.50% 25	0.00% 0	40
Playground at Whately Elementary School	36.36% 12	60.61% 20	3.03% 1	33
Connecticut River	33.33% 11	57.58% 19	9.09% 3	33
Great Swamp	32.14% 9	64.29% 18	10.71% 3	28
MassAudubon Graves Sanctuary	40.91% 9	54.55% 12	4.55% 1	22
Gym at Whately Elementary School	34.78% 8	65.22% 15	0.00% 0	23
Ice skating rink at firehouse	25.93% 7	66.67% 18	7.41% 2	27
Mount Esther Wildlife Management Area	35.00% 7	60.00% 12	5.00% 1	20
Tri-Town Beach	9.76% 4	48.78% 20	41.46% 17	41
Whately Wildlife Management Area	19.05% 4	61.90% 13	19.05% 4	21
Ballfield at Whately Elementary School	13.64% 3	77.27% 17	9.09% 2	22
Whately Oaks CT River Paddlers Tentsite	14.29% 2	71.43% 10	14.29% 2	14
Tot Lot at Center School	3.85% 1	65.38% 17	30.77% 8	26

#	OTHER (PLEASE SPECIFY):	DATE
1	Not sure of the few I didn't check off	3/12/2021 8:03 PM
2	need clearing near river or boardwalk. Need nicer bathrooms at all play areas and ballparks.	3/11/2021 11:12 AM

Q5 Do you choose not to use any of the above resources because of poor quality or lack of access? Please identify the place and explain.

Answered: 50 Skipped: 32

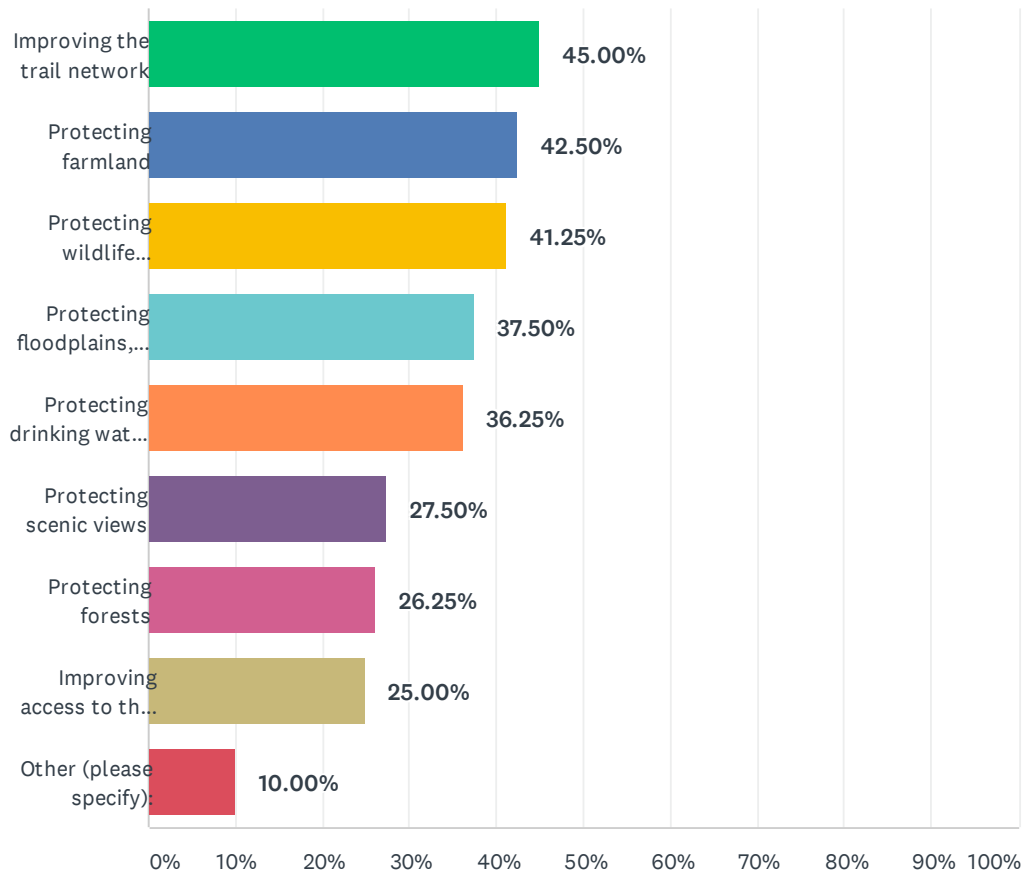
#	RESPONSES	DATE
1	lack of access affects my family's ability to experience the Connecticut River. If the town were to increase public access to the CT River, we would use it for swimming and boating.	3/30/2021 11:27 AM
2	My children and I used most of them when they were growing up--they were great resources. But I use them less now that my children have grown up--we tend to go farther afield for biking, mountain biking, trail running, cross country skiing , though I often use Whately Center wood for these activities.	3/30/2021 11:06 AM
3	We live near Great Swamp but cannot use because of hunters and poor trails. I'd love to help clean up trails to make accessible for families	3/30/2021 11:00 AM
4	Tri-Town Beach, poorly maintained	3/30/2021 10:52 AM
5	Center School Tot Lot needs help Tri-Town beach needs to be open/clean/accessible Whately Center Woods needs signage Would use Whately Oaks tentsite if cleaned up	3/30/2021 10:48 AM
6	Tri-Town Beach	3/30/2021 10:32 AM
7	I'm a senior citizen; didn't even know there was a gym available at Whately Elementary	3/30/2021 10:27 AM
8	Great Swamp needs bridge repair Whately Center Woods needs a parking area	3/30/2021 10:25 AM
9	No. We recently moved to Whately and have not had much time to explore yet!	3/30/2021 10:15 AM
10	Tri-Town Beach very poor quality. Don't know where to park at other locations, did not know they are open to the public. Kestrel wants donations for Center Woods but there are "No Trespassing" signs and no place to park! Provide newsletter with what is available, provide maps & where to park.	3/30/2021 10:11 AM
11	Don't know about access to Great Swamp, Whately Oaks Tentsite, and CT River Little parking at the Whately Wildlife Management Area Is the gym at the Whately Elementary School really open to the public?	3/30/2021 10:01 AM
12	No, wasn't aware of them	3/30/2021 9:53 AM
13	There's no bathroom at the Elementary School playground	3/30/2021 9:50 AM
14	I would only be using any of them as an observer, not a participant.	3/30/2021 9:44 AM
15	No -- they just seem to apply to a different age bracket - one that we are no longer in.	3/30/2021 9:39 AM
16	If access to some of the "wooded" resources was better I would use them	3/30/2021 9:32 AM
17	No interest for others, not due to quality	3/30/2021 9:29 AM
18	Did not know about use or access for most. Is there a place to access the CT River?	3/30/2021 9:25 AM
19	Tri Town Beach facilities are in very poor condition. Would use it more if bathrooms were a little more inviting. Some upgrades and painting would help. Would love to see some money invested in it. I think people would pay more for membership if they thought they were getting something. I am sure many residents don't even know about it.	3/25/2021 9:30 AM
20	No	3/24/2021 2:52 PM
21	I am unable due to disability to utilize the above and others I know nothing about	3/24/2021 1:01 PM
22	No	3/24/2021 8:50 AM
23	I would never pay to go to Tri-Town beach. It's close for bad water half the time and proximity to 91 is really unappealing. There are so many better places to swim.	3/23/2021 9:25 PM

2021 Whately Open Space and Recreation SURVEY

24	Yes , Tri-County beach is disgusting. Fill it in and make a dirtbike track	3/23/2021 7:25 PM
25	Lack of access for: Whately Wildlife Management Area, Mount Esther Wildlife Management and Whately Center Woods. Are there trails available in these areas?	3/23/2021 5:11 PM
26	No, I choose not to use things I don't know about.	3/23/2021 8:49 AM
27	Where is the access to the Connecticut River in Whately? We usually drive to Sunderland.	3/23/2021 8:47 AM
28	We just moved to Whately so have not explored the open spaces listed above, but look forward to doing so in the future. We left those tables blank because we are not familiar with the area.	3/18/2021 8:23 PM
29	Access top most fishing/ hunting areas on WMA property is awful!!	3/17/2021 5:22 PM
30	Some of the above have Whately access issues, e.g. Connecticut River	3/16/2021 9:33 PM
31	I have never heard about over half of these locations. I wish I would have known that some of these existed and would love to see improvements to be able to locate these wonderful resources	3/15/2021 6:14 PM
32	It would be great to have public parking for the trail network around Mt. Esther.	3/14/2021 6:36 PM
33	unknown resources would include lack of access	3/14/2021 12:40 PM
34	no - some I do not know about.	3/13/2021 8:55 AM
35	Limited personal ability to practice sports	3/13/2021 12:18 AM
36	Whately wildlife management area is absolutely beset with invasive multiflora rose, which makes it almost unusable.	3/12/2021 9:36 PM
37	No	3/12/2021 8:03 PM
38	Tri-Town Beach could use some upgrading. We stopped going there - "beach" is dirt, sand no longer brought in, geese get out of control and are messy, water gets funky later in the summer.	3/12/2021 3:51 PM
39	No. Either don't know about them or just don't get around to it.	3/12/2021 12:42 PM
40	No	3/12/2021 10:45 AM
41	WMA is badly impacted by invasive plants, esp. multiflora rose	3/12/2021 10:38 AM
42	No	3/12/2021 10:18 AM
43	no	3/12/2021 10:09 AM
44	I don't know how to access the Connecticut River or Great Swamp, and I don't know about the two wildlife management areas.	3/12/2021 8:56 AM
45	Lack of access to Connecticut River. No trails along the river. Biking on roads is dangerous because lack of bike lanes and the high speed of cars. No speed limits are enforced. Despite this we frequently bicycle or walk on River Road. Walkers, joggers and bicyclists on River Road risk their lives with traffic speeding even in residential neighborhoods where houses front onto the road. Children are often on bikes on River Road which is great to see but worrisome.	3/11/2021 5:19 PM
46	I wish that we could use the Swimming beach (tri town) but it's not safe water quality. The water is stagnant and I do not trust it. If the water conditions were posted or the water was treated or perhaps there was more flow in and out of the area, I would trust it more.	3/11/2021 11:12 AM
47	Access to the CT river, one would have to cross the bridge into Sunderland or down to Hatfield.	3/10/2021 5:03 PM
48	Information such as maps, marked trails, web info would help. I was not aware of many of the resources listed.	3/10/2021 9:24 AM
49	No, we will explore all options but have recently moved to Whately and have not had a chance to explore. But do not perceive any as poor quality.	3/9/2021 7:03 PM
50	WWMA is badly overrun with non-native plants, seriously impacting native species and limiting access. Hunting makes this area inaccessible to others during parts of the year	3/2/2021 12:28 PM

Q6 Imagine Whately has received \$1 million from an anonymous donor that can be spent only on open space projects. Choose the top three categories you recommend the Town prioritize when allocating this money. Please select three or less.

Answered: 80 Skipped: 2



ANSWER CHOICES	RESPONSES	
Improving the trail network	45.00%	36
Protecting farmland	42.50%	34
Protecting wildlife habitat	41.25%	33
Protecting floodplains, lakes, streams, ponds and wetlands	37.50%	30
Protecting drinking water supply	36.25%	29
Protecting scenic views	27.50%	22
Protecting forests	26.25%	21
Improving access to the Connecticut River	25.00%	20
Other (please specify):	10.00%	8
Total Respondents: 80		

2021 Whately Open Space and Recreation SURVEY

#	OTHER (PLEASE SPECIFY):	DATE
1	Local swimming hole similar to Conway	3/30/2021 10:11 AM
2	Tri Town Beach- does some of the above	3/25/2021 9:30 AM
3	Bike trail or more town sidewalks	3/24/2021 8:50 AM
4	ATV/UTV /SNOWMOBILE trails	3/23/2021 7:25 PM
5	Improving access and usability to floodplains, lakes, streams and wetlands	3/17/2021 5:22 PM
6	This was a hard question!	3/12/2021 8:03 PM
7	creating bikepaths/bikelanes throughout town	3/12/2021 10:09 AM
8	All of the above Impossible to choose three.	3/11/2021 11:12 AM

Q7 Over the past few years, the Town of Whately has helped to preserve agricultural land, updated Herlihy Park, and established the Whately Center Woods public conservation and recreation area. What open space and recreation project do you think the Town should prioritize next? Feel free to explain why.

Answered: 46 Skipped: 36

#	RESPONSES	DATE
1	Forest landowners in Whately need an incentives for keeping their land in forestry (now and in perpetuity) and incentives for implementing forestry Best Management Practices (BMPs) that promote forest health, carbon sequestration and storage, resiliency to climate change, and local wood products. This could take the form of a payment program that helps private land owners to make ends meet while supporting climate change mitigation, protecting land from development, and getting young people interested in forest land stewardship.	3/30/2021 11:27 AM
2	All of the goals in question 6 are worthy and important, but I'm intrigued by the possibility of access to the CT River	3/30/2021 11:06 AM
3	Great Swamp access	3/30/2021 11:00 AM
4	More sidewalks and walking trails	3/30/2021 10:54 AM
5	Access to the CT River for kayaking, picnicking, etc	3/30/2021 10:48 AM
6	Tri-Town Beach	3/30/2021 10:32 AM
7	Protect as much farmland as possible and create x-country ski trails. mOre trails like Whately Center Woods	3/30/2021 10:25 AM
8	Improving access to the CT River for kayaking and canoeing would be great!	3/30/2021 10:15 AM
9	Clean swimming hole. Tri-Town Beach is loaded with Canada geese poop! Water is dirty.	3/30/2021 10:11 AM
10	CT river boating and fishing access and walking trail. It's unconscionable that a town with so much land on the river has no public access or recreational sports there.	3/30/2021 10:01 AM
11	Tri-Town Beach needs an upgrade. A friend of mine decided against competing in the Police Dept.'s triathlon because the water at TriTown was "gross poop and agricultural runoff" Replant some of the healthy, carbon-sequestering trees that EVERSOURCE cut down!	3/30/2021 9:50 AM
12	I'm at a point in my life where I do not need more recreation areas.	3/30/2021 9:44 AM
13	Walking trails which all can enjoy in safety	3/24/2021 1:01 PM
14	A bike trail would be great! To connect some of the resources/parks we already have to increase utilization. Starting early spring we see many biking in our community and it would be awesome to have that resource even for walkers or runners. Add a map at town hall to showcase the trail and location of resources as well as intended use or what is there may be helpful and having it accessible online through our town website would be great as well. Not sure how that whole bike share thing works but it may be nice to have that available for those visiting and maybe bring in a source of revenue for the town.	3/24/2021 8:50 AM
15	More motorized recreation.	3/23/2021 7:25 PM
16	Thank you for asking and I am really glad that there is a conversation about all of these areas, but I don't have a preference as to prioritizing the next project.	3/23/2021 5:11 PM
17	Expanding trail networks and advertising those resources.	3/23/2021 8:49 AM
18	Preserve dirt roads and publish a map showing these locations - great for gravel cycling, walking, etc.	3/22/2021 9:57 AM

2021 Whately Open Space and Recreation SURVEY

19	I really don't know which areas in Whately are private and which have public access. Prioritize creating awareness of what we have and preserving the historic character that makes Whately such a special place. With this rustic, historic character Whately will keep being a great place to live and it will be a recreation destination for those looking to escape congested city or suburban life for the day.	3/19/2021 8:44 AM
20	rehab tri town beach for better access and over all quality	3/18/2021 5:57 PM
21	Had no idea there was a "Whately Center Woods" public conservation area, what activities is it limited to? I would like to see the town improve and expand access to WMA properties for fishing and hunting and other outdoor sporting activities. These areas are far too difficult for most any one to successfully use particularly elderly and disabled	3/17/2021 5:22 PM
22	Would love to see back of the library to have large flower gardens.	3/17/2021 3:49 PM
23	1. Adopt ridge top zoning bylaws to prevent housing on top of scenic ridge lines 2. Develop a Whately Connecticut River access ramp and river walk like in Sunderland.	3/16/2021 9:33 PM
24	Maybe adding trails and picnic/recreation to area near the damns/chapel.	3/16/2021 1:54 PM
25	Boat ramp at Herlihy field to allow access to the CT river.	3/15/2021 6:50 PM
26	In my mind the most important project would be advertising and identifying where the spaces we currently have are. I have not heard of many of these resources and if they are not being used because they are not known about that is the most unfortunate.	3/15/2021 6:14 PM
27	Swimming access to the Connecticut River	3/14/2021 6:36 PM
28	on-line when I googled Herlihy park - there are pics of the farm stand which is NOT Herlihy park at all and nothing at this farm stand is free (5J Creamery & Pasiecznik Farmstand).	3/14/2021 12:40 PM
29	save any land that is threatened to being sold to developers. Keep open space	3/13/2021 8:55 AM
30	Given the climate crisis, top priority should be protecting forests and wetlands.	3/13/2021 7:09 AM
31	Protecting agriculture serves everybody and is my one priority. Farms are an integral part of our community. All the rest is nice but a luxury. I am extremely worried by the endless request for more state money to use on recreational activities when essential needs are not met.	3/13/2021 12:18 AM
32	I think the Town needs to get a handle on areas beset with invasive non-native plants, such as areas with Japanese knotweed, multiflora rose, garlic mustard, and bittersweet. Some of these are Town-maintained areas that threaten habitat, including that on private land. Helping landowners learn about and address this on their own land would also be of benefit.	3/12/2021 9:36 PM
33	Good signage, maybe a map of town trails for easier access for hikers and other accepted users of the trails. Those are 3 diverse projects, not sure what is needed the most except the highest use could get the most support so maybe one more recreational project	3/12/2021 8:03 PM
34	provide more info on trails and improve Audubon, Great Swamp and WMA sites. These areas are not used to their full potential.	3/12/2021 3:42 PM
35	Access and views of Connecticut river. A hidden attraction and wildlife observation opportunity.	3/12/2021 1:28 PM
36	Expanding connecting trails. Creation of a space to encourage community gathering that incorporates and engages the visitors with the natural beauty and landscape of Whately.	3/12/2021 10:41 AM
37	Invasive plant control	3/12/2021 10:38 AM
38	sidewalks and/or bikepaths in other parts of town, with the intent of having a network throughout town for people to not just exercise but actually commute; to show the community how pedestrian/bike access can transform quality of life. Having the infrastructure on Chestnut Plain Road is so beautiful, and it would be neat to create more opportunities for people to walk safely and bike safely through town.	3/12/2021 10:09 AM
39	Working with landowners to create continuous conservation protection areas with managed access for respectful hikers and trail walkers.	3/12/2021 8:56 AM
40	RIVER ROAD is part of a major, favorite biking trail in the area. The Whately section of River Rd. needs to include biking lanes (like Hatfield and surrounding towns have). A few large profile trees should be planted along the "open field" sections of the road. These trees provide shade, soil conservation, habitat, windbreak and beauty.	3/11/2021 5:19 PM

2021 Whately Open Space and Recreation SURVEY

41	Tri Town Beach. We would use it every day in the summer. We can't afford a pool like many residents. Kids do not need camp...they need a central place to see friends. We go all the way to Look park and DAR in the summer, but really want to stay here.	3/11/2021 11:12 AM
42	Access to the CT river	3/10/2021 5:03 PM
43	Whately Center Woods	3/10/2021 3:55 PM
44	Develop a well marked and maintained network of trails with maps and trail descriptions. Included designated parking areas and signage similar to the network set up by Hatfield-Williamsburg for Horse Mountain trails.	3/10/2021 9:24 AM
45	improving trail system (walking or biking trail). reason accessibility, safety (not using roads) and the ability to walk or ride longer distances without traveling to other cities/towns	3/9/2021 7:03 PM
46	Extending trail network for hiking and non-motorized travel. Offering educational opportunities for residents to better appreciate and enjoy open space.	3/2/2021 12:28 PM

Q8 The Open Space Committee is exploring developing a multi-purpose trail network with connections to trails in adjacent towns. Are there particular routes or destination points that you would like to see connected by a trail?

Answered: 44 Skipped: 38

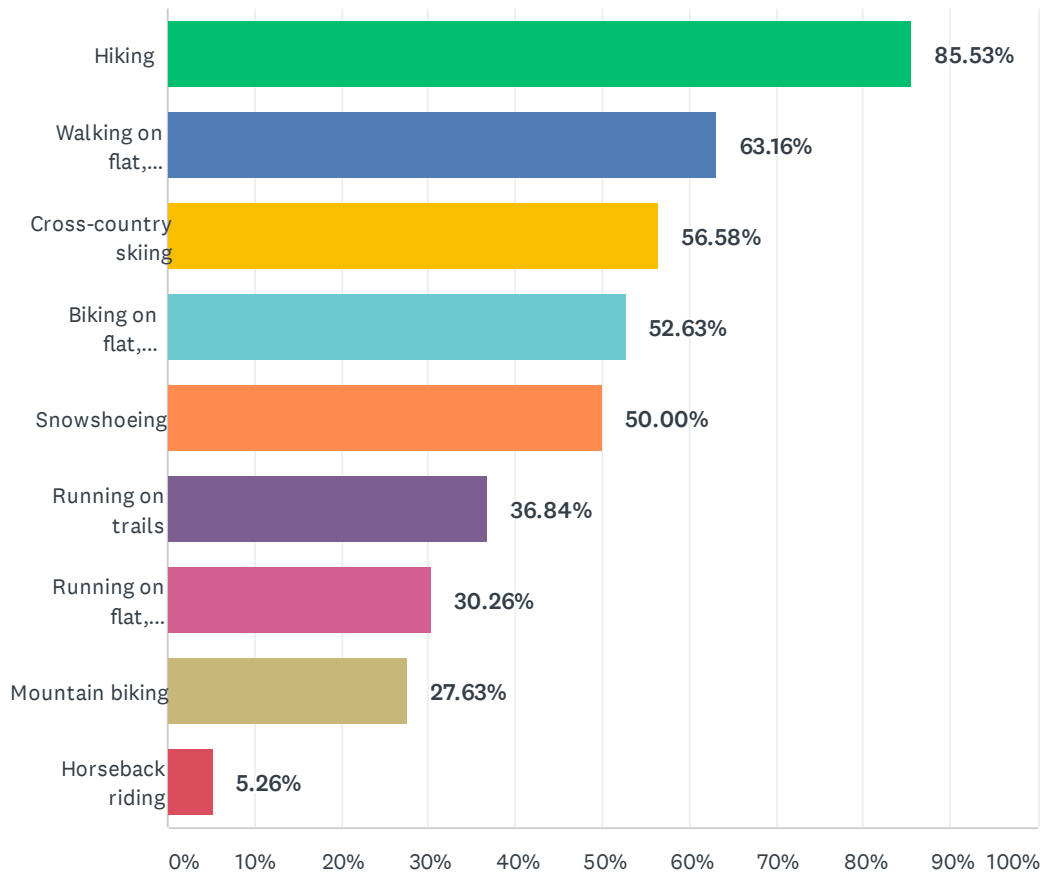
#	RESPONSES	DATE
1	Coordinate with private land owners and the Cons Com to create a trail head at the end of Grass Hill Road in a project that also mitigates invasive species (goutweed) and improves the riparian buffer on Potash Brook at the road/stream crossing with Grass Hill Road. Also, trails that lead to fresh water swimming spots on the Westbrook, Connecticut River, or upland ponds would be great.	3/30/2021 11:27 AM
2	No particular routes, but I'd love to hear about and explore more trails (particularly longer, hillier ones) wherever they may be	3/30/2021 11:06 AM
3	Walking Path along the CT River into Hatfield	3/30/2021 11:00 AM
4	Herlihy Park connected to Center of S Deerfield	3/30/2021 10:54 AM
5	I don't know where other town trails are... seems a good idea though, whenever	3/30/2021 10:48 AM
6	Mt. Esther Area and trails off Whately Glen Road Whately Center Woods connected to more trails	3/30/2021 10:25 AM
7	Connect to Northampton Rail Trail	3/30/2021 10:20 AM
8	No preference but I love the idea!	3/30/2021 10:15 AM
9	Anything would be great, but advertise so residents know it is open to public. Everything in town seems private, I enjoy walking outdoors, but drive to S. Deerfield or Hatfield Dike because there's nothing available in Whately! I pay over \$5,000 yearly in property taxes and only use the library!	3/30/2021 10:11 AM
10	Reconnect us to S. Deerfield through the Mass Wildlife area by fixing the bridge that washed out.	3/30/2021 10:01 AM
11	I recall trails already established for snowmobiles. I used them in my earlier days. I see the need to keep them open. If farmers object, a detour might be necessary.	3/30/2021 9:44 AM
12	No	3/30/2021 9:39 AM
13	I would like to see easier access and connection to the Greater Whately Snowmobil trails. Many snowmobil clubs have designated their trails as multi use officially. I know there is grant money available for maintaining these trails for building infrastructure like bridges. They are not well marked. Either are some of the trails that run along side them. Hard to find a map. I think vehicle and vehicle outdoor recreationalists should be able to share the trail. Not sure that is priority in this town.	3/25/2021 9:30 AM
14	Don't know	3/24/2021 2:52 PM
15	Yes please!!!	3/24/2021 1:01 PM
16	Connections to the Northampton or Hadley trails would be great. Unsure of other trails nearby. However I feel very strongly that connecting some or all of our resources via trail would be a huge benefit to the town and increase utilization of our resources. I have visited other communities that have a system such as this and it was great to see how many people use the trails and the resources as well as how the community plans for expansion of the resources ie additional parks along the trail. It makes it very family friendly and easily accessible.	3/24/2021 8:50 AM

2021 Whately Open Space and Recreation SURVEY

17	It would be absolutely fantastic to go from town to town on my ATV/UTV	3/23/2021 7:25 PM
18	Multi-purpose trails connecting West Whately to : Leeds, Conway and Williamsburg.	3/23/2021 5:11 PM
19	Great idea. Connections to Deerfield, Ashfield and Conway would be great.	3/23/2021 8:49 AM
20	GREAT IDEA!! Connect to the Norwottuck Trail and also the Canalside Trail.	3/22/2021 9:57 AM
21	Can I just say all of them? Connecting Whately Glen to Conway State Forrest can open up 50+ miles of trails; I know because I mapped it out.	3/19/2021 8:44 AM
22	A trail network from West Whately to Florence area (Fitzgerald lake or Look Park for access to the bike path).	3/18/2021 8:23 PM
23	to sugarloaf mt	3/18/2021 5:57 PM
24	Mt. Ester to town center	3/16/2021 9:33 PM
25	Connect to Haydenville/Leeds/Northampton bike path!	3/16/2021 1:54 PM
26	If we have the snowmobile trail why do we need another developed trail?	3/15/2021 6:14 PM
27	The North South trail network between Whately and Northampton is almost complete. It would be great to be able to walk on legitimate trails all the way. I would like more walking and biking trails through East Whately, particularly to get to the elementary school.	3/14/2021 6:36 PM
28	connections to Northampton/Florence would be awesome	3/14/2021 12:40 PM
29	Any where. That is great	3/13/2021 8:55 AM
30	I hate the idea for obvious reasons.	3/13/2021 12:18 AM
31	What a great idea. Connect us into the Conway State Forest and that trail network!	3/12/2021 9:36 PM
32	We have gotten turned around and almost lost of the trails off Dickinson Hill towards South Part Rd in Conway. Also no signage on trails off of Roaring Brook/Whately Glen. Is it possible to make a trail thru Great Swamp? Guessing not really, it's a swamp! Pipe dream....bike lanes....almost impossible for kids to bike to Frontier, or adults to bike into So Deerfield along 5&10	3/12/2021 8:03 PM
33	Along the "rail trail" ie connecting Hatfield and Deerfield	3/12/2021 3:42 PM
34	Conway	3/12/2021 1:28 PM
35	I'm interested in all trails!	3/12/2021 10:45 AM
36	I don't know Whately well enough yet to know which, but I LOVE this plan.	3/12/2021 10:41 AM
37	Extend/connect Whately Woods trails	3/12/2021 10:38 AM
38	(so funny! this is what I just wrote :)). Would love to see a trail that goes from the library down to the elementary school through the farmlands, maybe to the river and sugarloaf. also, bikelane to Hatfield along Chestnut Plain Rd.	3/12/2021 10:09 AM
39	Town Center to Mount Esther. Trail access through a section of West Whately.	3/12/2021 8:56 AM
40	Nice to see the River from a trail.	3/11/2021 11:12 AM
41	A trail along the CT River to Hatfield/Deerfield would be terrific	3/11/2021 6:40 AM
42	Connect to Horse Mountain trails. Develop trails in Whately Glen and Whately Center Woods.	3/10/2021 9:24 AM
43	any trail system or bike path that could connect to Sugarloaf as a destination And Amherst or South Deerfield	3/9/2021 7:03 PM
44	Create loops. Connect to neighboring town systems.	3/2/2021 12:28 PM

Q9 Which of the following activities would you like to be able to do on multi-use trails? Select all that apply.

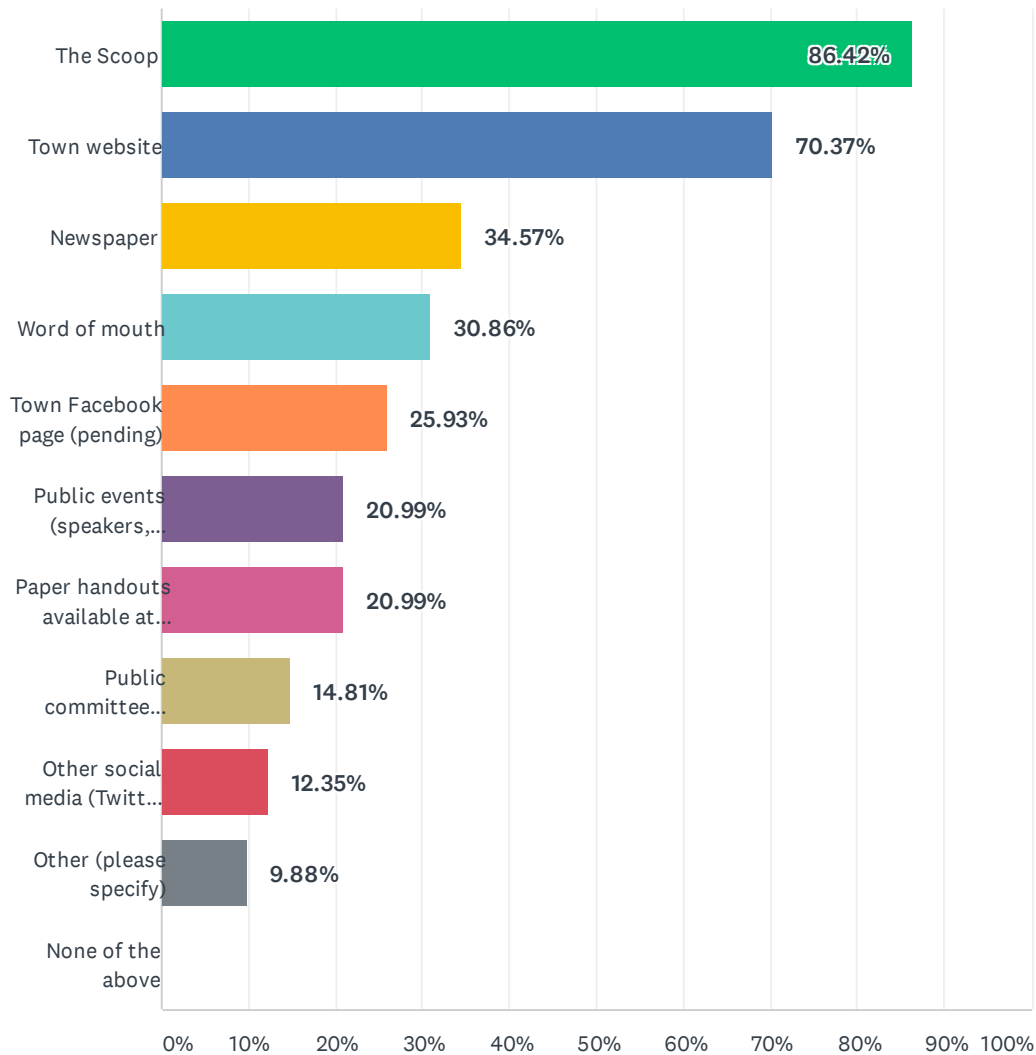
Answered: 76 Skipped: 6



ANSWER CHOICES	RESPONSES	
Hiking	85.53%	65
Walking on flat, accessible paths	63.16%	48
Cross-country skiing	56.58%	43
Biking on flat, accessible trails	52.63%	40
Snowshoeing	50.00%	38
Running on trails	36.84%	28
Running on flat, accessible paths	30.26%	23
Mountain biking	27.63%	21
Horseback riding	5.26%	4
Total Respondents: 76		

Q10 How do you prefer to get your information about open space and recreation matters (or other Town information)? Select all that apply.

Answered: 81 Skipped: 1



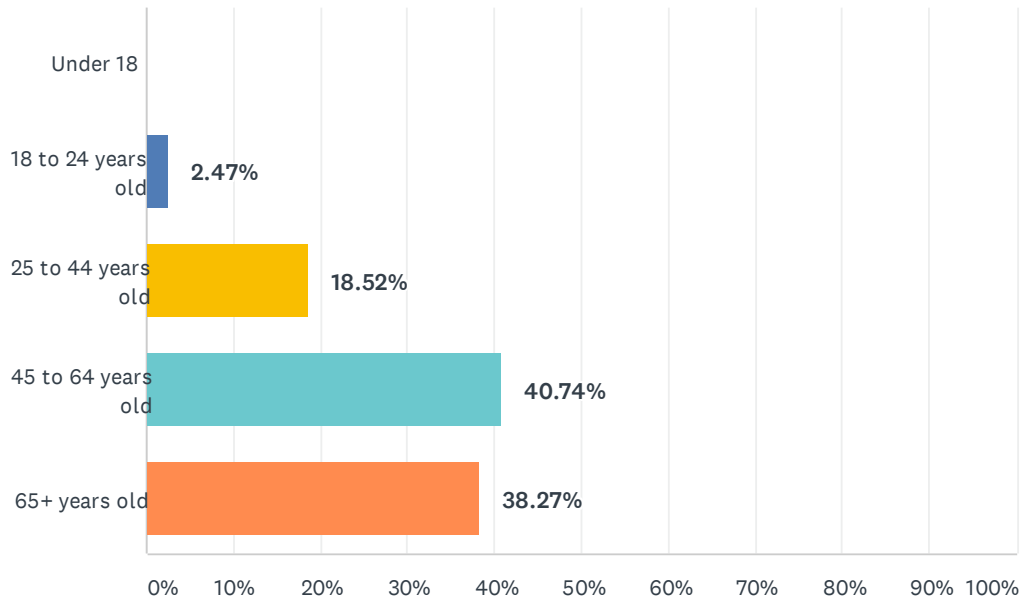
2021 Whately Open Space and Recreation SURVEY

ANSWER CHOICES	RESPONSES	
The Scoop	86.42%	70
Town website	70.37%	57
Newspaper	34.57%	28
Word of mouth	30.86%	25
Town Facebook page (pending)	25.93%	21
Public events (speakers, forums)	20.99%	17
Paper handouts available at school, Town Hall, Town Meeting, etc.	20.99%	17
Public committee meetings	14.81%	12
Other social media (Twitter, Instagram)	12.35%	10
Other (please specify)	9.88%	8
None of the above	0.00%	0
Total Respondents: 81		

#	OTHER (PLEASE SPECIFY)	DATE
1	handouts at library	3/30/2021 10:11 AM
2	Email (by type of event)	3/30/2021 10:01 AM
3	Being on the committee (ORP)	3/23/2021 5:43 PM
4	"The Scoop" is awesome!!	3/22/2021 9:57 AM
5	email newsletter	3/19/2021 8:44 AM
6	Email	3/18/2021 8:23 PM
7	Road signs to identify where the open spaces are	3/15/2021 6:14 PM
8	Email sign-up	3/10/2021 9:24 AM

Q11 What is your age?

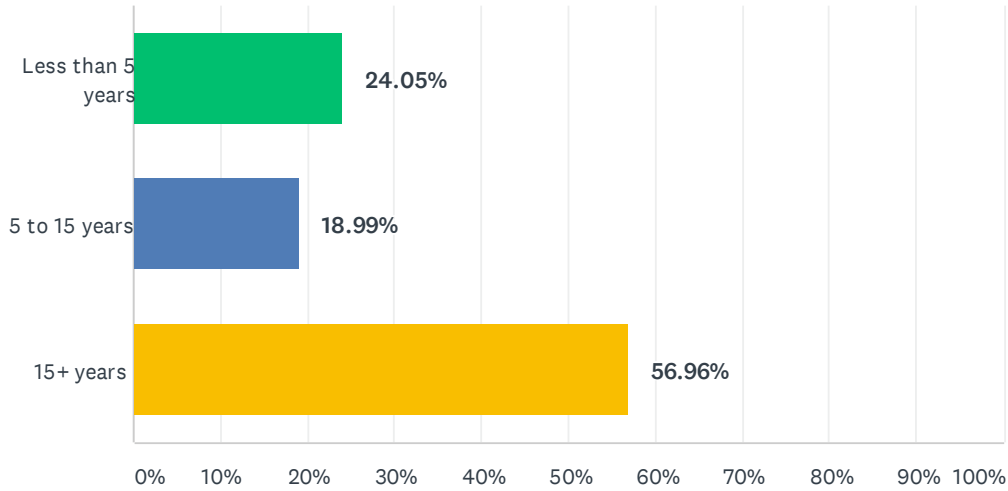
Answered: 81 Skipped: 1



ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18 to 24 years old	2.47%	2
25 to 44 years old	18.52%	15
45 to 64 years old	40.74%	33
65+ years old	38.27%	31
TOTAL		81

Q12 How many years have you lived in Whately?

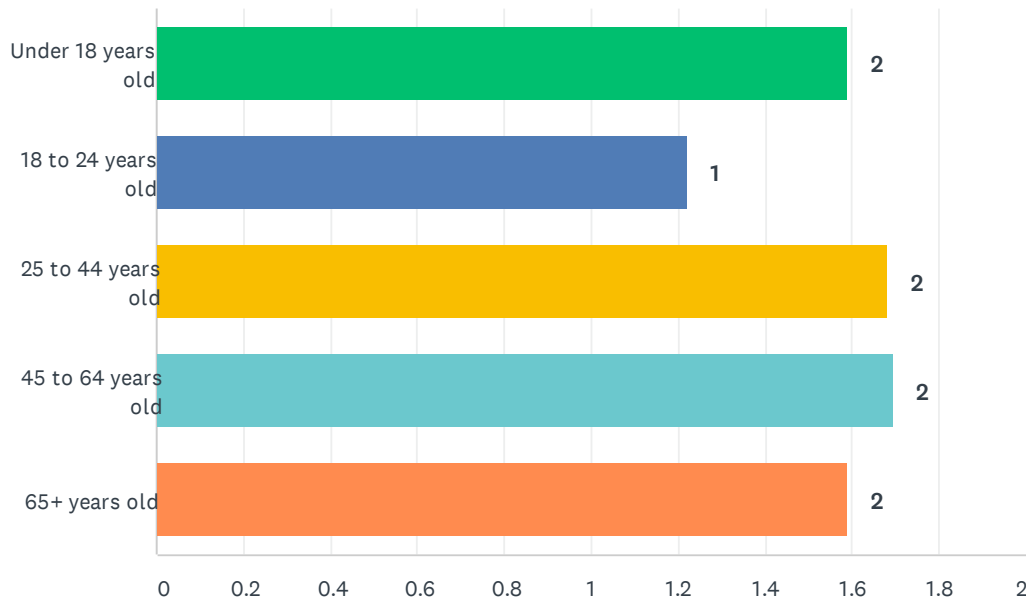
Answered: 79 Skipped: 3



ANSWER CHOICES	RESPONSES	
Less than 5 years	24.05%	19
5 to 15 years	18.99%	15
15+ years	56.96%	45
TOTAL		79

Q13 How many people in your household in each age group, including yourself?

Answered: 78 Skipped: 4

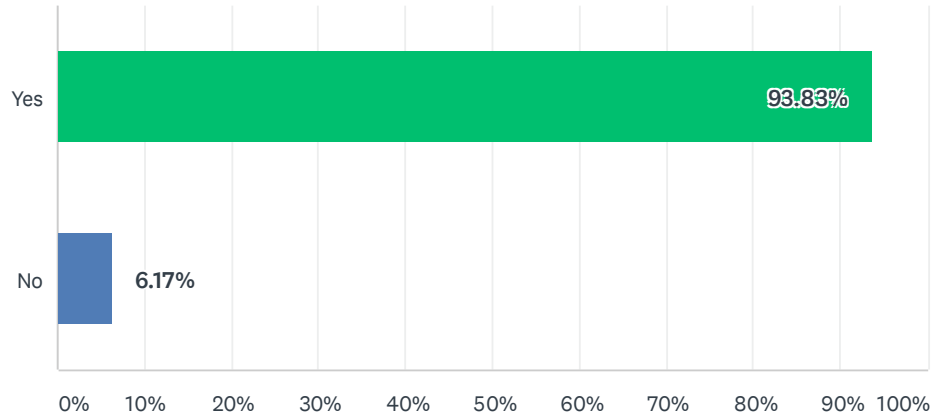


ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Under 18 years old	2	27	17
18 to 24 years old	1	11	9
25 to 44 years old	2	37	22
45 to 64 years old	2	61	36
65+ years old	2	54	34
Total Respondents: 78			

#	UNDER 18 YEARS OLD	DATE
1	1	3/30/2021 11:28 AM
2	2	3/30/2021 11:00 AM
3	2	3/30/2021 10:32 AM
4	2	3/30/2021 10:16 AM
5	1	3/30/2021 9:26 AM
6	1	3/24/2021 9:05 AM
7	2	3/24/2021 8:51 AM
8	1	3/23/2021 7:26 PM
9	4	3/17/2021 3:50 PM
10	2	3/16/2021 1:54 PM
11	2	3/16/2021 5:16 AM

Q14 Do you own property in Whately?

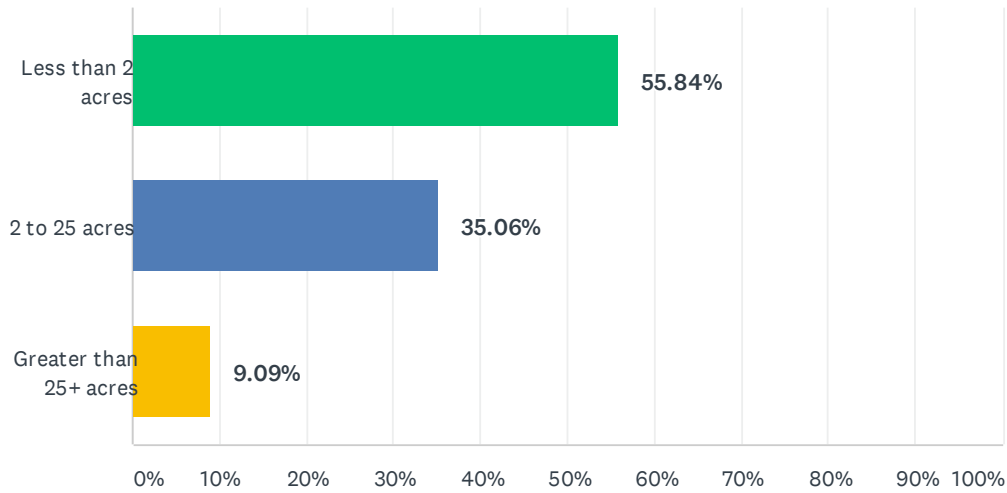
Answered: 81 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	93.83%	76
No	6.17%	5
TOTAL		81

Q15 How many acres do you own in Whately?

Answered: 77 Skipped: 5



ANSWER CHOICES	RESPONSES	
Less than 2 acres	55.84%	43
2 to 25 acres	35.06%	27
Greater than 25+ acres	9.09%	7
TOTAL		77

APPENDIX C

Agendas, Sign-In Sheets & Publicity

AGENDA

Whately Open Space and Recreation Plan Update Project

Meeting

Tuesday, November 17th

5:00 – 6:30 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/83908147528?pwd=WDdTL1l2UE5aSmJucFM1TlNOTm1lQT09>

1. Welcome and Introductions
2. Review of Project Scope of Work & Schedule
 - a. Set regular meetings
 - b. Preferred system for communication, including sharing of draft maps
 - c. Project outreach – preferred and effective methods
 - d. Develop Stakeholder List
 - e. Images for Plan
3. Review and Discuss 2006 Survey (see attached)
 - a. Review other recent town surveys (see attached)
 - b. Add questions/modify questions
 - c. Method of distribution
4. Adjourn meeting

AGENDA

Whately Open Space and Recreation Plan Update Project

Meeting

Wednesday, December 23rd

5:00 – 6:30 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/82045136899?pwd=N1hwTlVDczNUenZydXBEazlsbFNpUT09>

1. Survey Review
2. Survey Distribution
 - a. Paper & Survey Monkey
 - b. Press Release, flyers
3. Section 3 Questions (if time and need)
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AGENDA

Whately Open Space and Recreation Plan Update Project

Meeting

Thursday, February 9th 2021

5:00 – 6:00 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/84419767411?pwd=OVh6Ty94WFVRR2NxY3lXbjc5cVhsZz09>

1. Section 3 check-in
2. Section 4 & 5 check-in
3. Survey Review
4. Survey Distribution
 - a. Paper & Survey Monkey
 - b. Press Release, flyers
5. Adjourn meeting

AGENDA

Whately Open Space and Recreation Plan Update Project

Meeting

Tuesday, February 23th 2021

5:00 – 6:00 p.m.

Virtual meeting via zoom link: <https://us02web.zoom.us/j/84482771738>

1. Survey Review
2. Survey Distribution
 - a. Paper & Survey Monkey
 - b. Press Release, flyers
3. Adjourn meeting

Topic: Whately OSRP

Time: Feb 23, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/84482771738>

Meeting ID: 844 8277 1738

One tap mobile

+13126266799,,84482771738# US (Chicago)

+19292056099,,84482771738# US (New York)

AGENDA

Whately Open Space and Recreation Plan Update Meeting

Tuesday, March 9th 2021

5:00 – 6:00 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/86112457883?pwd=Vnhib1FMSUZVZTNubzdjMG04Z1JHdz09>

1. Review milestones and meeting schedule (10 minutes)
2. Decide public forum date, Zoom host, approve public forum agenda (10 minutes)
3. Discussion of Environmental Challenges section (20 minutes)
4. Begin review of 2006 Action Plan (30 – 50 minutes)
5. Adjourn meeting

Topic: Whately OSRP

Time: Mar 9, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/86112457883?pwd=Vnhib1FMSUZVZTNubzdjMG04Z1JHdz09>

Meeting ID: 861 1245 7883

Passcode: 291981

One tap mobile

+13126266799,,86112457883#,,, *291981# US (Chicago)

+19292056099,,86112457883#,,, *291981# US (New York)

AGENDA

Whately Open Space and Recreation Plan Update Meeting

Tuesday, March 23rd 2021

5:00 – 6:00 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/89913407620?pwd=ako4emIxcXZJRkRoTi9qVnhBdVAxZz09>

1. Complete old action plan review
2. Section 5 check-in
3. Review maps
4. Adjourn meeting

Topic: Whately OSRP

Time: Mar 23, 2021 05:00 PM Eastern Time (US and Canada)

<https://us02web.zoom.us/j/89913407620?pwd=ako4emIxcXZJRkRoTi9qVnhBdVAxZz09>

Meeting ID: 899 1340 7620

Passcode: 287605

One tap mobile

+19292056099,,89913407620#,,,*287605# US (New York)

+13017158592,,89913407620#,,,*287605# US (Washington DC)

Dial by your location

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington DC)

AGENDA

Whately Open Space and Recreation Plan Update Meeting

Tuesday, April 6th 2021

5:00 – 6:00 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/84630865705?pwd=TWtSb3dpd2hBMkVCdFUxK05ISHNIUT09>

1. Review survey results
2. Review Section 5 questions
3. How do we want to talk about solar in the OSRP?
4. Review Maps
5. How publicize public forum?
6. Begin review of Sections 6, 7, 8

Topic: Whately OSRP

Time: Apr 6, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/84630865705?pwd=TWtSb3dpd2hBMkVCdFUxK05ISHNIUT09>

Meeting ID: 846 3086 5705

Passcode: 430634

One tap mobile

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AGENDA

Whately Open Space and Recreation Plan Update Meeting

Tuesday, April 13th 2021

5:00 – 6:30 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/84326572654?pwd=UWFiVlllcWFWMklIK1YrTXplWWWh2Zz09>

1. Review Sections 6 & 7
2. Discuss Section 8 – Goals and Objectives
3. Begin review of 7-Year Action Plan

Topic: Whately OSRP

Time: Apr 13, 2021 05:00 PM Eastern Time (US and Canada)

<https://us02web.zoom.us/j/84326572654?pwd=UWFiVlllcWFWMklIK1YrTXplWWWh2Zz09>

Meeting ID: 843 2657 2654

Passcode: 322595

One tap mobile

+19292056099,,84326572654#,,, *322595# US (New York)

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Whately Open Space and Recreation Plan Update Meeting

Tuesday, April 20th 2021

5:00 – 6:30 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/84950500948?pwd=ZWh0U2sxeDBxQWJvTXM3V25XbFRhUT09>

1. Review 7-Year Action Plan

Topic: Whately OSRP

Time: Apr 20, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/84950500948?pwd=ZWh0U2sxeDBxQWJvTXM3V25XbFRhUT09>

Meeting ID: 849 5050 0948

Passcode: 205942

One tap mobile

+19294362866,,84950500948#,,, *205942# US (New York)

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Whately Open Space and Recreation Plan Update Meeting

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Virtual meeting via zoom link:

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1. Finalize 7-Year Action Plan
2. Forum Logistics

Topic: Whately OSRP

Time: Apr 27, 2021 05:00 PM Eastern Time (US and Canada)

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Passcode: 213276

One tap mobile

+13017158592,,88321566534#,,,,*213276# US (Washington DC)

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PUBLIC FORUM

Tuesday, May 4th 2021

6:00 – 7:30 pm

1. Introductions
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 - Purpose
 - Distinctive features of new OSRP
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4. Plan maps
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5. Presentation of draft plan key findings, goals, and objectives
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Register for Zoom Meeting:

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Whately Open Space and Recreation Plan Update Meeting

Tuesday, May 18th 2021

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<https://us02web.zoom.us/j/85330146493?pwd=bVg3N2JuTnd5VFRwT0l4N3JZUitOUT09>

1. Review public comment
2. Prioritize action items

Topic: Whately OSRP

Time: May 18, 2021 05:00 PM Eastern Time (US and Canada)

<https://us02web.zoom.us/j/85330146493?pwd=bVg3N2JuTnd5VFRwT0l4N3JZUitOUT09>

Meeting ID: 853 3014 6493

Passcode: 442609

One tap mobile

+19292056099,,85330146493#,,,*,442609# US (New York)

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Meeting

Tuesday, February 23th 2021

5:00 – 6:00 p.m.

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1. Survey Review
2. Survey Distribution
 - a. Paper & Survey Monkey
 - b. Press Release, flyers
3. Adjourn meeting

Topic: Whately OSRP

Time: Feb 23, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

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Meeting ID: 844 8277 1738

One tap mobile

+13126266799,,84482771738# US (Chicago)

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Topic: Whately OSRP

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Meeting ID: 861 1245 7883

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Topic: Whately OSRP

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Dial by your location

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AGENDA

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Virtual meeting via zoom link:

<https://us02web.zoom.us/j/84630865705?pwd=TWtSb3dpd2hBMkVCdFUxK05ISHNIUT09>

1. Review survey results
 2. Review Section 5 questions
 3. How do we want to talk about solar in the OSRP?
 4. Review Maps
 5. How publicize public forum?
 6. Begin review of Sections 6, 7, 8
-

Topic: Whately OSRP

Time: Apr 6, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

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Meeting ID: 846 3086 5705

Passcode: 430634

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AGENDA

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1. Review Sections 6 & 7
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AGENDA

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1. Review 7-Year Action Plan

Topic: Whately OSRP

Time: Apr 20, 2021 05:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/84950500948?pwd=ZWh0U2sxeDBxQWJvTXM3V25XbFRhUT09>

Meeting ID: 849 5050 0948

Passcode: 205942

One tap mobile

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Dial by your location

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AGENDA

Whately Open Space and Recreation Plan Update Meeting

Tuesday, April 27th 2021

5:00 – 6:30 p.m.

Virtual meeting via zoom link:

<https://us02web.zoom.us/j/88321566534?pwd=bGhQMjYvU0ZGRDhyNVk4NC9CWxc4QT09>

1. Finalize 7-Year Action Plan
2. Forum Logistics

Topic: Whately OSRP

Time: Apr 27, 2021 05:00 PM Eastern Time (US and Canada)

<https://us02web.zoom.us/j/88321566534?pwd=bGhQMjYvU0ZGRDhyNVk4NC9CWxc4QT09>

Meeting ID: 883 2156 6534

Passcode: 213276

One tap mobile

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Agenda
Whately Open Space & Recreation Plan
PUBLIC FORUM

Tuesday, May 4th 2021

6:00 – 7:30 pm

1. Introductions
2. Introduction to the **Whately Open Space & Recreation Plan**
 - Purpose
 - Distinctive features of new OSRP
3. Accomplishments since previous OSRP
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 - Future project ideas
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<https://us02web.zoom.us/j/85330146493?pwd=bVg3N2JuTnd5VFRwT0l4N3JZUitOUT09>

1. Review public comment
2. Prioritize action items

Topic: Whately OSRP

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Meeting ID: 853 3014 6493

Passcode: 442609

One tap mobile

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+13017158592,,85330146493#,,,*,442609# US (Washington DC)



WHATELY OPEN SPACE AND RECREATION PLAN UPDATE

PUBLIC FORUM

**Tuesday, May 4th
6:00 p.m. via Zoom**

**The Open Space Committee invites you to a
presentation of the DRAFT 2021 Whately Open
Space and Recreation Plan.**

**Join us to discuss key findings and provide input
on the 7-Year Action Plan.**

Info and registration:

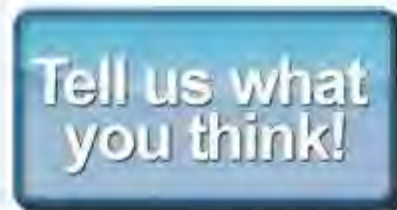
<https://www.whately.org/home/news/tell-us-what-you-think-about-open-space-and-recreation-whately>

Tell Us What You Think About Open Space and Recreation in Whately

POSTED ON: MARCH 12, 2021 - 3:12PM

The public comment period for the DRAFT 2021 Open Space and Recreation Plan is open now through Tuesday, May 18th.

We are working with the Franklin Regional Council of Governments to update Whately's Open Space and Recreation Plan—a tool through which Whately plans for the future of its conservation and recreation resources and becomes eligible for certain conservation and recreation grants.



The Seven-Year Action Plan (Section 9) establishes priority actions for accomplishing the needs identified in Section 7: Analysis of Needs. Feedback on all parts of the document are welcome, but if possible prioritize providing feedback on the draft action plan.

[Click here for DRAFT Section 9: Seven-Year Action Plan](#)

[Click here for DRAFT Section 7: Analysis of Needs](#)

[Click here for Whately's Open Space and Recreation DRAFT Plan in full](#)

[Click here for Whately's Open Space and Recreation DRAFT Maps](#)

Feedback can be directed to

Kimberly MacPhee: kmacphee@frcog.org

Tamsin Flanders: tflanders@frcog.org

[Click here for slide presentation from the 5/4 OSRP Public Forum](#)

Whately to hold public meeting on Open Space and Recreation Plan

WHATELY — Town officials and the Franklin Regional Council of Governments (FRCOG) will hold a public forum on Tuesday to review the Open Space and Recreation Plan.

Members of the public and regional stakeholders are welcome to attend the virtual meeting at 6 p.m., during which the draft Open Space and Recreation Plan will be presented for discussion.



An Open Space and Recreation Plan contains conservation and recreation goals for the town; includes an inventory of cultural, natural and recreational resources; identifies open space and recreation needs; and outlines a seven-year action plan with specific recommendations, according to a FRCOG press release.

The last Whately Open Space and Recreation Plan was completed in 2006, the release states. Up-to-date plans allow the town to apply for state grants for land conservation and recreation facility improvements.

Register for the meeti at bit.ly/3xEmdsA to receive a Zoom link.

APPENDIX D

Letters of Support



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181

November 23, 2021

Tamsin Flanders
Franklin Regional Council of Governments
12 Olive Street, Suite 2
Greenfield, MA 01301

Re: Open Space and Recreation Plan

Dear Ms. Flanders:

Thank you for submitting the draft Open Space and Recreation Plan for Whately to this office for review and compliance with the current Open Space and Recreation Plan Requirements. This plan was particularly thorough and has been conditionally approved through November 2028. Conditional approval will allow the town to participate in DCS grant rounds through November 2028, and a grant award may be offered to the town. However, no final grant payments will be made until the plan is completed.

Once the following items are addressed, your plan will receive final approval:

1. Scenic Resources and Unique Environments – a section on unusual geologic features must be added.
2. Environmental Challenges – a section on landfills must be added.
3. Section 5 – please note that recreation and water district land are also protected under Article 97. The table that lists town-owned conservation and recreation properties must be expanded to include columns on condition, recreation potential, type of grant (specify what “Commonwealth” means), and degree of protection (this column should show that recreation and water district land is protected). Any Conservation Restrictions in the town should be listed as well.
4. Analysis of Needs – the specific needs of special groups, such as teens and the elderly, must be added to the Community’s Needs section.
5. Maps – the Water Resources map should include the town’s watershed(s) and the Unique Features map should include unusual geologic features.
6. ADA – was the facility inventory form from the Open Space and Recreation Planner’s Workbook used to evaluate Herlihy Park?
7. Letters of Review – letters from the Regional Planning Agency, Planning Board, and Chief Municipal Officer are needed.

Congratulations on undertaking such an important task! Please contact me melissa.cryan@mass.gov if you have any questions or concerns, and I look forward to reviewing your final plan.

Sincerely,

Melissa Cryan

Melissa Cryan
Grant Programs Supervisor



Franklin Regional Council of Governments

June 2nd, 2021

Ms. Melissa Cryan
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

Dear Ms. Cryan,

The Franklin Regional Council of Governments (FRCOG) is pleased to endorse the work of the Whately Open Space Committee in their update of the Whately Open Space and Recreation Plan (OSRP). We support their submission of the 2021 Whately OSRP to the Massachusetts Division of Conservation Services for final review and approval.

The Plan was developed by the Whately Open Space Committee, which included representation from the Selectboard, Recreation Commission, Conservation Commission, Community Preservation Committee, Historical Commission, Trails Working Group, and Tri-Town Beach District Commission. The FRCOG provided technical assistance to complete the update. The Plan represents seven months of intensive work to gather public input, build consensus, and prioritize natural, recreation, and open space needs for the community. The goals and objectives in the Open Space and Recreation Plan reflect the vision and values of Whately residents gathered during the public input process.

The 2021 OSRP will provide Town officials and volunteers with resources to help inform decisions regarding land use, recreation, cultural, and open space issues. The Plan update, once approved by the State, will make Whately eligible for funding to implement open space and recreation projects. In addition, the Town will be better able to collaborate with neighboring towns, local land trusts, the FRCOG, and others to work towards the OSRP goals and objectives of protecting and enhancing Whately's significant natural, cultural, and recreational resources. We congratulate the Town of Whately on completing this project!

Sincerely,

Kimberly Noake MacPhee, P.G., CFM
Land Use and Natural Resources Program Manager

TOWN OFFICES
4 SANDY LANE
SOUTH DEERFIELD, MA
01373



TELEPHONE: (413) 665-4400
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TOWN OF WHATELY MASSACHUSETTS

SELECTBOARD

December 10, 2021

Melissa Cryan
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

Dear Melissa Cryan,

I am writing this letter of support for the updated Whately Open Space and Recreation Plan prepared by the Open Space Committee with the administrative support of the Franklin Regional Council of Governments (FRCOG). The Open Space Committee composition provides representation from the Selectboard, Recreation Commission, Conservation Commission, Community Preservation Committee, Historical Commission, Trails Working Group, and Tri-Town Beach District Commission. Each representative provided a unique perspective that helped to develop a comprehensive plan that will meet the recreational and open space needs, challenges, and opportunities of our community.

The Committee has thoughtfully conducted a community survey process and reflected on the feedback provided by the citizens of our community. With this information, the Committee spent several months reviewing each chapter of the plan and identifying priority action items and goals to achieve within the next seven years. I have reviewed the updated Whately Open Space and Recreation Plan that the Committee has prepared and support its submission to your office for approval.

Respectfully,

Jonathan Edwards, Chair

Whately Selectboard



TOWN OF WHATELY
Whately, Massachusetts

Planning Board
Donald Sluter, Chair

Mailing address:
4 Sandy Lane, So Deerfield, MA 01373

Melissa Cryan
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

Dear Melissa Cryan,

This letter is in support of the updated Open Space and Recreation Plan prepared by the Open Space Planning Committee, assisted by the Franklin Regional Council of Governments (FRCOG). The Open Space Committee was made up of members of the Selectboard, Recreation Commission, Conservation Commission, Community Preservation Committee, Historical Commission, Trails Working Group, and Tri-Town Beach District Commission. We feel that they have developed a comprehensive plan that will meet the recreational and open space needs, challenges, and opportunities of our community for the near future.

The Committee conducted a community survey and used the feedback provided by the Whately citizens and other input in drafting and reviewing the plan and identifying priority action items and goals to implement within the next seven years. The Whately Planning Board has reviewed the updated Open Space and Recreation Plan and supports its submission to your office for approval.

Respectfully,

Donald Sluter, Chair,
Whately Planning Board

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TOWN OF WHATELY MASSACHUSETTS

December 10, 2021

Melissa Cryan
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

Dear Melissa Cryan,

The Whately Recreation Commission is writing this letter of support for the updated Open Space and Recreation Plan prepared by the Open Space Planning Committee with the administrative support of the Franklin Regional Council of Governments (FRCOG). The Open Space Committee composition provides representation from the Selectboard, Recreation Commission, Conservation Commission, Community Preservation Committee, Historical Commission, Trails Working Group, and Tri-Town Beach District Commission. Each representative provided a unique perspective that helped to develop a comprehensive plan that will meet the recreational and open space needs, challenges, and opportunities of our community.

The Committee has thoughtfully conducted a community survey process and reflected on the feedback provided by the citizens of our community. With this information, the Committee spent several months reviewing each chapter of the plan and identifying priority action items and goals to achieve within the next seven years. The Whately Recreation Commission has reviewed the updated Open Space and Recreation Plan that the Committee has prepared and supports its submission to your office for approval.

Respectfully,

Chris Williams, Chair
Whately Recreation Commission