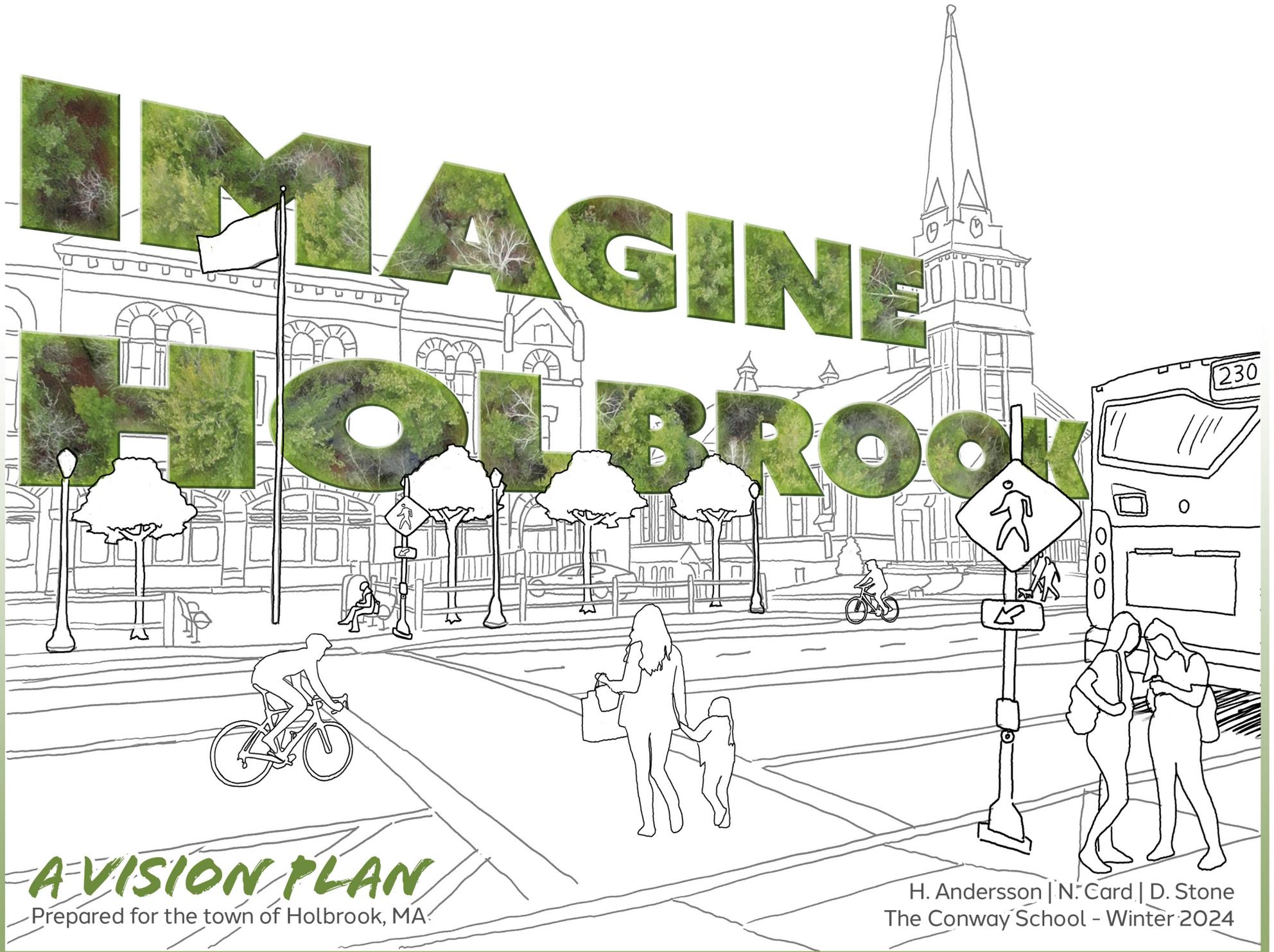


IMAGINE HOLBROOK



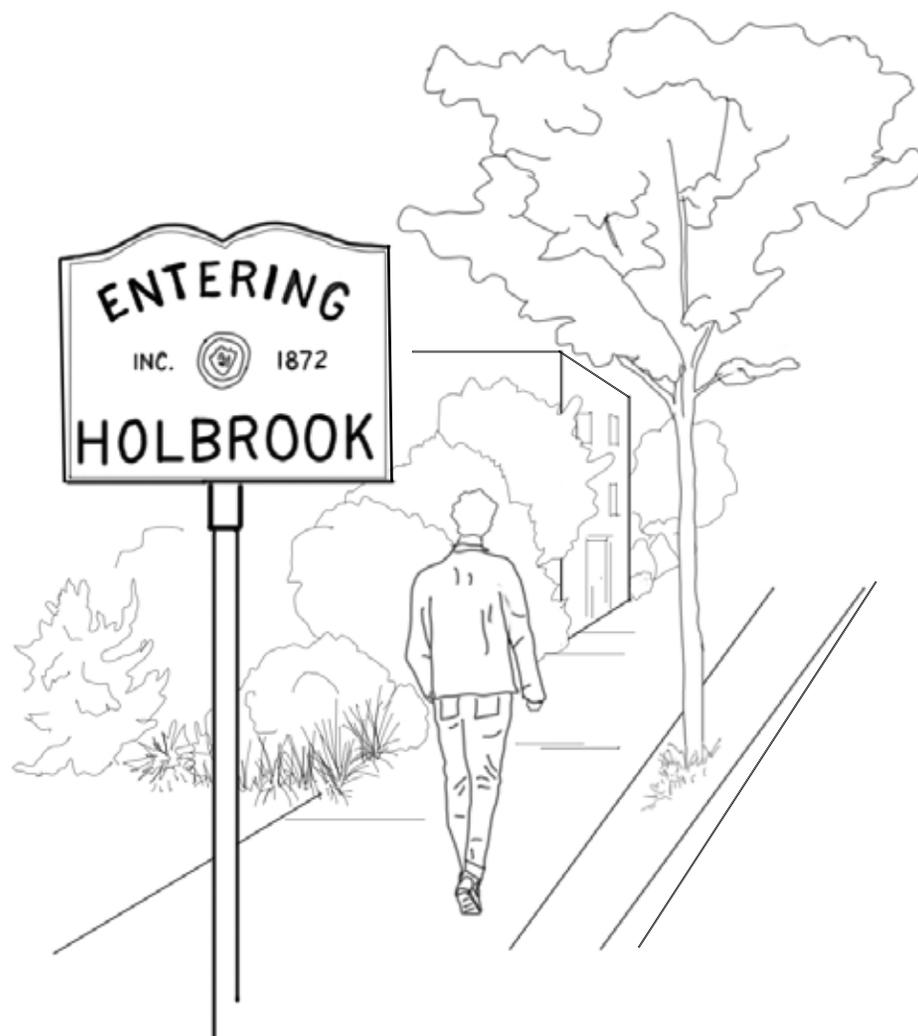
A VISION PLAN

Prepared for the town of Holbrook, MA.

H. Andersson | N. Card | D. Stone
The Conway School - Winter 2024

IMAGINE HOLBROOK

A VISION PLAN FOR THE TOWN OF HOLBROOK, MA



Prepared for the Holbrook Open Space Committee

Hannah Andersson | Nate Card | Deborah Stone

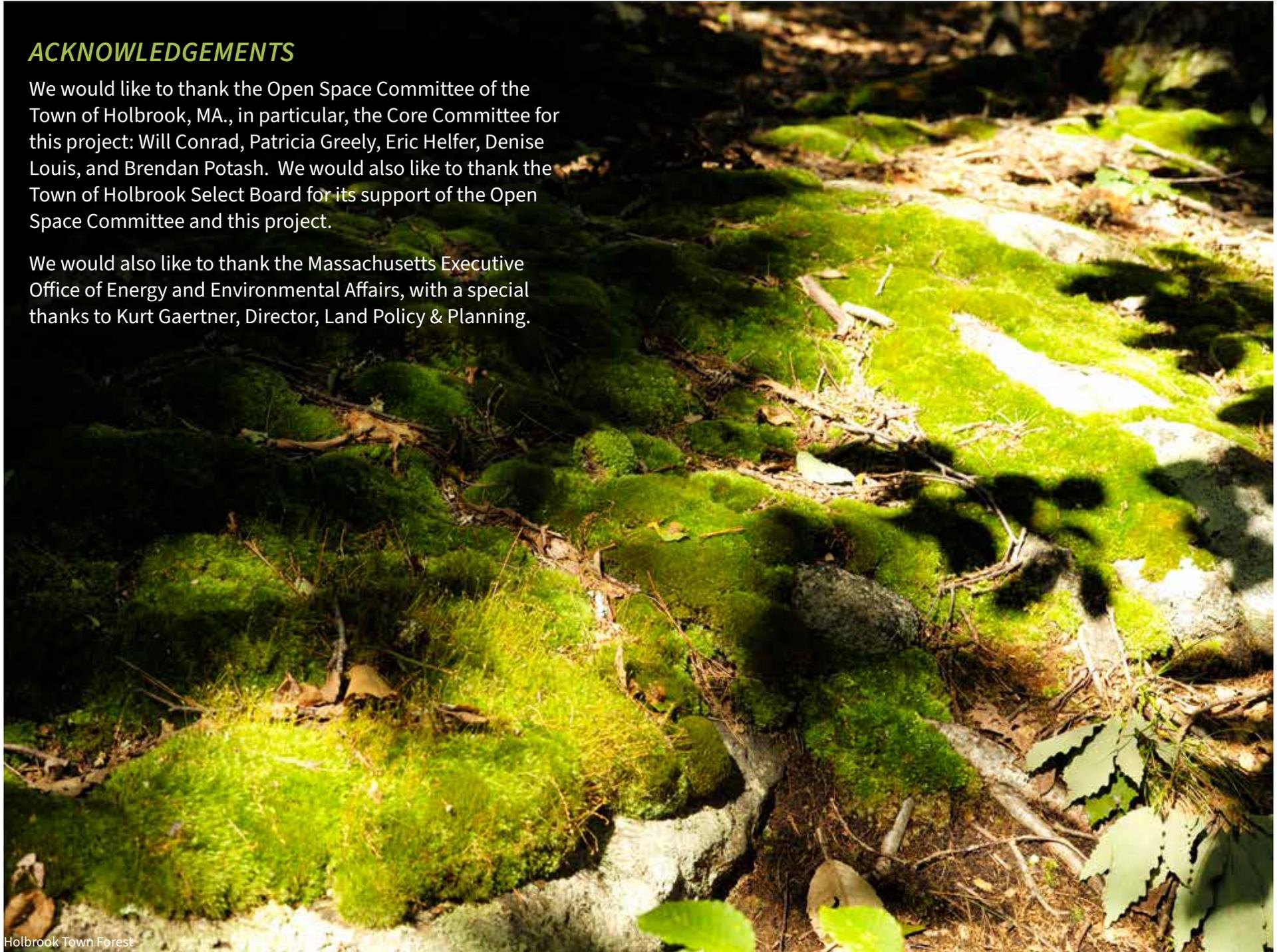
The Conway School of Ecological Landscape Design

Winter 2024

ACKNOWLEDGEMENTS

We would like to thank the Open Space Committee of the Town of Holbrook, MA., in particular, the Core Committee for this project: Will Conrad, Patricia Greely, Eric Helfer, Denise Louis, and Brendan Potash. We would also like to thank the Town of Holbrook Select Board for its support of the Open Space Committee and this project.

We would also like to thank the Massachusetts Executive Office of Energy and Environmental Affairs, with a special thanks to Kurt Gaertner, Director, Land Policy & Planning.





Holbrook Town Forest

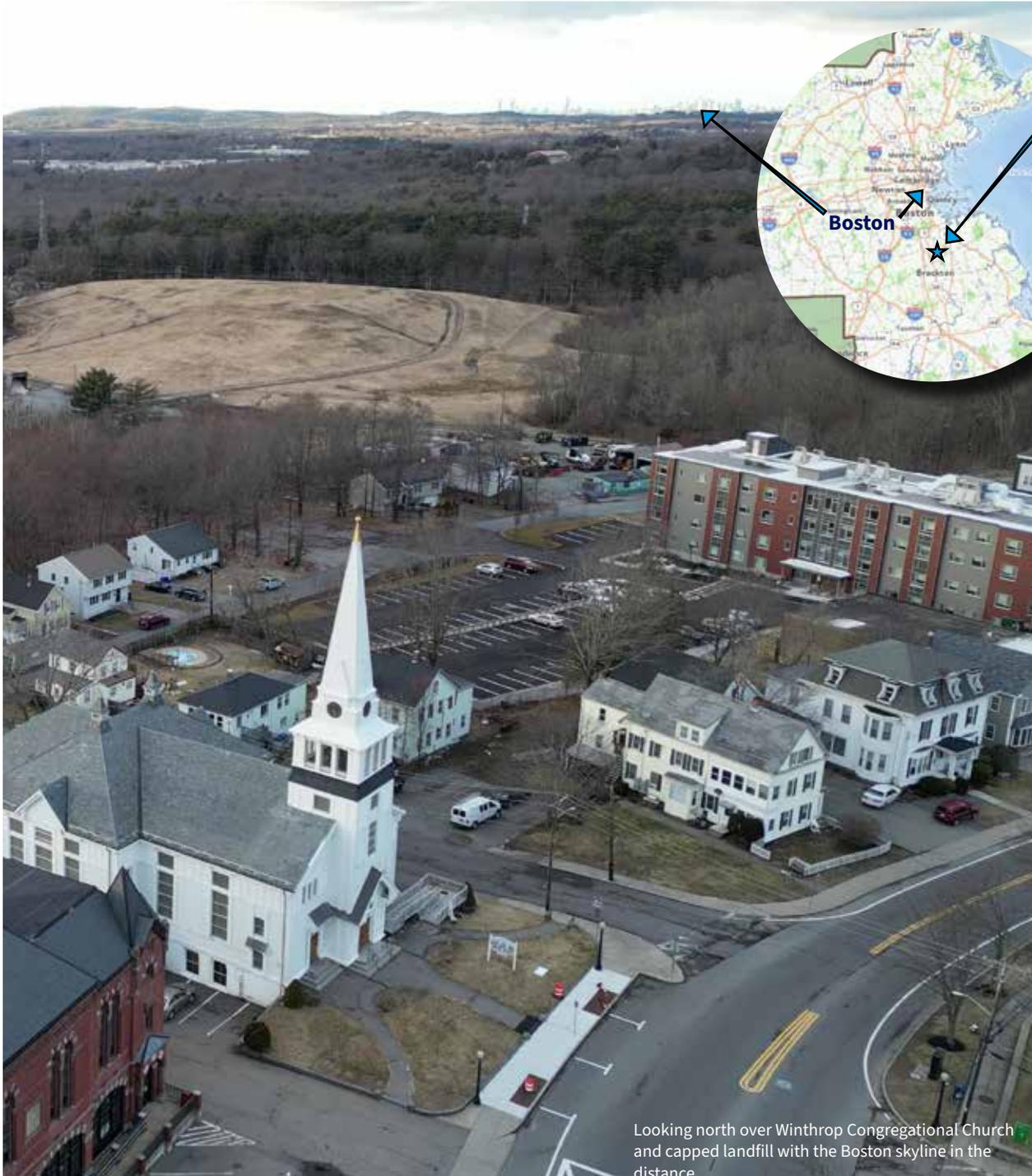
TABLE OF CONTENTS

4	<i>VISION: IMAGINING HOLBROOK</i>
18	<i>NATURAL RESOURCES</i>
42	<i>LAND USE</i>
78	<i>ACTION STEPS</i>
94	<i>SELECTED REFERENCES</i>
98	<i>PHOTO CREDITS</i>
102	<i>APPENDICES</i>



A photograph of a dense forest with many thin tree trunks and lush green foliage. The trees are tall and thin, with a thick canopy of green leaves. The ground is covered in fallen leaves and branches. The overall scene is a vibrant, sunlit forest.

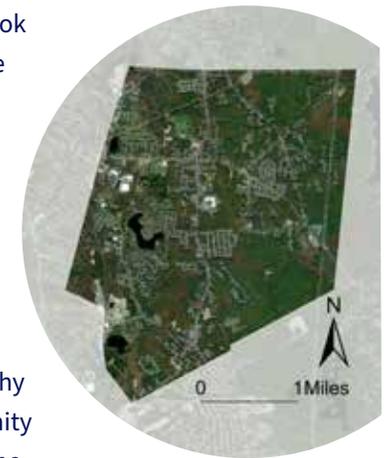
Imagining Holbrook



Looking north over Winthrop Congregational Church and capped landfill with the Boston skyline in the distance

Holbrook at a Glance

Holbrook, Massachusetts, is a town of just over 7.4 square miles, located seventeen miles south of Boston, with a population of just over 12,000 people. The town is considered part of the larger Boston metropolitan region, and while it has a long history of agriculture and industry, in the present day the town is largely residential, and many people commute in and out to neighboring cities for work. Like many towns in the region, Holbrook is looking to integrate its rich history and cherished values into a changing world, to manage pressures for growth along with protection of natural resources, and to ensure a healthy and thriving community in the decades to come.



What is a Vision Plan?

In the winter of 2024, members of the Open Space Committee of Holbrook and the Conway School entered into a collaboration to support the town in creating a Vision Plan. This visioning document is an attempt to capture town residents' values and aspirations which can help guide ongoing and future planning endeavors, and act as a foundation for the development of an Open Space and Recreation Plan to be completed in the winter of 2025. The residents' process of developing a vision for the town will continue beyond this document, and this document provides spatial, ecological, social,

and other inventories and analyses to support the residents as they further explore the kind of town they hope for.

The Conway School is a graduate program in ecological landscape design and planning located in Northampton, MA. Founded in 1972, the school's mission is to explore, develop, practice, and teach design of the land that is ecologically and socially sustainable. As part of the one year master's program, student teams from the Conway School engage in community scale design and planning projects with towns and municipalities.

The Conway student team worked closely with a Core Committee of four members of the Holbrook Open Space Committee. The Core Committee included Will Conrad, Patricia Greely, Denise Louis, and Brendan Potash. The Conway team and the Core Committee met weekly by Zoom throughout the course of the planning process.

While the Open Space Committee and the Conway team made strong efforts to reach as many community

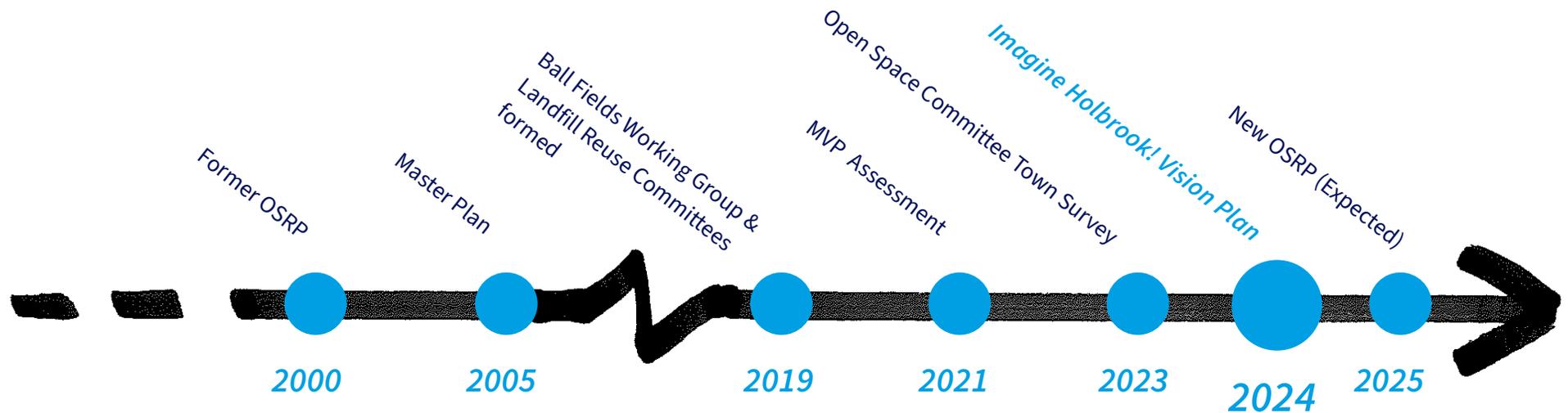
members as possible for input throughout this engagement, there were limits to how much input could be gathered. One challenge to fuller outreach and engagement was time. The vision project took place over a period of eleven weeks, and the Conway team was based in Northampton, not Holbrook. Thus there are limitations on the depth of engagement or with communities that may be newer to the town, may have English as a second language, may not be or feel included in the culture of the town, or may have economic realities or familial responsibilities that constrain participation in attending visioning plan events on weekends or evenings.

Recent History of Town Planning

Over the last 25 years, residents of Holbrook have embarked upon several town planning processes. In 2000 the town developed an Open Space and Recreation Plan (OSRP), followed in 2005 by a Master Plan. In 2019, two advisory groups were formed: the Ball Fields Working Group was tasked with evaluating fields and recreation opportunities; the second,

"Landfill Reuse Committee" was formed to explore options for the future of the town's capped landfill. In 2021, the town engaged in an assessment called Municipal Vulnerability Preparedness (MVP). Working with the consulting group Environmental Partners, the town performed an assessment of its preparedness for climate change. In 2023, the Open Space Committee conducted an online town-wide survey, and partnered with the Conway School to formulate this vision plan. In 2025, the town expects to partner with the Conway School again to create a new Open Space and Recreation Plan.

Although many of these existing plans were referenced throughout the visioning process, this plan draws most heavily from those written from 2021 onward: the MVP assessment, the Open Space Committee's town survey, and two community engagement sessions conducted by the Conway School student team in partnership with the Open Space Committee.



MVP Assessment (2021)

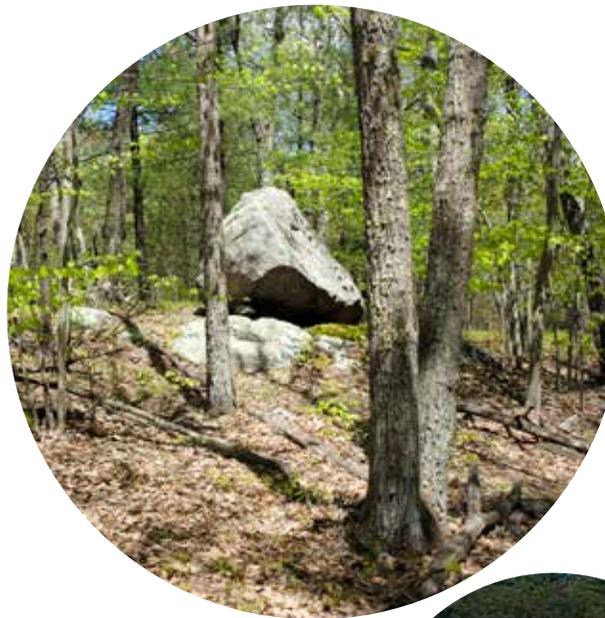
The Municipal Vulnerability Preparedness grant program (MVP) provides support for cities and towns in Massachusetts to begin the process of planning for climate change resiliency and implementing priority projects. The state grants funding to towns to complete vulnerability assessments and develop action-oriented resiliency plans. In 2021, working with the consulting firm Environmental Partners, the Town engaged in an MVP assessment. The major threats

related to changes in climate include increased extreme heat days and heat waves, both increased flooding from large rain events and a greater likelihood of drought, increased flooding due to sea level rise, and impacts from more intense storms (MVP Community Resilience Building Workshop Summary of Findings Report, Town of Holbrook, April 2021). A core group of ten key stakeholders participated in three virtual workshop sessions in which they identified the highest

priority hazards to the town, identified strengths and vulnerabilities across environmental, infrastructure, and socioeconomic systems, identified key actions for adaptation, and developed a set of high priority action items for the town to pursue.

The following assets and strengths were identified in the town:

- ▶ Available open space for potential flood storage and conservation
- ▶ Town Forest which provides recreation and is a protected natural resource
- ▶ Recently constructed dam at Lake Holbrook
- ▶ New K-12 school buildings
- ▶ New drinking water plant under construction
- ▶ Active food pantries
- ▶ Active clubs and organizations
- ▶ Emergency services



Photos clockwise from top left: Town Forest, geese on Lake Holbrook, Holbrook Middle-High School

MVP workshop participants generated a list of action items (below) and prioritized five of these as **most critical**.

Environmental

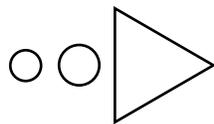
- ▶ **Comprehensive Plan/Update Master Plan**
- to evaluate open space, prioritize future development, and protect/acquire Open Space for resiliency
- ▶ **Lake Holbrook Water Quality Assessment**
- identify sources of pollutants, protect neighboring community from air quality issues
- ▶ Evaluation of town-wide culverts and watershed area - identify opportunities for ecological restoration and/or daylighting of streams
- ▶ Develop tree inventory to establish priority-based tree planting and maintenance (with goal of a Tree City-USA designation)
- ▶ Continued engagement to monitor activities and opportunities for beneficial use at the Baird & McGuire Superfund Site
- ▶ Encourage the extension of protected space that Town Forest has to offer (invaluable resource area)

Infrastructure

- ▶ Culvert assessment - identify need for increased capacity and/or restoration
- ▶ **Hazard Mitigation Plan** - needed for further planning and access to FEMA funds
- ▶ **Drainage system evaluation** - identify areas for increased capacity, improve water quality, and/or green infrastructure opportunities
- ▶ Collaboration with Joint Water Board to protect Resource Areas and infrastructure
- ▶ Evaluation of generator needs at sewer pump stations
- ▶ Ongoing maintenance of Holbrook Lake Dam
- ▶ Communication with Eversource for protection of infrastructure (in floodplain)

Societal

- ▶ Coordinate organizations in identifying and conducting best practices amongst members to reduce risk (faith-based groups/community clubs/organizations)
- ▶ **Provide resources and educational outreach to reduce risk in vulnerable neighborhoods** (Identify point of contact)
- ▶ Continue Emergency Communication System and increase awareness and involvement in the program for more use
- ▶ Conduct analysis of Regional Shelter Plan or need for intermunicipal agreement for shelter needs
- ▶ Evaluation of school buildings to accommodate cooling and heating centers or shelters as needed
- ▶ Coordinate emergency planning efforts with Council on Aging

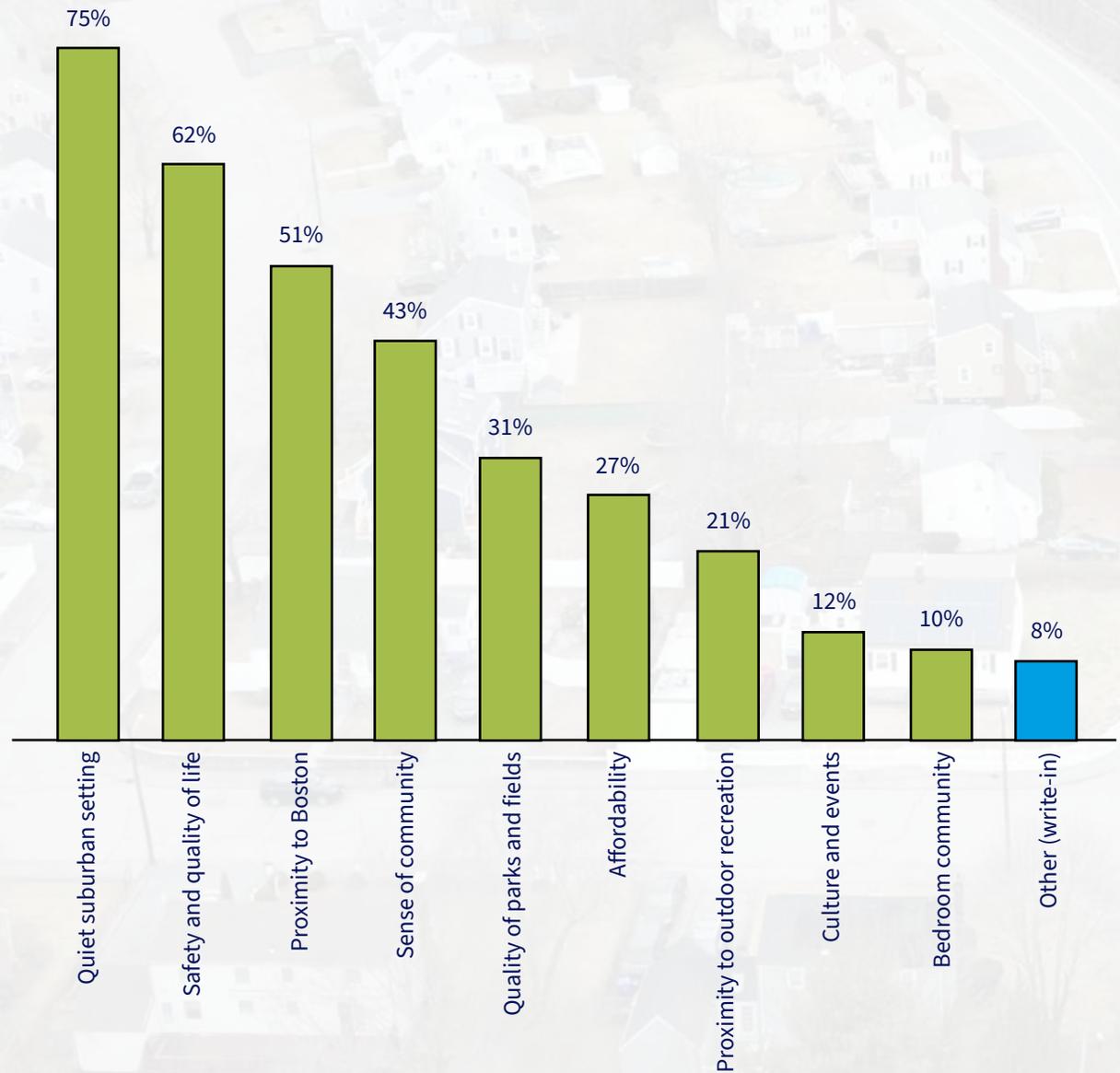


Towns that complete the MVP assessment are eligible to apply for MVP Action Grants. The Town has not yet followed up to apply for these grants, but the window of time is still open to do so. Completing projects funded with MVP grants will help improve climate resilience in the town, which is a priority for residents.

Online Survey (2023)

The Holbrook Open Space Committee's 2023 visioning survey—which received 237 responses, 2% of the population—offers some insight into the interests and concerns of this suburban New England community. When asked to select which features of life in Holbrook they value most, respondents' top three choices were: "quiet suburban setting" (75%); "safety and quality of life" (62%); and "proximity to Boston" (51%). The next two choices, which fell short of a majority, were "sense of community" (43%), and "quality of parks and fields" (30%). Combined with a handful of write-in responses which mentioned "people," "family" and "small-town atmosphere," these survey responses suggest that residents may have much of their work- and home-life needs met, and desire to prioritize improvements to "third place" spaces (i.e., communal settings, distinct from both home and work, where individuals gather for socializing and connection), especially when it comes to outdoor recreation.

The following question in the survey asks respondents what features in town they would like to see expanded or improved, and 2 out of every 3 responses mention open space and recreation in some form (e.g., parks, playgrounds, Town Forest, and the addition of a recreation center).



"Seeing wildlife that I would not normally see"

"The library!"

"Very nice people"

"Great people"

"Not the traffic"

"Small town atmosphere"

The town needs to be improved
The roads and sidewalks are in
Beautiful historic buildings are in
There is not enough green sp
The senior center needs to b
which have long been ignor

Driving through the town is
station, what would we hir
quality of life.

High Taxes and clean w

Safety, more commun

Attract and maintain

More open space &
markets to off set
Stop & Shops.

Open public spa

A community

Walkability,

Stronger le

Holbrook
commun
Flint Fie
Sumner

FIELD
town
dese
new
gre

D

Clean we

More local businesses, more of a downto

Better recycling center for things other f

More space for Sports / BASKETBALL

More shopping

Lower Taxes

Traffic control speeding in neigh

Conservation, more open spar

Programs for youth. Ymca, br

More town offerings

The playground needs sor
tall, the mulch needs refil

Parks and fields,

The Holbrook Town F

better playground fr
area for relaxing an

More transparent

Activities for th

Everything!

The sports f

Fix the wal

Dedicate

Better r
Playgr
Fields
Impr

Thr
Ba

Clean we

(7) Which features of Holbrook would you like to see expanded or improved?

200 responses

Safety

Town Government

Would like to see Holbrook Center more walkable, less traffic, more beautification
I would like to see the aesthetics and usability improved. Specifically around lakes and
waterways to allow residents and surrounding communities to enjoy these areas. Hopefully
adding to the economy of our small businesses in town.

Access to natural resources - town forest, Cochato river, clean industrial business
opportunities, bringing back
actual Charm to the town, a walkable downtown area.

The Holbrook Town Forest
I would like to see a rec center for ALL Holbrook residents, more park space with fields for
sports, and an expanded track between the old JFK and the High school or summer fields

Larger commercial areas.
Traffic Laws to be enforced!
Clean-up of individual homed
Stop the negativity

Need places for kids to go. Town pool, rec center, Dave and buster, trampoline park etc
More dog parks and areas to go hiking/walking. Also more shops and retail spaces.
Rec center for kids and seniors. Field improvements for all the fields.

I would like to see a Rec department and more focus on the youth of our town
Please make it a walkable town
A wider range of businesses and restaurants

Sumner park
I would like to see more business in town to help offset tax liabilities
some sort of indoor recreation center for the town youth
town sports, practices etc. I would also like to see
weekly collection.

Up keep of parks and

SAFETY

OS/REC

BEAUTY

Comm/BIZ
(GRAC, incl.)

WALK/TRAF

OTHER
(CONT)

Community Engagements (2024)

“Imagine Holbrook: Growing Our Home Together”

The first Community Engagement event was held at the Holbrook town library on Saturday February 3, from 12 to 2pm, titled “Imagine Holbrook.” Outreach included an email blast from the town, a limited number of flyers posted in the community, person-to-person outreach by the Open Space Committee to other committees

in the town, and postings on the library website and calendar. The goals of the event were to introduce the scope of the Vision Project to the community, share a summary of the results of the town survey, provide some information and context about the town and its resources, and gather feedback on three content areas that were identified from reviewing the survey results – Natural Resources, Circulation and Use, and Health

and Safety. Participants circulated among three content stations, which included maps and activities designed to elicit input from community members relating to the topic. An additional activity that ran throughout the event was a large timeline of the town’s history which attendees were asked to fill in with events and dates that they thought were important. The event was attended by approximately 50 people.



Community engagement at the Holbrook Public Library (February 2024)

“Imagine Holbrook: Past, Present, Future”

The second community engagement took place on Monday March 4, from 5:30 to 7:30pm at the John F. Kennedy Elementary School/Holbrook Middle-High School (they are on the same campus). This time and location represented an effort to reach community members who may not have been able to come on a weekend (to the prior event) and also to potentially reach younger families in the town. The flier for the event was put into the backpacks of the children at

school two weeks in advance of the event. The event was also shared through the town email list. Core Open Space Committee members distributed flyers to other members of the committee for distribution around town. The format of the event was a short presentation by the Conway Team sharing some of the analyses conducted around natural resources, zoning and land use, and community health. The community was then divided into three groups to dig further into each of these topics and to engage in conversations. At the end of the evening, a group vision activity collected words

and phrases with the prompt “My vision for the town of Holbrook is...” that represent what residents want for the future of their town. This event was attended by 40 to 50 people, most of whom were not at the event at the library.

Key words from the second engagement: community/ neighborhood, clean, safe, conservation/green/natural, recreation/sports, walkable, together/all-ages/mixed-use/diverse/everyone, honest/respectful/transparent (of gov't), family/youth, space(s)/place(s)/areas



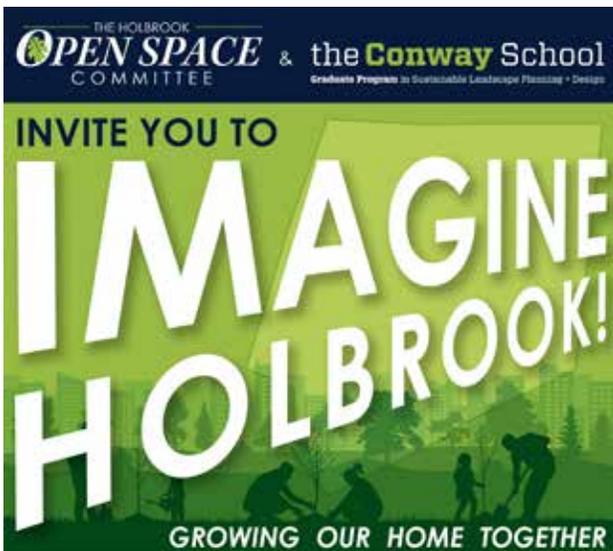
Community engagement at the Holbrook Middle-High School (March 2024)



Selection of photos from the 2024 community engagement events



Community timeline activity at community engagement)



Finding the Vision

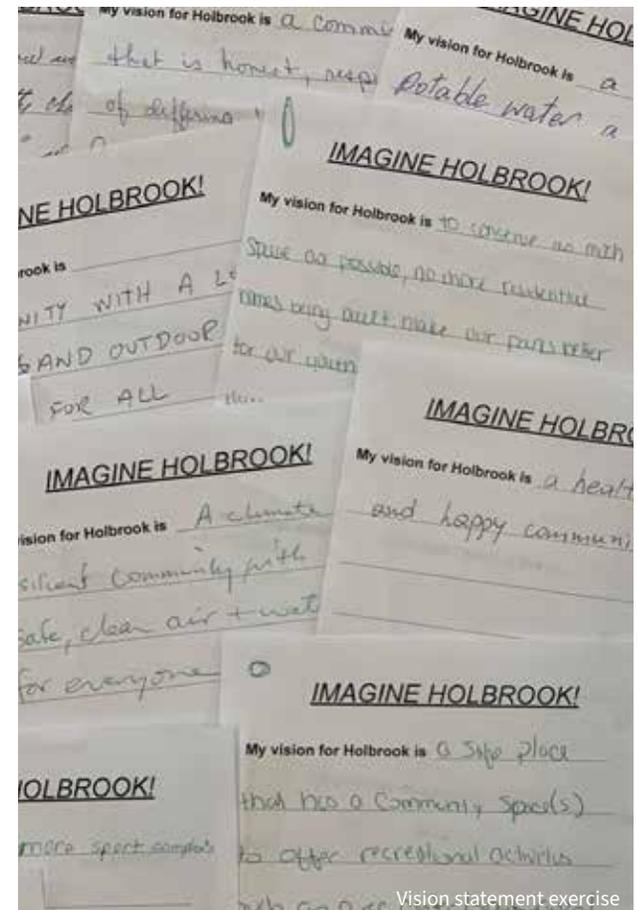
In addition to the MVP assessment, town survey, and community engagements just described, the student team collected input from residents by way of conversations and interviews. Throughout the process, the Open Space Committee provided additional information and feedback.

With the collected data, two forms of vision mapping were developed: a set of aspirations, and a working vision statement. These two summary documents inform, guide and support the plan that follows.



Community engagement event

Vision mapping: a set of ten aspirations that distill the feedback gathered from the survey and the first community engagement event.



Vision statement exercise

Vision mapping: a working vision statement which coalesces input received throughout the visioning process into a draft vision for the Town of Holbrook.

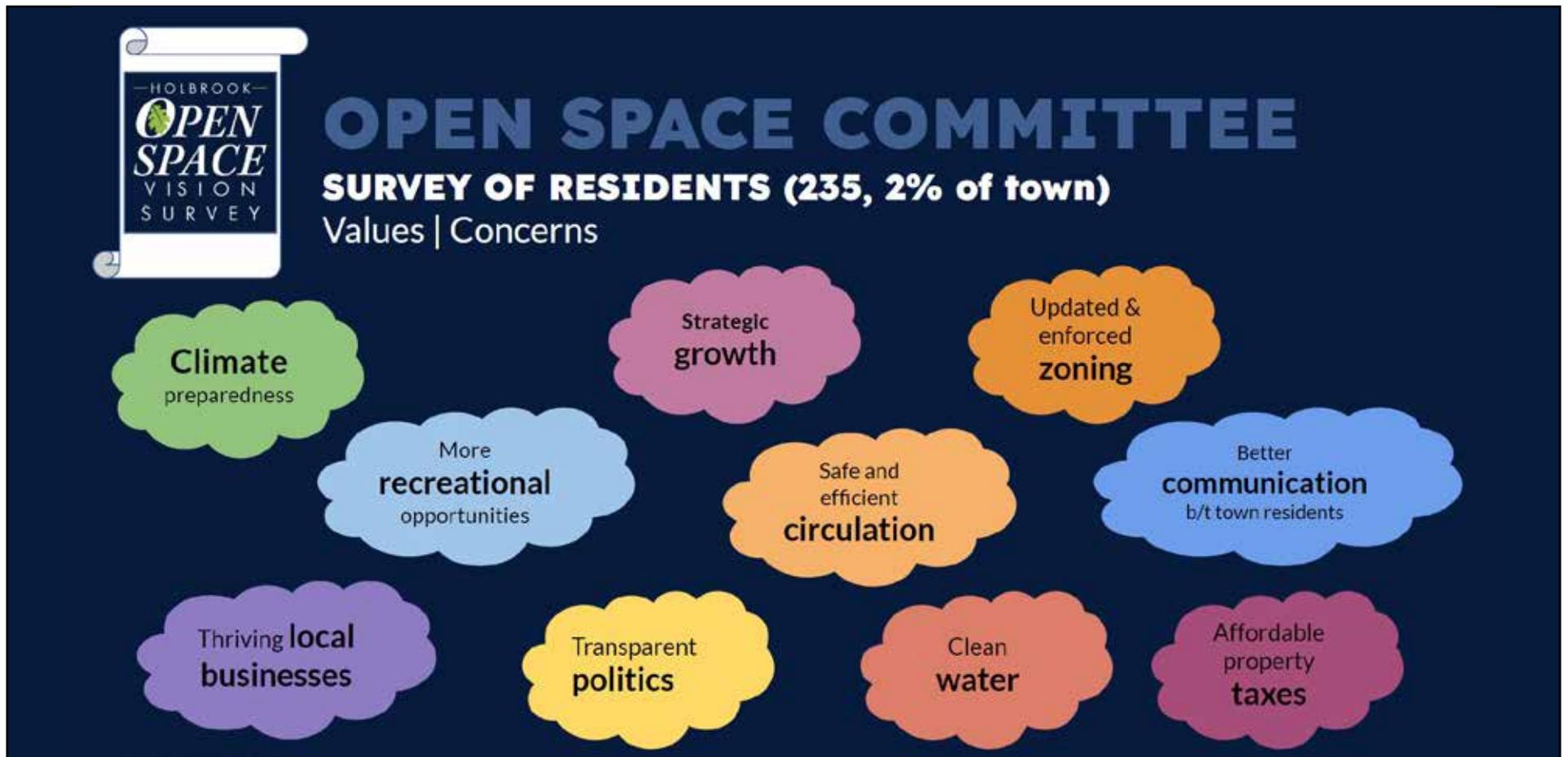
Aspirations

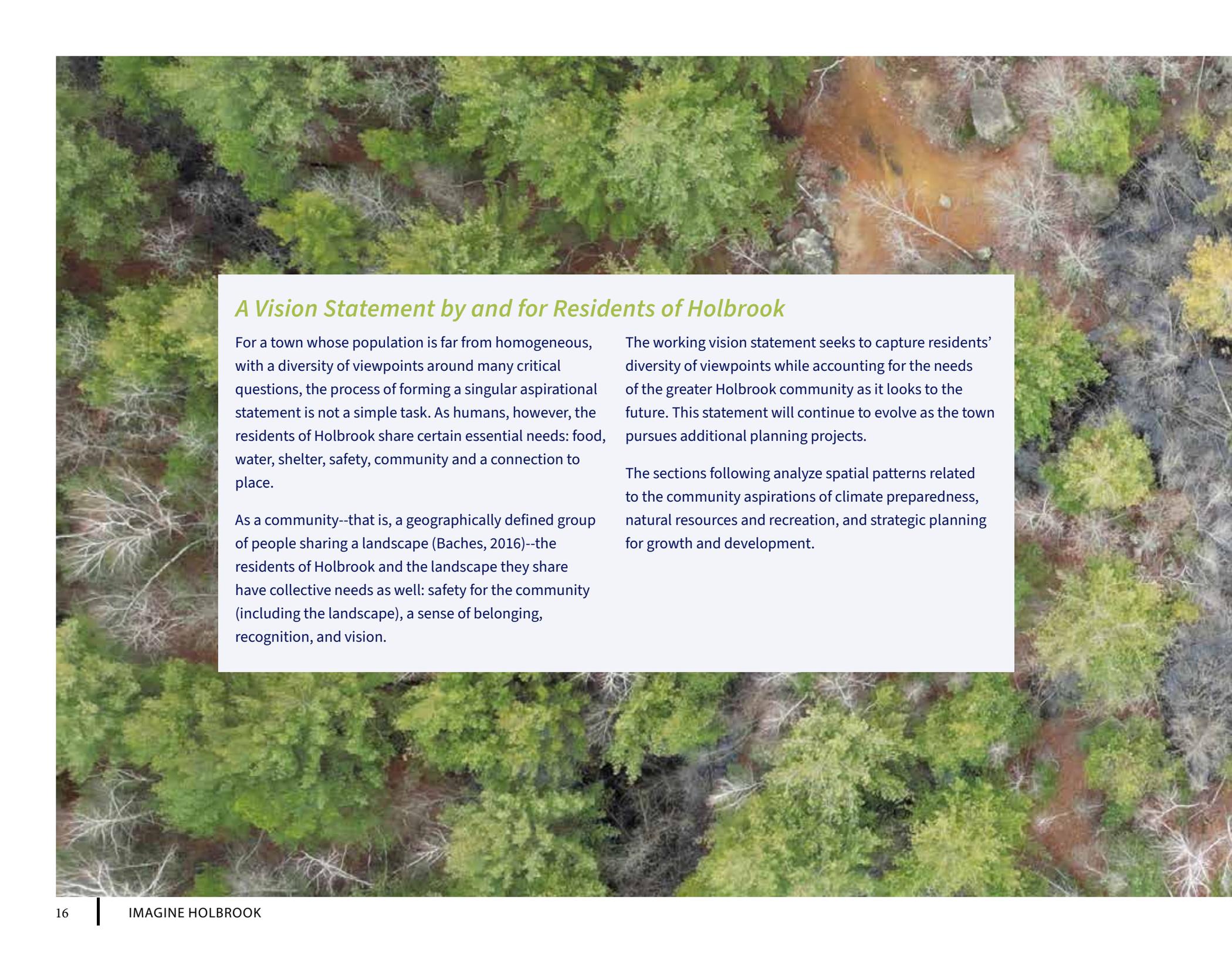
Themes that emerged through the town-wide survey and the community engagement events are distilled here into ten overarching aspirations expressed by residents of the town. These include climate preparedness, more recreational opportunities, thriving local businesses, transparent politics, clean water, strategic growth, safe and efficient circulation, updated and enforced zoning, better communication from the town to the residents, and affordable property taxes.

Within this list of salient aspirations is another quality which is implied but not overtly expressed, and that quality is: "a healthy, ecologically sustainable natural environment."

While all of these aspirations are extremely important, the vision plan directly addresses the issues of climate change preparedness, safe and efficient circulation, zoning and strategic growth, clean water, and recreational opportunities.

Topics not investigated in this report in depth are better communication between town and residents, affordable property taxes, transparent politics and the expressed wish for more thriving local businesses.



An aerial photograph of a forest. The trees are mostly green, with some bare, greyish branches visible. A dirt path or clearing is visible in the upper right quadrant, showing reddish-brown soil. The overall scene is a dense, natural landscape.

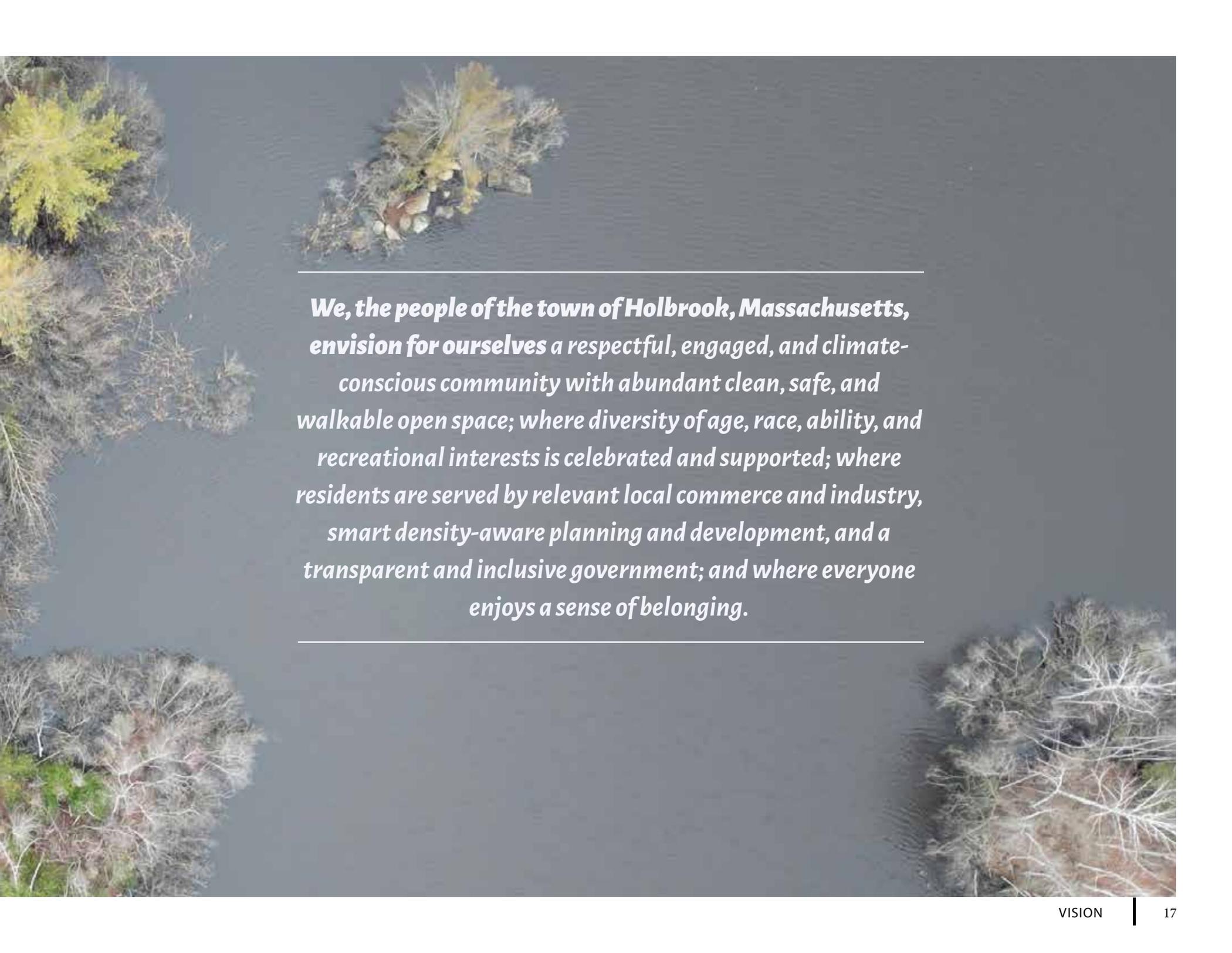
A Vision Statement by and for Residents of Holbrook

For a town whose population is far from homogeneous, with a diversity of viewpoints around many critical questions, the process of forming a singular aspirational statement is not a simple task. As humans, however, the residents of Holbrook share certain essential needs: food, water, shelter, safety, community and a connection to place.

As a community--that is, a geographically defined group of people sharing a landscape (Baches, 2016)--the residents of Holbrook and the landscape they share have collective needs as well: safety for the community (including the landscape), a sense of belonging, recognition, and vision.

The working vision statement seeks to capture residents' diversity of viewpoints while accounting for the needs of the greater Holbrook community as it looks to the future. This statement will continue to evolve as the town pursues additional planning projects.

The sections following analyze spatial patterns related to the community aspirations of climate preparedness, natural resources and recreation, and strategic planning for growth and development.

An aerial photograph of a pond with several small islands of trees and rocks. The water is dark and still. The trees are mostly bare, suggesting a late autumn or winter setting. The overall tone is muted and natural.

We, the people of the town of Holbrook, Massachusetts, envision for ourselves a respectful, engaged, and climate-conscious community with abundant clean, safe, and walkable open space; where diversity of age, race, ability, and recreational interests is celebrated and supported; where residents are served by relevant local commerce and industry, smart density-aware planning and development, and a transparent and inclusive government; and where everyone enjoys a sense of belonging.



A dirt trail winds through a dense forest. The path is covered in fallen leaves and small rocks, leading into the woods. The surrounding vegetation is lush and green, with many large, broad leaves in the foreground. Sunlight filters through the trees, creating dappled light on the ground.

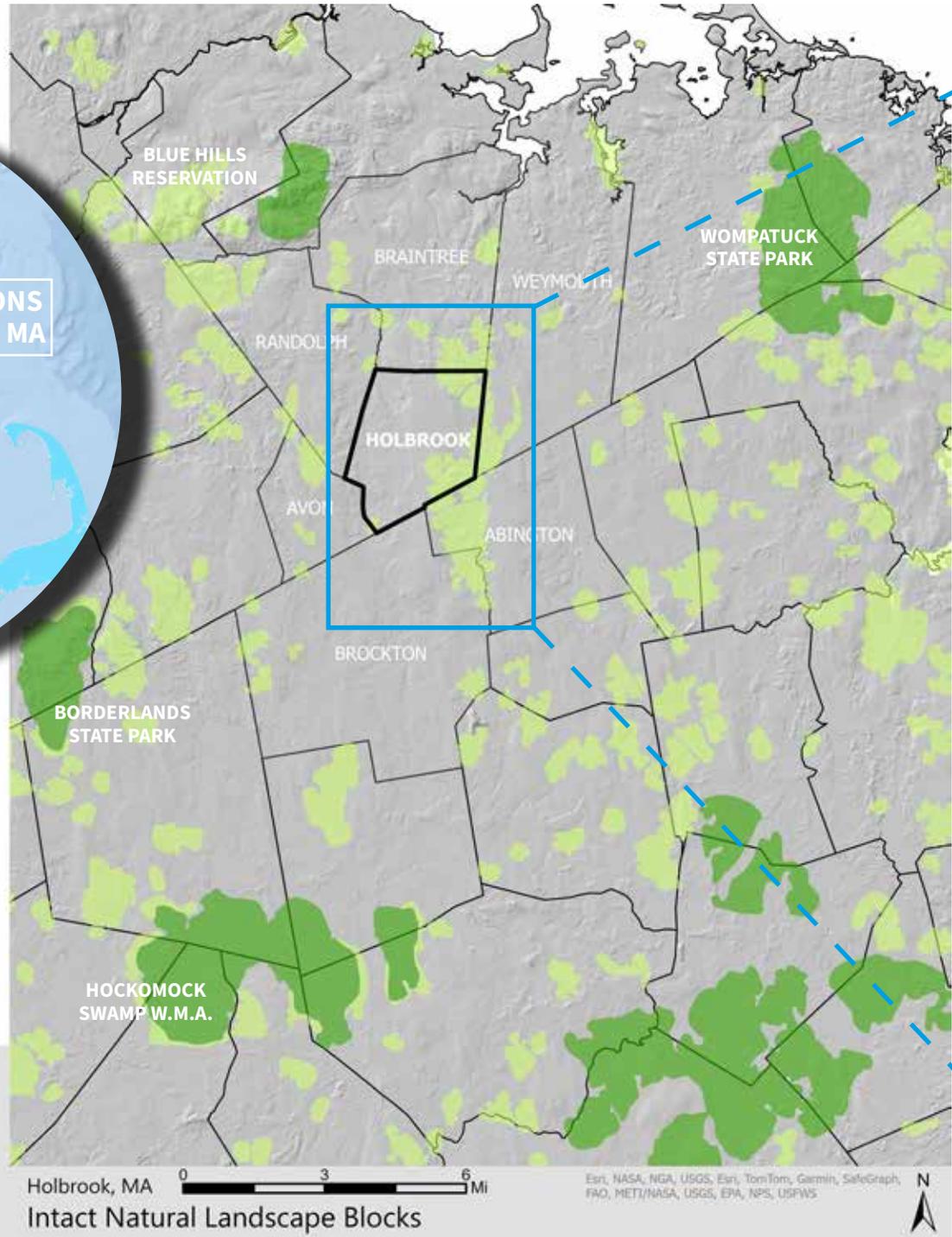
Natural Resources & Recreation

LAND COVER

Regional Significance

Holbrook lies within the Southern New England Coastal Plains and Hills (SNECPH) ecoregion which stretches around Boston to northeast Massachusetts and extends west through Rhode Island, Connecticut, and a small portion of New York. Ecoregions represent areas with similar ecosystems and natural resources such as forest type or abundance of wetlands. They serve as a spatial framework facilitating research, management, and monitoring of ecosystems. The SNECPH ecoregion is known for its low hills and many small lakes, reservoirs, and wetlands. The forests are predominantly oak, hickory, hemlock, and pine, with green ash, red maple, and Atlantic white cedar characteristic of the region's forested wetlands (EPA - Ecoregions of New England).

Within the SNECPH ecoregion and around Holbrook are large intact areas of natural landscape, such as Blue Hills Reservation to the north, and Borderlands State Park to the west. These intact areas designated by BioMap are minimally impacted by human development such as housing, industry, and roadways, and may also include core habitats supporting rare species, exceptional natural communities, and resilient ecosystems.



Legend

- Local Blocks
- Critical Blocks
- Holbrook
- Town Outlines

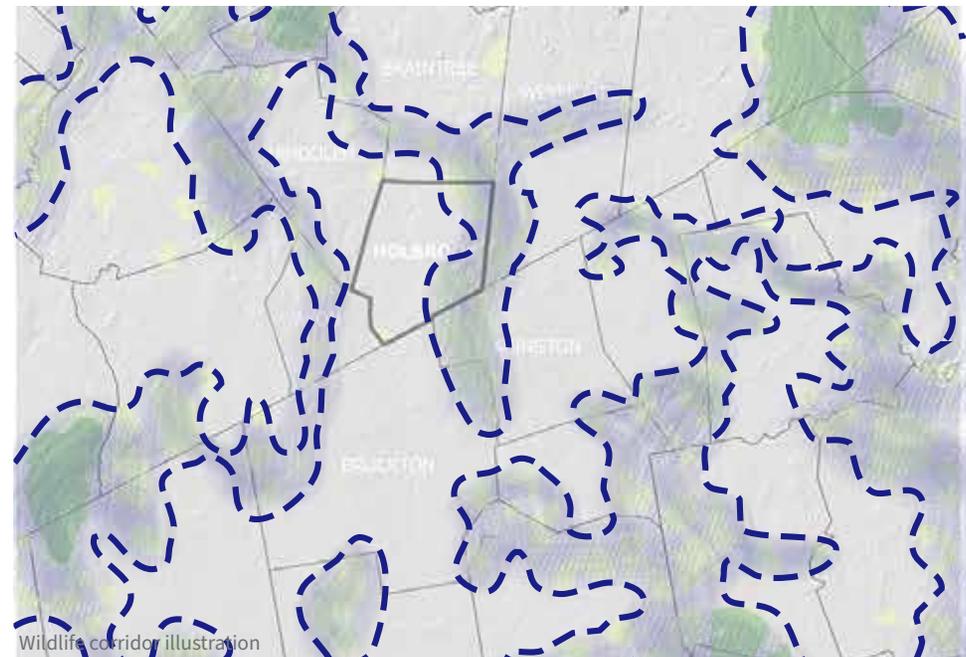


A corridor for wildlife along the eastern border of Holbrook, connecting regional areas of critical habitat



Connectivity

In between these larger critical areas in the region are smaller blocks of intact landscape, also known as local blocks, scattered across towns. These smaller patches not only provide habitat and other important ecological functions, but also create varying degrees of connectivity between the larger areas of intact landscape. This connectivity is critical for sustaining biodiversity, supporting ecosystem services, and promoting the resilience of ecosystems in the face of environmental changes due to climate change. Looking at these larger patterns can reveal how local decisions around land use can greatly impact ecological connectivity.



Wildlife corridor illustration



Mixed tree cover in Holbrook

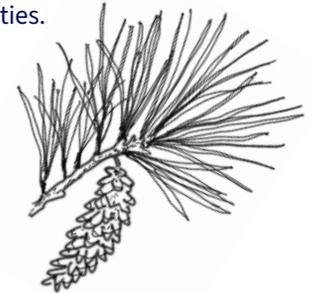
A Forested Landscape

The vegetation of Holbrook resembles that of other Norfolk County towns, but its wealth of forest is notable and is a source of pride for its residents. Holbrook has on average about 20% more tree canopy than the immediately surrounding communities (according to USDA data from iTree). This is especially noteworthy given its smaller size and close proximity to larger, more urban areas such as Brockton and Boston. Despite this, Holbrook’s landscape has remained relatively undeveloped over the decades. For more insight around why, comparatively, so little development occurred within Holbrook, please refer to the Land Use section of this document.

Holbrook’s forest cover is predominantly deciduous (trees which lose their leaves in fall such as oak and maple) with some smaller evergreen patches throughout. A large area of primarily deciduous forest can be found in the Town Forest in the northeast where there are also critical and unique ecological features. In the southeast area of town, referred to as Rocky Woods, an area of primarily evergreen forest can be found. Currently, both areas are largely undeveloped and provide many ecological and some recreational resources such as wildlife habitat and hunting. Ownership affects the usage of these spaces and is discussed further in the open space and recreation subsection.

Residents greatly value the wooded character of town and many want to keep it as is. Below are some quotes extracted from the recent town survey and community engagement activities.

“ I want to see untouched forest kept natural... ”



“ We need to become climate/nature responsible. ”

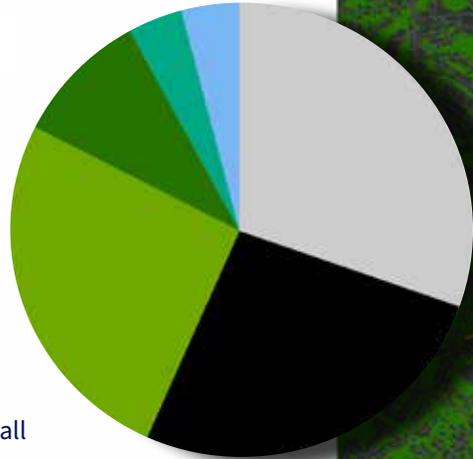


“ Work wisely to balance nature and building. All or none for either position is no benefit to anyone. ”

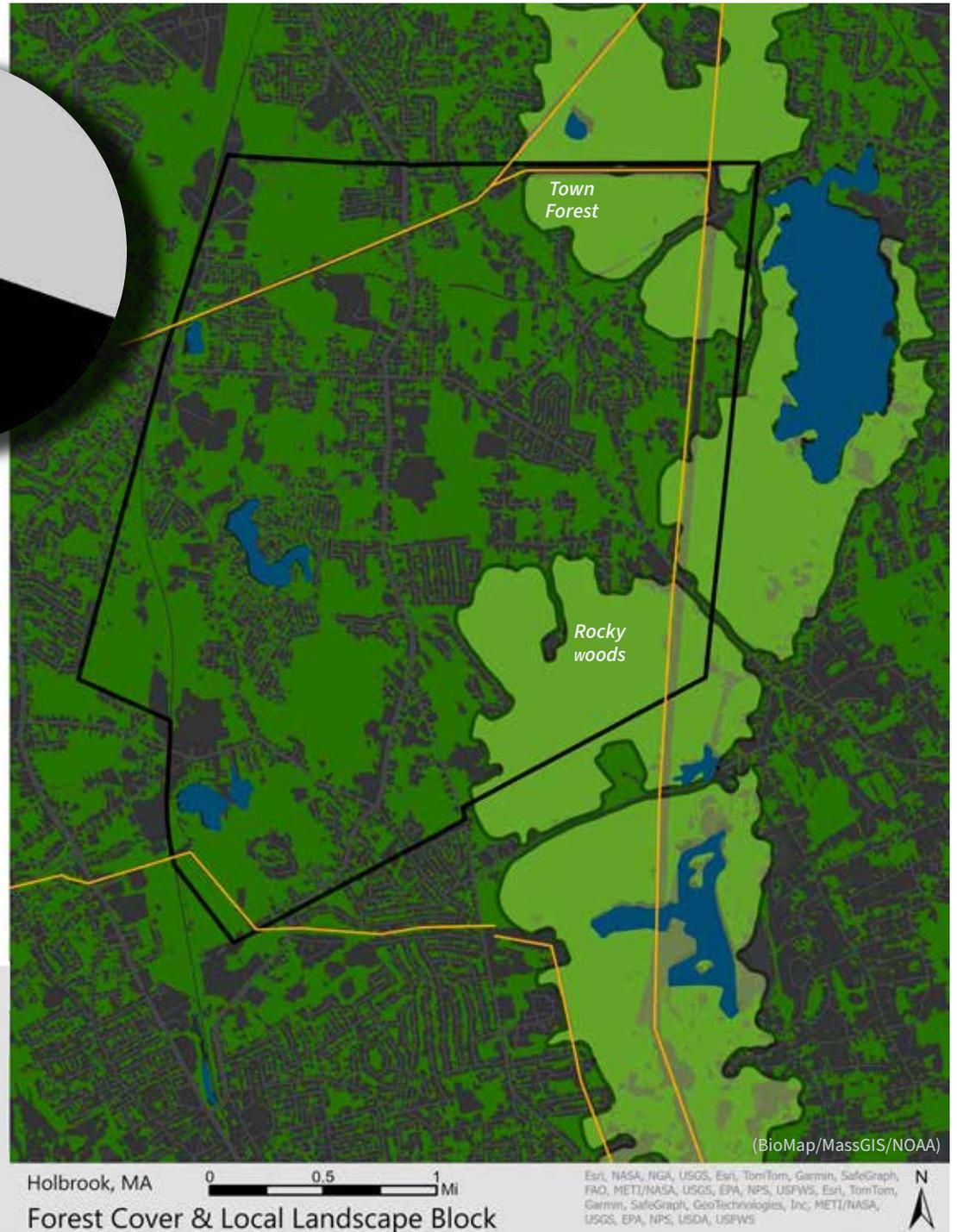


Forest Cover

- Developed Open Space 30.27%
- Impervious 26.44%
- Deciduous Forest 25.77%
- Evergreen Forest 9.55%
- Palustrine Forested Wetland 3.87%
- Other 4.105%



The forest cover map (2016) shows small patches of forest throughout the town and between areas of development, while there are large and relatively unfragmented forest patches along the northeastern, eastern, and southeastern town borders. These areas are part of a large intact natural landscape block, approximately 3,200 acres, stretching through Braintree, Holbrook, Weymouth, Abington, and part of Brockton. This intact block provides not only natural resources and recreation for local residents but also ecological connectivity for the region as it is located between larger areas of core habitat. It includes Braintree’s Cranberry Pond Conservation Area, the Holbrook Town Forest, Weymouth Great Pond water supply land, and Ames Nowell State Park in Abington among many other privately owned parcels. About 27% (roughly 865 acres) of this landscape block lies within Holbrook, and 22% (190 acres) of this area within Holbrook is protected.



- Legend
- Developed areas
 - Transmission Lines
 - ▭ Holbrook
 - Lakes and Ponds
 - Intact Natural Landscape
 - Forest Cover



Forested wetland in Town Forest

A Wet Landscape

Another significant natural asset in Holbrook is the abundance of wetlands. Approximately 880 acres of the town are wetlands. There are many different types of wetlands in the region, but the majority of wetlands in Holbrook are deciduous and evergreen forested wetlands, also referred to as swamps. These wetlands provide various benefits to both ecological systems and humans.

WETLANDS hold a significant portion—if not a majority—of the surface water in Holbrook, including marshes, shrub swamps, and wooded swamps. In the spring, abundant vernal pools contribute to the plenitude of surface water.

These wetlands are incredibly important ecosystems for several reasons:

- **Biodiversity Hotspots:** The unique combination of water and land in wetlands provides habitat for a diverse range of organisms, from birds and fish to many other vertebrate and invertebrate animals, as well as plants, fungi, and microbiota. Many of these are rare or endangered due to habitat loss.
- **Flood Control:** Wetlands act as natural sponges, absorbing and storing excess water during periods of heavy rainfall or snowmelt. This helps to reduce flooding in surrounding areas by slowing down the flow of water and releasing it gradually over time.
- **Water Filtration:** Wetlands play a crucial role in filtering and purifying water. As water passes through wetlands, plants and soil capture pollutants, excess nutrients, and sediments, improving water quality before it enters rivers, lakes, and groundwater.
- **Carbon Sequestration:** Wetlands store large amounts of carbon in their soils, helping to mitigate

climate change by removing carbon dioxide from the atmosphere. When wetlands are drained or degraded—e.g., as a result of development—this stored carbon is released back into the atmosphere, contributing to greenhouse gas emissions.

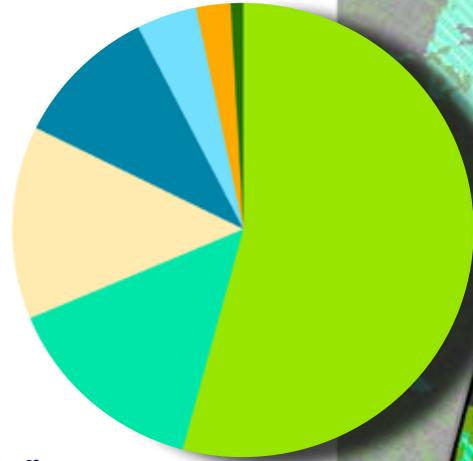
- **Recreation and Tourism:** Wetlands provide opportunities for outdoor recreation such as birdwatching, fishing, boating, and hiking. They also attract tourists who come to appreciate their natural beauty and wildlife.

- **Economic Benefits:** Wetlands provide valuable services such as water supply, nutrient cycling, erosion control, and flood control, which, if degraded, would shift the costs of these services to the Town.

Overall, wetlands are essential ecosystems, supporting biodiversity and providing valuable services to both the environment and society; as such, they are considered a prime example of green infrastructure. Widespread loss of these habitats—whether from development, pollution, climate change, or other factors—contributes significantly to flood and drought risk and subsequently to stress on built infrastructure. Conversely, constructing new wetlands or returning former wetlands to their pre-developed state is a common method for increasing the resilience of a landscape threatened by flood risk.

Wetland Types

- Wooded Swamp Deciduous 54.3%
- Shrub Swamp 14.42%
- Shallow Marsh Meadow or Fen 13.5%
- Wooded Swamp Mixed Trees 10.12%
- Open Water 4.294%
- Deep Marsh 2.454%
- Wooded Swamp Coniferous 0.92%

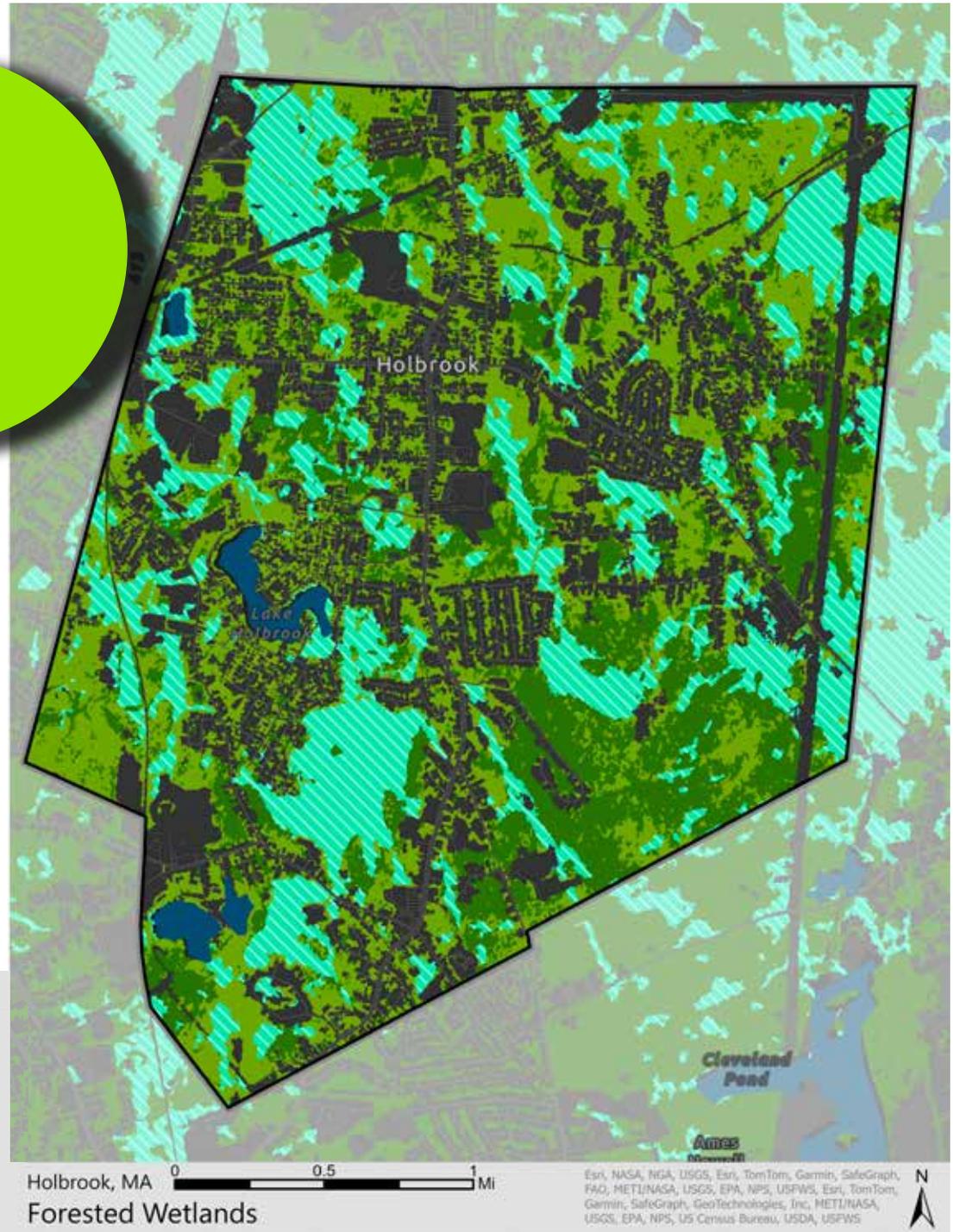


The Wetlands Protection Act (WPA) offers some safeguards for wetlands, but special permits, inadequate monitoring, or misuse can lead to their degradation or loss. It regulates activities like filling, dredging, or building with the goal of conserving wetlands. This is overseen at the local level by conservation commissions through a permitting process designed to avoid, minimize, or mitigate impacts on wetlands. The aim is to preserve wetlands' ecological functions and wildlife habitat while permitting compatible development, with buffer zones extending protections into the surrounding landscape.

Protecting wetlands and recognizing them as a form of green infrastructure can serve to support the residents' ambition of greater climate change preparedness. If the town considers these hydrological features as assets—e.g. with increased protections from development and recreational access where appropriate—wetlands can support all of the ambitions discussed in this vision plan.



- Legend
- Developed areas
 - Deciduous Forest
 - Evergreen Forest
 - Forested Wetland
 - Lakes and Ponds
 - Holbrook



The story of water in Holbrook is older than the town itself. Until c. 12,000 BCE, at the end of the most recent glacial maximum, the land which the town is on was covered in an ice sheet for thousands of years. As the present interglacial period progressed, melting glaciers scraped the landscape down to the bedrock and left behind massive deposits of sand and gravel in their wake. In present day Holbrook, evidence of that story is reflected in the abundance of local

wetlands. West of MA-37, the landscape sits high above the bedrock on a 50+ foot deep sand and gravel deposit which acts as a sponge, forming an aquifer. The water table comes right up to the surface in some places notably Lake Holbrook and its surrounding wetlands, Sylvan Lake, and the Tumbling Brook swamp. East of MA-37, the town is on higher, shallower soils where wetlands are perched on or just above the bedrock.

Landscape drainage in Holbrook is split into two watersheds: the Taunton River watershed, which drains into Narragansett Bay, extends northward into town from the southern borders with Avon, Brockton, and Abington, while the rest of town drains northward to Boston Harbor via the Cochato River and other smaller brooks.

Hydrologic features of the landscape within the Taunton River watershed include (on the west side of town) Spring Street Pond, also called Kanes Pond,

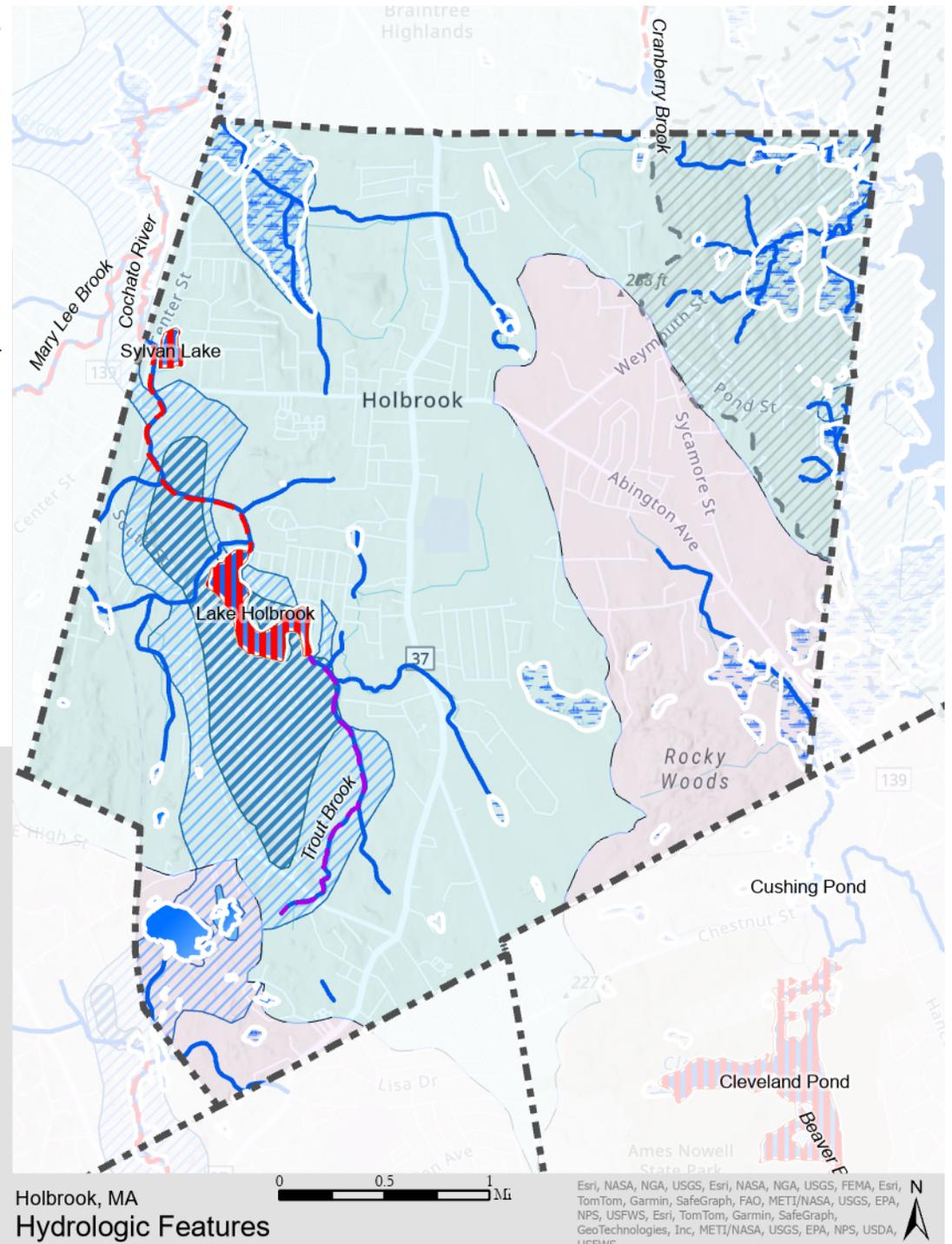


Looking southeast over Lake Holbrook and the Grove neighborhood

which was as a gravel pit until it was flooded by a spring during excavation; a couple of smaller ponds perched on wetlands, and a couple of small brooks which feed into Avon's Trout Brook; and (on the east side of town) Beaver Brook and associated wetlands.

Within the Boston Harbor watershed, Trout Brook and other smaller unnamed brooks in the southwestern portion of town flow into Lake Holbrook, which formed on top of a swamp when a dam was installed in the 1930s. The dam is the origin point for the Cochato River, which flows northward through Sylvan Lake near the town's western border with Randolph. On the town's north side, Tumbling Brook and at least one other unnamed brook flow northwest through a large swamp before joining the Cochato River near the town's northwest borders with Randolph and Braintree. In the northeast corner of town, a number of small streams, ponds, and wetlands within and around the Town Forest drain into Braintree's Cranberry Pond, and Weymouth's Great Pond, a drinking supply reservoir.

Of these waters, three are identified as impaired by the MassDEP 2014 list of integrated waters: Lake Holbrook (Nutrient/Eutrophication Biological Indicators), Cochato River (Chlordane, DDT, Fecal Coliform, Dissolved O₂), and Sylvan Lake (Chlordane, DDT).



Legend	
Municipal Boundaries	Rivers & Streams
▬▬▬▬ Municipal Boundaries	— Rivers & Streams
MassDEP ILOW - Rivers	Major Watershed Boundaries
— 3 - No uses assessed	Watershed
— 5 - Impaired - TMDL required	TAUNTON
MassDEP ILOW - Lakes, Estuaries	WEIR
▨ 5 - Impaired - TMDL required	Public Water Supply Surface Watersheds
Surface Waterbodies	Public Water Supply Surface Watersheds
Waterbody type	Aquifers by depth
▭ Reservoir	yield: gpm
▭ Wetland	0-100
▭ Pond	100-300
	>300

Holbrook, MA
Hydrologic Features

Esri, NASA, NGA, USGS, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS



Moss and wintergreen along powerline

A Rare Landscape

Various critical and regionally unique

ecological features, each elaborated below, are found in Holbrook. The following map identifies some of these areas primarily found in the northeast of town.

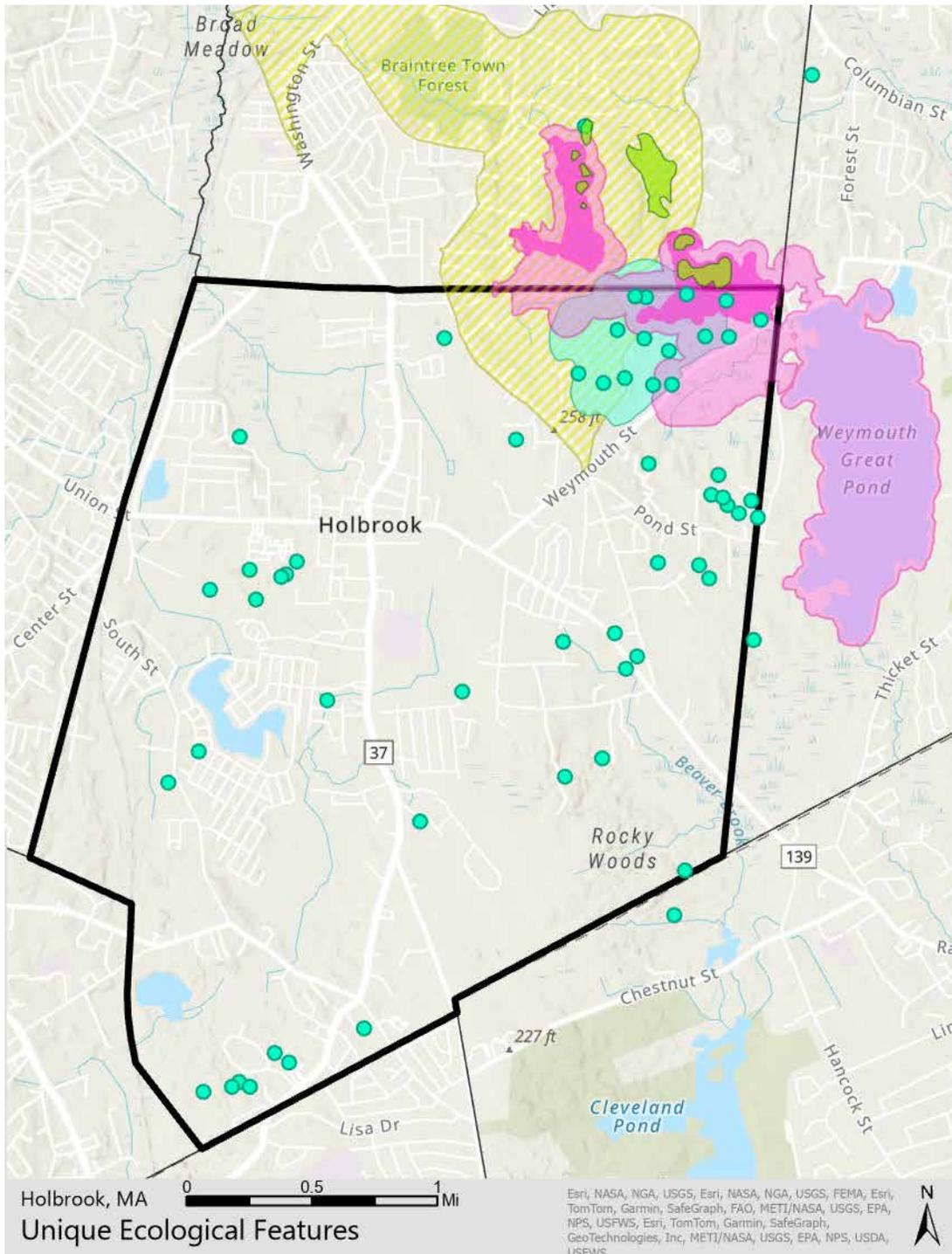
ACEC: Areas of critical environmental concern are designated by the Secretary of Energy and Environmental Affairs for the quality, uniqueness, and significance of their natural and cultural resources. The designated ACEC shown on the map covers areas of both Braintree and Holbrook, and is one out of only thirty ACEC designations in Massachusetts. The program is meant to increase appreciation and stewardship of these ecologically significant areas but designation does not inherently protect these lands, supersede local regulations or zoning, change or affect land ownership, allow public access on private property, or prohibit or stop land development.

Cedar swamps: Massachusetts Division of Fish and Game and The Nature Conservancy have documented Coastal Atlantic White Cedar Swamps along the border of Holbrook and Braintree and designated them as a Priority Natural Community for preservation purposes as they support specific animal and plant species with limited distributions in the region. These swamps are characterized by dense evergreen canopies, deciduous shrubs, and a sparse herb layer primarily composed of mosses.

Rare species habitat: These areas are critical to the long-term conservation of the most vulnerable species and their habitats. The Estimated Rare Wildlife Habitat designated by the Natural Heritage and Endangered Species Program (NHESP) is a subset of the Priority

Habitats of Rare Species data layer, which focuses on wetland wildlife. This area is protected under the Wetlands Protection Act (WPA). If any project or activities are being planned within a Priority Habitat area, the land owner or project proponent must submit a review to the NHESP to check for compliance. Failure to file constitutes a violation of the Massachusetts Endangered Species Act and/or WPA and is subject to a fine (pursuant to 10.06). BioMap Core Habitat areas, identified by MassWildlife and The Nature Conservancy, are further areas critical for the long-term persistence of rare species, although these areas are not protected simply based on this identification.

Vernal pools: Vernal pools (ephemeral or temporary woodland ponds) support critical breeding habitats for specific species of insects, amphibians, mollusks, and crustaceans. They generally become filled with water during the autumn or winter seasons and remain wet throughout the spring and into the summer months. These pools typically dry up entirely by the end of summer each year. Periodic drying events are essential as they deter the establishment of permanent fish populations, which is crucial for the reproductive viability of numerous amphibian and invertebrate species that depend on fish-free breeding habitats. Holbrook has around 53 NHESP certified vernal pools, some of which may qualify for protection under the Massachusetts Wetlands Protection Act if they lie within a recognized wetland. BioMap shows a vernal pool core in the northeast corner of town, which includes ecologically significant vernal pools and intact upland habitat nearby.



Cedar Swamp with boardwalk

- Legend**
- Atlantic White Cedar Swamp
 - NHESP Estimated Rare Species Habitat
 - Vernal Pool Core
 - Areas of Critical Env. Concern
 - Holbrook
 - Surrounding Towns
 - NHESP Certified Vernal Pools
 - BioMap Rare Species Core Habitat

Holbrook, MA
Unique Ecological Features

Esri, NASA, NGA, USGS, Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS



Wildlife in Holbrook

Common wildlife species such as coyote, deer, squirrels, and various bird species utilize Holbrook's intact landscape as a corridor for breeding, hunting, and movement. It's also important to note that large utility lines run through this landscape block and extend further into surrounding towns, connecting the region's natural landscapes to some degree.

Wildlife corridors are essential for maintaining healthy ecosystems and promoting species survival. They facilitate gene flow, migration, and range expansion, which are crucial for genetic diversity, adaptation to climate change, and ecosystem functioning. Corridors also help minimize conflicts between wildlife and human activities and are integral to conservation planning efforts aimed at preserving biodiversity and **ecosystem services**. Overall, recognizing and protecting wildlife corridors are vital for safeguarding biodiversity and ensuring the resilience of natural ecosystems.



Looking east over the power line north of the capped landfill

Ecosystem Services

The forests, wetlands, waterways, and natural communities in Holbrook support human health and recreation, and provide habitat for wildlife. According to the USDA, these ecosystem services are:

“

...the direct and indirect benefits that ecosystems provide humans. Agroecosystems, rangelands, and forests provide suites of ecosystem services that support and sustain human livelihoods. These services are typically broken down into four categories:

Provisioning services: the material or energy outputs from an ecosystem, including food, forage, fiber, fresh water, and other resources

Regulating services: benefits obtained through moderation or control of ecosystem processes, including regulation of local climate, air, or soil quality; carbon sequestration; flood, erosion, or disease control; and pollination

Supporting services: Services that maintain fundamental ecosystem processes, such as habitat for plants and wildlife, or the maintenance of genetic and biological diversity.

Cultural services: the non-material benefits that ecosystems provide to human societies and culture, including opportunities for recreation, tourism, aesthetic or artistic appreciation, and spirituality”

There are also several endangered and rare species documented in Holbrook, particularly in the northeast area of town abutting the Cranberry Pond Conservation Area. While the specific identity of these rare species is not made public for their protection, some examples of plant and animal species documented in Holbrook and listed as threatened or of special concern according to the Massachusetts Endangered Species Act (MESA) include the Eastern box turtle, long-eared bat, mocha emerald (insect), and pale green orchid. In addition to these species, river herring such as the blueback herring (listed as a species of concern) are likely to use riparian wetland complexes including floodplains, which may provide important spawning, nursery, and refuge habitat (NOAA). Restoration projects, such as dam removal along the Monaquot River in Braintree, to support the species have begun in surrounding towns, hinting at how Holbrook's streams, floodplains, and riparian wetlands upriver of these projects could be potential assets to the conservation of this species.



Photos left to right: river herring in Braintree, animal tunnel in capped landfill, Canada geese on Lake Holbrook



Trail marker in Massachusetts

OPEN SPACE & RECREATION

Results from the town survey and community engagement events showed that residents want to improve existing open spaces and create new recreational opportunities. There are concerns about accessibility, maintenance, conservation, and general awareness of open spaces in Holbrook as shown in the survey quotes below.

What is Open Space?

“The term ‘open space’ is often used to refer to conservation land, forested land, recreation land, agricultural land, corridor parks and amenities such as small parks, green buffers along roadways or any open area that is owned by an agency or organization dedicated to conservation. However, the term can also refer to undeveloped land with particular conservation or recreation interest. This includes vacant lots and brownfields that can be redeveloped into recreation areas. Some open space can be used for passive activities such as walking, hiking, and nature study while others are used for more active recreational uses including soccer, tennis, or baseball... Although open space itself is a simple concept, the factors that affect it, and

“ Open spaces are necessary for a healthy (physical and mental) population. ”

that it affects, are complex. Through an Open Space and Recreation Plan, [communities] identify and examine these factors and lay out strategies [the] community can use to protect and enjoy its character, natural resources, and open spaces.”

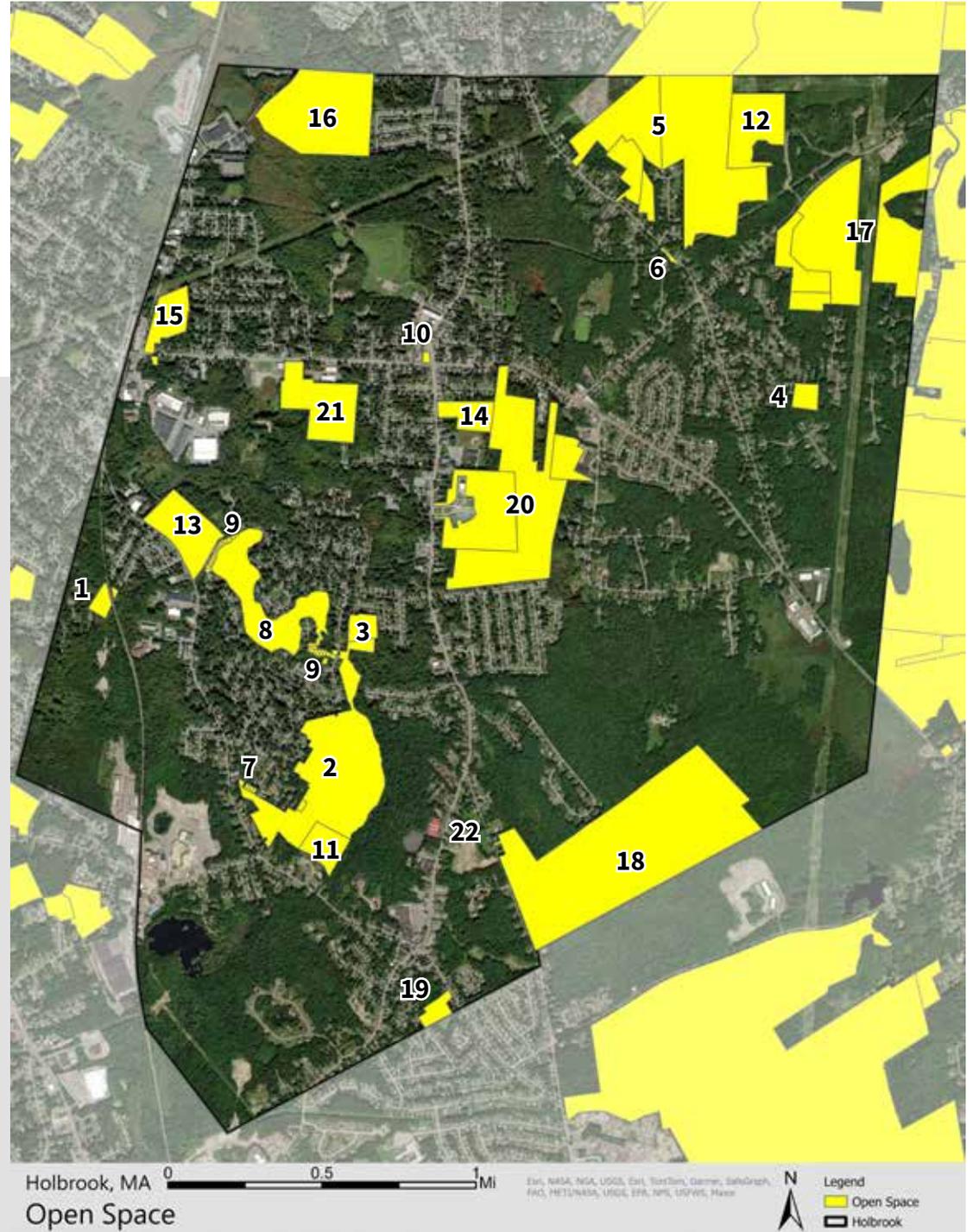
This description of open space comes from the Open Space and Recreation Planner’s Workbook (2008), distributed by the Massachusetts Office of Energy and Environmental Affairs and Division of Conservation Services. The workbook is meant to help guide and empower communities through the process of writing an Open Space and Recreation Plan making local “ownership” and implementation of the action items more likely. More information about the Open Space and Recreation plan process can be found in Section 4 of this document. This section examines existing open space and protection opportunities in Holbrook.

“ With the exception of the remaining Town Forest area which has little to no parking access we have no ‘open space’. ”

Existing Open Spaces

The areas designated as open space in Holbrook have been identified and continually updated by the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) with the help of volunteers at the local level, staff at regional planning commissions, land trusts, municipal conservation commissions, and more. The function, ownership, and level of protection of these areas vary widely (see table with further details in Appendix D).

- | | |
|---------------------------------------|---|
| 1. Conservation Area | 13. South Street Wellfield |
| 2. Donna Road Wellfields | 14. Sumner Field and Playground |
| 3. Fairfield II Conservation Area | 15. Sylvan Lake Conservation Area |
| 4. Hatch Playground | 16. Tumbling Brook Conservation Area |
| 5. Holbrook Town Forest | 17. Weymouth Street Conservation Area |
| 6. Holbrook Fire Tower | 18. Holbrook Sportsmen's Club |
| 7. Juniper Road Conservation Area | 19. Brookville Field |
| 8. Lake Holbrook | 20. School Department Property |
| 9. Lake Holbrook Conservation Areas | 21. Union Cemetery |
| 10. Mary Wales Park | 22. Former South Elementary School Playground |
| 11. Paul David Podolski Preserve | |
| 12. Siddarth Conservation Restriction | |

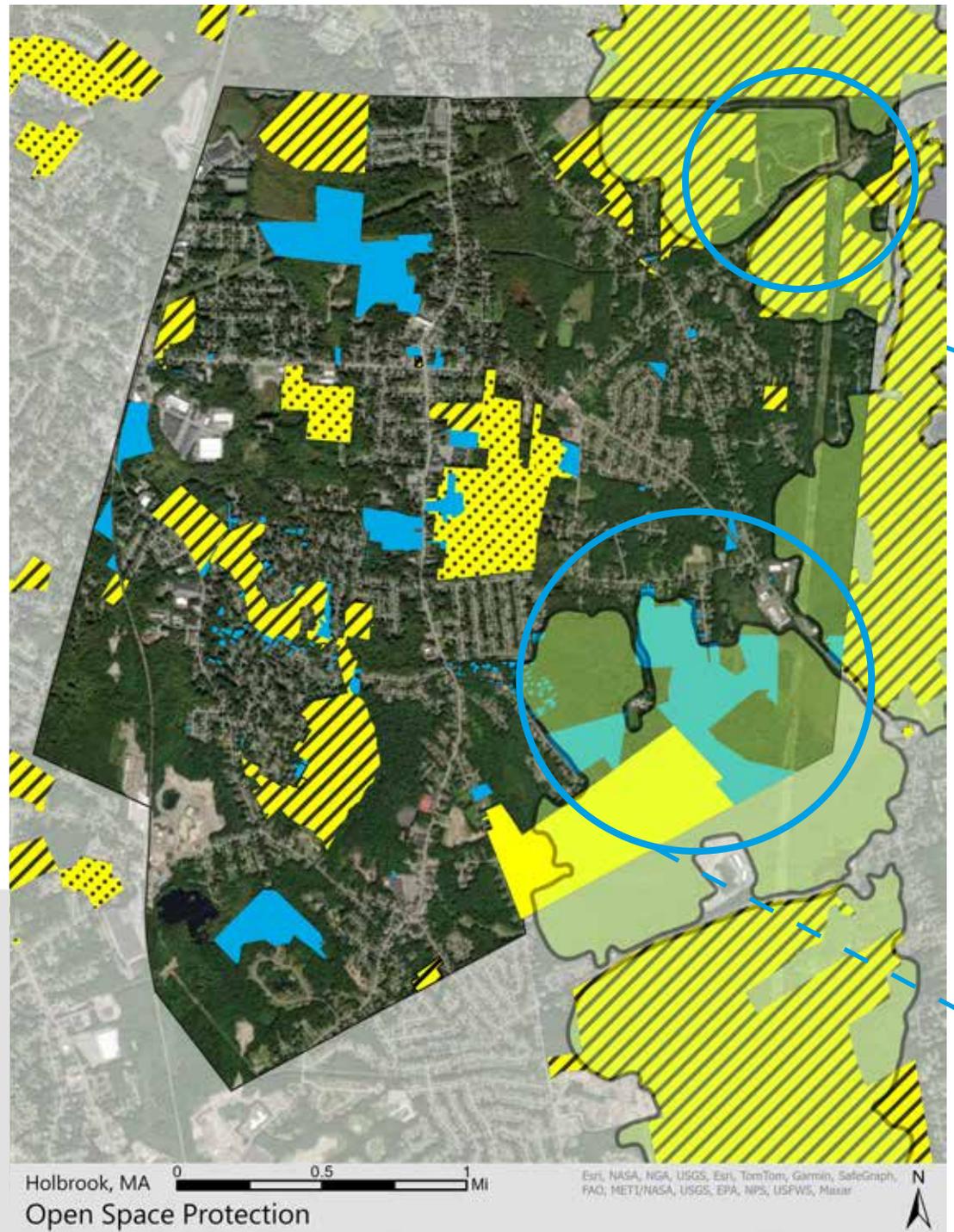


LAND PROTECTION

Approximately 897 acres of land are currently protected to some degree in Holbrook, which is good news for residents in favor of conserving their existing open spaces. Many residents desire to protect more land in town for recreational or environmental conservation purposes. Levels of protection can vary (see map with further explanation).

According to Holbrook's assessor's office, there are no areas currently owned or managed by a land trust or other conservation organization. No parcels are enrolled in Chapter 61 (a tax program encouraging use of land for forest management, agriculture, or open space preservation and recreation), and only one parcel in town is known to have a conservation restriction (CR). This area is a roughly 29-acre parcel abutting the Town Forest and there are concerns about the CR not being enforced. Additionally, a portion of this parcel (about 7 acres) has special exemptions from the CR, and is part of a current dispute around the development of it and surrounding parcels.

There are parcels within the intact natural landscape corridor with no protection and many other undeveloped parcels in town with no protection. According to MassGIS, the only parcel designated as open space with no protection is the Holbrook Sportsmen's Club, a private property along the southern town boundary. However nearby in Rocky Woods are unprotected municipally owned parcels which are not currently designated as open space.



Parcel with open space and a conservation restriction

Holbrook Town Forest



Unprotected Town owned land within the intact local landscape block

Holbrook Sportsmen's Club

These callouts highlight areas mentioned in the text with parcels that are within the intact local landscape block and may be developed in the future because they are unprotected.

Levels of Protection

In Perpetuity: Land can be legally protected in perpetuity through various means, typically recorded in a deed or official document. Municipal ownership by a conservation commission or water department, a town's perpetual conservation restriction, state agency ownership under Article 97, ownership by a non-profit land trust, or receipt of federal or state assistance for purchase or improvement constitute perpetual protection. Similarly, private land can achieve perpetual protection via deed restrictions, Agriculture Preservation Restrictions, or Conservation Restrictions.

Temporary: These areas are legally protected for a limited time, like with short-term conservation restrictions, or temporarily shielded due to ongoing functional use. For instance, some water district lands are only safeguarded while they serve as primary water resources. At the end of their temporary protection or when their functional role ends, these lands may be open for development unless the protection is extended.

Limited: Protected by alternative legal mechanisms or preserved through functional or traditional utilization, these lands are subject to safeguards requiring a majority municipal vote for any status change. This category also includes lands anticipated to remain as open space for various reasons, such as cemeteries and municipal golf courses.

None: These areas have no legal or functional protection. They are usually under private ownership and may be freely sold at any time without restriction for other purposes.

Opportunities for Protection

Residents have expressed a desire for their town to be more prepared in the face of climate change. Intact landscapes and regionally unique natural features such as Holbrook's forests and wetlands retain carbon, infiltrate and hold water, and help preserve biodiversity, all of which are key components to mitigating and adapting to climate change. While some of these undeveloped areas are protected by deed or through regulations, others are not and could be developed.

A Conservation Restriction (CR) offers landowners a means to permanently protect a portion or all of their property. By delineating specific property uses like forest management, firewood cutting, trail building, and agricultural practices

within the CR, landowners can ensure preservation in accordance with their vision. Advantages of CRs include not only safeguarding against development but also providing tax benefits such as reduced federal income taxes (if donated), estate or inheritance tax reductions, and potential deductions in real estate taxes. Landowners retain the autonomy to designate which parts of their property will be restricted by the easement, allowing for conservation-oriented development strategies. For instance, they may choose to exempt certain areas, such as potential building lots, from the easement while preserving the remainder of the property. The specifics of rights restrictions and permissions, as well as the areas affected, are carefully outlined within the CR agreement.

“ My vision for Holbrook is clean, safe water, protected open spaces, more attention to climate justices and sustainable living. ”



CR signage example



Unprotected area at Spring Street Pond

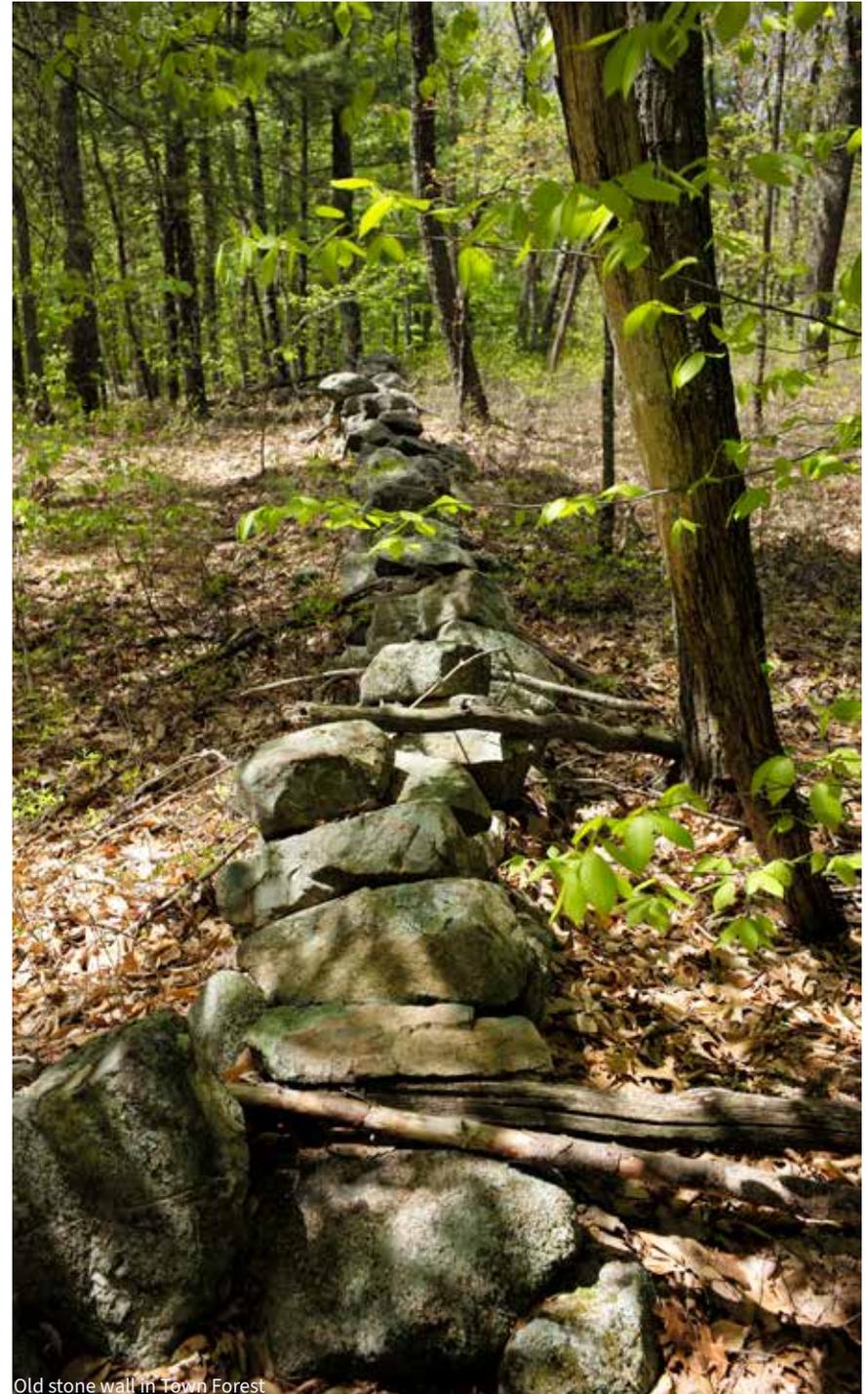
Chapter 61 is a second form of land protection. This state program is split into three categories which assess the land's current use against its development value and offer protection with term limits. The three categories are Chapter 61, which is intended for long-term active forest management; Chapter 61A, intended for agricultural uses; and Chapter 61B, which aims to maintain land in a wild or more natural state or that is used recreationally. There are restrictions and requirements for each, a breakdown of which can be found on the table created by the UMass Amherst MassWoods program (see Appendix F). Landowners who enroll in one of the Chapter 61 programs agree to maintain the land in alignment with their selected program. If they decide to sell or convert the land to a different use within one fiscal year of being taxed under these programs they must inform their municipality of their intention. The municipality then has the option to exercise its right of first refusal to purchase the land or to transfer this right to an eligible conservation organization.

“ Keep and protect, perhaps expand, the Town Forest. ”

“ Work wisely to balance nature and building. All or none for either position is no benefit to anyone. ”

Conservation groups and land trusts are another avenue to explore when looking to conserve land. While some factors such as limited resources, priorities, and lack of political support may limit the involvement of land trusts and conservation groups in certain

towns, it's essential to recognize that conservation efforts often require collaboration and cooperation among multiple stakeholders, including governments, nonprofits, landowners, and community members, to achieve meaningful and lasting results. Conservation groups and land trusts employ a combination of approaches to conserve land, safeguard biodiversity, and preserve natural landscapes for future generations. The efforts of such organizations align with the desires of many Holbrook residents to conserve their natural resources and strengthen efforts to address climate change. The Town can also buy or receive donated land and permanently protect it from development.



Old stone wall in Town Forest

DESIGNATED RECREATIONAL AREAS

Recreation is a big part of Holbrook residents' lives as demonstrated in the survey results and their desires to increase and improve recreational opportunities in town. In comparison to the amount of conservation and recreational areas identified on the open space layer, recreational infrastructure is somewhat limited in town. The most clearly established and well-used hiking trails are in the Town Forest, one of which (the red Wiggins trail) is connected with trails just across the border in Braintree's Cranberry Pond Conservation Area (see Appendix E). The Town Forest is also open to in-season hunting.

Along the southern edge of town bordering Abington, is the Holbrook Sportsmen's Club, a private rod and gun club open to members only. The Club has educational and recreational facilities for various sporting activities including hunting, fishing, archery, golf, and pool, although shooting sports are the primary focus of activities. The waters of Lake Holbrook and Sylvan Lake are unsuitable for the consumption of fish according to posted signs and some residents are concerned whether it is safe for swimming. Regardless residents can be found occasionally utilizing these areas for these and other recreational activities. Residents also tend to go outside of Holbrook, to places such as Ames State Park in Abington, to meet their recreational desires.

Sumner Park has a playground, basketball courts, and a paved walking trail that encircles public fields, including Sean Joyce field, which are used and unofficially maintained by various local athletic groups for activities such as baseball and soccer. There are also athletic fields around the Holbrook Junior-Senior High School managed by the school department, and behind the old JFK Elementary School, including Flint Field which is maintained by Holbrook Little League. Brookville Field, which lies to the south on the border of Holbrook and Brockton, offers a small play area with swingsets and further athletic fields.



Sumner Park



In 2019, an advisory panel of parents and other residents convened a working group to study the feasibility of adding more sports fields in the town. The study was completed and a proposal, the Holbrook Fields Master Plan (see Appendix G), was submitted. The plan focused on connecting school properties and Sumner Field, adding baseball, softball, soccer and flag football fields, as well as a playground, splash pad, walking path and senior center. The cost was quoted at 6.5 million and the plan was to apply for grants to fund the proposal. The process was stalled by COVID and has not progressed.

Throughout the survey and engagement sessions residents have mentioned interest in recreational gathering spaces such as a community center or pocket parks to serve their needs closer to home. A specific interest in creating more recreational opportunities for the youth in the town was another wish. More information on this topic can be found in the Land Use section.



Photos left to right, top to bottom: Basketball court at Ramblewood Apartments, Fields Master Plan, Town Forest kiosk off Park Drive, Brookville Field, Sumner Playground



Town Forest parking along Pine Street

Access to Recreational Areas

One of the more commonly cited concerns on the survey and in engagement events was the lack of recreational infrastructure within Holbrook’s existing open spaces. Holbrook residents would like to see signage, parking, trail markings, and general maintenance of these areas improved. These inadequacies not only limit accessibility to conservation and recreational areas but also the awareness of their existence and purpose.

The Town Forest, one of the most highly trafficked recreational areas in town, currently has a few separate entrances with signage that can be difficult to see. The parking options for these entrances are along public roadsides and are generally unclear with limited to no space for vehicles in some areas. Additionally, some residents have shared concerns about the proximity of hunting to residences, increased traffic in neighborhoods bordering the town forest, and a desire to have more connected and clearly marked trails.

In many of the conservation areas in town, such as Tumbling Brook, Sylvan Lake, the Wellfields, and others, there is no designated parking, signage, or official trails. Some unofficial short trails that may have been established over time by

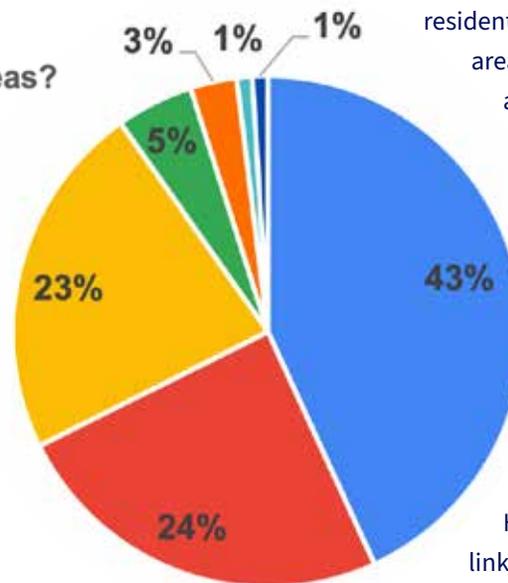
resident use exist, but it’s unclear whether there is active maintenance for these areas. Appropriate signage and established parking areas can increase the awareness of, access to, and potentially even stewardship of these areas.

Basic infrastructure such as this can also signal that an area is being watched and maintained and as a result deter criminal activity and misuse of the land that can result in environmental degradation.

In regards to trails, residents have expressed a desire to establish a trail between the old JFK school and the new school area. The area between the two locations is a mix of forest and wetland. A pedestrian or bike trail connecting the two areas could help alleviate traffic through the center of town, while providing opportunities for recreation and environmental education. The previously mentioned Holbrook Fields Master Plan from 2019 proposed designs that included linking these areas with a boardwalk over the wetland (see Appendix G).

What are your favorite natural areas?

- Town forest
- Lake Holbrook/The Grove
- Sumner Park
- Backyard/I don't know
- Mary Wales Park
- Cochato Nursery
- Council of aging



Result excerpt from the 2023 Open Space Survey

UNDESIGNATED RECREATIONAL AREAS

There are areas in Holbrook that are currently being used for recreational activities despite the lack of designation as a recreational area or infrastructure to support such activities. Examples include the capped landfill frequently used by dog walkers, Tumbling Brook Conservation Area and the utility lines running along the eastern and northern borders of town used for dirtbike and ATV activity, and unofficial walking trails in the southern and western industrial areas.

These unofficial recreational areas provide insight into what kind of infrastructure could be developed on location or elsewhere in town to suit the community's recreational desires. However, the continued use of such spaces without official designation as recreational areas, protection, or maintenance poses risks such as environmental degradation or loss of these spaces.

Looking northwest over the capped landfill with Blue Hills Reservation and Boston skyline in the distance



An aerial photograph showing a newly constructed road and a pond in a wooded area. The road is dark asphalt with white lane markings and curves through the landscape. A large, irregularly shaped pond is located at the bottom of the road. The surrounding area is filled with trees, some of which are bare, suggesting a late autumn or winter setting. The ground is a mix of dirt and sparse vegetation.

LAND USE

LAND AND THE PEOPLE

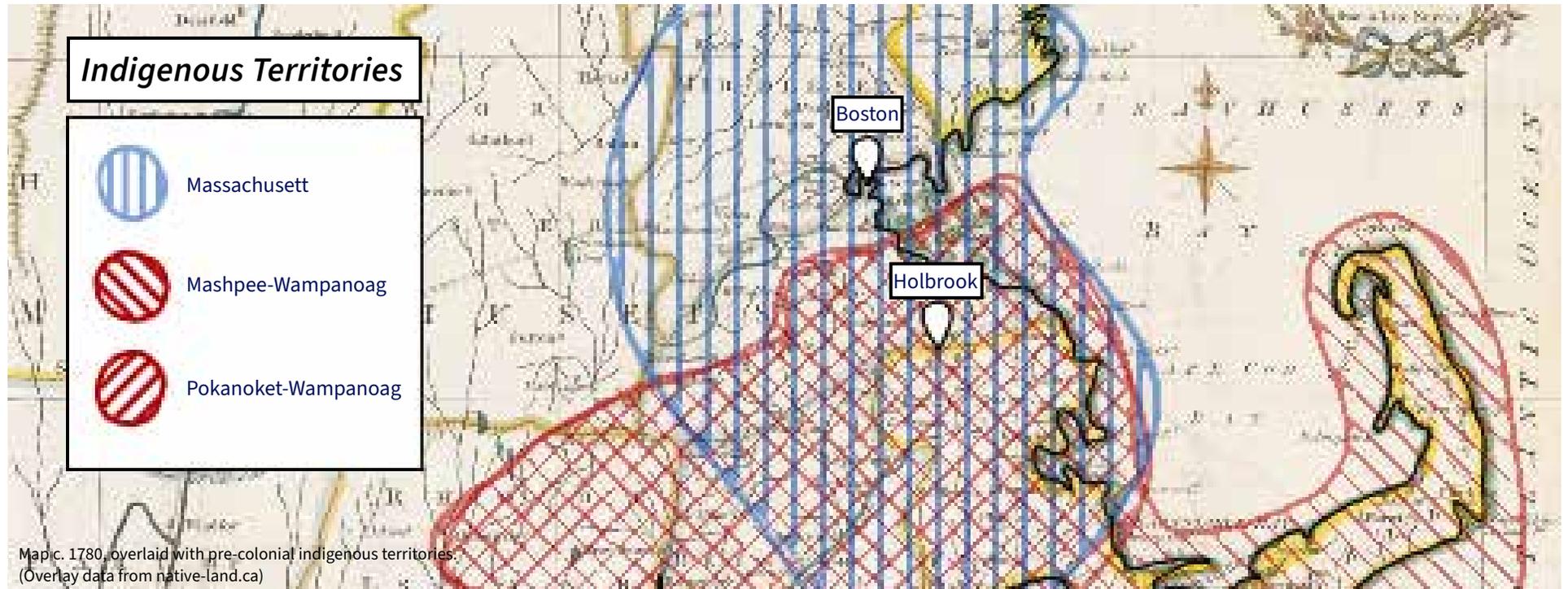
Pre-Colonial History

The story of a town is, in many ways, the story of its land use. Over the past several thousands of years, the land known today as Holbrook has been lived on, hunted, and fished by Indigenous Peoples; inhabited by early colonial settlers who used wood and sod ("bog iron") from the forests to smelt iron ore; has been a site of dairy farming and small-scale vegetable farming; and during the mid nineteenth century through the early twentieth century became a site of booming industry, producing shoes and boots during the Civil War and beyond. Since the mid twentieth century, until today, the town has served as a bedroom community for commuters within the Boston metropolitan area.

The area around what is now known as Holbrook was home mainly to the Massachusetts tribe, with the Wampanoag tribe to the east and south. Indigenous Massachusetts Villages spanned from Salem to Plymouth along the coast, and inland as far west as Worcester. The Massachusetts People hunted, fished, worked quarries, and planted vast fields of grain, corn, squash and beans. Massachusetts Tribal life was matriarchal. Women trapped small game, gathered shellfish, wild grains, greens and herbs for food and medicine, and owned and tended the planting fields. Men of the tribe were responsible for mining, whaling, fishing and hunting and for protecting the tribe and its territory against encroachment by other indigenous tribes.



Display of arrowheads in Holbrook Historical Society



Map c. 1780, overlaid with pre-colonial indigenous territories. (Overlay data from native-land.ca)

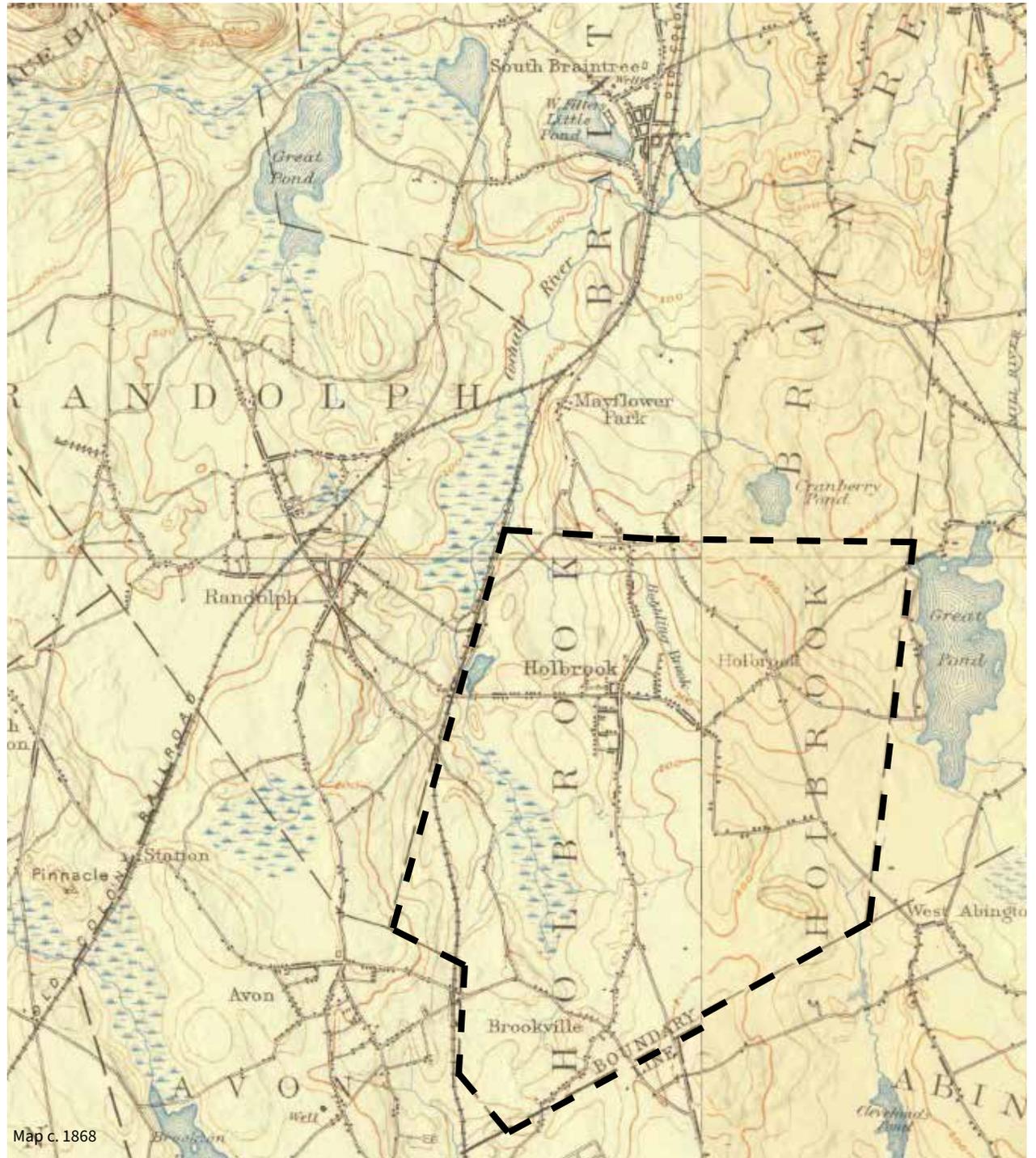


Display of arrowheads in
Holbrook Historical Society

Post-Colonial History

In the early days of the American colonies, the area which today includes Holbrook was part of Braintree. In 1793, the town of Randolph split off and incorporated. Holbrook was then known as East Randolph, until it too split off and incorporated on February 29, 1872.

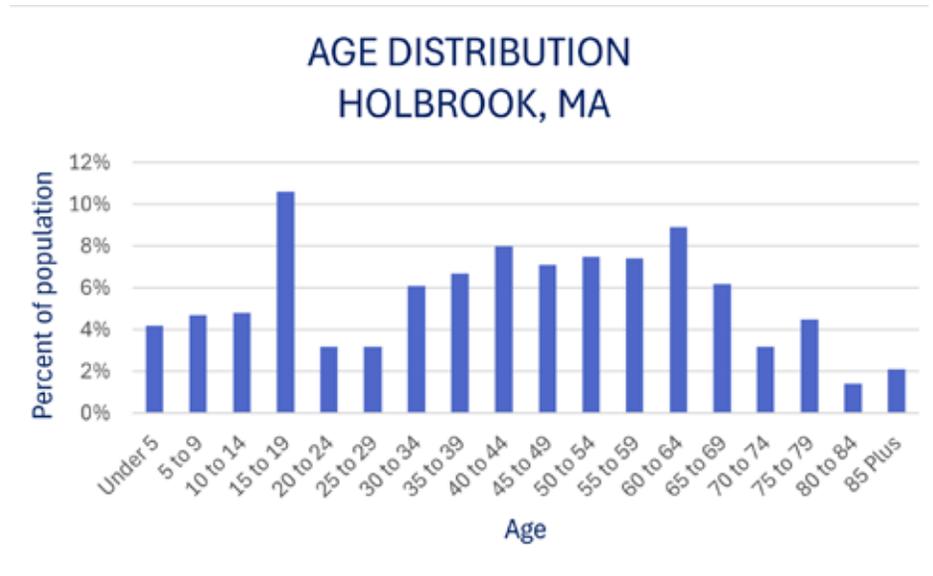
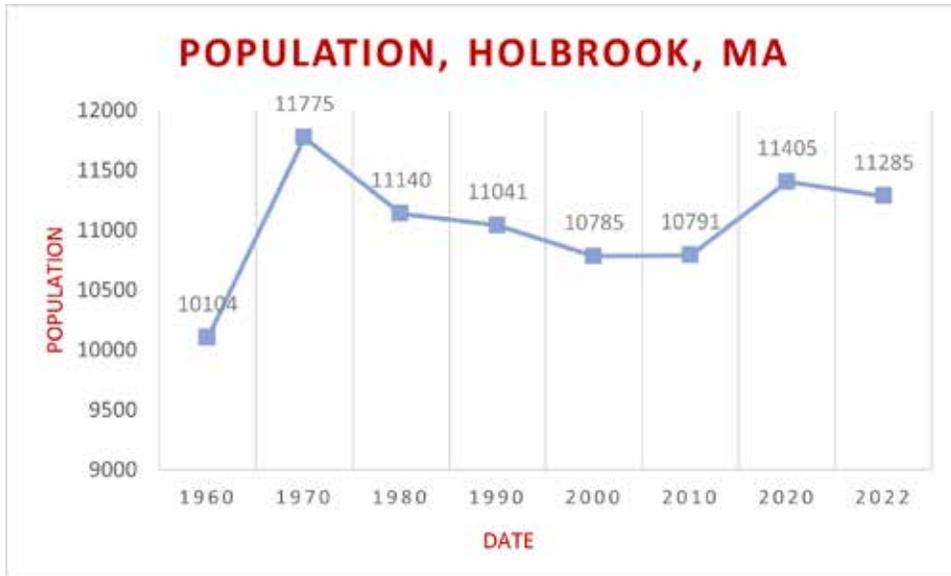
Today, the town is largely residential, with a commercial corridor that stretches along the two major roads that intersect in the town, with many people commuting out to nearby cities for work. The town continues to have much forested area and many intact natural resources. But like many towns in the region, it is facing the pressures of development, particularly the pressure for more housing. Additionally, many residents report feeling that the property taxes are too high, and wish for the town to pursue more sources of income or non-residential development. Finding a balance among these varied interests is one of the main challenges the Town is ready to take on.



Map c. 1868

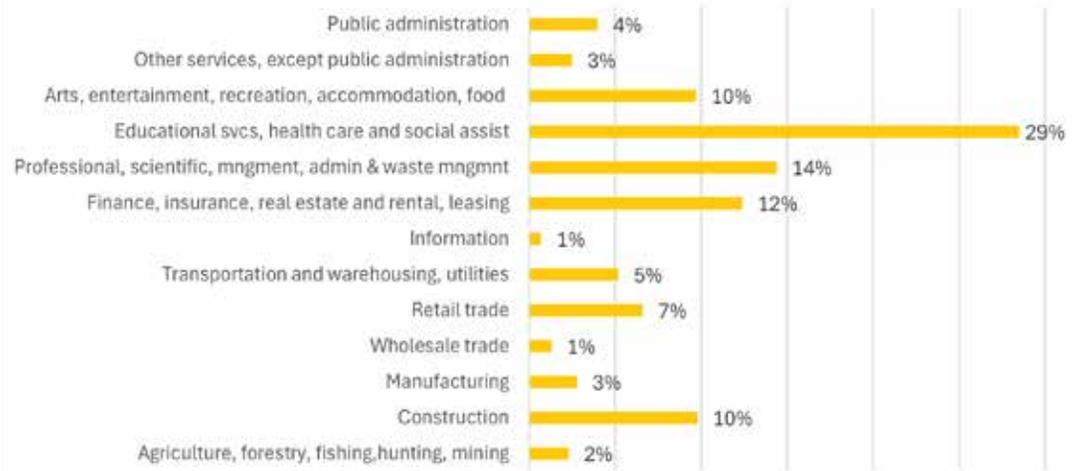
Demographics: Who Lives in Holbrook?

With a population of over 11,000 people, Holbrook is considered a small city, though residents value what they describe as a "small town" culture. As the graph below indicates, the population has been fairly stable over the past 50 years. The majority of the population is White (73%), followed by 9% Black, 3% Asian, and with 7% who identify as more than one race or ethnicity. The annual median income (2022) is \$96,920, which is on par with the rest of the state (\$96,505). 29% of the employed population works in educational services, health care or social assistance, and the next largest sector is professional, scientific and administration of waste management. The Town itself provides about 2,800 jobs, 22% of which are in construction, and most people commute out for work in neighboring cities. (Massachusetts Housing Partnership).

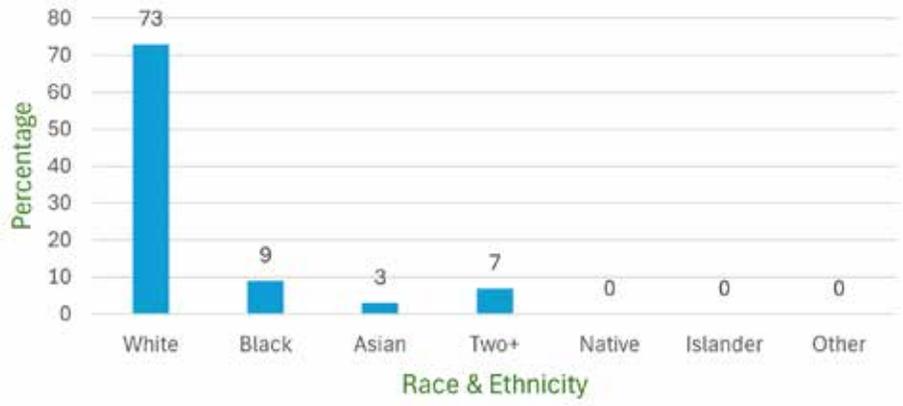




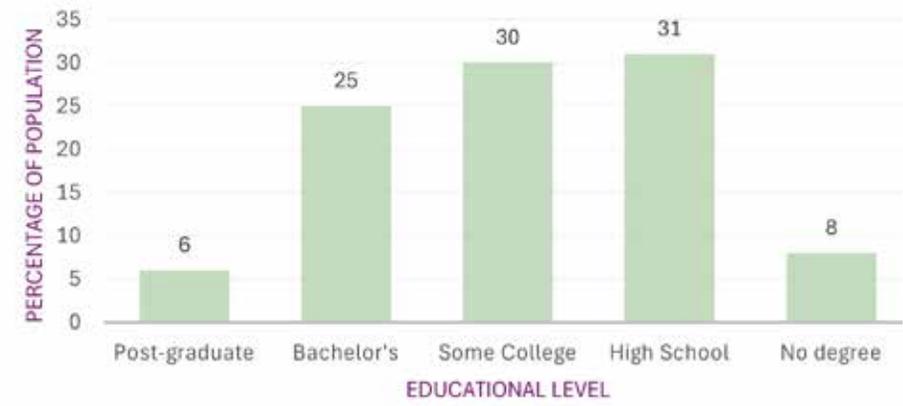
EMPLOYMENT BY INDUSTRY HOLBROOK, MA



RACE & ETHNICITY HOLBROOK, MA



EDUCATIONAL ATTAINMENT HOLBROOK, MA



Environmental Justice



The Massachusetts Executive Office of Health and Human Services (EOHHS) says "Environmental Justice (EJ) is based on the principle that all people have the right to be protected from environmental pollution and to live in and enjoy a clean, healthy environment. Various forms of discrimination and racism have created long-standing health inequities for people of color and lower-income individuals. These populations have historically been excluded from meaningful participation in decisions that impact their communities' environmental health. People of color and people with limited incomes are more likely to live near toxic waste sites, in areas with high air pollution, and in low-quality housing because of the inequitable distribution of high

"Environmental Justice is based on the principle that all people have the right to be protected from environmental pollution and to live in and enjoy a clean, healthy environment." (EOHHS)

pollution sites. Structural inequities result in fewer healthcare providers, limited access to transportation options, and limited access to health information in the community due to inaccessible health communications and lack of access for non-English speakers."

Environmental justice is typically measured through the analysis of demographic data alongside environmental hazards and resources to assess disparities in exposure to pollution and access to environmental benefits.

This involves evaluating factors such as race, income, and ethnicity in relation to environmental quality indicators like air and water pollution levels and rates of environmental-related health issues. In 2002, the

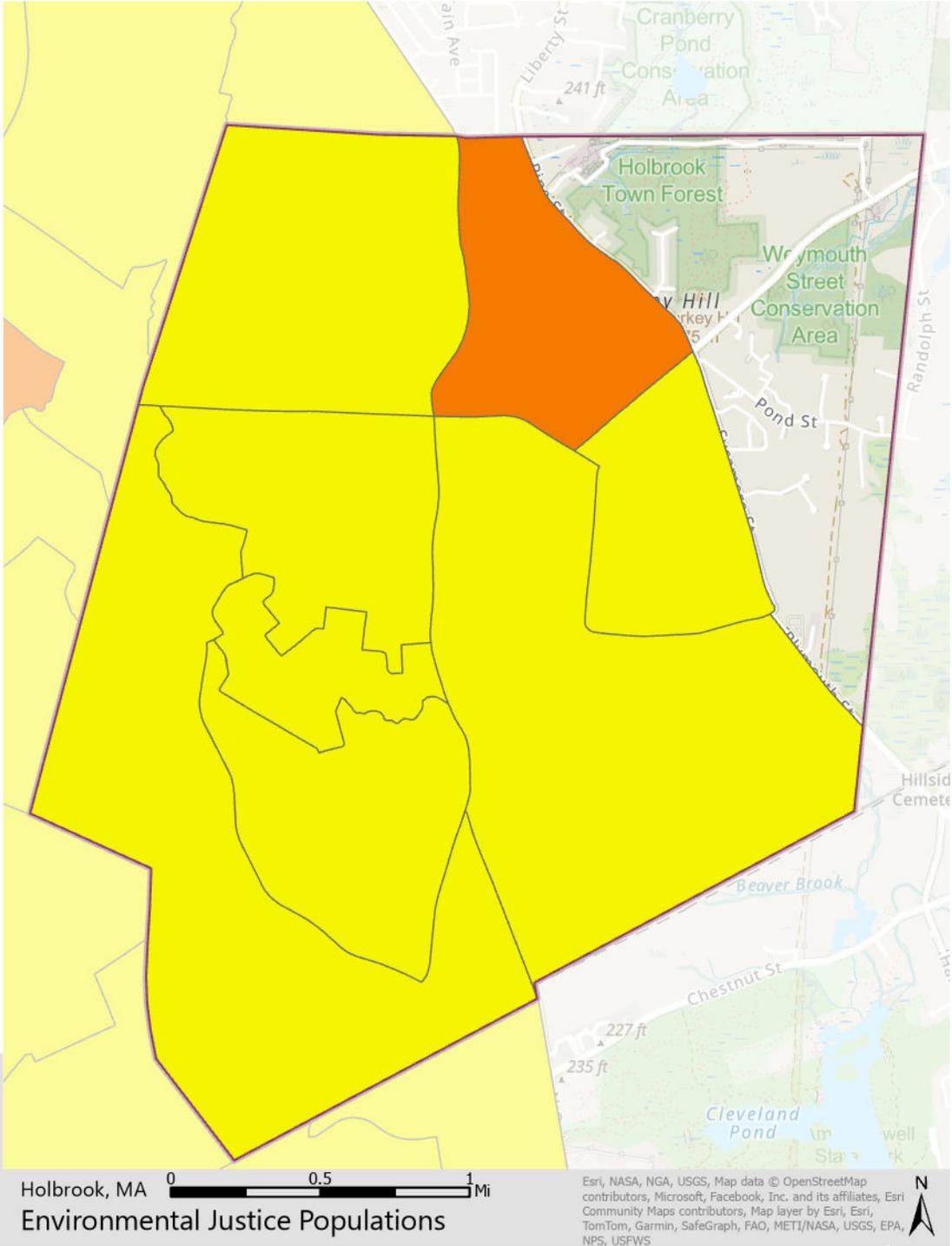
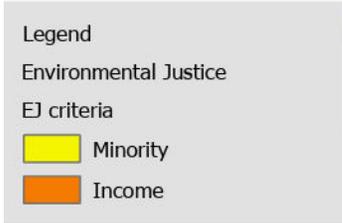
state of Massachusetts established the Environmental Justice Policy. This policy aims to identify and address environmental disparities in historically marginalized and low-income communities by considering those same factors. Massachusetts utilizes mapping tools and environmental data to assess the distribution of pollution sources and environmental hazards in relation to vulnerable populations, helping to identify areas in need of targeted intervention. The state also promotes community engagement and participation in decision-making processes through forums such as public hearings and advisory committees, ensuring that affected communities have a voice in shaping environmental policies and initiatives. Additionally, Massachusetts implements environmental justice grants and funding opportunities to support community-based projects and address environmental challenges in disadvantaged areas, advancing equity and sustainability across the state.



Lake Holbrook

In Massachusetts, a census block group is defined as an Environmental Justice population if one or more of the following four criteria are true: 1) the annual median household income is not more than 65% of the statewide annual median household income; 2) minorities comprise 40% or more of the population; 3) minorities comprise 25% or more of the population **and** the annual median household income of the municipality in which the neighborhood is located does not exceed 150% of the statewide annual median household income; or 4) 25% or more of households lack English language proficiency.

According to the 2020 census, eight of Holbrook's nine block groups are EJ populations. In the map at right, the areas in yellow represent populations which meet criteria #3: are more than 25% minority AND the median income is less than 150% of the statewide annual median income. The area in orange represents a population which additionally meets criteria #1: the annual median income is not more than 65% of the statewide annual median income.



Education

There are two public schools in Holbrook, the John F. Kennedy Elementary School and the Holbrook Middle-High School. They are both located on the same campus, which was built in 2017. This campus replaced the town's former three schools, and is on the same lot that the Holbrook Junior-Senior High School (7th to 12th grades) once stood. The campus of the former school, which residents refer to as "Old JFK," is now empty and there is discussion about what to do with it. Many people in town have expressed the desire for some sort of path through the forested wetland connecting the old campus with the new one. In town survey responses, many residents shared an appreciation of the new school. In addition to the public schools listed above, there is one private school, the Boston Higashi School, which is a specialized school for students age 3 to 22 on the Autism Spectrum.

"Could we utilize these buildings for town events or as gathering spaces? As [a taxpayer] without children in the school system, I am unclear how these buildings serve the rest of the community (seniors, etc.)"

In question 21 of the Open Space Committee's vision survey, "Do the Holbrook public schools meet the needs of the town," respondents were fairly split: 37% selected "Yes," 24% selected "No," and the remaining 39% were write-in responses. Many of those write-in comments simply stated "don't know," or similar; however, dozens of them indicated concerns about bullying, over-crowding, and lack of access for the community.

Recreation

According to question 16, "How do you spend your free time," residents' most popular recreational activity is socializing with friends (69%), followed closely by walking and hiking (63%). No other choices to this survey question registered higher than 35%; however, there was a diversity of athletic interests which were favored by more than 10% of respondents, including organized sports (24%), running (13%), fitness and weight training (12%). Of

cultural interests, nearly 24% of respondents enjoy community service, and within the write-in responses, activities like church, time with family, arts & crafts, clubs & hobbies, gardening, and reading were popular.

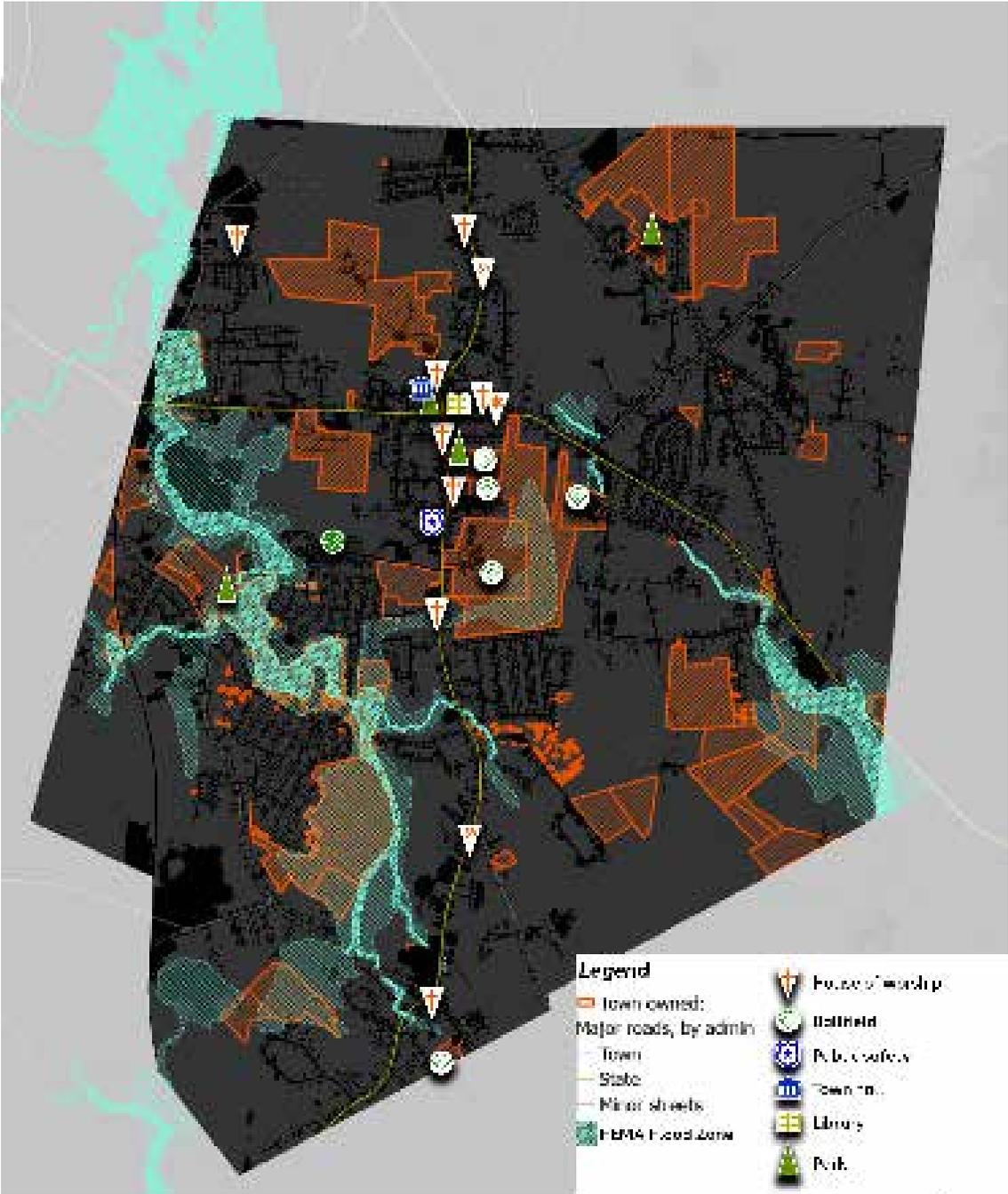
To understand where people spend their free time—or would like to—other questions provide some insight. In question 15, "What is your favorite part of Holbrook?" rather than specific locations, respondents indicate by a wide margin that "the people," "sense of community," and "the neighborhood" are their "favorite part of Holbrook," potentially indicating a broad appreciation for the communities close to home. Top locations mentioned are the Town Forest, the Grove/Lake Holbrook, the school, the library, and Sumner Field.

In question 17, "Which [open space] would you like to see made more accessible?" respondents prioritized three locations: Old JFK, i.e. the property of the former elementary school (48%); Lake Holbrook (46%); and Town Forest (45%). In question 7, "Which features of Holbrook would you like to see expanded or improved?" roughly one-third of responses mention a desire for improved athletic facilities and/or the addition of a recreation center or similar facility, often suggested to be located at Old JFK. Furthermore, a majority of the responses mention nature, parks, and playgrounds in general.

Considering Holbrook residents' apparent widespread affinity for socializing close to home, desire for more outdoor recreation, and the nuance of some specific recreation interests, there may be interest in establishing pocket parks—typically less than an acre and within walking distance of their intended community—to serve as outdoor spaces for residents within their neighborhoods (see Sec. 4 - Action Steps).



Holbrook High School Class of ???

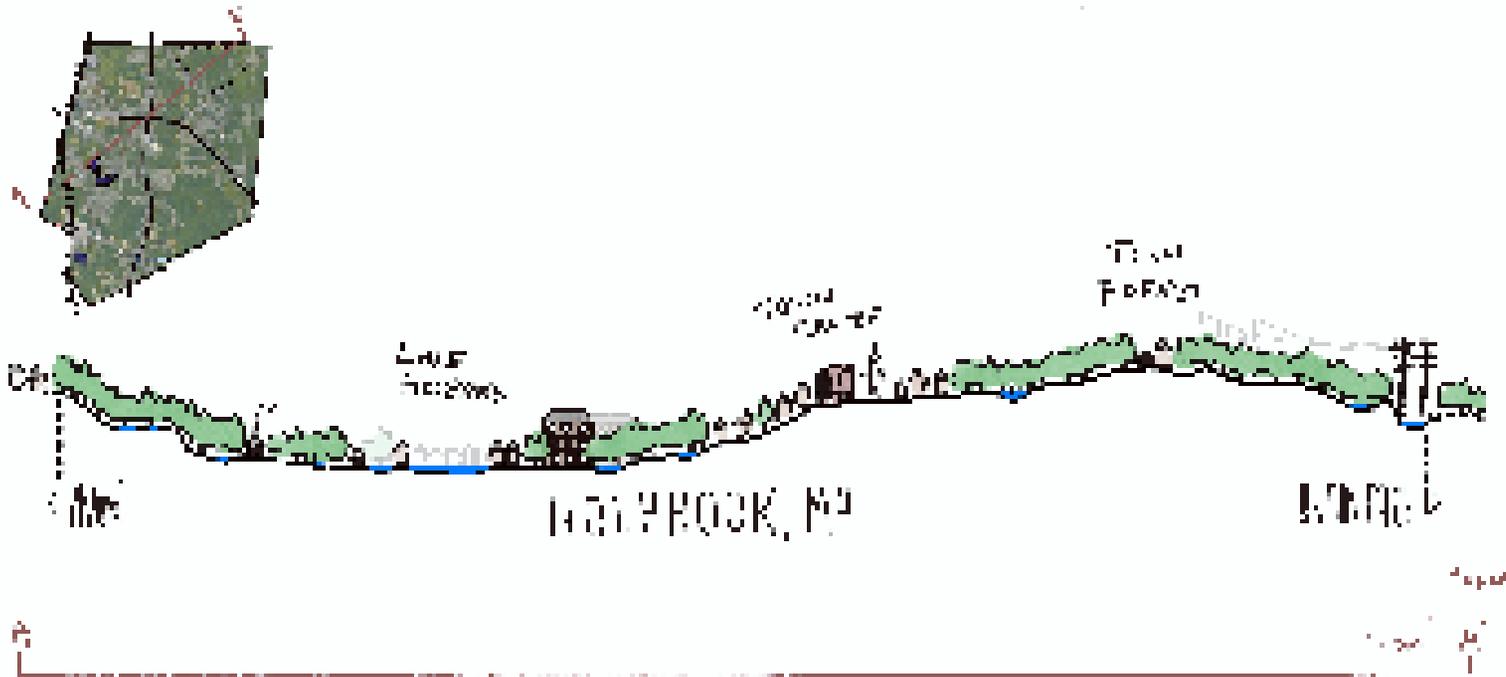


Major Gathering Spaces in Town





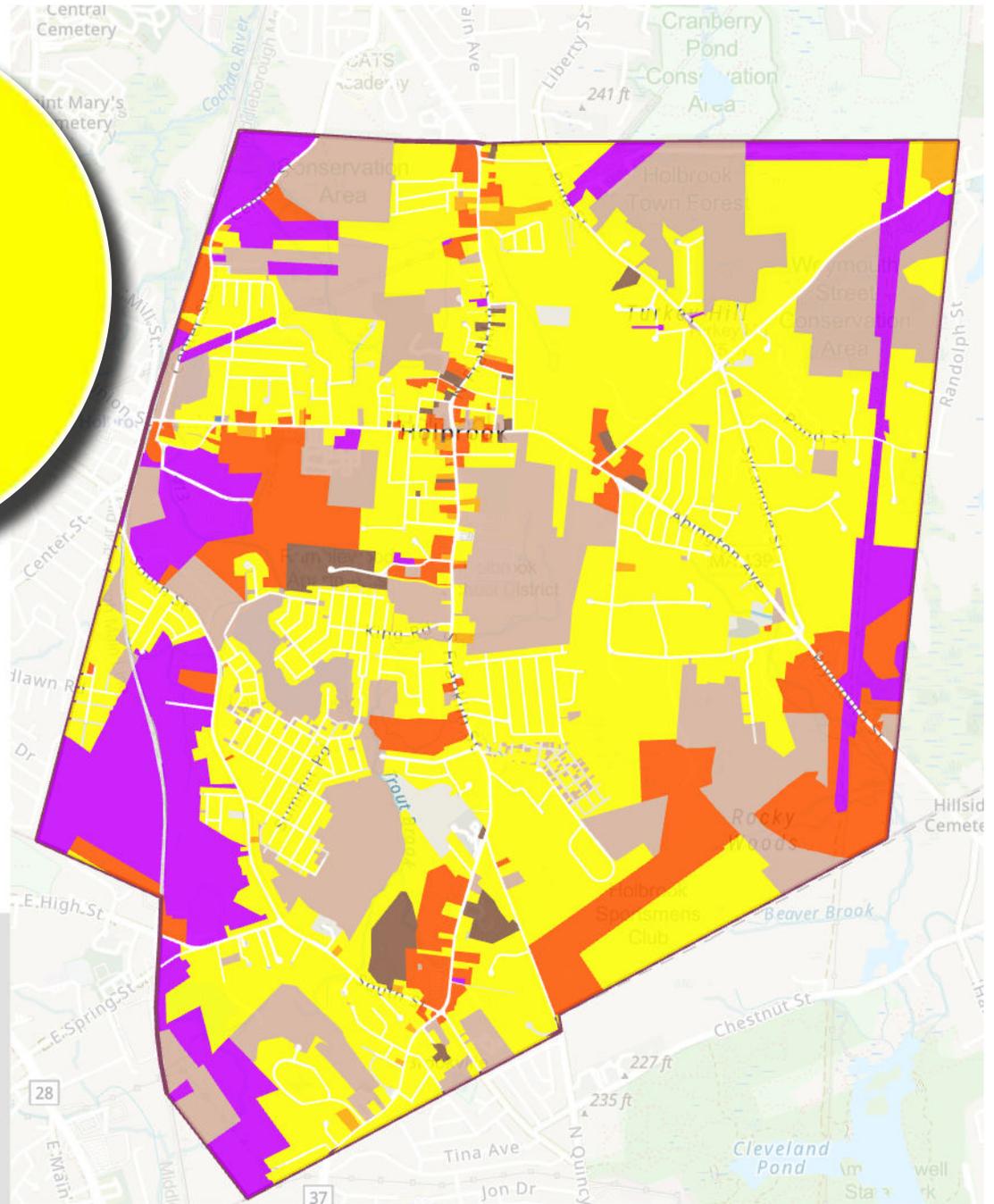
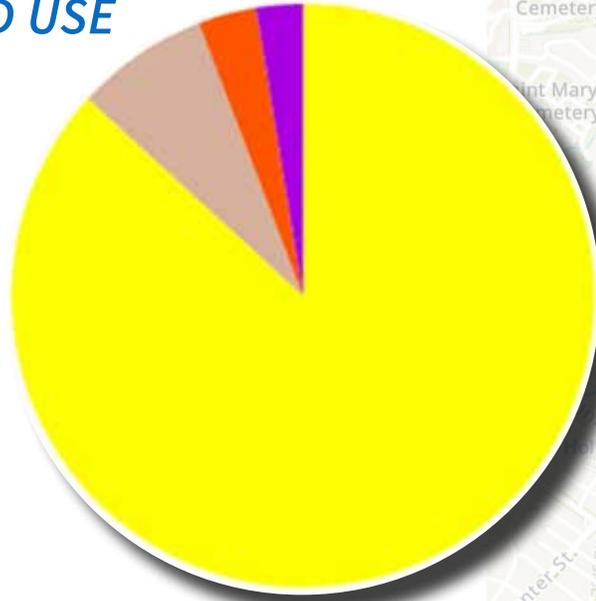
Looking west over Town Hall (left) and Winthrop Congregational Church (right)



CURRENT LAND USE

Land use type (%)

- Residential 86.8%
- Exempt 7.4%
- Commercial 3.23%
- Industrial 2.577%



By use (based on tax code) 86.8% of the town's land area is residential. Tax-exempt lands account for 7.4% of the town (this includes town-owned land such as the Town Forest and Lake Holbrook, as well as religious organizations and schools), commercial uses for 3.23%, and industrial uses for 2.58%.

Legend

- Exempt Land
- Multi use/home&business
- Chld Care facilities
- Residential -- Apartments
- Residential - single & 2 family
- Industrial
- Commerical
- Holbrook outline

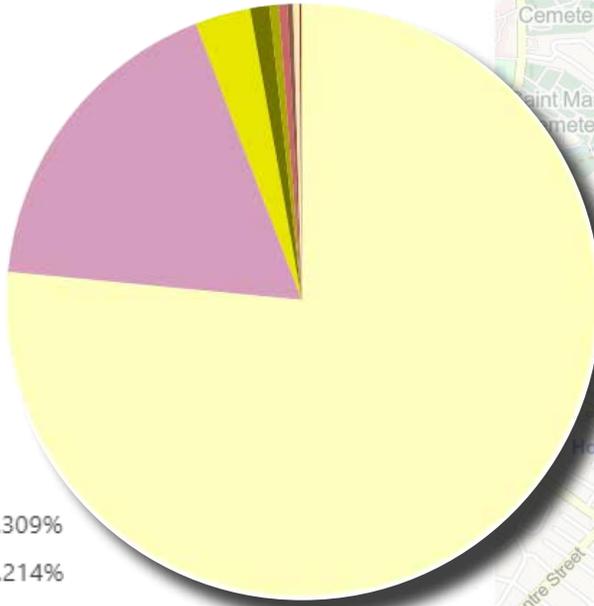
Holbrook, MA 0 0.5 1 Mi
Land Use, by tax code

Esri, NASA, NGA, USGS, Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS

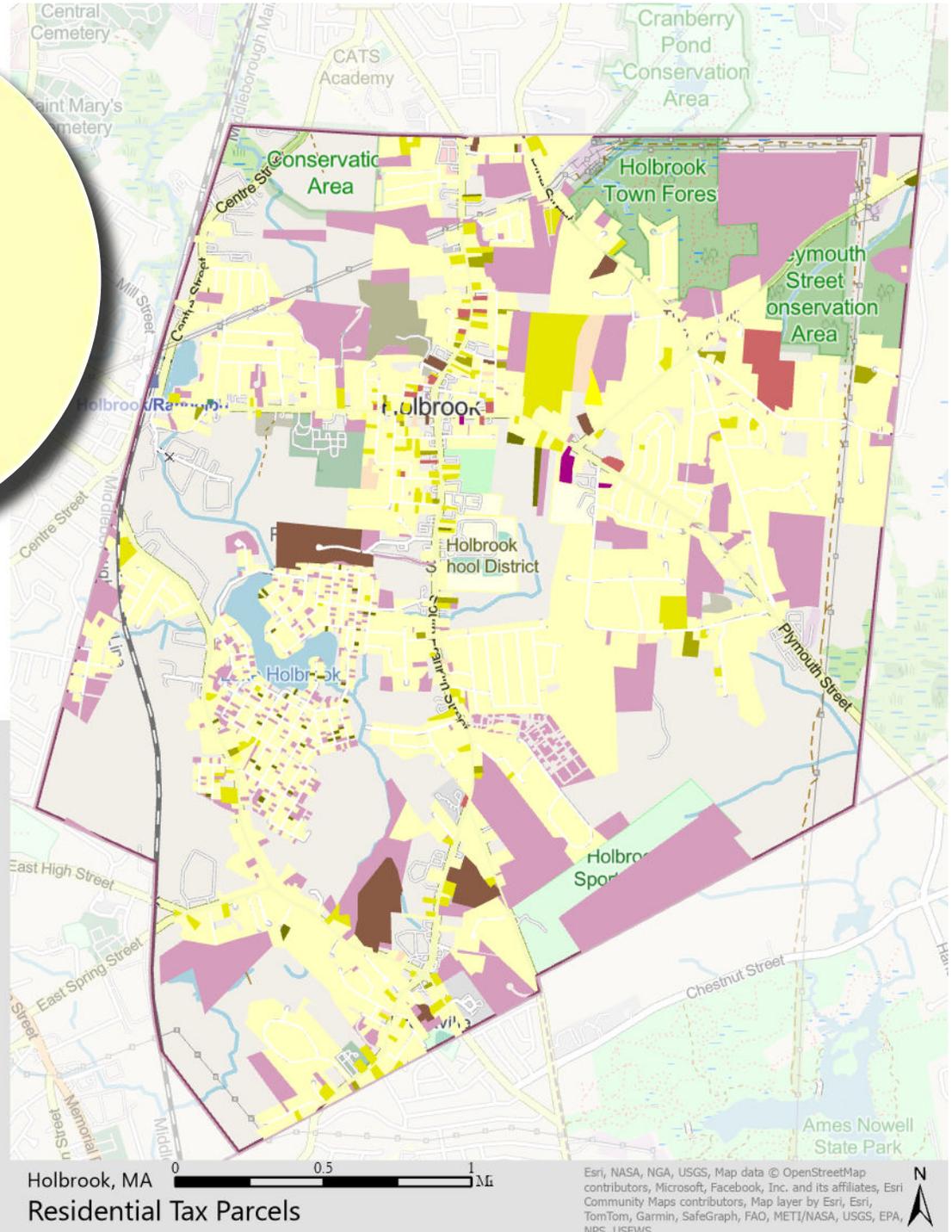
Residential Land

Residence type (%)

- Single-Family 76.5%
- Vacant 17.63%
- Two-Family 3.04%
- Accessory Land 1.046%
- Three-Family 0.499%
- Apts 4-8 Units 0.475%
- Apts more than 8 Units 0.309%
- Mult houses on one lot 0.214%
- Condo 0.1426%
- Congregate Housing 0.0713%
- Child Care facilities 0.02376%
- Mobile Home 0.02376%



As shown above, the large majority (over 76%) of residences in Holbrook are single-family, detached dwellings. The second largest residential category is vacant land (over 17%), parcels upon which homes can be built but which are currently empty. Only 3% of residential units are two-family, and apartments represent less than 1% of units. The map at right shows that large parcels of single-family dwellings are concentrated in the eastern half of town.





Looking west down Jewel Road



120 North Franklin Street

Grove neighborhood



Frozen Lake Holbrook

Exempt Land

WHAT IS "EXEMPT LAND?" The majority (approximately 90%) of the tax-exempt land in Holbrook is town or municipally-owned. This includes the Town Forest, the capped landfill, the School, Division of Fish and Wildlife area, and conservation land. Additional exempt land is owned by charitable organizations and religious organizations such as churches, mosques, synagogues, and temples.





Winthrop Congregational Church

Historic District

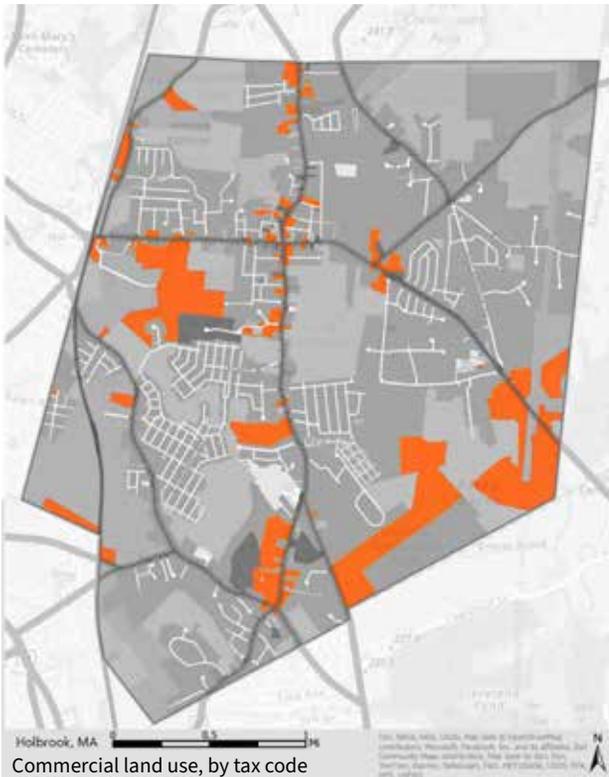
The historic district in the downtown area contains the Gothic Revival town hall, built 1878-79 and renovated in 2011, the Winthrop Congregational Church (1878-80), and the 1881 Central Fire Station. There are also many homes that are part of the historic register. There are old stone walls and foundations in the town, and two historic cemeteries, Union Cemetery, for which the land was purchased in 1752, and Wendell Cemetery in Brookville. In the town survey, many residents shared that they value the historic character of the town.

Legend

- Libraries Holbrook
- Mass Historical
- Mass Historical Society Areas



Commerce



The commercial areas of Holbrook are mostly spread out along the two main routes that intersect the town, Route 37 and Route 139. Historically, the intersection of these two roads —known locally as Town Center — has been a central junction since before the town's inception, and remains busy with automobile traffic to this day. Throughout the visioning process, residents voiced many concerns about the high volume and speed of through-traffic, making the area not suitable or appealing for pedestrians and potentially stifling small business growth.

"I would like to see more businesses in town to offset [property] tax liabilities."

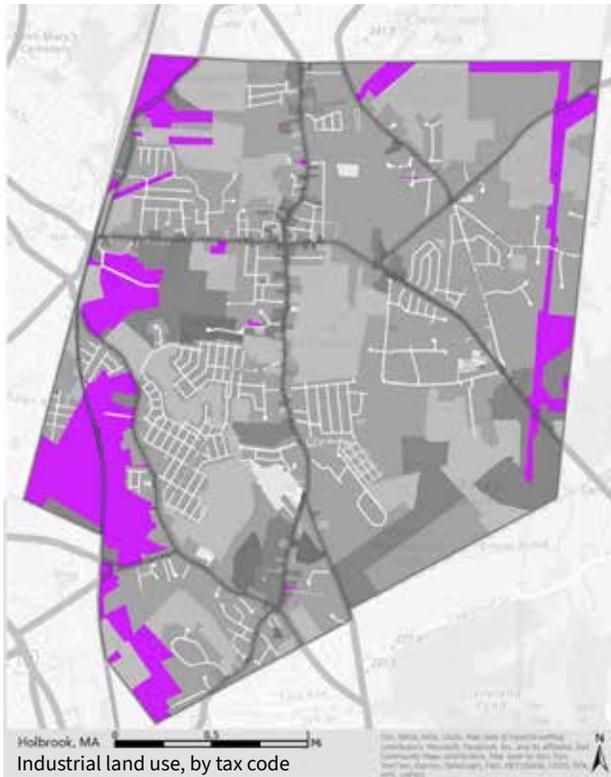
In 2014, working with the Metropolitan Area Planning Council (MAPC), the Town conducted an Economic Development Study for Town Center to analyze local retail and other business, and identified gaps between supply and demand. However, this data is likely out of date. The plans for the downtown development area did not move forward.

Throughout the town survey and community engagements, resident attitudes on whether or how the businesses in town suit their needs were varied. In the survey, the most favored business areas in town were Highland Plaza and Brookville. Interestingly, these two areas are as far from Town Center along Route 37 as one can get within Holbrook, at the northern and southern ends, respectively. Both areas are characterized by large amounts of impervious surface in the form of roads and parking lots, a hallmark of car-dependent local economy.

A majority of survey respondents expressed a desire for more businesses in town, with 80% answering "Yes" to the question "Would you like to see more retail businesses in town?" Many of those affirmations came with clarifying statements, expressing desire for more variety: fewer pizza shops, gas stations, and convenience stores; more cafes, bookshops, and clothing stores. Many residents expressed the desire to have better food access ("grocery store," "supermarket") in town, while others felt that grocery stores outside of town, including Stop & Shops in Braintree and Brockton, Shaw's in Braintree, and a Whole Foods in Weymouth, meet their needs.



Industry



Historically, industry was spread throughout the town, and included dairy and vegetable farms, shoe-makers, a saw mill, and an ice house, among many other businesses. Today, however, the industrial areas of Holbrook form a different pattern, mostly gathered around the train line and adjacent roads, which run along the town's western border with Randolph and Avon. Much of the industry along this corridor supports the construction industry, providing materials, products, and services involving metal, concrete, lumber, and synthetics. Also abundant here are products and services related to transport, including mechanics, trucking logistics, and signage. Notably, a stretch of land south of Route 139 is home

to two major environmental contamination sites (see "Contamination and Creative Reuse" on the next page).

Deviating from the western tendency of industry is an electrical substation in the northeastern corner of town, adjacent to the Town Forest, and the transmission lines which extend from it, cutting through mostly forested areas near the northern and eastern town boundaries.

Survey respondents were indirectly asked to share their feelings about local industry in question 26, "What types of businesses should Holbrook attract or work to keep?" They were asked to score from 1 to 5 (least to most desirable) their feelings about nine choices, which included a wide range of business types, including "Heavy Industry" and "Light Industry." The latter came in last, with an average score of 2.3; the former fared more strongly with an average score of 3.19—the median score of the nine—ahead of "Bars," "Tourism," and "Cannabis Dispensaries." These terms were not explicitly defined for the survey-takers, though, so the results do no account for varying ideas of what differentiates heavy and light industry.



Looking west on Mear Rd.



Industrial buildings off of Mear Rd.



Hallamore Corporation off Mear Road



Electric transfer station off Pine Street

Contamination and Creative Reuse

From 1912 to 1983, Baird & McGuire operated a chemical mixing and batching facility in Holbrook, handling various products including pesticides and solvents. In 1982, the site was assessed by the EPA and designated a Superfund site, citing hazardous waste disposal practices including direct discharge into soil and nearby water resources. Located near the Cochato River and a former municipal water supply well field, the site poses ongoing environmental risks requiring extensive remediation efforts, including demolition of most structures, capping of contaminated areas, incineration of contaminated soil, and implementation of groundwater containment measures. The former well fields, which are within 1,500 feet of the site, were shut down in 1982.

During the 2019 five-year review, an additional contaminant, arsenic, was discovered on the site.

Unfortunately, Baird & McGuire isn't the town's only contaminated site. In the same industrial corridor is the former site of Holbrook Chemical Corp., now listed as a brownfield due to toxic chemical pollution. A new transfer station has been proposed for the property, to serve a large portion of Eastern Massachusetts with 1000+ tons delivered to the site per day; however, there has been heavy opposition to this plan from residents, citing, among many things, the scale of the operation, history of land abuse in the town by industry, and the parcel's overlap with the FEMA 100-year flood hazard area. Loss of wetlands upstream of this site—whether from development or from degradation—could exacerbate this flood risk.

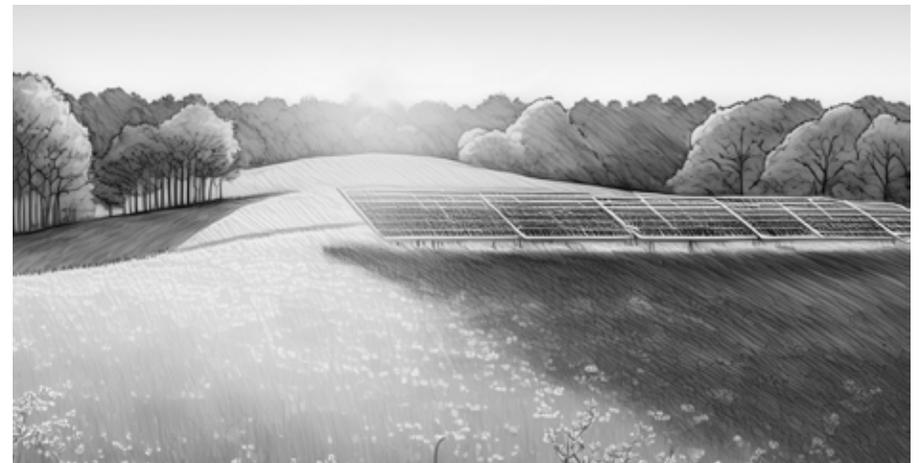
Additionally, a capped landfill located near Town Hall, northwest of town center, has been the proposed site for a contaminated soil dump.



Looking north over South Wellfield open space along South Street



Although these sites have been regarded by industry as wastelands, good for little else but continued waste dumping, there are a number of potential uses for these sites which could more directly support the ambitions of town residents. New standards for improved structuring of solar fields on capped landfills in combination with federal grant money for the conversion of contaminated sites to solar fields, means these sites could support *climate change preparedness*. If the town opts for habitat restoration on these sites, this could create opportunities to improve river and drainage function, as well as *more recreational opportunities*. As the town works toward *updated zoning*, some of these sites could be considered for industries which pose low health hazard risk or even provide improved health and wellbeing, like environmental remediation, sustainable construction and manufacturing, or information technology.



UTILITIES

Water Supply

Since the shutdown of the contaminated well fields near the Superfund site, Holbrook has relied entirely on the Tri-town Water Commission for its drinking water. Tri-town, a regional water supply collaboration between the neighboring towns of Holbrook, Randolph, and Braintree, has been in operation since the 1880s. The present day water treatment facilities were constructed in the 1930s, and have exceeded their life expectancy. (*holbrook.gov, “tri-town_rwtp_fact_sheet.pdf,” 2021) In 2021, the commission approved construction of a new state-of-the-art facility to update the aging system and address growing community concerns over high levels of PFAS contamination detected in the drinking water. Construction was first projected to conclude in 2024, but has since been extended into at least 2026. In the meantime, residents use a variety of methods to acquire clean drinking water, including: at-home filtration, purchasing bottled water, or filling bottles at Bluedrop commercial filtration stations at two locations in town, Stanney’s restaurant and Brookville Bible Church. Some residents continue to use unfiltered water from the tap. There is a phase 1 restriction limiting outdoor water use to handheld hose only, and on occasion, Tri-town has issued phase 2 and 3 water restrictions during drought conditions.



Stormwater outfall off South Street



Tri-Town entrance off South Franklin Street

Stormwater

A municipal separate storm sewer system (MS4) collects water from impervious surfaces throughout Holbrook and funnels that water into various surface water bodies. There are a total of 36 outfalls, 18 of which feed into Lake Holbrook or its tributaries. A comprehensive study of the MS4 would determine how much these outfalls would contribute to a flood event upstream, at, or below Lake Holbrook. The Notice of Intent for coverage under Small MS4 General Permit (2019) lists inventory and assessment of this infrastructure as action items.

Sewer

Roughly two thirds of the households in Holbrook are on the Massachusetts Water Resources Authority (MWRA) sewer network, which discharges into Boston Harbor after being treated at the Deer Island plant. A separate facility in Quincy turns sewage sludge into fertilizer. Households which are not on the sewer system continue to use septic systems with leach fields.

Trash and Recycling

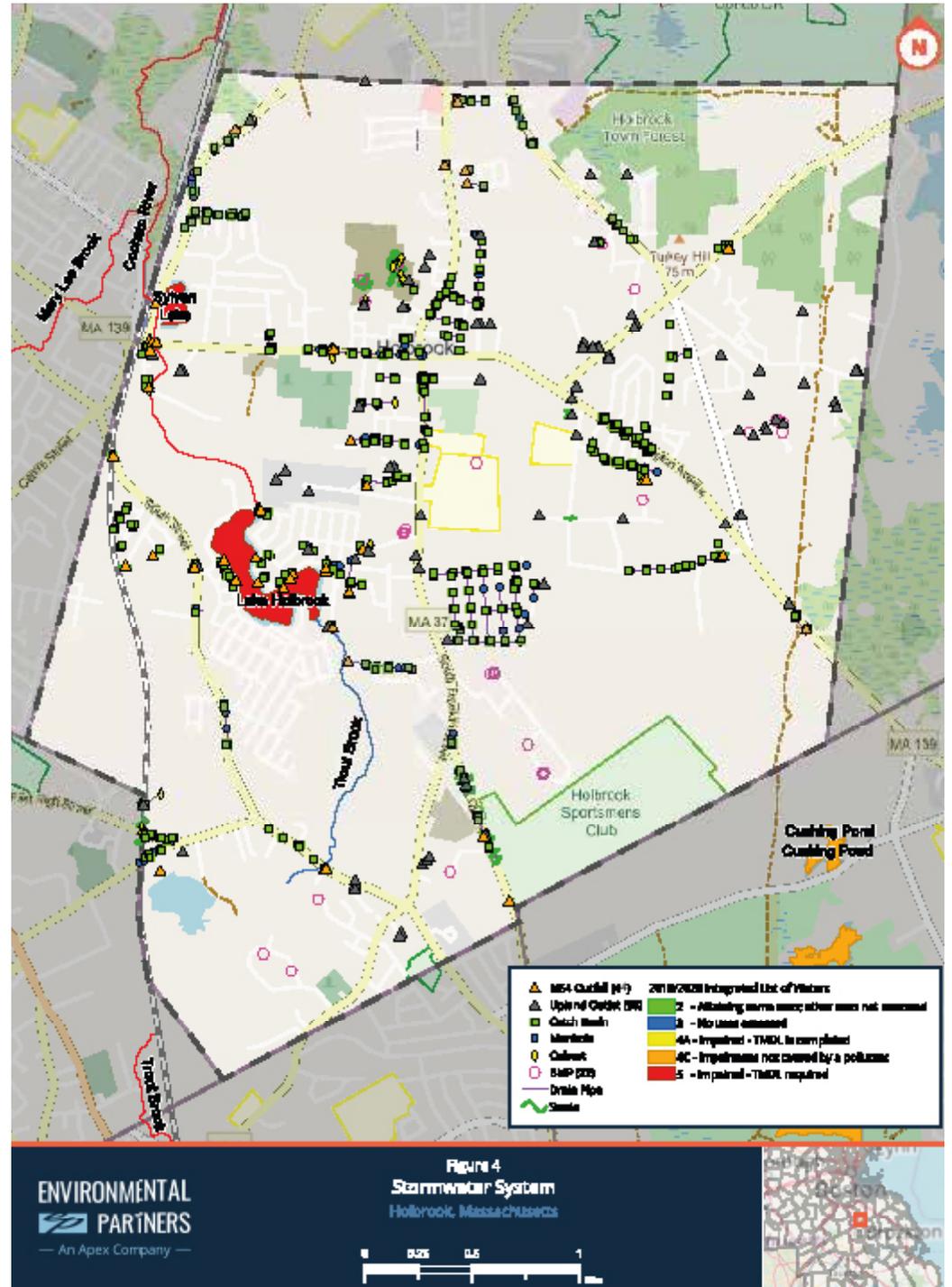
As of February 1, 2024, the Town no longer provides trash and recycling services. Residents are required to contract with a private company and to submit proof to the town of their contracted services.

Electricity

Electricity is provided in Holbrook by Massachusetts Electric Company, doing business as National Grid. There are many unofficial trails along the power lines in town, used by walkers and all terrain vehicles. These power lines also function as wildlife corridors, connecting various woodland areas. As the town looks to improve opportunities for recreation, these areas under utility lines could provide a set of trails that run along the northern and eastern edges of the town and have adjacencies to the Town Forest and Tumbling Brook Conservation area.



Powerlines off Center Street





Looking south at the intersection of Route 139 and Route 37

Getting Around Holbrook...

In the town survey, Holbrook residents were asked "Does public / private transportation meet your needs or desires?" Of the seven modes queried—Bus, Train, Public Roads, Bike Paths, Sidewalks, Walking Paths, and Taxi/Ride-share—"Public Roads" received the most "Yes," and least "I Don't Use It" responses; however, it still registered third for "No" votes, indicating significant desire for improvement of the town's most used mode of transit. Similarly, "Sidewalks" came in second for "Yes" responses, and second-to-last for "I Don't Use It," but also came in first for "No," potentially indicating an even stronger desire for improvements to this critical infrastructure. Responses to "Walking Paths" echoed those for "Sidewalks," only with slightly less use among respondents. Other noteworthy takeaways from the survey results are "Bike Paths" coming in last for "Yes" votes, and "Bus" coming in first for "I Don't Use It."

"It shouldn't take 10-15 minutes to drive a mile."

...By Automobile

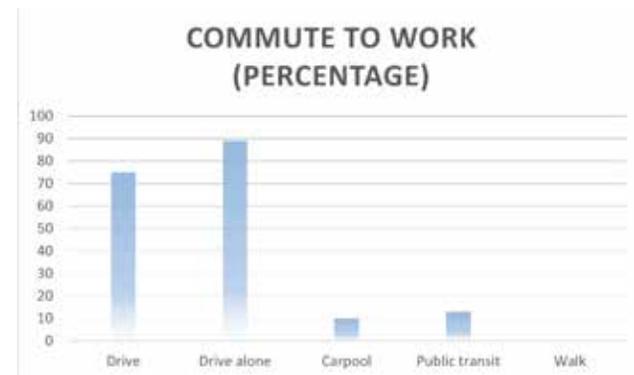
Data from the US Census Bureau reflect the town's preference for transit by car: 75% of the population drives to work, and of those commuters, almost 90% drive alone.

Whether driving to or from work, school, or otherwise, drivers in Holbrook are likely to interact with at least one of two major state routes which intersect in Town Center and define much of the town's traffic patterns.

Route 37—also known locally as North and South Franklin Streets—runs north-south along a low ridge which splits the town into relatively high land on the east and low land to the west. According to the Holbrook Historical Society, this used to be a trail used by Native Americans, and was later used as a trolley line within town. Today it hosts a bus line and a majority of the town's commerce and gathering spaces (e.g. Town Hall, the library, schools, public safety, and houses of worship).

Route 139—which includes Union and Plymouth Streets and Abington Avenue—runs primarily east-west, connecting Holbrook to its neighbors Weymouth and Randolph, respectively. Prior to the arrival of automobiles in the early twentieth century, this route served as the main connection between Town Center and the rail line, which runs along Holbrook's Western border.

It's not strictly Holbrook residents using these roads. Some people describe Holbrook as a "pass-through" town. For example, a Wednesday morning rush hour route from Abington to Boston, planned using Google Maps, directed drivers through Holbrook using Route 139, Sycamore Street, and Pine Street. Simultaneously,



CIRCULATION

In the context of land use and planning, "circulation" refers to the organization and management of movement of people, vehicles, and goods within and around a given area, often considering factors like traffic flow, accessibility, connectivity, and environmental impact. It encompasses various modes of transportation such as walking, cycling, driving, and public transit, as well as the infrastructure that supports these movements, such as roads, sidewalks, bike lanes, and public transportation systems. Even nature trails and waterways are modes of circulation.

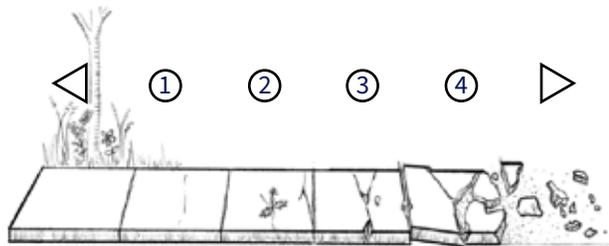
Google traffic data showed traffic flow had slowed significantly in the east-bound and north-bound directions around the Town Center intersection. This congestion extended for two-thirds of a mile in both directions. Similar congestion was seen at the intersections of Route 139 and South Street, and Route 37 at the MBTA rail line crossing.

Concerns about these conditions came up in the town survey and community engagements. A survey respondent called attention to residential streets which are commonly used to circumnavigate congestion at Town Center. Others remarked on speeding, or frustrating commute times through Town Center.

...On Foot

Throughout the visioning process, many residents expressed desires for a walkable town, and remarked that Holbrook is not one. But what makes a town walkable? The walkability scale below offers four benchmarks, from most to least walkable:

- (1) "walking is the most efficient way to get around,"
- (2) "the environment encourages you to walk,"
- (3) "It's possible but not pleasant to walk," and
- (4) "It's physically impossible or unsafe to get around on foot."



Walkability Scale

Input gathered from the survey and community engagements places Holbrook somewhere between three and four on this scale. One community member described a circuitous path she takes to avoid crossing Route 139 at Town Center, preferring to walk blocks out of the way to cross more safely. Another described the difficulties of safely pushing a stroller along the same street, needing to navigate around utility poles in the center of the walkway. Multiple survey respondents voiced desires for better support for pedestrians off of main routes—e.g., a footpath between the Ramblewood apartment community and the MBTA train station, or one between "Old JFK" and the K-12 school campus.

Walkability is also a matter of accessibility, especially for people with mobility challenges.

...By Bus, Train & Bike

Compared to cars, use of public transportation and bicycles in Holbrook is relatively very low. There are several factors that contribute to this. A significant factor is the limited availability of public transportation: only one bus route crosses through the town, the 230 Bus, which runs north and south along Route 37 serving as a connector for the Braintree station, a terminal on Boston Metro's subway system, "the T."

While there is an MBTA railway station in Holbrook (opened in 1997), the bus route does not connect to it. Instead the station

"Sidewalks are...so small you can't walk with two people and a stroller...huge trucks are feet away from you...It feels so unsafe."

serves more as a "Park & Ride" commuter station, with a large parking lot. Further, residents describe the train as unreliable, with frequent outages for repair. While many

residents complain of traffic congestion in the middle of the town, they also report that driving is still much faster than taking the bus to the T, and that the Red Line also can be unreliable with frequent disruptions.

At this time, there are no bike trails in Holbrook, and only one short bike lane, which also runs along Route 37 between Town Center and King Road (~0.7 mile). Residents report that given the traffic, biking would not feel safe.





Complete Streets

In 2020, the Holbrook Public Works department published a Complete Streets Policy. “Complete Streets” refers to a transportation policy and design approach that requires roadways, sidewalks, and trails to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities, including pedestrians, motorists, and commercial and emergency vehicles.* The town committed to considering Complete Streets principles and design elements in all public and private projects going forward. Some of the benefits of Complete Streets that relate to the vision of the residents for the town are:

Health

Complete Streets help improve quality of life by providing transportation options and by encouraging active transportation through improved connections to activities. The travel paradigm has begun to shift toward healthier options such as walking and biking.

Energy

Complete Streets promote travel by modes that are more energy efficient such as walking, biking, and transit. In many Complete Streets projects this mode shift away from travel by automobile has been realized, which helps lessen dependence on oil.

Environment

The largest source of transportation greenhouse gas emissions is from automobiles. By maximizing alternative modes of transportation, Complete Streets aid in reducing vehicle trips thereby reducing greenhouse gas emissions and improving air quality. Complete Streets can also reduce pavement width, which reduces deleterious impacts of stormwater runoff on water quality and reduces the urban heat island effect.

Economy

Complete Streets can provide accessible connections between land uses, thus providing greater opportunity for people to access activities that support daily life, recreation and entertainment, and other activities. The more activity an area can generate, the greater the investment. Numerous Complete Streets projects have demonstrated economic benefits through higher property values and increased business revenues.

*from Massachusetts Department of Transportation Complete Streets Funding Program Guidance

Regional Collaboration with Boston's MPO

GOALS	Project Rating
Safety	30
System Preservation	29
Capacity Management/ Mobility	29
Clean Air/ Clean Communities	16
Transportation Equity	12
Economic Vitality	18

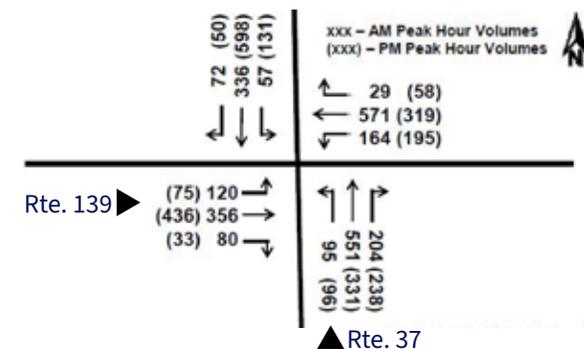
TIP Projects

The Transportation Improvement Program (TIP), managed by Boston Region Metropolitan Planning Organization (MPO), identifies, prioritizes, and allocates federal funding to transportation projects within the Boston metropolitan area over a four- to six-year period. In collaboration with stakeholders and public input, the TIP outlines specific initiatives such as road expansions, public transit enhancements, and bicycle and pedestrian infrastructure improvements, including trails. From inception to completion, the implementation of program projects is monitored and evaluated through a three-tier process to ensure that transportation goals, such as improving mobility and reducing congestion, are effectively addressed. The adjacent diagram illustrates the Tier One project rating rubric, which includes 28 criteria (not shown). This helps determine which projects move forward to Tier Two for funding and advertising. Since 2008, Holbrook has implemented (Tier Three) one TIP project, which was the reconstruction of Union Street (Route 139) from Linfield to Centre Street, and was funded in 2021. As of Q1 2024, Holbrook has 23 projects standing-by in Tier Two; however, these projects may need re-evaluation by TIP due to the time which has passed since being initiated.

Intersection Analysis

In 2014, the Boston Region Metropolitan Planning Organization conducted a Safety and Operations Analysis on the Town Center intersection (Rte. 139 and Rte. 37), to determine whether safety and flow could be improved. Two major issues were identified. First, the intersection had a high number of crashes and a high percentage (more than 30 percent) of crashes that caused personal injuries. Second, the intersection was highly congested during the morning and evening peak hours, especially on Rte. 139, with traffic frequently backing up for nearly half a mile in both directions.

The study concluded that changing the timing of the lights would make the intersection safer and more efficient. This data is ten years old, and residents continue to report that this intersection is often backed up, and that they would like to be able to walk around this area more safely.



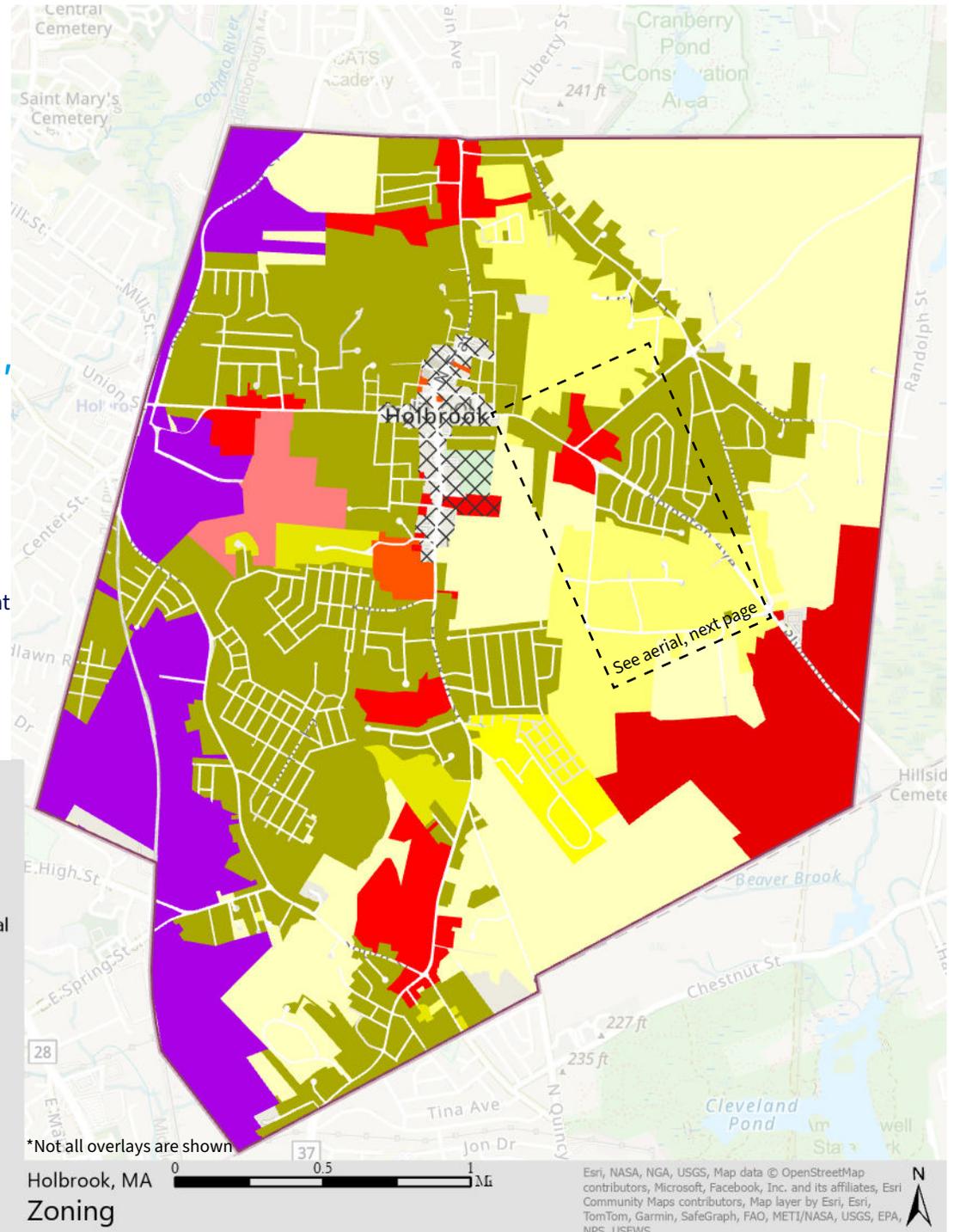
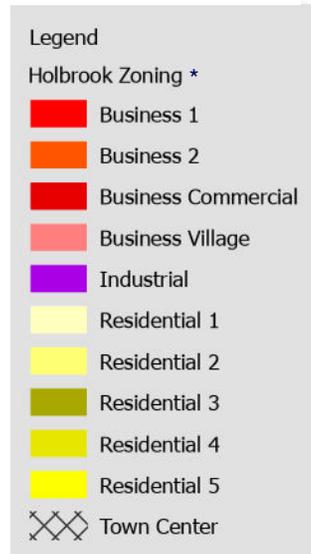
ZONING

Zoning is critical to many of the aspirations expressed by the residents of Holbrook across multiple sources of input. Residents expressed concerns about protecting natural resources, and also about developers building in areas that should be protected. Some expressed the desire for more housing, while others expressed worries about the town changing in character away from a “small town” feel. Some residents wanted a more walkable downtown, and many requested specific types of commercial growth (e.g., grocery stores). Zoning provides a pathway and a strategy for the residents of the town to decide where they want to prevent further growth and development, as well as where they think it could best occur. Zoning deliberately for more dense use in some areas could allow other areas to remain undeveloped and is a strategy that can contribute to climate resilience.

"Grow with the intent of keeping the character 'New England Style' while modernizing to fit peoples' needs."

Bylaws

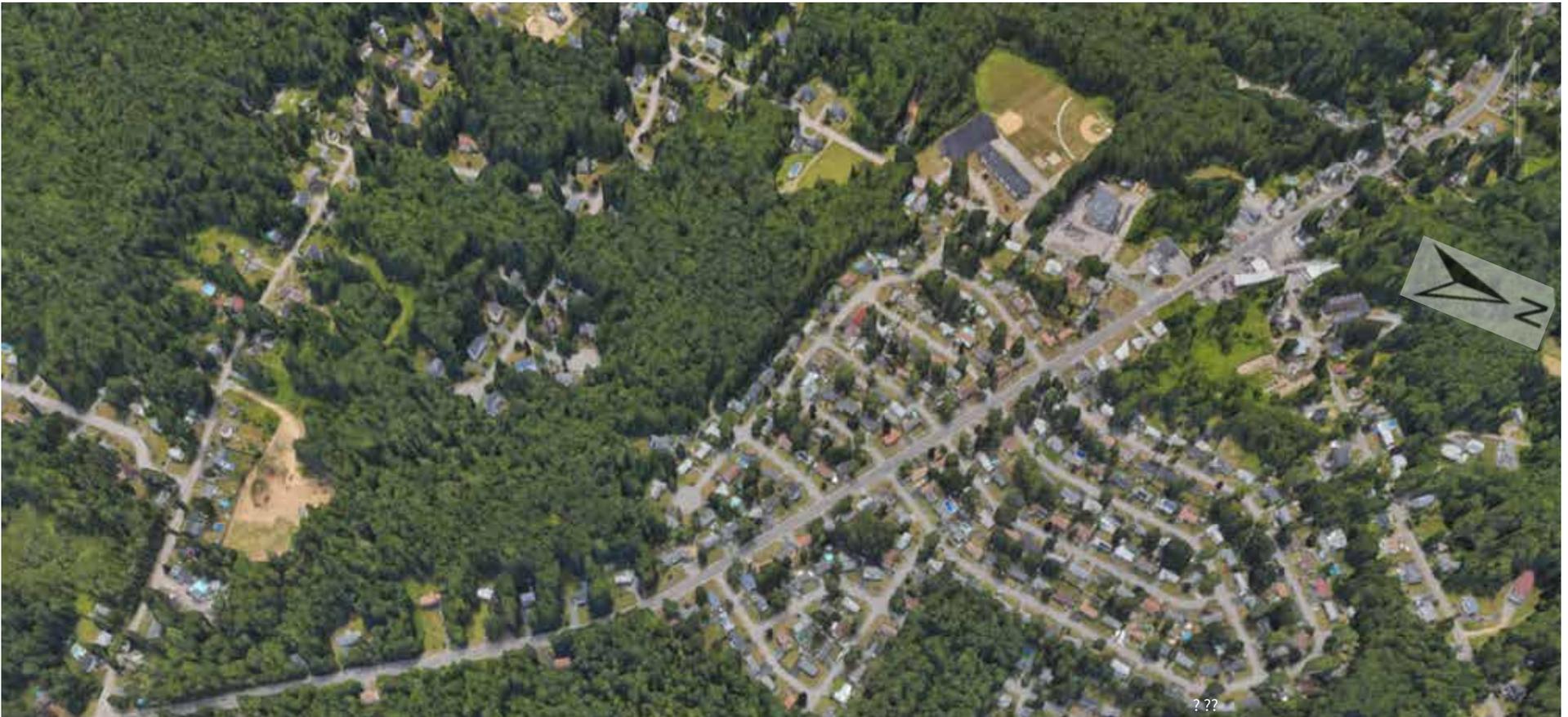
Holbrook’s zoning by-laws were last updated in 2019. There are ten original zoned districts, and six overlay districts, added at different times over the years. The original districts include five residential districts, four business/commercial districts, and an industrial district. The additional overlay districts include: a floodplain district, a town center district, the South school district, and medical marijuana, non-medical marijuana, and adult entertainment districts. Further, the town is working with the state of Massachusetts to add a multi-family zoning district required by the state for towns with MBTA stations.



Residential Zones

There are five residential zones in Holbrook, which differ primarily in minimum lot size per dwelling unit. Residential zone 1 is zoned for the least dense housing, with a minimum lot size of 60,000 square feet, and the remaining four zones go from 40,000 square feet to 20,000 square feet minimum. Zoning for low density housing with large lot sizes per unit is common in suburban towns and produces a sprawling pattern away from the downtown area. While this strategy may seem to preserve open space by creating housing with a more rural and nature-adjacent setting, it can actually erode open space by fragmenting habitat and requiring infrastructure such as water and sewer across broader swaths of town. Building more densely and consolidating infrastructure can allow for larger intact and undisturbed areas to persist. Towns wishing to protect land and promote climate resilience may wish to zone for more dense housing.

None of the residential zones allow for multi-family housing by right, and only one zone (zone 4), allows two-family units by right. In zone 5, multi-family housing can be built by a special permit of the planning board. Under a provision of the by-laws called Flexible Development, with a special permit all residential zones allow for the building of more than one single-family dwelling per lot to encourage the production of affordable housing. Without any areas explicitly zoned for multi-family housing, these more dense units are built only by special permit and at the behest of various developers, in multiple and scattered locations, rather than being guided by a vision for the form of the town. Developers may be discouraged by special permitting processes that allow development only at the discretion of the town. By-right and site review plan processes are less risky and thus may be more enticing to developers; if the town wishes to have more multi-family housing built, and to manage where it goes, moving away from special permit systems may facilitate that.



Town Center Overlay: Mixed-Use

“Mixed-use” is a term that can refer to either a district that allows both residences and businesses in the same area, or a single building that has both a residential and business use in it (for example, a business on the first floor or in the front, with residential quarters in another area of the building). In 2015, the Town added a Town Center overlay district to allow mixed uses in the town center, where people can both live and work. This can increase walkability and thus promote climate resilience.

Mixed-use buildings are allowed by right and do not require special permitting, although they do require site plan approval and are required to conform to design standards laid out in the by-laws related to aesthetic values. Currently there are 36 mixed-use parcels in this district.

"...focus on redevelopment in areas that are already developed. Create pockets of high density mixed-use housing/commercial to help with housing needs and also create opportunities for small cafe store front type businesses."



“Facades shall create a visually appealing environment. Building materials should be compatible with, but not necessarily mimic, the older character of architectural styles found in the Town Center.”

-Town of Holbrook Zoning By-Laws, 2019

Floodplain Overlay District

The floodplain overlay district is determined by FEMA flood zone maps. Per the town by-laws, the purposes of the floodplain protection district are to preserve and protect the streams and other water bodies in the town, to protect the public health and safety of persons and property against the hazards of flooding, to preserve and maintain the water table within the town, to assure the continuation of the natural flow pattern of the water courses providing safe and adequate flood water storage and runoff capacity, to protect the community against detrimental uses and developments, and to minimize losses by provisions designed to consider floodplain management programs in neighborhood areas.

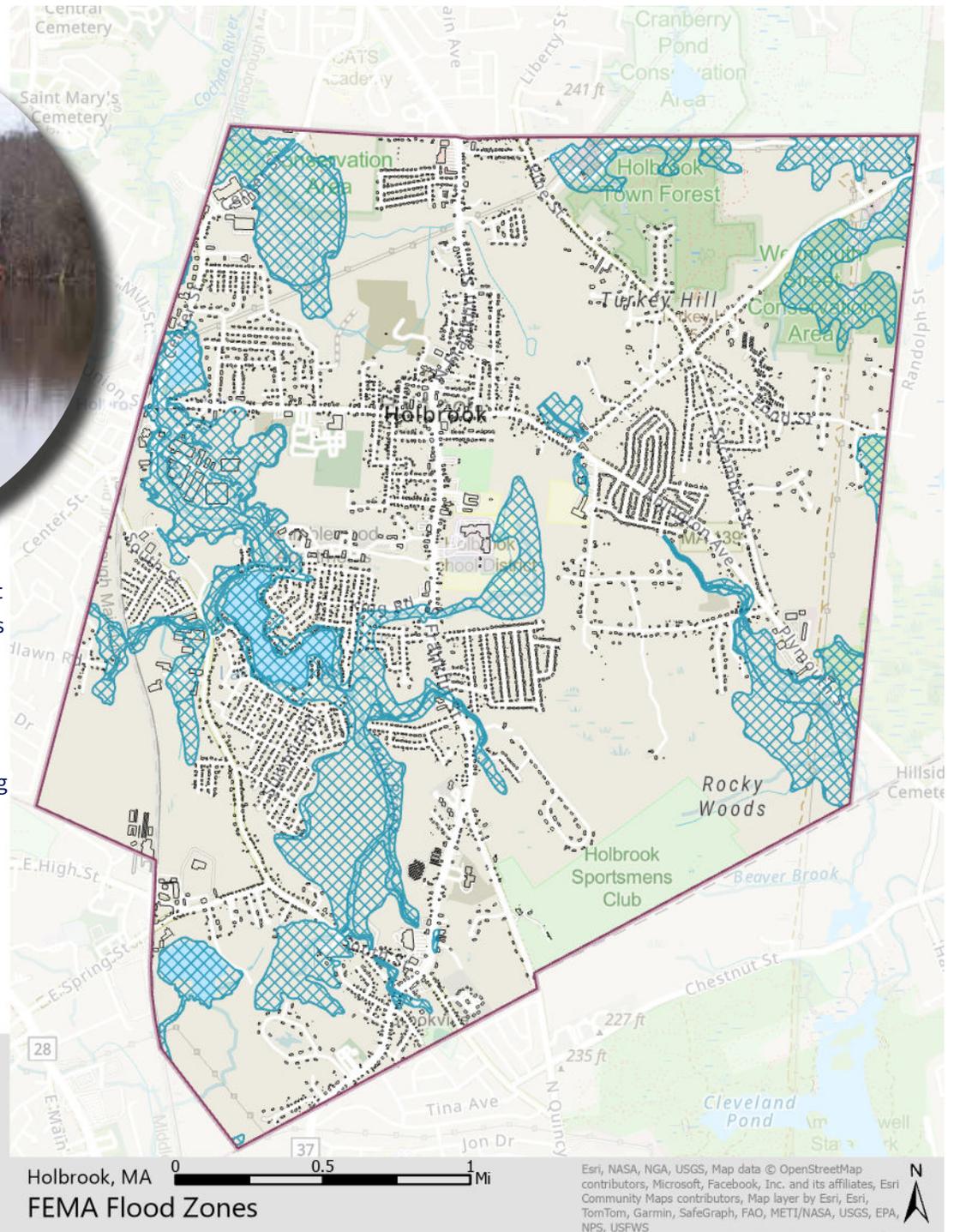


Flooding near Mear Rd.

Use regulations and restrictions in this district include prohibitions against new buildings or structures, the moving or enlargement of existing structures by more than 20%, the dumping, filling or relocation of earth materials, and storage of road salt, fertilizer, mineral, manure or other organic or inorganic chemical leachable material. Along watercourses within Holbrook that have a regulatory floodway designated on the Norfolk County Flood Insurance Rate Map, encroachments are prohibited which would result in an increase in flood levels within the community during the occurrence of the base flood discharge. All subdivision proposals must be designed to assure that flood damage is minimized, public utilities and facilities are located and constructed to minimize or eliminate flood damage, and that adequate drainage is provided to reduce exposure to flood hazards.

Legend

-  Holbrook outline
-  FEMA Flood zone overlay HB
-  Existing structures Holbrook



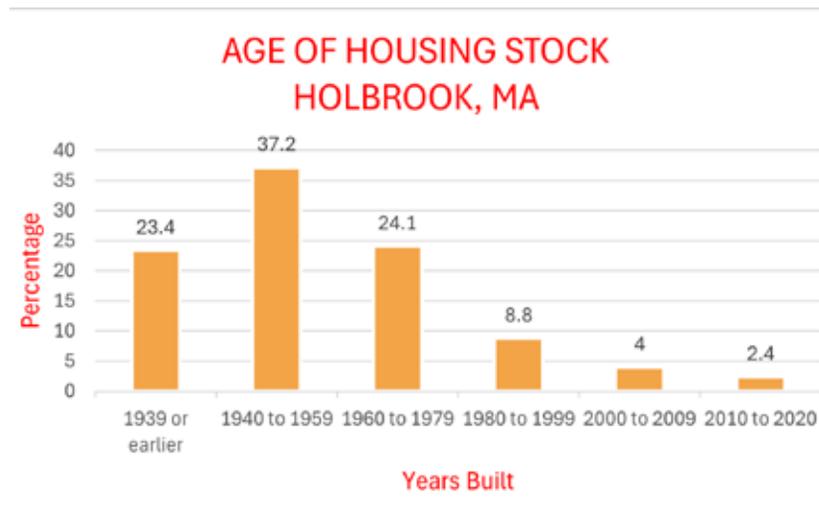
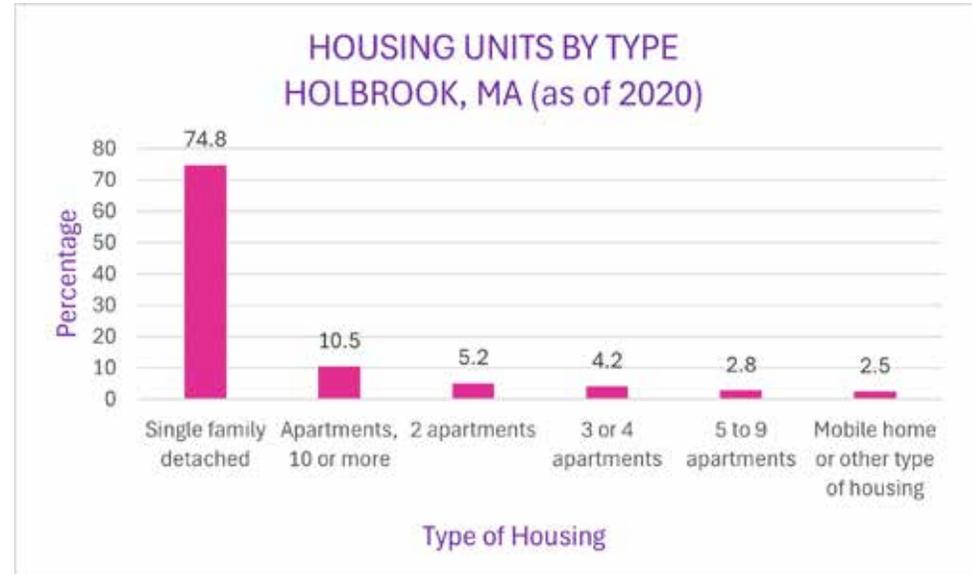
Holbrook, MA
FEMA Flood Zones

Esri, NASA, NGA, USGS, Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS

HOUSING

Existing Housing

According to the Massachusetts Housing Partnership, the majority of the housing in Holbrook is single-family dwellings. As of 2020, 74% of Holbrook's housing was single-family units, compared to 51% in the state of Massachusetts. Given that single-family dwelling units are the only type allowed as of right in four of the five residential zones (with one zone allowing for two-family dwelling units), this is not surprising. As noted above, one residential zone allows multi-family housing by permit, and several apartment complexes do exist in town. Of the existing housing stock, 9.9% is affordable under Massachusetts guidelines, which is just below the 10% required by the state of Massachusetts. Recently approved developments may bring the Town back into compliance with this requirement. (Massachusetts Housing Partnership)



Age of Housing Stock

As the graph at left shows, approximately 23% of the housing stock in Holbrook was built before 1939, another 37% in the years 1940 to 1959, and about 24% in the years 1960 through 1979. This means that over 80% of Holbrook's housing stock was built before 1980. This data is through the year 2020 and some additional housing has been built since then, but the amount of housing built between 2010 and 2020 lags behind the state.

Recent & Proposed Development

Over the past several years, a number of additional building projects have been approved by the Town, some single-family and some duplexes. Completed projects include 13 duplexes for a total of 26 two-bedroom units, and 72 one-bedroom units (all of which are 62+ and affordable). An additional project that includes seven single family units (3-4 bedroom) is partially completed.

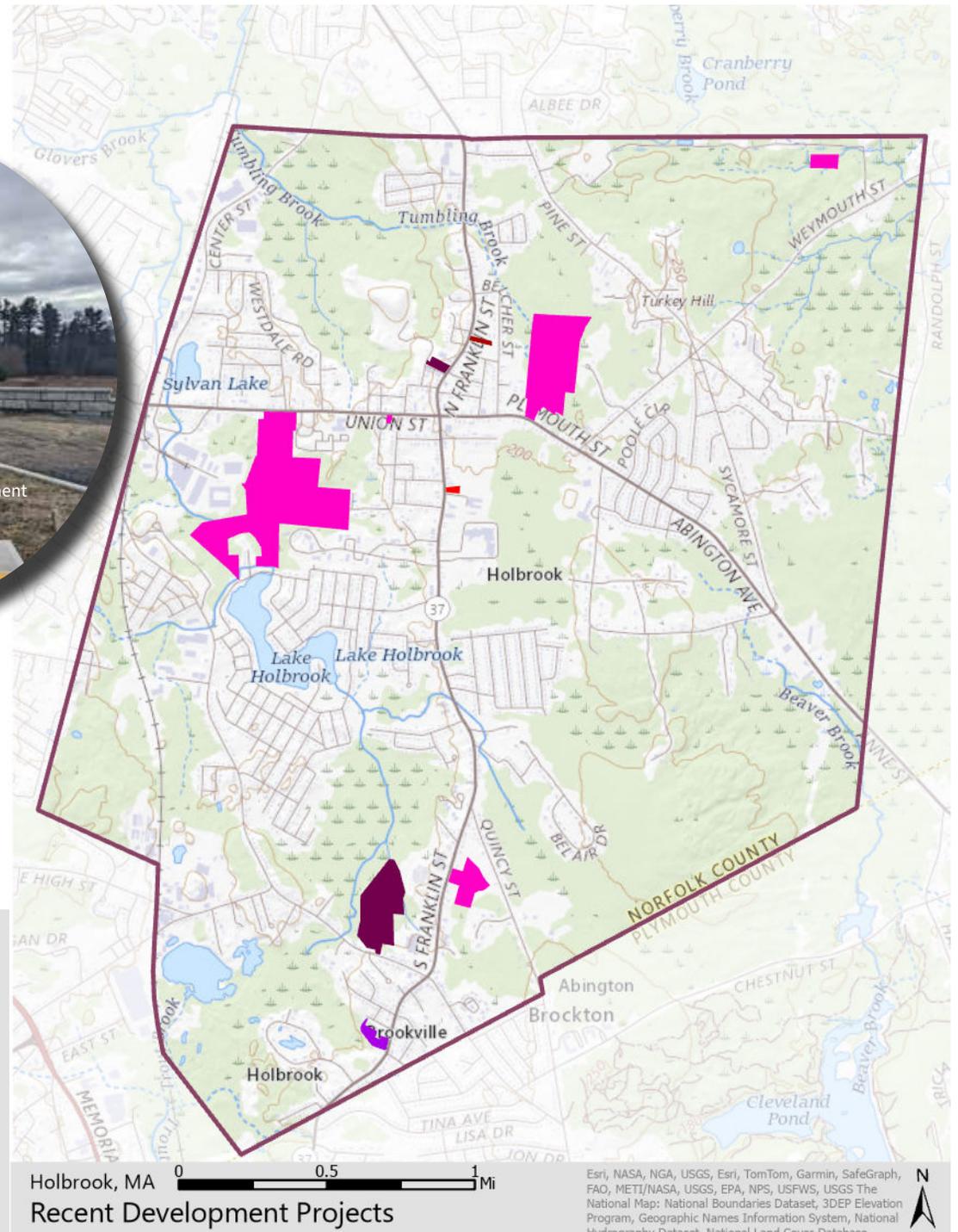


Entrance to approved development at 229 Union Street

Projects that have been approved but not started include:

- 40 two-bedroom townhomes, ten single-family units;
- 92 two-bedroom townhomes that are 55+ and 10% affordable;
- 11 one-bedroom and 217 one-two bedroom units (10% affordable);
- 410 one and two bedroom units all affordable and 164 one-bedroom and 264 two-bedroom units;
- 5 additional units, details unspecified.

(Data on recent and approved developments courtesy of town planning department)



DEVELOPMENT PRESSURE

There are both external and internal pressures for more housing in the town. External pressures include predicted demographic shifts, state mandates for affordable housing, and a state mandate for communities with MBTA rail stations in them to zone for more multi-family housing near the stations. Internally, many residents expressed a wish for more housing, and more affordable housing, while others worry about more growth.

Population Trends

Holbrook is considered part of the Metro Boston area and the regional planning agency for Holbrook is the Metropolitan Area Planning Council (MAPC). Jointly, the MAPC and the Donahue Institute of the University of Massachusetts Boston have prepared population and housing demand projections for cities and towns in the state.

Using available data about current trends, the state of Massachusetts makes specific predictions about the housing that will be needed in each town. According to these predictions, in Holbrook, new households headed by someone currently under the age of 35 will need an additional 570 housing units, and households headed by someone currently between the ages of 35 and 55 will demand 250 more units. While

older residents will need 690 fewer units than they do today, these predictions still net to a demand for 66 single-family and 69 multi-family units to provide adequate housing and maintain a healthy vacancy rate. This projected demand will influence to what extent and how quickly the town will continue to approve and allow new housing units to be built. As noted before, some residents welcome additional housing, and some have concerns about growth and development.

State Mandates: Affordable Housing

In 1969, the Commonwealth of Massachusetts enacted the Comprehensive Permit Law (Chapter 40B) to help address the shortage of affordable housing statewide by reducing barriers in local approval processes, local zoning, and other restrictions. This law requires that all towns in Massachusetts must have 10% of their housing stock be affordable, defined as a unit that could be purchased or rented by a household making up to 80% of the area median income.

The state maintains a list of “Subsidized Housing Inventory (SHI)” which measures a community’s stock of low-or moderate-income housing to ensure that it complies with Chapter 40B.

The Executive Office of Housing and Livable Communities Chapter 40B Subsidized Housing

Inventory reports that as of June 29, 2023 Holbrook’s inventory of low or moderate income housing was at 9.90%, just below the 10% state-mandated percentage. This mandate is one of the pressures on the town to encourage the construction of more housing, specifically more affordable housing.(Massachusetts Subsidized Housing Inventory.)

When asked in Question 19 of the Town Survey what types of housing residents would prefer to accommodate growth, 24% expressed a wish for more single-family housing, and 16% for more apartments. When asked their feelings about growth more generally, in Question 25 (What are your feelings about Growth?) 80% of residents endorsed growth that is 'well planned and designed.'

Recent development at 120 N. Franklin St.



MBTA Overlay Districts

An additional pressure for housing has come in the form of a recent (2021) mandate from the state of Massachusetts that all towns served by the MBTA (MBTA Communities) must create zoning that allows for multi-family housing. Section 3A of the Zoning Act states that an MBTA community shall have a zoning ordinance or by-law that provides for at least one district of reasonable size in which multi-family housing is permitted as of right; the housing must be without age restrictions, and suitable for families with children. The minimum density must be 15 units per acre, and in MBTA rail communities such as Holbrook, 20% of the zoned district must be within 0.5 miles of the rail station.

Massachusetts has among the highest, and fastest growing, home prices and rents of any state

in the country. Rising costs have increased financial pressures on low- and middle-income families, and forced them to sacrifice other needs in order to pay housing costs. Towns that don't zone for multi-family housing may present a barrier to creating enough housing in the state. In order to address this, the state has created a requirement that towns locate multi-family zoning districts near transit. In allowing multifamily housing near transit, new walkable neighborhoods can be created. Some of the benefits include:

more housing closer to the places that people go every day, such as local shops, jobs, schools, restaurants,

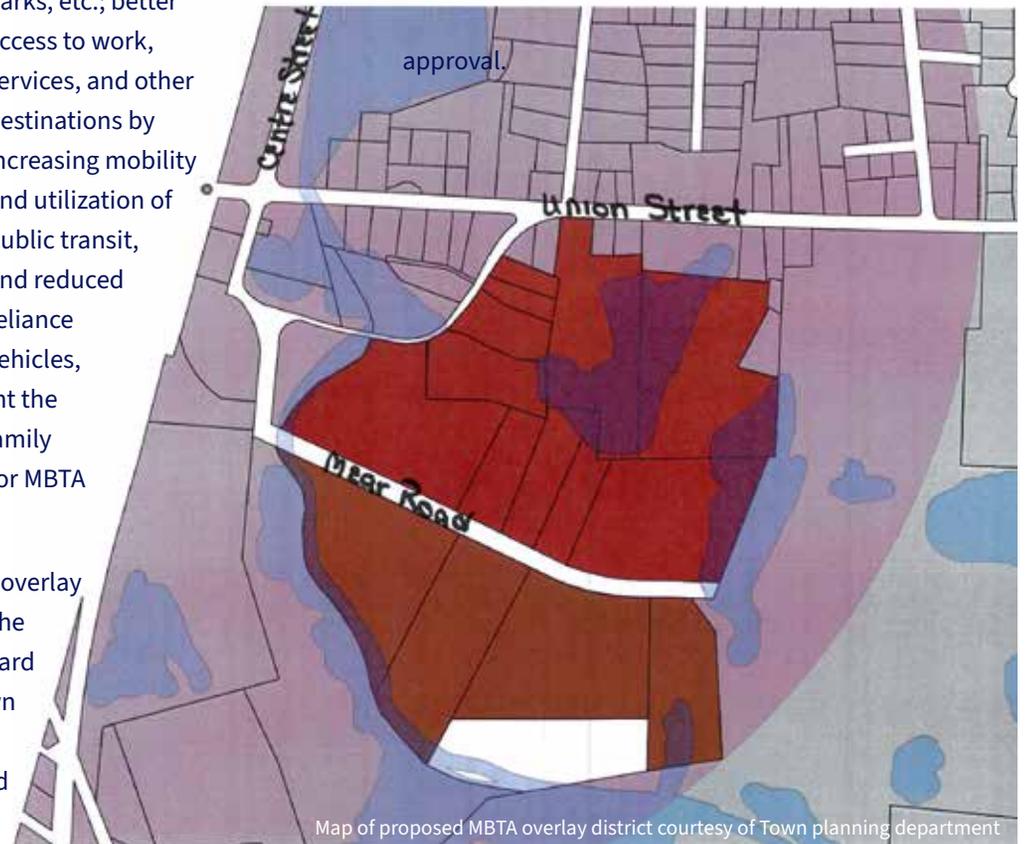
"There are a lot of folks who are looking for affordable housing and something needs to be done where folks have access to public transportation."



parks, etc.; better access to work, services, and other destinations by increasing mobility and utilization of public transit, and reduced reliance

on single occupancy vehicles, which helps to confront the climate crisis. (Multi-family Zoning Requirement for MBTA Communities)

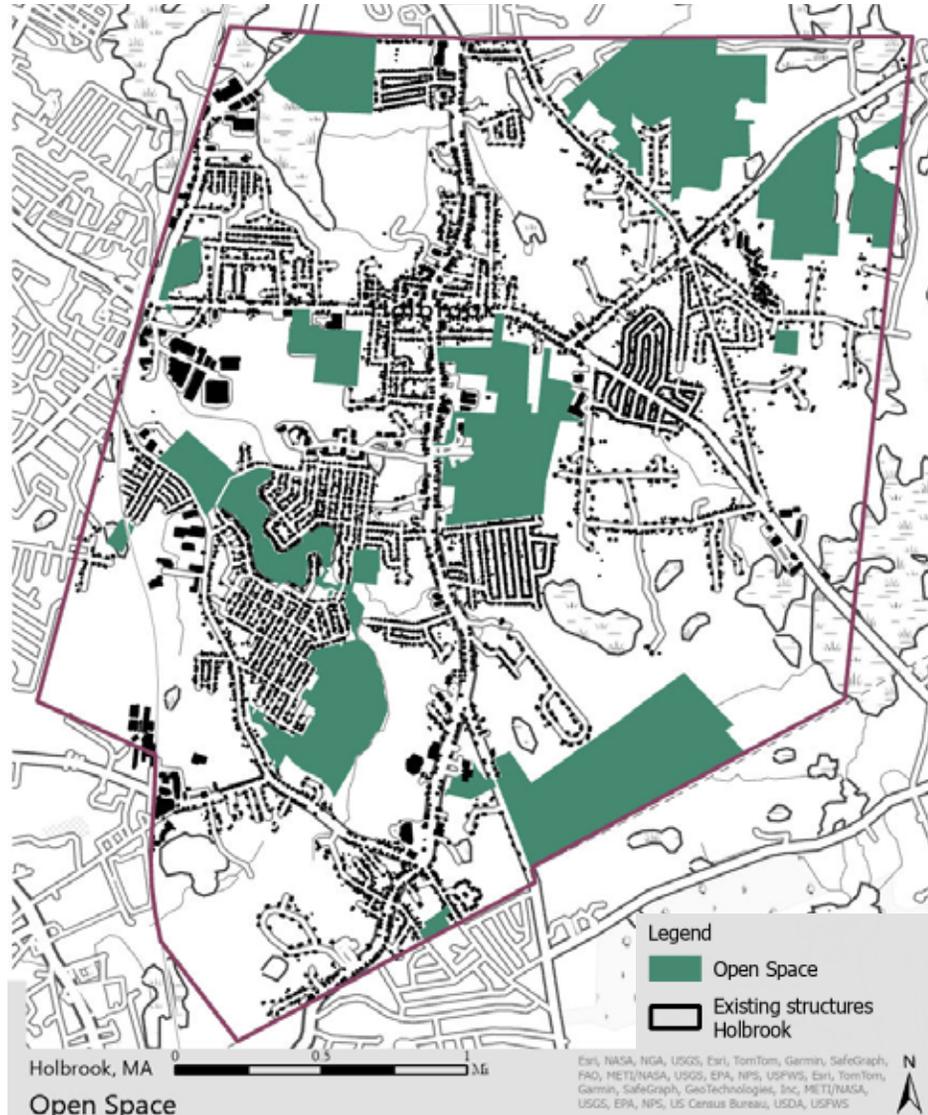
The current proposed overlay district, approved by the Holbrook Planning Board in March 2024, is shown at right. The proposal now must be approved at Town Meeting.



WHERE TO GROW?

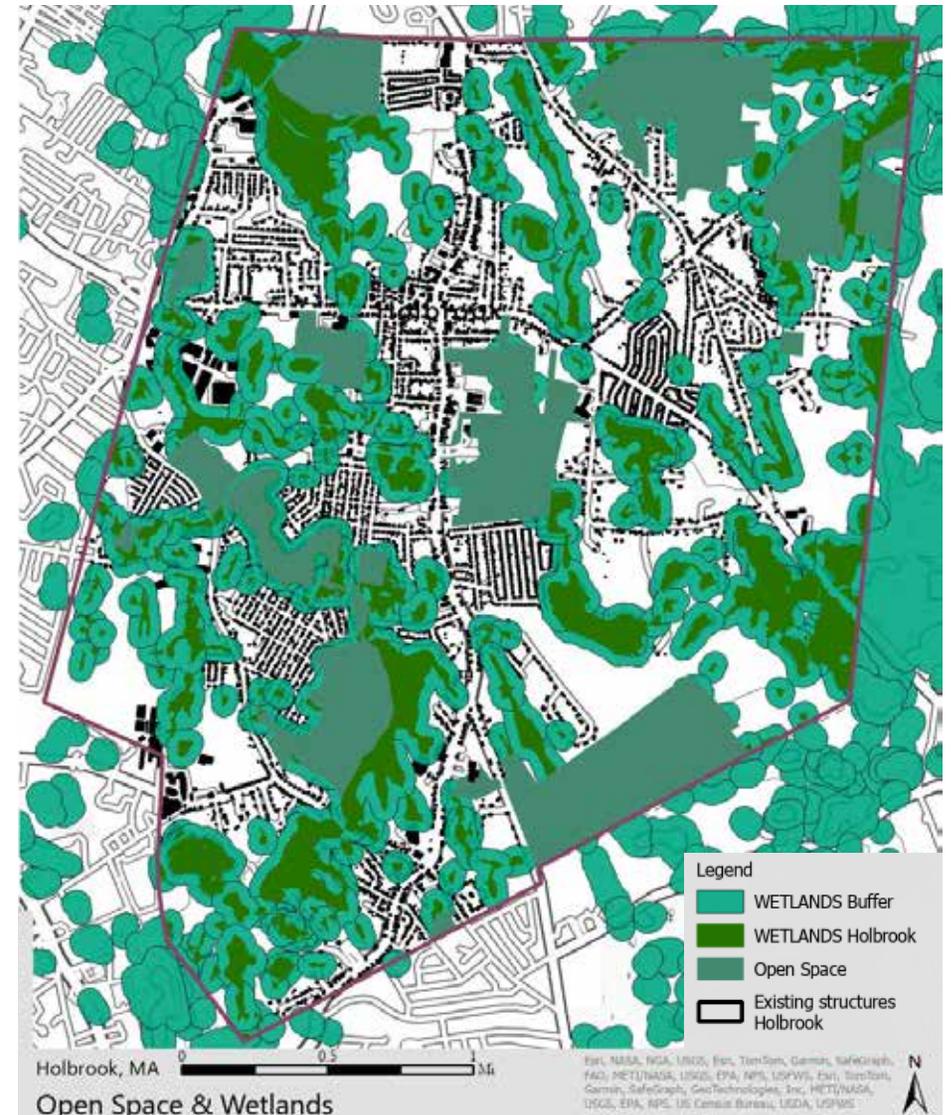
As Holbrook faces these pressures for more housing, the town will need to decide which areas can best support more infrastructure, and which areas need to be protected. Defining specific areas for growth and areas for protection will be one of

Holbrook may wish to permanently protect land mapped as Open Space.



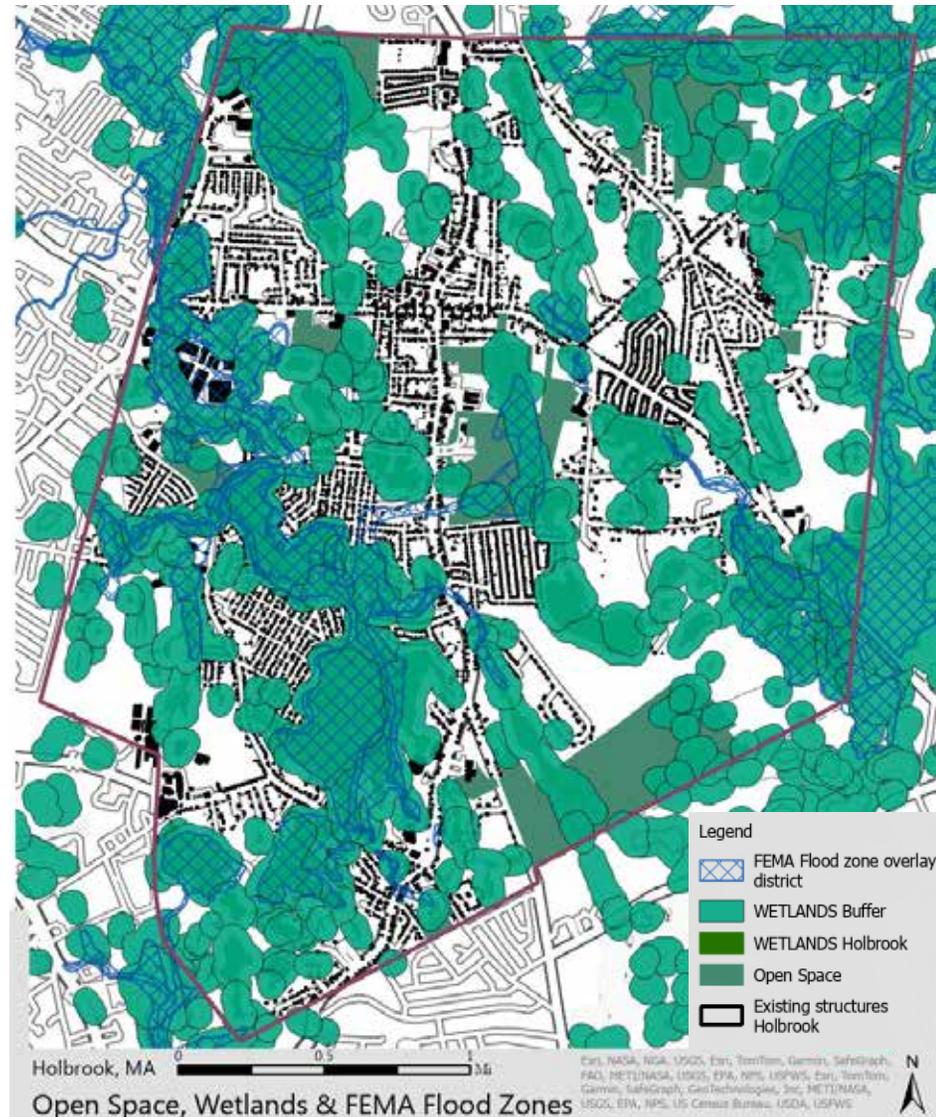
the goals of the Open Space and Recreation Plan that the Town will write within the coming year. Factors that the Town will consider as it decides where to allow growth will directly relate to areas it wants to protect, for example existing open space and natural resources, vulnerable flood zones, and wetland areas, many of which are

Holbrook may extend protections to include all wetlands and their 100' regulated buffer zones

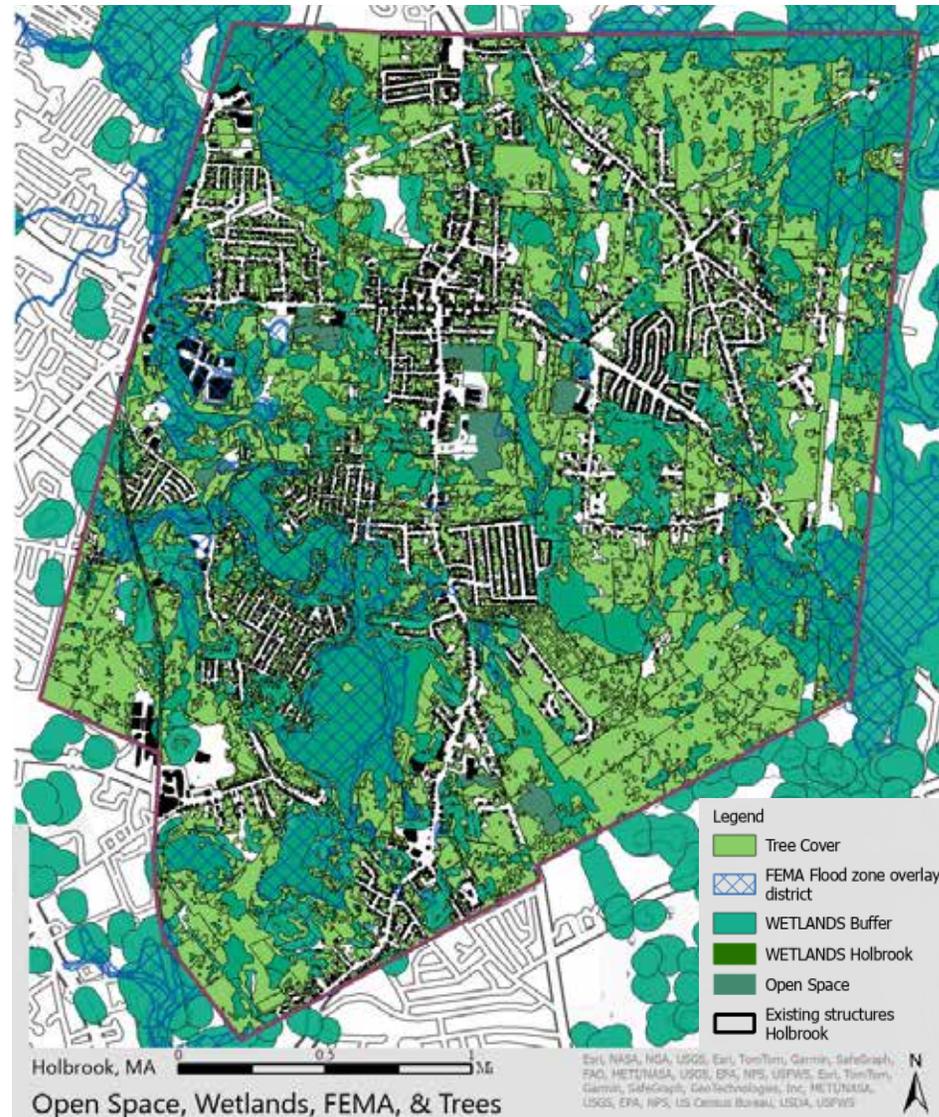


already overburdened and impaired (see discussion of impaired waters in Natural Resources and Recreation Section). Taking into account the existing capacity of water, sewer, and stormwater systems will also be critical. These maps show different paths for protection/development scenarios.

Further, the floodplain overlay district may exclude development within the 100 year floodplain.



The areas remaining may be home to trees and other plant communities. The Town may consider where it wants to encourage or discourage development given the habitat and ecosystem services provided by these communities.





Action Steps

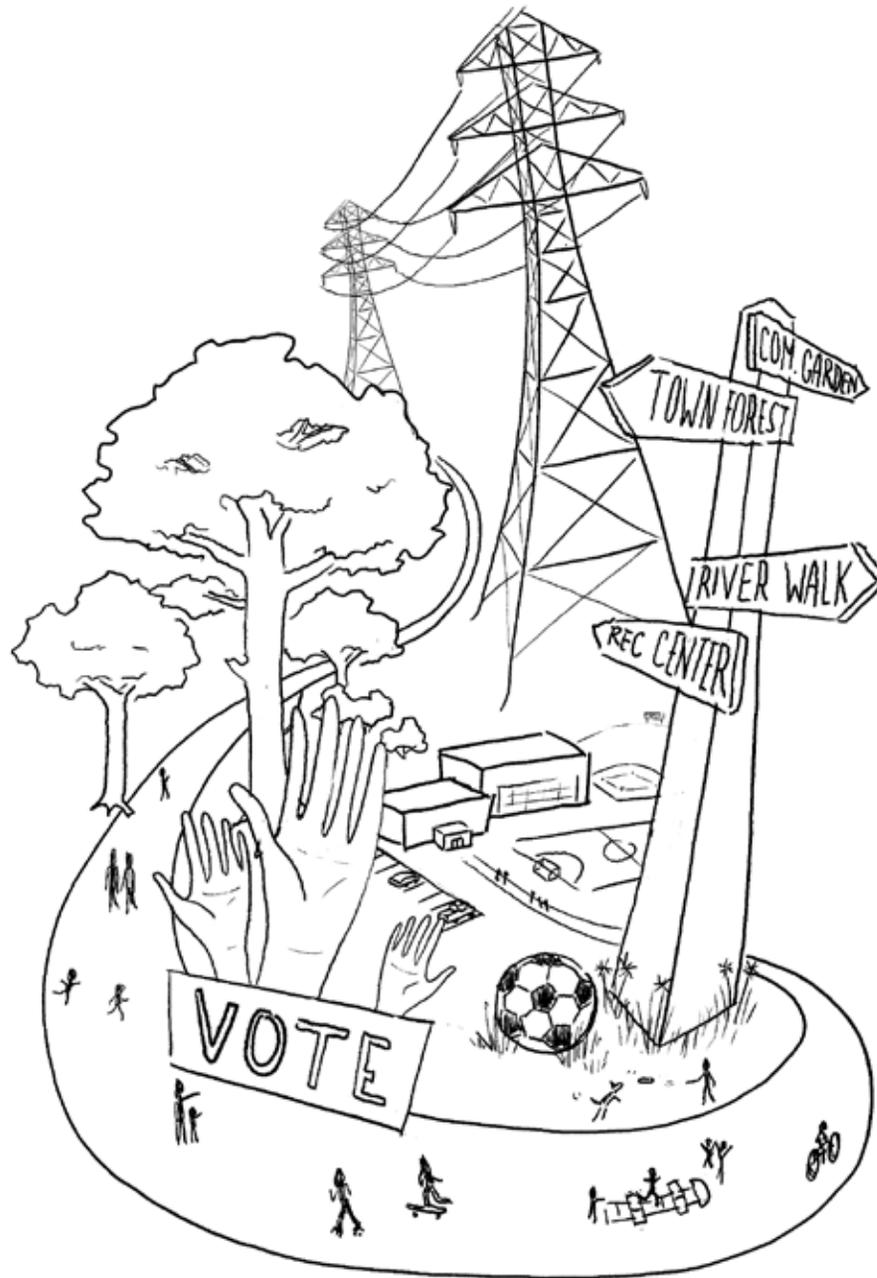


The following pages contain lists and graphics illustrating possible next steps the town can take to move forward with their vision. These action steps, categorized by topic--Natural Resources, Land Use, Additional Actions--help address the aspirations of the community expressed in this vision plan.

Natural Resources

Improved recreation

- ▶ Develop an Open Space Recreation Plan (OSRP). The adoption of an OSRP can provide more opportunities to receive grants.
- ▶ Explore becoming a Community Preservation Act (CPA) community to help raise funds to conserve open space and improve recreational facilities. Community preservation monies are raised locally through the imposition of a surcharge of not more than 3% of the tax levy against real property, and municipalities must adopt CPA by ballot referendum. To date, 196 municipalities in the state have adopted CPA including some of Holbrook's neighboring towns - Randolph, Braintree, Weymouth, and Abington. Some residents have expressed concern about property taxes. A town vote will give community members the opportunity to weigh pros and cons.
- ▶ Identify and include representatives from local interest groups in the recreational infrastructure planning process. Examples of interest groups in town include: field sports, hunting, motorsports, hikers, conservationists, historical society, etc. Explore the option to expand the Open Space Committee title to include recreation which could increase visibility for and community involvement in the committee's efforts towards an Open Space & Recreation Plan.
- ▶ Prioritize smaller but effective improvement projects of existing recreational and conservation areas, such as signage, parking, and maintenance, to gain momentum for larger projects.
- ▶ Pursue feasibility studies for increased trail connectivity between existing open spaces. Examples include a connected pathway between the old JFK school and new school, and connecting Town Forest with Tumbling Brook possibly along the existing utility lines.
- ▶ Revisit feasibility studies and explore incentive programs to support the redevelopment of the capped landfill property for multifunctional uses that will benefit the local community. Examples of uses to explore include: a recreational center, walking trails (possibly connecting to the nearby Tumbling Brook Conservation Area), native grassland habitat, solar farm, sculpture park, etc.).
- ▶ Conduct community surveys and engagement sessions to solicit input and feedback on a community recreation center.
- ▶ Identify areas of higher to medium residential density and explore options to increase access to outdoor recreational areas. Examples include pocket parks and walking/bike paths for connectivity.



Natural Resources

Land Protection

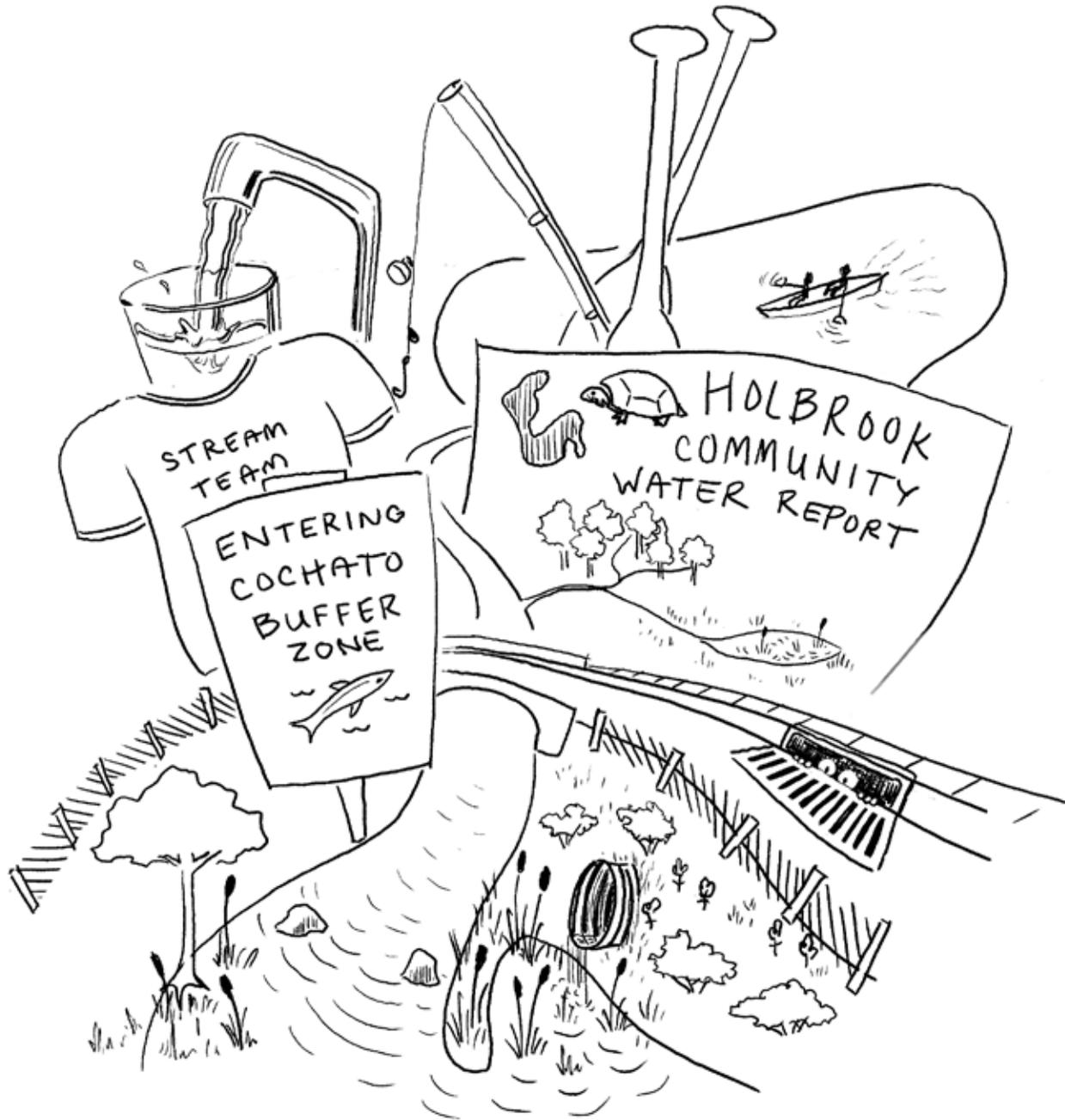
- ▶ Conduct community engagement sessions and produce informational materials such as signs or brochures to educate landowners about the different benefits of and options to conserve their property.
- ▶ Explore criteria for conservation prioritization in the OSRP planning process. Criteria may include climate change mitigation and adaptation, biodiversity preservation, cultural significance, etc. Identify specific parcels of interest for conservation and reach out to landowners. Discussion points could include:
 - ▶ Land restrictions such as those for conservation or agriculture.
 - ▶ Filing under Chapter 61.
 - ▶ Land Acquisition: Explore options to begin a town fund for local land conservation. Towns can purchase land outright or accept land donations from willing landowners. Once acquired, the Town typically manages the land to preserve its natural features and ecological value.
 - ▶ Conservation Easements: These are legal agreements between a landowner and a conservation organization or government agency. Through easements, landowners voluntarily limit certain uses of their land (such as development or logging) to protect its conservation values. In exchange, they may receive tax benefits or financial compensation.
 - ▶ Establish land management plans for existing open spaces to enhance biodiversity, restore ecosystems, and mitigate threats like invasive species or habitat fragmentation. This may involve activities such as habitat restoration, controlled burns, or wildlife monitoring.
 - ▶ Create a list of neighboring towns, government and regional planning agencies, nonprofits, businesses, and community members to potentially collaborate with. These partnerships can provide opportunities to pool resources, share expertise, and tackle conservation challenges collectively around areas of shared interest, such as water protection lands, areas important to endangered species, intact habitat corridors, and recreational areas. These partnerships can amplify conservation efforts and foster greater impact. Regional planning organizations (e.g. MAPC, MPO) are particularly resourced to help their constituent communities achieve their objectives, and may be able to help facilitate collaborations when appropriate.
 - ▶ Solicit support from outside organizations to conduct scientific research and monitoring to better understand ecosystems, identify conservation priorities, and measure the effectiveness of conservation interventions. This data informs management decisions and helps evaluate the health of protected lands over time. Encourage citizen science to build appreciation, leadership, and stewardship of the local landscape.
 - ▶ Offer educational opportunities such as workshops, guided nature walks, school programs, and outreach events for all ages to raise awareness about the importance of land conservation and environmental stewardship.



Natural Resources

Healthy Waters

- ▶ Explore the DEP 604B Impaired Water Program as a potential funding source for water quality assessment of Lake Holbrook and other streams and water bodies.
- ▶ Apply for action grants from the DEP 319 Program for implementation of projects that address nonpoint source water pollution.
- ▶ Identify and map areas where rivers/streams are buried and where they daylight (exposed above ground).
- ▶ Assess capacity of current stormwater systems in light of climate change predictions.
- ▶ Reassess Holbrook's Wetland bylaw to further regulate wetlands beyond the current WPA regulations, and increase penalties for unlawful wetland disruption. Strengthen the monitoring and enforcement of said laws.
- ▶ Encourage restoration of vegetation within wetland, stream, and pond buffers.
- ▶ Provide regular updates and information about water quality and water access to town residents.
- ▶ Explore opportunities through the Climate Vulnerability Program with surrounding communities to address rivers as integrated ecological systems from source to mouth while addressing climate change predictions.



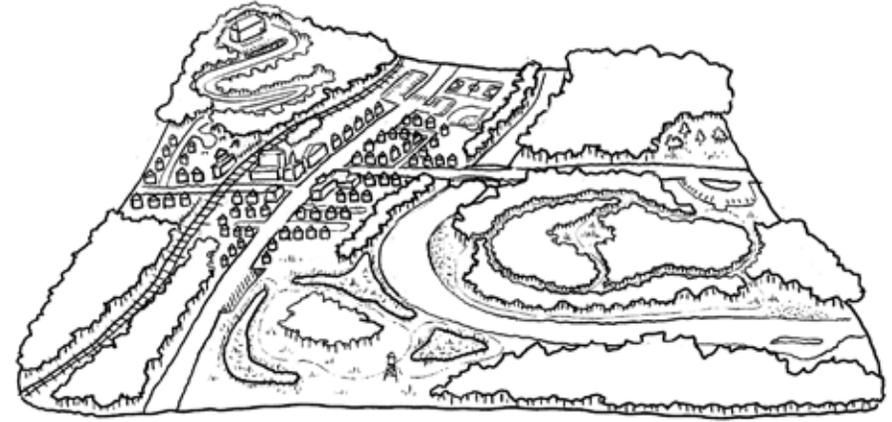
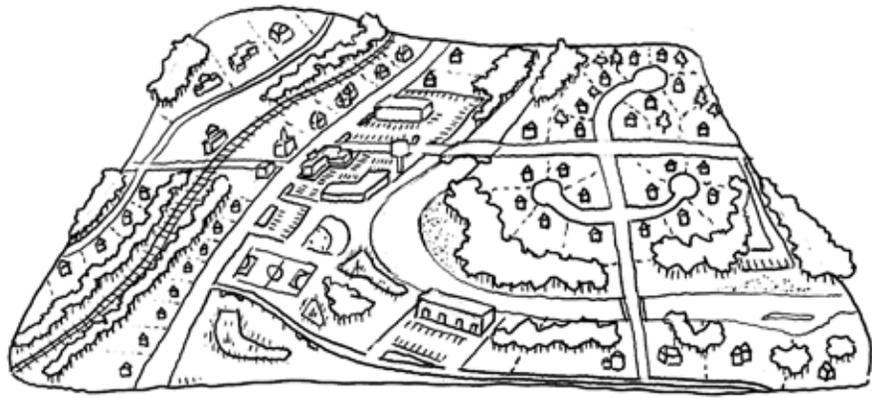
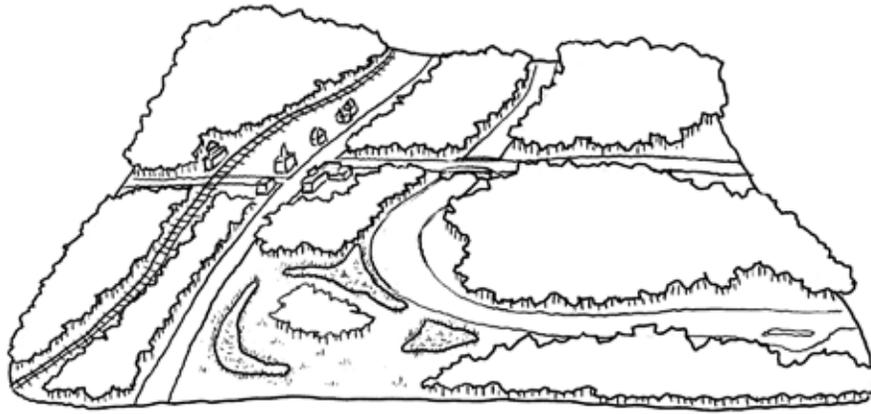
Land Use

Zoning

- ▶ Conduct an evaluation of current zoning, and make necessary changes to the zoning districts and by-laws that support the protection of open space and natural resources, while identifying areas in the town that are appropriate for additional growth and development. Through the zoning process, the town can articulate a land use vision, and strategically map areas for protection as well as areas for higher density use. See diagram at right illustrating how zoning for more density (versus traditional low density large suburban lot sizes) can act to protect and preserve open space.
- ▶ Consider zoning for more mixed use areas (as in the town center overlay), to develop areas that embody the ‘village’ aesthetic, places where people can both live as well as access restaurants, retail businesses, and other needed services; mixed use districts may also attract new businesses to support town revenue and help to reduce high property taxes.
- ▶ When zoning for areas that are appropriate for increased density of housing or mixed use, consider explicit zoning for multi-family housing as a right, rather than by special permit. This makes building in the areas that the town identifies as optimal more appealing and straightforward to develop. The town may describe aesthetic or other standards for such buildings to maintain the ‘small town’ feeling that residents prize.

In identifying areas for growth and development, some of the factors that the town should consider include:

- ▶ Locating growth near established areas of density in order to consolidate infrastructure needs
- ▶ Locating growth near existing public transportation to reduce reliance on cars
- ▶ Minimizing development within ecological areas identified in Biomap, FEMA flood zones and other town by-laws, and wetlands -- these protections can be codified in zoning as well as through other forms of protection status
- ▶ Revise/strengthen wetland by-laws to reduce impacts of development on wetlands



Land Use

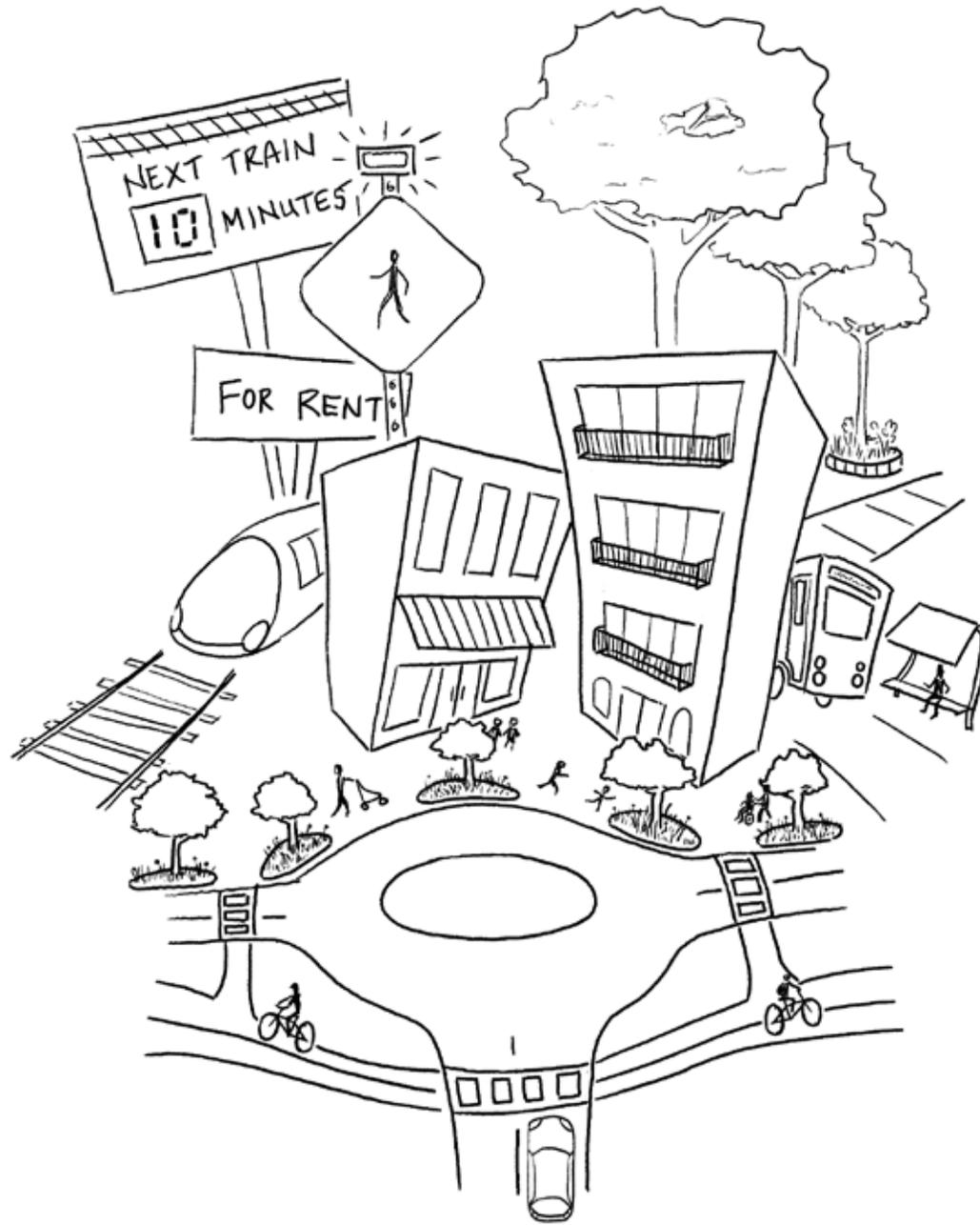
Smart Growth

One of the strategies that the state of Massachusetts is recommending for climate resilience is the inclusion of Smart Growth districts in town planning. These are areas zoned to include both housing and commercial properties. As noted previously, the Town has adopted a Town Center Overlay district which does permit mixed use projects as of right. According to the tax information available, 36 parcels are currently zoned for mixed use. The principles of a Smart Growth* approach to planning are:

- ▶ Mix land uses
- ▶ Take advantage of compact building design
- ▶ Create a range of housing opportunities and choices
- ▶ Create walkable neighborhoods
- ▶ Foster distinctive, attractive communities with a strong sense of place
- ▶ Preserve open space, farmland, natural beauty, and critical environmental areas
- ▶ Strengthen and direct development towards existing communities
- ▶ Provide a variety of transportation choices
- ▶ Make development decisions predictable, fair, and cost effective
- ▶ Encourage community and stakeholder collaboration in development decisions

Pursuing a Smart Growth strategy in planning efforts supports the vision expressed by residents for Climate Resilience, thriving local businesses, improved tax revenue, increasing available housing, and potentially decreasing car traffic, as Smart Growth districts promote more walkable areas. In addition, identifying areas for increased density of use and concentrating development there allows for the protection of natural resources, which might otherwise be used for large single family dwelling units.

* <https://smaartgrowth.org>, "Smart Growth Principles," accessed March 19, 2024

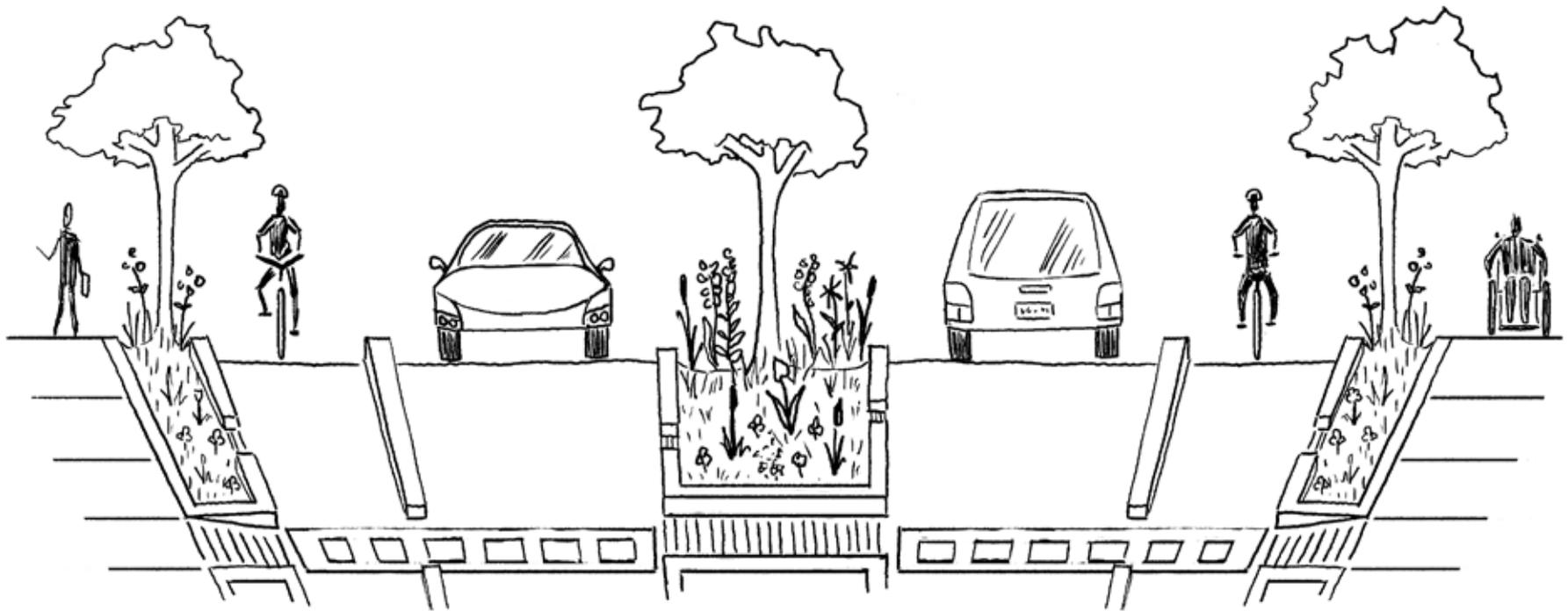


Land Use

Circulation and Use

In addition to the recommendations made in the natural resources recommendation section regarding recreational trails and paths, the town can take steps to improve traffic and circulation, and make the town easier to get around in.

- ▶ In consultation with the Mass DOT Complete Streets program, re-engage with the Tier 2 projects identified in 2021 and move priority projects toward funding
- ▶ Connect with MAPC (Massachusetts Area Planning Commission) Regional Transportation Improvement program to identify regional transportation issues affecting the area in and around Holbrook, and work to pursue strategies to improve safety and efficiency of transportation; explore roundabouts at key intersections in town to promote safer pedestrian access and more efficient traffic flow.



Additional Actions

Continuing the vision process

Make a plan for continued community engagement. In doing so, consider prioritizing actions which will deepen involvement from past participants (i.e. the growing community of residents who are invested in Open Space & Recreation as a municipal priority) while increasing the diversity of thought and life experience within the community through thoughtful outreach. Every engagement is an opportunity to deepen community members' sense of belonging and esteem in pursuit of the shared vision.

Strengthening the communication network

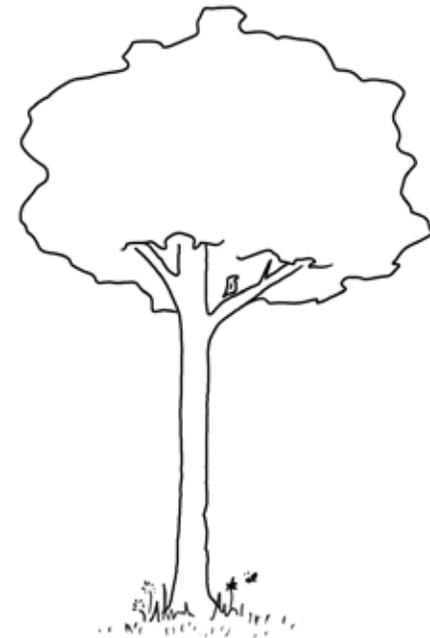
Conduct an assessment of communication practices within town. How do people get their information? What means of communication do they prefer? What groups are missed by current communication practices? When organizing future community engagements, consider the role that time plays in the communication process, e.g. leaving time for word-of-mouth to get around, or for parents to arrange childcare. Communication is a central element of community.

Centralizing data and information

Identify a central location (both physical and virtual) for archiving reports and other important information from all municipal departments, in order to make the continuation of this process more efficient, and to protect against data loss. The library, for example, which is publicly accessible and already has a considerable archive of historical information could serve as a hub for research and community engagement around future planning efforts.

Increasing administrative faculties

Convene municipal staff and committee volunteers to assess and identify staffing needs, e.g. grant writing. Consider establishing new administrative committee positions, or reorganizing existing ones, as an investment in the ongoing visioning and planning process.



Selected References



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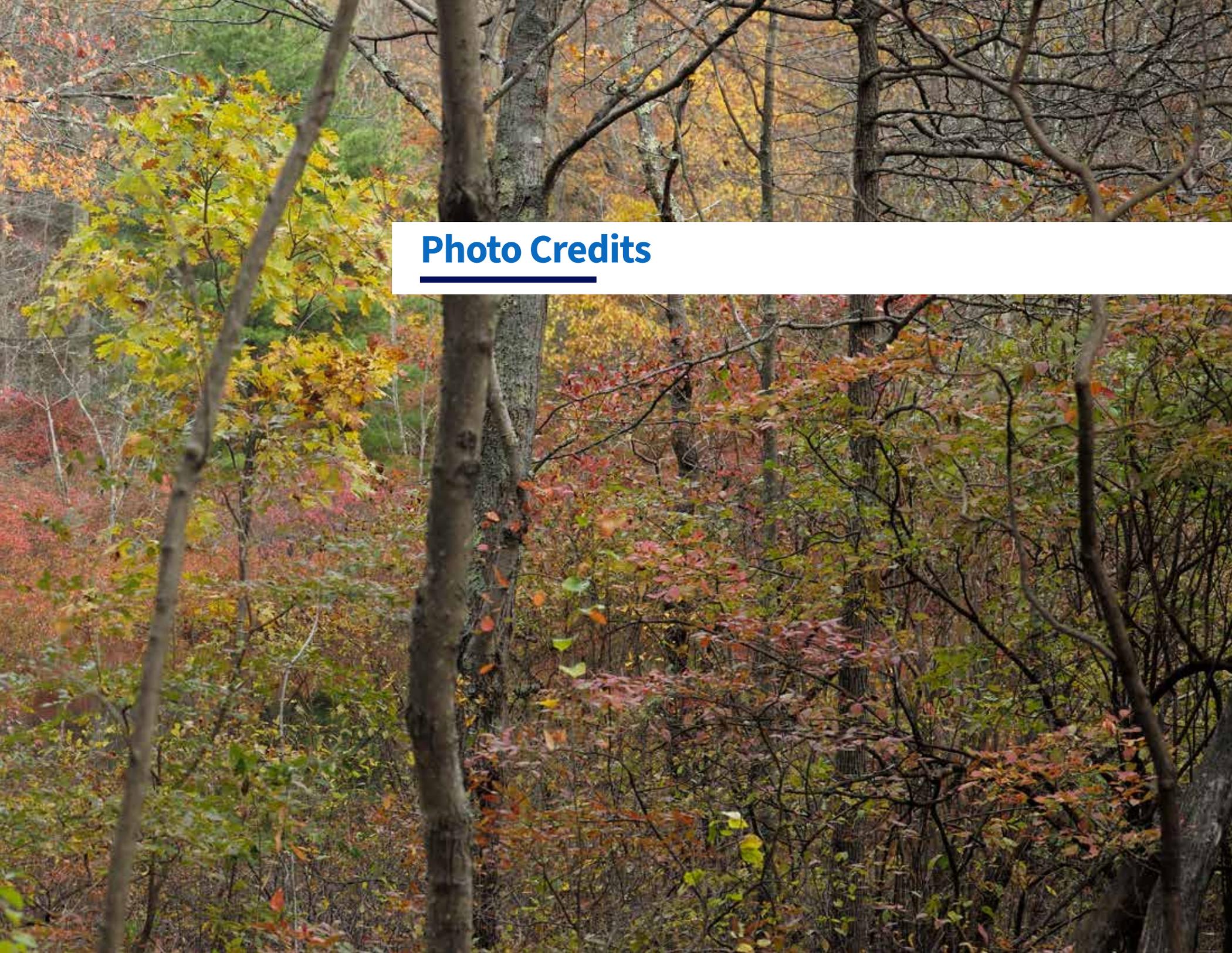


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VISION

PP. 4-5 Will Conrad

P. 6 Nate Card

P. 8 Clockwise from top left: 1) Will Conrad 2) Hannah Andersson 3) Barbara Davis

P. 12 Top to bottom 1) Alison Bowden 2) Hannah Andersson

P. 13 Clockwise from top left 1) Alison Bowden 2) Hannah Andersson 3) Hannah Andersson 4) Nate Card 5) Hannah Andersson 6) Alison Bowden

P. 14 Deb Stone

PP. 16-17 Nate Card

NATURAL RESOURCES

PP. 18-19 Will Conrad

P. 22 Nate Card

P. 24 Nate Card

P. 26 Nate Card

P. 28 Hannah Andersson

P. 30 Nate Card

P. 31 Left to right 1) Alison Bowden 2) Hannah Andersson 3) Hannah Andersson

P. 32 Hannah Andersson

P. 36 Left to right 1) Hannah Andersson 2) Nate Card

P. 37 Will Conrad

P. 38 Hannah Andersson

P. 39 Clockwise from top left 1) Nate Card 2) Will Conrad 3) Hannah Andersson 4) Hannah Andersson

P. 40 Hannah Andersson

P. 41 Nate Card

LAND USE

PP. 42-43 Nate Card

P. 44 Deb Stone

P. 45 Deb Stone

PP. 48-49 Nate Card

P. 50 Barbara Davis

P. 52 Nate Card

P. 55 Clockwise from top left 1) Nate Card 2) Hannah Andersson 3) Nate Card
4) Nate Card

P. 56 Left to right 1) Deb Stone 2) Deb Stone 3) Deb Stone 4) Deb Stone

P. 57 Barbara Davis

P. 58 Top to bottom 1) Nate Card 2) Nate Card

P. 59 Top to bottom 1) Nate Card 2) Nate Card 3) Nate Card 4) Nate Card

P. 60 Nate Card

P. 61 Nate Card

P. 62 Top to bottom 1) Nate Card 2) Nate Card

P. 63 Hannah Andersson

P. 64 Nate Card

P. 65 Nate Card

P. 69 Google Earth

P. 71 Will Conrad

P. 73 Nate Card

P. 74 Hannah Andersson

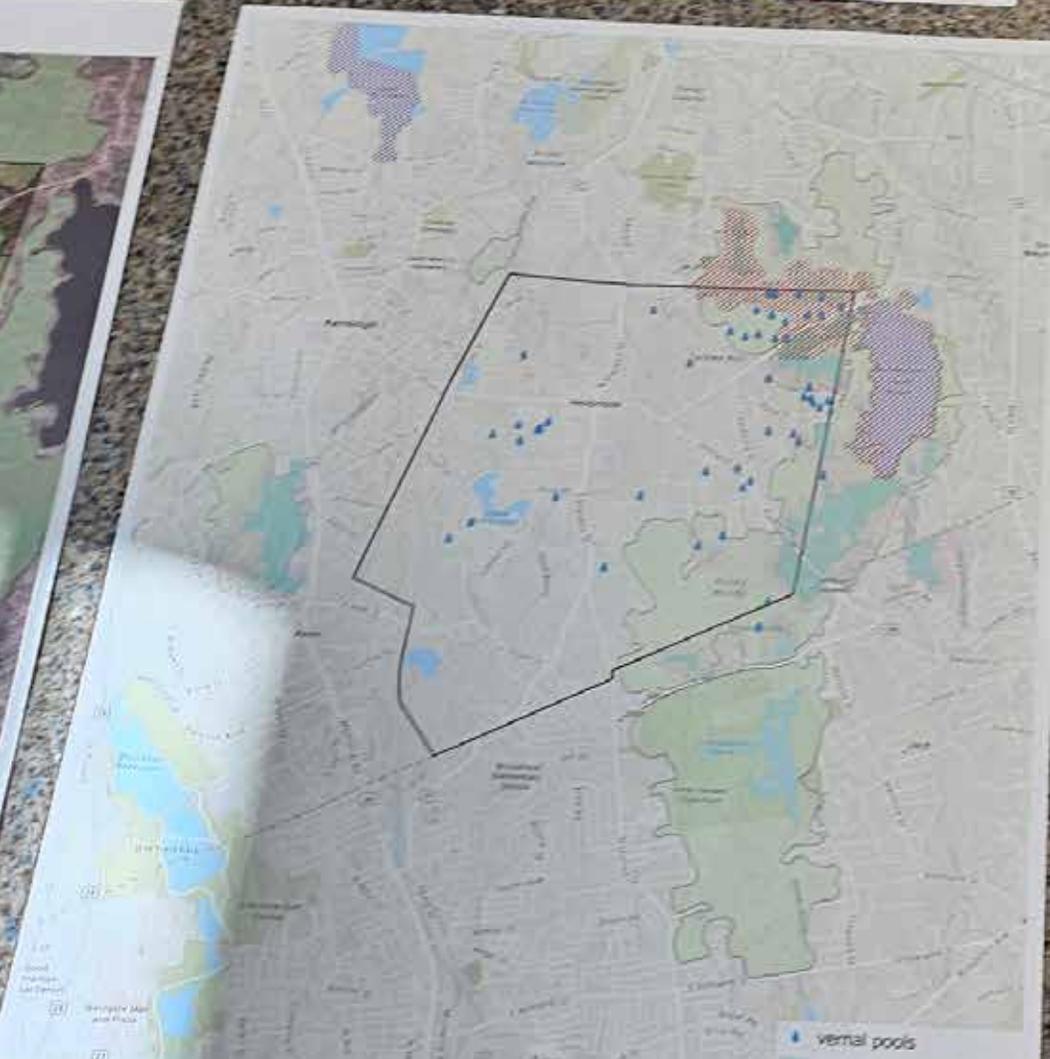
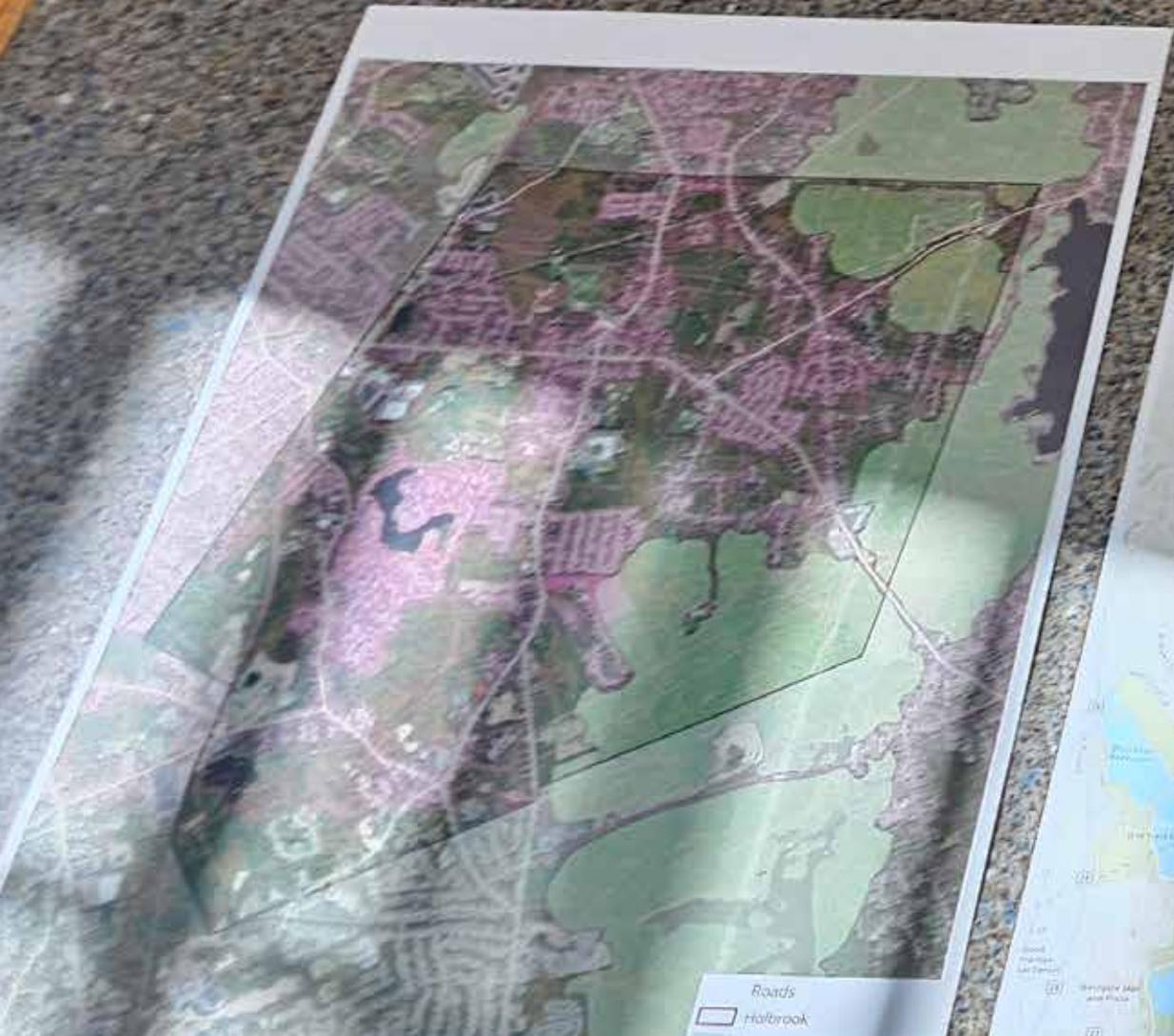
P. 75 Left to right 1) Hannah Andersson 2) Hannah Andersson

BACK MATTER

PP. 94-95 Nate Card

PP. 98-99 Will Conrad

PP. 102-103 Alison Bowden



Appendices

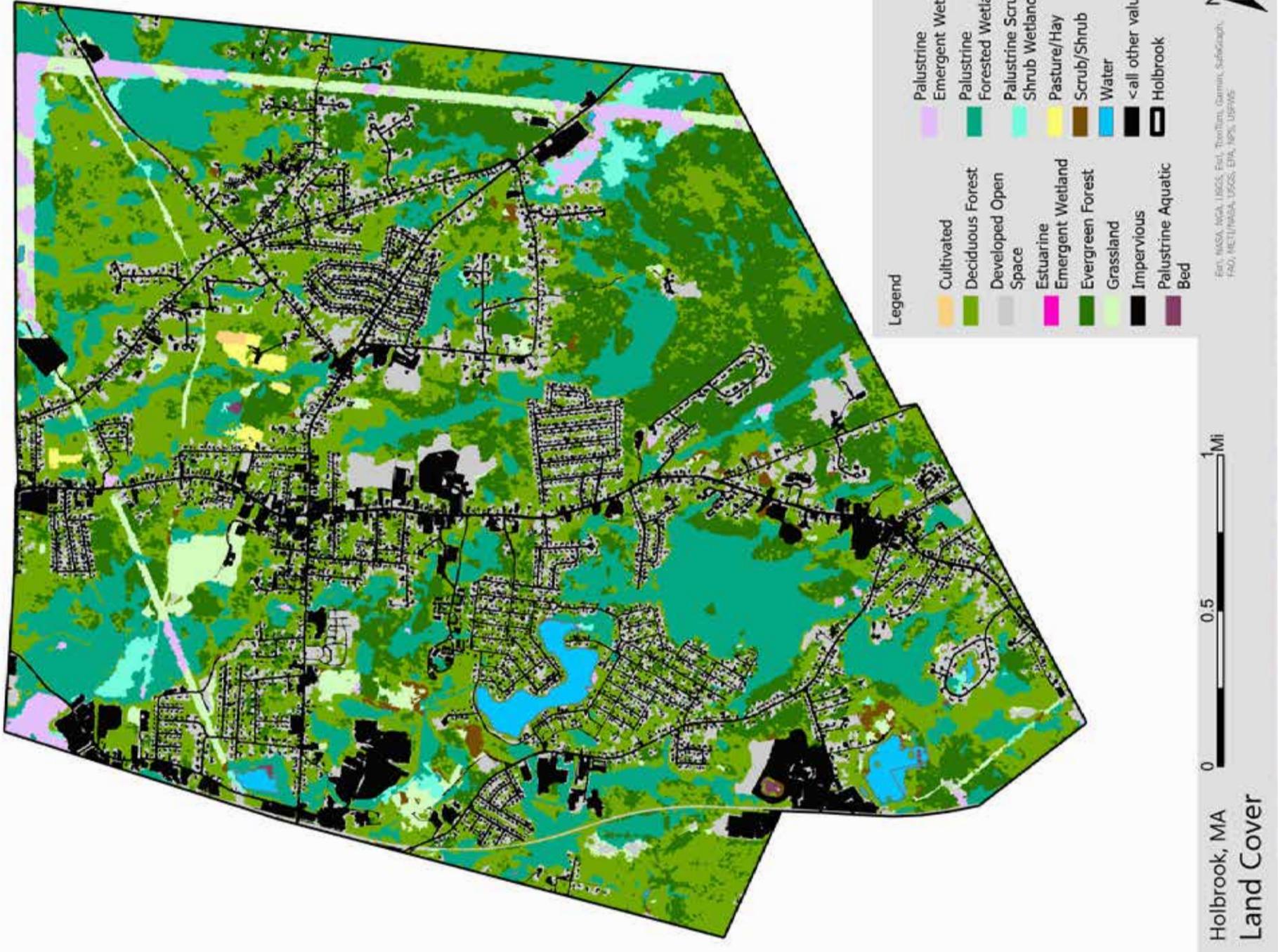
The Hills
Public Lib
Free Wifi
network name:
halbrooklibrary
password:
ilovehalbrook



APPENDIX A	Land Cover Map
APPENDIX B	Parcel Map
APPENDIX C	Open Space and Municipal Land
APPENDIX D	Open Space Table
APPENDIX E	Holbrook Town Forest Trail Map
APPENDIX F	Chapter 61 Table
APPENDIX G	Holbrook Fields Master Plan

APPENDIX H	Forest Connectivity Map
APPENDIX I	Composite Hydrology Map
APPENDIX J	Topographic Map
APPENDIX K	Historic Map of Holbrook (1876)
APPENDIX L	Historic Map of Boston Sewer System (1875)
APPENDIX M	Holbrook Sewer System Map (2020, Environmental Partners)
APPENDIX N	Holbrook Stormwater Management Plan (SWMP): System Locus (2020, EP)
APPENDIX O	Holbrook SWMP: Stormwater System Map (2020, EP)

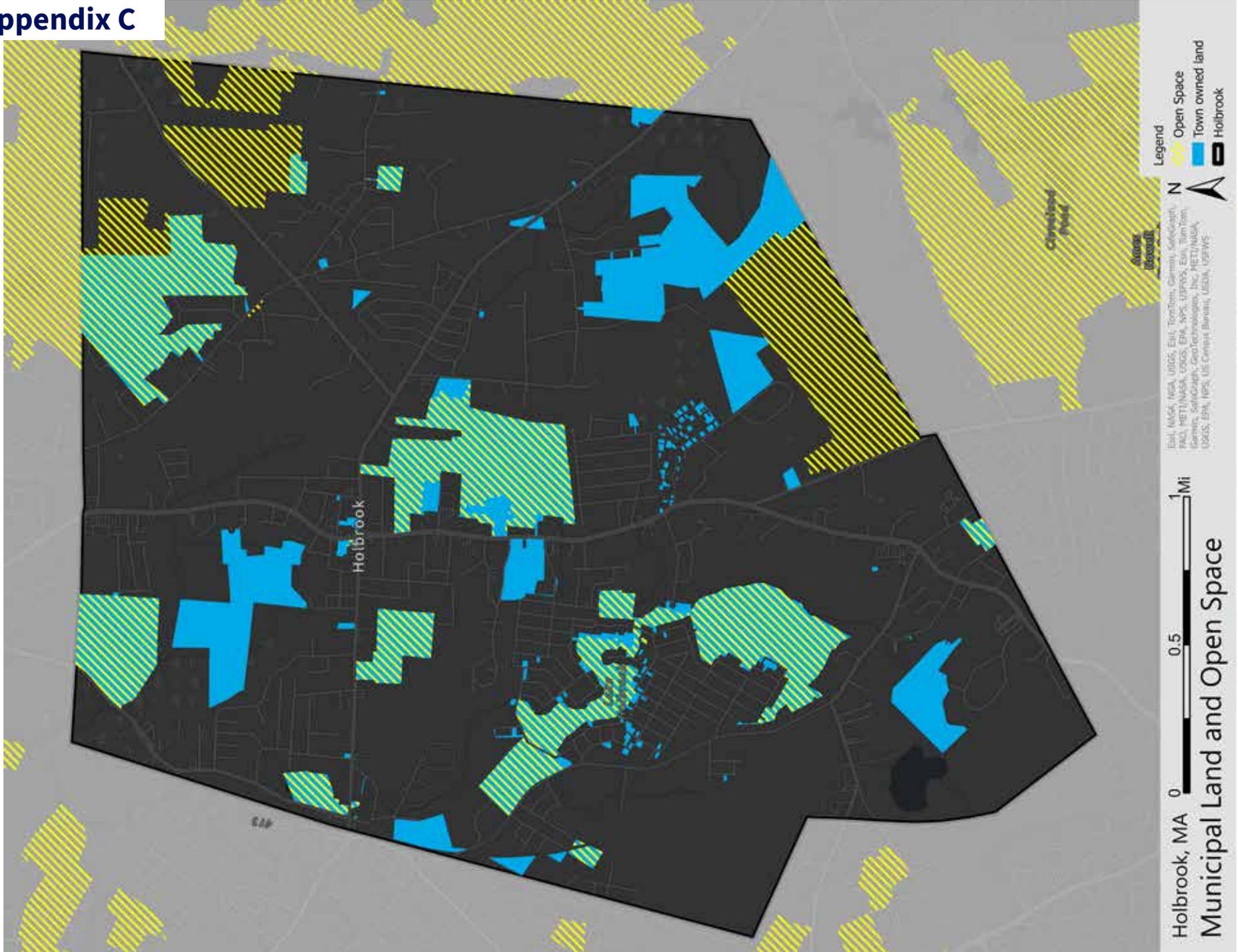
Appendix A



Appendix B



Appendix C



Appendix D

OPEN SPACE TABLE - Selected Details

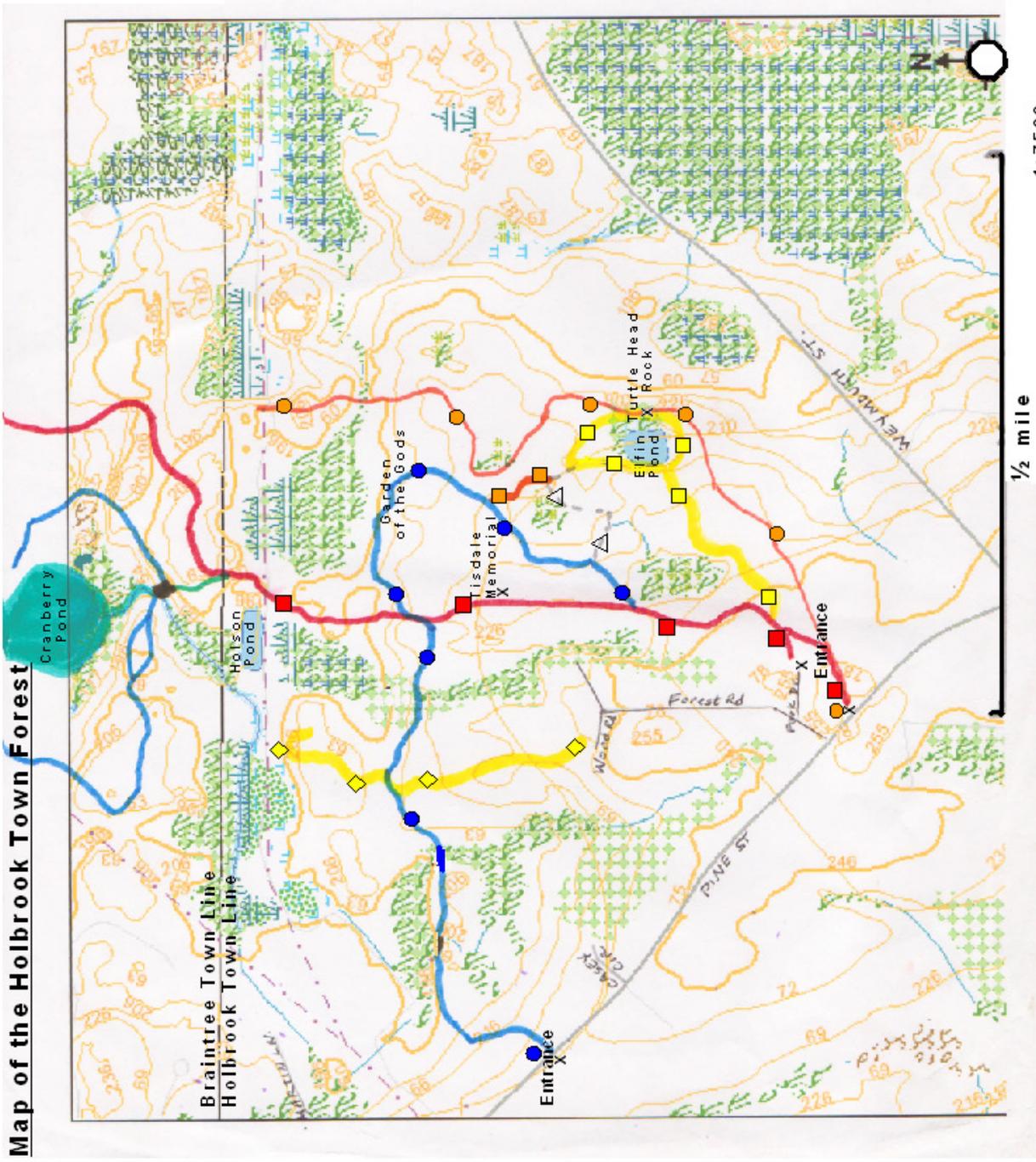
ID	NAME	OWNER	MANAGER	Level of Protection	Approximate GIS acreage	Primary Land Cover	Primary Purpose	Notes	
1	Conservation Area	Town of Holbrook	Town of Holbrook Conservation Commission	P	3	Wetland	Conservation	MBTA line runs through	
2	Donna Road Wellfields	Town of Holbrook	Town of Holbrook Department of Public Works	P	75	Wetland	Water supply protection	Wells out of service	
3	Fairfield II Conservation Area	Town of Holbrook	Town of Holbrook Conservation Commission	P	5	Wetland, forest	Conservation	Adjacent Donna Road Wellfields	
4	Hatch Playground	Town of Holbrook	Town of Holbrook Conservation Commission	P	4	Forest	Conservation	Use set aside for Boy Scouts	
5	Holbrook Town Forest	Town of Holbrook	Town of Holbrook Conservation Commission	P	114	Forest, wetland, grassland	Conservation	Utility line runs through these parcels; ACEC land	
6	Holbrook Fire Tower	Commonwealth of Massachusetts	Department of Conservation and Recreation	P	0.5	Forest, roadside	Conservation and Recreation	Built in 1926 and removed in 2006	
7	Juniper Road Conservation Area	Town of Holbrook	Town of Holbrook Conservation Commission	P	0.5	Wetland, forest	Conservation	Adjacent to Donna Road Wellfields	
8	Lake Holbrook	Town of Holbrook	Town of Holbrook Conservation Commission	P	35	Open water	Site is underwater	Manmade, previously a swamp	
9	Lake Holbrook Conservation Areas	Town of Holbrook	Town of Holbrook Conservation Commission	P	3	Developed open space, forest	Conservation	Separate areas on East and West side of lake, picnic tables and recreational infrastructure West side only	
10	Mary Wales Park	Town of Holbrook	Town of Holbrook Department of Public Works	P	0.5	Developed open space, forest	Recreation	Downtown, memorial statue	
11	Paul David Podolski Preserve	Town of Holbrook	Town of Holbrook Conservation Commission	P	9	Wetland	Conservation	Adjacent to Donna Road Wellfields	
12	Siddarth CR	Siddarth Siddarth		P	23	Forest, wetland	Conservation	Conservation Restriction; rare species; ACEC land	
13	South Street Wellfield	Town of Holbrook	Town of Holbrook Department of Public Works	P	21.5	Forest, grass, wetland	Water supply protection	Wells out of service	
14	Sumner Field and Playground	Town of Holbrook	Town of Holbrook Recreation Commission	P	9	Developed open space, impervious, forest	Recreation	Fields, walking path, playground, basketball courts	
15	Sylvan Lake Conservation Area	Town of Holbrook	Town of Holbrook Conservation Commission	P	11.5	Open water, forest	Conservation	Adjacent to MBTA station and utility lines	
16	Tumbling Brook Conservation Area	Town of Holbrook	Town of Holbrook Conservation Commission	P	54	Wetland, forest	Conservation	Unofficial recreational trails (ATV and walking)	
17	Weymouth Street Conservation Area		County of Norfolk, Town of Holbrook Conservation Commission	P	91	Wetland, forest, grassland	Conservation	Utility line runs through these parcels	
18	Holbrook Sportsmens Club	Holbrook Sportsmens Club	Holbrook Sportsmens Club	N	156	Impervious, forest, wetland	Recreation	Private, membership required	
19	Brookville Field	Town of Holbrook	Town of Holbrook School Department	L	4	Developed open space, impervious, forest	Recreation	Athletic fields, swingset	
20	School Department Property	Town of Holbrook	Town of Holbrook School Department	L	111	Developed open space, forest, wetland	Recreation, Other	Holbrook Jr-Sr High School Athletic Fields, School Department Lands, and Old JFK Playground	
21	Union Cemetery	Holbrook Union Cemetery Corporation	Holbrook Union Cemetery Corporation	L	26.5	Developed open space, forest, wetland	Historical/Cultural	Used by some for recreation	
22	Former South Elementary School Playground	NO LONGER OPEN SPACE							The Town sold this property in 2019; private housing development underway

Information collected from MassGIS

P = Protected in Perpetuity L = Limited Protection N = No Protection

Appendix E

Map of the Holbrook Town Forest



Holbrook Town Forest Trails:

- WIGGINS (Red Square)
- LONG (Blue Circle)
- ELFIN POND (Yellow Square)
- △ SAWYER (White Triangle)
- ◆ DIMAN (Yellow Diamond)
- ESTES (Orange Square)
- BOUNDARY (Orange Circle)

Braintree Cranberry Pond Trails:

Orange, Red, Blue, Yellow, Green, White

The 112 acre Holbrook Town Forest is located in Northeastern Holbrook, MA. It was founded in 1955 on undeveloped land. There are several trails, winding around stone walls and glacial rock outcroppings, forested wetlands, small ponds and vernal pools. The entire area is protected as an Area of Critical Environmental Concern, and is a Priority Habitat for Endangered Species.

Trails connect to Cranberry Brook Conservation Area in Braintree. It is a great place to walk, hike, bike, cross country ski or snowshoe. Entrances are at the end of Park Drive, and 255 Pine Street. Please take out what you bring in. Please observe leash law, and curb your dog.

Motorized vehicles are prohibited. Comments may be emailed to forest@holbrookmassachusetts.us. Messages may be left at the Holbrook Selectmen's Office at 781-767-4312. Event information is available at <http://holbrooktownforest.blogspot.com/>

Appendix F

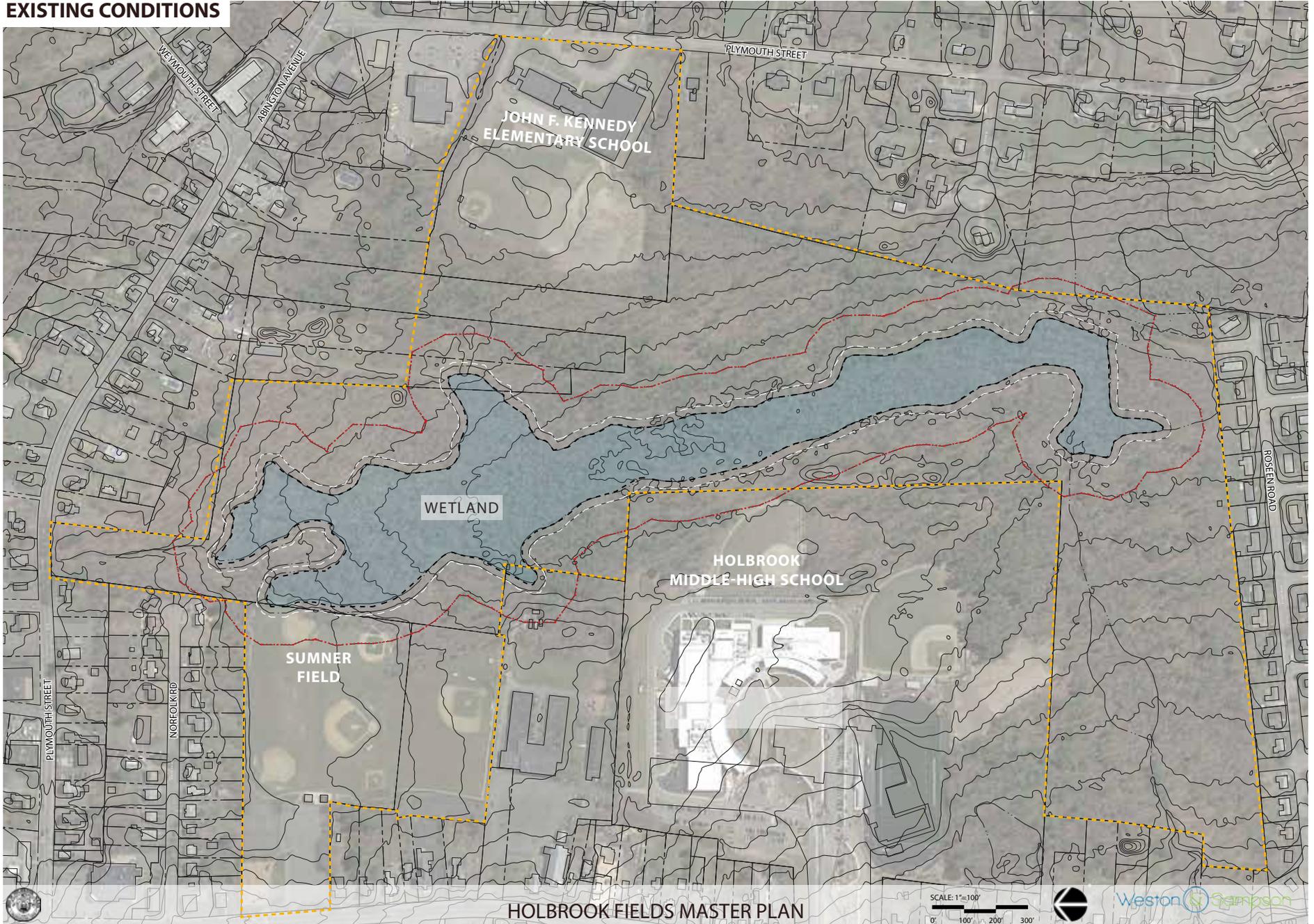
Chapter 61 table from UMass Amherst MassWoods Program

TABLE 4: COMPARING THE CHAPTER 61 PROGRAMS

Program Characteristics	Chapter 61 FORESTRY	Chapter 61A AGRICULTURE	Chapter 61B OPEN SPACE AND RECREATION
Land Use	Forest management	Agriculture, including forest management	Passive or recreational use (forest management optional)
Administration	Dept. of Conservation and Recreation (DCR) Service Forestry Program	<ul style="list-style-type: none"> Town Board of Assessors DCR Service Forestry Program if managing forestland 	<ul style="list-style-type: none"> Town Board of Assessors DCR Service Forestry Program if managing forestland
Minimum acreage	10 acres	5 acres	5 acres
Tax Reduction	Based on market value of forest products land is capable of producing, set annually by Farm Land Advisory Committee	Based on market value of farm products land is capable of producing, set annually by Farm Land Advisory Committee	75% reduction of assessed value
Requirements	10-year Forest Management Plan approved by the State Service Forester	<ul style="list-style-type: none"> Demonstrate at least \$500 in annual sales of agricultural products, including forest products. If managing forestland, 10-year Forest Management Plan approved by the State Service Forester 	<ul style="list-style-type: none"> Land mostly natural, wild, or open, or used for an approved recreational use. If managing forestland, 10-year Forest Management Plan approved by the State Service Forester
Posting (excluding public access)	Posting allowed	Posting allowed	<ul style="list-style-type: none"> Posting allowed under “natural, wild, or open” category Posting may be allowed under the Recreation category for organizations with paying members
Renewal Timeframe	Reapply every 10 years by September 30 with new 10-year Forest Management Plan	Reapply annually by October 1	Reapply annually by October 1
Forest Management	Required	Required for enrolled productive forestland	Optional
10-Year Forest Management Plan	Required	Required only if landowner manages forestland	Required only if landowner manages forestland

Appendix G

EXISTING CONDITIONS



Appendix G (continued)

OVERALL PLAN



HOLBROOK FIELDS MASTER PLAN

Appendix G (continued)

SUMNER FIELD | SCHEME



HOLBROOK FIELDS MASTER PLAN

SCALE: 1"=50'
0' 50' 100' 150'



Weston & Sampson
transform your environment

Appendix G (continued)

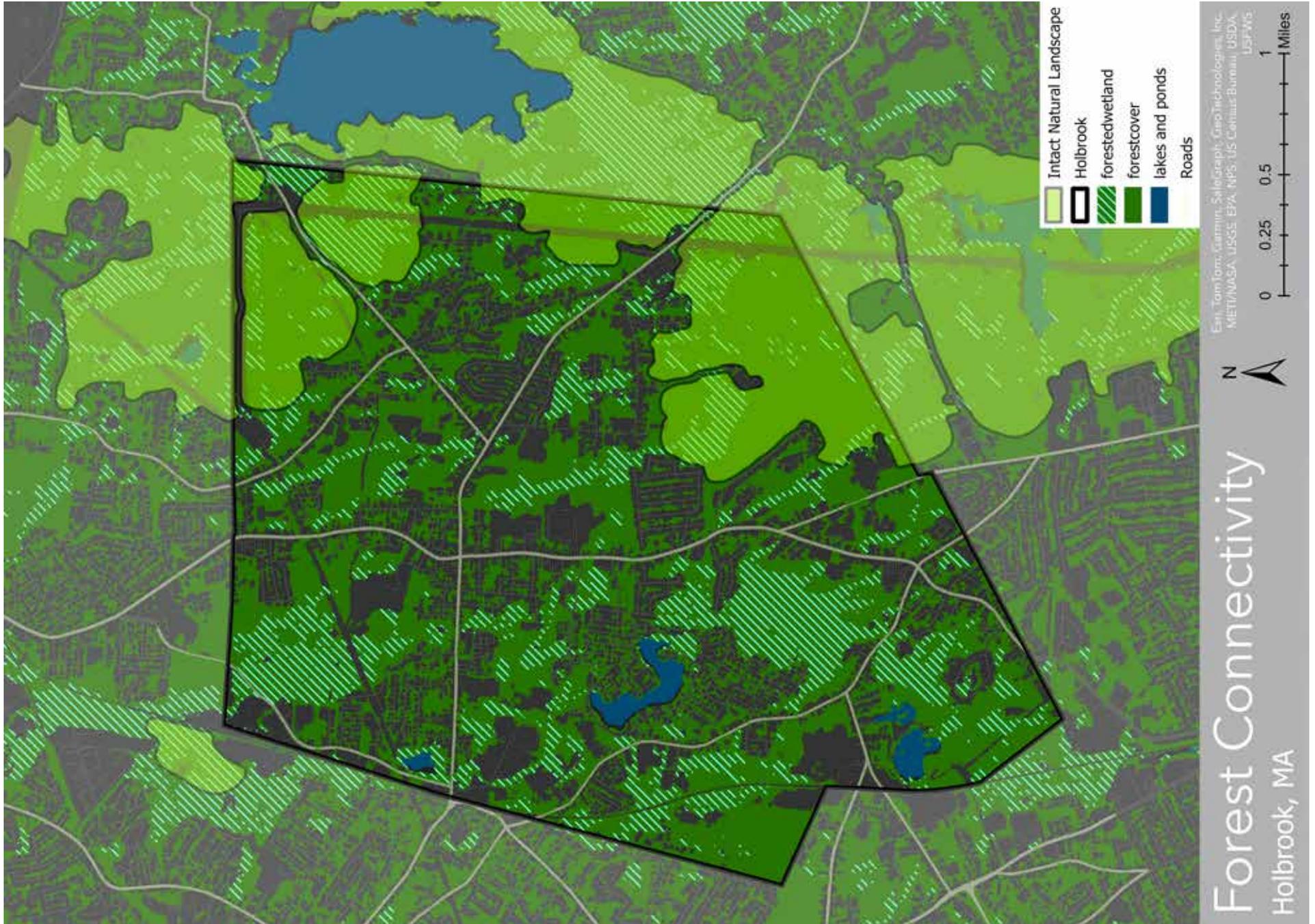
JOHN F. KENNEDY ELEMENTARY SCHOOL | SCHEME



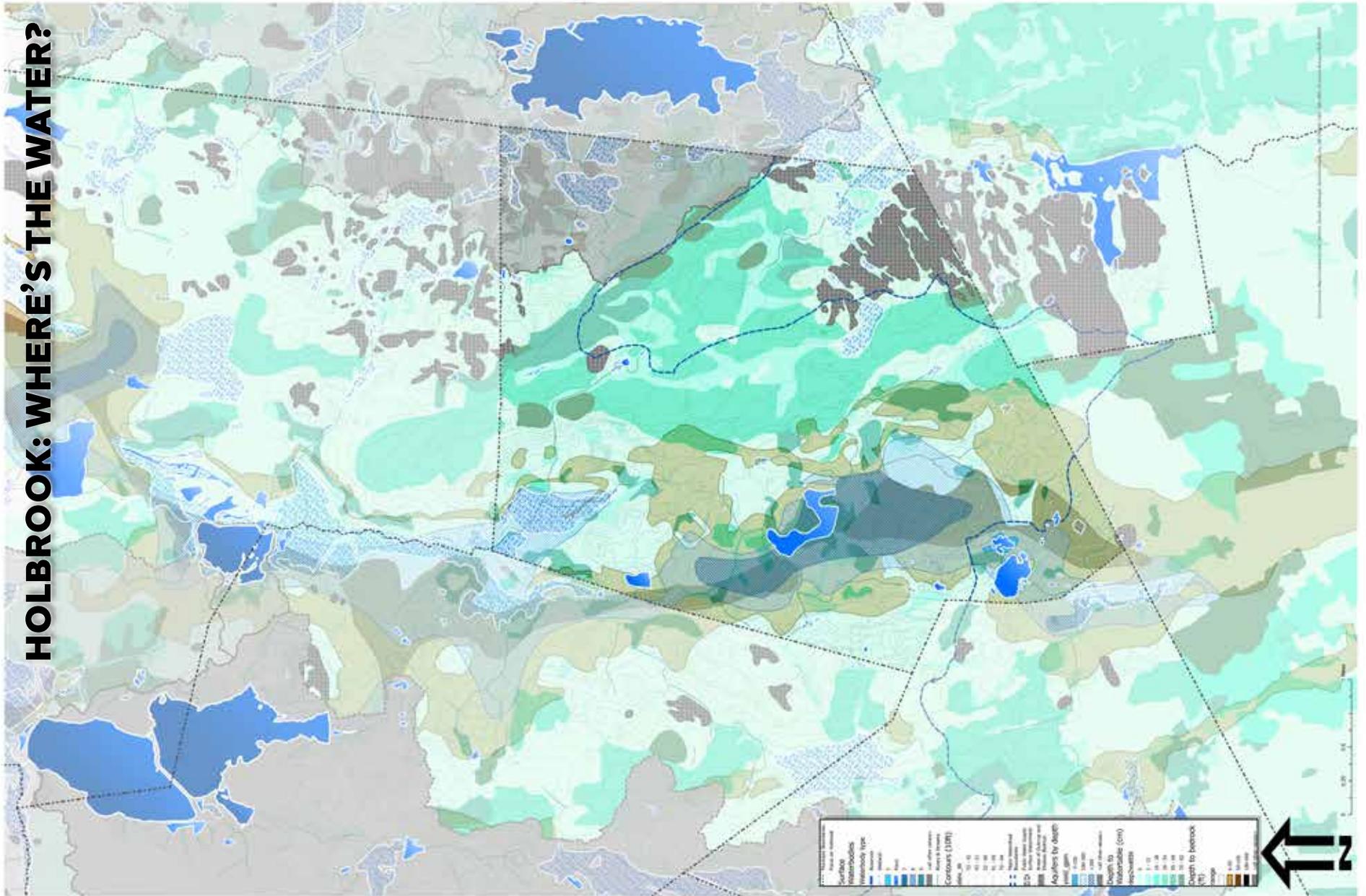
HOLBROOK FIELDS MASTER PLAN



Appendix H

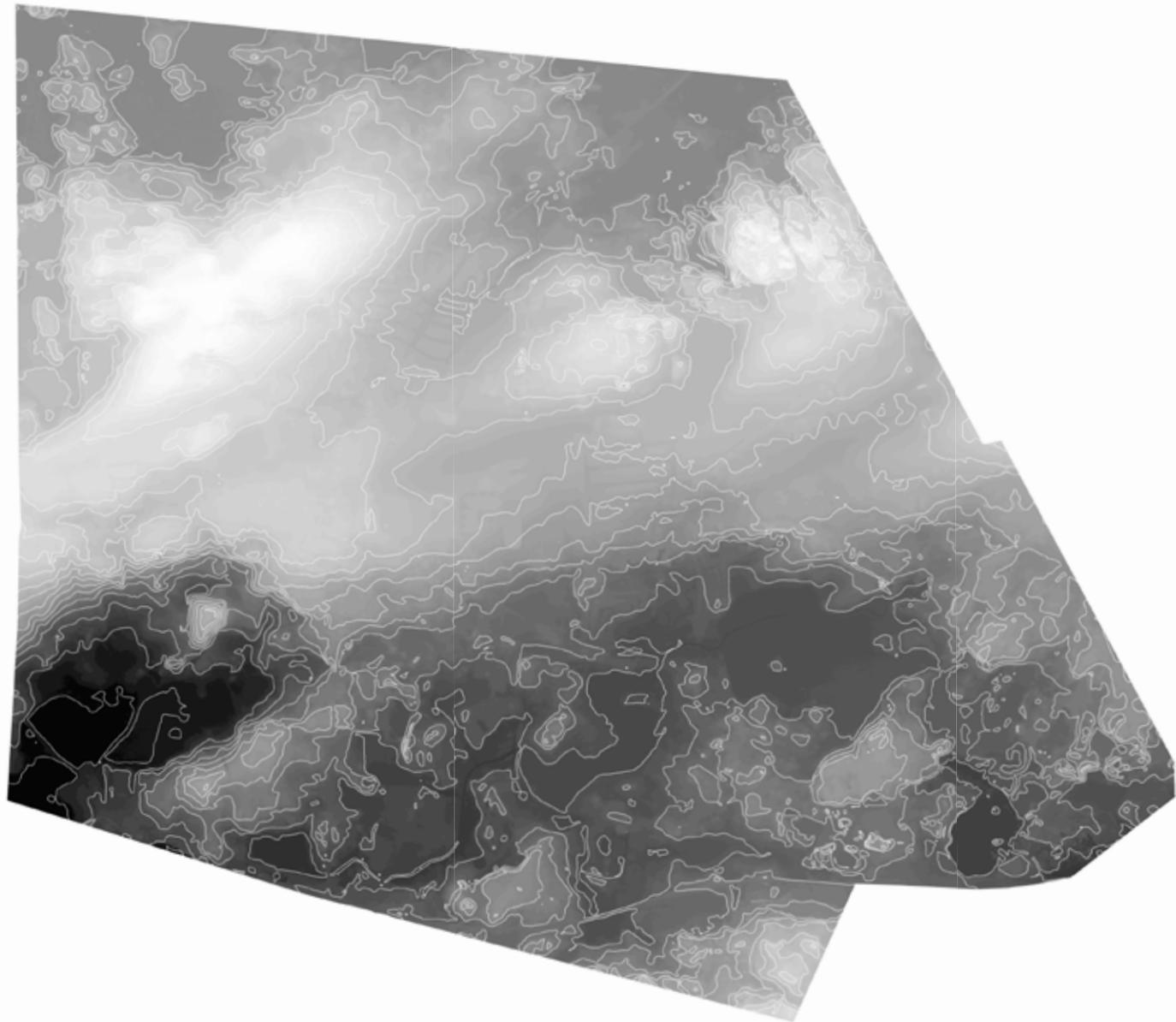


Appendix I



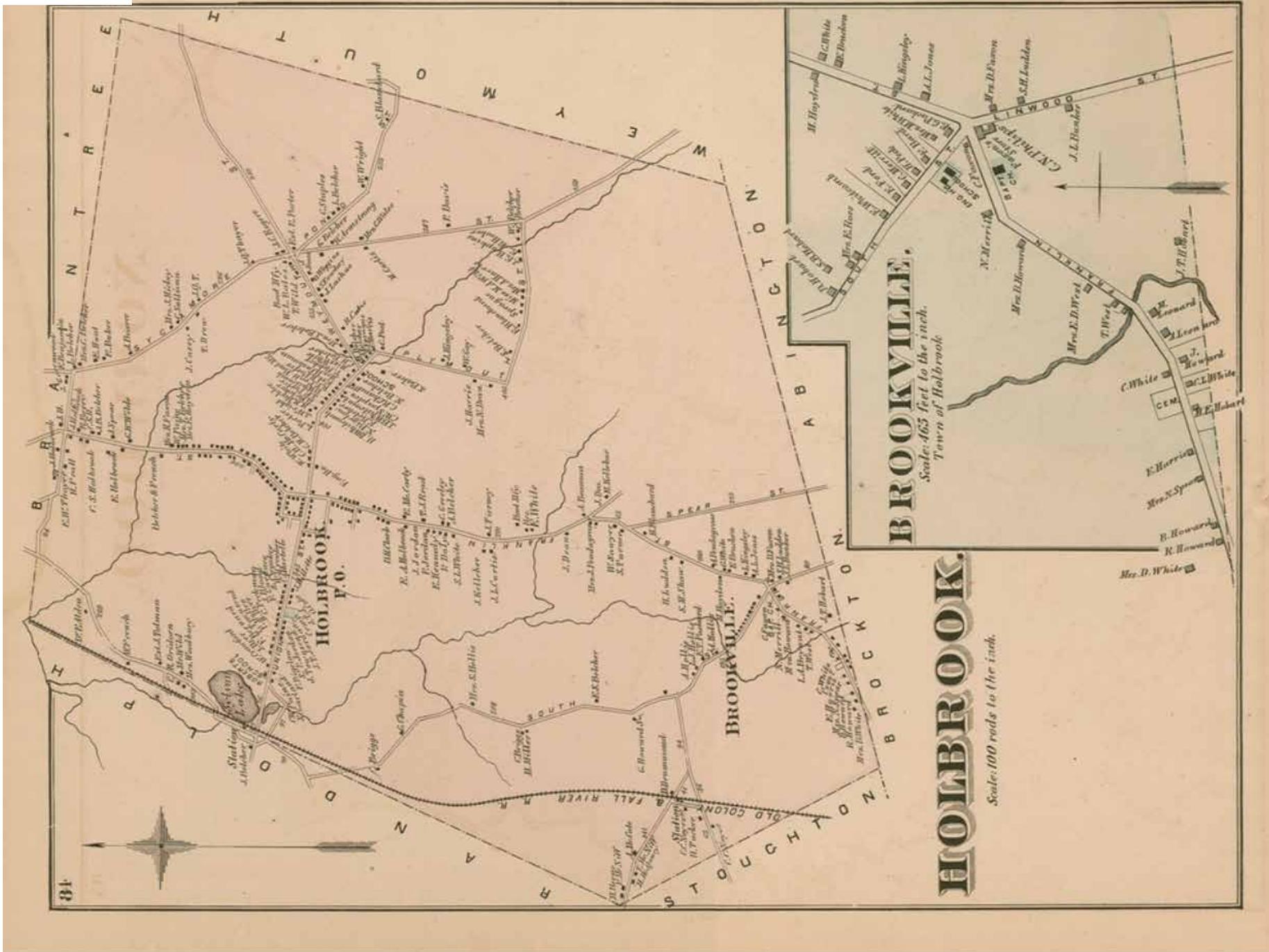
Appendix J

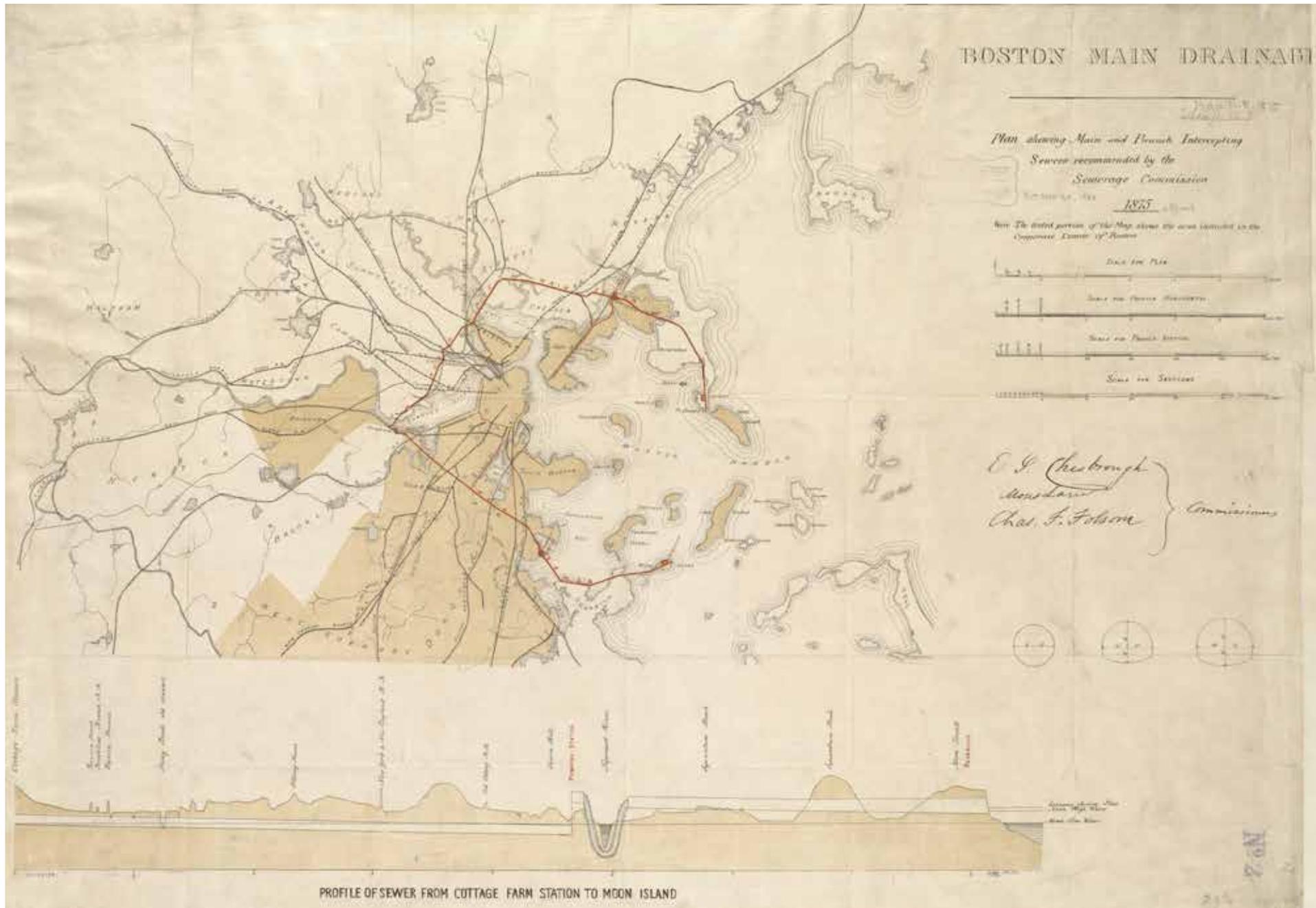
Topographic map (10 foot intervals)



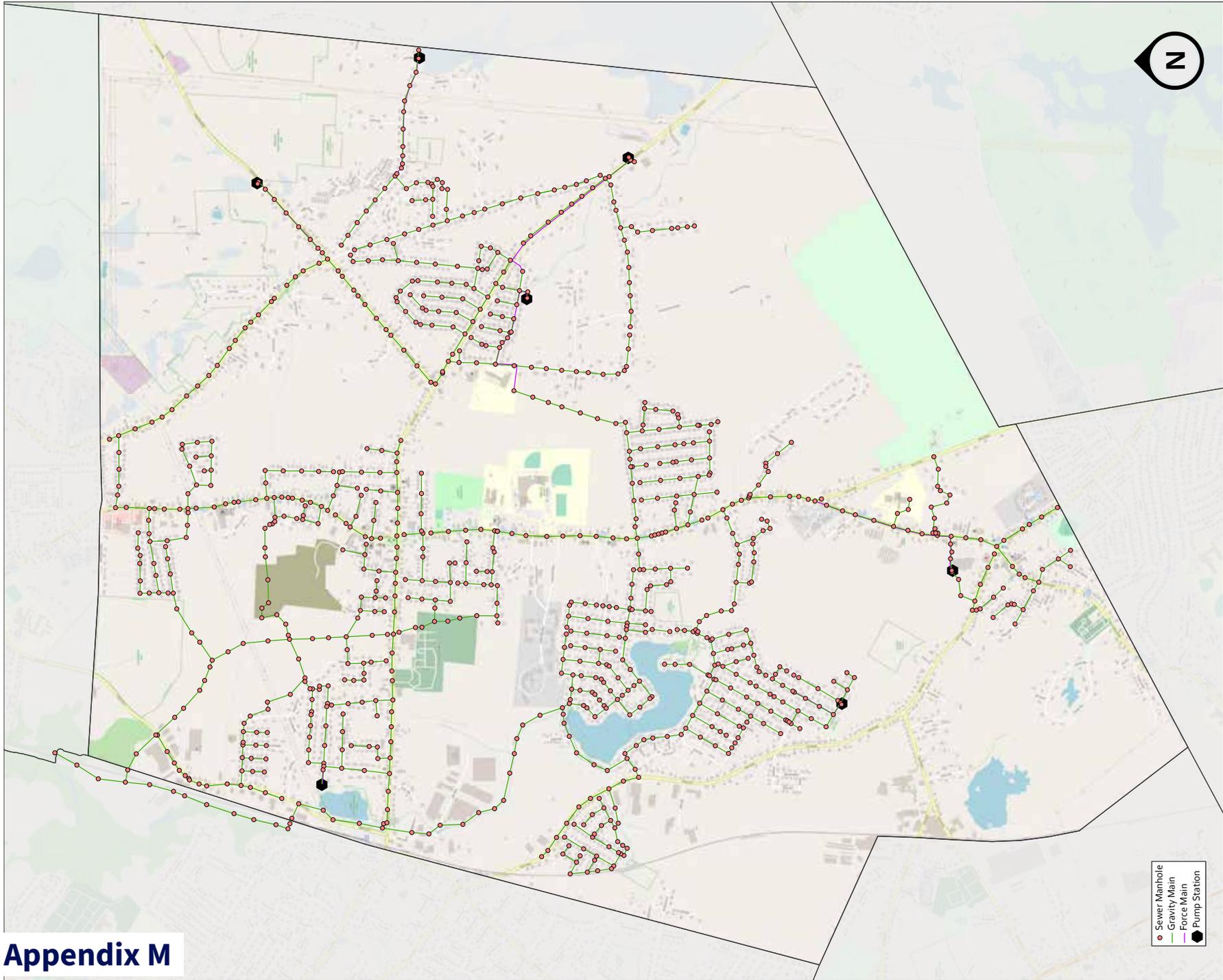
0 0.1 0.2 0.4 0.6 0.8 1 Miles

ESRI Community Maps Contributors (Arc, Bentley, Garmin, Intergraph, GeoTechnology, Inc, MIT/USGS, UNIC, UNL, USGS, USGS, USGS, USGS, USGS)





Appendix L



Sewer System Map
Holbrook, Massachusetts



Appendix M

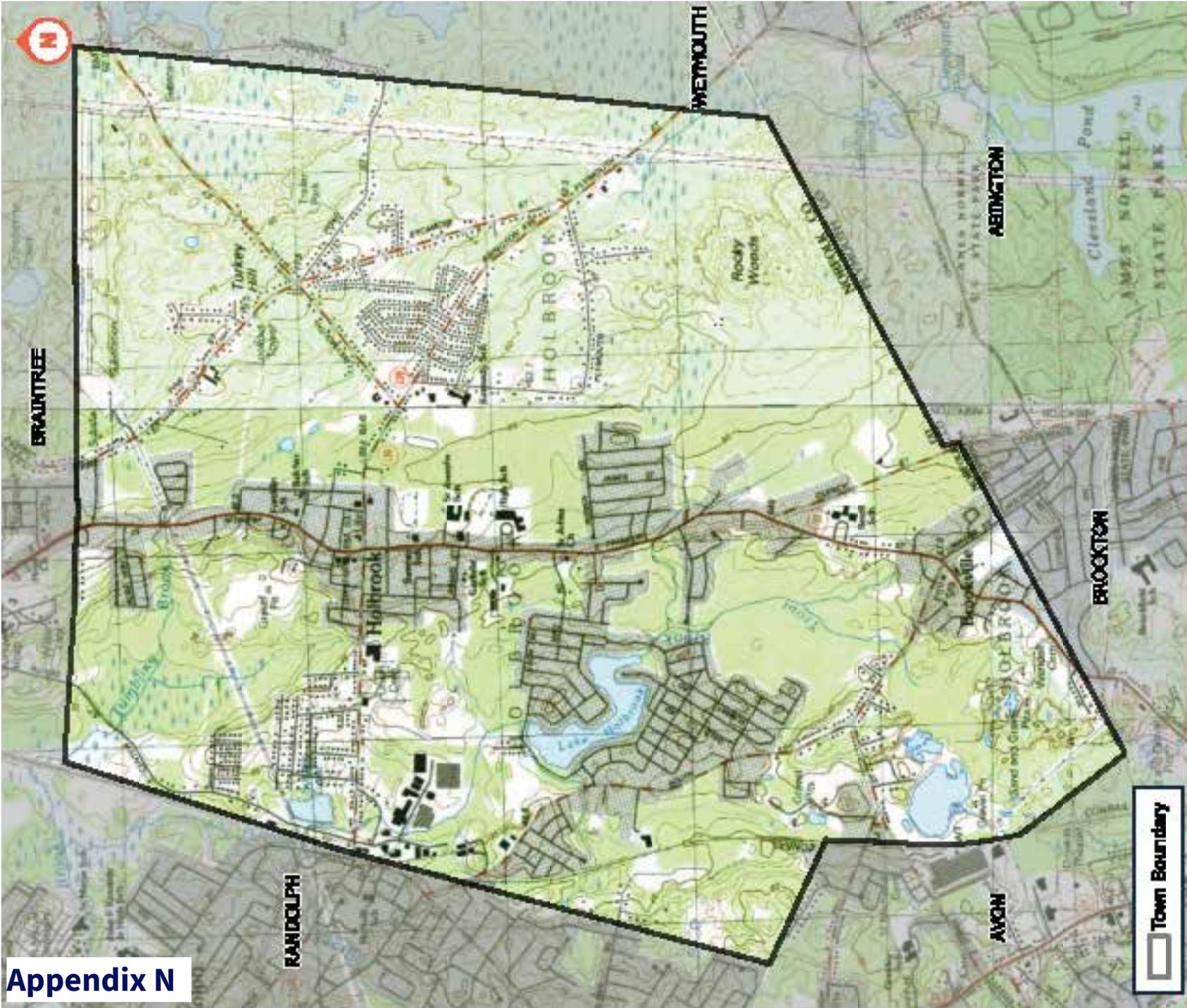


Figure 1
System Locus
Holbrook, Massachusetts



□ Town Boundary

ENVIRONMENTAL PARTNERS
— An Apex Company —

Appendix N



Holbrook, Massachusetts, is a town seventeen miles south of Boston, with a population of just over 12,000 people. The town is part of the larger Boston metropolitan region, and while it has a long history of agriculture and industry, in the present day Holbrook is largely residential, and many people commute in and out to neighboring cities for work. Like many towns in the region, Holbrook is looking to integrate its rich history and cherished values into a changing world, to manage pressures for growth along with protection of natural resources, and to ensure a healthy and thriving community in the decades to come.

To that end, in the winter of 2024, members of the Open Space Committee of Holbrook and the Conway School entered into a collaboration to create a Vision Plan for the town. This Plan provides an analysis of existing natural resources and land use patterns, and documents the values and aspirations expressed by members of the community that describe the town they want Holbrook to be. Taking into account changing demographics as well as a rapidly changing climate, this plan provides a foundation that can help guide ongoing and future planning endeavors, and act as a grounding for the development of an Open Space and Recreation Plan to be completed in the winter of 2025.

the Conway School
Graduate Program in Sustainable Landscape Planning + Design