

Town of Dartmouth

2023-2030

Open Space & Recreation Plan

*A 7-year Plan to maintain
Dartmouth's agricultural and seaside character,
protect its natural resources, and
provide recreational opportunities for its citizens.*



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Open Space and Recreation
Plan Committee
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First and foremost, gratitude and appreciation goes to the many Dartmouth residents who took the time to respond to the OSRP survey and to attend public workshops. Your local knowledge and understanding of Dartmouth's strengths and needs was foundational to developing this plan.

Thank you to the following individuals for assisting in the preparation of this plan.

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Sue Guiducci	Historical Commission
Cody Haddad	Director of Development
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I. PLAN SUMMARY

The 2023 Dartmouth Open Space and Recreation Plan (OSRP) is an update of the town's 2015 Open Space and Recreation Plan. The Plan is intended to act as a blueprint for the future development of Dartmouth's parks and recreational areas, as well as a guide to strategies to help retain and preserve the integrity of Dartmouth's cultural, historical, agricultural, and natural resources.

The 2023 Open Space and Recreation Plan has been developed in accordance with the applicable requirements and guidelines as set forth by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), Division of Conservation Services (DCS). The Commonwealth requires that all municipalities file an open space and recreation plan every seven (7) years as a means of satisfying eligibility requirements for state and federal grant programs offered through EEA and DCS.

The 2023 OSRP was developed in the context of numerous ongoing projects and planning work in the Town of Dartmouth. Community research and workshops in 2020 undertaken as part of the town's Master Planning process generated many ideas for future action items that would enhance open space, recreation, and natural and cultural resources. Town staff and other stakeholders planned for nature-based solutions to strengthen climate resilience in the town's 2019-2020 Municipal Vulnerability Preparedness (MVP) planning process, some of which implicate the resilience functions provided by open space areas in town. Dartmouth is a community on Buzzards Bay with deep historic and present-day recreational and commercial ties to water. The town's 2019 Harbor Management Plan reflects this deep care for the water, with recommendations related to enhancing upland landscapes that can help to preserve water quality, and for expanding responsible water-based recreational opportunities. This Plan integrates goals, ideas, objectives, and action items from these existing planning materials, as well as the generation of new ideas from the OSRP community surveying and action item prioritization from OSRP community workshops.

The 2023 OSRP was also written as development patterns and demographic trends continue to evolve and change in town. According to US Census Bureau counts, Dartmouth lost population slightly from 2020 to 2010, reversing a century of continual population growth. However, new home construction is still on the rise, with 424 permits for new single-family residences recorded from 2011 to 2020, reflecting trends in smaller household sizes whereby the realities of the current market support more home construction even given stable overall town population. Moreover, this recent decline may quickly reverse because of housing policy, laws, and incentives enacted at the state level. The recent Multi-Family Zoning Requirement for MBTA Communities zoning rule, as current administrative guidance stands, would potentially require the town to zone for hundreds of additional housing units as South Coast Rail comes online.

The first step in the plan update process was to appoint an Open Space and Recreation Plan Committee (OSRPC). The OSRPC was organized under the leadership of the town's Office of Community Development/Grants in partnership with the Conservation Commission, Parks and Recreation, Planning Board, and Select Board. The OSRPC solicited participation from a variety of town departments, community organizations, and non-profits. The OSRPC totaled twenty-one

members. The OSRPC reviewed the goals, objectives, and action items of the 2015 plan, commenting on sections that pertained to their particular areas of expertise or involvement, and to make note of progress made or changes that have occurred over the ensuing years.

The OSRPC developed a public survey to gather input on conservation, recreation, and open space needs from Dartmouth residents. The survey was mainly deployed online but was also made available at various locations throughout town, including the Town Hall and Council on Aging. A total of four public in-person workshops were held during the summer and fall of 2022; three workshops engaged participants in an action item prioritization exercise, and the final workshop presented full public survey results, analytical inputs into the plan, and the final set of goals, objectives, and action items to ensure that the project team and OSRPC heard residents correctly in the interpretation of public comment into the plan document. Throughout this process, and the subsequent development of the Open Space and Recreation Plan, all meetings were posted, ADA accessible, and open to the public.

Based on the survey results, information obtained and exchanged at public meetings, written and oral comments obtained during the review of draft iterations of the plan, the open space and recreation inventory, and needs of special interest groups, the OSRPC re-evaluated, updated, and expanded the goals of the 2015 Plan to fit current needs and context. The Goals and Objectives of the 2023-2028 Dartmouth Open Space and Recreation Plan are:

GOAL 1: Provide decision makers, including town residents and voters, with effective policies and tools to protect and enhance those qualities that support open space and recreational activities within the town.

OBJECTIVES:

1. Promote conservation, open space, cultural, historic, and recreation planning priorities in town decisions, actions, and plans where and when appropriate and practical.
2. Continue to make the Open Space and Recreation planning process open and accessible to the public and ensure that regular updates are provided on the implementation of the plan.
3. Take the actions needed and pursue the means necessary (administrative, fiscal, regulatory, partnerships, etc.), as feasible and practical, to accomplish the goals of this Plan.
4. Increase community awareness of and appreciation for the Town's cultural, historic, and natural resource assets.

GOAL 2: Conserve and protect the unique coastal, agricultural, rural, and scenic qualities that give Dartmouth its characteristic landscape.

OBJECTIVES:

1. Promote the practice of farming and the retention of agricultural land and business as an important local and regional economic engine.

2. Protect, preserve, and conserve Dartmouth's coast and coastal heritage.
3. Protect, preserve, and conserve Dartmouth's scenic coastal, open space, field, and forestland vistas.
4. Protect, preserve, and conserve the town's historical and cultural assets.

GOAL 3: Preserve, protect, and maintain the quality of Dartmouth's natural resources.

OBJECTIVES:

1. Protect the quality and quantity of the town's water supply, surface water, and groundwater resources.
2. Provide extra protection to the Town's most fragile and vulnerable natural resources.
3. Plan for and undertake the necessary physical/structural improvements to infrastructure and facilities that impact the quality of the Town's natural resources.
4. Prioritize the conservation of lands that have inherent climate resilience value.
5. Promote the preservation, retention, and quality of regionally significant natural resources.

GOAL 4: Provide a range of active and passive recreational facilities and programs that address the needs of all Dartmouth residents.

OBJECTIVES:

1. Increase and improve access for water-based recreation, including activities based in and around Dartmouth's coastal and inland waters.
2. Increase and improve access to open space holdings for active use and passive recreation and enjoyment.
3. Provide recreational programming that promotes opportunity for lifelong involvement and activity for people of all ages and abilities.
4. Develop new facilities, and upgrade or repurpose existing facilities, to enhance recreational use and opportunity.

GOAL 5: Manage and channel growth and infrastructure in a manner that retains the character of the town and its natural, cultural, and historical assets, and promotes recreation.

OBJECTIVES:

1. Consider the crossover needs of open space and recreation planning goals and objectives and the preservation of unique and sensitive environmental features and resources when drafting, recommending, and passing zoning code changes.
2. Promote a healthy and livable community that encourages multimodal transportation, including continuous improvements to the town's bikeway system.

Dartmouth has unique character, born of its historical development over centuries and its location on Buzzards Bay. Many citizens moved to or remain in town to enjoy this landscape, with its waterfront, forests, and agricultural lands. This Plan is one tool among many that the town can utilize to chart a course that maintains ample recreational opportunities for boating, fishing, team sports, and getting close to nature, and that preserves the integrity of agricultural land, wildlife habitats, water supply recharge areas, watersheds, and scenic landscapes for future generations. This kind of planning is especially important when natural landscapes and assets are at risk of development, and when additional population expands recreational service needs in town.

In furtherance of the goals and objectives stated above, this Plan proposes specific actions for protecting and enhancing open space and recreation over the next seven years. The following chapters describe in detail the data, analyses, public and stakeholder input, and other relevant source material that went in to formulating these goals and objectives, and the specific action items that the town can pursue to achieve them.

II. INTRODUCTION

A. Statement of Purpose

The Open Space and Recreation Plan (OSRP) is intended to present and discuss a coordinated set of measures that will help the Town of Dartmouth protect, preserve, and increase its open space and recreation assets and resources. The purpose of the plan is to provide the citizens of Dartmouth with a document that is comprehensive, readable, easily understood, and that accurately conveys the policies and actions necessary to meet the changing physical, cultural, and social needs of the population. The OSRP is itself a policy document, outlining a direction for the balanced use of a town's natural resources and recreation areas, and a prioritized set of action items so that the town can differentiate short-term needs versus complex projects that will take further study, planning, design, engineering, and/or property acquisition to accomplish.

Dartmouth's most recent Open Space Plans were drafted in 2009 and 2015. The 2023 OSRP is an opportunity for the town to re-dedicate itself to the goal of protecting and enhancing its open space and recreation assets to serve the current and future needs of the community.

An important part of updating the 2015 OSRP was to understand and document the progress made by Dartmouth in addressing the previous plan's goals, objectives, and recommended actions. Overall, Dartmouth has continued to make gains in preserving open space, largely through its strong partnerships with local and regional non-profit and natural resource-based organizations. Dartmouth, like many other cities and towns across the nation, has had to be very resourceful over the past seven years in order to maintain the level of quality recreational opportunities available to both residents and visitors, but has also made significant progress in upgrading its recreational facilities and programming.

The following list includes many of the actions and partnership activities undertaken by the town in an effort to complete specific tasks outlined in the goals and objectives of the 2015 OSRP.

Conservation:

- 2014-2021,¹ the Conservation Commission acquired 344 acres of land for permanent open space protection;
- 2014-2021,² the Conservation Commission protected 186 acres of land through Conservation Restrictions;
- 2021-present, building on work conducted in 2011, the Environmental Affairs Coordinator is reviewing all properties listed as assigned to the Conservation Commission in order to ensure that the mechanism of assignment to the Conservation Commission is clear (gift, purchase, or tax title taking), and that the wording in each deed affords permanent

¹ We are reporting progress from 2014-2021 because the 2015 Plan reported a figure from 2009-2013 (which was 49 acres); in this way the accounting is continuous.

² We are reporting progress from 2014-2021 because the 2015 Plan reported a figure from 2009-2013 (which was 17 acres); in this way the accounting is continuous.

protection as open space under Article 97 of the Massachusetts Constitution as appropriate. These efforts are undertaken toward developing an understanding of how to approach the operations and maintenance of these lands, and of the appropriate role of the Conservation Commission as the land steward.

- The Conservation Commission continues to partner with the Dartmouth Natural Resources Trust (DNRT) on land protection and trail development projects, including several Agricultural Preservation Restriction projects enumerated below; the DNRT now has over 60 reserves comprised of 5,523 acres of land and 40 miles of trails available in Dartmouth (the 2015 plan noted that DNRT held thirty miles of trails an increase of 10 miles in less than 10 years).

Parks and Recreation:

- Funding has been obtained for a redesign of the dog park.
- In partnership with parks and recreation, the COA and friends group installed mats that enable better ADA access at Round Hill Beach.
- Initial improvements were made to the Rogers Street Waterway Access facility boat ramps, though additional study is now needed to address shoaling that limits the use of the boat ramp for recreators.
- The pavilion/bandstand at Apponagansett Park were renovated. Additional walkway improvements in the vicinity are expected to be installed as part of the Dias Landing seawall project.
- A turf field was installed to renovate Dartmouth Stadium.

Planning:

- 2021, Town Meeting adopted revised flood hazard maps for the entire town, remaining fully compliant with the National Flood Insurance Program.
 - In a related measure, the town Planning Office spearheaded exploration of the town participating in FEMA's Community Rating System program, which would realized better flood protection and decreases in flood insurance premiums on a town-wide scale.
- The Planning Board promotes the use of its Open Space Residential Development (OSRD) Bylaw as a primary option for new residential subdivision proposals.

Historical:

- The Historical Commission prepared a National Historic Register nomination for the Russell Garrison Site.
- The Historical Commission, through renewed Community Preservation Act (CPA) funding in 2019, continues to survey historic properties and complete additional Form B historical building descriptions with the assistance of architectural and historic documentation companies.

Agriculture and Aquaculture:

- 2015-present, the town continues to support the reuse of Round the Bend Farm as a community education, kitchen and sustainable agricultural facility.³
 - 2017, Round the Bend's Learning Center was complete.
 - 2017, Round the Bend acquired 55-acres of Ocean View Farm in a joint effort between the farm, the town, Buzzards Bay Coalition and the Dartmouth Natural Resources Trust with contributions from the USDA and many individual donors, placing this land into an Agricultural Preservation Restriction.
 - 2020, Round the Bend acquired an additional 21 acres, growing the farm to 115 acres.
- 2019, an Agricultural Preservation Restriction (APR) and Conservation Restriction totaling 23 acres, was placed on the three-acre Sommaripa Farm (Eva's Garden) and surrounding acres of mature woodlands.⁴ Support for protecting the property came from private gifts, the Town of Dartmouth's Agricultural Preservation Trust Fund, and a major grant from the USDA.
- 2019, the acquisition and protection of the 128-acre Apponagansett Bay Farm property, and effort led by the town Conservation Commission, Dartmouth Natural Resources Trust (DNRT), and the Buzzards Bay Coalition.⁵ Also known as the Dike Creek Land, 73 acres bordering the creek was taken over by DNRT for public use as a reserve featuring public trails. 21 acres was sold, with a conservation restriction, to a private buyer, and while remaining acres containing a vineyard were sold as farmland.⁶
- 2020, Community Preservation Act funds were used to acquire a Conservation Restriction on 24.2 acres in the Russells Mills village area, preserving forest, rare species habitat, and a farmland component.
- After an APR was accomplished for the Dutch Belt Farm (in part made possible by \$300,000 in town CPA funds, appropriated in 2004), the land was leased in 2014, and sold to a new property owner in 2016. The new owner is continuing to farm the property's 74 acres as Copicut Farms.
- The Agricultural Commission is continuously active in supporting and assisting young farmers (and all farmers) in town, pursuing projects such as mapping and the preparation of materials to inform consumers and connect farmers and farm stands with the local market. The Commission also assists farms in navigating regulations and permitting.

³ "About Round the Bend Farm," accessed: <https://roundthebendfarm.org/about/>, 7/3/2022

⁴ "Renowned Organic Farm and Surrounding Woodlands in Dartmouth gain Permanent Protection," Buzzards Bay Coalition, accessed: <https://www.savebuzzardsbay.org/news/renowned-dartmouth-organic-farm-gains-permanent-protection/>, 07/03/2022.

⁵ Ibid.

⁶ "Select Board approves conservation restriction for Dike Creek land, Dartmouth Week, published 8/6/2019, accessed: <https://dartmouth.theweektoday.com/article/select-board-approves-conservation-restriction-dike-creek-land/42951>, 07/03/2022.

- The Agricultural Commission continues to help resolve farmer-neighbor conflicts whenever they arise.
- Shell fishing has been reestablished in the Slocums River, with the Padanaram Oyster Farm now operating at the mouth of the river, for a total of three aquaculture farms in town.

"These two properties represent the best of what's worth preserving in Dartmouth: productive farmland, scenic vistas, and diverse coastal ecosystems. Once again, we have shown how a partnership of non-profit organizations, local government, federal agencies, and generous individuals can come together to accomplish great things." - Dexter Mead of the Dartmouth Natural Resources Trust.

Pathways Committee, and Bicycle Committee:

- 2018, the town worked with SRPEDD to explore procurement for a public bike share program. Evaluation of such a program is on-going.
- Standard DPW practices have been upgraded to automatically consider bicycle traffic accommodations when roads are repaired or redone; MassWorks grants required complete streets that include sidewalks and bike lanes. A recent example was the inclusion of bicycle lanes and sidewalks in plans to redo Faunce Corner North. Cove Road and Slocum Road are also examples of recent and planned sharrow installation.
- 2021, the Pathways Committee continues to work with local and regional partners to develop multimodal trails and bike routes. Town CPA funding was used in conjunction with contributions from New Bedford, Westport and a MassTrails grant to work with SRPEDD and other south coast communities to undertake a bikeway feasibility study for the best route to connect the south coast bikeway. Results of that study are discussed further in this Plan.
- The Pathways Committee continues to accomplish field work to assess the potential of various long distance routes in town, mainly routed through existing town property.

Select Board, Public Works, Town Administration and Other Departments:

- In 2021, the town launched a new community engagement portal, where communication around the Open Space and Recreation Plan and implementing its action items going forward can be posted to keep the public and town partners informed.
- An Environmental Inventory Analysis for Dias Landing and Apponagansett Park has been completed for improvements to the seawall at Dias Landing. There is an on-going grant for design work, moving the project toward construction.
- 2019, the town completed a Harbor Management Plan, which presents action items for addressing issues such as nitrogen management and TMDL development, among other topics.

- Two culverts have been installed in the Padanaram Causeway to improve tidal flushing, accomplished when the causeway was rebuilt by Mass Highway.
- The Gidley School property as repurposed (though not for recreational purposes, but as a new community Police Station).
- A culvert was installed on Hawthorne Road to help mitigate flooding issues in the Buttonwood Brook watershed.

B. Planning Process and Public Participation

The process of creating a long-range plan is almost more important than the document itself. The process allows for public participation and general education on issues and a means for all involved to reach a consensus on these issues.

With the knowledge of the importance of process in plan development, the Open Space and Recreation Plan Committee (OSRPC) was established in November of 2021 to guide the project and update the 2015 OSRP. Members of the OSRPC included:

Robert Almy	Board of Public Works
Tim Barber	Department of Public Works Director
Fred Dabney	Agricultural Commission
Amy Dipietro	Council on Aging Director
Kevin Estes	Planning Board
Marc Garrett	Environmental Affairs Coordinator
Sue Guiducci	Historical Commission
Cody Haddad	Director of Development
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Sherri Tetrault	Parks and Recreation
Joe Vieira	Board of Parks and Recreation / Community Preservation Committee
Mary Waite	School Committee
Nathaniel Watson	Conservation Commission

The OSRPC, or its sub-committees, conducted six (6) meetings between November 2021 and January 2023. These meetings were used to update attendees on the work that had been completed to date, make decisions on how to proceed with work tasks, scrutinize draft work,

and to formulate new tasks moving forward. OSRPC meetings were held as needed, in alignment with key project needs or junctures. All meetings were posted and open to the public. The Southeastern Regional Planning and Economic Development District (SRPEDD) was hired to facilitate planning activities and coordinate the drafting of the OSRP document.

Throughout the Plan update process, the OSRPC was active and instrumental in assisting to complete the following tasks:

- Reviewing goals, objectives, and action items from the 2015 Plan and noting progress or continued relevance;
- Updating the OSRP Lands Inventory with accurate GIS data;
- Designing the online public OSRP survey questionnaire;
- Developing the public prioritization workshop format;
- Advertising and attending public events;
- Reviewing OSRP Plan drafts; and
- Updating goals, objectives, and action items after review and synthesis of public engagement outcomes.

Open Space and Recreation Survey and Community Meetings

To ensure that public participation in Plan development was widespread and available beyond attendance at in-person meetings, the project team launched an online survey that respondents could take at their convenience.

Survey questions were meant to gauge the public's satisfaction with the current state of conservation, open space, and recreation lands, facilities, programs and policies within the town, as well as to help chart a course for future improvements. The resulting 29 question survey was posted on the town website and the SRPEDD website, and was available from March 16, 2022, through July 31, 2022. Limited paper copies were also available at the Dartmouth Senior Center/Council on Aging and the Town Hall. The exact number of survey responses is difficult to gauge precisely, as it was possible for participants to skip individual questions. A total of 715 responses were recorded, but a core group of approximately 420 respondents completed the survey fully, skipping few, if any, questions. The responses were varied by Precinct and demographics and gave a good representation of the town.

The project team held four in-person public workshops throughout the OSRP planning process. The first three workshops were identical; participants went through the same prioritization exercise at each workshop. Holding three sessions of the public workshop enabled the project team to distribute them throughout Dartmouth (the town is of substantial size at 64 square miles in area). The variety of days of the week and times furthered made greater opportunity for participants to select a meeting time and location combination that best enabled their attendance. These meetings were held in April, May and June of 2022, as shown in Table 1 below.

Table 1. Schedule of Public Workshop Sessions 2022-2023

Location	Date	Time	Number of Participants
North Branch Library	Tuesday, April 26, 2022	6:00-7:30 PM	13
Dartmouth Town Hall	Thursday, May 26, 2022	5:00-6:30 PM	7
Southworth Library	Wednesday, June 29, 2022	7:00-8:30 PM	20
Dartmouth Town Hall Meet your Plan Open House	Tuesday, January 17, 2023	6:00-7:30 PM	5

At each of the three initial meeting iterations, SRPEDD followed a consistent public engagement process. The 2023 OSRP was developed in the context of numerous ongoing projects and planning work in the Town of Dartmouth, including the 2020 Master Plan (particularly public engagement on the open space, recreation, and natural and cultural resources chapters); the town's 2019-2020 Municipal Vulnerability Preparedness (MVP) planning process; and the town's 2019 Harbor Management Plan. This Plan presented a unique opportunity to integrate goals, ideas, objectives, and action items from all of these existing planning materials, and to specifically engage the public on their priorities coming out of this recent work related to open space and recreation community assets.

Workshop participants were provided with a list of action items generated in these plans in the areas of conservation, recreation, and water access, and were asked to work in a small, facilitated group to categorize these actions as short-term priorities versus items that could happen with flexible timing, and as either higher or lower priority. A picture of the prioritization matrix is presented below. Blank sticky notes were also provided to record new ideas and prioritize these into the matrix. In many ways, the pre-populated list of recommendations pulled from other plans were meant to serve as a jumping off point, soliciting some feedback on the urgency of existing recommendations, but also as a means of sparking conversation that the small group facilitators encouraged with follow-up questions and attempts to have group participants refine, revamp, edit, or revise these general ideas, with that conversation also yielding new insights and ideas. All in all, six small groups conducted this exercise across the three workshops.

The fourth and final public meeting, which occurred on January 17, 2023, had a presentation of public engagement findings, research that went into the plan, and most importantly, the final articulated set of goals, objectives, and recommendations for inclusion in the OSRP. After the presentation, participants were lead through the action items one goal at a time for final review and comment. They were encouraged to say whether the action items were especially important to them, if they were surprised by an action item, or if they were concerned or felt the action items had missed something. The media outlet Dartmouth Week covered the final plan, and the subsequent story "Open Spaces Plan highlights Dartmouth's outdoor priorities," included information on where and how residents could review the final plan during the month-long comment period, through February 15, 2023.

The results of the survey and public workshops were summarized in a Dartmouth OSRP Public Engagement Report, which is incorporated into this report as Appendix A of this document.

Efforts to reach out to all neighborhoods included those designated as Environmental Justice (EJ) communities. The EJ communities in Dartmouth are located in five Census Block Groups. In the town's northern and central regions (inclusive of UMass Dartmouth). Enhanced outreach in these areas included the accessibility of the online public survey and an in-person meeting (at the Southworth Library) within an EJ neighborhood. Distribution of meeting notices and surveys also occurred through Facebook, a widely used social media channel. Translation services were available for all planning related events and activities through SRPEDD.

Release of Draft Plan to the Public

Draft Open Space and Recreation Plan chapters were released to the public starting in fall 2022. The complete final draft, reflective of comments from the final public open house meeting, was released to the public and town boards on January 25, 2023, with a final comment period for review of the final draft through February 15, 2023.

III. COMMUNITY SETTING

A. Regional Context

The Town of Dartmouth is located in Bristol County, in southeastern Massachusetts midway between Providence and Cape Cod with a 47-mile irregular coastline on the north shore of Buzzards Bay. The town has the distinction of containing the third largest land area of any municipality in Massachusetts at 97.5 square miles.⁷ To the east, Dartmouth borders the City of New Bedford. To the west, the town's significant agricultural land abuts rural Westport, while the less dense northwestern extent blends into the expansive wooded areas of the City of Fall River and the Town of Freetown. Dartmouth lies 60 miles south of Boston, Massachusetts and 33 miles southeast of Providence, Rhode Island.

Buzzards Bay and Regional Watershed Connections

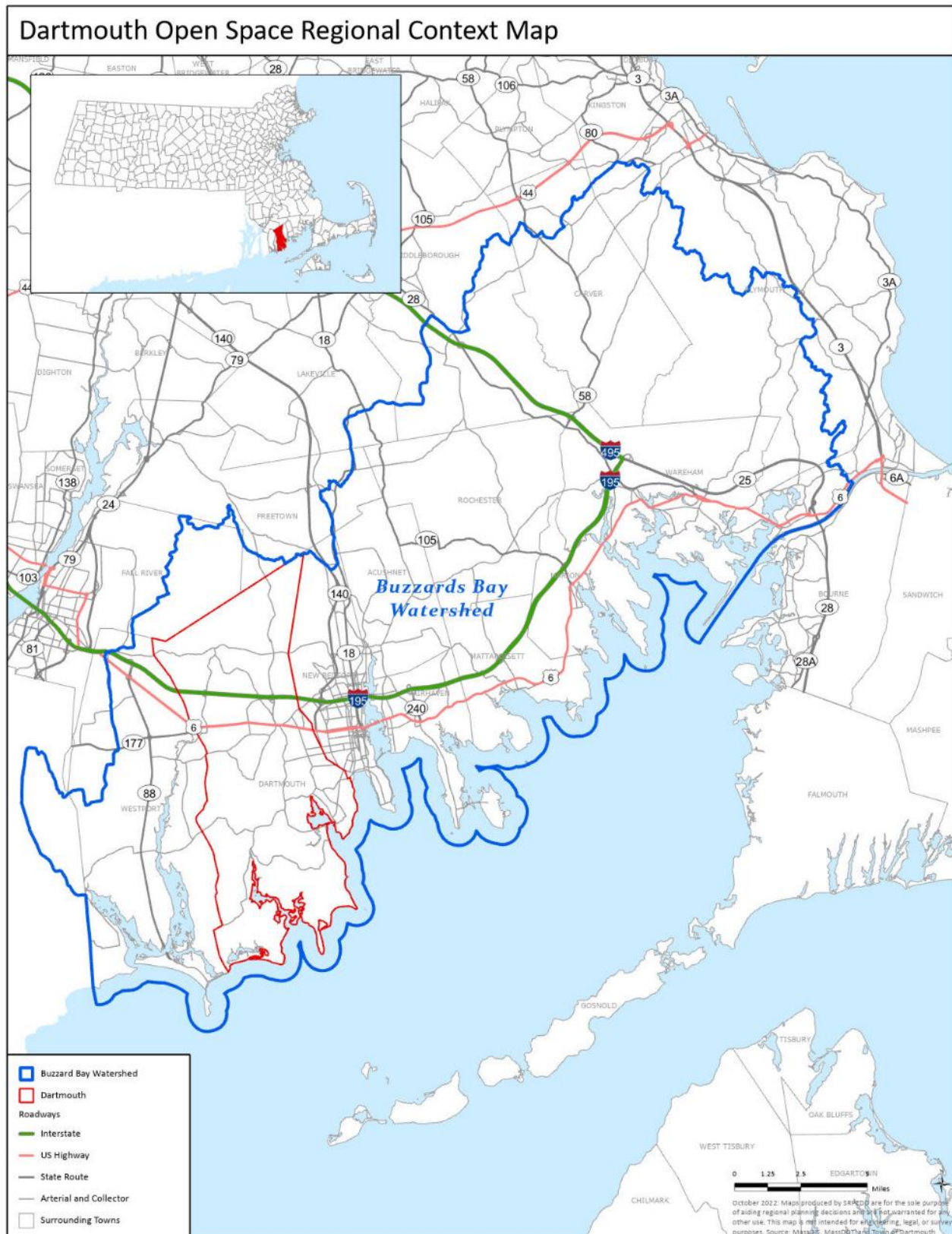
Dartmouth is situated on the north shore of Buzzards Bay in its western reach. In its full extent, Buzzards Bay is 28 miles long and has 280 miles of shoreline, including 11 miles of public beaches. The Bay had a significant impact on the early growth of Dartmouth and the surrounding region, spurring the development of whaling and fishing communities in many of its harbors. In the mid-nineteenth century, Dartmouth's Apponagansett Bay was part of the regional whaling industry. Dartmouth's harbor area, however, was neither deep enough nor large enough to support the type of intensive commercial and industrial activities that grew up around ports like those in New Bedford and Fall River. The former whaleship yards and the Concordia yacht yards are now home to the South Wharf Yacht facility.

Buzzards Bay is a shared resource among its coastal communities for boating, fishing, and shellfishing. Dartmouth's Apponagansett Bay is ideal for recreational boating. Padanaram Harbor is one of thirty major recreational harbors and coves connected in a network along the Bay, including those in nearby Mattapoisett and Marion. Maintaining and improving water quality in the Bay is critical to preserving these activities and is therefore a vital issue in the communities that surround it.

Water quality in the Bay starts beyond the coastal shoreline, in the greater upland watershed area that contributes to Buzzards Bay. A watershed is an area of land where all sources of water, including streams, rivers, groundwater, and rain, drain to a common water body. The Buzzards Bay watershed is 432 square miles in size - twice the size of the Bay itself. All of Dartmouth's land area is located within the Buzzards Bay Watershed. Most of the communities on the northern shore of Buzzards Bay (that is, those communities exclusive of the Elizabeth Islands) generally constitute the watershed limits of the Bay and therefore tend to control the freshwater resources that feed the area's rivers and aquifers.

⁷ MassGIS municipal boundary files, 4/27/22.

Map 1. Dartmouth Regional Context



Negative impacts to water resources in one area of a watershed can have far-reaching effects. Ground and surface water movements can transport pollutants and excessive nutrients far from the original source. In Dartmouth and surrounding communities, the Paskamensett-Slocum River system, the Shingle Island-Copicut River system, the Buttonwood Brook River system, and the coves and waterbodies to which they lead, suffer from varying degrees of water quality degradation related to residential, agricultural, and infrastructure-related pollutants. Dartmouth cooperates with other coastal communities in the area, and with non-profits such as the Buzzards Bay Coalition (BBC), to address pollution issues as they affect the Bay.

Regional Service Interdependencies

Historically, Dartmouth depended on New Bedford for a part of its water supply. Today, Dartmouth is still connected to the New Bedford water supply system, obtaining water during high-usage summer months when local sources must be supplemented. On the other hand, Dartmouth supplies the City of Fall River with some of its water via the Copicut Reservoir, located in the northern portion of the town. As a region, the cities and towns of the Buzzards Bay area are interdependent with one another for freshwater resources.

In addition to water, Dartmouth participates in regional service provision through the Massachusetts Community Electricity Aggregation program, which is a bulk electricity-purchasing program launched in 2016 which offers an alternative to utility provided service rates. This program generally creates cost savings for the communities involved. The price rate of electricity for Dartmouth is set by the CEA every three to six months.⁸

State police officers in the North Dartmouth State Police Barracks make regional patrols from this base, covering parts of Fall River and Route 195 from Mattapoisett to the Rhode Island state line.

Regional Green Infrastructure Network

Dartmouth's open space and recreation lands are situated within a greater regional context of open space and recreation facilities. More broadly, beyond what has already been put to use for recreation or preserved for conservation, Dartmouth lands are part of the larger interconnected regional **Green Infrastructure** Network. In this context, the Conservation Fund's definition of **Green Infrastructure** is:

"A strategically planned and managed network of wilderness, parks, greenways, conservation easements, and working lands with conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life for America's communities and people."⁹

⁸ Group of 25 Community Electricity Aggregation Programs. MASS CEA. Accessed: <https://masscea.com/>, 7/7/22.

⁹ Mark Benedict and Ed McMahon (2006), Conservation Fund, as quoted by David C. Rouse and Ignacio F. Bunster-Ossa (2013), Green Infrastructure: A Landscape Approach, American Planning Association, Planning Advisory Service Report Number 571, p. 10.

The “Green Infrastructure” approach emphasizes the benefits that a community draws from its natural and semi-natural spaces and supports action to protect and enhance the ability of natural systems to function. Ecosystem services - the benefits and services that natural processes provide to people - are a related concept. Ecosystem services can be divided into four categories:

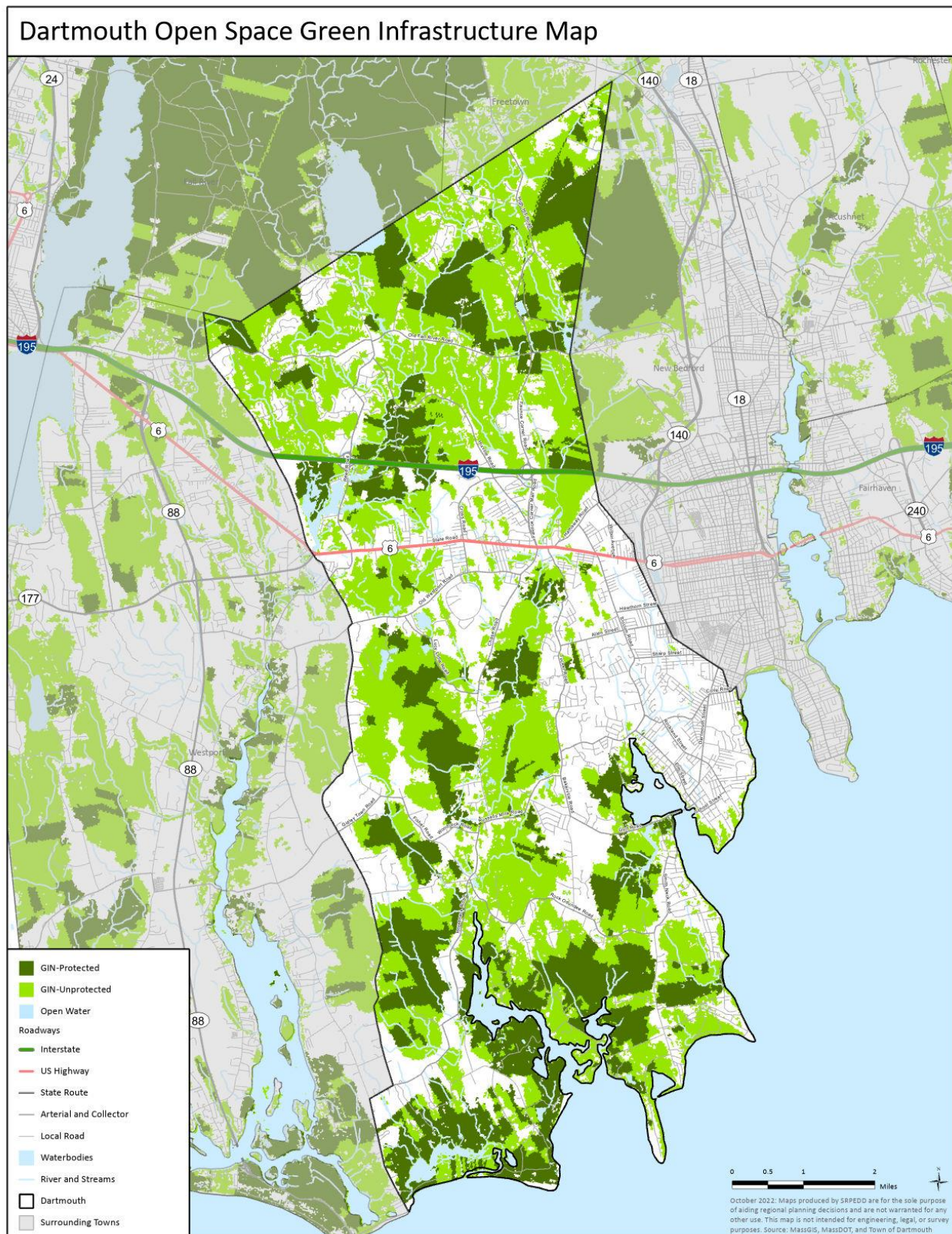
1. *Regulating Services* - filtering air and water, sequestering carbon, absorbing floodwaters, moderating micro-climates, aquifer recharge.
2. *Provisioning Services* - food and fiber production, drinking water.
3. *Supporting Services* - sheltering and allowing for the movement of wildlife, nutrient cycling, crop pollination.
4. *Cultural Services* - physical activity and recreation, mobility, cultural identity, spiritual inspiration, community cohesion.¹⁰

Consider a stream corridor, for example. Protecting and restoring forested areas along the stream provides habitat for both fish and wildlife and accommodates their movement through the landscape (ecological resilience), while also reducing flood risks to downstream communities (community resilience). Consistently improving and strengthening local open space in concert with adjacent communities and the regional Green Infrastructure Network is one way to protect a functioning landscape that promotes the health and well-being of people and ecosystems at all scales. An open space plan that takes a regional Green Infrastructure approach emphasizes the environmental, economic, and social benefits provided by a town's open space and recreational resource network.

Massachusetts cities and towns are fortunate to have tools that enable communities to incorporate the Green Infrastructure approach into open space preservation. The Manomet and Mass Audubon Green Infrastructure Network (GIN) Map identifies lands that provide climate change resilience, serve a critical landscape function, and/or are vulnerable to current or future flooding and sea level rise. Communities can reference the GIN Map to identify significant Green Infrastructure land assets that are still unprotected, undeveloped, or both. Dartmouth's GIN extent is shown in Map 2.

¹⁰ David C. Rouse and Ignacio F. Bunster-Ossa (2013), *Green Infrastructure: A Landscape Approach*, American Planning Association, Planning Advisory Service Report Number 571, p.12.

Map 2. Green Infrastructure Network in Dartmouth



Regional Climate Change Context

Maintaining a regional perspective while planning for open space, recreation, and conservation intensifies and expands the benefits that accrue from these community assets. While many land use decisions are made on a local or site-by-site basis, most natural processes, climate conditions, and movements of plants and animals transcend jurisdictions over large contiguous areas shaped by topography and geology. Environmental issues such as pollution, changes in groundwater tables, and rising temperatures require a regional - even national and global - response, with every local unit acknowledging the role that their lands and policies play in the larger ecological context. Climate change is one such issue.

Climate change is a complex topic. We encourage anyone unfamiliar with the basics or with curiosity about the evidence that shows human-induced climate change is occurring, how serious it is for the Buzzards Bay region, and how the ultimate outcome is dependent on choices we make today to see **Appendix B: Climate Change Basics**.

Our modern human civilization developed during a time of relative stability in earth's geological history. This stability enabled us to design buildings, communities, infrastructure – all the cornerstones of modern life – with confidence that in planning these structures, we knew what to expect. The ability to draw on prior conditions to inform what we anticipate future conditions to be is referred to as a 'stationarity.' For example, engineers could design a road to withstand a weather event called a "1% annual chance" or "hundred-year" storm, which represented the intense weather conditions that would be expected to occur just once in a one-hundred-year period. Stationarity allowed us to prepare for the future with the knowledge of prior conditions and static probabilities.

Climate change is shifting what is typical of our region's temperature and precipitation beyond the boundaries of predictability. Presently occurring climate shifts and the anticipated new conditions toward which we are moving with additional Greenhouse Gas (GHG) emissions will continue to move the needle, representing a paradigm shift into 'non-stationarity;' a condition in which we can no longer rely on historical records to precisely predict future outcomes. We are planning for our communities today against a future that is a moving target. What was previously classified as the 100-year storm event may become a more likely and frequent occurrence; it may become the twenty- or ten-year storm event. Everything from emergency response plans, to siting community facilities, to designing roadways to determining flood insurance rates will likely have to evolve continually and quickly.

The uncertainty associated with non-stationarity means that communities must take the long view and build some of this uncertainty into their decision-making structures with strategies that are flexible and nimble, that can **adapt** to and **mitigate** the effects of climate change.

Mitigation refers to reducing the overall amount of climate change caused by human released GHG, requiring a reduction in the amount of GHG an individual, municipality, or country emits, or the establishment of ways to draw GHG out of the atmosphere. By mitigating GHG emissions, we can help slow down the rates of human-caused climate change, lengthen stationarity, and reduce the uncertainty caused by climate change. **Adaptation** refers to implementing changes in our built or natural environment to reduce our societal and individual vulnerability to the

negative impacts of climate change. Adaptation strategies can cut across all sectors of life, including our behaviors, building techniques, and where we live.

Open space planning can assist with both climate change adaptation and mitigation. Mitigation in an open space planning context can involve preserving open spaces, trees, and wetlands as carbon dioxide sinks, or areas that draw GHG out of the atmosphere. In fact, wetlands are even more productive carbon sinks than forests.¹¹ Open space and recreation planning that protects these areas is a component of local climate change mitigation.

Examples of adaptation can include preserving critical areas like floodplains and aquifers, so that they are able to absorb rainfall and storm water runoff, thereby minimizing the impact of extreme storm events on our neighborhoods, downtowns and greater built environment. Adaptation could also refer to planting more trees so that they cool down neighborhoods and protect people from rising temperatures. We can expand our traditional definition of open space, to also include small but key patches of Green Infrastructure that perform critical functions, such as roadside bioswales that collect stormwater runoff. We can expand recreation offerings to activities that provide educational programming on household resilience and connect residents with the landscape to further a community stewardship ethic.

Adaptation efforts are flexible and can incorporate changes in both our environment and our behavior; using conservation subdivisions in combination with planned migration away from the coasts provides the dual benefits of protecting open space while minimizing community vulnerability to extreme storms. Protecting our open space now allows us to hedge against an uncertain future and tap into the multitude of benefits of adaptation and mitigation. In many scenarios, preserving Dartmouth's open space and recreation lands overlaps with protecting Dartmouth's Green Infrastructure Network, further overlapping climate resilience goals, preserving nature's ability to provide these mitigation and adaptation services.

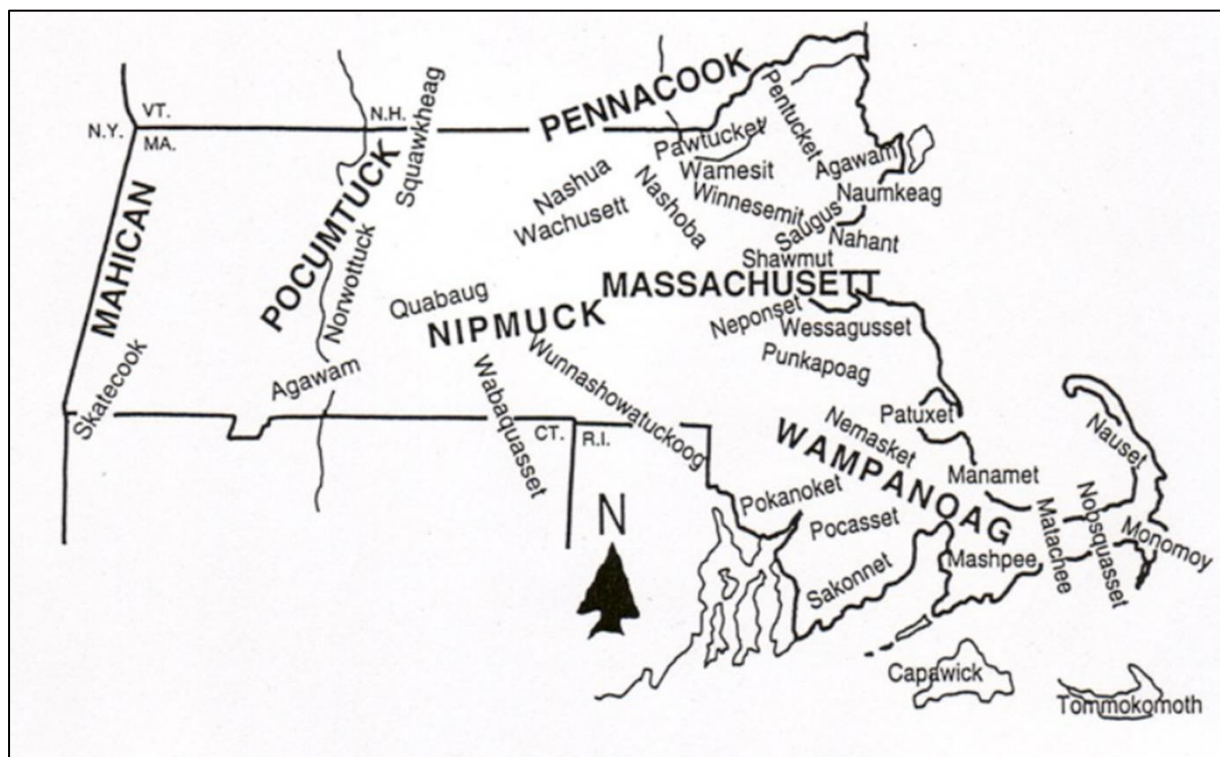
B. History of the Dartmouth Community

Land Acknowledgement

The Town of Dartmouth is part of the unceded tribal lands of several Indigenous Tribes / First People's Nations. We cannot plan for the future of the land without first reflecting on the past, and we cannot expect to be good stewards without recognizing and learning from the stewards who have lived on this land for millennia. It is important that those who live, work and play in Dartmouth today acknowledge the complicated history of colonialism as we continue to develop an understanding of the harmful legacy that has enabled life as we know it today.

¹¹ Massachusetts Healthy Soils Action Plan public workshop materials.

Figure 1. Algonkian Tribes of Massachusetts¹²



The Colonial Period

The settlement of the Town of Dartmouth does not follow traditional colonial patterns. Most New England communities, especially those governed by the Plymouth Colony, started as planned and controlled communities. Land was purchased or otherwise obtained by and for the settlers, who built their houses close together around village greens and meeting houses.

As of 1787, Dartmouth was part of a much larger area referred to as Old Dartmouth. The modern communities of Westport, New Bedford, Fairhaven, Acushnet and Dartmouth were once all part of Old Dartmouth which extended to over 100 square miles. The topography of the land contributed to the diffusion of people around rivers and inlets along Buzzards Bay thereby hindering any town center with a village green, church, or townhouse to build up.

In Old Dartmouth, each of the original thirty-four European proprietors had a share of land that consisted of at least 2,000 acres, although they did not reside in the area. Only about one-third of the purchasers settled on their newly acquired land. Those who did move to Old Dartmouth settled in widely scattered areas along the coast or along the rivers. The first of these settlers came to the region around 1660. As proprietors sold off land for profit, several religious dissidents - Baptists and Quakers - were attracted to Old Dartmouth, an undeveloped region where they could practice their beliefs more freely because there was no strong church control in the

¹² Available Online at <http://www.greenfutures.org/?content=1dlmvMa2OssSaDJK>, accessed 10/14/22.

community. Despite the attractions of the region to some groups, by 1675 the time of King Phillip's War, only thirty-seven dwellings were left in Old Dartmouth.

After King Phillip's War, the regional government at Plymouth recommended that the residents of Old Dartmouth rebuild closer to each other. However, the residents, who were mostly farmers, ignored this recommendation. Instead, small, scattered settlements such as Russells Mills, Smith Mills, Fairhaven and Bedford Village (later New Bedford) develop. By 1700, the area's agricultural economy was supplemented by sawmills, gristmills, fulling mills and an ironworks, using wind as the power source. Most small industries were located along the Paskamansett and Slocum Rivers. Padanaram and Russells Mills were involved in shipbuilding and maritime trades. The salt industry was established in the area by 1720. Salter's Point, Ricketson's Point, and Apponegansett were sites of saltworks at various times.

The growing Whaling industry was centered in the small village along the Acushnet River known as Bedford Village. Many Dartmouth residents in the eighteenth and nineteenth century played a significant role in the history of American whaling. In the north end of Dartmouth, the community of Hixville began to grow around the Church founded by the Reverend Daniel Hix and later this village became a stage stop on the route from New Bedford to Fall River.

The Twentieth and Twenty-First Centuries

By 1900, Dartmouth felt the impact of industrialization in New Bedford. The agricultural economic base of the town began to give way to summer residences for people who lived in New Bedford. The 'summer resident' phenomenon began with the establishment of summer communities such as Nonquitt, BayView, Salter's Point, and Mishaum. At about this time, many Portuguese immigrants began to buy the established farms. At the beginning of the twentieth century, people were moving to Dartmouth to farm and because it was a 'nice place to live.'

Following World War II, Dartmouth entered its greatest period of change and growth, whereby it evolved into a 'bedroom' community for New Bedford. It was during this period that old family farms became housing developments while rising land values and decreasing farm prices put pressure on farmers and encouraged them to sell their land. Vestiges of the early villages remain in Hixville, Russell's Mills and Padanaram. Other areas like Smith Mills and Bliss Corner saw a more complete turn-over and modernization. Areas between the original villages became more densely settled along winding country roads that followed Native American trails. Paths that once saw little traffic gave way to wider roads for automobiles and traffic lights, which marked the town of Dartmouth's transformation into a suburban community.

In the late 20th Century, several environmental groups, notably the Dartmouth Natural Resources Trust (1971) and the Lloyd Center for Environmental Studies (1980) were established. These groups were active in protecting and advocating for Dartmouth's natural resources and environmental assets and helped to secure open space throughout the town. The positive impacts of these organizations have continued to this day, joined by additional environmental stewardship organizations.

Today, many town residents know the value of preserving fast-disappearing open space that

was once taken for granted as a defining community characteristic. As shown on town materials, Dartmouth has seven different categories of protected open space throughout the town, including protected municipal lands, land trust protections, and various types of use restrictions.¹³ The town currently has an Open Space Residential Development (OSRD) bylaw that was amended most recently in 2020 that allows for “a residential development in which the buildings or lots are clustered together with reduced lot area, frontage, setback and lot coverage requirements.” However, given Dartmouth’s preferences for limited development, even OSRD has been met with some concerns about the impact that this style of development would have on the town’s natural forested spaces, particularly with respect to stormwater runoff.¹⁴ Balancing the town’s desire to retain its traditional rural and agricultural history with the development needs of a thriving modern town is a continuous challenge.

C. Population Characteristics

The seeds of Dartmouth’s transformation from a rural community to a suburb can be traced to the end of World War II when President Eisenhower, a former general, instituted the interstate highway system, connecting cities to aid in the movement of troops and people.

An unanticipated consequence of the establishment of highways was the overwhelming movement of people out of cities and into suburbs, supported by the GI Bill, which assisted returning military service members in the purchase of new houses through mortgages, car travel over public transit, electricity, and other new infrastructure. The move to Dartmouth during this period was, for many people, an embodiment of the American Dream.

Population Growth and Change through Time

Migration from the city to the suburbs is reflected in the fact that Dartmouth’s population rose while New Bedford’s population decreased between 1960 and 2010. During this period, the populations of the communities in the southeast region also increased, as residents from other parts of the state were drawn to a healthy economy, a high quality of life, and a growing university in the area, which contrasted to the high costs of living and working in the metropolitan area of Boston.

The 2020 US Decennial Census marks an interesting reversal of these historical trends. For the first time, Dartmouth is recorded as having lost 249 persons from its overall population between 2010 and 2020. Meanwhile, the populations of surrounding cities are on the rise. In fact, Dartmouth was the only community in the SRPEDD region that was recorded as having lost population from 2010 to 2020. Dartmouth is an interesting and complicated case – the status of UMass Dartmouth and its student population, the COVID-19 pandemic and potential undercounting in 2020 may all contribute to an anomalous 2020 count. Dartmouth and all other South Coast communities

¹³ Town of Dartmouth Open Space and Protected Lands Categorized by Type of Protection. Accessed: https://www.town.dartmouth.ma.us/sites/g/files/vyhlif466/f/uploads/open_space_protected_land_categorized_by_type_of_protection_november_2014_24_x_51_inches_april_2019.pdf, 7/7/22.

¹⁴ <https://www.southcoasttoday.com/news/20190517/neighbors-unsure-of-two-proposed-subdivisions-in-dartmouth>

are looking to the future and anticipating that the activation of South Coast Rail commuter rail stations in 2023 will ultimately add population to the region as it becomes an even more commutable extension of metro Boston.

Table 2. Area Population Growth, 1960-2020

	1960	1970	1980	1990	2000	2010	2020
Dartmouth	14,607	18,800	23,966	27,244	30,666	34,032	33,783
Acushnet	5,755	7,767	8,704	9,554	10,161	10,303	10,559
Fall River	99,942	96,898	92,574	92,703	91,938	88,857	94,000
Freetown	3,039	4,270	7,058	8,522	8,472	8,870	9,206
Marion	2,880	3,406	3,932	4,496	5,123	4,907	5,347
Mattapoisett	3,117	4,500	5,597	5,850	6,268	6,045	6,508
New Bedford	102,477	101,777	98,478	99,922	93,768	95,072	101,079
Westport	6,641	9,791	13,763	13,852	14,183	15,532	16,339
SRPEDD Region	426,461	478,728	524,389	563,130	597,294	616,670	652,375

Source: U.S. Census Bureau, Decennial Census

Table 2 shows the decadal population of Dartmouth and surrounding communities since 1960. Dartmouth's population experienced a steady increase from 1960 to 2010, while some neighboring communities did not share this pattern of growth. Some lost residents over this same period, while other towns experienced only moderate increases in population. The regional population increased by over 225,000 people between 1960 and 2020, or roughly 37,500 additional people each decade.

Population Structure – Race, Age and Sex

The racial and ethnic composition of Dartmouth's population from 1990 to 2020 is presented in Table 3. The data depict a predominantly White population that is becoming slowly but consistently more racially and ethnically diverse over time.

We note that the 2020 Census did change questions related to race, allowing for greater granularity and accuracy in how individuals self-identify. Thus, there are additional reporting categories starting in the year 2020 as reflected in the table. From 1990 to 2010, over 90% of Dartmouth's population identified as White. As of the 2020 census, this figure is now at 85.6% of the population reporting their race as White alone, approaching Bristol County's figure of 78.7%. In 2020, African American individuals, Asian individuals, Hispanic individuals, and those with a racial identity of two or more races make up a larger proportion of Dartmouth's population than in any previous decade.

Table 3. Race and Ethnicity: Dartmouth, 1990-2020

Race/Ethnicity	1990		2000		2010		2020	
One Race Reported	No.	Perc.	No.	Perc.	No.	Perc.	No.	Perc.
White	26,434	97.0%	27,836	90.8%	31,323	92.0%	28,909	85.6%
Black or African American	197	0.7%	325	1.1%	869	2.6%	1,059	3.1%
American Indian and Alaskan Native	24	0.1%	60	0.2%	61	0.2%	47	0.1%
Asian	223	0.8%	363	1.2%	651	1.9%	853	2.5%
Hawaiian/Pacific Islander	5	0.0%	10	0.0%	6	0.0%	1	0.0%
Other	361	1.3%	2,072	6.8%	1,122	3.3%	893	2.6%
Two Races Reported							1,828	5.4%
Three Races Reported							179	0.5%
Four or More Races Reported							14	0.0%
Total	27,244	100%	30,666	100%	34,032	100%	33,783	100%
Hispanic	279	1.0%	461	1.5%	805	2.4%	1,360	4.0%

Source: U.S. Census Bureau, 1990, 2000, 2010, and 2020 Decennial Census Counts

Figure 2. Population Age and Sex Distribution 2000-2020

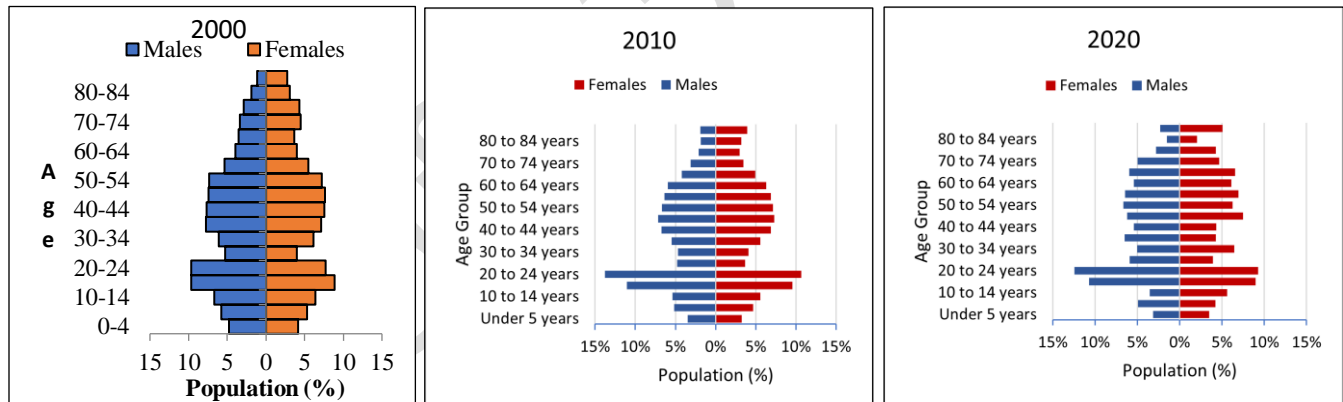


Figure 2 represents Dartmouth's population composition by age and sex from 2000 to 2020 in the form of a population pyramid. While the overall shape is similar decade on decade, there are some subtle differences. Between 2000 and 2010, there is a notable increase in the number of 20–24-year old's, which may reflect more young adults returning at home after college. We can observe a small decrease in baby and toddler aged children. On the other end of the spectrum, there is a notable and continual increase of those in the senior age categories. Between 2010 and 2020 in particular, there is a barreling-out of the pyramid – again reflective of this increase in the senior population relative to those young- and middle-aged households.

Table 4 aggregates these figures into just three population groupings: youth (under 25 years old) currently within the town's school system and neighboring colleges, the working-age population

responsible for supporting the town's economy, and older adults and retirees. Each of these population groupings may have specific recreational needs.

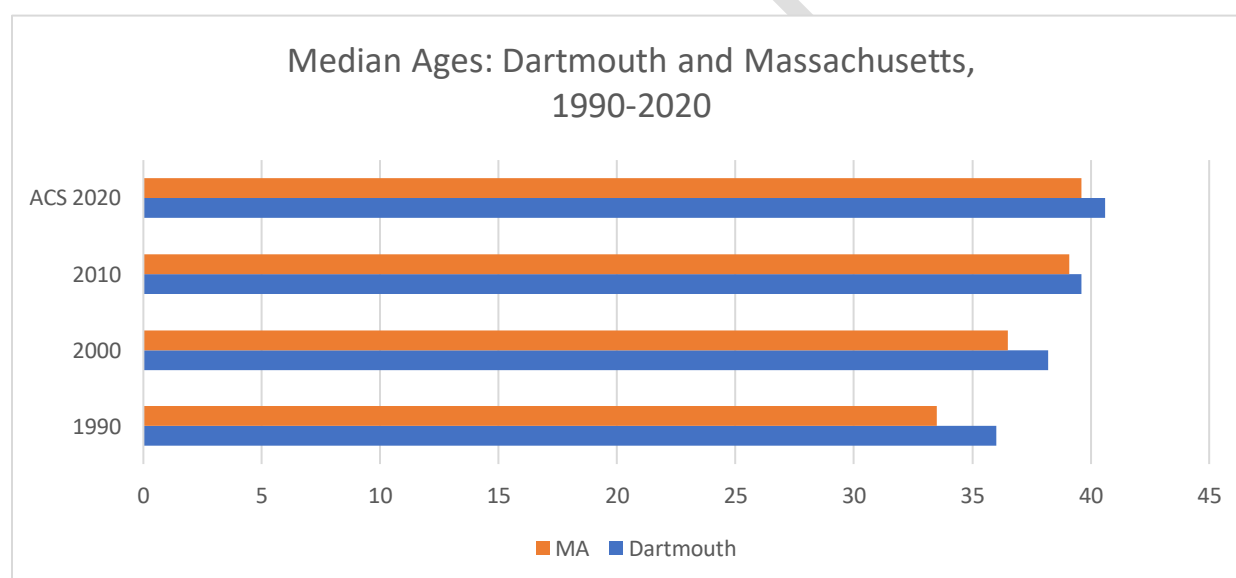
Table 4. Major Population Age Groups: Dartmouth, 1990-2020

Major Population Age Groups	1990	2000	2010	ACS 2020
% Below 25 Years	36.9	34.5	36.3	33.1
% 20 to 64 Years	47.4	50	47.8	57.5
% 65 Years and Older	15.7	15.5	15.8	20.2

Over the last 10 years Dartmouth has lost school age children population (5-years old to 19 years old) and has gained population 65 years old and older. The working age population has cycled up and down.

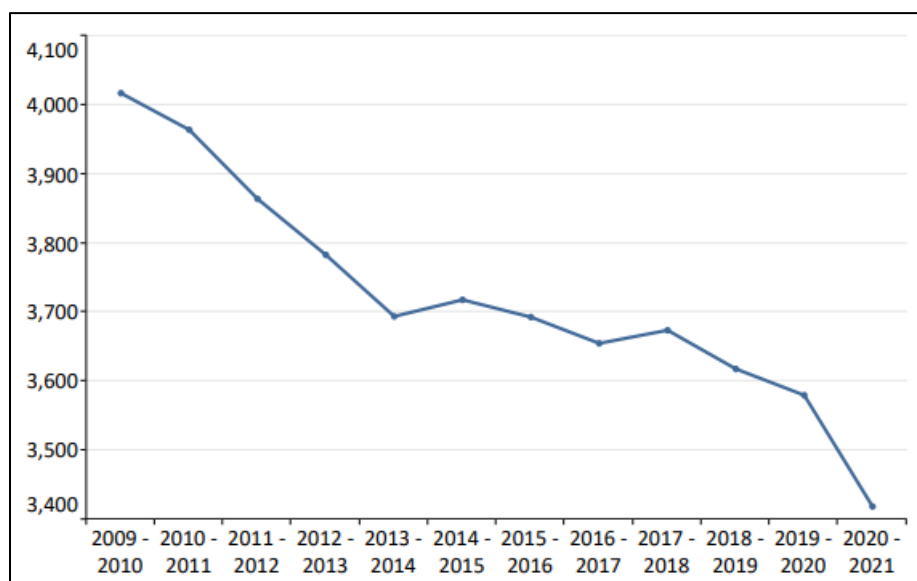
These findings are echoed in the change in Dartmouth's median age, which has increased slightly each decade, from 36 to 40.6 (Figure 3). The town continues to have a slightly older population than the State of Massachusetts overall.

Figure 3. Median Ages: Dartmouth and Massachusetts, 1990-2020



Finally, Figure 4 shows a consistent overall decline in school enrollments in recent years. Unless there are major population shifts, this trend is likely to continue due to less households having children and an aging population. It may also reflect a housing affordability gap that is pricing young families with children out of the local housing market, and for recent years, the effects of the COVID-19 pandemic.

Figure 4. Dartmouth School Enrollments, 2009-2021



Source: Massachusetts Department of Elementary & Secondary Education

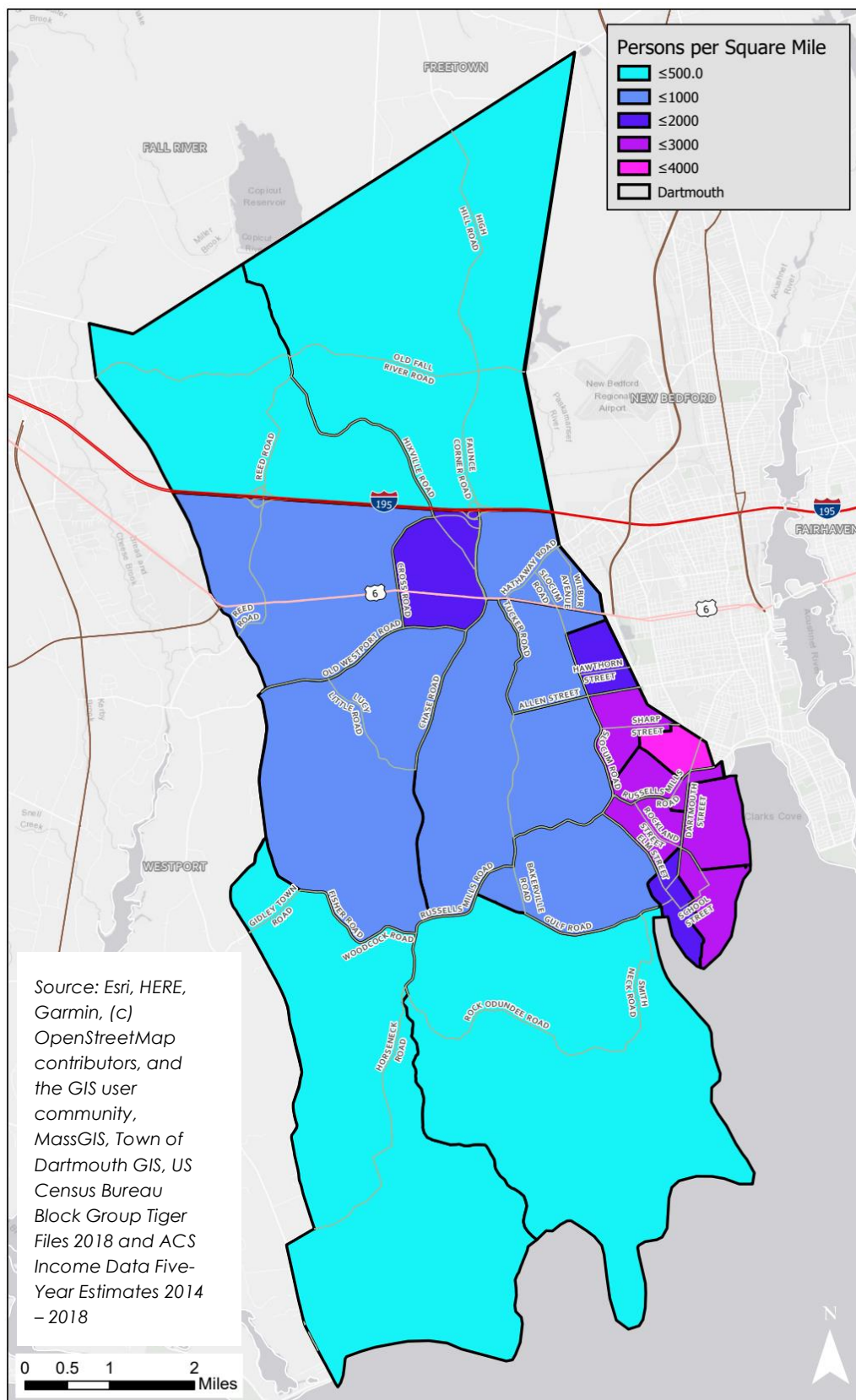
In the area of open space and recreation, the town can respond to these demographic changes by providing opportunities for the differing recreational needs of each age cohort. In an ageing community, demand for new recreational facilities may eventually shift from active recreation, such as soccer and baseball fields, to somewhat passive, more individualized activities such as nature hiking and fitness trails. Some seniors are well-served by passive recreation options like trail walking or waterfront viewing. Senior-friendly recreation facilities can also include ample benches for seating, and overhead shade from the sun. Some seniors may also need transportation assistance getting to and from recreation spots.

Population Density

There are clear population density patterns in Dartmouth. Large swaths of the southern and northern bookends of town contain less than 500 persons per square mile. In total, these areas contained an estimated 8,859 people (2018 ACS figures). With a total town population of 34,204 this large area of town, shown in light blue in Map 3, is occupied by just over 25% of the town's population.

The remaining 75% of Dartmouth's population is concentrated in its core, between Interstate 195 to the north and Fisher / Gulf Roads / Padanaram Village to the south. Population density is highest in the Bliss Corner neighborhood. South Dartmouth in general is also a relatively higher density area. The most moderate-density locations are located around Faunce Corner Road, Padanaram Village, and the town's civic center along Allen / Slocum Roads.

Map 3. Population Density by Block Group, 2018



Environmental Justice Populations

In Massachusetts, Environmental Justice (EJ) neighborhoods (delineated by census block groups) are defined as meeting one or more of the following criteria:

- The annual median household income is not more than 65% of the statewide annual median household income;
- Minorities comprise 40% or more of the population OR 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
- 25% or more of households lack English language proficiency.

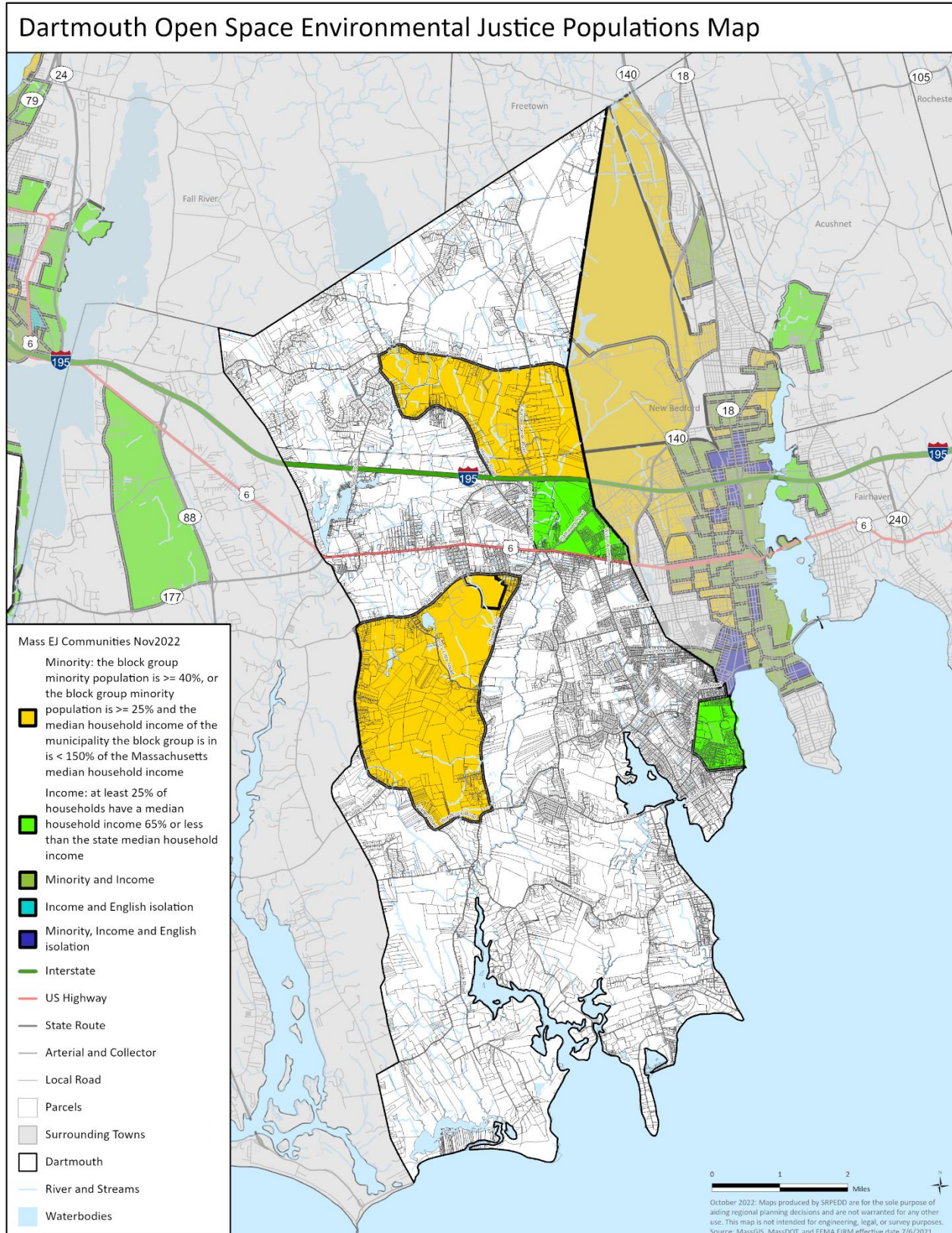
Per 2010 Census analysis and state definitions, 3.8% of Dartmouth's population lived within one designated Environmental Justice (EJ) population area in South Dartmouth. This portion of town was designated due to the median household income for those homes being 65% or less of the statewide median.

Since the state updated its EJ Policy and classifications in November 2022, there are five EJ areas in Dartmouth that include approximately 8,385 people, or 25% of the town's population (Map 4). Two of these block groups have median household incomes that fall below 65% of the statewide median income, and three block groups have a high minority population comprising 25% or more of the block group's total population in a municipality where the annual median household income does not exceed 150% of the statewide annual median household income, as shown in Table 5.

Table 5. Block Groups Meeting Environmental Justice Criteria: Dartmouth, November 2022

Block Group	Qualifying Criteria	% Minority Pop	Median Household Income (% of State Median HH Income)
Block Group 1, Census Tract 6531.01	Income	-	53%
Block Group 2, Census Tract 6531.02	Minority	33%	-
Block Group 2, Census Tract 6533.01	Income	-	41%
Block Group 1, Census Tract 9855	Minority	28%	-
Block Group 2, Census Tract 9855	Minority	50%	

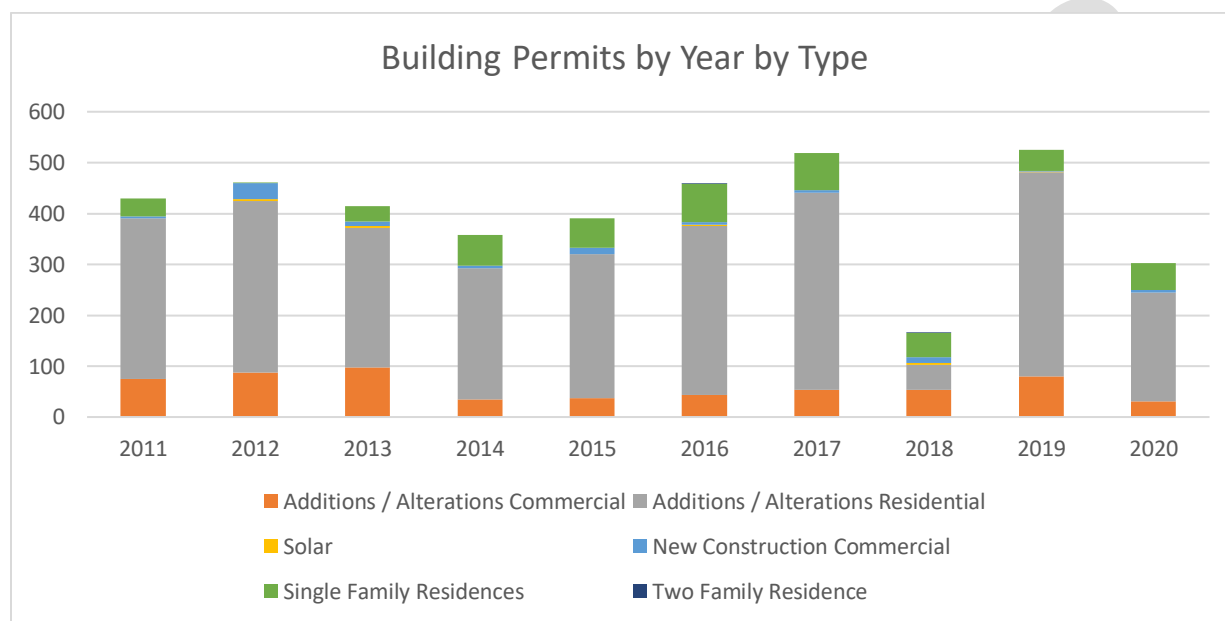
Map 4. Environmental Justice Populations



Housing Characteristics

A town's housing stock and supply is largely determined by the amount of space and land area the municipality has within its boundaries for such use, and the building activity driven by housing market demand. Figure 5 shows the number of building permits issued in Dartmouth from 2011 to 2020.

Figure 5. Building Permits Issued in Dartmouth, 2011 to 2020



Source: Town of Dartmouth

The total number of building permits issued in Dartmouth has fluctuated from 2011 to 2020. However, the numbers indicate that there has been consistent significant interest and building activity in Dartmouth. The lowest year on record, 2018, still saw the issuance of 167 permits, 61 of which were for new construction. It is notable that from 2011 to 2020, the town recorded 477 permits for new single-family residences, and average of 48 per year. Most permits recorded are for additions and alterations to existing properties.

Building in town is occurring in the context of changes to the composition of Dartmouth's households. With the average household size decreasing, more single-person households, and more of these single-person households occupied by those over the age of 65%, a relatively stable overall population total in Dartmouth could still see a housing market that has demand for additional units for this greater number of smaller households.

Another determinant of community composition is the cost of housing. Data on housing prices as of 2018 and 2022 in Dartmouth are presented in Table 6. The average asking price of homes in a 2018 sample from Zillow.com was \$854,154 and the median asking price was \$549,900, indicating that a set of very expensive homes is slightly skewing the average. In the 2022 sample however, both figures were elevated, with an average asking price of \$1,447,940 and a median asking price of \$662,450.

Table 6. Real Estate Listings – Single Family Homes in Dartmouth, July 2018 and Sept 2022

Price Range	Number Listings 2018	Percent Listings 2018	Number Listings 2022	Percent Listings 2022
Under \$157,000	1	1.0%	0	0.0%
\$157,000 - \$199,999	1	1.0%	0	0.0%
\$200,000 - \$249,999	4	3.8%	0	0.0%
\$250,000 - \$299,999	6	5.8%	0	0.0%
\$300,000 - \$349,999	6	5.8%	1	2.5%
\$350,000 - \$399,999	7	6.7%	4	10%
\$400,000 - \$449,000	8	7.7%	2	5%
\$450,000 - \$499,999	13	12.5%	3	7.5%
\$500,000 - \$549,999	6	5.8%	3	7.5%
\$550,000 or more	52	50.0%	27	67.5%
Total	104	100.0%	40	100.0%
Average Asking Price	\$854,154		\$1,447,940	
Median Asking Price	\$549,900		\$662,450	
Source: Zillow.com; July 6, 2018 & September 6, 2022				

In 2022, the lowest single-family home listed for \$335,000 and the highest priced property listed for \$12,950,000. There were no properties priced below \$300,000. The 10 homes for sale at less than \$500,000, save one, were all older homes (over 25 years old) with less than 1,900 square feet of floor area. At the time of the analysis, there were 19 properties being sold with list prices between \$500,000 and \$1,000,000. These are not particularly new homes, but they are larger, with all but two of these properties at over 3,000 square feet in size. There was one “condo” unit for sale, at a price of \$699,000.

At these prices, many households risk experiencing housing cost burdens. The generally accepted threshold for a highly cost-burdened household is one that is spending more than 30% of its income on housing costs such as rent or mortgage payments. At this level of spending, other expenses for essentials such as food, clothing and medical needs may not be being met as household spending is concentrated on housing costs.

To help offset these issues, the State of Massachusetts's 40B program helps to ensure a baseline supply of housing that is affordable to low- and moderate-income households. As of 2022, Dartmouth has made progress in providing affordable units, with 995 existing as of June 15, 2022; yet a gap still exists in affordable units as mandated by the state's Chapter 40B Program. As of June 2022, Dartmouth needs 183 additional affordable housing units to meet the 10% requirement (currently at 8.45%).

The level of household income that falls within the low- and moderate-income ranges is often surprising. Many of the essential workers needed to make our communities function have incomes in these ranges. The Massachusetts 40B program specifies certain income criteria that qualify families for the rental or ownership of a 40B affordable unit, most of which carry some form of subsidy or deed restriction limiting their sale price. The income ranges are based on how closely a household approaches Area Median Income (AMI) as defined by the U.S Department of Housing and Urban Development. In 2020, Dartmouth's AMI is \$74,300 for a family of four.

Key findings from the town's 2018 Housing Production Plan (HPP), include:

- **Shifting Population:** The housing needs assessment revealed that the town of Dartmouth is losing its younger adult and middle-aged population while the population approaching retirement and the senior population rose significantly. Figures indicate a trending loss of families with school-aged children and a trending gain in retirement-aged adults.
- **Diversity in Housing Types:** Given the changing demographics of the town (i.e., an increase in non-family households and householders living alone), there is a need for more options in housing supply. Householders over 65, young adults living along, and young professional couples often seek smaller single-family homes, townhouses or apartments instead of large-lot, high square-footage, single-family housing.
- **Limited Supply of Rental Units:** Analysis showed that while 22% of housing units are rental units, there remains a shortage for certain populations. Moreover, renters suffer housing cost burdens. Hence there is still a need for affordable rental units suitable for small households: singles of all ages, childless couples of all ages, and small households with children.
- **High Housing Costs:** Many households are experiencing housing cost burdens. They are paying more than 30% of their income on housing, an indication that food, medical needs, and other expenses may be being foregone to cover housing costs.

The HPP also identifies key challenges in developing affordable housing, including:

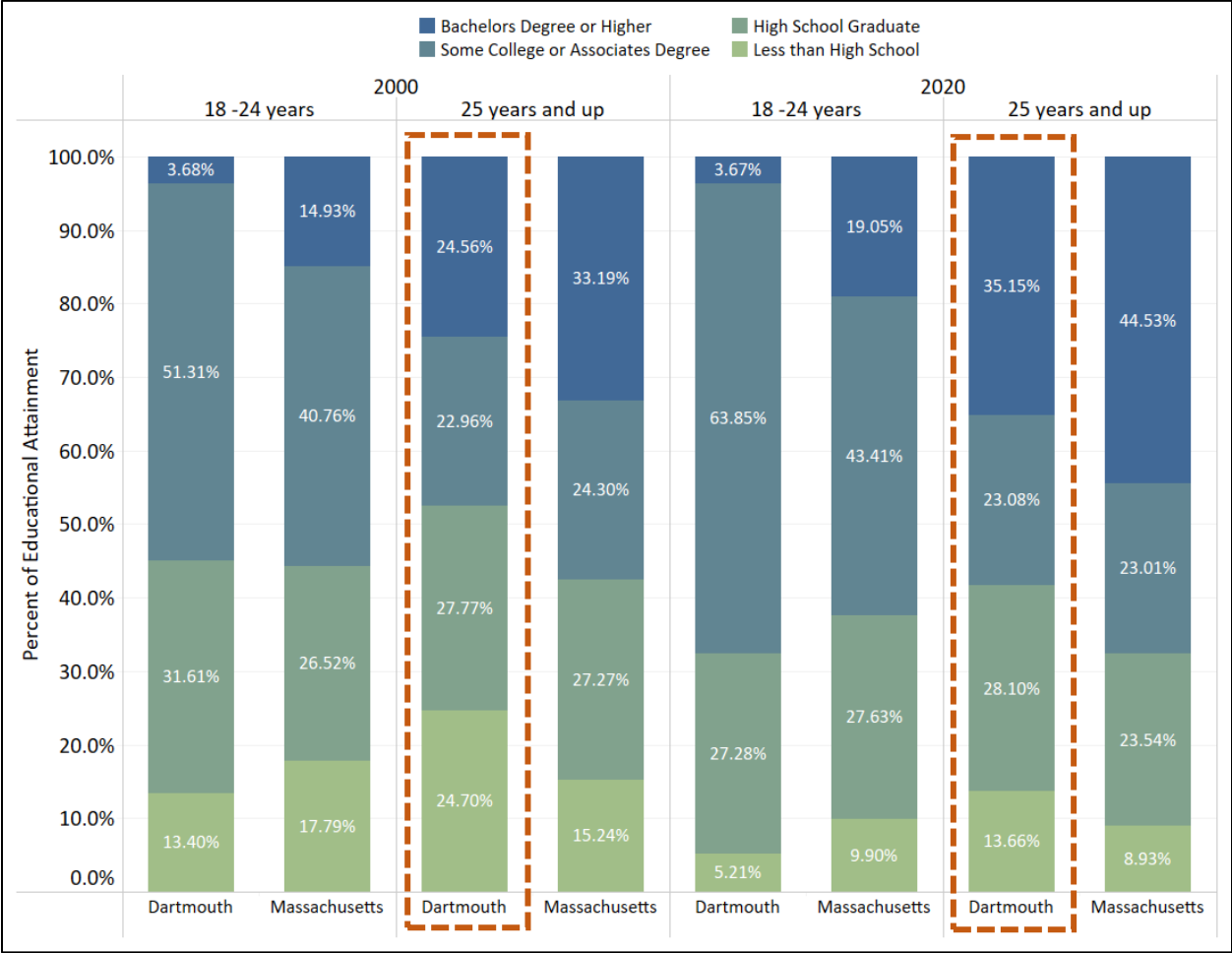
- **Land Costs:** Land and housing in prices over the last twenty-five years have vastly outpaced inflation. There is a limited amount of available land given large-lot zoning, extensive preservation that stems from a desire to preserve Dartmouth's rural and historic character for future generations, a desire for current and future Dartmouth residents to live in areas of the Town where rural and/or historic features have been preserved, and high demand for Dartmouth's desirable location.
- **Zoning:** The majority of developable land in Dartmouth is zoned single-family residential, which requires an 80,000 square feet (almost 2-acre) minimum lot size. Larger lot requirements result in more land-based expense, reducing the likelihood that houses built on these lots will be affordable to households with low- or moderate-incomes.
- **Transportation:** Dartmouth is an auto-dependent community; public transit service in Dartmouth is extremely limited. The Southeastern Regional Transit Authority provides service between Fall River and New Bedford via Route 6, Faunce Corner Road and the Bliss Corner neighborhood. Other portions of town are not accessible via public transit.
- **Infrastructure and Environmental Concerns:** Dartmouth has limited municipal water or sewer service in some parts of town, and developments must rely on septic systems. These septic systems must comply with Title V. Notwithstanding this compliance, there are concerns about nitrogen leaching from septic systems on wetlands, critical habitat, and waterbodies. The lack of sewer service, however, provides no other option and makes it cost prohibitive to develop denser housing in many areas of town as doing so would likely require the installation of a package treatment plant or other alternative.

Economic Characteristics

Education

Figure 6 presents the educational level distribution of the population of Dartmouth in 2000 and in 2020. The education level of Dartmouth's adult population generally increased between 2000 and 2020, as shown by the 10% increase in those with a bachelor's degree or higher. The proportion of the community with less than a high school level of education decreased by about the same magnitude over this period, from 25% to 14%.

Figure 6. Educational Attainment in Dartmouth



Source: U.S. Census Bureau 2010 Census and U.S. Census Bureau American Community Survey, 2016-2020

Income

Table 7 shows a comparison of income measures between the town and the state from 2000 to 2020. Dartmouth slightly exceeded state values for median household income and median family income since 2011, but the town has had a lower per capita income than the state.

Table 7. Income Levels: Dartmouth and Massachusetts 2000 - 2020

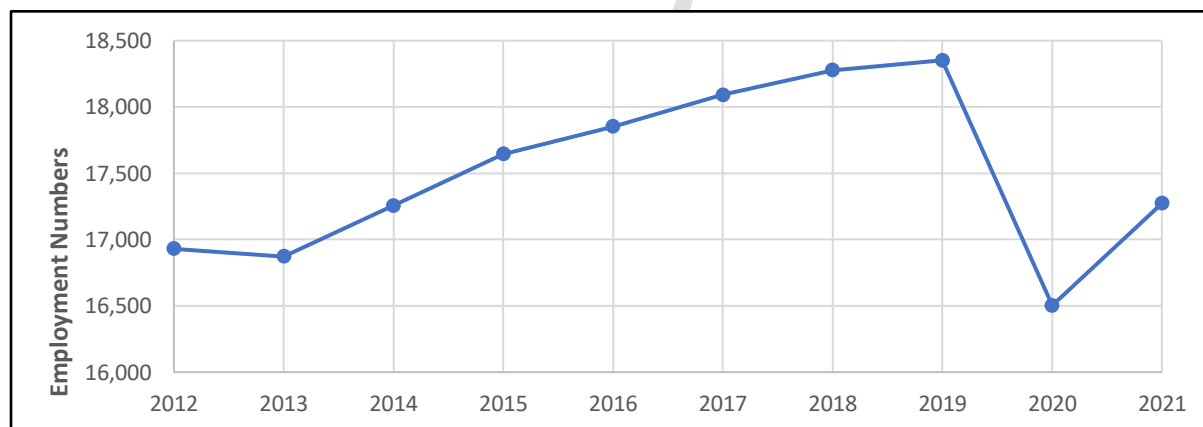
	2000		2011		2020	
	Dartmouth	MA	Dartmouth	MA	Dartmouth	MA
Median Household Income	\$50,742	\$50,502	\$73,007	\$65,981	\$85,783	\$84,385
Median Family Income	\$60,401	\$61,664	\$86,650	\$83,371	\$108,263	\$106,526
Per Capita Income	\$24,336	\$25,952	\$32,138	\$35,051	\$37,962	\$45,555

Source: U.S. Census Bureau, ACS

Employment and Unemployment

Employment and unemployment conditions in Dartmouth in recent years had been closely linked with the region's overall economic conditions. The total employment in Dartmouth from 2012 to 2021 is illustrated in Figure 7.

Figure 7. Total Employment in Dartmouth, 2012 - 2021

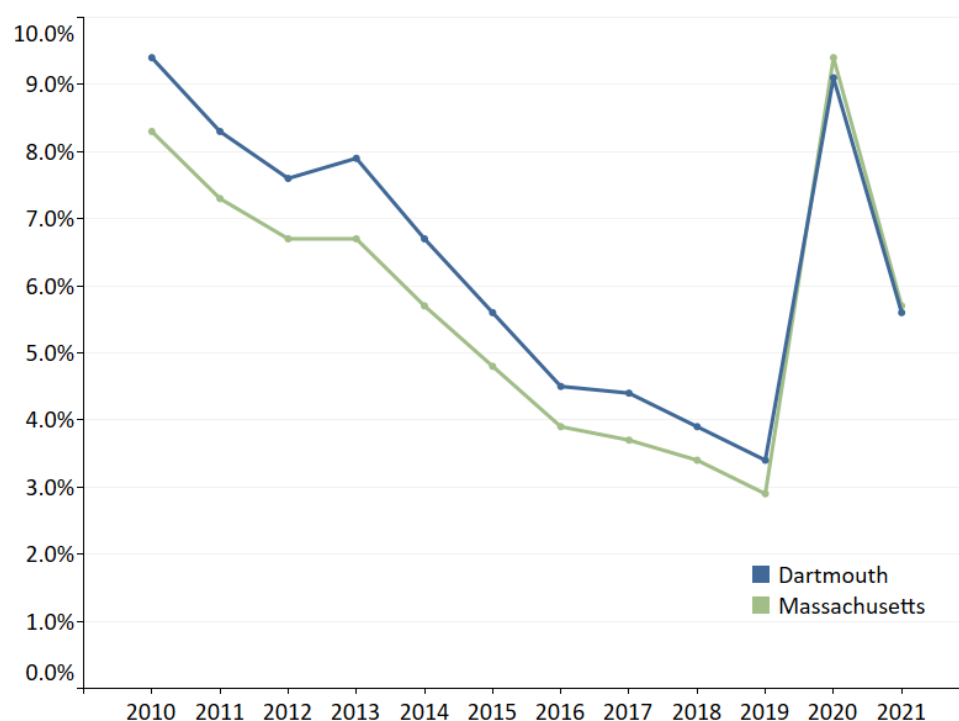


Source: MA EOWLD

As the data shows, total employment in Dartmouth was steadily growing from 2012 – 2019 but dropped significantly in 2020 due to the COVID-19 pandemic. As of 2021, there is a sharp upward trend toward economic recovery, with employment levels beginning to recover.

In Figure 8, the trend in unemployment rates from 2000 to 2019 in Dartmouth is juxtaposed with those of the state, with Dartmouth's rate trending slightly above that of Massachusetts.

Figure 8. Unemployment Rates Compared, 2010 - 2019



Source: MA Executive Office of Labor and Workforce Development, 2019

Table 8. Employment by Industry: Dartmouth, 2021 (Population 16+ years)

Industry Sector	2001 Jobs	2001% of Workforce	2010 Jobs	2010 % of Workforce	2021 Jobs	2021 % of Workforce
Education & Health Services	3,286	23.6%	5,049	32.7%	5,926	35.5%
Trade, Utilities, Transportation	4,639	33.3%	4,417	28.6%	4,311	25.9%
Leisure & Hospitality	2,104	15.1%	2,324	15.0%	2,080	12.5%
Public Administration	755	4.5%	694	4.5%	878	5.3%
Professional & Business Services	492	3.5%	572	3.7%	911	5.5%
Manufacturing	1,098	7.9%	866	5.6%	1,006	6.0%
Construction	617	4.4%	466	3.0%	656	3.9%
Other Services	481	3.5%	645	4.2%	435	2.6%
Financial Activities	303	2.2%	291	1.9%	326	2.0%
Information	115	0.8%	88	0.6%	99	0.6%
Natural Resources & Mining	22	0.2%	0	0.0%	43	0.3%
Total, All Industries	13,912	100.0%	15,447	100.0%	16,671	100.00%

Source: MA Executive Office of Labor and Workforce Development, 2021

Table 8 shows the leading sectors in Dartmouth to be: Education & Health Services; Trade, Utilities, Transportation; and Leisure & Hospitality. The prominence of educational services is attributable to the presence of UMass Dartmouth, Dartmouth College, and other educational institutions. Additional employment trade, utilities, and transportation, as well as retail, might be related to the presence of the industrial park and Dartmouth mall shopping centers.

Table 9. Travel Time to Work for Dartmouth Residents

Travel Time to Work	Total	Percent
Less than 10 minutes	1,792	12.1%
10 to 14 minutes	2,045	13.8%
15 to 19 minutes	3,041	20.6%
20 to 24 minutes	1,972	13.4%
25 to 29 minutes	712	4.8%
30 to 34 minutes	1,556	10.6%
35 to 44 minutes	795	5.4%
45 to 59 minutes	1,042	7.1%
60 or more minutes	1,812	12.3%

Source: U.S. Census Bureau American Community Survey, 2016-2020

Average travel time to work for Dartmouth residents is 28 minutes. People who drive 60 minutes or more for their commute make up 12.3% of Dartmouth's population. Seventy-seven percent of commuters drive alone, and only 11% carpool or take a less carbon emissive pathway to work.

D. Growth and Development Patterns

Patterns and Trends: Population Growth and Change

Growth has been occurring in Dartmouth consistently over time, in some decades at a considerable pace and rate of change. Table 10 shows Dartmouth's rate of population change each decade from 1960 to 2020. Dartmouth's total population more than doubled from 1960 to 2010. The town's most dramatic population increase occurred between 1960 and 1980, then began to slow in subsequent decades.

Table 10. Population Growth Rate: Dartmouth, 1960-2020

Year	Population	Numerical Change	Percentage Change
1960	14,607		
1970	18,800	4,193	28.7%
1980	23,966	5,166	27.5%
1990	27,244	3,278	13.7%
2000	30,666	3,422	12.6%
2010	34,032	3,366	11.0%
2020	33,783	-249	-0.7%

Source: U.S. Census Bureau, Decennial Census

SRPEDD makes periodic population projections as part of its regular regional transportation planning cycles. The most recent Regional Transportation Plan (RTP) was prepared in 2018-2019. To make individual community population projections, SRPEDD reviewed MassDOT's regional forecasts for employment, population and households and distributed them to Census block groups. For this Regional Transportation Plan, staff relied on the methodology used in the 2012 Regional Transportation Plan for distributing the region's population, housing and employment forecasts with a traditional scenario that projected growth in the same manner as the region has grown over the past 30 years.

The actual counts of the 2020 Decennial Census, however, show that the predictions undercounted values for 2020. Many anticipated declines did not occur. Thus, while these figures represent the best population predictions available, we take them with a grain of salt knowing where we are in 2020 versus the 2020 predicted values. Table 11 shows projected population changes in the region through 2040.

Table 11. Population Projections to 2040 in Dartmouth and Neighboring Communities

Community	2010	2020 Actual	2020* Predicted	2030*	2040*
Dartmouth	34,032	33,783	36,646	39,280	41,828
Acushnet	10,303	10,559	10,362	10,238	9,871
Fall River	88,857	94,000	87,606	84,917	81,813
Freetown	8,870	9,206	9,194	9,353	9,313
Marion	4,907	5,347	4,614	4,256	3,762
Mattapoisett	6,045	6,508	5,624	5,118	4,438
New Bedford	95,072	101,079	99,134	101,777	105,284
Westport	15,532	16,339	16,543	16,908	16,756
SRPEDD Region	616,670	652,375	637,719	650,104	653,966
Source: U. S. Census Bureau, *SRPEDD					

Despite a small population drop in 2020, Dartmouth is expected to grow in the coming decades, especially considering the activation of South Coast Rail, and required zoning changes that are likely to accompany it (see the "New MBTA Zoning Rule" section below). Using the RTP projections, Table 11 shows a project increase in Dartmouth's population by about 8,000 residents through 2040. We caution again against taking these projections as fact. In 2022-2023, SRPEDD is once again mobilizing to update the RTP, and we anticipate revised projections as that process unfolds.

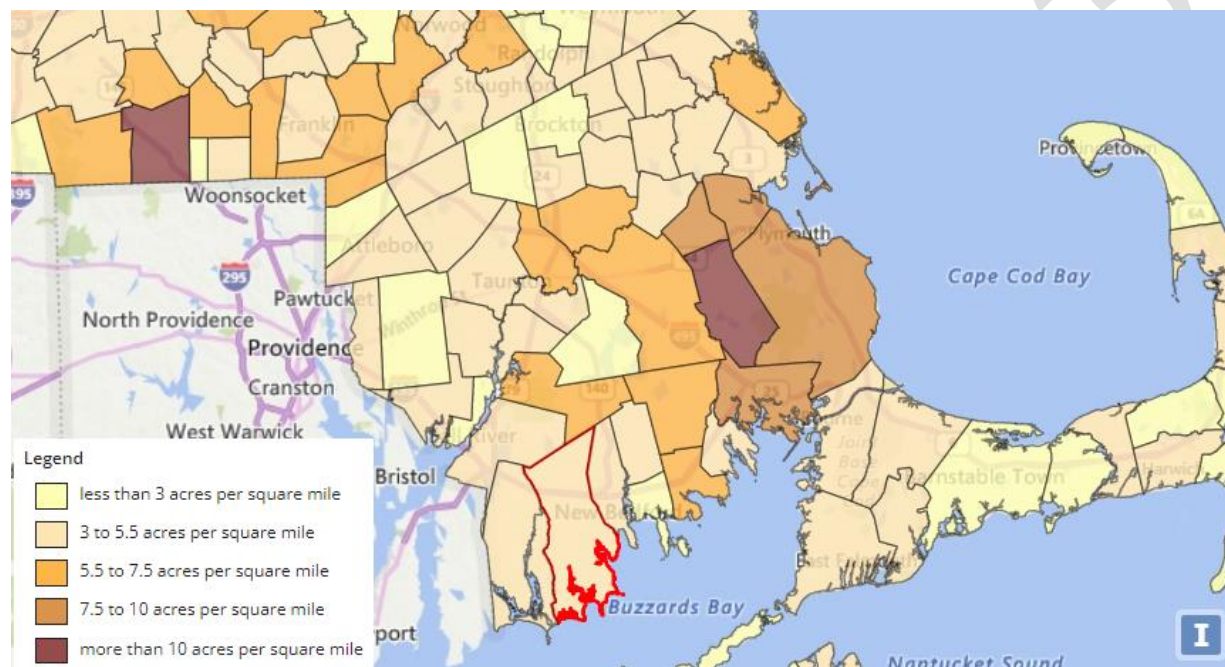
Patterns and Trends: Land Conversion

The rapid rise of regional and town-specific population in recent decades also brought about swift land development. According to the Massachusetts Audubon Society's *Losing Ground: Planning for Resilience Report (2020)* Dartmouth was ranked 11th in the state in acres of natural land, and 5th in terms of open land converted to development between 2012 and 2017, at a combined 327 acres. In the context of the Audubon report, natural land is defined as forest, wetland, and water; open land is defined as agricultural areas, bare soil, or low vegetation; and

developed land includes low density residential and commercial/industrial/high density residential development.

When normalized for the area of the community, Dartmouth ranked as the 43rd most rapidly developing community in the Commonwealth between 2012 and 2017, at a rate of 5.31 acres per square mile (Figure 9). This rate is on the higher end of Dartmouth's neighboring communities (Table 12). The highest rates of development during this period were experienced in neighboring Plymouth County.

Figure 9. Rates of development across Southeastern Massachusetts, 2012-2017



Source: Mass Audubon, 2020

Table 12. Rates of development in Dartmouth and Neighboring Communities, 2005-2017

Community	Rate of Development 2005 – 2013	Rate of Development 2012 – 2017
Dartmouth	4.03	5.31
Acushnet	3.31	4.57
Fall River	3.03	3.61
Freetown	4.72	6.26
Marion	1.76	3.74
Mattapoisett	5.05	6.09
New Bedford	5.07	3.75
Westport	3.33	3.89

Source: Mass Audubon, 2020

These values have changed slightly from Mass Audubon's previous *Losing Ground* report in 2014, in which Dartmouth ranked 7th in the state in acres of natural and open land converted to development, between 2005 and 2013, at 250 acres. The rate of development in Dartmouth during this time was slightly lower, at 4.03 acres per square mile, the 94th most rapidly developing community in the Commonwealth.

Existing Land Use

Based on land use classifications recorded in property assessment categories, about 49% of Dartmouth's land area is in parcels that contain development and development-based uses (shown in yellow in Table 13). An equal amount, or 49%, of Dartmouth's land area is in parcels that are considered undeveloped, containing undisturbed natural areas, agricultural uses, or public conservation and recreation types of uses (shown in green in Table 13).

Table 13. Overall Amount of Land in Major Land Use Categories in Dartmouth, 2020

Land Use Category	Total Acres	Percent
Residential, 3 Units or Less	12,663	33%
Public Recreation / Open Space	6,690	18%
Agricultural	4,284	11%
Other Publicly Owned	3,409	9%
(Vacant use description)	2,216	6%
(Improved use description)	1,193	3%
Vacant Undevelopable	3,164	8%
Vacant Developable	2,105	6%
Commercial	1,274	3%
Education	1,220	3%
Church / Charitable / Cemetery	697	2%
Utility / Transportation	423	1%
Residential, 4 Units or More	399	1%
Mixed Use Residential / Commercial	360	1%
Industrial	334	1%
Unknown	332	1%
Water	282	1%
Office	173	<1%
Total	37,809	100%

Source: MassGIS Level 3 Parcel Data for Dartmouth, downloaded April 14, 2020

Residential Uses

Residential development accounts for the largest share of Dartmouth's current land use by area. Low density residential lots of three or fewer units accounts for 33% of the town's area, and higher density residential and mixed-use residential and commercial account for an additional 1% each of the town. Residential uses are distributed throughout town, with many lots along and in developments off the town's major arterial streets, or centered around Dartmouth's defined neighborhoods of Hixville, Faunce Corner, UMass Dartmouth, Bliss Corner, Padanaram, Smith Mills, Nonquitt, Bakerville, Round Hill, Mishaum Point, and Russells Mills.

Protected and Semi-Protected Natural Lands

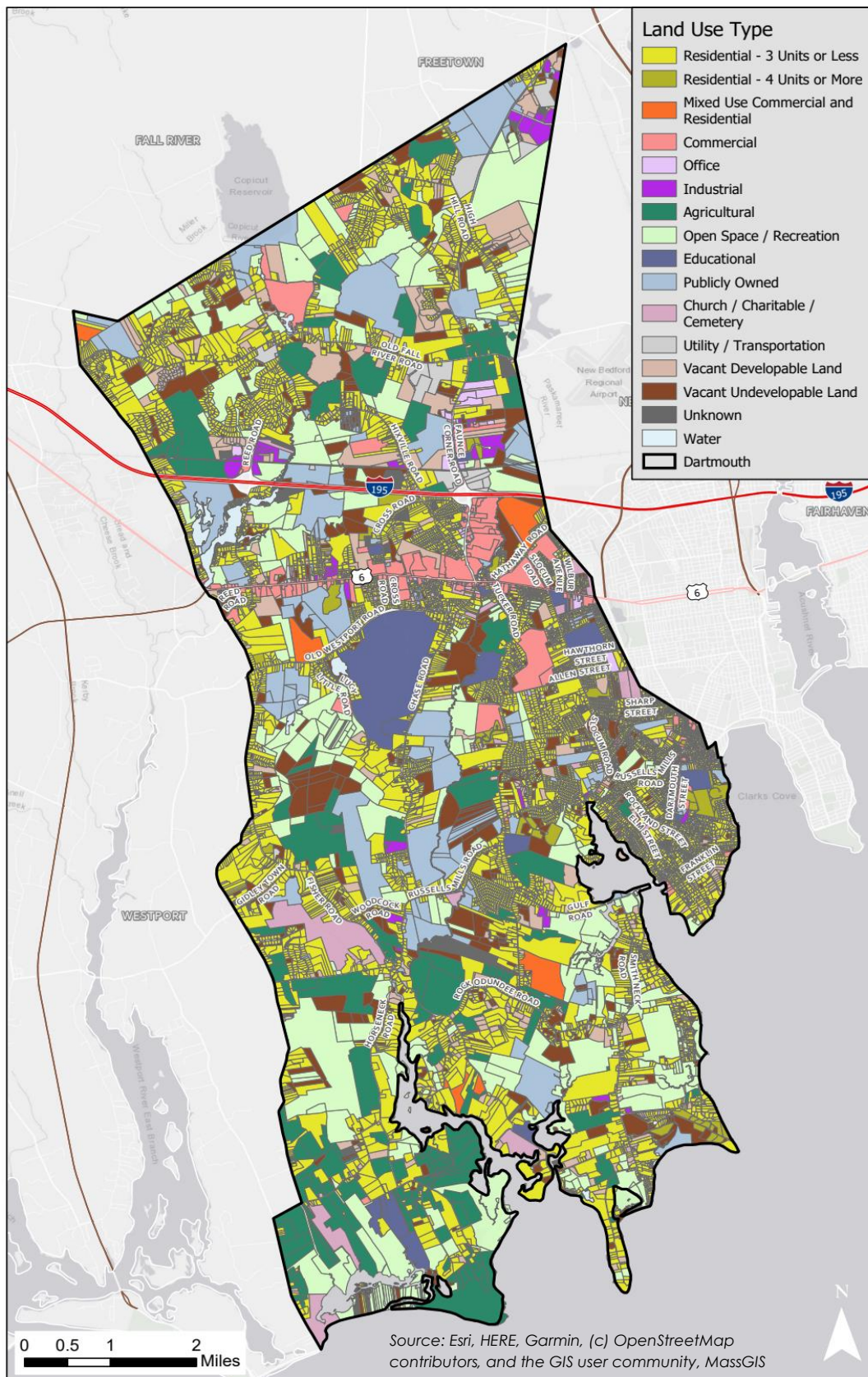
In 2020, the amount of land under a permanent preservation restriction or belonging to a class of publicly owned land unlikely to be developed is approximately 11,000 acres. This includes lands under fee simple ownership by a conservation organization; an Agricultural Preservation Restriction; a Conservation Restriction held by a land trust or other conservation organization; a Conservation Covenant; a Deed Restriction required by municipal subdivision processes; protection of municipal drinking water wells and water supply areas; state or municipal beaches and parks; public access points; public recreation properties; historic preservation properties; resource protection required by Federal, State or private grants; State of Massachusetts wildlife refuges or other protected lands; and private Deed Restriction. While the amount of development is increasing in Dartmouth, so is the amount land placed under permanent preservation protections. The 11,000 acres protected today is an increase of over 1,000 acres from 2007.

Apart from permanent development restrictions, some of the land that is currently experienced as natural land and open space is actually in a state of temporary preservation. The Massachusetts tax reduction program commonly known as “Chapter 61” allows landowners to voluntarily enroll their forested, agricultural, and open space recreation areas as temporarily preserved lands in exchange for a reduction in property taxes. These lands, commonly known as “Chapter 61 lands” (Chapter 61 forestry; Chapter 61A agriculture; and Chapter 61B recreation lands) are not permanently protected. Property owners may un-enroll at any time. In exchange for the reduced property assessment, however, the property owner must provide the community the right of first refusal for purchase of the land and pay a partial recapture of the reduced property tax. Generally, Chapter Land is a good indication of active agricultural and managed forest areas in the Town. Per current town estimates, there are more than 6,500 acres of Chapter land in Dartmouth, though the acreage fluctuates with property additions and removals. Map 6 shows open space and recreation lands in Dartmouth alongside Chapter 61 lands, and the fact that many of these chapter lands connect open space and recreation areas.

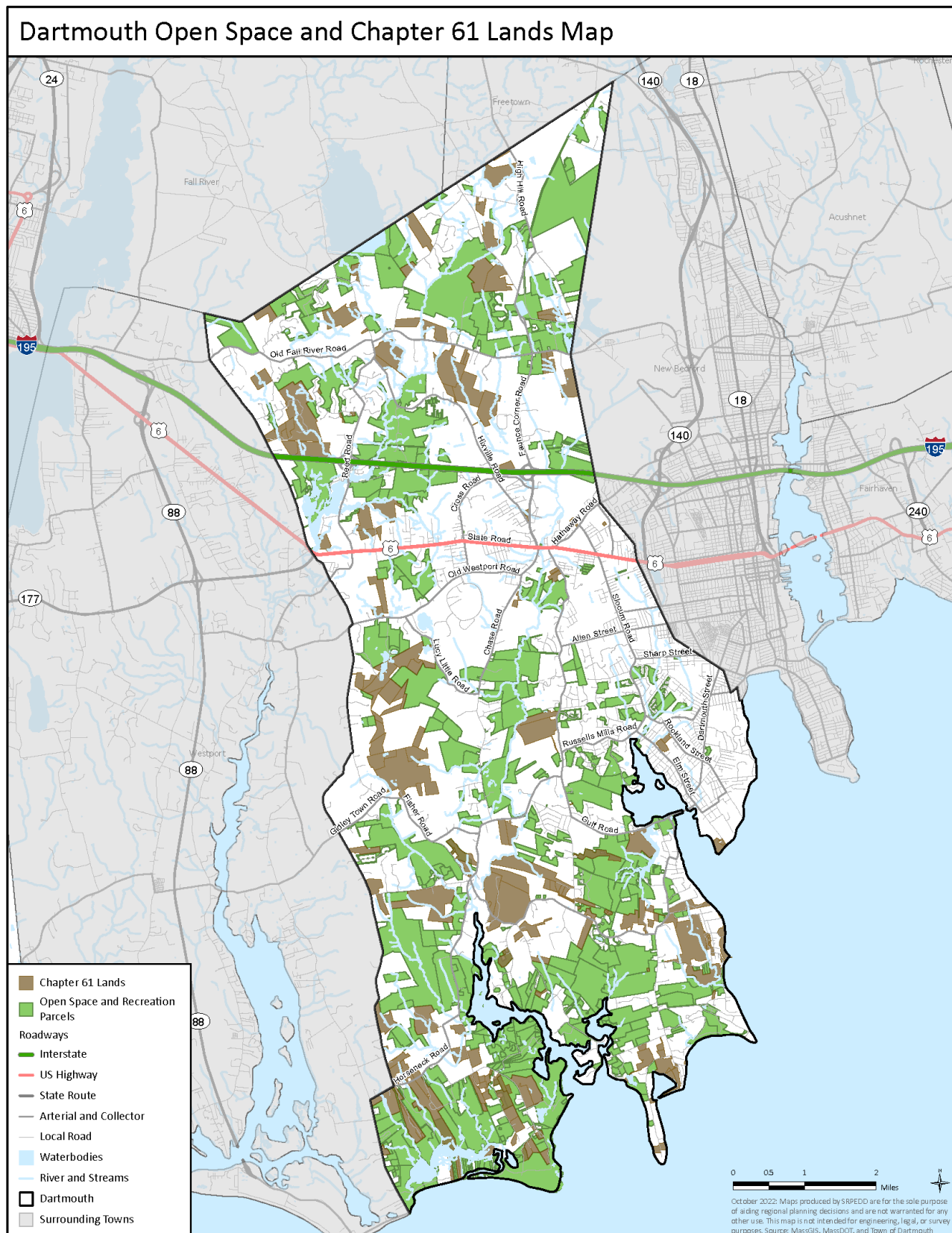
Other Uses

As a reflection of the town's agricultural roots and continued rural character, productive lands are the third-largest land use category by area in Dartmouth. Publicly owned lands, vacant developable lands, and vacant undevelopable lands each represent between 5 and 10% of Dartmouth. Interestingly, commercial uses occupy only 3% of Dartmouth. Many land uses occupy less than 1% of Dartmouth's land area; including medium- and high-density residences, industrial, and mixed-use style development. The following is a breakdown of existing land use that was taken from the draft Land Use chapter of Dartmouth's 2023 Master Plan (See Map 5 and Table 13).

Map 5. Existing Land Use



Map 6. Chapter Lands in Dartmouth in relation to the Open Space and Recreation Network



Infrastructure

Transportation Infrastructure

Population growth is closely connected to economic development and transportation. Boston is a major economic engine of New England and transportation improvements bring the region increasingly within its economic sphere. Dartmouth and other towns in the South Coast can increasingly be considered suburbs of not only New Bedford and Fall River as in previous decades, but also of Boston and Providence. Improvements to Routes 24, 140, 495 and 195 make it easier to live in Dartmouth and work in the Boston or Providence markets. Many people are willing to spend a long time commuting if they can combine a Boston income with a South Coast cost-of living and quality of life, especially given remote work changes in the wake of the COVID-19 pandemic, where many employees may only have to be present in a central office space one or two days per week.

While improved transportation networks bring convenience, they also bring potentially negative impacts from congestion, traffic, and speeding/unsafe driving. Public transportation options and an improved network of sidewalks and bike paths can provide alternatives that mitigate these issues. Gaps in the pedestrian and bicycle network in town came up throughout Dartmouth's recent Master Plan Process. The town has a Complete Streets Prioritization Plan. As the town works through the action items in this plan, the town will see new and upgraded sidewalks and bicycle facilities in town.

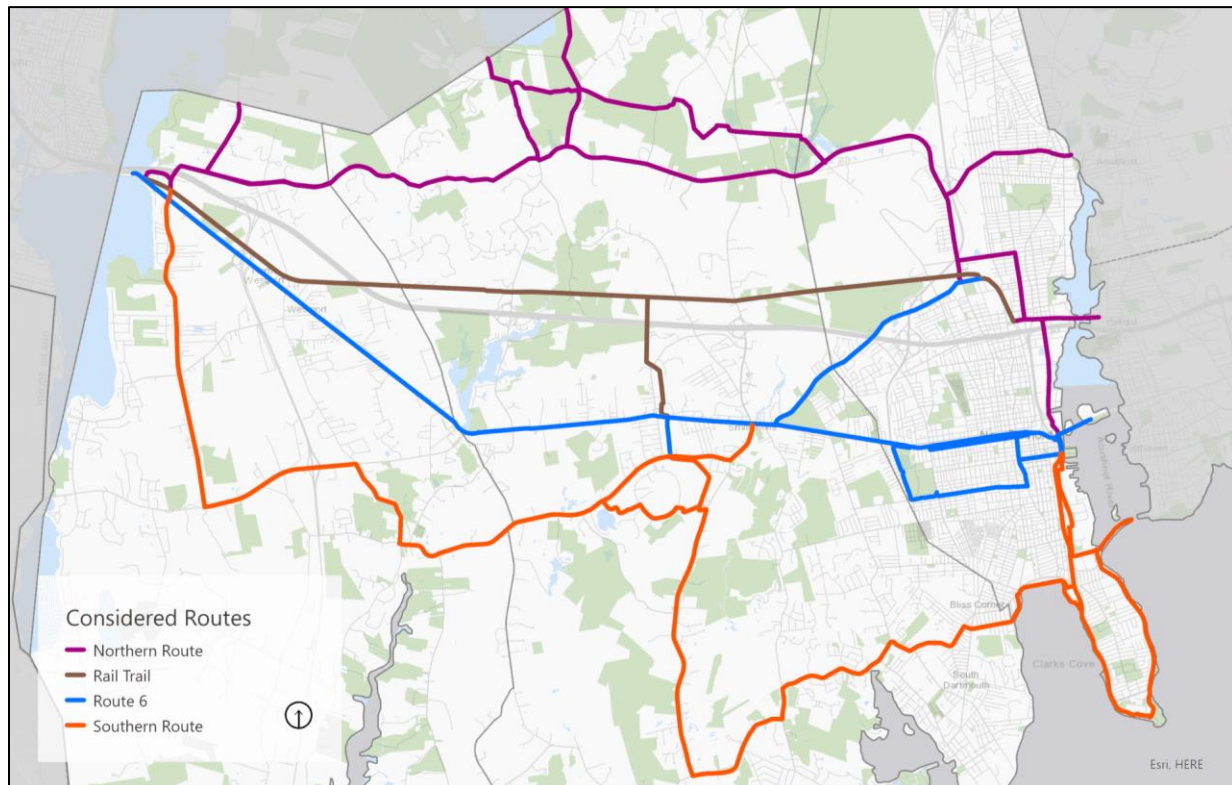
The Route 6 area was also identified as an area of particular concern, due to high traffic, low biking routes/visibility, and the potential for traffic backups. Route 6 provides access to the Dartmouth Mall, serves cross traffic in Dartmouth between Westport and New Bedford, and serves as a transit route for Dartmouth students. Since Route 6 is a major thoroughfare, it serves several lanes of traffic moving at consistently high levels, but it does not feature consistent bike infrastructure. Given the lack of sidewalks and public transportation, a network of paths that would enable safe bike travel between activity centers in town would be a great addition.

There are several transportation projects and other developments that promise continued growth in the region. First and foremost is the realization of the long-planned South Coast Rail proposal to extend commuter rail to New Bedford and Fall River. Commuter rail will offer long-distance commuters an alternative to driving, and on that turns commuting time into a more productive and pleasant experience. While the proposed commuter rail will bring the positive impacts of economic development to the area it can also be expected to increase the demand for new houses and infrastructure.

Dartmouth has become one of the leading communities in southeastern Massachusetts in promoting the planning and development of bike routes, paths, and related facilities. The Dartmouth Pathways Committee was created/appointed by the Select board in 2010 as part of a state and regional effort to work with local leaders and officials to build a network of bikeways around the South Coast region. Committee members have been active in the regional South Coast Bikeway Alliance since its inception and have contributed to the South Coast Bikeway Plan, which would provide a 50-mile continuous system of bike paths connecting Rhode Island to Cape Cod.

In 2021, the South Coast Bikeway Alliance and SRPEDD conducted a feasibility study with SRPEDD to close the gap in the South Coast Bikeway Plan between Fall River and New Bedford through Westport and Dartmouth. Four routes were considered, as pictured below in Figure 10. The Northern Route is most favored, with the Southern Route being considered as a potential complementary route as well.

Figure 10. South Coast Bikeway Routes studied in 2021



Public Water Supply

The Dartmouth Water Division currently provides water service to approximately 70% of the population, with the remaining 30% served by private wells. Dartmouth's municipal water supply system consists of fourteen (14) groundwater, gravel packed wells, or naturally developed wells, and three (3) water treatment facilities. To accommodate peak water demands in the summer, Dartmouth also purchases water from the City of New Bedford's Quittacas Water Treatment Plant located on the Assawompset Ponds Complex (the largest natural reservoir in the Commonwealth) in Lakeville, Freetown, Rochester, and Middleboro.

Sewer Service

Approximately 50% of Dartmouth residents and all major commercial areas are served by the town's sewer system, with the remaining areas relying on Individual Septic Disposal Systems. The Dartmouth Wastewater Treatment Plant (WWTP) is located on Braga Memorial Drive. It is operated by the Dartmouth Water Pollution Control Division and discharges to Buzzards Bay off Mishaum Point. The WWTP has a design flow of 4.2 million gallons per day (mgd), though it is

nearing this capacity, particularly during rainy periods. The DPW plans to complete a Comprehensive Wastewater Management Plan to increase capacity and accommodate future development. The WWTP also contains a testing laboratory, a composting site, a sludge facility, and twenty-one (21) sewerage pumping stations.

Stormwater Management

Pollutants from stormwater runoff are a contributing factor to the impairment of Dartmouth's waterbodies, including high levels of nitrogen, turbidity and bacterial contamination. The EPA requires the town to manage stormwater runoff, as well as to protect public health and safety, preserve environmental resources, and safeguard town character against these negative stormwater impacts. EPA and MassDEP originally authorized Dartmouth to discharge stormwater to local waterbodies through the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) in 2003 under an NPDES MS4 General Permit, known as the "2003 General Permit." These bodies issued a revised General Permit to the town in 2016, which significantly increases stormwater management requirements in Dartmouth, and mandates specific timelines for compliance. As required by the permit, Dartmouth developed a Stormwater Management Plan (SWMP) in 2020. The 2020 SWMP sets out a path of implementation measures through which the town will meet is 2016 General Permit requirements.

The MS4 General Permit applies to stormwater discharges within a limited portion of town that is the "regulated area," specifically, within "Urbanized Areas" as delineated by the US Census. These boundaries are revised after each new decennial Census. As of the 2010 Census, 26% of Dartmouth qualified as an Urbanized Area for the purposes of the MS4 permit. The SWMP must be implemented within all regulated portions of Town at a minimum. In Dartmouth, the Department of Public Works is the lead entity in implementing the SWMP, though other departments have a role in carrying out actions. For reference, the SWMP has helpful explanations of the NPDES program, MS4 requirements, the history of MS4 implementation in Dartmouth, and general definitions of a municipal separate storm sewer system. Per the 2016 General Permit, the town must take specific actions within certain categories of Minimum [stormwater] Control Measures, including public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site stormwater runoff control, stormwater management in new development and redevelopment, and pollution prevention.

Long-term Development Patterns

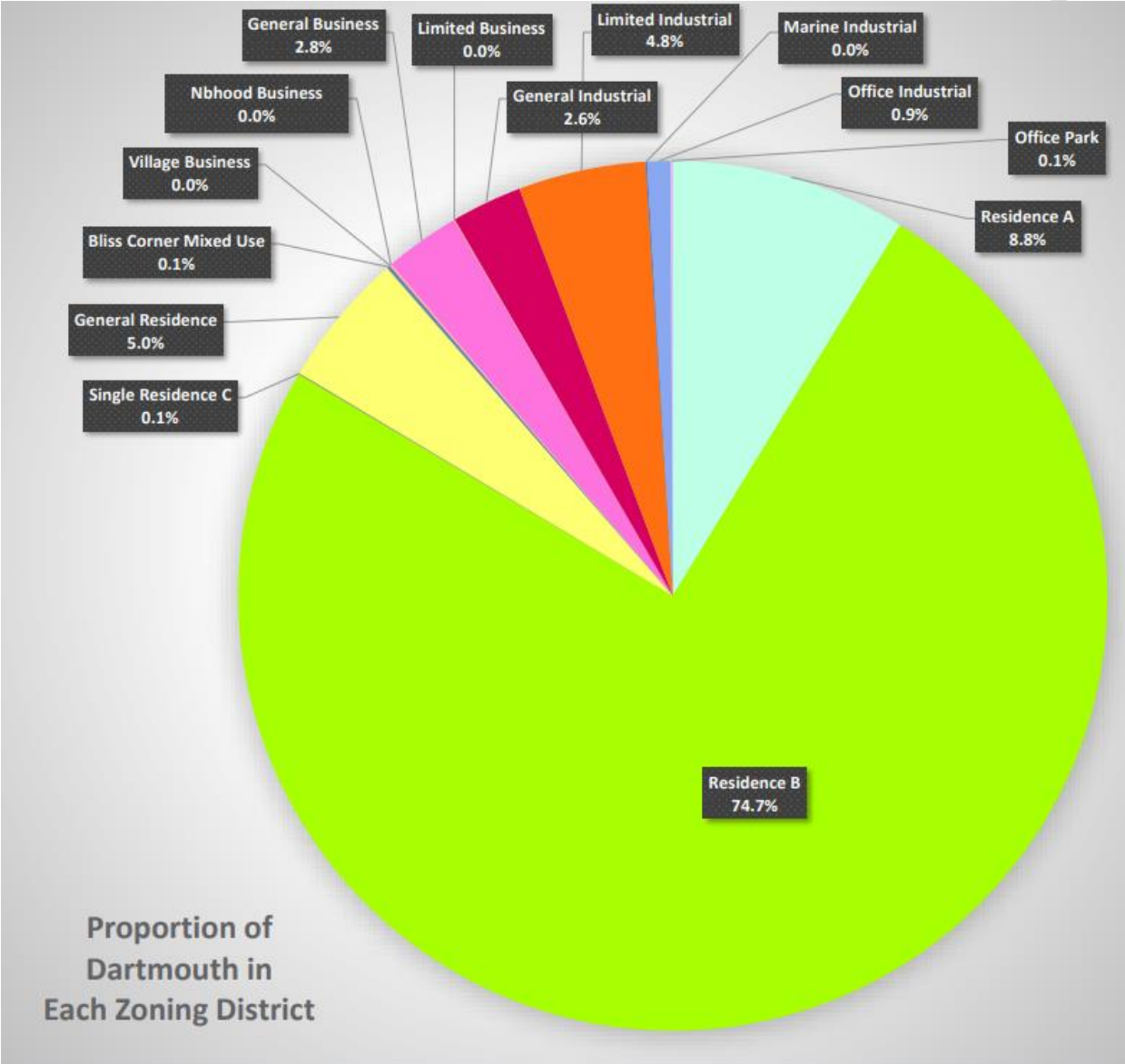
Zoning and Land-Use Controls

Zoning districts regulate the location of land uses within Dartmouth, as well as use intensity (amount of residential density or commercial square footage permitted) and form (setback requirements, height restrictions, etc.). The rules that regulate land use can change over time in response to community requirements, changes in lifestyle trends, or the acknowledgement of new realities and priorities. The creation and amendment of zoning bylaws is a function of Town Meeting decision-making processes. Over time Dartmouth has progressively refined the Town's

Zoning Bylaw to protect natural resources, respect the historical development pattern, and support economic development.

The current Zoning Bylaw includes four residential districts, five business districts, four industrial districts, and one mixed use district. Most of the land in Dartmouth – 88.25% - is zoned for residential use. A single zone, Residence B, covers 75% of Dartmouth (Figure 11). The land along the Route 6 corridor is zoned General Business. Land to the north of Interstate Route 195 is zoned industrial, as is land in the northeast corner of Dartmouth.

Figure 11. Proportion of Dartmouth in each zoning district



Source: "Dartmouth Zoning Map March 23, 1999 (Amended by Town Meeting to October 16, 2018)

Map 7. Base Zoning Districts in Dartmouth

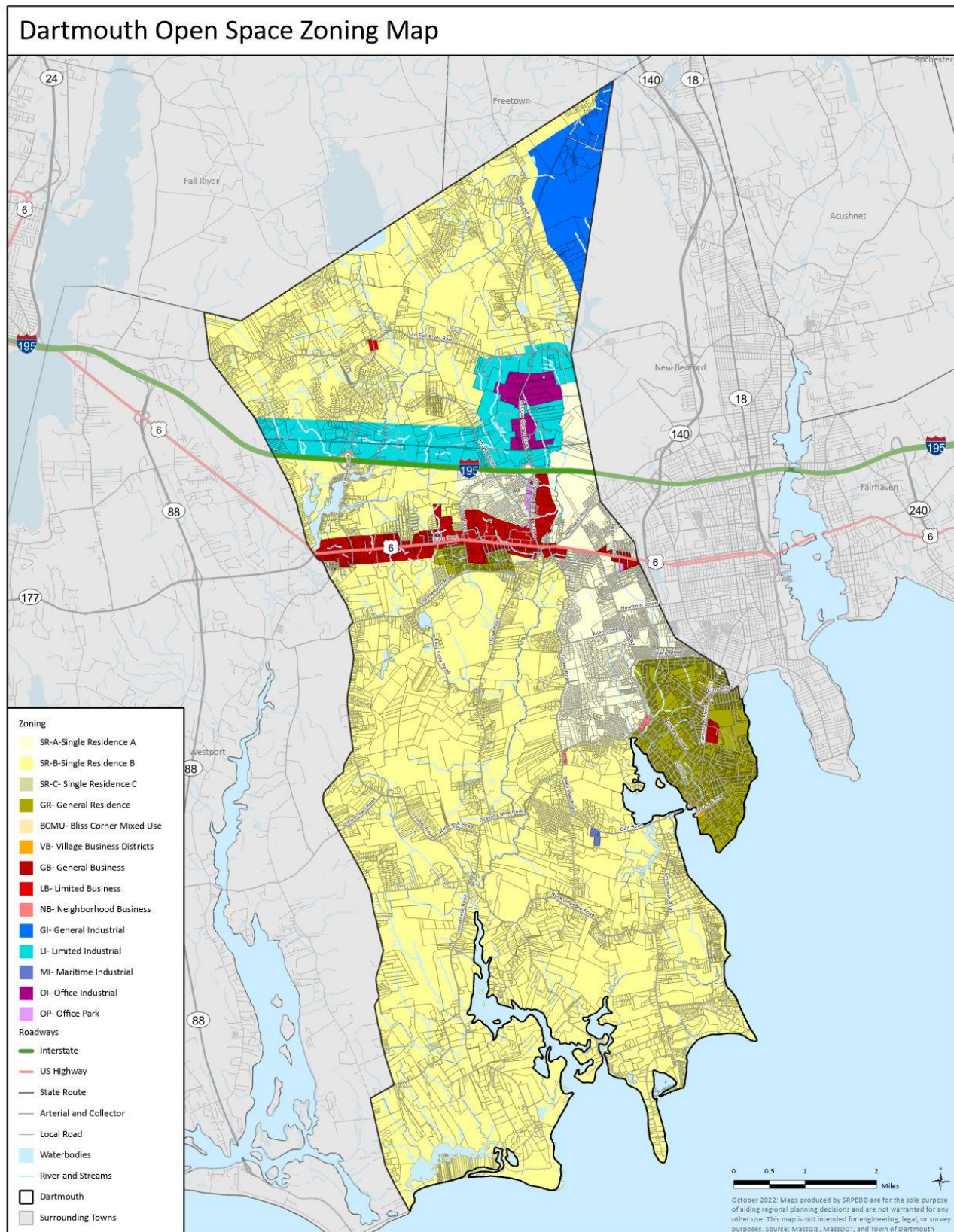


Table 14. Single Residence Lot Dimensional Requirements by District

REQUIREMENT	Single Residence A	Single Residence B	Single Residence C	General Residence
Minimum Lot Size (ft ²)	40,000	80,000	6,000	15,000
Frontage (ft)	150	200	50	100
Front Setback (ft)	50	60	10	20
Rear Yard (ft)	20	20	7	20
Side Yard (ft)	20	20	7	20
Maximum Building Height (ft)	35	35	35	35
Maximum % of Lot Covered	50	50	65	50

Table 15. Business and Office Lot Dimensional Requirements

REQUIREMENT	Neighborhood Business	Village Business	Limited Business	Bliss Corner Mixed Use	General Business	Office Park
Minimum Lot Size (ft ²)	20,000	5,000	1,250-15,000, depending on dwelling type	5,000	43,560	43,560
Frontage (ft)	100	50	100	50	150	150
Front Setback (ft)	40	5	10	Depends	40	40
Rear Yard (ft)	20	5	10	on how	20	20
Side Yard (ft)	20	5	10	many stories	20	20
Maximum Building Height (ft)	35	30	35	35	35	35
Maximum % of Lot Covered	65	70	65	70	65	50

Table 16. Industrial Lot Dimensional Requirements

REQUIREMENT	Maritime Industrial	Limited Industrial	Office Industrial	General Industrial
Minimum Lot Size (ft ²)	43,560	43,560	50,000	43,560
Frontage (feet)	150	150	150	150
Front Setback (feet)	50	50	50	50
Rear Yard (feet)	25	25	25	25
Side Yard (feet)	25	25	25	25
Maximum Building Height (feet)	35	50	50	100
Maximum % of Lot Covered	50	65	65	65

In addition to the town's "base zoning" described above, there are six overlay districts (Map 8) that address specific concerns, either by apply additional performance standards and restrictions on the development permitted in the underlying area, or by expand the uses permitted for a limited area with a specific purpose.

Table 17. Dartmouth Overlay Districts

Overlay District	Purpose	Total Acreage	Number of Parcels
Floodplain	Reduce damage to public and private property resulting from floodwaters.	9,762.9	2,801
Aquifer Protection	Protect groundwater supplies from detrimental development and land use practices, and to ensure the adequate quality and quantity of drinking water for distribution within Dartmouth.	11,648.1	3,392
Faunce Corner	Preserve the value of the lots within the District, as those lots were formerly constituted, prior to the acquisitions by the Town of portions of the lots in the District for the purposes of widening Faunce Corner Road and a portion of Old Westport Road.	613.7	87
Waterfront	Provide adequate areas in the Town for harbor dependent uses and to promote access to the waterfront.	10	11
Lincoln Park Smart Growth	Encourage smart growth in accordance with MGL Chapter 40R, and foster a range of housing options along with a mixed-use development component.	1.6	4
Marijuana Establishments	Designate areas in Town for such facilities that will have the least impact on community character.	1,546.6	134

Source: Ecode zoning bylaw descriptions, accessed 10/17/2022

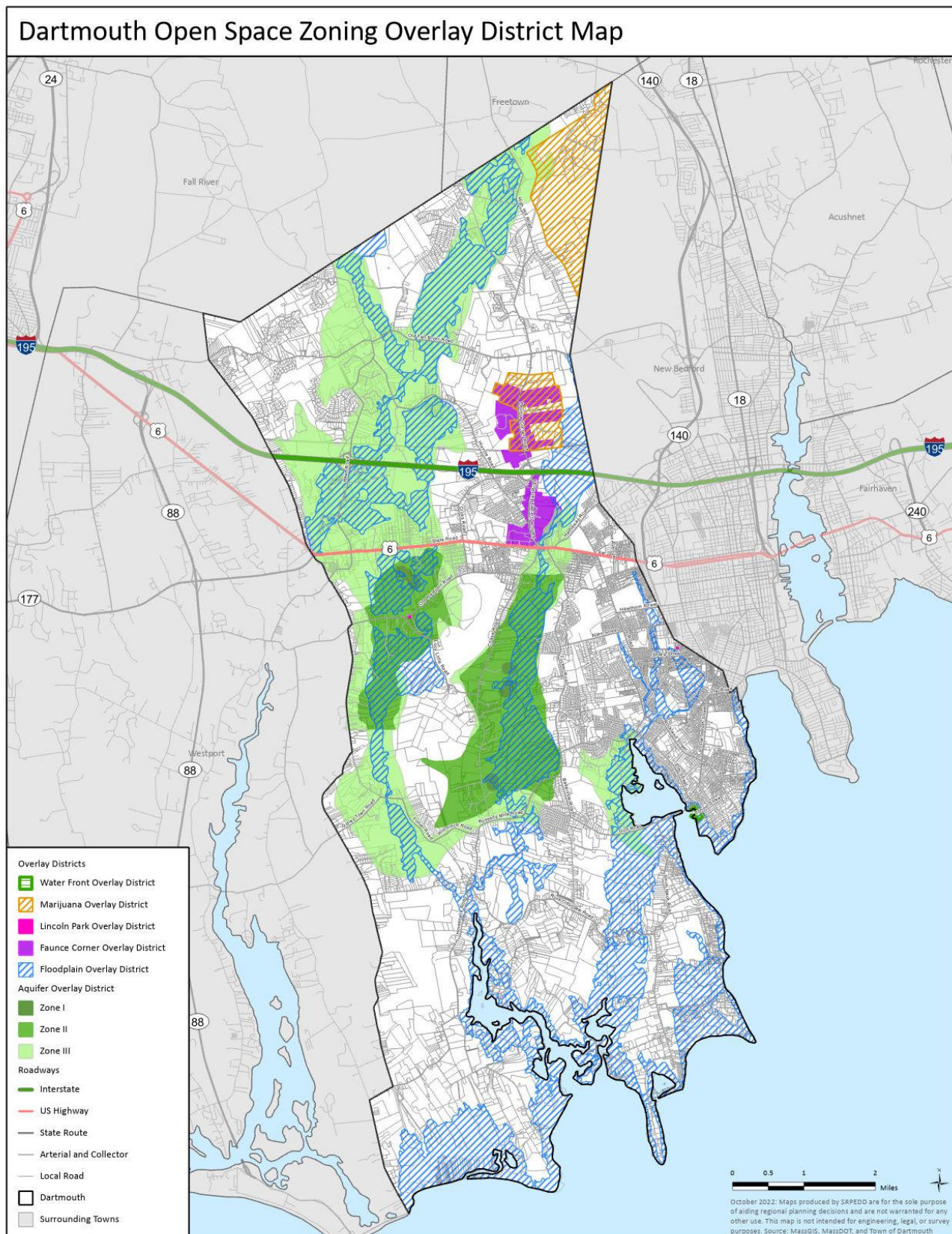
Other Significant Bylaws

Land use and development options in Dartmouth are also controlled by other bylaws that sometimes integrate with zoning districts but are not necessarily zoning-district dependent.

Dartmouth has a robust Open Space Residential Design (OSRD) bylaw that provides an environmentally conscious approach to subdivision and development that has been cited as a statewide example of a successful instrument for preserving land in a developing municipality. Dartmouth's OSRD bylaw provides an option for residential development with reduced lot area, frontage, and other requirements. In Dartmouth's OSRD bylaw, the same total number of units are permitted as in a conventional subdivision, but the units are clustered together, allowing for the permanent preservation of open space in the remainder of the lot.

Mass Audubon's 2014 Losing Ground report estimated that the OSRD bylaw conserved 1,609 acres of land in Dartmouth between 2005 and 2013. This bylaw has, however, changed recently in a way that may make it less impactful. Previously, Dartmouth required that the proponent of any proposed subdivision for five or more lots file both a conventional subdivision plan and concept plans for an OSRD. The Planning Board picked its preferred development option from the two presented, and most often, selected the OSRD development.

Map 8. Overlay Zoning Districts in Dartmouth



Based on land use law challenges to similar bylaws in other towns, Dartmouth recently changed this bylaw to make the preparation of the OSRD Plan optional, though kept strong language indicating that OSRD is the preferred method of subdivision in town. Many other towns incentivize the OSRD option to make it more attractive for developers to pursue by permitting a density bonus for additional units above that which is permitted by the base zoning for an OSRD. Dartmouth should consider similar incentives, as well as allow OSRD by right. The current special permit requirement poses a significant disincentive for developers to choose cluster subdivisions rather than traditional subdivision design.

Dartmouth also regulates development with a local Wetlands Bylaw administered by the Conservation Commission, Subdivision Rules and Regulations administered by the Planning Board, and local Board of Health regulations administered by the Board of Health. Infrastructure to support and guide development includes water, sewer, and circulation related improvements. Public input from this Master Planning process echoes previous preferences for coordinating development with existing infrastructure.

New MBTA Zoning Rule

Southeastern Massachusetts is at a turning point with the realization of South Coast Rail. Part of an Economic Development Bill enacted in January 2021 created Section 3A of M.G.L. c. 40A (the Zoning Act). This new section requires that an MBTA community – including MBTA adjacent communities – shall have at least one zoning district of reasonable size in which multi-family housing is permitted as of right, with a minimum gross density of 15 units per acre, and with no age restrictions. Dartmouth is not in the initial round of affected communities, but this rule is almost certainly likely to be applied to the town once the New Bedford and Fall River stations are complete and operational. Such land use requirements, should the mandatory zones be built out, will certainly increase population. Under current program guidance, Dartmouth will be required to institute a zone that can accommodate a minimum of 1,319 new housing units. Multiplying this figure by the most current average household size, of 2.52 these housing units could represent an additional 3,324 persons.

Priority Preservation Areas and Priority Development Areas

Another effort undertaken by the Town, in conjunction with the South Coast Rail Project, and tied to local planning and zoning protocol, is the designation and mapping of Priority Development Areas (PDAs) and Priority Protection Areas (PPAs) within the community. This community driven planning exercise was originally conducted in 2008 by the three regional planning agencies serving the thirty-one (31) communities addressed in the South Coast Rail Corridor Plan. In 2013, the three regional planning agencies, including SRPEDD (serving Dartmouth), revisited the original process and choices as part of a five-year update of the 2008 project.

A community's Priority Area designations can guide municipal decisions about zoning revisions, infrastructure investments, and conservation efforts. These Community Priority Area designations served as the foundation for developing Regional and State Priority Area designations. Priority Area designations gained further importance when, in the fall of 2010, the Patrick Administration issued Executive Order 525 (E.O. 525) providing for the implementation of the South Coast Rail

Corridor Plan and Corridor Map (including PPAs and PDAs) through state agency actions and investments. These state actions have the potential to help leverage local and private investments in the Priority Areas.

PDAs are areas that are appropriate for increased development or redevelopment due to transportation access, available infrastructure (primarily sewer and water), an absence of environmental constraints, and local support for increased development. PDAs can range from a single parcel to many acres, and can include small scale infill, commercial, industrial, mixed use, transit facilities, or other such projects.

PPAs are areas that are important to protect due to the presence of significant natural or cultural resources, including, but not limited to: rare and endangered species habitats; areas critical to water supply; historic areas; scenic vistas; and agricultural areas. PPAs also vary greatly in size, from small, species dependent areas, to large expanses of intact habitat. These sites may be candidates for protection through acquisition, conservation restriction, or other means. The following brief descriptions and Map 9 illustrate the location and character of Dartmouth's 2013 Priority Preservation Areas:

Allen Street and Slocum Road Farm [72-09]

Purpose: Preserve active agriculture and open space.

Boundaries: Boundaries correspond to selected parcels at the intersection of Allen Street and Slocum Road containing active agricultural uses.

Old Westport Road Farm [72-10]

Purpose: Preserve active agriculture and open space.

Boundaries: Boundaries correspond to a parcel north of UMass Dartmouth on Old Westport Road that contains active agricultural uses.

Paskamansett River Park [72-11]

Purpose: Preserve public open space.

Boundaries: Boundaries correspond to a park/reclamation site on the Paskamansett River at the intersection of Route 6 and Faunce Corner Road.

Shingle Island River and Acushnet Cedar Swamp [72-12]

Purpose: Preserve contiguous habitats, water resources, cultural sites, open space, and active agriculture associated with the Acushnet Cedar Swamp.

Boundaries: Boundaries correspond to selected, largely undeveloped parcels in north Dartmouth, the majority of which are north of I-195. Selected developed parcels are excluded from the PPA.

Slocum River, Smith Neck, and Apponagansett River [72-13]

Purpose: Preserve contiguous active farmland, NRCS SSURGO-Certified Soils of All-Prime and Statewide significance, BioMap 2 Core Habitats and Critical Natural landscapes, NHESP Vernal Pools, DEP Zone II Aquifers, and High- and Medium-Yield Aquifers.

Boundaries: Boundaries correspond to over 25 square miles of largely undeveloped parcels in South Dartmouth. Selected development parcels are excluded from the PPA designation.

South Coast Rail Community Priority Areas 11 South Dartmouth Historic Preservation [72-14]

Purpose: Historic preservation of the small village.

Boundaries: Boundaries correspond to selected parcels within the General Residence Zoning District in South Dartmouth, with the exception of two small parcels (totaling 1.07 acres) that are entirely within the Neighborhood Business Zoning District.

Town Wells [72-15]

Purpose: Protect public drinking water supplies and designated resource areas including DEP Zone II Aquifers, High- and Medium-Yield Aquifers, and Interim Wellhead Protection Areas.

Boundaries: Boundaries correspond to selected, largely undeveloped parcels in west Dartmouth between Route 6 to the north and Old Westport Road to the south.

Master Plan Development Goals and Objectives

Dartmouth is in the final stages of updating the town Master Plan. The following are some strategies recommended in Dartmouth's 2023 Comprehensive Master Plan that could have implications for future land use:

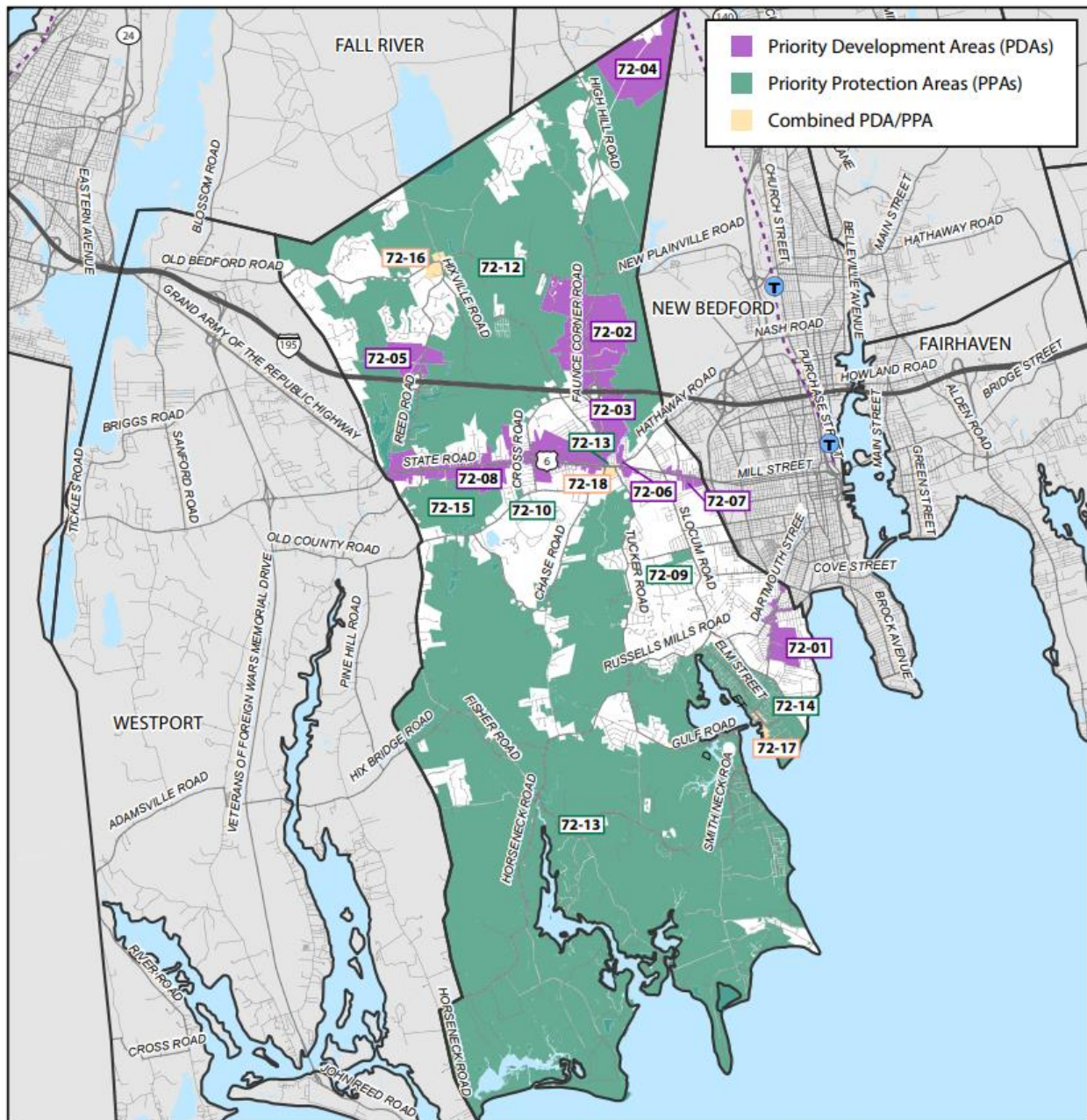
Enable medium-density housing options

Enabling and encouraging more medium-density housing options in appropriate locations in town may help to both address housing needs for new families and seniors and reduce the loss of open space to single family housing development. In Dartmouth's Master Plan workshops, residents provided feedback against further large lot, sprawling development and in favor of additional housing options on smaller lots. Between the existing Single Residence A and Single Residence B districts, 86% of the town is zoned for large-lot (an acre or more) houses. The new MBTA Multi-Family Zoning Rule, expected to apply to Dartmouth within a couple of years, would force new zoning at 15 units per acre minimum density. The town can start now to proactively plan for this requirement in a way that also meets the express desires of residents for smaller-scale housing options. Rezoning or establishing overlay zoning districts that permit higher density housing in those areas most appropriate, particularly where transportation and water and sewer infrastructure already exist, could help meet the demand in a way that is favorable to the town. Taking advantage of state programs like 40R could also help the town recover some of the costs of accommodating this additional development.

Pursue mixed-use redevelopment projects

Redevelopment projects often enable the achievement of two conflicting goals at one time; additional needed residential and other built land uses can be achieved at a site that is already altered from its natural setting, thus directing these uses away from consuming additional greenfield lands. Targeting redevelopment and infill projects along Dartmouth's existing business corridor on Route 6 could go a long way in meeting housing and development needs while strengthening the town's main economic engine and protecting remaining open spaces from further development. Smaller scale mixed-use development should also be included in Dartmouth's village areas.

Map 9. Priority Protection Areas (PPAs) and Priority Development Areas (PDAs) in Dartmouth



Institute low-impact development regulations

When you know better, you do better - that is the reasoning behind low-impact development in a nutshell. Development does not have to be pursued in the same way today as it was 50 years ago, even when contemplating single-family homes. Many communities have legacy regulations on the books that allow or require excessive impervious surfaces, that do not allow for innovative approaches such as green roofs, or that do not plan for adequate stormwater infiltration. Low impact development regulations allow for these innovations, reducing the toll that new housing and pavement takes on the natural environment. A thorough review of Dartmouth's bylaws and regulations using Mass Audubon's Low Impact Development Bylaw Review Tool could help identify opportunities within local regulations to require or encourage better development practices that are less impactful on natural resources.

Support the inherent resilience of land through targeted preservation and restoration projects

With anticipated sea level rise and intense storm outcomes resulting from climate change, we can mitigate some impacts by simply allowing land to remain in its natural, resilient state. Wetlands sequester more carbon than any other land cover. Marshes absorb wave action and floodwaters. Preserving and enhancing these features is imperative. Future conservation efforts in town should prioritize preservation of high-quality lands identified as part of the town's Green Infrastructure Network and lands adjacent to coastal marshes that allow for future marsh migration, as well as restoration of degraded coastal marshes.

Plan in terms of connected landscapes

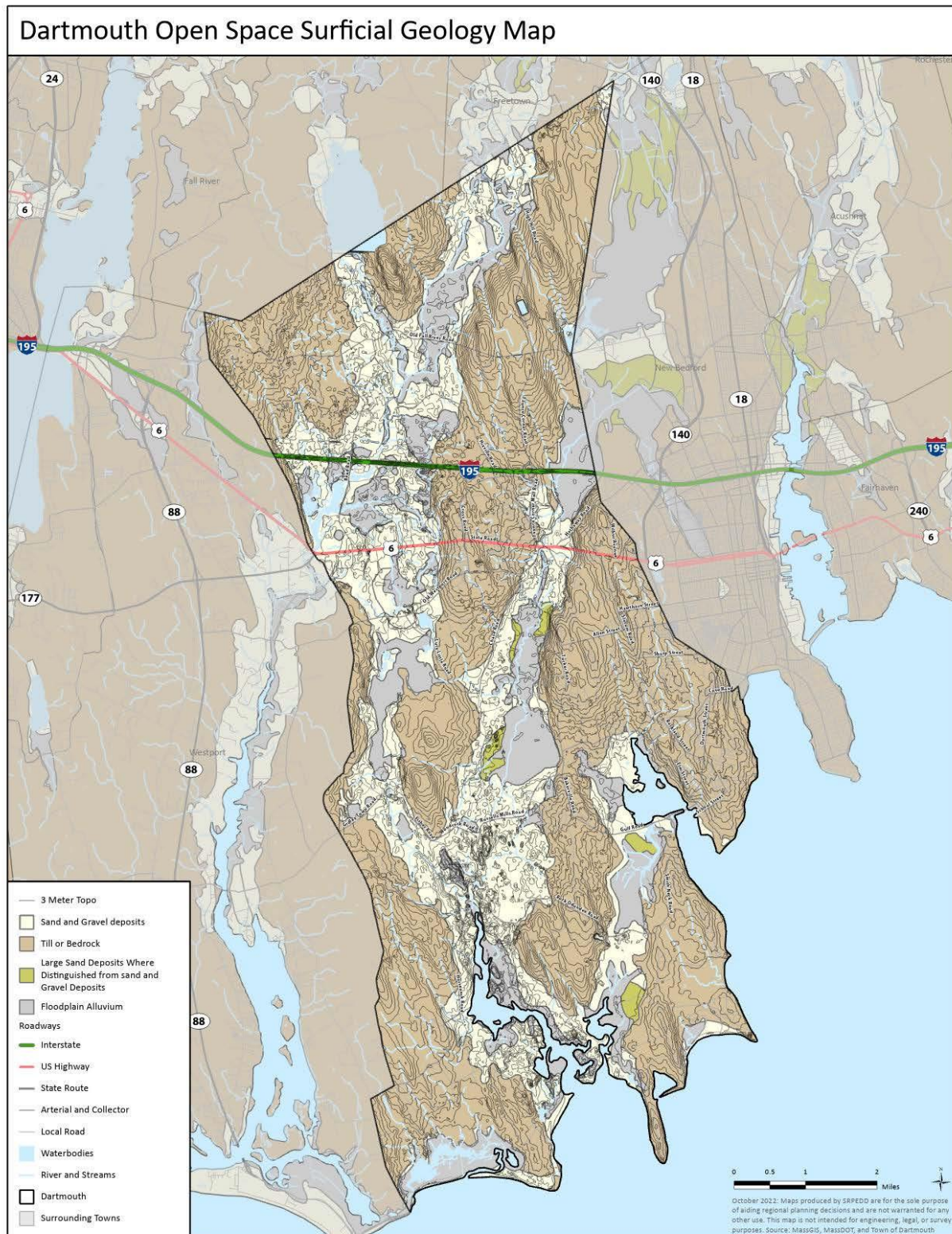
Context matters. Quality of life will be enhanced if denser housing is within a pleasant walk to parks, the coast, local commercial centers, or similar community facilities. Future housing development should incorporate sidewalk improvements and park enhancements and plan for making these community feature accessible without a motor vehicle. Preserved lands should be connected via networks of walking and biking trails and sidewalks. Planning coordinated and comprehensive actions to improve water quality within a watershed is often more effective, enabling focused effort into one sub-basin at a time, for coordinated action and meaningful improvement of environmental. In its land use planning, the town should zoom out and keep these connections in mind.

IV. ENVIRONMENTAL INVENTORY AND ANALYSIS

A. Geology, Soils, and Topography

Dartmouth occupies a total area of 97.5 square miles, of which 65.2 square miles are land. Elevations range from a high of 252 feet at Yellow Hill in the northwest corner of town, to sea level along the tidal shoreline of Buzzard's Bay. The topography is typical of southeastern Massachusetts in that it is a mixture of gentle slopes and flat terrain good for agriculture and activities dependent upon coastal access. As can be seen in Map 10, Dartmouth contains several types of major geological features. Till or bedrock is generally found in areas of higher elevations. Sand and gravel deposits are generally found in lower elevations between the till or bedrock, and floodplain alluvium is generally found along the major waterways in Dartmouth.

Map 10. Surficial Geology in Dartmouth



The soils in Dartmouth are largely Paxton-Woodbridge-Whitman association (Map 11). These consist of nearly level to moderately steep slopes that are well drained, moderately well drained, and very poorly drained on glacial uplands. In addition, there are large areas of wetlands containing Freetown and Swansea soils. This soil is mucky, poorly drained, level, and deep. These areas are protected by the Massachusetts Wetlands Protection Act and the Dartmouth Wetland Protection By-Law. This includes the Deerfield Swamp, the Acushnet Cedar Swamp, Shingle Island Swamp and Apponagansett Swamp (Map 12).

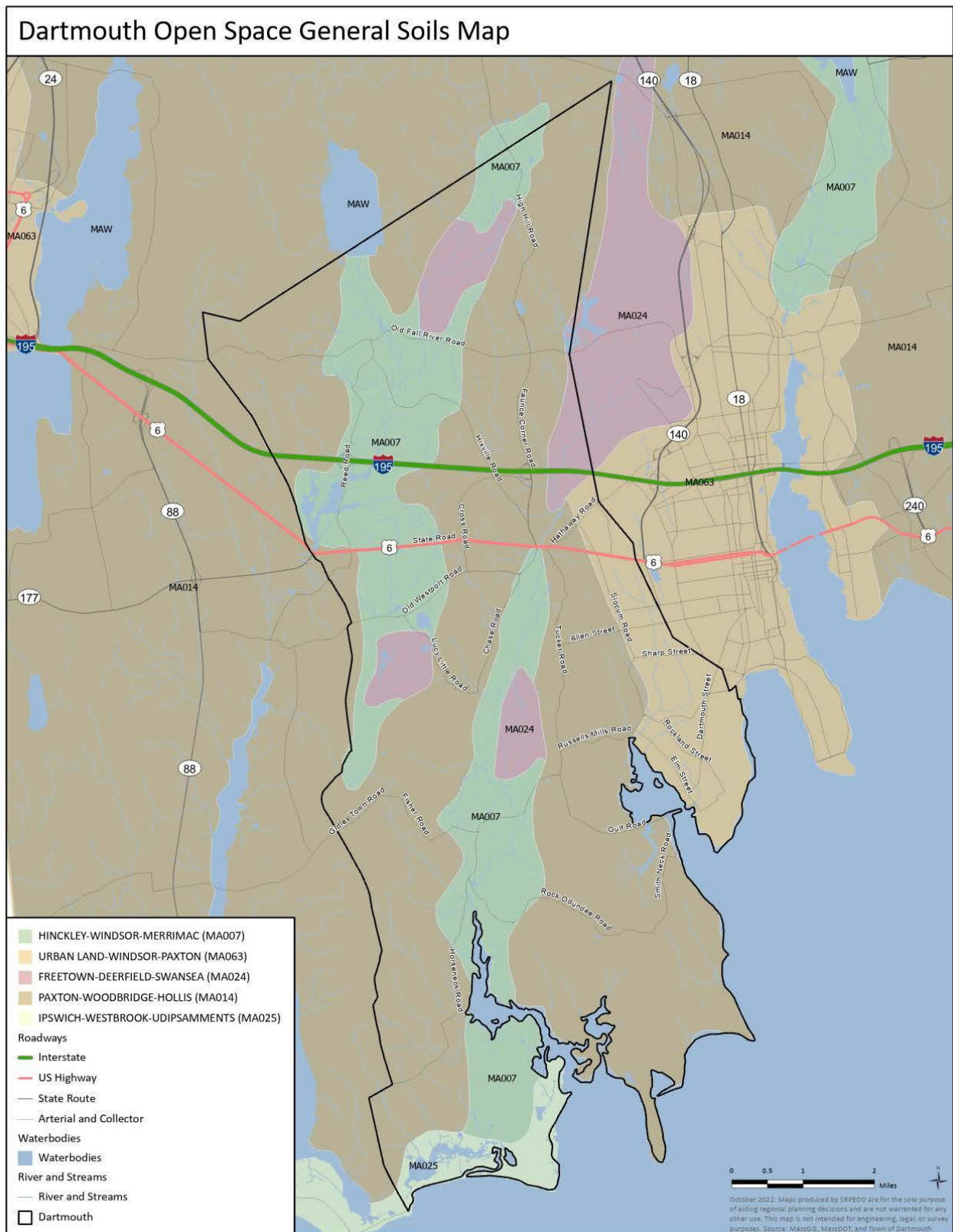
A soils characteristics influence an area's suitability for different uses. The soil's porosity, erodibility, and even its depth, dictate whether a site may be appropriate for construction, preservation, or active or passive recreational uses. Thus, in some areas of Dartmouth that remain open and unprotected, soil conditions may, themselves, prohibit development and ensure some level of protection against development. For example, the town's river areas are protected under state and local regulations.

Most of the remaining upland areas of Dartmouth would be expected to support modern Title 5 septic systems. Limitations are bedrock, wetlands, coastal dunes, barrier beaches, seasonal high water tables, and perched water tables. Recreational facilities could be sited on some of these areas using composting toilets and non-nitrogen loading soil additives. Passive recreation activities, such as nature trails, swimming, boating and fishing could be encouraged.

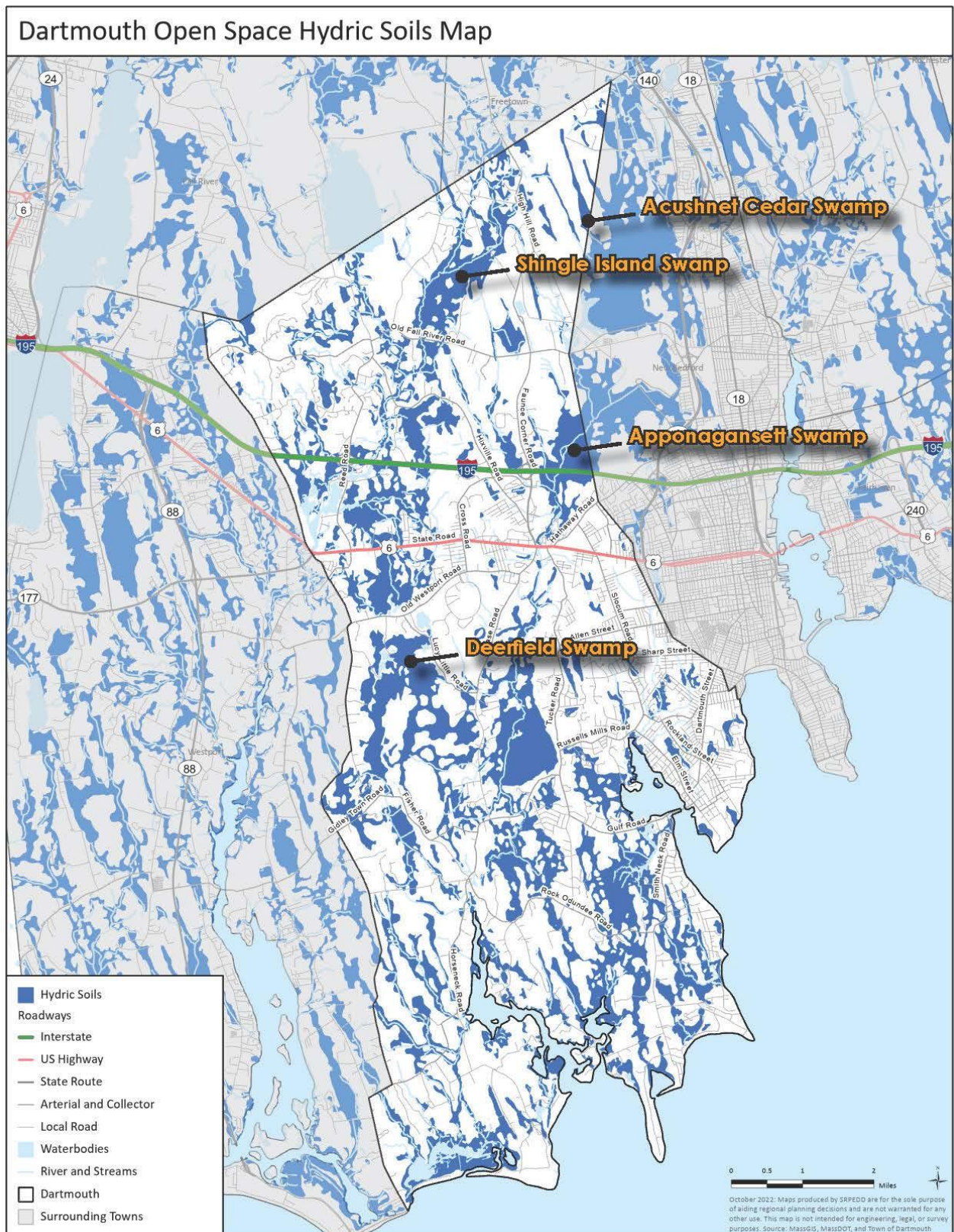
Agricultural activity remains a prominent feature of life in Dartmouth and is supported by an active Agricultural Commission as well as a Right-to-Farm bylaw. The practice of agriculture in Dartmouth is made possible by the presence of soils that support the growth of agricultural products. The Natural Resources Conservation Service (NRCS) has prepared soils maps across the country, and as part of that effort, classified those soils that have primary importance to supporting agriculture and food production.

In Dartmouth, 14,711 acres of land across the town have been identified as soils of prime farmland or as farmland of statewide importance (Map 13). However, this mapping considers the quality of soils only, and does not automatically incorporate what is currently constructed overtop of it. Of the 14,711-acres of soils significant for agriculture in Dartmouth, 2,883 are covered with impervious surfaces like roads, buildings, and pavement. Of the remaining 11,828 acres, only 18% (2,135 acres) are contained within parcels that are assessed as active agriculturally productive uses.

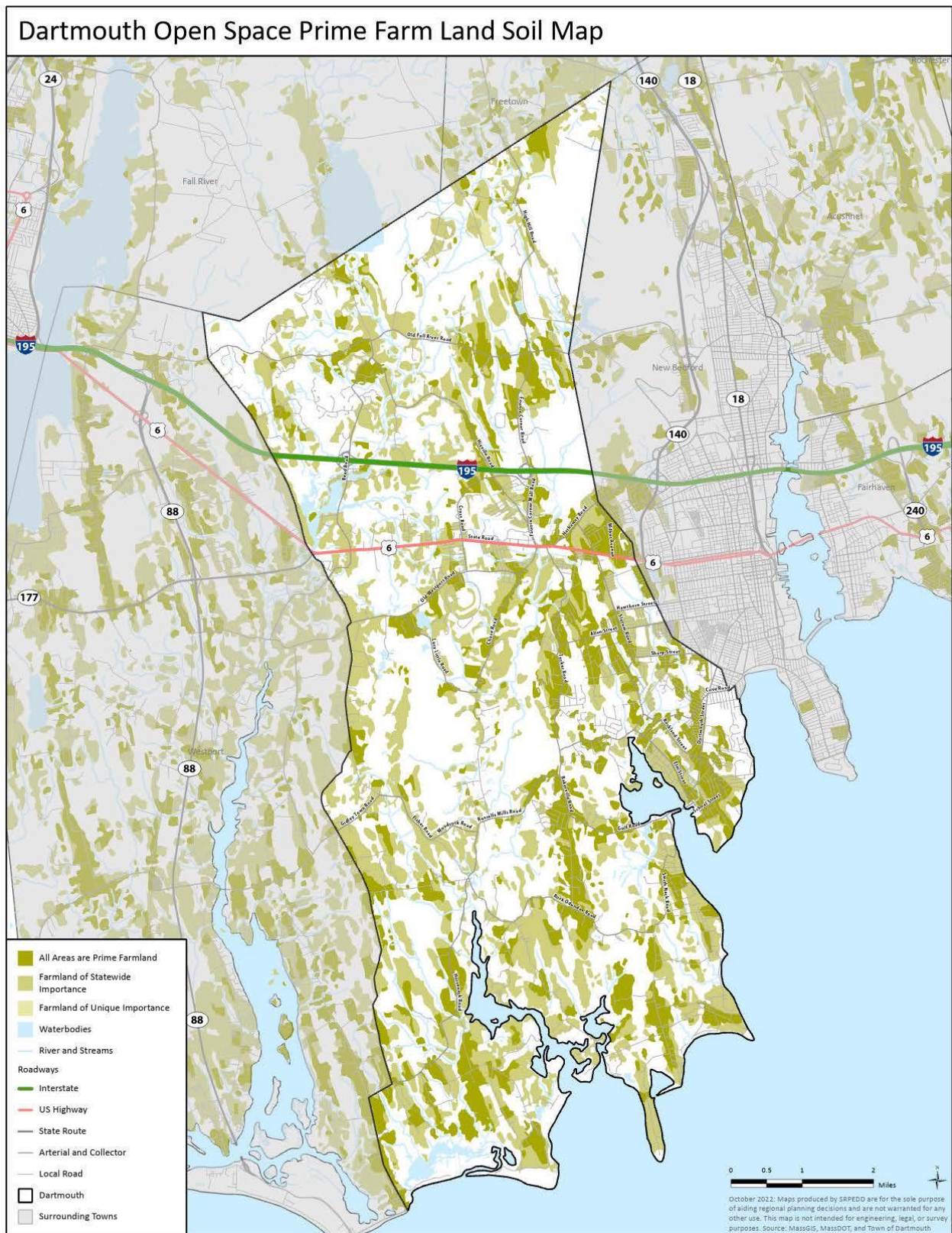
Map 11. General Soils in Dartmouth



Map 12. Hydric Soils



Map 13. Prime Agricultural Soils



B. Landscape Characteristics

The Town of Dartmouth is the fourth largest community, geographically, in the State of Massachusetts. After decades of fast-paced growth through 1990, Dartmouth has experienced a slower, yet steady pace of growth in both residential as well as commercial development.

Dartmouth residents enjoy a rich diversity of striking and high-quality landscape elements that are not often found within a single town's borders. Dartmouth's farmlands, wooded areas and coastal location represent perhaps the three most notable features that make Dartmouth so aesthetically pleasing. Open fields, stone walls, gentle valleys, dense woodlands, delicate marshlands, expansive beaches, and historic buildings equally combine to give Dartmouth its uniqueness. The sheer variety of natural features, coupled with a wide array of commercial, industrial, and residential development, creates scenery that gradually changes as one moves through town.

There is widespread appreciation for many of these features among town residents. The 2021 Open Space and Recreation Survey posed the question: "What is your favorite thing about living in Dartmouth?" From the responses, Dartmouth residents clearly love many things about their town. Chief among these are the coast and sea, open space and access to nature, rural and small-town feel, farmland, scenic beauty, the sense of community, and convenience.

From the figures in the table below summarizing the responses to this question, many residents find the town's coastal location to be perhaps its most outstanding feature. Many residents derive a great deal of joy from both active, passive, and daily viewing interactions with the waterfront, coast, and ocean. After coastal location, residents most generally view access to nature – being able to get up and go out and have opportunities to enjoy being outside - or at least the presence of green space and open space, as some of their favorite things about living in Dartmouth.

Additionally, residents tend to value the rural and small-town characteristics of Dartmouth, but also the fact that these rural, small-town attributes coexist with other convenience-oriented development and ready access to services. The continued presence of active, operational farms in Dartmouth is closely tied to the town's rural quality, and many respondents singled-out farmland as providing multiple benefits, including access to fresh food. The coastal and pastoral qualities of the town no doubt contribute to many respondents saying that for them, it is the town's natural beauty that sets it apart. A notable number of respondents also mentioned or singled-out people as their favorite part of living in town, portraying a rich and friendly community-oriented life.

Table 18. Responses to the 2021 OSRP Survey Question: "What is your favorite thing about living in Dartmouth?"

Category	Number of mentions / related comments	Specific examples
Coasts and waterways	143	"Access to the seashore," "the beaches and the marina," "Access to the sea!," "I enjoy activities along the waters edge and on the water," "Round Hill Beach"
Access to nature and outdoor recreation options (trails, biking, etc.)	69	"Definitely the variety of nature based activities," "the trails in the woods," "DNRT trails," "access to nature and recreation I enjoy"
Presence of open space / conservation land	54	"open green space with water views and fresh air!," "preserved open space," "DNRT and its efforts to acquire and preserve open natural space in the town," "the amount of protected land"
Small town, village, and rural feel	52	"Rural living," "rural character," "small town feel with many outdoor activities available"
Farmland, agricultural community, and availability of local produce	44	"farmland, local food and access to healthy, wild, outdoor spaces," "being part of a farm friendly...community," "The farms (visual appeal, fresh produce and the farmers themselves)," "the community of new generation small farming businesses that are developing"
Natural scenic beauty	33	"beauty everywhere," "natural beauty," "beautiful scenery"
Sense of community, people, and friendliness	25	"nice people," "people," "Incredible diversity of farmland, woodland, and ocean access all within a short drive (or bike ride!) within a friendly and culturally diverse community," "the beauty and friendliness of everyone in town"
Convenient proximity to services (medical, commercial, restaurants, nearby cities, infrastructure)	20	"We have a great balance of a coastal town with a rural feel mixed with easy access to many stores and the taxbase of businesses on Rt. 6 & Faunce Corner Rd," "It's a great town and we have everything in it," "Country feeling but close to services/medical facilities"
Wildlife and habitat diversity	14	"I love the opportunity for all to use the green open space for recreation, sport and wildlife!," "wildlife habitat," "access to several habitat type settings"
Fresh air, peaceful, calming, and quiet	11	"it's a beautiful, calming existence!," "close to everything yet still quiet," "peaceful"
Historic resources	10	"reminiscing about its truly nostalgic history!," "Its natural beauty as a coastal community and its cultural and historic resources," "quaint historic places to visit"
Variety and blend of development types (natural lands, urban, rural, suburban)	9	"It has a balance of quaintness, ruralness and openness that also responsibly accommodates agriculture, business and industry. There is something for everyone here," "access to water and natural facilities while still having a thriving business community. After reading this survey I realize there is so much more in

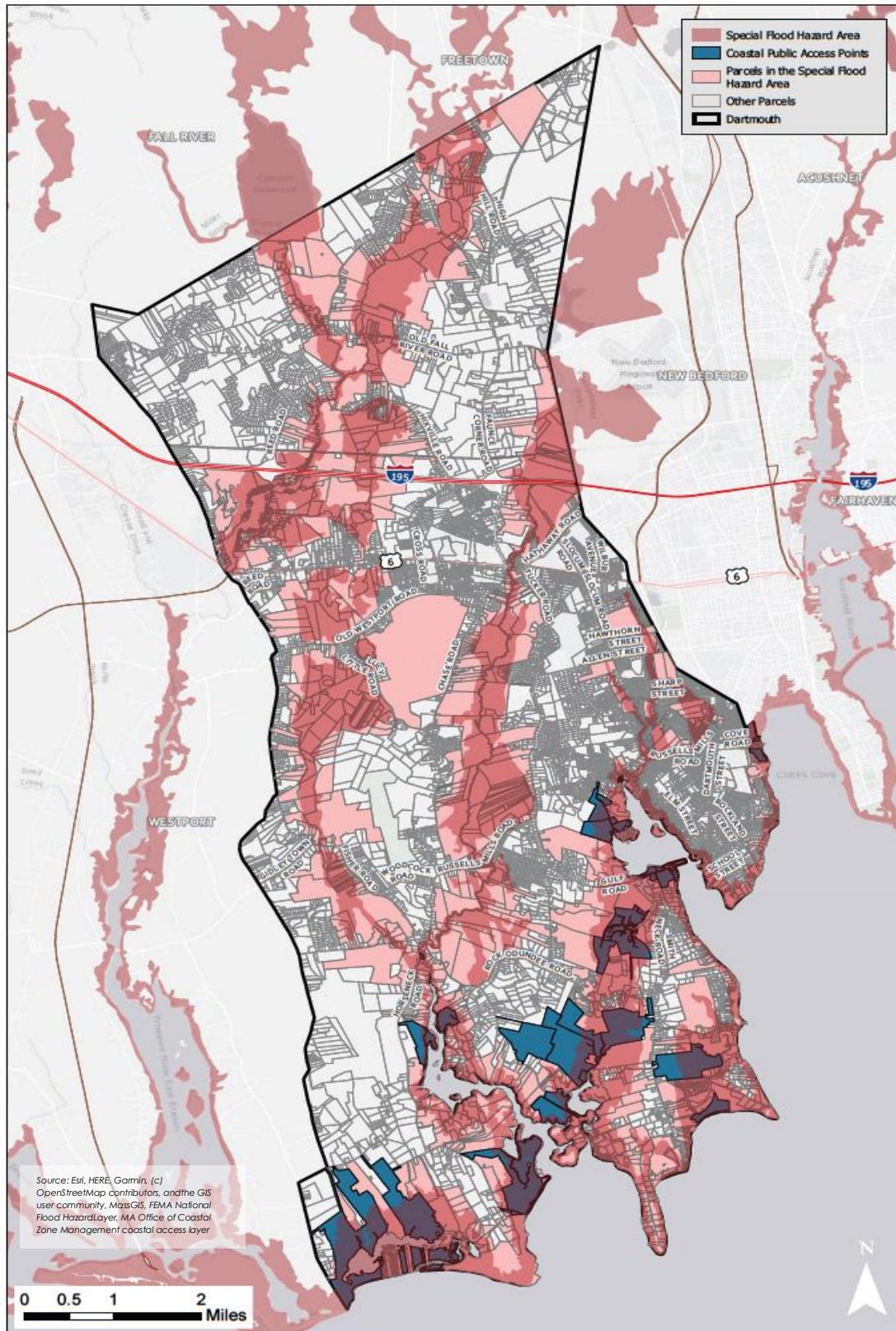
		Dartmouth that I was never aware of and I've lived in the town for almost 20 years"
Trees and Woodlands	7	"trees and wildlife," "the woods," "tree lined streets"
Quality schools	7	"schools," "the school system"
Youth sports and playgrounds	4	"youth sports activities," "DYAA sports have been great"
Stonewalls	3	"the beauty and the stonewalls"
Arts and culture	3	"The trails! The ocean! The local farms and being able to eat locally grown produce and meat. The stone walls, open fields and the rural beauty, adjacent to excellent restaurants and a robust arts community"
Safety	3	"safety," "The open space, forested and farmed, brings me a profound inner peace, which I notice almost every time I drive through an "undeveloped" area. It feels rural and safe, whether the latter is so or not"
Walkability	2	"walking on a sidewalk"
Low taxes	2	"affordable and near the water," "low taxes"

Priority Landscape: Coastal Lands

As the survey demonstrates, Dartmouth residents are closely tied to their coastal location on Buzzards Bay. Dartmouth's scenery and recreational cultural are heavily identified with the bay and the town's waterfront. The Massachusetts Office of Coastal Zone Management identifies 30 public access points in Dartmouth, which are managed by either state, local or nonprofit entities (see Map 14). Located entirely within the Buzzards Bay Watershed, activity and land uses upland from the bay have significant consequences for the health of Dartmouth's waterways and Buzzards Bay.

While life on the water contributes a unique scenic beauty and maritime recreational opportunities, Dartmouth's coastal location also entails the possibility of severe flood and storm risks. The Federal Emergency Management Agency (FEMA)-designated Special Flood Hazard Area covers approximately 2,801 properties, in whole or in part. These properties contain about 1,614 structures located within the Special Flood Hazard Area (see Map 14). The large number of properties and improvements located within this high-risk flood area make it essential for the town to maintain its standing and compliance with the rules and regulations of FEMA's National Flood Insurance Program, and to consider high risk flood areas carefully when making high-cost community facility and infrastructure investments.

Map 14. Water Nexus Map



Priority Landscape: Agricultural Lands

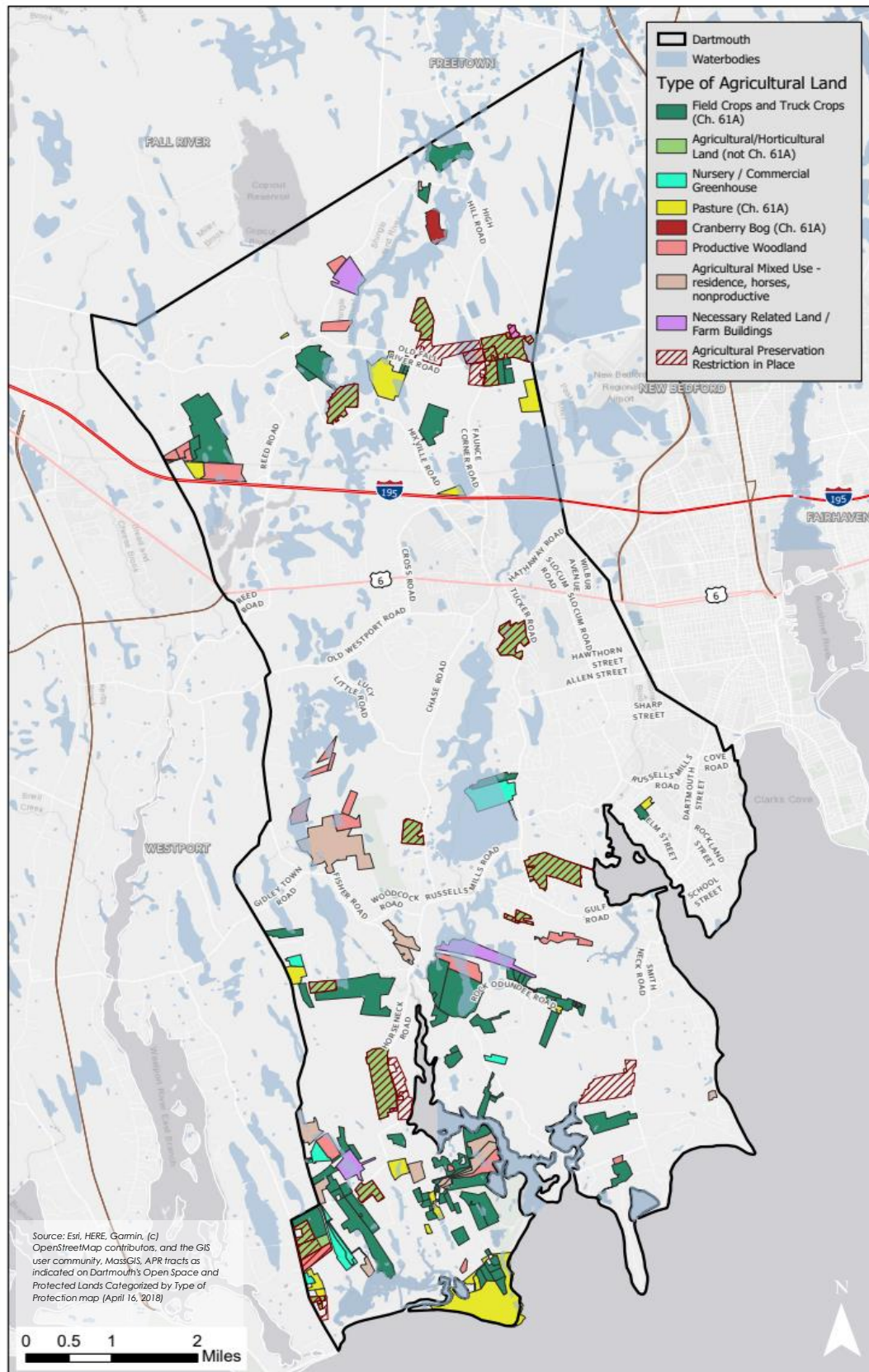
Overall, 4,284 acres in Dartmouth (11% of the town), are categorized as having some type of agricultural use (Map 15). Currently, 1,075 acres of land in Dartmouth are part of the state's Agricultural Preservation Restriction (APR) program, whereby lands have been set aside in perpetuity for agricultural use. Most of the agricultural lands in Dartmouth produce field or truck crops including hay, wheat, tillable forage, and vegetables. Other large-acreage product types include unspecified agricultural operations not in the Chapter 61 program, and pasture land, and mixed-use agricultural land.

Per zoning regulations, agricultural uses are permitted in all zoning districts except for Residence C, Village Business, Bliss Corner, Office Park, Marine Industrial, and General Industrial districts (overall, these districts occupy small portions of land area in Dartmouth). Rather than regulatory barriers, the continuation of active farmland in Dartmouth may face its biggest challenge from social and environmental pressures. Preserving the quality of prime agricultural soils into the future as climate change impacts bring more rain, erosion, summer drought, snap freezes, and pest pressures may require unconventional farming practices, such as no-till and similar operations, or the growth of different crops.

From a social and demographic perspective, the 2009 American Farmland Trust survey found that 2/3 of farmer respondents did not have a successor in line to continue the farming operation. Connecting young farmers with agricultural land may emerge as a key priority for maintaining Dartmouth's valued rural character.

The continuation of farming practices in Dartmouth is highly valued by the community. The 2021 Open Space and Recreation Survey posed three questions about "Activity related to Locally Grown Produce:" (1) Do you purchase locally grown produce; (2) Is the availability of locally grown produce important to you; and (3) Are you willing to pay more for locally grown produce. Ninety-three percent of respondents purchase locally grown produce. An even slightly larger percentage of respondents (95%) indicated that the availability of locally grown produce is important to them. Finally, 92% of respondents indicated that they are willing to pay more for locally grown produce.

Map 15. Dartmouth's Active Agricultural Operations



C. Water Resources

Watersheds

A watershed is an area of land that drains to a common waterbody. Watershed extents are defined by peaks and topography of the land that causes water to drain in a specific direction, toward a specific lake, river, and ultimately, ocean. Watersheds occur at different scales. A major watershed for a large waterbody, such as Buzzards Bay, contains multiple sub-watersheds that drain to specific waterbodies within the major watershed. Watersheds connect the health of the land with the health of the water. Characteristics of the land in a watershed, including the degree of urbanization, affect many natural processes, such as the amount of rainfall that infiltrates into the land as groundwater, the amount that enters pipes and human-made pathways, and the amount that runs off over land.

Buzzards Bay Watershed

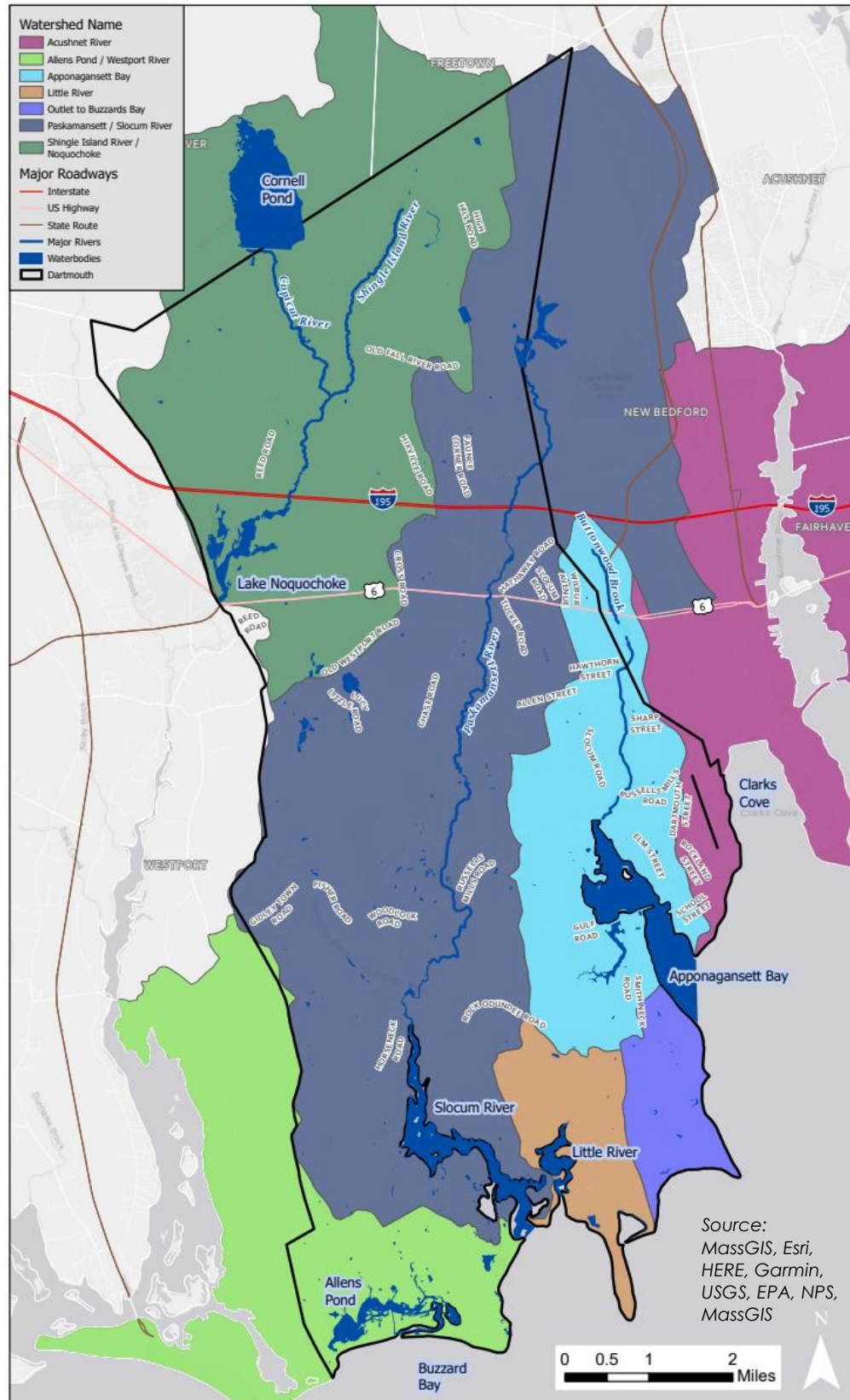
Watersheds occur at different scales. The Buzzards Bay Watershed drains approximately 432 square miles of land, including lakes, rivers, streams, wetlands, and groundwater, into Buzzards Bay. The bay itself is approximately 228 square miles in size and has a coastline which stretches over 280 miles. The coastline of Buzzards Bay offers a wealth of diverse habitat, including: 5,000 acres of salt marsh, 10,500 acres of eelgrass beds, and 5,000 acres of tidal flats, which are essential to the marine life in and around the bay. The Buzzards Bay Watershed encompasses all or part of 13 municipalities including the entirety of Dartmouth.

Dartmouth's Sub-watersheds

There are five sub-watersheds of the larger Buzzards Bay Watershed within the Town of Dartmouth. From north to south, they are: the Shingle Island River/Noquochoke Watershed; the Slocums/Paskamansett River Watershed; the Apponagansett Bay Watershed; the Little River Watershed; and the Allens Pond Watershed (Map 16).

The Apponagansett Bay Watershed, at 5,342 acres, is one of the smaller Buzzards Bay sub-watersheds and is over 80% developed. The Little River Watershed is relatively small at 1,842 acres in size. The Little River Watershed has a great deal of undeveloped land (over 80% undeveloped), and over half of the watershed is permanently protected through Conservation Restrictions, DNRT and Conservation Commission ownership, and Agricultural Preservation Restrictions. The Slocums River Watershed is the fourth largest of the embayment watersheds to Buzzards Bay, encompassing 23,636 upland acres. Upper parts of the Slocums River Watershed are within New Bedford and Freetown, including the New Bedford Industrial Park. Approximately 50% of the Slocums River watershed is forestland, despite the dominance of heavy commercial development along Route 6.

Map 16: Subwatersheds in Dartmouth



While they may seem remote from end-point receiving waters, the characteristics and quality of upland land areas that drain water through the watershed influence watershed health. Nutrient overloading within a watershed can cause poor watershed health through a process called eutrophication. Eutrophication occurs when there are excess amounts of nutrients, mainly nitrogen and phosphorus, which stimulate the growth of plants (algae and phytoplankton). Excessive algae and invasive plant growth blocks sunlight to native plants such as eelgrass, reducing the area of this intensively ecologically productive habitat, and creating low oxygen conditions. Poor water clarity, bad odors, stressed marine organisms and fish kills are all symptoms of eutrophic conditions.

Natural resource preservation in key areas helps to maintain several essential watershed functions. For example, protecting vegetation in a watershed preserves the porosity of the soil, which increases water infiltration into the ground. Water that can infiltrate where it falls generally carries less pollutants than water runoff traveling over impervious surfaces, helping to maintain cleaner water for aquatic organisms. Good infiltration rates also recharge town wells, especially in mapped aquifer recharge areas. Protection of open space and implementation of smart growth management measures that reduce impervious cover (buildings, pavement, etc.) within sub-watershed areas protects the water supply for Dartmouth and improves the condition of waterbodies like Apponagansett Bay, Little River and Slocums River.

Water quality in these and other coastal waters in and around Dartmouth is consistently monitored through the data collection efforts of the Buzzards Bay Coalition's Baywatchers Program. Volunteers regularly sample and collect data from saltwater harbors, coves, salt ponds, and tidal rivers throughout Buzzards Bay. Each saltwater waterbody is assigned a Bay Health Index Score between 0 and 100, with 0 representing severe nitrogen pollution, low dissolved oxygen, poor water clarity, and/or high algal pigments, and 100 representing pristine water (data for at least three of five indicators must be present to calculate the score). Baywatchers monitor water quality at 23 stations across Dartmouth's eight coastal waterbodies. The following chart and map show the locations and current water quality scores in each of these monitored waterbodies.

Table 19. BBC Bay Health Index Scores for Waterbodies in Dartmouth (as of October 2022)

Waterbody	Bay Health Index Score (5-Year Average)
Outer Clarks Cove	69 = good, decrease from over 80 in 1995 but now up trend
Inner Clarks Cove	67 = good, decrease from over 80 in 1995 but now up trend
Outer Apponagansett Bay	57 = fair, consistent over time
Outer Slocums River	55 = fair, some improvement since 1994
Middle Apponagansett Bay	53 = fair, consistent over time
Nonquitt Marsh	53 = fair, improvement since 2004 when score below 10
Allens Pond	40 = fair, representing some improvement
Outer Little River	40 = fair, declines in recent years
Inner Apponagansett Bay	34 = poor, consistent over time (since 1992)
Inner Little River	31 = poor, small improvement over time, but recent decline
Salters Pond	29 = poor, improvement from 2014, but steady since 2016
Inner Slocums River	27 = poor, steady over time
Slocums River - Head	7 = poor, high of 20 in 2014 but down again since

Map 17. A Selection of Water Body Locations Monitored by BBC Baywatchers in Dartmouth



Surface Waters

Dartmouth's surface waters include its rivers, streams, lakes, ponds and coastal waters.

Shoreline

Dartmouth has an unusual combination of developed, rural, and seashore lands that lend themselves to creating especially scenic settings. Many would agree that Dartmouth's long and varied shoreline is its most prominent feature. The many inlets and shoreline features total 82 miles in length. This shoreline is divided into three distinct areas: Buzzards Bay, Apponagansett

Bay and Clarks Cove. In addition to the recreational benefits discussed further below, the bay shore provides several ecologically valuable coastal estuaries and ponds that should be protected from development.

Buzzards Bay

Buzzards Bay is a moderately large estuary approximately 228 square miles in size located in Southeastern Massachusetts between the western most portions of Cape Cod and Narragansett Bay in Rhode Island. This unique estuarine environment provides habitat for numerous plant and animal species. The Bay's 280 miles of coastline offers a wealth of diverse habitat, including salt marsh, eelgrass beds, and tidal flats, which are essential to the marine life in and around the bay. Ironically, the bay itself was named after a large bird, identified as a "buzzard", which the early colonists saw frequenting the shoreline along the bay. In actuality, the large "buzzard" was really an Osprey. Buzzards Bay was designated "estuary of national significance" in 1988.

Along the Buzzards Bay shore is the Nonquitt Marsh, an extensive saltwater marsh entirely protected by the Dartmouth Natural Resources Trust (DNRT) and the Incorporated Proprietors of Nonquitt. With funding from the New Bedford Harbor Trustees Council, the Nonquitt Marsh Restoration Project restored tidal flushing to the more than 87 acres of marsh located in Nonquitt through the replacement of undersized culverts with three large box culverts. The restoration greatly increased the habitat value, species diversity, and biological productivity of the marsh and is helping to restore the natural exchange of nutrients between the marsh and Buzzards Bay.

In the southwestern corner of Dartmouth, Allens Pond is another exceptional, environmentally sensitive area. Allens Pond is recognized by the US Fish & Wildlife Service as one of the most significant coastal habitats in Southern New England. Dartmouth's Wetland Protection Bylaw provisions and the Massachusetts Audubon Society protect the surrounding saltmarsh and barrier beach, but additional steps, including the acquisition of more land, should be pursued if this scenic basin is to be retained in its natural state. To that end, in 2017, DNRT in partnership with Round the Bend Farm and the Buzzards Bay Coalition, acquired the 60-acre Ocean View Farm Reserve, which is on Allens Pond adjacent to The Mass Audubon Wildlife Sanctuary.

Apponagansett Bay

Apponagansett Bay serves as the Town's harbor for commercial and recreational boating. It is divided by the Padanaram causeway and bridge, which date back to 1830. These structures have the effect of dividing the bay in two – the inner bay to the north of the causeway, and the outer bay to the south. The waters of the inner bay are confined by the causeway structures, with less opportunity for "flushing," a term for natural water exchange that would occur between Apponagansett Bay and Buzzards Bay, but which is constricted by this infrastructure. Recent upgrades to the causeway from 2016-2018 installed roadway, drainage, structural, and lighting improvements, but Apponagansett, particularly Inner Apponagansett, is still one of the most nutrient overloaded embayments in Buzzards Bay. In September 2022, the town and state announced \$2 million in funding to initiate a more extensive causeway replacement project. In its initial design phase, the newly proposed Padanaram Bridge could have features that would

promote greater water exchange.¹⁵

A 2015 report, "Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Apponagansett Bay Estuary, Dartmouth, MA," written by the Massachusetts Estuaries Project (MEP) with local, state and federal agency contributions, found that each acre of estuary receives contributing nutrients from 15 acres of land area. With substantial nitrogen inputs, one major ecological threat to the inner bay is eutrophication resulting from nutrient over-enrichment. The nutrient issue in Apponagansett Bay results from a combination of factors. The MEP report lists four principal sources: onsite disposal of wastewater in areas not served by the municipal wastewater systems of Dartmouth and New Bedford; storm water runoff containing nitrogen; residential and agricultural fertilizer use; and atmospheric deposition of nitrogen compounds on the land and water surface.

Aside from nutrient overloading, the Bay faces polluting influences of other harmful bacteria. The major freshwater inflow to Apponagansett is from Buttonwood Brook, which is the primary surface water transport of fecal coliform into the inner bay. This contamination causes shellfishing beds to be closed within the inner bay (see the Designated Shellfish Growing Areas Map in Section 4E).

Because the Apponagansett watershed is over 80% developed, nitrogen management options focus on cleaning up Buttonwood Brook, improving existing wastewater and storm water management systems that discharge to the bay, and managing tidal exchange. The MEP report referenced above was developed to help establish a formal designation for controlling nitrogen loads into the Bay called a Total Maximum Daily Load (TMDL), which, once developed by MassDEP, sets a target threshold and implementation actions for reducing the amount of a target pollutant entering a designated waterbody. A TMDL issuance from MassDEP has yet to be developed as of the writing of this plan (see the section below on impaired waterbodies for additional details).

Clarks Cove

The Clarks Cove area similarly contributes to Dartmouth's shoreline resources. This cove, lying between New Bedford and Dartmouth, was very badly polluted until recently when pollution levels dropped, and New Bedford and Dartmouth were both able to reopen their shellfish beds. Heavy rains have an adverse effect on water quality in the cove resulting in closure to both shellfishing and swimming activities. The Conservation Commission received grant money from the Buzzards Bay Project to perform a stormwater remediation study and design for controlling fecal coliform pollutants within the Rogers Street storm drain, which resulted in the installation of an additional stormwater treatment facility on Rogers Street in 2016.

Rivers and Streams

Several river systems flow through Dartmouth, and with their adjoining wetlands, form large

¹⁵ Robinson, Kate. WBSM. "State announces \$2 million for Padanaram Bridget Redesign," September 2, 2022. <https://wbsm.com/state-announces-2-million-padanaram-bridge-redesign/>

watersheds that affect water conditions throughout town and in abutting Westport. These river systems provide excellent recreational opportunities for canoeing, fishing, and sightseeing.

The Paskamansett River

The Paskamansett River begins at Turner's Pond, adjacent to the State-owned Acushnet Cedar Swamp in New Bedford. It flows southerly through broad wetland areas to an old mill pond in the Smith Mills commercial district. The river then follows a well-defined channel for about a mile before flowing into a large, wooded swamp for two more miles. Between Russells Mills Road and a second mill pond in Russells Mills village, the stream is again well defined, with patches of white-water rapids. South of Russells Mills, the stream becomes subject to tidal action, and is known as Slocums River.

The Paskamansett River has historically supported a population of river herring. In October of 2000, the Dartmouth Conservation Commission completed the Paskamansett River Fishway Restoration Project to correct design flaws in the fishway at the dam near the head of the tide at Russell's Mills, observably improving fish passage in subsequent years.

The Slocums River

The Slocums River estuary flows nearly three miles through sparsely developed farm and woodlands. As Slocums River enters Buzzards Bay, it joins with the Little River, another tidal estuary of similar scenic beauty. The Destruction Brook is a significant tributary to the Slocums River. This short but scenic stream originates in the Deerfield Swamp and flows through undeveloped farmlands and woodlands past an abandoned grain mill to join the Slocums near the Town Park in Russells Mills. Destruction Brook supports extensive wildlife and was once Dartmouth's only freshwater hatchery for Alewife. Water quality is exceptionally high.

The Massachusetts Estuaries Project (MEP) 2008 "Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Slocum's and Little River Estuaries, Dartmouth, MA" report found the Slocums River was impaired by nitrogen loading from its watershed; however, the extent of degradation varied across the system. The upper portion of the watershed exhibited healthy to moderately impaired benthic habitat; the middle portion of the watershed showed signs of significantly impaired habitat; and the lower portion of the watershed showed signs of generally healthy habitat with some instances of macroalgal accumulation, likely transported from lower quality waters upstream. Loss of historic eel grass beds at the mouth of the Slocums and Little Rivers, however, are an important indicator of nutrient pollution and depleted oxygen levels. The largest identified contributors to nitrogen loading in the watershed were from septic systems, fertilizers used on lawns and golf courses, and stormwater runoff from impervious surfaces.

In 2009 and 2013, DNRT acquired a 29-acre parcel on Slocum's River at the mouth of Peter's Creek – the Peter's Creek Reserve. The Reserve contains three habitats (salt marsh, small islands and riparian forest) identified by the Commonwealth's Division of Fish and Game's State Wildlife Action Plan as being in the "greatest need of conservation," and builds on a network of adjacent and cross-river conservation land at the Hawes-Wadsworth, Grosswendt, and Slocum's River Reserves.

Shingle Island—Copicut River System

The Shingle Island – Copicut River system drains most of the northern half of Dartmouth. This system includes the Copicut and Shingle Island Rivers, 1,200 acres of wetlands, and Lake Noquochoke, into which they drain. Shingle Island River flows from the Freetown line south to Lake Noquochoke. The Copicut River flows south from Copicut Swamp and Reservoir in Fall River to Cornell Pond on Old Fall River Road in Dartmouth, where it merges with the Shingle Island River. The whole system is very valuable to Dartmouth for its water and recreational needs.

Buttonwood Brook

The Buttonwood Brook watershed is extensively developed. The brook has significant implications for water quality in Apponagansett Bay. Though degraded in many parts of its northern drainage area due to the degree of urbanization, Buttonwood Brook provides a riparian corridor along the western side of New Bedford and southward through Dartmouth.

Lakes and Ponds

Lake Noquochoke

Lake Noquochoke is the largest freshwater pond in the Town, encompassing 165 acres. The lake is intensively developed with cottages along its eastern shore. With a grant from the Massachusetts Lakes and Ponds Program, a report was completed to propose a management strategy for the control of aquatic nuisance vegetation at Lake Noquochoke, called the Lake Noquochoke Aquatic Nuisance Vegetation Project. The study showed that phosphorus coming from the Shingle Island watershed was causing the vegetative bloom in the lake. An attempt to address the phosphorus and nitrogen problems through the installation of town sewer to all the neighborhoods surrounding the lake has been implemented.

Because of an act of the state legislature in the 1940s, all surface waterways within the Town of Dartmouth associated with the Shingle Island and Copicut areas are owned by the adjoining City of Fall River. This little-known fact impacts the surrounding land uses, and the amount of flexibility Dartmouth maintains over these systems. Lake Noquochoke falls into this geographic area. The City of Fall River owns the lake and a one-foot strip of land along the lake's perimeter. There are two dams that currently impound water in Lake Noquochoke – an upper and a lower dam. In 2021, Fall River pursued action for the permitting of the removal of the upper dam, which is anticipated to drain a small reservoir above the lake when the dam is removed, but the lake should remain unaffected. A breach of the lower dam would drain the lake and return the area to wetlands. Fall River has previously considered a breach of the lower dam as the impoundment is no longer needed for the City's use and requires costly maintenance measures.

Cedar Dell Pond

Cedar Dell Pond, like Lake Noquochoke, has an intensely developed shoreline with many small houses and cottages in close proximity to one another, especially on its southern and western shores. The extended lawn of the University of Massachusetts and a few small houses dominate the eastern shore. Presently the University of Massachusetts owns much of the land surrounding the pond, which have high preservation value for protecting one of the few freshwater ponds in Dartmouth and as scenic open space.

Teal Pond

Teal Pond, located off Little River Road between Mishaum Point and Little River, covers only a few acres but is of great value to wildlife. It is a coastal pond characterized by fresh water and protective barrier beach. A large rock outcrop adds to its aesthetic value. Teal Pond provides a nesting place and feeding area for herons, sandpipers, egrets, swans, and migrating Canada geese. Similar coastal ponds are located off the beach between Mishaum and Salter's Point.

Turner Pond

Turner Pond is 55 acres in size and is located on the New Bedford/Dartmouth municipal line, bordering the Acushnet Cedar Swamp and situated near the end of the main runway for the New Bedford Regional Airport. Turner Pond is the headwaters of the entire Paskamansett-Slocums River system. The Massachusetts Department of Natural Resources owns the swamp and the eastern shore, but not the pond itself.

Cornell Pond

Cornell Pond is a manmade freshwater pond on the Copicut River. It has excellent potential for helping to meet the recreational needs of the area. North of Old Fall River Road near Hixville Village and surrounded by woods and hills, the pond is stocked for fishing and has a small park with a picnic table and a barbecue. Additionally, there is a small canoe/boat launching area along the pond's banks.

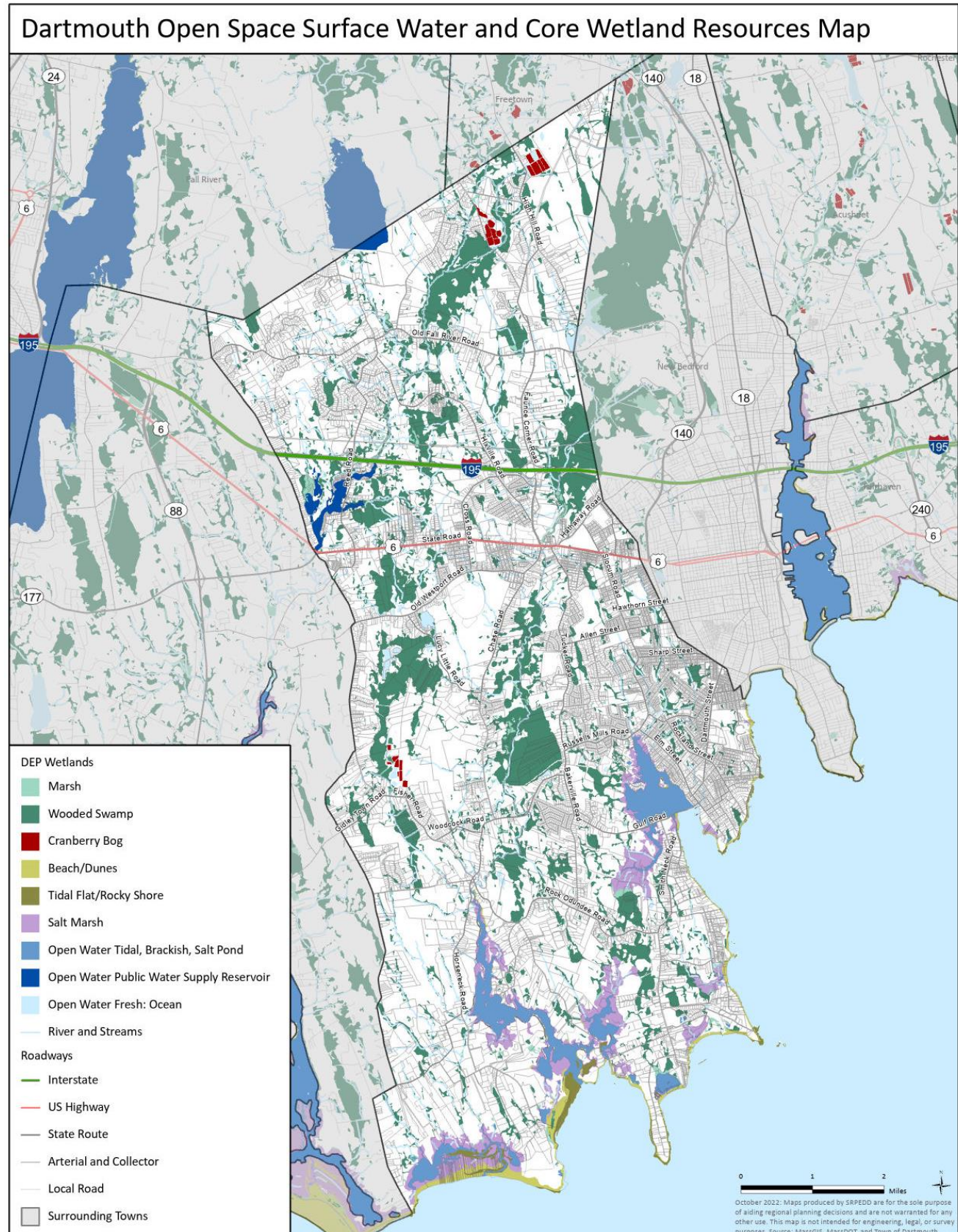
Wetlands

Dartmouth's wetlands, both coastal and inland, are protected by the Massachusetts Wetlands Protection Act (MGL c.131 sec. 40) and the Dartmouth Wetland Protection Bylaw. Key wetland areas include Deerfield Swamp, Acushnet Cedar Swamp, Shingle Island Swamp, Allens Pond, and Apponagansett Swamp. Most of the inland (freshwater) wetlands in Dartmouth, including Shingle Island and Apponagansett Swamp, border the town's major rivers and streams, including the Paskamansett River, Destruction Brook, Shingle Island River and the Copicut River. The undeveloped swamps and forests along these inland rivers and streams together form two broad and nearly continuous green belts extending northward from Buzzards Bay to the Fall River and New Bedford borders.

Dartmouth's Wetland Protection Bylaw was enacted at Special Town Meeting in November 1986. The adoption and continued utilization of this bylaw communicates the seriousness with which the town approaches wetland conservation as a critical element of preserving key ecosystem services such as flood abatement. The local bylaw identifies additional interests that, combined with the State's baseline wetland protection regulations, cover areas of flood control, storm damage, prevention of pollution, public or private water supply protection, groundwater, marine fisheries, shellfish, and wildlife protection, erosion prevention, recreation and aesthetics.

Both coastal and inland wetlands serve as flood protection barriers. They act as giant sponges in times of flood, absorbing tremendous quantities of water that would otherwise inundate developed areas, causing property damage and threats to safety. Barrier beaches, tidal flats and sand dunes provide a protective barrier from damage by hurricanes and excessively high tides. (Section 4G. Environmental Challenges further addresses the issue of flooding.) There is indeed good reason to protect wetlands from development.

Map 18. Surface Water and Core Wetland Resources in Dartmouth

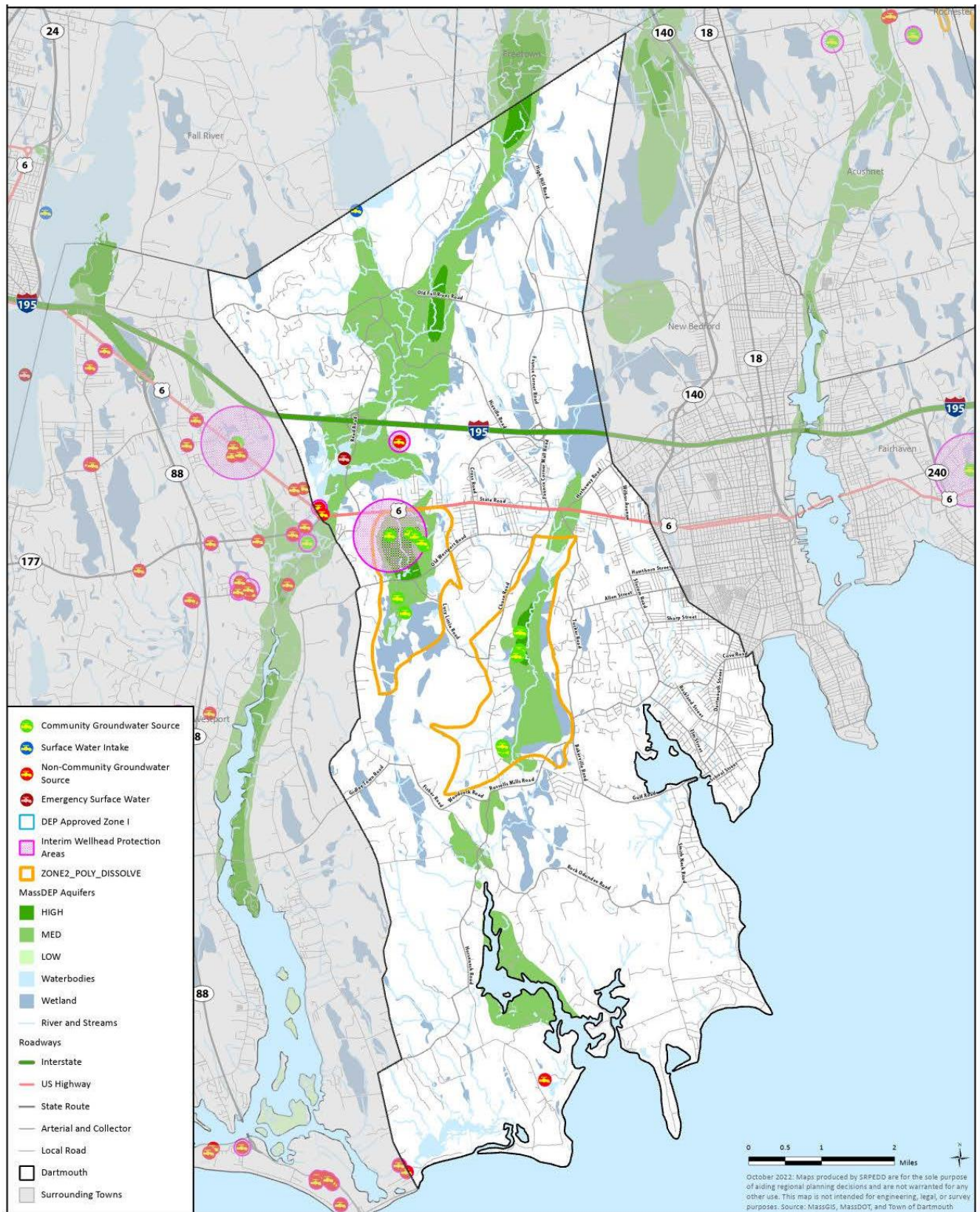


Aquifer Protection Zones

Dartmouth depends on town wells for most of its water supply, and consequently, prioritizes aquifer protection areas. Map 19, the *Water Resources Map*, displays community and non-community water supply wells, DEP approved Zone IIs (water supply recharge areas), and conceptual Zone IIs (estimated recharge radius around a wellhead), as well as Dartmouth's underlying aquifers. DEP's aquifer protection zones were determined by a computer model factoring in topography, soil conditions, and well infrastructure. From these state-designated zones, Dartmouth has identified Aquifer Protection Overlay Districts (Areas One, Two and Three), as shown on Map 8 *Zoning Overlay Districts* in Section 3D. The Aquifer Protection Areas lie predominantly within the Paskamansett and Shingle Island Watersheds.

Dartmouth was the first Town in Massachusetts to adopt Aquifer Protection Zoning (September 23, 1980). Aquifer protection zones were updated at Spring Town Meeting in 2021 to remain current and increase protections. Recently, the Town has been diligent in acquiring land for aquifer protection. These land acquisitions are part of an overall strategy to protect environmentally important portions of town, as well as to enhance the Town's water supply protection.

Map 19. Water Resources in Dartmouth



D. Vegetation

Characteristic Plant Species

Dartmouth contains numerous natural communities that are typical for southeastern Massachusetts and a few which are less common. The combination of Dartmouth's size and varied land use history have endowed the Town with a rich diversity of flora and fauna. The wise stewardship and preservation of these many resources will not only preserve the Town's character, widely valued by its residents, but also have regional, national and even global significance in preserving biodiversity by protecting habitats. Protection of a Green Infrastructure Network linking forest lands and wildlife habitats will help promote preservation throughout the Town of Dartmouth and beyond.

Most of Dartmouth's forests are dominated by oaks (*Quercus*). Mixed stands of White Oak (*Quercus alba*), Red Oak (*Quercus rubra*), Black Oak (*Quercus velutina*), and Scarlet Oak (*Quercus coccinea*) are common on upland. Swamp White Oak (*Quercus bicolor*) are found in wetlands. Especially huge Swamp White Oak with 5-foot trunk diameters grow in the Paskamansett River floodplain. In the central coastal area, Hickory (*Carya*) and Ash (*Fraxinus*) becomes co-dominant with Oak. White Pine (*Pinus strobes*) forms extensive stands in the northern and western parts of town, particularly on sandy glacial outwash deposits. The only other native Pine, the Pitch Pine (*Pinus rigida*), tends to favor gravel and ledge areas, but is also found in sandy swamps. Various blueberries (*Vaccinium* sect. *Cyanococcus*) dominate the understory. American Holly (*Ilex opaca*) approaches its northern limit of growth here. Holly trees with trunk diameters of 8-12 inches and 30 feet tall are locally common. On the many cool eastern facing slopes, American Beech, (*Fagus grandifolia*) associates with Yellow Birch (*Betula alleghaniensis*) and Maple (*Acer*) to resemble forests found in mountainous New England; this is largely possible due to the cool maritime summer climate. In the northwest, away from the salt spray of the coast, Hemlock groves are found with Black Birch (*Betula lenta*). An uncommon tree is the Sycamore (aka Buttonwood) tree (*Platanus occidentalis*) which only grows in the wild as isolated specimens along Buttonwood Brook in the eastern part of Town.

The forests of Dartmouth change from distinctive low growing 30-40 feet tall open canopied woodlands along the coast to towering dense forests with 80-foot-tall trees on the cool eastern slopes. These rich, cool eastern slope forests are located far enough inland to be somewhat protected from salt spray but close enough to the bay to benefit from the damp fogs. Most forests in Dartmouth tend to be windswept because of the constant southwest summer winds that force tree growth to lean towards the northeast. Tall White Pine (*Pinus strobus*) provide a reliable natural compass pointing most of their branches to the northeast away from the southwest wind.

Wooded wetlands, dominated by Red Maple (*Acer rubrum*) are common throughout the Town. In addition, the Black Gum or Tupelo tree (*Nyssa sylvatica*) is also partial to wet sites and is very tolerant of salt spray and the coastal winds. Atlantic White Cedar (*Chamaecyparis thyoides*) swamps, a habitat recognized as globally restricted by the State's Natural Heritage and Endangered Species Program (NHESP), may be found throughout the Lake Noquochoke/Shingle Island River Wetland system and to a lesser degree along the Paskamansett River and Flag Swamp wetland systems. A common wetland understory shrub noted for its summer fragrance is

the Sweet Pepperbush (*Clethra alnifolia*). The fragrance from blooms is noticeable when driving along roads near wetlands, contributing to the unique ambiance of the town. Northern Arrowwood (*Viburnum spp.*) is also a common wetland shrub.

Small but biologically important acid fens, bogs, shrub swamps and vernal ponds are scattered throughout the Town. Dartmouth has numerous salt marsh systems, including those associated with Little and Slocums River, Allens Pond, Apponagansett Bay, Nonquitt Marsh, and Meadow Shores. Vegetation here is typical of other salt marsh systems found throughout Massachusetts with certain rare exceptions. These salt marshes are in many cases accompanied by dune and barrier beach habitat.

Dartmouth has a strong agricultural past and much of its vegetation today is characteristic of such use. Pastures, hay fields, and corn and other vegetable fields are located in north and south Dartmouth. Many of Dartmouth's fields act as upland grass prairie habitat.

Forest Land

Numerous large tracts of woodlands may be found throughout the Town, for example, between Horseneck and Division Roads, Slades Corner and Fisher Road, Woodcock Road and Deerfield Swamp, and High Hill Road and the New Bedford line. They are also found throughout the Shingle Island River Watershed. Many of Dartmouth's forests are managed for and temporarily preserved under Massachusetts General Laws Chapter 61 Program or the Massachusetts Forest Stewardship Program. According to 2020 assessment data, approximately 1,114 acres of Dartmouth's forests are enrolled in the Chapter 61 program as forest land or productive woodlots. While some lots provide wood to heat homes, others provide wood for Dartmouth's lumber industry (e.g. the Delano Mill) that processes hardwoods such as white oak.

While many forest lands are private, there are many recreational opportunities for residents to walk and hike in these forests. The Dartmouth Natural Resources Trust (DNRT) maintains an increasing number of reserves that contain a forested woodland natural community and that are open to the public for passive woodland recreation. The subset of DNRT reserves that contain significant forest areas include:

- **Destruction Brook Woods** - On Slades Corner Road, this area consists of approximately 284 acres of pine forests, Atlantic white cedar stands, and beech groves surrounding Destruction Brook and its 3 mill ponds with 8 miles of trails.
- **Dike Creek Reserve** – This 77-acre property was acquired in 2019, in partnership with Buzzards Bay Coalition, to conserve the 128-acre Apponagansett Bay Farm. Located on Dike Creek Marsh, accessed on Bakerville Road, it offers 2 miles of trails along salt marsh, forested swamp, agricultural fields, streams, wooded uplands and vernal pools.
- **Dodge Reserve** – This 27-acre property is located on Russells Mills Road and contains upland oak and laurel forest, cattail marsh, red maple forest, and Buttonwood Brook.
- **Frank Knowles/Little River Reserve** – Accessed on Potomska Road, north of the Lloyd Center, this 194-acre reserve offers mature woodland along a meandering brook. It is part of a protected 500-acre block of publicly accessible land surrounding the headwaters of

Little River and there are 9 miles of walking trails available.

- **Howland Reserve** – On North Hixville Road, just north of Old Fall River Road, this area consists of approximately 25 acres of upland pine woodland and old stone walls on Cornell Pond.
- **Irvin Reserve** – 21 acres with a 100-yard long trail along Lak Noquochoke, accessible on Deerfield Land east of Reed Road.
- **Knowles Reserve** – Located at the intersection of Gulf & Smith Neck Roads, this area consists of 30 acres of early successional cedar forest, ponds, salt marshes & a picnic area.
- **McBratney Reserve** – 5 acres of red maple swamp, hardwood upland forest and a cultivated blueberry patch, located on Smith Neck Road.
- **New Bedford Garden Club Reserve** – This almost 3-acre property off Gaffney Road is a rhododendron-encircled glacial kettle hole.
- **Parsons Reserve** – This site consists of 32 acres in Russells Mills Village with a vernal pool, oaks, beech grove and a wooded glade that fills with hundreds of daffodils in spring.
- **Paskamansett Woods** – Acquired in 2015, this 11-acre property on Chase Road includes a pine-dominated woodland, small man-made pond and the historic “Kings Highway” granite bridge over the Paskamansett River.
- **Peter’s Creek Reserve** – 29 acres on the Slocums River, at the mouth of Peter’s Creek, including salt marsh, small islands and riparian forest.
- **Ridge Hill Reserve** – This area consists of 175 acres on Collins Corner Road. It includes a millpond, pitch pines, hemlocks, white pines and mature beech stands. Located between the Copicut and Shingle Island Rivers and abutting the Southeastern Massachusetts Bioreserve, it is close to several other protected properties in Dartmouth, providing an important wildlife corridor and protecting private and public water supplies.
- **Slocum’s River Reserve** – Located on Horseneck Road, just north of Barney’s Joy Road, this 47-acre property is jointly owned by DNRT and The Trustees of Reservations. It protects 3,000 feet of frontage along the Slocum’s River and includes mature woodland & old agricultural fields with extraordinary views of the River.
- **Smith Farm Reserve** – Located on the east side of Smith Neck Road, north of Round Hill, this 140-acre property includes a mix of Dartmouth’s diverse habitats: farmland, meadows, upland forest, freshwater wetland, wetland forest, ponds, streams and salt marsh.
- **Star of the Sea Reserve** – Located on Star of the Sea Drive, off of Russells Mills Road, this is a 44-acre former gravel pit with young scrub oak, red maple and pine forest.
- **Wernick Farm** – This 62-acre, formerly agricultural, property on North Albrow Avenue (off North Hixville Road) includes agricultural fields, wooded uplands and spring-fed ponds. It is also contains part of the Southeastern Massachusetts Bioreserve and “Critical Natural Landscape” lands designated by the MA Natural Heritage Program.
- **Wylde Reserve** – 5 acres on Barneys Joy Road with a short trail through dunes and scrub habitat to the southern shore of George’s Pond.

MassWildlife manages the 205-acre Noquochoke Wildlife Management Area in North Dartmouth along the Shingle Island River. Accessed off Hixville Road, the property features pine, cedar and oak forests and multiple grassy meadows. Seasonal hunting for white-tailed deer, wild turkey, pheasant, and eastern coyote is allowed here. There is also warmwater fishing in Shingle Island River.

The Conservation Commission also holds several large contiguous forest tracts in the town including:

- The Town Forest - 420 acres
- Acushnet Saw Mill forest, Lucy Little Rd & Chase Rd – 306 acres
- Interchurch Counsel Forest, Highland Ave – 190 acres
- Jarabeck Conservation Area – 107 acres
- Dartmouth Preserve – 70 acres adjacent to Dartmouth Regional Park and Trails, protected through Open Space Residential Design (OSRD) Development

Hunting is permitted in the Conservation Commission Town Forest property, just north and south of I-195 and east of Reed Road. Hunting is also permitted in state Wildlife Management Areas, including Noquochoke Wildlife Management Area. Some private groups, including the New Bedford Rod and Gun Club and the High Hill Fox and Coon Club, own forested lands, and permit hunting for members.

Public Shade Trees

The Town of Dartmouth is very active in requiring shade trees as a vital part of new development. The Subdivision Regulations mandate shade trees along all new streets no further than 75 feet apart. The Town also requires diversified species planting to mitigate the risk of disease or insects harming entire plantings. All commercial and industrial developments are required to plant shade trees along public streets no further than 30 feet apart. In new parking lots, trees are required at a minimum of one tree for every 15 parking spaces. Often more trees planted in commercial developments with the strong oversight of the Planning Department.

Furthermore, Dartmouth has a Scenic Road Bylaw that protects existing trees from removal during any repair or construction along designated Scenic Roads (listed in Section 4F). These protections not only protect the Town's scenic beauty but also protect its resilience by helping to keep the carbon that is stored in trees and their root systems out of the atmosphere. Trees also provide shade to walkways and buildings, helping to cool neighborhoods in the summer.

Rare Vegetative Species

Dartmouth's numerous natural communities support a diversity of rare plants. The activity of the Lloyd Center for Environmental Studies within the Town has helped to identify many of them. Additionally, NHESP delineates areas of Priority Habitats that represent the geographic extent of habitats of state-listed rare species in Massachusetts based on documented observations (See the NHESP Priority Habitats of Rare Species Map, Sect. 4E). Priority Habitats are the filing trigger for determining whether a proposed project or activity must be reviewed by the NHESP for

compliance with the Massachusetts Endangered Species Act. NHESP has identified the presence of a total of 23 species of vascular plants in Dartmouth that are listed as threatened, endangered, or of special concern.

Table 20. Vascular Plants in Dartmouth

Common Plant Name	Scientific Name	Listing Status	Last Observed
Sandplain Gerardia	<i>Agalinis acuta</i>	E	1888
Whorled Milkweed	<i>Asclepias verticillata</i>	T	1904
Long-leaved Panic-grass	<i>Coleataenia longifolia</i> ssp. <i>longifolia</i>	T	2010
Tiny-fruited Spike-sedge	<i>Eleocharis microcarpa</i>	E	2013
Purple Cudweed	<i>Gamochaeta purpurea</i>	E	1889
Weak Rush	<i>Juncus debilis</i>	E	1999
New England Blazing Star	<i>Liatris novae-angliae</i>	SC	2020
Stiff Yellow Flax	<i>Linum medium</i> var. <i>texanum</i>	T	2006
Taperleaf Water-horehound	<i>Lycopus rubellus</i>	E	2000
Green Adder's-mouth	<i>Malaxis unifolia</i>	T	1904
Pinnate Water-milfoil	<i>Myriophyllum pinnatum</i>	SC	2022
Lion's Foot	<i>Nabalus serpentarius</i>	E	1903
Violet Wood-sorrel	<i>Oxalis violacea</i>	E	2013
Philadelphia Panic-grass	<i>Panicum philadelphicum</i> ssp. <i>philadelphicum</i>	SC	1999
Pale Green Orchid	<i>Platanthera flava</i> var. <i>herbiola</i>	T	1923
Sea-beach Knotweed	<i>Polygonum glaucum</i>	SC	2019
Tuckerman's Pondweed	<i>Potamogeton confervoides</i>	T	1889
Plymouth Gentian	<i>Sabatia kennedyana</i>	SC	2020
Sea Pink	<i>Sabatia stellaris</i>	E	1988
Long's Bulrush	<i>Scirpus longii</i>	T	2011
Tall Nut-sedge	<i>Scleria triglomerata</i>	E	1888
Bristly Foxtail	<i>Setaria parviflora</i>	SC	2019
Grass-leaved Ladies' - tresses	<i>Spiranthes vernalis</i>	T	2014

Source: Mass.gov Rare Species Viewer

Without question, the Lake Noquochoke/Shingle Island River wetland system supports the greatest diversity of rare plants, including Plymouth Gentian (*Sabatia kennedyana*), Long's Bulrush (*Scirpus longii*), Long-Leaved Panic Grass (*Panicum longifolium*), Tiny Fruited Spike-Sedge (*Eleocharis microcarpa*), and Stiff Yellow Flax (*Linum medium*). Tiny Fruited Spike Sedge, Sea Pink, and Long's Bulrush are all classified as endangered by the NHESP, requiring the highest level of protection. The Noquochoke wetlands support one of the world's largest Long's Bulrush populations. Every effort should be made to protect these rare populations from infringement brought upon by development or inappropriate recreational activities.

The town has a lengthy history of gravel extraction that has left behind numerous abandoned gravel sites. Many of these sites within the Noquochoke/Shingle Island wetlands mimic coastal

plain pond shores, a second rare habitat, and are home to rare species such as Plymouth Gentian. Plymouth Gentian may also be found around Cedar Dell Pond.

Barney's Joy and Allens Pond also support rare plants including Heart-Leaf Tway Blade (*Listera cordata*), Sea Pink (*Sabatia stellaris*), Crested Yellow Orchid (*Plantanthera cristata*) and New England Blazing Star (*Laetris borealis*). Much of this land is protected already through the efforts of the Massachusetts Department of Environmental Management, the Massachusetts Audubon Society and the DNRT. However, further protection should be sought to protect this resource.

Other species of concern to the NHESP that are found in Dartmouth include Bushy Rockrose (*Helianthemum dundsum*), Pinate Water Milfoil (*Myriophyllum pinnarum*) and Grass-Leaved Ladies' Tresses (*Spiranthes vernalis*). NHESP has identified the estimated habitat of rare species in Dartmouth. Every effort should be made to protect the habitats identified by NHESP, with the protection of the Noquochoke/Shingle Island Wetlands, Allens Pond, and the Paskamansett River wetlands among the top priorities.

While not listed as rare or endangered on a state or national level, locally rare wild plants include Painted Trillium (*Trillium undulatum*) in the northern Hemlock forests; Round Leaved Yellow Violet (*Viola rotundifolia*) growing on old uprooted tree root mounds in the east slope forests; Mayflower (*Epigaea repens*), in gravelly soils near the Slocum River; Pink Ladyslipper (*Cypripedium acaule*) in pine, hemlock and oak Woods; White Fringed Orchid (*Platanthera blephariglottis*) in meadows and bogs; Columbine (*Aquilegia* sp.) on coastal ledges; Christmas Fern (*Polystichum acrostichoides*) in the cool east slope woods; and the insectivorous Pitcher Plant (*Nepenthes* sp.) in the Noquochoke/Shingle Island wetlands.

Additional unique plants include Bladderwort (*Huttonia Inflata*) that are present in vernal pools; Butterfly Weed (*Asclepias tuberosa*) found in coastal open fields; and Cardinal Flower (*Lobelia cardinalis*) located in stream banks and wetlands. These plants may not be of state or national significance but certainly are of town-wide importance and should be protected for future generations.

E. Fisheries and Wildlife

Land Based and Avian Species

Dartmouth's diversity of habitat types supports an equally diverse array of fauna. Its upland forests support an abundance of forest dwelling avian species, as well as typical small mammals such as the Northern Flying Squirrel (*Glaucomys*) and Eastern Chipmunk (*Lamias*). The large areas of land that support agricultural activities or sparse suburban dwellings create abundant "edge" and field habitats that support such species as White-Tailed Deer (*Odocoileus virginianus*), Red Fox (*Vulpes fulva*), Grey Fox (*Urocyon dneroeargemeus*), Coyote (*Canis latrans*), and assorted smaller mammals.

Wood Ducks (*Aix sponsa*), Mallard Ducks (*Anas platyrhynchos*) and Black Ducks (*Anas rubripes*), Canada Geese (*Branra Canadensis*), Mute Swan (*Cygnus olor*) Osprey (*Pandion haliaetus*) and Gadwall (*Anas strepera*) are among the avian species that live, breed and feed in the wetland habitats of Dartmouth.

Aquatic Species

Dartmouth has an 82-mile shoreline and ranks #2 in the State of Massachusetts for the value of quahogs harvested. Clarks Cove is the most productive area and is managed by New Bedford and Dartmouth. Apponagansett Bay is also an excellent shellfish resource area, however, shellfishing has been limited in the inner harbor due to water quality issues. Map 20 shows current designated shellfish growing areas. Much of the upper reaches of Apponagansett Bay are open seasonally and in conjunction with the State Division of Marine Fisheries water quality testing. Little River and Slocums River have less important shellfish value.

In recent years, Dartmouth's Harbor Master has taken part in programs to restock the town's waters with quahogs, using a relay method for transplanting mature shellfish from other waterbodies and the installation of "upwellers" – floating nurseries for quahogs. A settlement associated with the Bouchard oil spill, which released 98,000 gallons along nearly 100 miles of Buzzards Bay coastline in 2003, funds some of these projects. Blue Crabs (*Callinectes sapidus*) are fished in the Little and Slocums Rivers. Lobster traps are set in the Slocums River embayment, Apponagansett Bay and Clarks Cove. In total this marine shellfish industry engages many people, both commercial fisherman and hobbyists, and generates significant annual revenue.

Many individuals fish in Buzzards Bay for Bluefish, Striped Bass, Flounder, Scup and Tautog. Every effort should be made to preserve Dartmouth's estuarine systems that contribute to the breeding and raising grounds of these fish species. Fresh water fishing from town-owned park land abutting Cornell Pond is common (though the fish may be inedible due to contamination). Noquochoke Lake is another frequented freshwater fishing spot. Yellow Perch, Sunfish, Bass, Bullheads and Pickerel are all common catches. A few Alewife continue to migrate annually up the Slocums River and Destruction Brook to the Deerfield Swamp. The Town of Dartmouth must continue to respect the environmental wealth of Buzzards Bay and carefully work toward the preservation of this indispensable natural resource.

Dartmouth's wetlands serve as important habitat for migrating birds. The coastal estuaries, salt marshes, and associated wetlands feed and provide resting habitat for dozens of bird species migrating in spring and fall. Allens Pond is perhaps the most important of such places, being an important link along the Atlantic Coast flyway. Allens Pond is utilized by more than 25 species of waterfowl and 35 species of shore birds. Among the species which use the resource during migration are the federally endangered peregrine falcon (*Falco peregrinus*) and roseate tern (*Sterna dougallii*), state-listed endangered short ear owl (*Asio flammeus*) and the state-listed threatened pied-billed grebe (*Podilymbus podiceps*) and king rail (*Rallus elegans*).

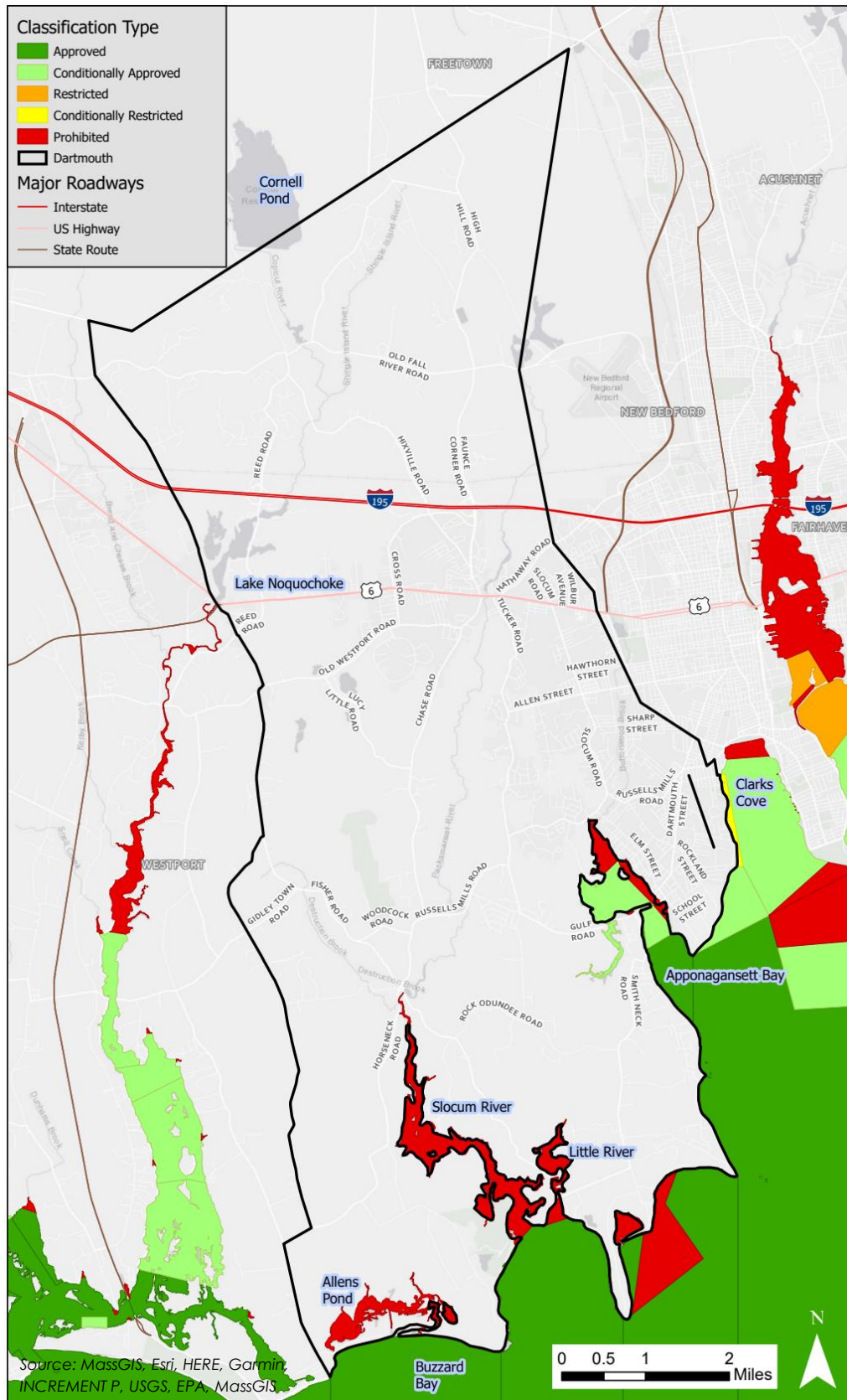
To a certain degree, much of Dartmouth, especially to the north, south and west has developed in a low-density form that enables private lands to act as a local corridor for wildlife movement. Route 6 (State Road) and I-195 present a formidable barrier for non-flying species.

Coldwater Fisheries

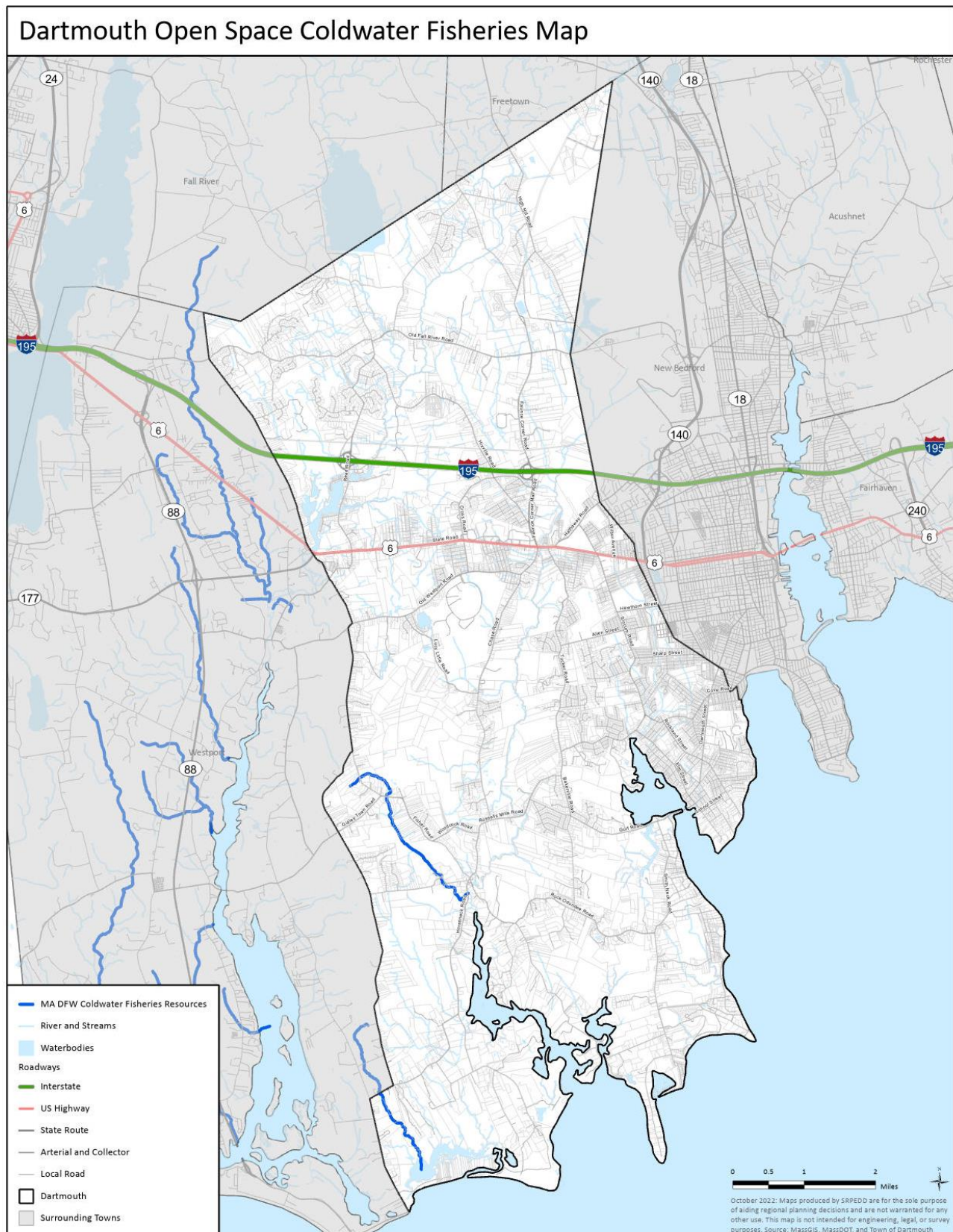
Coldwater Fisheries Resources (CFR) are state-classified Critical Area streams, and they are certified by MassDEP under the "Outstanding Resource Water" Program. These streams provide important habitat for several aquatic species, including Trout, which are a very important indicator species in gauging the health of a coldwater stream. Trout are typically sensitive to changes in temperature, water quality, and stream flow within their resident streams. The CFR database is derived from fish samples collected annually by DFW staff biologists and technicians. The hope is to update the database as new streams are sampled annually by staff. Dartmouth currently has two (2) certified streams listed in the state's CFR database, Destruction Brook, and an unnamed tributary (UNT) to Allens Pond, as shown in Map 21.

Threats to CFRs include roadway runoff, cutting down streamside vegetation, and other activities that can reduce the amount of shading and increase the stream's temperature. For example, according to ResilientMA, annual average temperature from 1971 to 2000 was approximately 50.7 degrees Fahrenheit in the Buzzards Bay watershed. That number is currently expected to increase anywhere from 2.6 to 5.9 degrees Fahrenheit by 2050. These temperature increases can have significant impacts on the animals that reside in CFRs, and on those that rely on cold water temperatures during the hotter summer months to survive. Fortunately, streamside vegetation has a significant impact throughout the reach of a coldwater stream and can help mitigate these rises in temperature. An even greater threat to CFRs may be the general lack of awareness of where these critical resources are located.

Map 20. Designated Shellfish Growing Areas Map



Map 21. Dartmouth Open Space Coldwater Fisheries Map



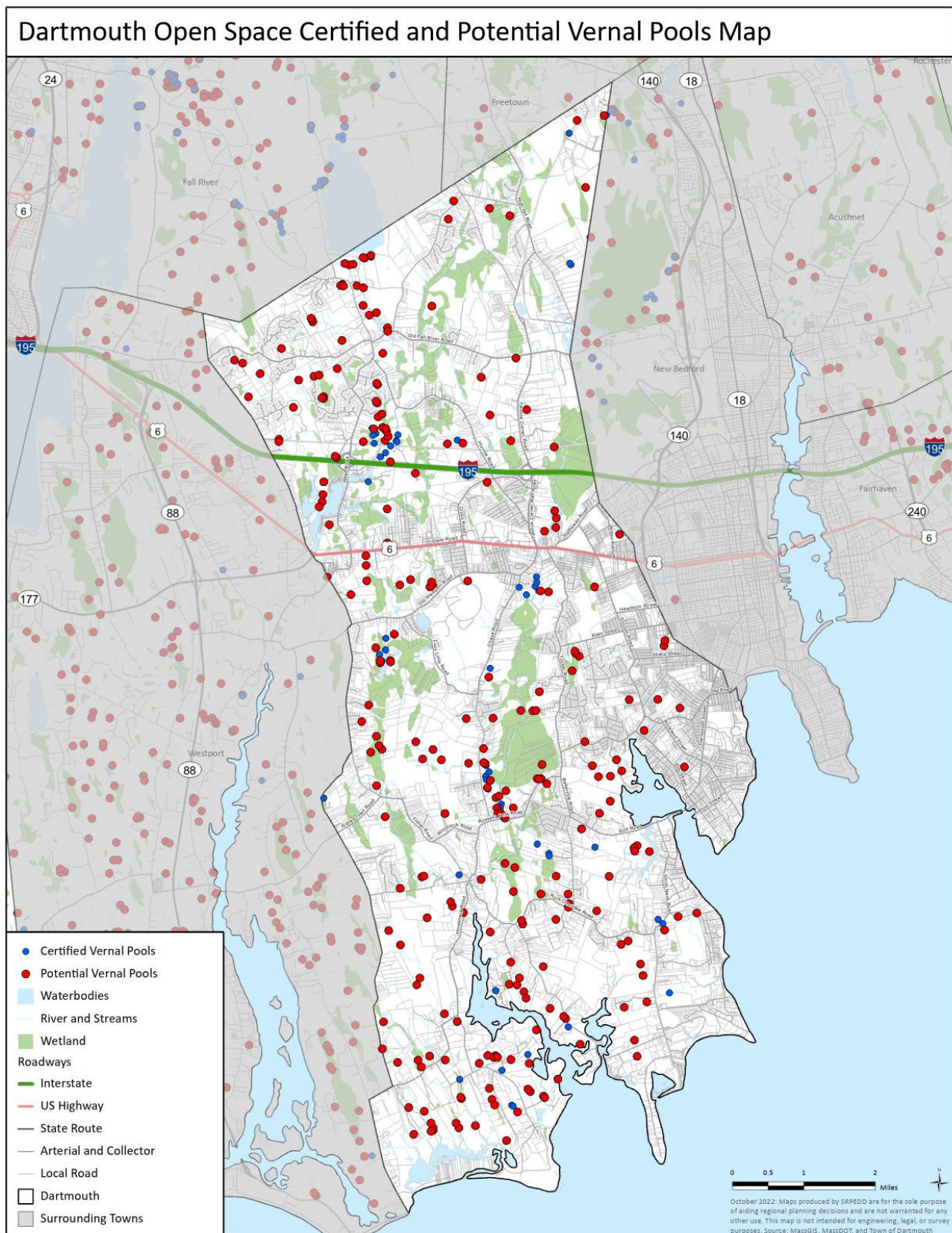
Vernal Pools

A vernal pool (sometimes referred to as a spring pool) is a shallow depression in the landscape that contains water for only a portion of the year. These pools may be only a few square feet in size or cover acres of land. Vernal pools vary in appearance, in when and how long they are full, and in their principal source of water.

While vernal pools do not support fish, they do provide very important habitat for various species of frogs, turtles, and salamanders. Many of these species must return to these vernal pools to breed. Some of the species found in vernal pools include Wood Frogs, Spring Peepers, Spotted Salamanders, Spotted Turtles, and Wood Turtles. Vernal pools are often part of wildlife corridors, allowing for the movement of these species between wetland areas.

NHESP documents and certifies vernal pools. Certified vernal pools are protected under several state and federal laws, such as the Massachusetts Wetlands Protection Act; Title 5, Section 401 of the Federal Clean Water Act; and the Massachusetts Forest Cutting Practices Act. In an effort to increase the number of certified vernal pools, NHESP recently released data on potential vernal pools sites in southeastern Massachusetts. Using color infrared photos, NHESP identified areas with the highest potential for supporting vernal pools. This data provides a significant head start for directing scientists and observers to sites that can be field checked for the presence of an actual, certifiable vernal pool. Due to the large land area that must be covered, NHESP relies on volunteer efforts to help identify vernal pools and begin the certification process. According to NHESP's most recent data, Dartmouth currently has 66 certified vernal pools and 252 potential vernal pools located throughout the town, as shown on Map 22.

Map 22. Dartmouth Open Space Certified and Potential Vernal Pools Map



Corridors for Wildlife Migration

Dartmouth's wetlands serve as important habitat for migrating birds. The coastal estuaries, salt marshes, and associated wetlands feed and provide resting habitat for dozens of bird species migrating in spring and fall. Allens Pond is perhaps the most important of such places, being an important link along the Atlantic Coast flyway. Allens Pond is utilized by more than 25 species of waterfowl and 35 species of shore birds. Among the species which use the resource during migration are the federally endangered Peregrine Falcon (*Falco peregrinus*) and Roseate Tern (*Sterna dougallii*), state-listed endangered Short Ear Owl (*Asio flammeus*) and the state-listed threatened Pied-Billed Grebe (*Podilymbus podiceps*) and King Rail (*Rallus elegans*).

The Nature Conservancy (TNC) has analyzed local connectivity, with the results for Dartmouth displayed in Map 23. Areas in Dartmouth, especially to the north, south and west, remain sparsely developed and so may act as a local corridor for wildlife movement. Route 6 and I-195 present barriers for non-flying species, especially in the eastern section of town where it is surrounded by a large degree of development. To the west, around Noquochoke Lake, the surrounding land is more open and may facilitate north-south movements by some animals.

TNC Resilient and Connected Landscapes Data

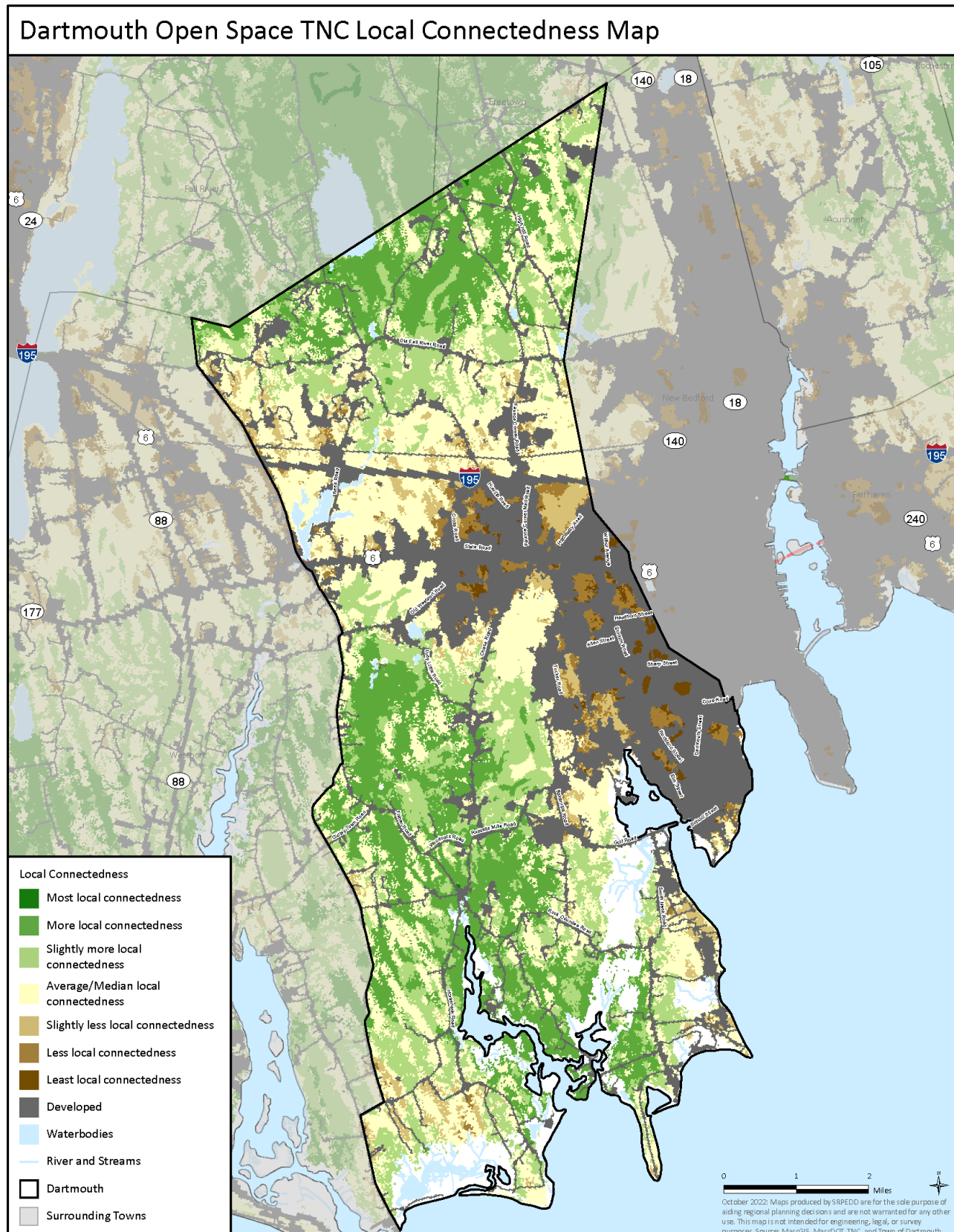
As climate change drives shifts in species and ecosystems, conservation plans based on current biodiversity patterns will become less effective at sustaining species and natural processes over the long term, and the current configuration of protected areas may fail to adequately provide access to diverse climatic conditions needed for species and populations to persist and thrive. The TNC Resilience and Connected Network addresses this problem by identifying a connected network of climate resilient sites, which if conserved, could help sustain biodiversity into the future as it moves and changes. The Network also protects the source water, carbon stocks, oxygen, and recreation space that people depend on. The Resilient and Connected Map integrates three nationwide assessment datasets:

- Climate Resilient Sites: Ecologically representative sites with a diversity of connected microclimates and low human modification
- Connectivity and Climate Flow: Linkages that allow species to move across sites and climate gradients
- Recognized Biodiversity Value: Places with intact habitats, rare species, or exemplary communities.

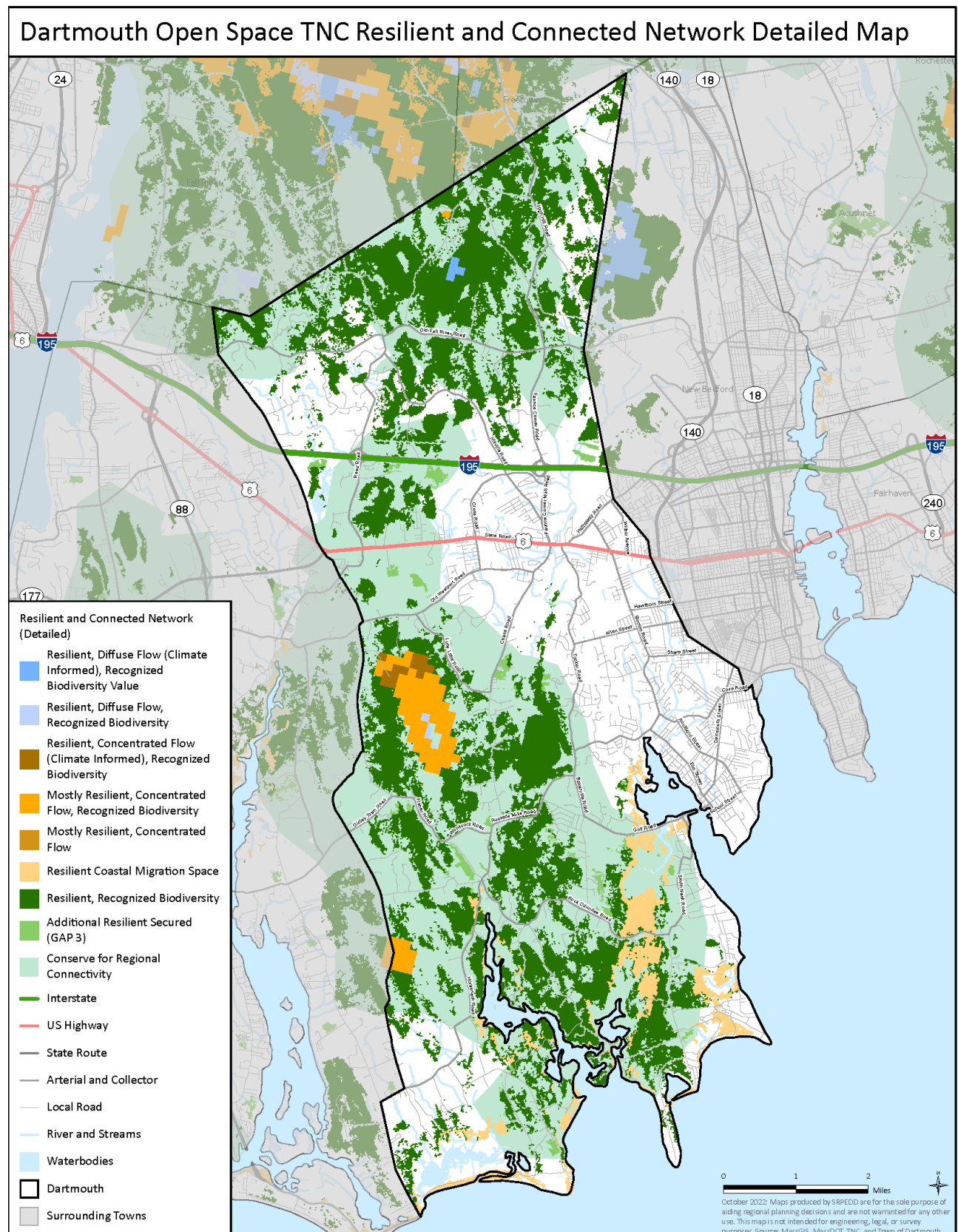
Focusing on the Connectivity and Climate Flow element, the categories in Map 24 classify climate flow groups based on the amount and concentration of species flow. Importantly, each flow type suggests a different conservation strategy.

- **Diffuse flow:** areas that are extremely intact and consequently facilitate high levels of dispersed flow that spreads out to follow many different and alternative pathways. **The conservation strategy here might be to keep these areas intact and prevent the flow from becoming concentrated.**
- **Concentrated flow:** areas where large quantities of flow are concentrated through a narrow area. **Because of their importance in maintaining flow across a larger network, these pinch points are good candidates for land conservation.**

Map 23. TNC Landscape Connectedness



Map 24. TNC Resilient and Connected Network



TNC further mapped areas that were identified as areas for potential Nature-Based Solutions to aid in Climate Resilience, but that also have Biodiversity Co-Benefit Opportunities. The layer Conserve for Regional Connectivity shows areas that have above average resilience landscape features, and that also preserve biodiversity, adding in consideration of Constrained Flow areas:

- **Constrained flow:** areas of low flow that are neither concentrated nor fully blocked but instead move across the landscape in a weak reticulated network. **These areas present large conservation challenges. In some cases, restoring a riparian network might end up concentrating the flow and creating a linkage that will be easier to maintain over time.**

Rare, Threatened, and Endangered Animal Species

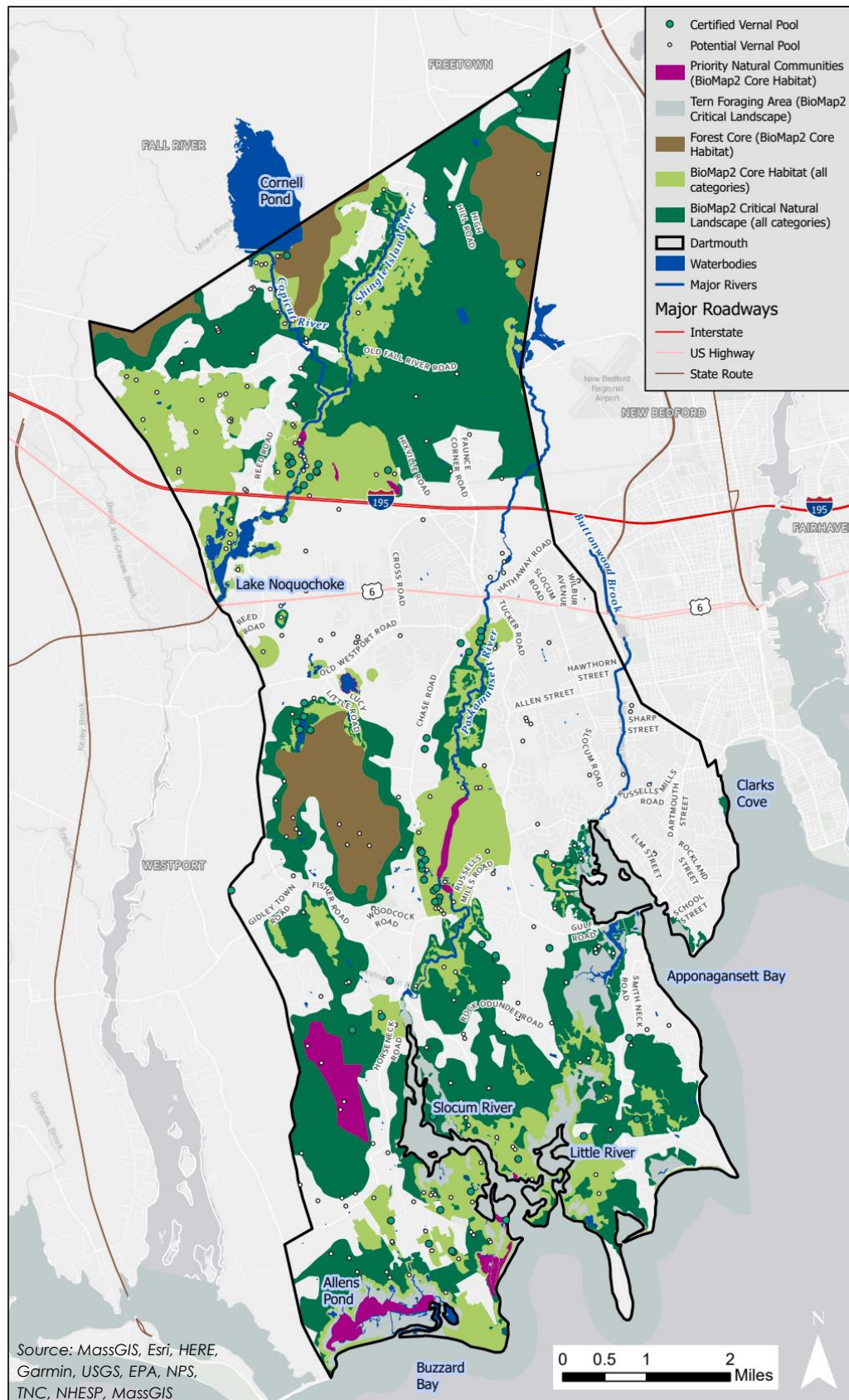
BioMap2 Core and Critical Habitat Areas

NHESP and The Nature Conservancy (TNC) developed a biodiversity mapping project that identifies the areas of the state with the most viable habitats for rare species and natural communities in Massachusetts. An updated version of this data, known as BioMap2, was released in 2010. BioMap2 identifies Core Habitat, which are key natural communities that support Species of Conservation Concern (identified in the Massachusetts Endangered Species Act and State Wildlife Action plan), and Critical Natural Landscape, which are large natural landscape blocks that have suffered only minor impact from development, and that if afforded adequate protection, will support all of the values inherent in Core Habitats as well as contribute to the resilience of Dartmouth and the surrounding region in the face of climate change.

Dartmouth contains several areas of both Core Habitat and Critical Natural Landscape. In terms of Core Habitats in Dartmouth, there are Forest, Wetland, and Aquatic Core areas, and in the way of Critical Natural Landscape in Dartmouth, there are Wetland, Aquatic, Coastal, and Tern Foraging areas. Many of these areas, highlighted in Map 25, are located around two primary locations: in Southern Dartmouth along the coastlines, and in Northern Dartmouth above I-195.

In this map, special attention is brought to the Critical Landscape Tern Foraging and the Core Habitat Forest Core. The Tern Foraging areas have been identified as foraging habitat and breeding grounds for the tern species, which is a federal and state listed endangered species. Forest Core areas are sections of land that have been identified for their large, intact forests, with minimal impact from roads or development, which provides critical habitat for woodland species, and ecosystem services that benefit human communities, such as air quality support, water infiltration, and carbon sequestration.

Map 25. BioMap2 Core and Critical Habitat Areas



Massachusetts Natural Heritage & Endangered Species Program (NHESP) Priority Habitats

According to NHESP, Dartmouth contains 12 NHESP Priority Natural Communities.

Priority Natural Communities	Community State Rank
Coastal Interdunal Marsh/Swale	S1
Kettlehole Wet Meadow	S3
Maritime Dune Community	S2
Alluvial Red Maple Swamp	S3
Alluvial Atlantic White Cedar Swamp	S2
Acidic Graminoid Fen	S3
Coastal Plain Pondshore	S2
Estuarine Intertidal: Coastal Salt Pond Marsh	S2
Estuarine Subtidal: Coastal Salt Pond	S2
Coastal Forest/Woodland	S3
Maritime Shrubland Community	S3
Oak - Holly Forest / Woodland	S1

The Community State Rank is part of the *Classification of the Natural Communities of Massachusetts* and reflects the habitat type's regional rarity or threat by prioritization, with rankings from S1 to S5. Critically imperiled communities are given a rank of S1 and are considered to have five or fewer documented sites or limited acreage remaining across the state. Imperiled communities have a rank of S2, indicating six to 20 sites or limited acreage remaining across the state. Vulnerable communities have a rank of S3, indicating 21 to 100 sites or limited acreage across the state.

NHESP has identified 31 rare animal and insect species sighted in Dartmouth, listed in Table 33. It is of course likely that other species are present for which there has not been a documented observation recorded in the NHESP database. A strategy that protects known rare species will also likely protect as-yet unobserved or undocumented rare species.

Dartmouth contains an abundance of barrier beach and dune habitat from Demarest Lloyd State Park south and west to its border with Westport. This habitat and its surrounding uplands provide breeding and feeding grounds for the following rare avian species:

- Piping Plover [federally and state threatened, *Charadrius melodus*]
- Least Tern [state listed species of special concern, *Sterna antillarum*]
- Grasshopper Sparrow [state listed species of special concern, *Ammodramus savannarum*]
- Northern Harriers [state listed threatened, *Circus cyaneus*]
- Osprey [recovering from declines due to pesticides, *Pandion haliaetus*]
- Common Terns [state listed species of special concern]
- Northern Diamondback Terrapin [state listed threatened, *Malaclemys terrapin*]

Similar habitat occurs less abundantly further north, between Mishaum Point and Round Hill and east of Nonquitt Marsh. Dartmouth's numerous riparian corridors and associated seasonally

flooded lands support many wetland amphibian and reptile species, some of which are rare. The most important of such wetlands are the Paskamansett River wetlands and the Noquochoke Lake/Shingle Island River Wetland systems. The rare vertebrates inhabiting these lands are:

- Marbled Salamander [state listed threatened, *Ambystoma opacum*]
- Four-Toed Salamander [state listed species of special concern, *Hemidactylium scutatum*]
- Eastern Box Turtle [state listed species of special concern, *Terrapene carolina*]

Atlantic white cedar swamps are located throughout the Town but are most common in the Lake Noquochoke/Shingle Island and the Paskamansett River headwaters. Adjacent open fens support the rare Chain Fern Boring Moth (*Papaipema stenooelis*). Ponds and associated wetlands support two rare blue Damselflies, *Enallagma daeckii* and *Enallagma laterale*.

The following State-listed species of special concern also occur throughout Dartmouth's grassland, upland shrub, and wooded swamp habitats:

- Chain Dot Geometer, *Cingilia catenaria*
- Coastal Heathland Cutworm, *Abagrotis crumbi*
- Pale Green Pinion Moth, *Lithopane viridipallens*
- Imperial Moth, *Eacles imperialis*
- Coastal Swamp Amphipod, *Synurella chamberlaini*
- Mystic Valley Amphipod, *Cragonyx abeans*
- Straight Lined Mallow Moth, *Bagisara rectifascia*

Much of the land that supports Dartmouth's most rare and threatened animal species is the same habitat that supports rare plant populations described in Section 4D (Noquochoke/Shingle Island wetlands, Paskamansett River wetlands, and Allens Pond). These dynamic systems require a proactive strategy to ensure that growth in Dartmouth does not compromise their natural integrity and value for rare, threatened, and endangered species.

Designated NHESP Priority Habitat are one mechanism that enables such protections. Any proposed projects or activities that take place in these mapped locations must be reviewed by NHESP for compliance with the Massachusetts Engaged Species Act (MESA) regulations. NHESP Priority Habitat areas cover a diversity of wetland, upland, and marine habitat areas, protecting the rare species within them. As seen in Map 26, in Dartmouth, many of these priority habitats are located along bodies of water, especially the western coastline, Slocums and Little River, north of Old Fall River Road and west of Faunce Corner Road (connecting with a large priority habitat area around Copicut Reservoir), the large Forest Core habitat area in South Dartmouth west of Horseneck Road, and Core Habitat along the Shingle Island River leading to Lake Noquochoke.

Table 21. NHESP List of rare animal and insect species sighted in Dartmouth

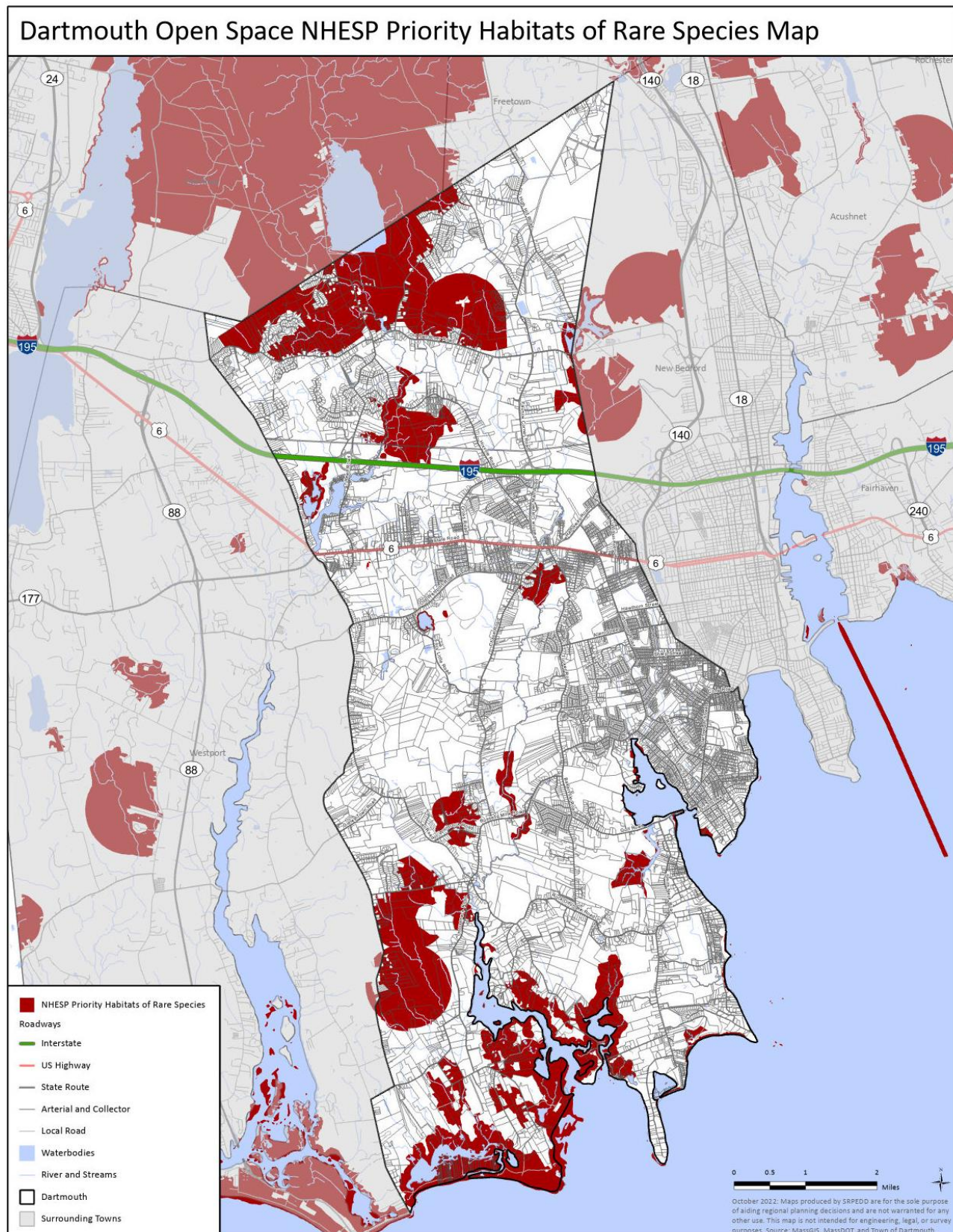
Common Name	Scientific Name	Listing Status	Last Observed
Marbled Salamander	<i>Ambystoma opacum</i>	T	2021
Purple Tiger Beetle	<i>Cicindela purpurea</i>	SC	2001
Barn Owl	<i>Tyto alba</i>	SC	1966
Common Tern	<i>Sterna hirundo</i>	SC	2017
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	T	1993
King Rail	<i>Rallus elegans</i>	T	1988
Least Bittern	<i>Ixobrychus exilis</i>	E	1993
Least Tern	<i>Sterna antillarum</i>	SC	2017
Northern Harrier	<i>Circus hudsonius</i>	T	1987
Piping Plover	<i>Charadrius melodus</i>	T	2019
Roseate Tern	<i>Sterna dougallii</i>	E	2006
Vesper Sparrow	<i>Pooecetes gramineus</i>	T	1993
Chain Dot Geometer	<i>Cingilia catenaria</i>	SC	1999
Chain Fern Borer	<i>Papaipema stenocelis</i>	T	2011
Coastal Heathland Cutworm	<i>Abagrotis benjamini</i>	SC	2012
Drunk Apamea Moth	<i>Apamea inebriata</i>	SC	1983
Dune Sympistis	<i>Sympistis riparia</i>	SC	2013
Frosted Elfin	<i>Callophrys irus</i>	SC	2005
Heath Metarranthus	<i>Metarranthus pilosaria</i>	SC	1988
Hessel's Hairstreak	<i>Callophrys hesseli</i>	SC	2013
Imperial Moth	<i>Eacles imperialis</i>	T	1986
Pale Green Pinion Moth	<i>Lithophane viridipallens</i>	SC	2011
Pink Sallow Moth	<i>Psectraglaea carnea</i>	SC	1992
Spartina Borer Moth	<i>Photodes inops</i>	SC	2007
Waxed Sallow Moth	<i>Chaetoglaea cerata</i>	SC	1986
American Clam Shrimp	<i>Limnadia lenticularis</i>	SC	1985
Coastal Swamp Amphipod	<i>Synurella chamberlaini</i>	SC	2001
Attenuated Bluet	<i>Enallagma daeckii</i>	T	2004
Scarlet Bluet	<i>Enallagma pictum</i>	T	2020
Eastern Box Turtle	<i>Terrapene carolina</i>	SC	2017
Northern Diamond-backed Terrapin	<i>Malaclemys terrapin</i>	T	2019

Source: Mass.gov Rare Species Viewer

Key to Listing Status:

- E = Endangered. Any reproductively viable native species of wildlife or wild plant that has been documented by biological research and inventory to be in danger of extirpation from the Commonwealth.
- T = Threatened. Any reproductively viable native species of wildlife or wild plant that has been documented by biological research and inventory to be rare or declining within the Commonwealth and that is likely to become endangered in the Commonwealth in the foreseeable future.
- SC = Special Concern. Any native wildlife or wild plant species that has been documented by biological research and inventory to be suffering a decline that could threaten the species in the Commonwealth if allowed to continue unchecked, or that occurs in such small numbers or with such restricted distribution or specialized habitat requirements that it could easily become threatened.

Map 26. Dartmouth Open Space NHESP Priority Habitats of Rare Species



Massachusetts Conservation Assessment and Prioritization System (CAPS)

The Conservation Assessment and Prioritization System (CAPS) uses landscape ecology and conservation biology to help identify areas which can support biodiversity, also known as areas of ecological integrity. The CAPS process uses several key metrics, such as road traffic intensity, habitat connectedness, vulnerability to invasive species, soil pH, average temperature, and slope to assesses the undeveloped landscape for potential areas of ecological integrity for different ecosystem types, such as forests, shrublands, and freshwater wetlands, to give each area an Index of Ecological Integrity (IEI). This IEI can be used in numerous ways, such as helping to identify the best land to prioritize for conservation, evaluating the best ecological restoration approaches, and helping to develop the best policies for protection.

The default CAPS analysis scales the IEI values to the full extent of the assessment area (e.g. statewide). Separate analyses allow IEI to be rescaled by percentiles within each watershed or ecoregion. For example, if the IEI is rescaled by watershed, a marsh with a value of 0.85 would be interpreted as being in the 85th percentile of marshes for its watershed. CAPS assessment rescaled the results at three extents (full extent, rescaled by major watershed, and rescaled by ecoregion), plus a final integrated rescaling. The integrated rescaling uses the maximum score from statewide and watershed analyses for each cell in wetland and aquatic communities, and the maximum score from statewide and ecoregion analyses for cells in upland communities. The resulting IEI is then rescaled again by community to preserve the interpretation (i.e., the top 10% of IEI values represent 10% of the landscape).

As shown in Map 27, Dartmouth has several areas that have been identified as having high ecological integrity. These areas consist of forest, freshwater wetland & aquatic, and coastal wetland & aquatic ecosystems.

High IEI Forest Habitat Areas:

- Forest around Acushnet Cedar Swamp
- Forest around the Copicut Reservoir
- Forest bordering the Copicut River
- Forest around Shingle Island Swamp
- Forest around Apponagansett Swamp
- Forests between Route I-195 (north), Route 6 (south), Cross Rd (east), and Reed Rd (west)
- Forests around Deerfield Swamp
- Forest Core south of Slades Corner Road and west of Horseneck Road

High IEI Coastal Upland Habitat Areas:

- Small areas around Deerfield Swamp
- Small areas around a tributary to Bread and Cheese Brook

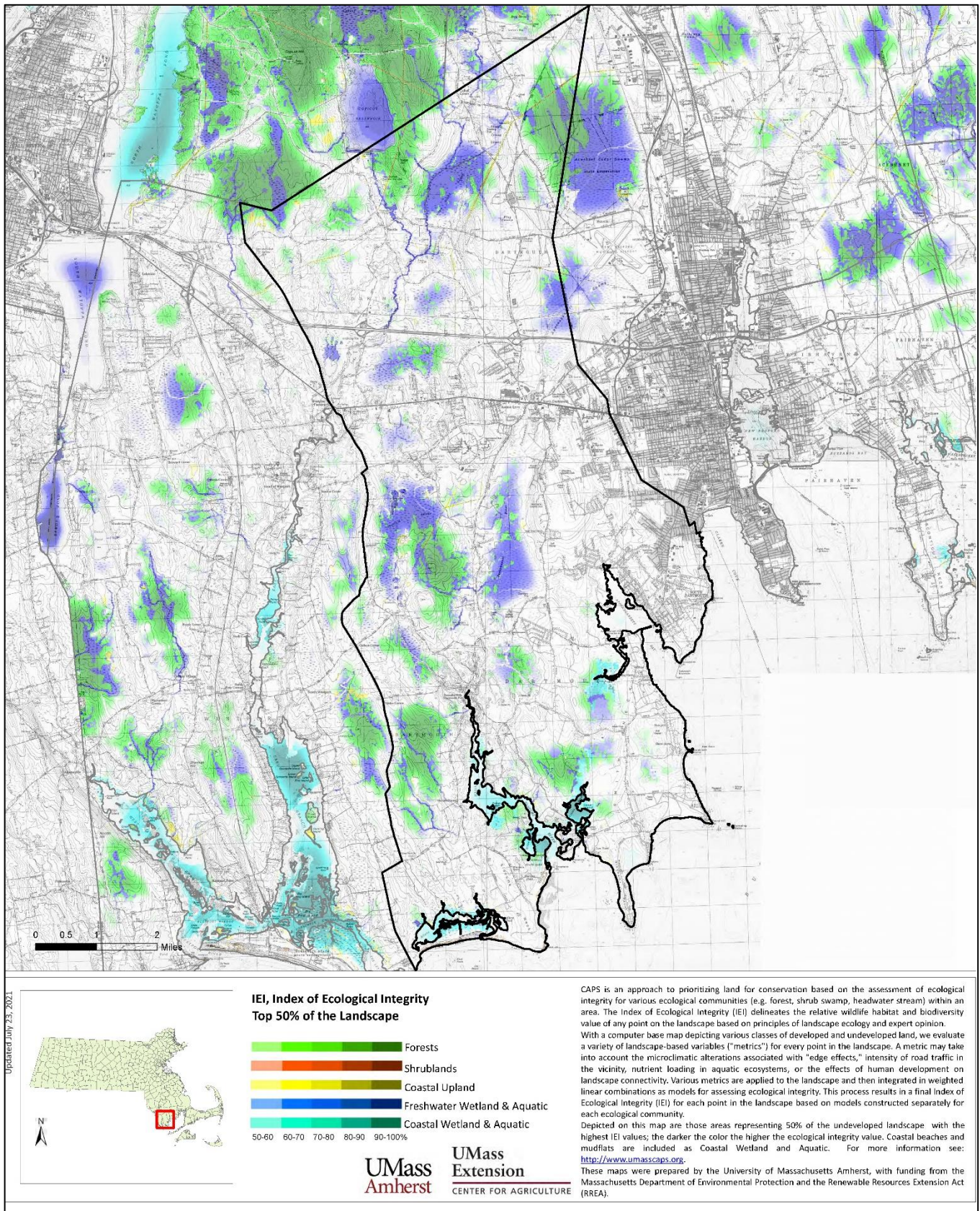
High IEI Coastal Wetland & Aquatic Habitat Areas:

- Slocums River
- Allens Pond
- Little River
- Little River to Apponagansett Bay (Gulf Road) corridor

High IEI Freshwater Wetland & Aquatic Habitat Areas:

- Single Island River
- Shingle Island Swamp
- Copicut River
- Acushnet Cedar Swamp
- Apponogansett Swamp
- Wetland to the north of Lake Noquochoke
- Wetlands between Hixville Road and Route I-195
- Wetlands between Route I-195 (north), Route 6 (south), Cross Rd (east), and Reed Rd (west)
- Deerfield Swamp
- Wetlands along the Paskamansett River between Chase Road and Tucker Road
- Tributaries to Solcums River below Destruction Brook

Map 27. CAPS Index of Ecological Integrity (IEI) in Dartmouth



F. Scenic Resources and Unique Environments

Throughout this Plan Dartmouth has been described in a variety of ways. Perhaps, however, it may best be described as having both a suburban and rural character with the added feature and grace of the Buzzards Bay coastline. From the New Bedford suburban fringe to the east, the rural farmlands bordering Westport to the west, the saltwater coastline to the south and the rural forested highland bordering Freetown to the north, Dartmouth encompasses a wide variety of natural and built environments. Dartmouth has exceptional water views, intriguing waterfalls, rambling stonewalls, winding woodland roads and the presence of dramatic rock outcroppings.

Dartmouth's historic villages - Hixville, Smith Mills, Padanaram, Russells Mills, and Bliss Corner - are spread geographically throughout the Town and originated from small scale traditional 18th century centers, forming the foundation from which the Town eventually grew. Dartmouth encompasses all these scenic natural resources and exceptional historic, cultural and even archaeological treasures.

Scenic Landscapes

In the southern part of town, some of the best scenic views include the view of the entire Allens Pond area from Horseneck Road near the Almy Farm; the view of Buzzards Bay and Allens Pond at the Audubon Reserve, the view of the Slocum River from Horseneck Road at Russells Mills Town Landing; Barney's Joy Road and Horseneck Road at the upper end. Similarly, views of Buzzards Bay from Round Hill Beach, Apponagansett Park, Conservation Commission land along Smith Neck Road and from Little River Road at the bridge, as well as views of Clarks Cove from Jones Park are outstanding. There are also farms along back roads that offer unparalleled vistas.

In the northern-central part of town at the top of Poole's Hill on Old Fall River Road, one can clearly see far into Freetown and most of the Shingle Island Valley. On Faunce Corner Road there is a tremendous view of New Bedford. While the southern portion of town offers views over Padanaram Harbor and Clark's Cove, northern portions of town likewise possess extraordinary views particularly related to Cornell Pond on Old Fall River Road, Shingle Island River on Hixville Road as well as areas surrounding Lake Noquochoke. The Paskamansett Landing off State Road near Faunce Corner Road has opened a view to the falls of the Paskamansett River. The view of the fields at the Noquochoke Wildlife Management Area is also notable.

The proceeding sites, highlighted in the Massachusetts Scenic Landscape Inventory of 1982 and updated in each Open Space and Recreation Plan, are all indicated Map 29 – Unique Features. On the map, these sites are labeled with a key, corresponding to the Key ID Number in Table

Table 22. Scenic Vistas Key

Key ID Number	Description
0	Views of BB & Allens Pond at Audubon Reserve
1	Views of BB from Smith Neck Rd
2	Views of Harbor from Smith Neck Road
3	Apponagansett Park
4	Con Comm land on Smith Neck Road

5	Views from Little River Rd Bridge
6	Views of Clarks Cove from Jones Park
7	Views of Cornell Pond from Old Fall River Rd
8	Views of Shingle Island River from Hixville Rd
9	Lake Noquochoke
10	Views from Barneys Joy & Horseneck Roads
11	Russells Mills Town Landing
12	Allens Mill at Destruction Brook Property
13	Hill School
14	Apponagansett Meetinghouse
15	Akins House
16	Padanaram Village
17	Russells Mills Village
18	Hixville Village
19	Views from Faunce Corner Rd towards NB
20	Paskamanset Landing
21	Views of Slcomums River from Horseneck Road
22	Views from Tucker Road
23	Views of Fields at Noquochoke WMA

Scenic Roads

Massachusetts General Law Section 15C, Chapter 40 was created to protect the character, scenery, and history of roads by allowing towns to designate scenic roads. Scenic Roads bylaws are an effective, although limited, method of maintaining the rural character of scenic roads. A Scenic Roads designation provides limited protection from actions resulting from the repair, maintenance, reconstruction, or paving of the road that would involve the cutting or removal of trees or tearing down, destruction or alteration of stonewalls, or portions of stonewalls, within the public right of way. On a Scenic Road, such actions are subject to a public hearing and approval by the Planning Board.

A town may designate any road as scenic other than a numbered route or state highway. A numbered route may be designated only if its entire length is contained within the town's boundaries and the Commonwealth maintains no part of the route. Recommendations for the designation of Scenic Roads may come from the Planning Board, Conservation Commission, or Historical Commission. The process involves a petition to the Planning Board, coordination with the Highway Department, a public hearing, and placing of the bylaw on the Warrant for a Town Meeting to obtain voter approval.

Dartmouth has a Scenic Road Bylaw that protects historical objects and landscapes. The bylaw states that: "The following roads in the Town of Dartmouth are hereby designated Scenic Roads under the provisions of Section 15C, Chapter 40 of the General Laws. Any repair, maintenance, reconstruction, or paving work done with respect thereto shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls or portions thereof, except with the prior written consent of the Planning Board, after a public hearing duly advertised..."

The bylaw designated the following scenic roads, as shown on Map 29 (Unique Features):

- Allens Neck Road
- Bakerville Road
- Barney's Joy Road
- Collins Corner Road
- Flag Swamp Road
- Gaffney Road
- Gidley Town Road
- Gulf Road
- Hixville Road
- Horseneck Road
- Jordan Road
- Little River Road
- Lucy Little Road
- North Hixville Road
- Old Fall River Road (from Hixville Road to the New Bedford line)
- Potomska Road
- Reed Road (North of Limited Industrial District)
- Rock O Dundee Road
- Slades Corner Road
- Smith Neck Road
- Tucker Road

Cultural, Archeological, and Historic Resources

Archeological Sites

The town of Dartmouth is one of the oldest and largest towns in Massachusetts. Archaeological evidence documents the presence of humans in the area for a period of 10,000 years. An archaeological reconnaissance survey of the town completed in 2002 documented 50 previously unrecorded archaeological sites, both prehistoric and historic.¹⁶ The town has been identified as an area of high archaeological sensitivity.

The areas with greatest prehistoric sensitivity are found along the major wetland margins. The town could expect to find prehistoric sites along Apponegansett Bay, near the Slocums, Paskamansett, and Shingle Island Rivers, and along streams, swamps, and ponds. Historic sites would most likely be found near the historic villages of the town and on some of the longstanding farms.

The protection of these sites will need the active participation of town agencies such as the Planning Board and the Conservation Commission, local and regional preservation and planning advocates, landowners, Native American tribes, and the general public. In some

¹⁶ Archaeological Reconnaissance Survey, Town of Dartmouth, By Holly Herbster and Deborah C. Cox Public Archaeology Laboratory, 210 Lonsdale Avenue, Pawtucket Rhode Island, 2002.

cases, acquisition of open space would be the best means of preserving and protecting areas of cultural and historical resources. In other cases, a property owner might be encouraged to put a preservation restriction on his or her property, an action which may qualify as a charitable deduction for federal tax purposes.

Historic Sites: Colonial Period to the Present

The National Park Service administers the National Register of Historic Places. The National Register is the official Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture. National Register properties have significance to the history of their community state, or the nation. Nominations for listing historic properties come from State Historic Preservation Officers, from Federal Preservation Officers for properties owned or controlled by the United States Government, and from Tribal Historic Preservation Officers for properties on Tribal lands. Private individuals and organizations, local governments, and American Indian tribes often initiate this process and prepare the necessary documentation. A professional review board in each state considers each property proposed for listing and makes a recommendation on its eligibility.

The Town of Dartmouth has four Historic Districts, two individual building, and one individual site that are listed on the National Register of Historic Places. They are:

- Padanaram Village Historic District – listed 9/5/1985, 166 contributing buildings
- Russells Mills Village Historic District – listed 9/5/1985, 37 contributing buildings, three contributing sites, and one contributing structure
- Tucker Farm Historic District – listed 8/25/1988, five contributing buildings
- Apponegansett Meeting House (individual building) – listed 3/14/1991, two contributing buildings, two contributing sites, and one contributing structure
- Hixville Village Historic District – listed 6/17/1991, four contributing buildings, one contributing site
- The Russell Garrison Site (individual site) – listed 8/6/2018
- The Hill School (individual building) – listed 4/11/1980, within the Padanaram Village Historic District

Under Federal Law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually funding or licensing/permitting. If federal monies are attached to the property, any changes to the property must allow the Advisory Council on Historic Preservation to comment on the project.¹⁷ At the state and local level, there may be preservation laws that apply to historic properties.

At the state level, the Massachusetts Historical Commission (MHC), office of the Massachusetts

¹⁷ National Register of Historic Places, FQA's, accessed <https://www.nps.gov/subjects/nationalregister/faqs.htm>, 10/28/22

State Historic Preservation Office (SHPO), administers several programs created by the National Historic Preservation Act of 1966 (NHPA).

- Review of properties nominated for the National Register of Historic Places
- Federal Reinvestment Tax Incentive Program (income-producing historic structures can receive 20% of qualified rehabilitation costs as a federal income tax credit)
- State Historic and Archeological Sites Records Management
- Federal Project Review under Section 106 of the NHPA, and
- The Certified Local Government Program, providing grants to municipalities that have passed historic preservation ordinances and established local historic preservation commissions (Dartmouth is not a certified local government).¹⁸

MHC's Massachusetts Cultural Resource Information System (MACRIS) provides tabular and mapped data of the state's inventoried and designated historic resources. As with the federal designation, listings in the MACRIS database does not afford these properties protection from demolition, nor does it ensure their historical integrity. However, it is a positive step in creating a local historic district or pursuing individual property listings on the National Register. Further, if state or federal funds are utilized in renovation of the properties, they must go through a design review process with the Massachusetts Historical Commission.

The most stringent historical protections are not afforded by National or State listing, but through the application of a Historic Preservation Restriction through a deed easement. Because they serve the public interest and can be perpetual, Historic Preservation Restrictions must be held by an organization that has historic preservation as part of its recognized mission. Non-profit corporations that have been recognized as 501(c)(3) charities that exist to promote historic preservation meet this requirement, as do governmental agencies that promote and regulate historic preservation.

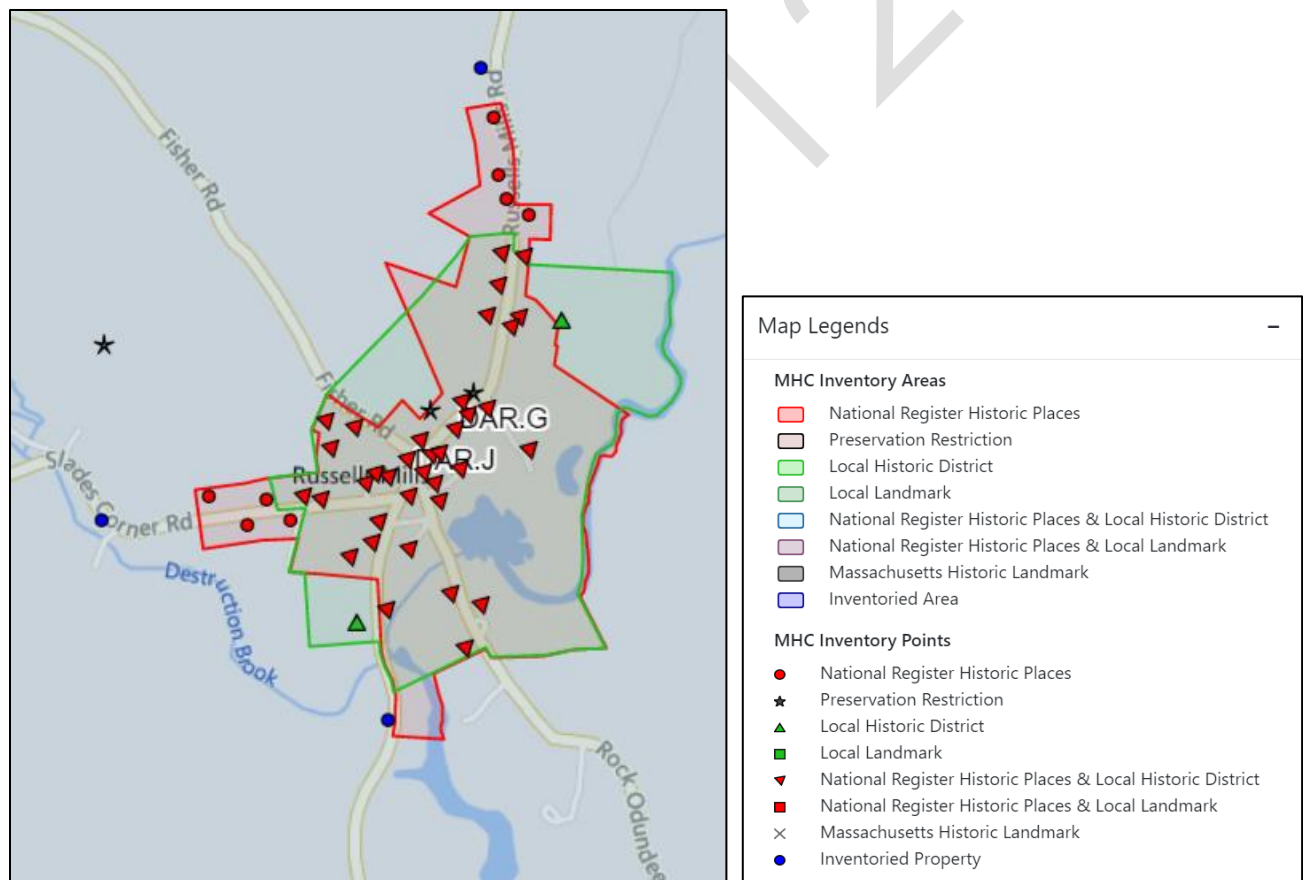
The database includes 1,276 potentially historic assets in Dartmouth, 342 of which are located within the National Register Historic Districts or Local Historic Districts, or which have a Historic Preservation Restriction applied, and 934 additional "inventoried" buildings without designation. The MACRIS mapper shows the following historical resources:

- National Register sites: Padanaram Village Historic District, Russells Mills Village Historic District, Tucker Farm Historic District, Hixville Village Historic District, and The Russell Garrison.
- In addition to the Russells Mills Village Historic District on the National Register, there is a Russells Mills Village Local Historic District (designated in 1998), with slightly different boundaries (see figure 12 below). Both the Local and National Districts contain two properties with Historic Preservation Restrictions: Russells Mills Village School and Russell-Elkstrom House. Properties within the Local Historic District that are listed must comply with the Russells Mills Historic District Committee site plan review process.

¹⁸ Massachusetts State Historic Preservation Office Programs,
https://www.sec.state.ma.us/mhc/mhcpdf/MHC_SHPO_Programs.pdf

- Apponegansett Meeting House, on the National Register, is also shown as having a Historic Preservation Restriction applied to the property, as well as to the Apponegansett Friends Meeting House and the Apponegansett Meeting Burial Ground.
- The Stone Barn Farm at Allens Pond Wildlife Sanctuary, while not on the Federal Register, is shown as having a Historic Preservation Restriction applied to the property, and specifically to the Main House, the Stone Barn, and the Tractor Barn.
- Outside of Historic Districts, there are several properties with Historic Preservation Restrictions: Allen's Grist Mill, the Elihu Akin House, and the Ezra Winslow House.
- The MHC database (October 2022) also contains several districts that have been inventoried as potential historic districts, but that remain undesignated: Jacob Tomkiewicz Farm, University of Massachusetts Dartmouth, Gulf Hill Farm Dairy (this area includes a Preservation Restriction on the Gulf Hill Dairy Barn), Slocum – Motha Farm, Barney's Joy Farm, Nonquitt, Slaters Point, and Mishaum Point.

Figure 12. Russells Mills Local and National Historic Districts



Source: Screenshot from the MACRIS database.

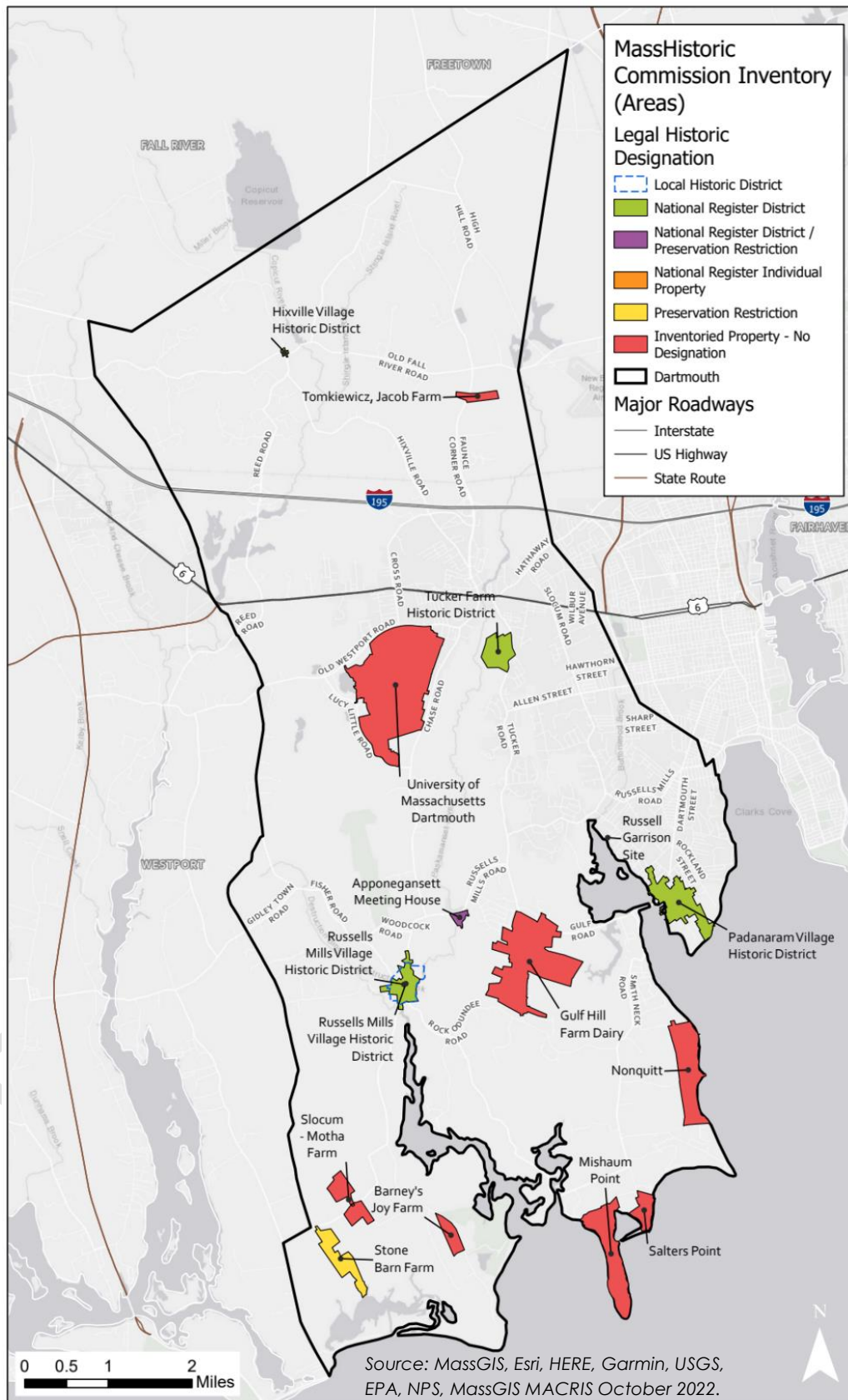
Dartmouth's rich history is preserved in its many cultural and historic resources. Those areas need to be protected by various means to maintain the history and character of the town. Several stakeholder groups in Dartmouth are actively and enthusiastically engaged in historic preservation efforts, collecting, and disseminating information about the history of the town itself,

as well as the larger south coast region. The Dartmouth Historical Commission conducts research on places of historic value, cooperates with the state archaeologist, and reviews development proposals for recommendations related to historic elements.

The DNRT, in conjunction with the Waterfront Historic Area League (WHALE) rebuilt the historic Allen Grist Mill at the Destruction Brook property on Slades Corner Road. The Dartmouth Historical Commission and The Dartmouth Heritage Preservation Trust (DHPT) continue working on the preservation of the historic Elihu Akin House at 762 Dartmouth Street (the intersection of Dartmouth and Rockland Streets. This house is one of the oldest existing residences in the Town, dated to 1762. In 2008, Community Preservation Funds were awarded to the DHPT to restore the property to be used as an architectural, historic preservation and cultural educational tool. The ultimate vision is for this site to become a Cultural Heritage Center. DHPT is also the holder of two Historic Preservation Restrictions, one for the Russell's Mills Schoolhouse, a significant contributing building in the only 40C local historic district Dartmouth, Russell's Mills Village; and the "Y Barn," an integral structure of the Gulf Hill Dairy Farm complex on scenic Gulf Road, owned by the SouthCoast YMCA. DHPT's role is to ensure compliance with the terms and conditions of the applicable Historic Preservation Restriction agreements.

Another organization, the Dartmouth Historical and Arts Society (DHAS), has focused its efforts on amassing a remarkable archive of historical research and documentation about Dartmouth and the surrounding south coast region, and on disseminating this information by organizing lecture events, and through the easily accessible and navigable Dan Socha memorial Digital Library, which includes historical maps, Colonial Era records, Quaker Meeting transcripts, genealogy documents, photographs, and more.

Map 28. Inventoried and Designated Historic District Features in the MACRIS Database



Unique Environments

Farmland Clusters

As previously noted under Section 4B - Landscape Character, Dartmouth has retained substantive farmland tracts and agricultural operations that are very important to the community and are foundational to Dartmouth's character.

Historically, agriculture was of prime importance to the economy of Dartmouth. Agricultural land was intermingled with wooded areas and historical villages centered around the harbor and river heads. This pattern of land use has given the town a unique quality and beautiful scenic areas. The loss of farmland and wooded area to development is a threat to this scenic quality. The change in use of these open areas affects the land and its resources.

Despite these pressures, Dartmouth continues its commitment to the promotion of the practice of agriculture and the retention of working farms. In the last decade alone, The Souza Lagasse Farm, the Stone Barn Farm, the Jarabeck Farm, the Silverbrook Farm, the Dike Creek Farm and the Dutch Belt Farm, a total of 580 acres, have been permanently protected through the partnership efforts of DNRT, the Agricultural Commission and Trust, the Conservation Commission, The Buzzards Bay Coalition, and The Trustees of Reservations (TTOR). Additionally, the Cornell Farm has been acquired by TTOR (with DNRT holding a CR on the property and assisting in raising funds), to add an additional 323 acres of preserved farmland. These permanently preserved farmland areas are shown on Map 29, Unique Features. Clusters of preserved agricultural lands occur in North Dartmouth along Old Fall River Road and North Hixville Road, in central Dartmouth along Bakerville Road, and in several areas of South Dartmouth (Smith Neck Road and Horseneck Road).

However, there is still more Agricultural Preservation to accomplish as Dartmouth faces the irrevocable loss of these heritage farms to development. The Chapter 61 lands shown in Map 29 include some of these as-yet unpreserved farmlands. There are presently approximately 5,450 acres of property in Chapter 61A. As noted previously, this method of preservation is not a guarantee and vital parcels can be easily removed from this protection. The threat of farmland loss is very real. In OSRP community outreach, survey respondents indicated a particular desire to preserve the scenic farmland corridors along the Old Fall River Road, Tucker Road/Bakersville Road, and Rock O'Dundee Road. In addition to preserving land, it is vital to preserve the practice of agriculture. The town and its non-profit partners are also focused on offering opportunities for new and entry level farmers on some of these holdings, such as the Dutch Belt Farm, through lease or purchase options.

Water Resources and Recreational Access

Dartmouth's location on the Buzzards Bay coastline affords many opportunities for boating, waterfront views, fishing, and swimming. Less well-known but also engaging are inland opportunities for water-based recreation in Dartmouth's rivers, lakes and ponds. Many groups are invested in water-based recreation in Dartmouth, but the group that has brought the most attention to bear in recent years was the Padanaram Harbor Management Plan Advisory Committee, which assisted in the development of the Padanaram Harbor Management Plan and is now pursuing the goals and objectives presented in the plan, many of which concern

recreation around the Harbor. Water-based recreation access areas are incorporated into the Unique Features Map (Map 29)

Beaches and Launches

Dartmouth's long and varied shoreline offers many opportunities for boating and swimming throughout 30 water access locations. There are presently three Town-owned beaches: Jones Park on Clarks Cove, Apponagansett Park on Apponagansett Bay, and Round Hill Beach on Buzzards Bay. All Town beaches have improvements, are open year-round and are staffed during summer months. The extended inventory below discusses town-, state-, and privately-owned beaches.

Apponagansett Bay serves as the Town's harbor for commercial and recreational boating. The New Bedford Yacht Club and several boating services are located here, and the harbor is widely known as a center for yachting. There are several private docks and landings along the bay and two public Town landings. The first at Apponagansett Park has a boat ramp, parking lot and drainage system. Apponagansett Park is adjacent to the second, Alfred F. Dias Town landing, which includes a small town beach, playground, bandstand area, volleyball court and two basketball courts. This park is a key component in Dartmouth's recreation system, particularly insofar as it serves areas with higher population densities. As of the writing of this plan, the town is pursuing a project to improve the Dias Landing Pier and mooring facilities.

Clarks Cove has one improved public beach at Jones Park. Another beach further south, Anthony's Beach, remains private. Like Apponagansett Park, Jones Park is located in a high-density area and serves a large number of people through its beach, open space and softball field. Jones Park has a great deal of available land area remaining for future park development and expansion. Such available land even provides the possibility of a greenway/recreation link connecting the park and the DeMello School and the Dartmouth Council on Aging building. This link would provide an exciting opportunity to integrate youth and senior populations into the town's recreation resources.

There are many beaches along Buzzards Bay, three of which are public and located in Dartmouth: Round Hill Town Beach opened in the 1970's on a portion of Hetty Green's former estate. It has undergone very little change over the past two decades primarily because of the character of the landscape and the site's own limitations. Little Beach, owned by the Massachusetts Audubon Society is on the Bay. Demarest Lloyd State Park Beach is owned by the State of Massachusetts. There are also private beaches, including Nonquitt, Mishaum, Salters, and Barney's Joy, among others, which can be used below the high tide mark for fishing.

Rivers

The Paskamansett Landing, a $\frac{3}{4}$ -acre parcel in the heart of the Rt. 6 and Faunce Corner Road area, provides a green haven in the commercial heart of Dartmouth with access to the Paskamansett River and a waterfall. As a river for canoeing, the Paskamansett is beautiful but has several access issues: there is not clear passage along its entire route; it does not provide accessible banks for stopping en route; and it does not have any public put-in location upstream. The Paskamansett can be accessed via a canoe put-in along Russells Mills Road and a public town boat landing at the small park further south on Russells Mills Road.

There are exceptional public recreation opportunities at several key parklands along the Slocums River. Demarest Lloyd State Park offers direct access to the river with hiking trails, a boat ramp for canoers and kayakers, fishing, swimming, a picnic area, restrooms, scenic viewing area and ADA accessible beach wheelchairs available. The Slocums River Reservation has additional walking trails, and the Lloyd Center for the Environment has walking trails and offers guided kayak tours and educational and nature study programs.

Water access along the Copicut and Shingle Island Rivers and Buttonwood Brook are limited to land-based recreation at this time. The Copicut and Shingle Island Rivers have several publicly accessible parklands along their banks: The Noquochoke Wildlife Management Area, the Town Forest, and Dartmouth Regional Park. Flowing through one of the most developed areas of Dartmouth, Buttonwood Brook is currently too polluted for boating or swimming. Sections of the brook are very scenic, and though its potential for recreation has yet to be secured, it could one day serve as the focus for a series of small neighborhood parks.

Lakes and Ponds

Some of Dartmouth's lakes and ponds are developed with shorefront residential communities, without existing public access for recreation. Lake Noquochoke is intensely developed with cottages along its eastern shore and several small private beaches. There are no town facilities currently and potential use of the lands surrounding the Lake are limited. The homeowners along the Lake use it for private recreation, and people are regularly seen fishing along Reed Road into the Lake. Cornell Pond has excellent potential for recreation. It is stocked for fishing and has a small park with a picnic table and a barbecue. Additionally, there is a small canoe/boat launching area along the pond's banks.

The Existing Open Space and Recreation Network in Relation to Environmentally Sensitive Areas

While there is not a formally designated "Areas of Critical Environmental Concern (ACEC)" in Dartmouth, it is clear from the preceding discussion in Section 4 that there are many environmentally significant lands in Dartmouth, including its water resources, priority habitat lands, areas that serve and will continue to serve (as long as they are protected) as critical wildlife corridors and migration routes, and lands that rank highly in their existing ecological integrity.

In considering the overlap between these environmentally sensitive areas, the Unique Environments of NHESP Priority Habitat areas and lands with continued high ecological integrity encompass many of the BioMap2 and other features that were discussed in Section 4. Together, these lands identify where priority species have been documented, and lands that represent the highest quality relative to the rest of the Dartmouth landscape for forest, wetland, and upland natural communities. There is already a significant overlap between the town's open space and recreation network and these lands, as can be seen on Map 29, and as is further discussed in Section 7.

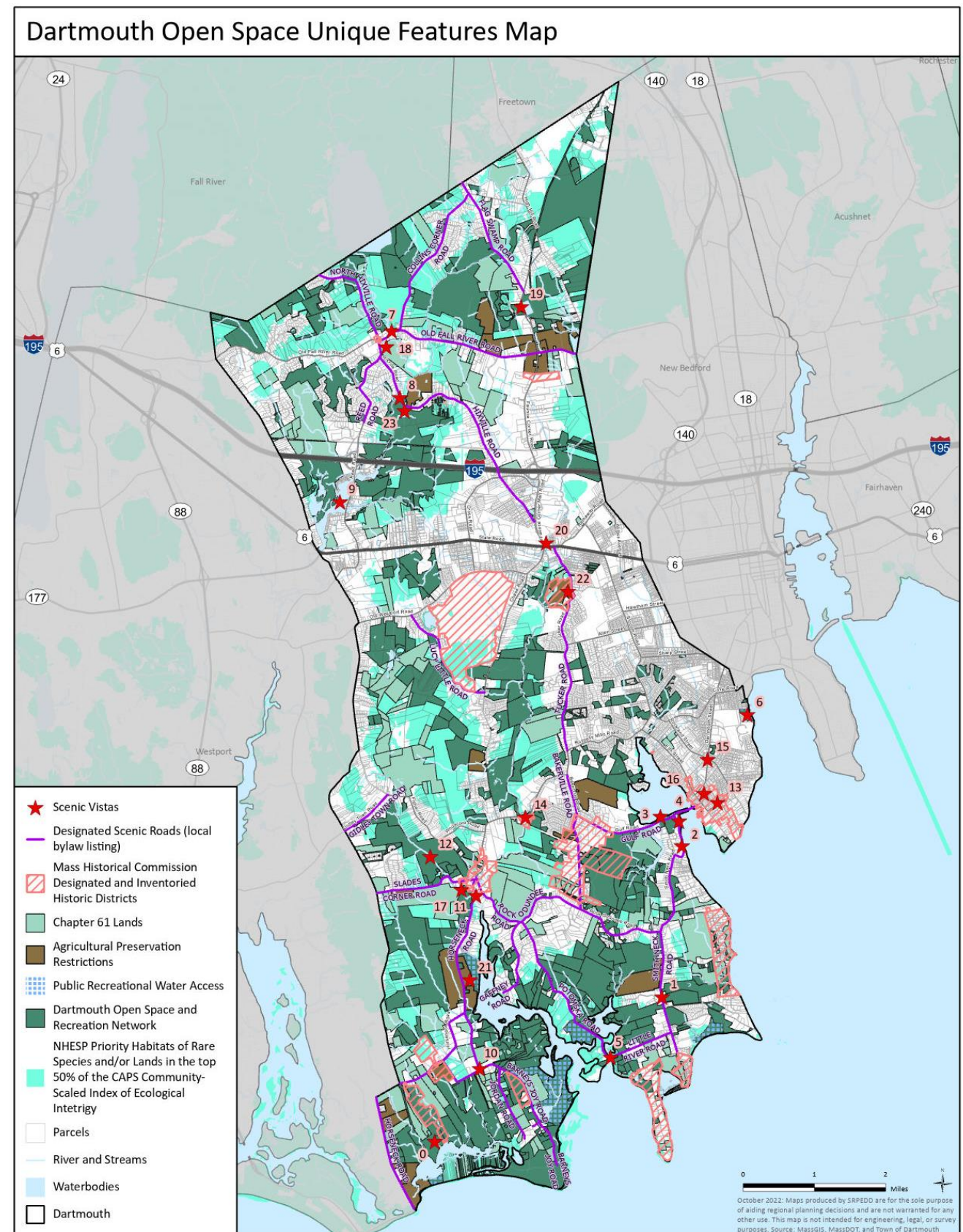
In Sum: The Unique Features Map

This section reviewed the major characteristics and features that contribute to Dartmouth's

character, especially for their aesthetic and environmental importance. This OSRP defines Dartmouth's Unique Features to include the following, as depicted in the Unique Features Map:

- Scenic Vistas
- Scenic Roads
- Designated and Inventoried Historic Districts
- Agricultural Land
- Public Access for Water-Based Recreation
- Existing Open Space and Recreation Lands
- Chapter Lands
- The Environmentally Sensitive and Significant Areas of NHESP Priority Habitat and the top 50% percentile of lands in the community-scaled CAPS Index of Ecological Integrity

Map 29. Unique Features



G. Environmental Challenges

Landfills

The Town of Dartmouth and the City of New Bedford, through the Greater New Bedford Regional Refuse Management District, constructed the Crapo Hill Landfill in 1995. The Crapo Hill Landfill provides Dartmouth with a cost-effective and environmentally sound way to dispose of its solid waste. The District is governed by the District Committee consisting of, three representatives from Dartmouth and three representatives from New Bedford. The site consists of a 152-acre wooded area in North Dartmouth, bounded by the Freetown line to the north and Conduit Road to the southeast. The landfill and its related site facilities are in an industrial zone, with access to the landfill provided through the New Bedford Industrial Park. Crapo Hill handles about 100,000 tons of solid waste per year. About 50% of this is residential solid waste from Dartmouth and New Bedford, and 50% is commercial solid waste from several sources.

The landfill is currently 39 acres in size and has been constructed in phases of about ten acres each, with an expected total of 70 acres before closing in 2027. According to this timeline, Dartmouth can rely on this facility for another five years before an alternative must be found. Updated facility information will likely be part of Dartmouth's next OSRP update. The portions of the landfill that have reached final grade are capped with an impermeable 'sandwich' of plastic liner and clay-like materials. To date, 22 acres have been capped. The ultimate height of the capped landfill will be 320 feet above mean sea level.

The current facility is also an energy generator. The decomposition of material within the landfill creates methane gas. This gas is collected through a system of perforated pipes installed throughout the landfill. The gas is piped to an electricity generating plant operated by Commonwealth New Bedford Energy, LLC. The gas is burned at the plant where it generates approximately 3.4 megawatts of electricity that is then sold to Eversource. The District's website points out that this is enough gas to light 3,500 homes every day.

In October of 2014, the Commonwealth's first food waste to biogas anaerobic digester facility at an operating Massachusetts landfill was opened at Crapo Hill. The project was developed by Boston based Commonwealth Resource Management Corporation with the Greater New Bedford Regional Refuse Management District. The facility, in its initial phase, will handle 3,000 gallons of organic waste per day. When expanded to full capacity, the anaerobic facility will generate an existing 0.8 megawatts of electricity to supplement the 3.4 megawatts currently generated by collected landfill gas. In 2018, a project expansion increased the digester's input capacity from 5,000 to 30,000 gallons of liquid material a day, increasing generating capacity to 4.1 megawatts. Company representatives believe anaerobic digestion will provide disposal capacity of organics beyond the closure of the landfill.¹⁹

¹⁹ Karidis, Arlene. Feb 20, 2018. Waste360. "Massachusetts Landfill Operator Teams with Energy Project Developer for AD Project Expansion," <https://www.waste360.com/design-and-construction/massachusetts-landfill-operator-teams-energy-project-developer-ad-project>

Hazardous Waste Sites

MassDEP's Bureau of Waste Site Clean-Up lists 196 records of sites/reportable releases in Dartmouth. Most of these sites do not constitute serious hazards to public health, reflecting minimal leaks of fuel oil and gasoline. According to the most recent listing (Fall 2022), most of these sites (133) are classified as having a least some degree of resolution.

Hazardous sites are Tier Classified using a Numerical Ranking System (NRS) that scores sites based on a variety of factors, including the site's complexity, the type of contamination, and the potential for human or environmental exposure to the contamination. Tier 1 is DEP's highest priority ranking. In some cases, sites are automatically classified as Tier 1 if they pose an imminent hazard or affect public water supplies.²⁰

Table 23. Hazardous Release Sites Compliance Status

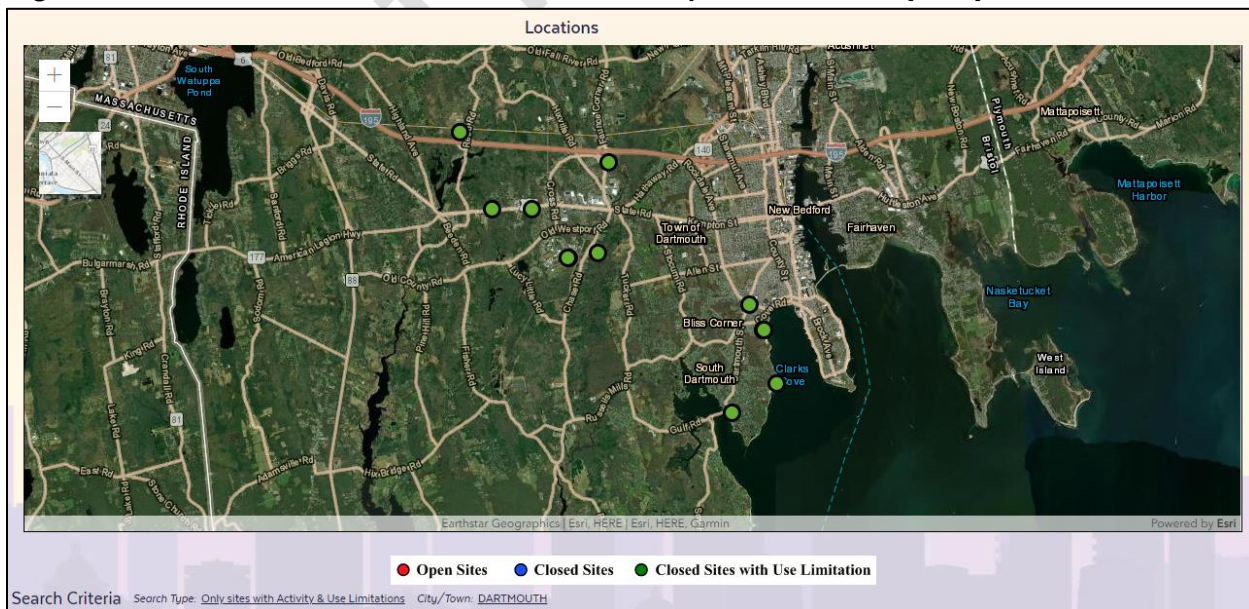
Type	Count	Status Detail
Adequately Regulated	4	A release where response actions are being conducted following the rules of another state or federal regulatory program.
DEP No Further Action	2	(pre-1993) Response actions were conducted for the release and MassDEP determined that no further action was needed.
Permanent Solution with Conditions	4	(post-2014) A release where a Permanent Solution Statement was submitted indicating that response actions achieved a level of No Significant Risk for current property uses, but that remaining conditions may limit how property can be used without additional cleanup – may require AUL.
Permanent Solutions with No Conditions	31	(post-2014) A release where a Permanent Solution Statement was submitted indicating response actions achieved a level of No Significant Risk for all current and foreseeable future uses of the site.
Response Action Outcome	110	(pre-2014) A release where a Permanent or Temporary Solution Statement was submitted, asserting that response actions were sufficient to achieve a level of No Significant Risk.
Response Action Outcome Not Received	4	An RAO Statement was not received.
Remedy Operation Status	3	A site where a remedial system relying upon Active Operation and Maintenance is being operated in order to eventually achieve a Permanent Solution.
Statement Retracted	1	An RAO Statement that had been submitted for the site has been retracted.
Tier Classification	5	A site/release where a Tier Classification Submittal was received, but the classification type has not been confirmed by DEP.
Tier 1	5	Site has been classified as Tier 1 because: (a) there is evidence of groundwater contamination, and such groundwater is located within an Interim Wellhead Protection Area, Zone II, or within 500 feet of a Private Water Supply Well; (b) an Imminent Hazard is present;

²⁰ In 2014, the subcategory tiers 1A, 1B, and 1C were discontinued and collapsed under an overarching 'Tier 1' category.

		(c) one or more remedial actions are required as part of an Immediate Response Action; or (d) one or more response actions are required as part of an Immediate Response Action to eliminate or mitigate a Critical Exposure Pathway. (note that subcats. 1A, 1B and 1C have been discontinued as of 2014; such sites would now be considered simply Tier 1.)
Tier 1D	8	Site where the responsible party fails to provide a required submittal to DEP by a specified deadline (formerly Tier 1B).
Tier 2	10	Site has been classified as Tier 2. Any disposal site that is not Tier 1D and does not meet the Tier 1 Criteria.
Temporary Solutions	1	(post-2014) A release where a Temporary Solution Statement was submitted – response actions were sufficient to eliminate all substantial hazards, but additional work is necessary for Permanent Solution.
Unclassified	3	A release has not reached its Tier Classification deadline (usually one year after reporting), and where a Permanent or Temporary Solution Statement or other Classification Submittal has not been received by DEP.
Utility-Related Abatement Measure	3	A Release Tracking Number has been assigned to a release where a response action is being or was performed in conjunction with utility-related work.
Waiver Completion Statement	2	(pre-1993) A Waiver Completion Statement has been submitted to DEP.

The record for Dartmouth includes thirteen (13) sites listed as having “Activity & Use Limitations.” Contamination on these sites has been closed or resolved to a point where they are suitable for some, but not all uses, with restrictions for reuse placed on the property.²¹ As shown in Figure 13, these sites are clustered around the major arterial and commercial roadway of I-195 and Route 6, near UMass Dartmouth, and in the Padanaram/Bliss Corner neighborhoods.

Figure 13. Hazardous Waste Release Sites with Activity Use Limitations (AULs) Post-remediation



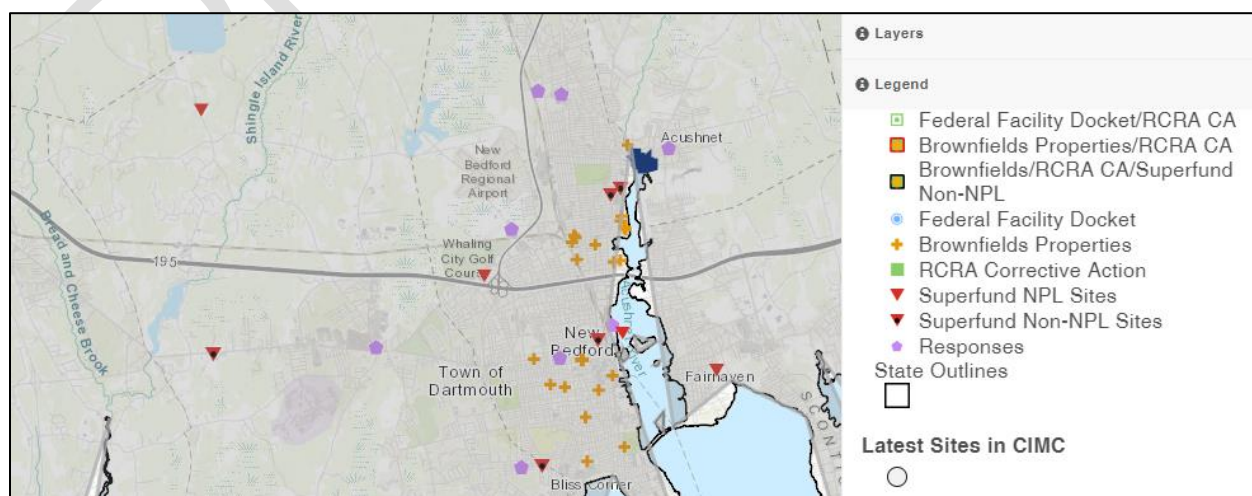
²¹ More information on these sites can be found in the EEA's online data portal, <https://eeaonline.eea.state.ma.us/portal#/search/wastesite>

Table 24. Chapter 21E Tier Classified Hazardous Sites in Dartmouth

Category	Sites
Tier 1	<ul style="list-style-type: none"> • RTN 4-0027363 (85 McCabe Street, Residential Lot) • RTN 4-0026666 (498 Old Westport Road, Pine Hill Sand & Gravel) • RTN 4-0011942 (30 Champion Terrance, Bush Quality Cleaners) • RTN 4-0006042 (24 Longmeadow Road, Merrick Mutual) • RTN 4-0000361 (Chase Road Lot 72)
Tier 1D	<ul style="list-style-type: none"> • RTN 4-0028995 (285 Old Westport Road, Umass Dartmouth) • RTN 4-0027857 (383 Reed Road, Former Auto Salvage Yard) • RTN 4-0027703 (21 Kraseman Street and 31 McCabe Street) • RTN 4-0027620 (Bliss Corner Neighborhood Investigation) • RTN 4-0027576 (20 Kraseman St, Residential Development) • RTN 4-0025462 (25 Robert Street, Unoccupied Residence) • RTN 4-0014188 (79 Slocum Road) • RTN 4-0000333 (25 Tolland Path)
Tier 2	<ul style="list-style-type: none"> • RTN 4-0028603 (52 Donald Street, Little People's College) • RTN 4-0028128 (532 Russells Mills Road, Service Station) • RTN 4-0023920 (540 South Dartmouth Street, Cumberland Farms) • RTN 4-0021545 (77 Sharp Street, Martins Service Station) • RTN 4-0019227 (831 State Road, Shell Gas Station) • RTN 4-0017215 (218 Elm St) • RTN 4-0014553 (582 Dartmouth Street, Gulf Station) • RTN 4-0014053 (582 Dartmouth Street, Gulf Station) • RTN 4-0013414 (582 Dartmouth Street, Gulf Station) • RTN 4-0011538 (246 State Road, Shell Service Station)
Unclassified	<ul style="list-style-type: none"> • RTN 4-0029179 (958 Reed Road, Catch Basin) • RTN 4-0029158 (831 State Road, Shell Gas Station) • RTN 4-0029096 (52 Donald Street)
Tier Classification Received, Unconfirmed by DEP	<ul style="list-style-type: none"> • RTN 4-0015259 (469 Hixville Road, Propane Storage Facility) • RTN 4-0011445 (94 Faunce Corner Rd, Circle K) • RTN 4-0010788 (289 Bakerville Road) • RTN 4-0000263 (Chase Road, SMU Sewer Easement) • RTN 4-0000056 (North Hixville Road, Re Solve Inc)

Dartmouth, in conjunction with federal, state, and local partners, has continued assessing, cleaning up, and promoting reuse opportunities on its contaminated sites, also known as brownfields. The EPA's Cleanups In My Community database shows five sites in Dartmouth, as shown in Figure 14 below:

Figure 14 . EPA Cleanups In My Community Database Map



From north to south, the RE-SOLVE site is categorized as a National Priority List (NPL) Superfund site. A waste chemical reclamation facility operated on site from 1956 to 1980. Re-Solve handled a variety of hazardous materials, including solvents, waste oils, organic liquids and solid, acids, alkalizes, inorganic liquids and solids, and polychlorinated biphenyls (PCBs). Four unlined lagoons were used as disposal areas for hazardous materials. The lagoon contents were burned periodically to reduce the volatile organic compounds (VOCs) content. Facility operations contaminated soil, sediment, and groundwater with hazardous chemicals. The site was placed on the NPL in September 1983. Following immediate actions to protect human health and the environment, the site's long-term remedy is in place. Groundwater treatment and monitoring are ongoing. The LEDGE site on Route 6 was not placed on the NPL, and the EPA has determined that no further federal action will be taken at this landfill site. In 2012, a response action occurred at the Dartmouth Mall, caused by the activity of a painting contractor that caused latex paint to enter into the storm drain system, which flowed directly into the Paskamanset River, turning it temporarily white. The contractor engaged a Licensed Site Professional to develop a strategy to clean out the drains, which was implemented shortly thereafter.

Finally, a response action occurred in the Bliss Corner Neighborhood at properties in the vicinity of 85 McCabe Street. In the summer of 2018, MassDEP and the town Board of Health discovered waste material, including buried drums containing unknown materials, at this residential property. MassDEP issued a field Notice of Responsibility (NOR) to the property developer. The developer hired a Licensed Site Professional and started conducting response actions. During this process, MassDEP learned of potential dumping activities in the Bliss Corner Neighborhood dating back to the 1930s. During follow on inspections and sampling MassDEP and EPA sampled 46 residential properties in the neighborhood. From this sampling, the main contaminants of concern identified are lead and polychlorinated biphenyls, better known as PCBs. MassDEP requested support for a removal action at five residential properties where elevated levels of lead and/or PCBs had been identified in surficial soil that posed a risk to human health and the environment. EPA took on the cleanup and restoration of these five properties with completion of work expected in 2022.

Erosion and Sedimentation

There have been historic sedimentation problems with harbors and inlets. The Conservation Commission and town addresses these problems through proper implementation of Best Management Practices such as street sweeping, and stormwater Best Management Practices (BMPs) for new/updated construction. Continued vigilance in this area will help prevent further damage. In areas such as Buttonwood Brook, a mix of urbanized and open land, sediment, channelization, encroachment in the floodway, and debris all combine to exacerbate stormwater impacts. In these areas, more complex and multidisciplinary solutions are needed.

Flood Hazard Areas

There are several areas in town that have experienced repetitive flooding during periods of heavy rain. Most of these areas were developed before the introduction of wetlands protection or flood hazard and flood plain zoning regulations. As a result, development was allowed in areas that would now be considered jurisdictional wetland, flood plain, or floodway.

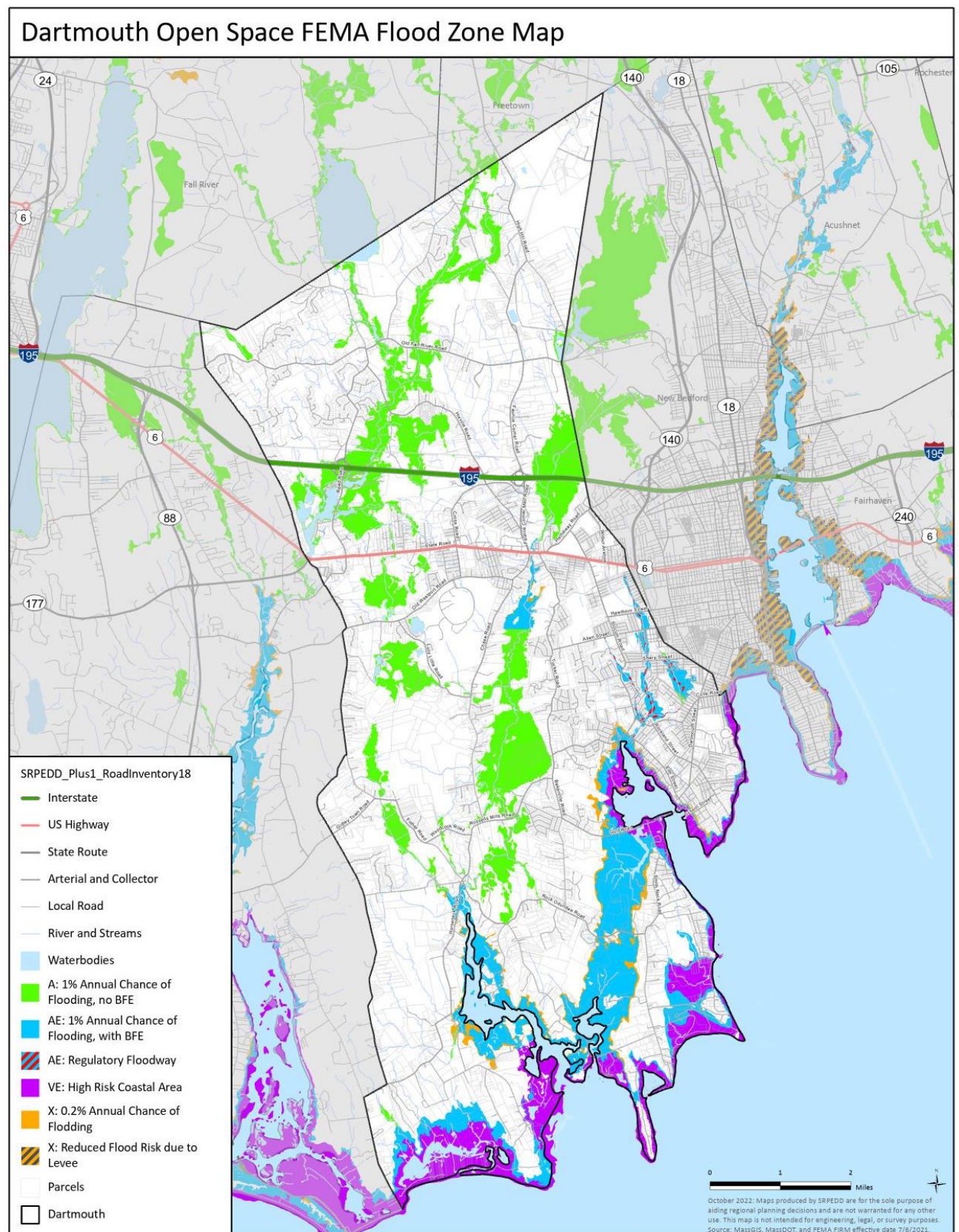
Flood risk data is compiled for the community by the Federal Emergency Management Agency (FEMA) for use in both insurance rating and floodplain management. Both the Dartmouth Conservation Commission and Building Department use FEMA's Flood Insurance Rate Maps to administer floodplain management regulations. FEMA regulates land areas that are flooded by a 100-year flood event, or the flood event likely to occur once every hundred years (or 1% chance of occurring in any given year). This area is designated as the Special Flood Hazard Area, depicted as the "A" and "V" zones in Map 30. These areas include locations flooded during hurricanes and identify wave velocity zones. It is interesting to note that the hurricane flood zone for the ocean is generally 13 feet above sea level, but exposed land in wave velocity zones can have waves cresting to 20 and 30 feet above sea level. Areas along rivers and lakes that flood are also identified.

FEMA's Special Flood Hazard Area affects approximately 2,793 properties in Dartmouth. These properties contain about 1,614 structures located within the Special Flood Hazard Area. To remain compliant with the National Flood Insurance Program (NFIP), the Town of Dartmouth maintains a current Special Flood Hazard District Bylaw, which regulates and places some limitations on development within FEMA's designated high risk flood zone area.

Dartmouth initially adopted a Flood Plain Zoning Plan on June 28, 1977. The bylaw was most recently updated in 2021, when a new FEMA Flood Study updated the Special Flood Hazard Area. Flood plain zoning is designed to lessen the damaging effects of flooding. The Dartmouth Building Department uses this zoning to require certain types of construction in the flood plain. Building requirements are very strict, and in many cases, expensive. Flood plain zoning does not prevent construction in the flood plain, but it does require structures to be flood-proof. Projects in flood plains also require a Conservation Commission permit. In 1997, in anticipation of rising sea levels, the town amended the flood plain zoning to require that buildings be elevated one foot higher than the current Federal requirement. In an effort to reduce the impacts from older developments that were built before the current stormwater regulations were in place, the Conservation Commission requires compliance with current stormwater standards whenever an existing commercial or residential development is required to obtain a permit pursuant to the Wetlands Protection Act and/or the Dartmouth Wetlands Bylaw. Dartmouth's stormwater management controls are stringently regulated and enforced through the cooperative efforts of many town officials including the Conservation Commission and the Planning Board.

A Special Permit from the Board of Appeals is required to fill or excavate land in a flood zone other than that related to building a house. The Building Commissioner ensures that standards to prevent damage to structures built in flood plains are adhered to. The most significant standard for new construction is that no area of human habitation be built below the mapped flood level.

Map 30. FEMA Designated Flood Zones in Dartmouth



Development Impact

New development causes environmental impacts, even with the best implemented regulations. The impervious surfaces that development brings, such as roofs, roads, driveways, and other pavement interrupt hydrologic and hydraulic processes, altering the way water moves across the landscape. The removal of trees and habitat area is required to make space for houses and other development. One of the byproducts of development is an increase in the presence of nitrogen, found primarily in stormwater runoff and groundwater seepage from residential septic systems. The regulatory community tries to manage and mitigate these impacts to balance development and environmental protection. Upgrading of older commercial and residential developments with current stormwater BMP's will help to mitigate the problem, as would the adoption of so-called "Low Impact Development" or LID regulatory techniques, that seek to limit the amount of impervious surface, among other meaningful measures for mitigating the impact of development on natural systems.

Ground and Surface Water Pollution

Ground and surface water pollution is also closely tied to nitrogen pollution and stormwater runoff. Strict implementation of DEP stormwater regulations and adoption of new management techniques as technology and information improves, including the issuance of the state's new Total Maximum Daily Loads (TMDLs) for nitrogen, will help mitigate this problem.

Impaired Water Bodies

The federal Clean Water Act was enacted to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. As one step toward meeting this goal each state must administer a program to monitor and assess the quality of its surface waters and provide periodic status reports to the U.S. Environmental Protection Agency.

Section 305(b) of the Clean Water Act codifies the process whereby waters are evaluated with respect to their capacity to support specific uses that are defined in the Massachusetts Surface Water Quality Standards. These uses include aquatic life, fish consumption, drinking water, shellfish harvesting, primary (e.g., swimming) and secondary (e.g., boating) contact-recreation, and aesthetics. The 305(b) process entails assessing each of these uses, where applicable, for rivers, lakes and coastal waters using all readily available data. Each evaluated waterbody or portion thereof on the list is referred to as an assessment unit (AU), and assigned to one of the following categories:

- Category 1 = Unimpaired and not threatened for all designated uses.
- Category 2 = Unimpaired for some uses and not assessed for others.
- Category 3 = Insufficient information to make assessments for any uses.
- Category 4A = Impaired for one or more designated uses but does not require the development of a TMDL: TMDL has been completed.
- Category 4B = Impaired for one or more designated uses but does not require the development of a TMDL: Other pollution control requirements are reasonably expected to result in the attainment of designated uses.

- Category 4C = Impaired for one or more designated uses but does not require the development of a TMDL: Impairment is not caused by a pollutant.
- Category 5 = Impaired for one or more uses and requiring a TMDL (impairment due to pollutant(s) such as nutrients, metals, pesticides, solids, and pathogens).

A Category 5 designation is given if available data indicate that at least one designated use is not being supported or is threatened and a TMDL is needed. Waters listed in Category 5 constitute the “303(d)” list, the final version of which must be approved by the EPA. Once a water body is identified as impaired by a pollutant and added to the 303(d) list, MassDEP is required to develop a pollutant limit designed to restore the health of the impaired water body.

The process of developing the pollutant limit, generally referred to as a Total Maximum Daily Load (TMDL), includes identifying the cause (type of pollutant) and source (where the pollutant comes from), determining how much of the pollutant is from direct discharges (point sources) or indirect discharges (non-point sources), determining the maximum amount of the pollutant that can be discharged to a specific water body and still meet water quality standards, and developing a plan to meet that goal. The plan must identify the required activities to achieve the allowable load to meet the allowable loading target, the timeline for those activities to take place, and reasonable assurances that the actions will be taken.

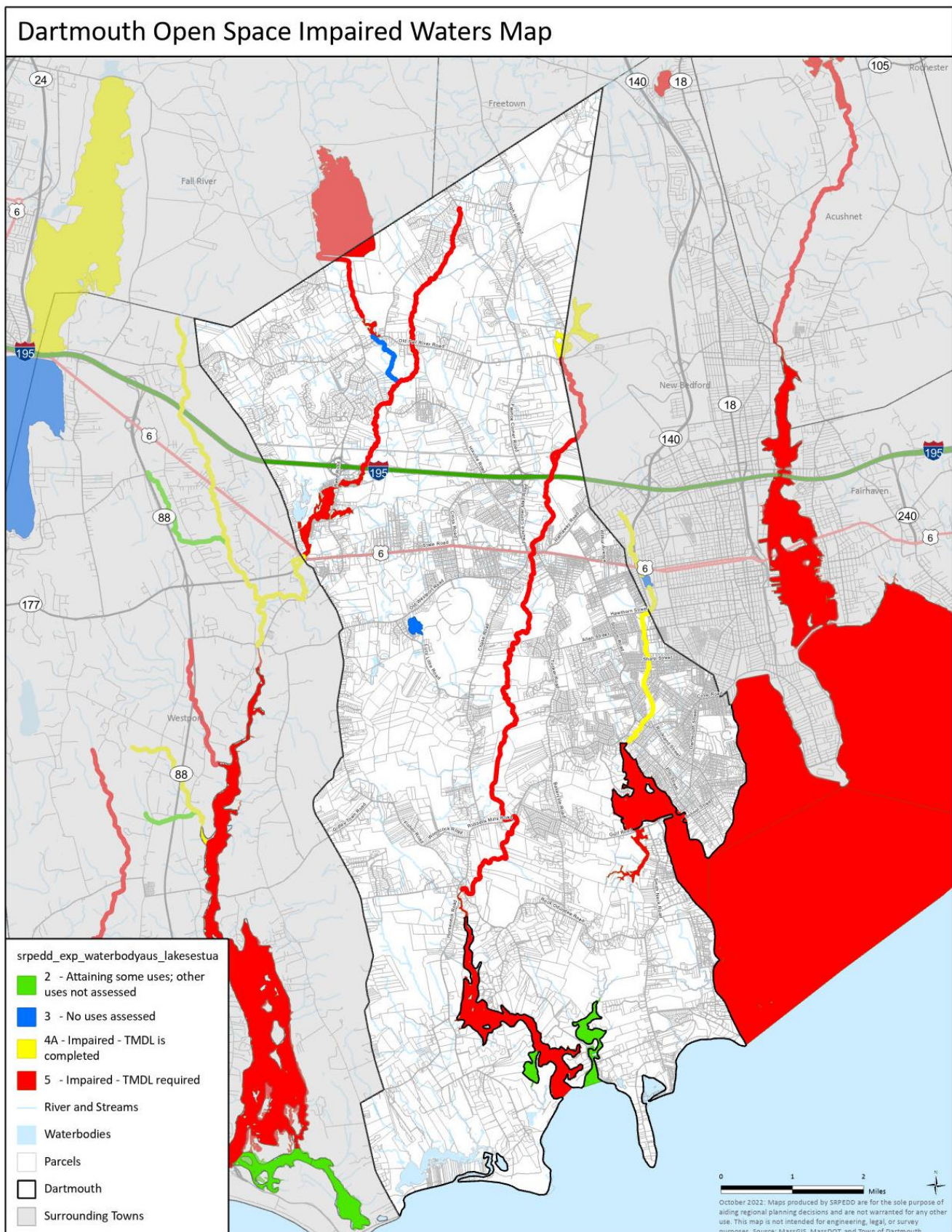
According to MassDEP's 2018/2020 *Integrated List of Waters*, waterbodies within the Buzzards Bay Watershed are listed as impaired for various reasons including nutrients (nitrogen, phosphorus), low dissolved oxygen, non-native aquatic invasive species, eutrophication biological indicators, and fish passage barriers. As can be seen in Map 31, several waterbodies in Dartmouth are classified as impaired in Category 5, requiring the development of a TMDL. These include Cornell Pond, the upper Copicut River, the Paskamansett River, the Shingle Island River, Lake Noquochoke, Slocum River, Apponagansett Bay, and Clarks Cove. The only waterbody within Dartmouth with an established TMDL is Buttonwood Brook. Table 25 provides additional details for those waterbodies identified as impaired (MassDEP, 2021).

Table 25. Catalog of Impaired Waters in Dartmouth (2018/2020)

Name	ID	QUAL.	CAT.	Additional Details
Copicut Reservoir	MA95175	Public Water Supply, Outstanding Water	5	Mercury in Fish Tissue
Noquochoke Lake	MA95170	Public Water Supply, Outstanding Resource Water	5	(Non-Native Aquatic Plants*) Aquatic Plants (Macrophytes) Mercury in Fish Tissue PCBs in Fish Tissue Turbidity
Cornell Pond	MA95031	Public Water Supply, Outstanding Resource Water	5	Mercury in Fish Tissue PCBs in Fish Tissue

Turner Pond	MA95151	none	4A	Mercury in fish tissue
Cedar Dell Lake	MA95021	none	3	No uses assessed
Apponagansett Bay	MA95-39	SFO	5	Estuarine Bioassessments Fecal Coliform Nitrogen, Total Nutrient/Eutrophication Biological Indicators PCBs in Fish Tissue
Clarks Cove	MA95-38	SFO, Combined Sewer Overflow	5	Enterococcus Fecal Coliform PCBs in Fish Tissue
Buzzards Bay	MA95-62	SFO	5	Fecal Coliform PCBs in Fish Tissue
Slocums River	MA95-34	SFO, HQW	5	Estuarine Bioassessments Fecal Coliform Nitrogen, Total Nutrient/Eutrophication Biological Indicators
Giles Creek	MA95-89	SFO	2	Uses attained: Fish, other aquatic life, and wildlife
Little River	MA95-66	SFO	2	Uses attained: Fish, other aquatic life and wildlife; Primary Contact Recreation; Secondary Contact Recreation
Copicut River	MA95-43	Public Water Supply, Outstanding Resource Water	5	Mercury in Fish Tissue PCBs in Fish Tissue
Unnamed Tributary	MA95-57	Public Water Supply, Outstanding Resource Water	3	No uses assessed
Shingle Island River	MA95-12	Public Water Supply, Outstanding Resource Water	5	Enterococcus
Paskamanset River	MA95-11	none	5	Combined Biota/Habitat Bioassessments Enterococcus Escherichia Coli (E. Coli)
Buttonwood Brook	MA95-13	none	4A	Enterococcus Escherichia Coli (E. Coli) Fecal Coliform

Map 31. Impaired Waters in Dartmouth



Threats to Specific Natural Communities

As a coastal community, Dartmouth is particularly vulnerable to the impacts of sea level rise, which not only impacts coastal infrastructure but natural communities as well (more details in Climate Change Basics Appendix). Dartmouth's coastal saltmarshes, which provide important wildlife habitat, carbon storage and protection from storm surge, are uniquely adapted to exist within a specific tidal range where they are inundated for part of the day. As the daily tide reaches farther and farther inland, salt marsh grasses are dying, and marsh habitat is converting to mud flat.

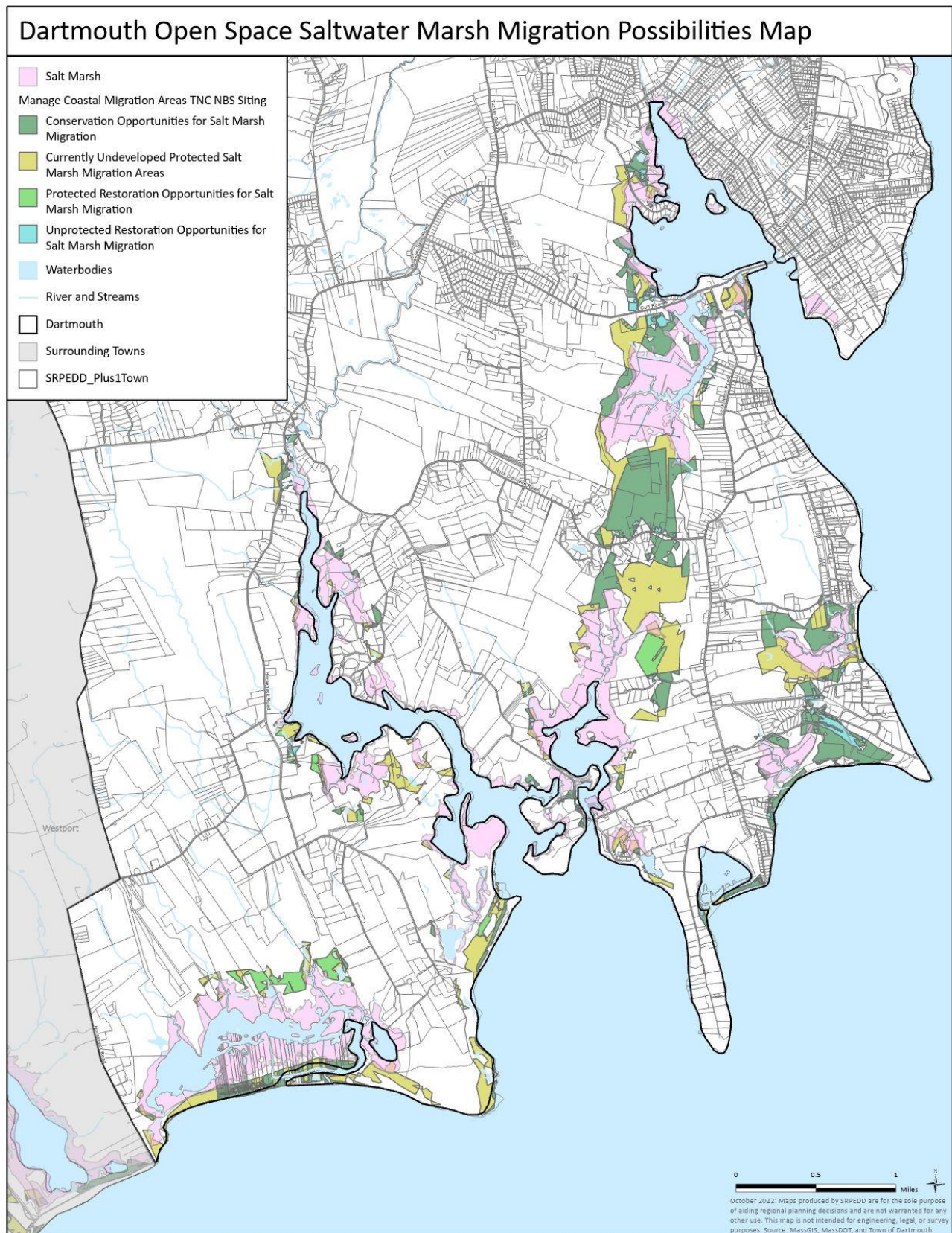
Salt marshes may naturally migrate farther inland to adapt to these changing conditions; however, several factors impact whether Dartmouth's marshes will be able to adapt quickly enough to keep pace with ongoing sea level rise. A healthy salt marsh is much more likely to adapt than an already degraded one. In many cases, existing structures like buildings, roadways and parking lots create hard barriers preventing marsh migration. Map 32 displays existing salt marsh habitat and their potential migration areas in Dartmouth. Migration areas include undeveloped areas adjacent to existing marshes that are either already protected or are conservation opportunities to allow for migration, as well as developed areas where restoration can provide room for marsh migration. These adjacent uplands will play a critical role in protecting Dartmouth's coastal habitats in the future.

Dartmouth's forests are vulnerable to storm damage, particularly blow downs and damage caused by strong winds. While tree damage negatively impacts forest health it can also create hazards to communities where fallen trees or limbs may restrict road or pathway access and/or damage infrastructure. Dartmouth's *Municipal Vulnerability Planning Project and 2020 Hazard Mitigation Plan Update* identified storm damage from trees to electrical power lines as a significant concern. Additionally, forest health has been impacted by invasive spongy (formerly known as gypsy) moths and other insects and pathogens, increasing the likelihood of tree blow-downs in a storm.

Environmental Equity

Dartmouth enjoys open space and trails in both North and South Dartmouth and open space is fairly well distributed. However, there is less open space in the center of Dartmouth because of the denser commercial development along Route 6. See Section 7 for an in-depth analysis of park locations and Dartmouth's Urbanized Area.

Map 32. Existing Salt Marsh and Potential Marsh Migration Areas in Dartmouth



V. OPEN SPACE PROTECTION STRATEGY AND PARCEL INVENTORY

The primary objective of this section is to consider all valuable open land and identify those parcels that are permanently protected open space, and those that are not protected and therefore vulnerable to adverse development.

A. Open Space Inventory Definitions and Concepts

To set the stage for the inventory to come, it is important to establish a baseline definition of open space. Open space includes any land that is largely undeveloped and seen as a community asset because of its current natural or semi-natural state.

Relative to its surrounding context and particular characteristics, land in open space can serve one or more of several beneficial functions. Open space lands can provide flood control, community resilience, and habitats for diverse plant and wildlife species. Open space is valued for its aesthetics, natural resources, recreational opportunities, and even its economic contributions. Continued open space preservation is necessary in Dartmouth not only to maintain the rural character treasured by many residents, but also to protect farmland, provide outdoor recreation opportunities, drinking water protection, as well as protection of habitat for animals and plants.

Dartmouth's open space network consists of both **publicly owned** and **privately owned** lands. Examples of publicly owned land include town conservation land and recreation fields. Examples of **privately owned** lands include farmland and portions of large residential properties that are placed into a conservation restriction. The inventory presented in this Section of the OSRP will thus include publicly owned land, land held by nonprofit conservation-focused entities, and privately-held properties that have a component of open space or recreation preservation, whether permanent or semi-permanent.

Open Space also includes both **protected** and **unprotected** properties. Protected properties are those which have been placed into a permanent state of preservation. There are several mechanisms by which permanent protection can be achieved for a piece of land. Permanent protection does not strip all uses from a particular property in every case. Agricultural land, for example, can be privately owned, but permanently protected for agricultural use through the Agricultural Preservation Restriction program (more details on this program are included below).

In addition to the Agricultural Preservation Restriction, private lands can also be permanently protected lands if the deed is restricted by a Conservation Restriction, Historic Restriction, or Wetlands Restriction. These categories of protection are explored further in the inventory below.

Protected public and nonprofit lands in Dartmouth are comprised of town owned conservation and park properties, State properties, and land owned by nonprofit land trusts and statewide or regional conservation organizations. Properties in this category are owned by the Town of Dartmouth, Dartmouth Natural Resources Trust (DNRT), MassAudubon, and The Trustees of Reservations, among others.

Parcels owned by the Conservation Commission, obtained under the provisions of MGL Chapter 40, section 8C, and committed to conservation purposes, have a special status, and are permanently protected under **Article 97** of the Articles of Amendment to the State Constitution. Article 97 protects certain lands acquired for natural resources purposes, meaning “conservation, development, and utilization of the agricultural, mineral, forest, water, air, and other natural resources.” Furthermore, a 1973 opinion of the Attorney General stipulates that land acquired for these purposes cannot be converted to any other use without the following actions:

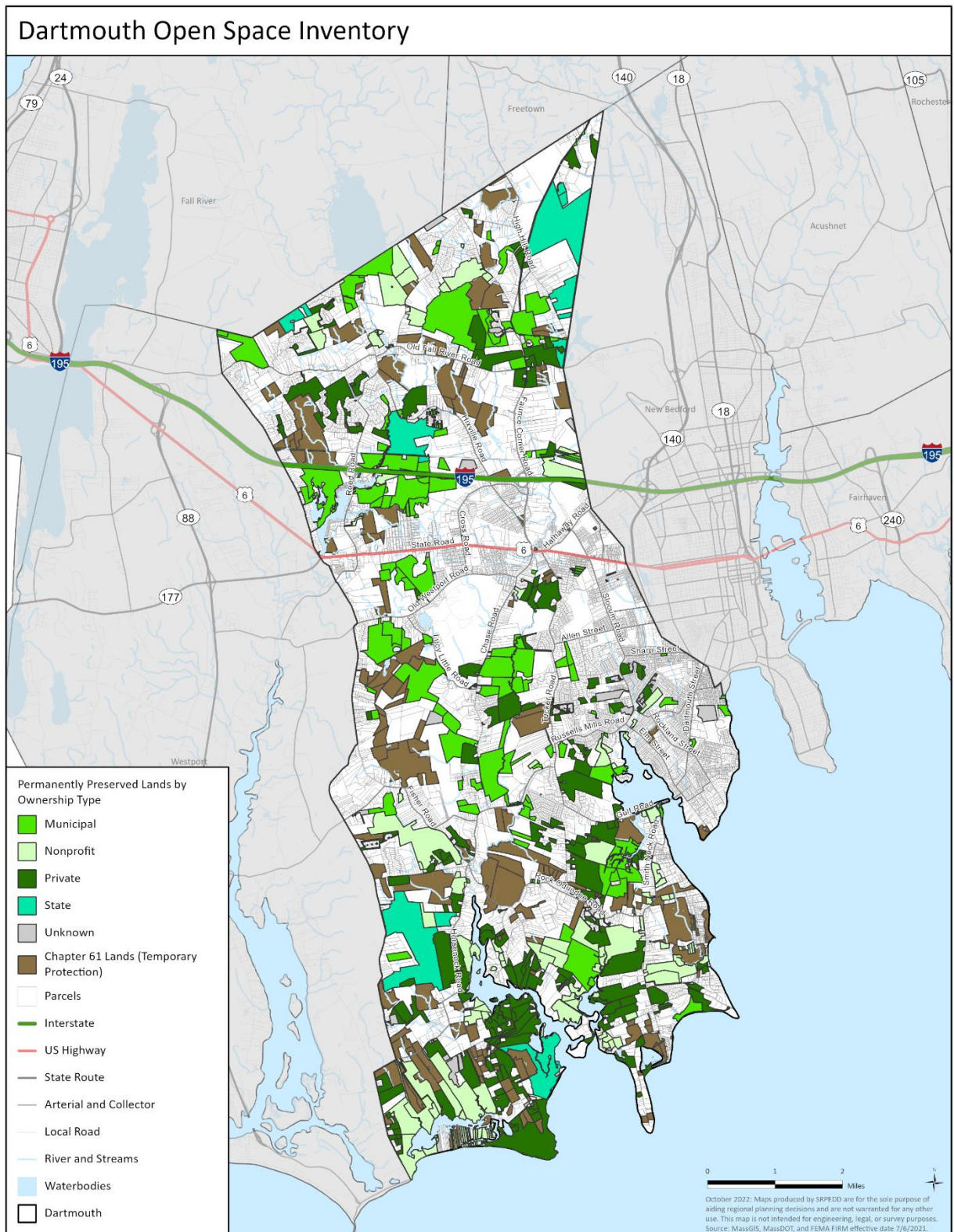
1. A unanimous vote of the local conservation commission that the land is surplus to its needs,
2. The Parks & Recreation Board must vote the same if it is parkland in question,
3. The matter must be taken up at Town Meeting or City Council and pass by a 2/3 vote,
4. The community must file an Environmental Notification Form with EOEEA's MEPA Unit, and
5. The matter must pass by a 2/3 vote of both branches of the Massachusetts Legislature.
6. Finally, if the property was either acquired or developed with grant assistance from EOEEA's Division of Conservation Services (i.e. Self-Help, Urban Self-Help, or Land and Water Conservation Fund), the converted land must be replaced with land of equal monetary value and recreational or conservation utility. While conversions do occur, the process is purposefully onerous to protect these conservation and recreation lands in perpetuity.

Town owned park lands dedicated under MGL Chapter 45, Sections 3 or 14, are also protected under Article 97. Lands protected by Article 97 are often owned by the municipal conservation commission, recreation commission, water department, or by a state conservation agency (i.e., state EOEEA agencies). Other Town owned lands purchased for general municipal purposes, under the control of the Select Board, are afforded only temporary protection unless otherwise specified or provided for by legal agreement.

It is important to note that some land that currently looks like open space, or that is experienced as open space by Dartmouth community members may not, in fact, be permanently protected. These lands, valued for their open space qualities by the community at large, are vulnerable to development or change in use. Thus, some of the land in the inventory may already be protected open space dedicated to conservation or recreational use, while others are identified for future acquisition or other protection measures.

This section identifies and maps all protected and unprotected land of conservation and recreation interest. The inventory is divided into two subsections, the first on Private Lands and the second on Public and Nonprofit Lands. The Open Space and Recreation Inventory Map depicts all permanently preserved lands in Dartmouth by ownership type, and includes lands temporarily preserved as Chapter 61, 61A, and 61B properties.

Map 33. Open Space and Recreation Inventory by Ownership Type



B. Private Parcel Inventory

Permanently Protected Private Parcels

Private lands are permanently protected lands if the deed is restricted by a Conservation Restriction (CR), Agricultural Preservation Restriction (APR), Historic Restriction (HR), or Wetlands Restriction (WR).

The APR program is a way for farmland to be protected in perpetuity from future development. The program pays farmers the difference between "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction, which precludes any use of the property that will have a negative impact on its agricultural viability. As contained in the table below, there are currently approximately 1,390 acres of APR land held in private ownership (though sometimes managed by nonprofit entities) in Dartmouth.

Inventory of APR Parcels Held in Private Ownership in Dartmouth											
Map	Block	Lot	Acres	Zone	Parcel Address	Current Use / Recreational Potential	Ownership	Control / Manager	Condition	Access	Funds
1	1		4.81	SR-B	HORSENECK RD	Yacubian Farm APR	ARMSTRONG RICHARD C TRUSTEE	Dept. of Agricultural Resources	Good	no	
1	2		2.047	SR-B	HORSENECK RD	Vacant Land	ARMSTRONG RICHARD C TRUSTEE	Private	Good	No	
1	4		1.048	SR-B	HORSENECK RD	Outbuildings	ARMSTRONG RICHARD C TRUSTEE	Private	Good	No	
1	6		1.883	SR-B	HORSENECK RD	Outbuildings	ARMSTRONG RICHARD C TRUSTEE	Private	Good	No	
1	7		8.334	SR-B	HORSENECK RD	Vacant Land	ARMSTRONG RICHARD C TRUSTEE	Private	Good	No	
4	1	1-5	30.65	SR-B	HORSENECK RD	APR	BETTENCOURT	Dept. of Agricultural Resources	Good	No	
4	3		29.11	SR-B	1028 HORSENECK RD	Vacant Land	DAVIS EVERETT M & TITUS DAVID B & VAN SL	Private	Good	No	
4	5		34.07	SR-B	1100 HORSENECK RD		ALMY ANNE T	partial CR w/Audubon 16 ac	Good	No	
9	24		22.7	SR-B	JORDAN RD	Sommaripa Farm	SOMMARIPA EVA TRUSTEE	Buzzards Bay Coalition	Good	No	USDA funds
9	36		55	SR-B	30 ALLENS NECK RD	Round the Bend Farm	MCFARLAND DUNCAN M &	Buzzards Bay Coalition	Good	No	
9	39		1.98	SR-B	660 HORSENECK RD	Outbuildings	MOTHA RONALD C &	Private	Good	No	
9	42		35.5	SR-B	HORSENECK RD	Motha Farm APR, dairy & forage	MOTHA ISABEL TRUSTEE	Dept. of Agricultural Resources	Good	No	
18	3	2	118	SR-B	253 HORSENECK RD	APR (Dartmoor / Sylvan), fruit	VAN SLOUN FOUNDATION	Dept. of Agricultural Resources	Good	No	

						trees & nursery stock					
18	3	4	2.0	SRB	HORSENECK RD		MASSACHUSETTS LAND CONSERVATION TR INC &		Good	No	
18	8		47.60	SR-B	HORSENECK RD	MLCT/Island View Farm APR, sweet corn & hay	Sylvan Nursery	Dept. of Agricultural Resources	Good	No	
18	10		2.10	SRB	368 HORSENECK RD		Thornton Peter A Trustee	Private	Good	No	
20	12		109.79	SR-B	482 SMITH NECK RD	APR, corn & hay	M & M FERRY BROTHERS LLC	Dept. of Agricultural Resources	Good	No	
22	1		26.33	SR-B	304 SLADES CORNER RD	King Farm - Farmland, arborvitae & cut flowers	TAVARES PAUL J & TAVARES LINDA	Dept. of Agricultural Resources	Good	No	
29	37	1	1.08	SR-B	BAKERVILLE RD	House lot	RYDER EDWARD H	Private	Good	No	
29	38	1	12.43		274 BAKERVILLE RD	Flying Carrot Farm, APR vegetables & pastured poultry	DASILVA LIBERIO J	Dept. of Agricultural Resources	Good	No	
30	7		21.92		227 BAKERVILLE RD	Apponagansett Bay Farm CR (aka Apponagansett Bay Estate) vineyard	DNRT	BBC/DNRT	Good	No	gift
34	3		4.26	SR-B	BAKERVILLE RD	Vacant Land	DASILVA LIBERIO J	Private	Good	No	
34	12		115		BAKERVILLE RD	King Farm & Brix Bounty Farm, APR, hay, vegetables, flowers	LOPOULOS WILLIAM D &	Dept. of Agricultural Resources	Good	No	
38	20		39		CHASE RD	APR vegetables, small fruit, eggs	SILVERBROOK FARM	Dept. of Agricultural Resources	Good	No	
43	9	1	8.58		858 TUCKER RD	Hay, horses	LISTER JUDITH &	Farm Bureau			
50	3	3	69.528		TUCKER RD	Gidley Farm APR	WAITE MARJORIE A TRUSTEE	Dept. of Agricultural Resources	Good	No	
61	42		74.96		HIXVILLE RD	Souza-Lagasse APR, flowers, fruit	VIVEIROS JULIE ANN	Dept. of Agricultural Resources	Good	No	
67	22		77.319	SR-B	337 OLD FALL RIVER RD	Running Brook Vineyard and Winery, APR	TEIXEIRA PEDRO L &	Dept. of Agricultural Resources	Good	No	
68	11	1	0.984	LI	644 FAUNCE CORNER RD	House lot	DEGRAZIA PASQUALE &	Private	Good	No	
68	11		25.84	LI	636 FAUNCE CORNER RD	Vacant Land	DEGRAZIA ROBERT P	Dept. of Agricultural Resources	Good	No	
68	16		22	LI	155 OLD FALL RIVER RD	Schofield Farm APR	ARSENIO CLAUDIA &				CPC
68	27		26.316	LI	645 FAUNCE CORNER RD		DEGRAZIA ROBERT P	Dept. of Agricultural Resources	Good	No	

72	35		58.19	SR-B	OLD FALL RIVER RD	Running Brook Vineyard and Winery	TEIXEIRA PEDRO L &	Dept. of Agricultural Resources	Good	No	
73	16		11.867	LI	OLD FALL RIVER RD	Vacant Land	DEGRAZIA ROBERT P	Dept. of Agricultural Resources	Good	No	
73	18		71.70	SR-B	OLD FALL RIVER RD		DEGRAZIA ROBERT P	Dept. of Agricultural Resources	Good	No	
73	20		2.25	SR-B	MCCONVILLE LN	House lot	DEGRAZIA ROBERT P	Private	Good	No	
73	23		155	SR-B	MCCONVILLE LN	MFCLT / McConville Farm APR, beef & eggs	Degrazia, Robert & Annette	Dept. of Agricultural Resources	Good	No	
74	12 & 14		61.02	SR-B	11 COPICUT RD	Dutch Belt Farm	COPICUT FARMS LLC		Excellent		

CRs can be placed on a parcel of land for a specified number of years, or in perpetuity. The CR is a restriction to a particular specified use or an exclusion of certain types or degree of development and runs with the deed. As contained in the table below, there are currently 2,195 acres of CR land held in private ownership (though sometimes managed by nonprofit entities) in Dartmouth.

Inventory of CRs Held in Private Ownership in Dartmouth												
Map	Block	Lot	Acres	Protection	Zone	Parcel Address	Current Use / Recreational Potential	Ownership	Control / Manager	Condition	Access	Funds
4	5	5	5.7	CR P	SR-B	HORSENECK RD	Almy CR	Barbara Almy	MA Audubon Society			
4	5		34.07	CR P	SR-B	1100 HORSENECK RD		ANN ALMY - MASS AUDOBON				
5	8		7	CR P		JORDAN RD		OUELLETTE	DNRT (partial)	Good	No	
6	1		29	CR P	SR-B	262 JORDAN RD	JP & Betsy Powel CR	Powel, John & Elizabeth	Buzzards Bay Coalition			
6	13		263.82	CR P	SR-B	14 BARNEYS JOY RD	Ranch	RUSSELL ANGELICA L	TTOR			
6	17		7	CR P		JORDAN RD	Wildes CR	Angelica Lloyd Clagett Nominee Trust	MA Audubon Society			NCWC G funds - federal / gift
6	18		2.59	CR P	SR-B	JORDAN RD	Hood CR	HOOD FREDERIC C & JOHANNA S TRUSTEES	DNRT	Excellent	No	gift
6	20		1.94	CR P		14 BARNEYS JOY RD		RUSSELL ANGELICA L	TTOR			
6	24		16.47	CR P		BARNEYS JOY RD	Sylvia CR	Sylvia, Mary	TTOR			
7	26		3.01	CR P	SR-B	136 MISHAUM POINT RD	Mishaum Point CR	Naumset LLC	DNRT	Excellent	No	

8	15		97.77 6	CR P	SR-B	740 HORSENECK RD	Conventional	HAMBLETT STEPHEN &	MAS			
9	16	1	7.33	CR P		BARNEYS JOY RD		KNIGHT	DNRT	Excellent	No	
9	18		87	CR P	SR-B	BARNEYS JOY RD	Peleg Island Farm CR (aka Koch Property CR)	Koch Family	DNRT	Excellent	No	NAWC A funds
9	19		40.23	CR P	SR-B	BARNEYS JOY RD	Vacant Land	HASKELL MELISSA E	DNRT	Excellent	No	
9	19	1	40	CR P	SR-B	BARNEYS JOY RD	Vacant Land	TRUSTEES OF THE GREAT NECK	DNRT	Excellent	No	
9	19	2	39.01	CR P	SR-B	BARNEYS JOY RD	Vacant Land	HOYT H AUSTIN	DNRT	Excellent	No	
9	19	3	40.09	CR P	SR-B	315 BARNEYS JOY RD	Vacant Land	BOEGEHOL D ALAN L &	DNRT	Excellent	No	
9	19	4	40.32	CR P	SR-B	307 BARNEYS JOY RD	Vacant Land	TRUSTEES OF THE GREAT NECK	DNRT	Excellent	No	
9	22		3.68	CR P	SR-B	25 JORDAN RD	Sullivan CR	Sullivan, Nicholas & Deborah	DNRT	Excellent	No	gift
9	24	2	10.8	CR P	SR-B	JORDAN RD	Sommaripa CR - Forest Component	Sommaripa , Eva & Leo	Buzzards Bay Coalition	Excellent	No	
9	26		15	CR P		JORDAN RD		SHELLEY	DNRT	Excellent	No	
9	31	2	0.925	CR P	SR-B	JORDAN RD	Vacant Land	BURNES ANDREW P &	DNRT	Excellent	No	
9	31	3	0.952	CR P	SR-B	JORDAN RD	Vacant Land	BURNES ANDREW P &	DNRT	Excellent	No	
9	31	5	0.9	CR P		JORDAN RD	Vacant Land	BURNES ANDREW P &	DNRT	Excellent	No	
9	31	10	8.8	CR P		JORDAN RD	Vacant Land	BURNES ANDREW P &	DNRT	Excellent	No	
10	3		42.41	CR P	SR-B	JORDAN RD	VonErtfelda CR	VonErtfelda , Harry	DNRT	Excellent	No	gift
11	1		5.1	CR P		POTOMSKA RD	Vacant Land	BASS SALLY	DNRT	Excellent	No	
11	15		23.5	CR P	SR-B	100 MISHAUM POINT RD	Vacant Land	PARKER MISHAUM PARTNERS HIP	DNRT (partial)	Excellent	No	
11	32		9.9	CR P	SR-B	MISHAUM POINT RD	Teal Pond Trust / Frontage on Salter's Pond	Teal Pond Nominee Trust	DNRT	Excellent	No	
11	36		11.85	CR P	SR-B	MISHAUM POINT RD	Vacant Land	PARKER MISHAUM PARTNERS HIP	DNRT	Excellent	No	
12	20		22.68	CR P		HORSENECK RD	Mahoney II CR	DeCosta, Richard	DNRT	Excellent	No	
12	19& 9		55.1	CR P		DIVISION RD		SYLVAN TRUST	DNRT	Excellent	No	

13	26		13.5	CR P	SR-B	BARNEYS JOY RD	Outbuildings	LEESON RICHMOND T	DNRT	Excellent	No	
13	30		1.941	CR P	SR-B	BARNEYS JOY RD	Vacant Land	TRUSTEES OF THE GREAT NECK	DNRT	Excellent	No	
14	3		6.88	CR P	SR-B	BARNEYS JOY RD	BioMap Core Habitat and NHESP Priority Habitat	Golden, Arthur	DNRT	Excellent	No	gift
14	4		55	CR P	SR-B	430 POTOMSKA RD	Lloyd Center for the Environment / Nature center, walking trails	Lloyd Center for the Environme nt	Lloyd Center			gift
14	6		14.87	CR P	SR-B	POTOMSKA RD	BioMap Core Habitat and NHESP Priority Habitat	Golden, Arthur	DNRT	Excellent	No	gift
14	11		10.98	CR P	SR-B	539 POTOMSKA RD	Bungalow	TABORS RICHARD D &	DNRT (partial)	Good	No	
14	14		26.5	CR P	SR-B	430 POTOMSKA RD	Lloyd Woods / Shoreline of Little River, Priority Habitat for Rare Species	Lloyd Center for the Environme nt	DNRT & Buzzards Bay Coalition			NAWC A funds
15	13		49.51 5	CR P	SR-B	99 LITTLE RIVER RD	Atkins CR	Atkins, Elizabeth	DNRT	Excellent	No	gift
15	15		17.96 5	CR P	SR-B	SMITH NECK RD	Vacant Land	LITTLE RIVER REALTY CORP	DNRT	Excellent	No	
15	16		24.62 9	CR P	SR-B	97 LITTLE RIVER RD	Mixed-Use	LITTLE RIVER REALTY CORP	DNRT	Excellent	No	
15	21_1 , 22 & part 23		83	CR P		SMITH NECK RD	Delano/Brown ell CR	Isaac Howland Homestead , LLC	DNRT	Excellent	No	
18	3	3	13.12	CR P		HORSENECK RD		MAHONEY	DNRT	Excellent	No	
18	50		16.1	CR P	SR-B	194 GAFFNEY RD	Garfield CR	Garfield, John and Natalie	DNRT	Excellent	No	
18	54		3.4	CR P	SR-B	GAFFNEY RD	Garfield CR	Garfield, John and Natalie	DNRT	Excellent	No	
18	55		1.53	CR P	SR-B	194R GAFFNEY RD	Garfield CR	Garfield, John and Natalie	DNRT	Excellent	No	
18	55, 54, 50		18.29	CR P		GAFFNEY RD		GARFIELD	DNRT & CBB	Excellent	No	
19	17		28.40 7	CR P	SR-B	GAFFNEY RD	Vacant Land	RAYMOND EDWARD H &	MAS			
19	18		19.37 4	CR P	SR-B	55 GAFFNEY RD	Cape Cod	MALONEY MARY R				
19	20	1	12.34	CR P	SR-B	POTOMSKA RD	Pattullo CR	Torres, Gregory &	DNRT	Excellent	No	

								Pattulo, Elizabeth				
19	20	2	26.29 5	CR P	SR-B	600 POTOMSKA RD	Barnes CR / Frontage on Slocums River, saltmarsh	BARNES BENJAMIN A JR & MARY B	DNRT	Excellent	No	
19	22		19.37 7	CR P	SR-B	POTOMSKA RD	Camp	RAYMOND EDWARD H &	MAS			
19	23		11.97 5	CR P	SR-B	686 POTOMSKA RD	Raised Ranch	RAYMOND EDWARD H &	MAS			
23	13- 14		28.86	CR P	SR-B	133 HORSENECK RD	Atkinson CR	ATKINSON RUTH A &	DNRT	Excellent	No	
24	49	1	2.02	CR P	SR-B	BAKERVILLE RD	Bogusky/Purd y CR	BAKER FARM TRUST UPPER PORTION	DNRT	Excellent	No	gift
24	49	2	25.56	CR P	SR-B	ROCK O'DUNDEE RD	Bogusky/Purd y CR	NORTON ELIZABETH C	DNRT	Excellent	No	gift
28	4, 4_1, 4_2		25.01	CR P	SR-B	107-115 SLADES CORNER RD	Leontire Conserv. Covenant / Abuts Destruction Brook Woods / Shub Covenant	SHERWOOD SCOTT L	DNRT/TT OR	Excellent	No	gift
28	5	1	12.41	CR P		SLADES CORNER RD	Wing House CR / Abuts Destruction Brook Woods	TUCKERMA N JANE BAYARD &	DNRT	Excellent	No	gift
28	37	1	3.036	CR P	SR-B	RUSSELLS MILLS RD	Vacant Land	EKSTROM LINCOLN &	DNRT	Excellent	No	
29	13		11.90 1	CR P	SR-B	BAKERS BROOK RD	Vacant Land	COYKENDA LL NANCY N	DNRT	Excellent	No	
29	26		25.8	CR P	SR-B	BAKERS BROOK RD	Vacant Land	COYKENDA LL NANCY N	DNRT	Excellent	No	
29	27		3.46	CR P	SR-B	BAKERS BROOK RD	Vacant Land	NELSON PETER V W &	DNRT			
29	46		26.88	CR P		205 Bakerville Road		Padanaram Vines LLC	Buzzards Bay Coalition			gift
29	54	1	153	CR P		Bakerville Road	Dike Creek Farm CR, upland forest, freshwater wetlands, agric fields	DIKE CREEK FARM	TTOR / DNRT			
35	2		10.98	CR P	SR-B	GULF RD		MCGETRIC K MARGARET TRUSTEE	DNRT			
35	3	1	58.91	CR P	SR-B	GULF RD	'Share the Harvest' occupies a portion of the field on the east side	YMCA	DNRT	Excellent	No	
35	24		11.5	CR P		GULF RD		153 GULF ROAD LLC	DNRT (partial)	Excellent	No	

43	4		4	CR P		824 TUCKER RD	Outbuildings	HOLY CROSS FATHERS INC	DNRT (partial)	Good	No	
50	3	9, 6 (part)	40	CR P		Tucker Road	Burgess CR (Gidley Farm)	WAITE MARJORIE A TRUSTEE	DNRT	Excellent	No	
50	3		58.19 8	CR P		1178 TUCKER RD		Marge Waite and Neal Weiss	DNRT	Excellent	No	
50	4		15.40 9	CR P	SR-B	1178 TUCKER RD	Vacant Land	Marge Waite and Neal Weiss	DNRT	Excellent	No	
61	9		16.5	CR P		1061 REED RD	Conventional	PIMENTAL CRAIG A &	DNRT	Excellent	No	
65	32		73.45	CR P		OLD FALL RIVER RD		GENDREAU ESTATES LLC	DNRT (partial)	Excellent	No	
74	20	5	5.83	CR P		Shannon WY	Courtlyn Park Estates Trust CR	Courtlyn Park Estates Trust	Dartmouth Board of Selectmen			
74	20	7	23.36	CR P		Shannon WY	Courtlyn Park Estates Trust CR	Courtlyn Park Estates Trust	Dartmouth Board of Selectmen			
79	13 (part), 14		7.93	CR P	SR-B	199 PINE ISLAND RD	Bailey CR / Frontage on Spring Brook	Bailey, George	DNRT			gift
84	8_9, 34, 34_6 (part)		25	CR P		Samuel Barnet Blvd and High Hill Road	New Bedford Industrial Foundation CR #1	NB INDUSTRIAL FOUNDATION	Dartmouth Conservation Commission			
84	8, 9 (part)		24	CR P		Samuel Barnet Blvd	New Bedford Industrial Foundation CR #2	NB INDUSTRIAL FOUNDATION	Dartmouth Conservation Commission			
85	7 (part), 8		16	CR P		Samuel Barnet Blvd / JOHN VERTENTE BLVD	New Bedford Industrial Foundation CR #3	NB INDUSTRIAL FOUNDATION	Dartmouth Conservation Commission			
89_33 (part), 89_34 (part), 90_2_1			8.57	CR P		SMITH NECK RD	Montgomery CR / Salt marsh	Montgomery, Gratia	DNRT	Excellent	No	gift
95	5	2, 3 (part), 4 (part)	6.2	CR P	SR-B	FEATHERBED LN	Ross CR Amendment	Ross, Robert, et al.	DNRT	Excellent	No	gift
104	6	4, 5, 7	13.2	CR P	SR-B	840 Smith Neck Road	fields, forest, fresh and salt water wetlands	Hughes, James S.	DNRT	Good	No	gift

104	1	9	8.4	CR P		794 Smith Neck Road	Windmill Easement	Dawson Hughes, Bess	DNRT	Excellent	No	BBNEP mini- grant funds
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Aside from Conservation Restrictions, the Town of Dartmouth has also identified properties with other Deed Restrictions that limit property usage in ways compatible with open space preservation. Many of these are associated with Open Space Residential Design developments and represent land that was set aside for preservation as part of this development approach. As contained in the table below, there are currently 60 properties covering 808 acres of Deed Restricted land held in private ownership (though sometimes managed by nonprofit entities) in Dartmouth.

Inventory of Lands Held in Deed Restrictions (DR) Private Ownership in Dartmouth									
Map	Block	Lot	Acres	Protection	Zone	Parcel Address	Current Use / Recreational Potential	Ownership	Control / Manager
25	1		14.3	DR	SRB	ROCK O'DUNDEE RD	Ledgemont OSRD; Undevelopable Residential Land / Vacant Land	LEDGEMONT DEVELOPMENT LLC	PRIVATE
25	46		6.24	DR	SRB	166 ROCK O'DUNDEE RD	Single Family Residential / Cape Cod	SICKUL DOUGLAS J &	PRIVATE
25	51		44.69	DR	SRB	ROCK O'DUNDEE RD	Undevelopable Residential Land / Vacant Land	ASPEN DONALD ET AL	PRIVATE
27	7	20	16.09	DR	SRB	CHRISTINE DR	Undevelopable Residential Land / Vacant Land	TRUSTEES OF THE ROLLING HILLS ESTS TR	PRIVATE
27	7	22	1.03	DR	SRB	CHRISTINE DR	Undevelopable Residential Land / Vacant Land	TRUSTEES OF THE ROLLING HILLS ESTS TR	PRIVATE
32	28	6	7.25	DR	SRB	GIDLEY TOWN RD	Apponagansett Properties OSRD; Undevelopable Residential Land / Vacant Land	APPONAGANSETT PARTNERS LLC	PRIVATE
32	28	7	0.048	DR	SRB	GIDLEY TOWN RD	Apponagansett Properties OSRD; Undevelopable Residential Land / Vacant Land	APPONAGANSETT PARTNERS LLC	PRIVATE
41	43		5.86	DR	SRB	FISHER PINES WY	Undevelopable Residential Land / Vacant Land	BRUCE MARK ET AL TRS	PRIVATE
42	132	8	0.15	DR	SRB	BACK RIVER DR	Undevelopable Residential Land / Vacant Land	MANN JEFFREY L TRUSTEE	PRIVATE
42	132	9	0.10	DR	SRB	BACK RIVER DR	Undevelopable Residential Land / Vacant Land	MANN JEFFREY L TRUSTEE	PRIVATE

42	132	10	26.26	DR	SRB	BACK RIVER DR	Undevelopable Residential Land / Vacant Land	MANN JEFFREY L TRUSTEE	PRIVATE
42	132		70.50	DR	SRB	CHASE RD	Improved, Selectmen or City Council (Municipal) / Vacant Land	TOWN OF DARTMOUTH	PRIVATE
43	3	12	3.24	DR	SRB	WINSTON LN	Undevelopable Residential Land / Vacant Land	FERNANDES MICHAEL & RUI M DOS SANTOS & C	PRIVATE
43	3	13	14.40	DR	SRB	WINSTON LN	Undevelopable Residential Land / Vacant Land	FERNANDES MICHAEL & RUI DOS SANTOS & CRA	PRIVATE
46	4	2	8.50	DR	SRB	COUNTRY CLUB BLVD	Undevelopable Residential Land / Vacant Land	PASKAMANSETT VALLEY II TRS	PRIVATE
60	1	49	0.03	DR	SRB	DEERFIELD LN	Undevelopable Residential Land / Vacant Land	CALLAHAN WAYNE P &	PRIVATE
60	1	50	0.01	DR	SRB	DEERFIELD LN	Undevelopable Residential Land / Vacant Land	MOURATO JOSE E	PRIVATE
60	1	51	0.05	DR	SRB	DEERFIELD LN	Undevelopable Residential Land / Vacant Land	HAGGERTY ARTHUR L	PRIVATE
60	1	53	4.58	DR	SRB	DEERFIELD LN	Undevelopable Residential Land / Vacant Land	MOURATO JOSE E	PRIVATE
60	1	54	8.98	DR	SRB	DEERFIELD LN	Undevelopable Residential Land / Vacant Land	HAGGERTY ARTHUR L	PRIVATE
66	2	22	1.89	DR	SRB	BLUEBERRY LN	Undevelopable Residential Land / Vacant Land	OLIVEIRA ROBERT ET AL TRS	PRIVATE
66	2	32	0.22	DR	SRB	BLUEBERRY LN	Undevelopable Residential Land / Vacant Land	OLIVEIRA ROBERT ET AL TRS	PRIVATE
66	2	51	1.27	DR	SRB	BUTTERFLY TR	Undevelopable Residential Land / Vacant Land	EUSEBIO SHAWN ET AL TRS	PRIVATE
66	2	52	20.21	DR	SRB	BUTTERFLY TR	Recreation / Vacant Land	EUSEBIO SHAWN ET AL TRS	PRIVATE
66	2	53	1.97	DR	SRB	BUTTERFLY TR	Undevelopable Residential Land / Vacant Land	EUSEBIO SHAWN ET AL TRS	PRIVATE
66	2	142	13.29	DR	SRB	SONGBIRD DR	Recreation / Vacant Land	SONGBIRD ACRES TRUST	PRIVATE
66	2	143	1.19	DR	SRB	SONGBIRD DR	Recreation / Vacant Land	SONGBIRD ACRES TRUST	PRIVATE
66	2	146	90.23	DR	SRB	SONGBIRD DR	Recreation / Vacant Land	SONGBIRD ACRES TRUST	PRIVATE
66	2	148	1.61	DR	SRB	SONGBIRD DR	Recreation / Vacant Land	SONGBIRD ACRES TRUST	PRIVATE
66	2	149	11.15	DR	SRB	SONGBIRD DR	Recreation / Vacant Land	SONGBIRD ACRES TRUST	PRIVATE

69	3		13.00	DR	SRB	OLD FALL RIVER RD	Vacant, Selectmen or City Council (Municipal) / Vacant Land	TOWN OF DARTMOUTH	PRIVATE
69	4		9.00	DR	SRB	OLD FALL RIVER RD	Vacant, Selectmen or City Council (Municipal) / Vacant Land	TOWN OF DARTMOUTH	PRIVATE
69	11		13.22	DR	SRB	OLD FALL RIVER RD	Vacant, Selectmen or City Council (Municipal) / Outbuildings	TOWN OF DARTMOUTH	PRIVATE
69	12		72.70	DR	SRB	OLD FALL RIVER RD	Vacant, Selectmen or City Council (Municipal) / Vacant Land	TOWN OF DARTMOUTH	PRIVATE
70	13		16.55	DR	SRB	MILLERS DR	Undevelopable Residential Land / Vacant Land	TATRO ALICE &	PRIVATE
72	45	33, 34	13.94	DR	SRB	IVY WY	Enclave Subdivision HOA OSRD; Vacant Land	TRUSTEES OF THE ENCLAVE AT THE RESERVOIR HOMEOWNERS ASSOCIATION TRUST	PRIVATE
77	23		3.74	DR	SRB	315 HIGH HILL RD	Single Family Residential / Colonial	AMARAL JOHN B	PRIVATE
80	1	1	7.69	DR	SRB	417 HIGH HILL RD	Single Family Residential / Cape Cod	BOUCHARD PAUL M &	PRIVATE
80	1	2	4.97	DR	SRB	409 HIGH HILL RD	Single Family Residential / Conventional	SWIFT ADAM R &	PRIVATE
80	1	3	12.10	DR	SRB	403 HIGH HILL RD	Single Family Residential / Colonial	MINGOLA OLAVO G &	PRIVATE
81	2	5	17.03	DR	SRB	FLAG SWAMP RD	Medeiros OSRD; Undevelopable Residential Land / Vacant Land	MEDEIROS RANDALL TRUSTEE	PRIVATE
93	3		40.60	DR	SRB	SMITH NECK RD	Undevelopable Residential Land / Vacant Land	ROUND HILL COMMUNITY CORP	PRIVATE
93	7	ROC1	0.00	DR	SRB	39 HETTY GREEN DR	Condominium	BERNHEIMER DEBORAH HARRIS &	PRIVATE
94	4		37.70	DR	SRB	ROUND HILL	Undevelopable Residential Land / Vacant Land	ROUND HILL COMMUNITY	PRIVATE
125	56	1	2.91	DR	SRB	COUNTRY WY	Undevelopable Residential Land / Vacant Land	PADANARAM ACRES COMMUNITY CORPORATION	PRIVATE
125	56	2	10.10	DR	SRB	COUNTRY WY	Undevelopable Residential Land / Vacant Land	PADANARAM ACRES COMMUNITY CORPORATION	PRIVATE
125	56		38.82	DR	SRB	JUNIPER RIDGE RD	Undevelopable Residential Land / Vacant Land	PADANARAM ACRES COMMUNITY CORPORATION	PRIVATE

126	66	1	0.88	DR	SRB	ROBIN DR	Undevelopable Residential Land / Vacant Land	QAMAR SAMEER &	PRIVATE
126	66		0.91	DR	SRB	22 ROBIN DR	Single Family Residential / Ranch	NIEUWENHUIZEN PETER	PRIVATE
130	32		13.49	DR	SRA	LANE FARM RD	Undevelopable Residential Land / Vacant Land	LANE FARM ESTATES TRUST	PRIVATE
132	7		10.88	DR	SRA	1 CARREIRO LN	Single Family Residential / Ranch	CARREIRO RICHARD P	PRIVATE
132	48	68	18.73	DR	GR	GALLEON DR	Undevelopable Residential Land / Vacant Land	WOODFORD ESTATES TRUST	PRIVATE
132	48	69	1.32	DR	GR	WINDJAMMER DR	Undevelopable Residential Land / Vacant Land	WOODFORD ESTATES TRUST	PRIVATE
136	26	46	13.10	DR	SRA	TUCKER LN	Undevelopable Residential Land / Vacant Land	TRUSTEES OF MERRYMOUNT II	PRIVATE
136	26	47	4.04	DR	SRA	TUCKER LN	Undevelopable Residential Land / Vacant Land	TRUSTEES OF MERRYMOUNT II	PRIVATE
136	26	49	5.56	DR	SRA	EMERALD DR	Undevelopable Residential Land / Vacant Land	TRUSTEES OF MERRYMOUNT II	PRIVATE
137	10		6.72	DR	SRA	SLOCUM RD	Undevelopable Residential Land / Vacant Land	SLOCUM HEIGHTS TRUST	PRIVATE
143	146	9	3.88	DR	GR	MOSS ST	Undevelopable Residential Land / Vacant Land	FARRELL CHRISTOPHER R	PRIVATE
143	230		25.71	DR	GR	SLOCUM RD	Undevelopable Residential Land / Vacant Land	PIRES GARY J & MARCEL DUMONT &	PRIVATE
185	29		13.89	DR	SRA	HATHAWAY RD	Undevelopable Residential Land / Vacant Land	SOUZA STEPHEN E	PRIVATE

Finally, there are currently 5 properties covering 28.44 acres of land under Historic Preservation Deed Restrictions held in private ownership in Dartmouth.

Inventory of Historic Preservation Restriction Land Held in Private Ownership in Dartmouth								
Map	Block	Lot	Acres	Protection	Zone	Parcel Address	Current Use / Recreational Potential	Ownership / Management
28	37		2	HPR	SRB	1193 Russells Mills Rd	Russell - Elkstrom House, NRDIS, LHD, C 1700	Newton Edmund H & / Preserve New England
109	34		14.14	HPR	SRB	890 Russells Mills Rd	Apponegansett Friends Meeting House/Burial Ground, NRDIS, 1790	Society of Friends Apponegansett / DHPT
35	5		3.47	HPR	SRB	276 Gulf Rd	Gulf Hill Dairy Barn, C 1920	YMCA / DHPT

122	187		0.55	HPR	GR	786 Horseneck Rd	Stone Barn Farm - Tractor Barn, Main House, Stone Barn, R 1935	Brown Stuart T & / DHC
28	4		8.28	HPR	SRB	107 Slades Corner Rd	Allen's Mill, C 1876	Sherwood Scott L

Unprotected Private Parcels of Conservation Interest

In Massachusetts, private landowners with certain kinds of land can choose to manage their properties for forestry, agricultural, and recreational purposes and benefit in return from a reduced property tax under three distinct special taxation programs. Chapter 61 is for forested lands, Chapter 61A for agricultural and horticultural lands, and Chapter 61B for recreation lands.

The Chapter Programs afford only temporary protection as they are based on landowner enrollment and continued participation, and landowners can opt out. The conversion provisions in each of the statutes provide communities an opportunity to maintain the land as open space. Properties under Chapter 61 allow the town a right of first refusal to purchase the land should the property owner intend to take the land out of restricted status – if the property is put up for sale for conversion to another use. Because opportunities to exercise this right of first refusal can come about suddenly, communities must plan ahead to take advantage of this window of opportunity. Inventorying and prioritizing these properties before a “For Sale” notice is delivered to Town Hall can help in determining which properties to act on. It is also important for notice to be spread from the Board of Selectmen or Mayor to all commissions that have insights into high priority properties, including the Conservation Commission, Planning Board, Park Commission, and Agricultural Commission, among others. As of 2023 assessment data, contained in the table below, there are currently 5,306.6 acres of property that contain Chapter Land (in whole or in part) held in private ownership in Dartmouth.

REM_ID From Town Database	Acres	Protection	Parcel Address	Current Use
76	31.696547	CHAPTER 61 T	262 JORDAN RD	Mixed Use with Forest
199	22.7	CHAPTER 61 T	JORDAN RD	Forest
321	67.88	CHAPTER 61 T	HORSENECK RD	Forest
432	5.79	CHAPTER 61 T	MISHAUM POINT RD	Forest
464	13.12	CHAPTER 61 T	HORSENECK RD	Mixed Use with Forest
1587	65.816547	CHAPTER 61 T	144 GULF RD	Mixed Use with Forest
1679	22.03	CHAPTER 61 T	FISHER RD	Forest
1688	10.25	CHAPTER 61 T	FISHER RD	Forest
2195	16.52	CHAPTER 61 T	FISHER RD	Forest
2393	12.72	CHAPTER 61 T	OLD WESTPORT RD	Forest
2394	27.16	CHAPTER 61 T	540 OLD WESTPORT RD	Forest

2407	0.14	CHAPTER 61	T	OLD WESTPORT RD	Forest
2447	3.77	CHAPTER 61	T	TUCKER RD	Forest
2449	8.753379	CHAPTER 61	T	1310 TUCKER RD	Mixed Use with Forest
2492	17.68	CHAPTER 61	T	STATE RD	Forest
2493	38.89	CHAPTER 61	T	REED RD	Forest
2495	38	CHAPTER 61	T	REED RD	Forest
2496	5.37	CHAPTER 61	T	STATE RD	Forest
2922	30.196547	CHAPTER 61	T	60 BERGERON LN	Mixed Use with Forest
3453	25.33	CHAPTER 61	T	ALBRO AVE	Forest
3636	35.096547	CHAPTER 61	T	511 OLD FALL RIVER RD	Mixed Use with Forest
3713	12.5	CHAPTER 61	T	HIGH HILL RD	Forest
3714	16.51	CHAPTER 61	T	HIGH HILL RD	Forest
3840	62.25	CHAPTER 61	T	FLAG SWAMP RD	Forest
3877	56.42	CHAPTER 61	T	FLAG SWAMP RD	Mixed Use with Forest
4220	5.4	CHAPTER 61	T	HIGH HILL RD	Forest
4406	5.77	CHAPTER 61	T	LITTLE RIVER RD	Forest
TOTAL FOREST ONLY	416.7				
TOTAL MIXED USE WITH FOREST	241.1				
TOTAL CH 61	657.8				
59	28.996548	CHAPTER 61A	T	1028 HORSENECK RD	Mixed Use with Agriculture
61	16.97	CHAPTER 61A	T	HORSENECK RD	Agriculture
65	18.646547	CHAPTER 61A	T	794 HORSENECK RD	Mixed Use with Agriculture
78	5.11	CHAPTER 61A	T	JORDAN RD	Agriculture
81	16.706547	CHAPTER 61A	T	179 JORDAN RD	Mixed Use with Agriculture
93	238.9	CHAPTER 61A	T	14 BARNEYS JOY RD	Agriculture
94	10.08	CHAPTER 61A	T	BARNEYS JOY RD	Agriculture
95	10.286547	CHAPTER 61A	T	34 BARNEYS JOY RD	Mixed Use with Agriculture
96	9.726547	CHAPTER 61A	T	36 BARNEYS JOY RD	Mixed Use with Agriculture
100	1.94	CHAPTER 61A	T	BARNEYS JOY RD	Agriculture
140	0.5	CHAPTER 61A	T	DIVISION RD	Agriculture

141	17.106547	CHAPTER 61A T	908 DIVISION RD	Mixed Use with Agriculture
142	20.056547	CHAPTER 61A T	950 DIVISION RD	Mixed Use with Agriculture
144	11.996547	CHAPTER 61A T	733 HORSENECK RD	Mixed Use with Agriculture
146	6.33	CHAPTER 61A T	HORSENECK RD	Agriculture
149	9.596547	CHAPTER 61A T	725 HORSENECK RD	Mixed Use with Agriculture
152	8.746547	CHAPTER 61A T	696 HORSENECK RD	Mixed Use with Agriculture
154	96.856547	CHAPTER 61A T	740 HORSENECK RD	Mixed Use with Agriculture
165	48.536548	CHAPTER 61A T	820 HORSENECK RD	Mixed Use with Agriculture
181	26.236547	CHAPTER 61A T	500 BARNEYS JOY RD	Mixed Use with Agriculture
188	28	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
189	40.316547	CHAPTER 61A T	301 BARNEYS JOY RD	Mixed Use with Agriculture
190	39.996548	CHAPTER 61A T	323 BARNEYS JOY RD	Mixed Use with Agriculture
191	39.006548	CHAPTER 61A T	321 BARNEYS JOY RD	Mixed Use with Agriculture
192	40.086547	CHAPTER 61A T	315 BARNEYS JOY RD	Mixed Use with Agriculture
193	40.316547	CHAPTER 61A T	307 BARNEYS JOY RD	Mixed Use with Agriculture
194	7.92	CHAPTER 61A T	JORDAN RD	Agriculture
196	6.31	CHAPTER 61A T	25 JORDAN RD	Mixed Use with Agriculture
208	0.92	CHAPTER 61A T	JORDAN RD	Agriculture
209	0.92	CHAPTER 61A T	JORDAN RD	Mixed Use with Agriculture
211	0.95	CHAPTER 61A T	JORDAN RD	Agriculture
216	8.83	CHAPTER 61A T	JORDAN RD	Agriculture
218	7.166547	CHAPTER 61A T	396 BARNEYS JOY RD	Mixed Use with Agriculture
223	5	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
224	5.87	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
242	4.44	CHAPTER 61A T	JORDAN RD	Agriculture
243	23.17	CHAPTER 61A T	155 BARNEYS JOY RD	Agriculture
244	48.63	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
270	31.1	CHAPTER 61A T	52 MISHAUM POINT RD	Mixed Use with Agriculture
281	9.91	CHAPTER 61A T	MISHAUM POINT RD	Agriculture
286	3.11	CHAPTER 61A T	MISHAUM POINT RD	Agriculture
288	44.426547	CHAPTER 61A T	774 DIVISION RD	Mixed Use with Agriculture

298	24.28	CHAPTER 61A T	856 DIVISION RD	Mixed Use with Agriculture
299	0.94	CHAPTER 61A T	DIVISION RD	Agriculture
300	1.38	CHAPTER 61A T	860 DIVISION RD	Agriculture
307	16.89	CHAPTER 61A T	HORSENECK RD	Mixed Use with Agriculture
308	30.82	CHAPTER 61A T	DIVISION RD	Agriculture
309	5.79	CHAPTER 61A T	HORSENECK RD	Agriculture
346	23.5	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
350	14.18	CHAPTER 61A T	580 BARNEYS JOY RD	Mixed Use with Agriculture
397	58.73	CHAPTER 61A T	SMITH NECK RD	Agriculture
462	2	CHAPTER 61A T	HORSENECK RD	Agriculture
518	16.096547	CHAPTER 61A T	194 GAFFNEY RD	Mixed Use with Agriculture
522	3.4	CHAPTER 61A T	GAFFNEY RD	Agriculture
549	4.29	CHAPTER 61A T	POTOMSKA RD	Agriculture
552	18.896548	CHAPTER 61A T	682 POTOMSKA RD	Mixed Use with Agriculture
567	12.316547	CHAPTER 61A T	751 POTOMSKA RD	Mixed Use with Agriculture
597	1.01	CHAPTER 61A T	SMITH NECK RD	Agriculture
655	15.596547	CHAPTER 61A T	358 SLADES CORNER RD	Mixed Use with Agriculture
684	151.766547	CHAPTER 61A T	164 SLADES CORNER RD	Mixed Use with Agriculture
687	1.46	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
698	17.4	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
749	149.996547	CHAPTER 61A T	713 ROCK O'DUNDEE RD	Mixed Use with Agriculture
788	9.806547	CHAPTER 61A T	45 BAKERVILLE RD	Mixed Use with Agriculture
791	8.106547	CHAPTER 61A T	307 ROCK O'DUNDEE RD	Mixed Use with Agriculture
800	24.926547	CHAPTER 61A T	288 ROCK O'DUNDEE RD	Mixed Use with Agriculture
839	18.566547	CHAPTER 61A T	859 POTOMSKA RD	Mixed Use with Agriculture
930	22.516547	CHAPTER 61A T	86 DIVISION RD	Mixed Use with Agriculture
970	21.336548	CHAPTER 61A T	383 SLADES CORNER RD	Mixed Use with Agriculture
1068	15.996547	CHAPTER 61A T	1213 RUSSELLS MILLS RD	Mixed Use with Agriculture
1107	45.73	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
1108	52.56	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
1134	90.566547	CHAPTER 61A T	74 BAKERVILLE RD	Mixed Use with Agriculture

1295	23.416547	CHAPTER 61A T	227 BAKERVILLE RD	Mixed Use with Agriculture
1395	195.448274	CHAPTER 61A T	756 FISHER RD	Mixed Use with Agriculture
1680	26.8	CHAPTER 61A T	FISHER RD	Agriculture
1685	15.5	CHAPTER 61A T	FISHER RD	Agriculture
1686	31.6	CHAPTER 61A T	FISHER RD	Agriculture
1869	10.83	CHAPTER 61A T	FISHER RD	Agriculture
1872	5.24	CHAPTER 61A T	FISHER RD	Agriculture
1875	12.11	CHAPTER 61A T	OLD WESTPORT RD	Agriculture
2042	89.26	CHAPTER 61A T	TUCKER RD	Agriculture
2048	27.496547	CHAPTER 61A T	742 TUCKER RD	Mixed Use with Agriculture
2576	13	CHAPTER 61A T	HIXVILLE RD	Agriculture
2677	193.446547	CHAPTER 61A T	451 HIGHLAND AVE	Mixed Use with Agriculture
2680	1.1	CHAPTER 61A T	HIGHLAND AVE	Agriculture
2694	20.52	CHAPTER 61A T	HIGHLAND AVE	Agriculture
2697	60.08	CHAPTER 61A T	REED RD	Agriculture
2790	61.876547	CHAPTER 61A T	559 HIXVILLE RD	Mixed Use with Agriculture
3196	10.53	CHAPTER 61A T	HIXVILLE RD	Agriculture
3360	4.95	CHAPTER 61A T	OLD FALL RIVER RD	Agriculture
3400	22.516547	CHAPTER 61A T	155 OLD FALL RIVER RD	Mixed Use with Agriculture
3405	47.406547	CHAPTER 61A T	36 OLD FALL RIVER RD	Mixed Use with Agriculture
3409	15.656547	CHAPTER 61A T	86 OLD FALL RIVER RD	Mixed Use with Agriculture
3410	14.746547	CHAPTER 61A T	112 OLD FALL RIVER RD	Mixed Use with Agriculture
3576	24.996547	CHAPTER 61A T	780 COLLINS CORNER RD	Mixed Use with Agriculture
3620	63.916547	CHAPTER 61A T	1141 HIXVILLE RD	Mixed Use with Agriculture
3622	4.12	CHAPTER 61A T	OLD FALL RIVER RD	Agriculture
3627	97.636547	CHAPTER 61A T	452 OLD FALL RIVER RD	Mixed Use with Agriculture
3759	48.5	CHAPTER 61A T	11 COPICUT RD	Mixed Use with Agriculture
3787	15.596547	CHAPTER 61A T	567 COLLINS CORNER RD	Mixed Use with Agriculture
4030	11.98	CHAPTER 61A T	PINE ISLAND RD	Agriculture
4228	68.996547	CHAPTER 61A T	651 HIGH HILL RD	Mixed Use with Agriculture
4412	4.78	CHAPTER 61A T	LITTLE RIVER RD	Agriculture

6885	5.66	CHAPTER 61A T	36 MISHAWUM DR	Mixed Use with Agriculture
7120	10.1	CHAPTER 61A T	607 ELM ST	Mixed Use with Agriculture
100022	33.816548	CHAPTER 61A T	HORSENECK RD	Mixed Use with Agriculture
100061	0.69	CHAPTER 61A T	BAKERVILLE RD	Agriculture
100503	6.176547	CHAPTER 61A T	14 BARNEYS JOY RD	Mixed Use with Agriculture
100505	7.7	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
100506	10.52	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
100507	6.68	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
100551	9.57	CHAPTER 61A T	HIGHLAND AVE	Agriculture
100552	11.35	CHAPTER 61A T	HIGHLAND AVE	Agriculture
100553	8.63	CHAPTER 61A T	HIGHLAND AVE	Agriculture
100554	14.656547	CHAPTER 61A T	435 HIGHLAND AVE	Mixed Use with Agriculture
100555	2.796547	CHAPTER 61A T	144 PINE ISLAND RD	Mixed Use with Agriculture
101586	7	CHAPTER 61A T	HORSENECK RD	Agriculture
101587	5.74	CHAPTER 61A T	HORSENECK RD	Agriculture
102924	5.23	CHAPTER 61A T	0 FEATHERBED LN	Mixed Use with Agriculture
102925	2.78	CHAPTER 61A T	0 FEATHERBED LN	Agriculture
102926	1.84	CHAPTER 61A T	N HIXVILLE RD	Agriculture
103040	0.71	CHAPTER 61A T	POTOMSKA RD	Agriculture
103180	43.05	CHAPTER 61A T	293 FLAG SWAMP RD	Agriculture
103267	2.97	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
103268	2.75	CHAPTER 61A T	BARNEYS JOY RD	Agriculture
103271	25.56	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
103272	1.95	CHAPTER 61A T	LEDGEMONT LN	Agriculture
103371	1.05	CHAPTER 61A T	BAKERVILLE RD	Agriculture
103372	0.94	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
103373	0.94	CHAPTER 61A T	ROCK O'DUNDEE RD	Agriculture
104695	3.104	CHAPTER 61A T	38 BARNEYS JOY RD	Agriculture
104740	3.784	CHAPTER 61A T	0 BARNEYS JOY RD	Agriculture
TOTAL AGRICULTURE ONLY	1,157.3			
TOTAL MIXED USE WITH AGRICULTURE	2,245.1			

TOTAL CH 61A	3,402.4			
31	8.486547	CHAPTER 61B T	ALLENS POND	Mixed Use with Recreation
35	6.876547	CHAPTER 61B T	ALLENS POND	Recreation
36	9.146547	CHAPTER 61B T	ALLENS POND	Recreation
75	6	CHAPTER 61B T	JORDAN RD	Recreation
97	7	CHAPTER 61B T	JORDAN RD	Recreation
119	5.83	CHAPTER 61B T	MISHAUM POINT RD	Recreation
124	6.3	CHAPTER 61B T	MISHAUM POINT RD	Recreation
160	13.796547	CHAPTER 61B T	788 HORSENECK RD	Mixed Use with Recreation
273	1.47	CHAPTER 61B T	OCEAN AVE	Recreation
274	6.18	CHAPTER 61B T	OCEAN AVE	Recreation
280	54.146547	CHAPTER 61B T	130 OCEAN AVE	Mixed Use with Recreation
649	49.5	CHAPTER 61B T	SOUTH AVE	Recreation
744	6.996547	CHAPTER 61B T	828 POTOMSKA RD	Mixed Use with Recreation
862	28.266547	CHAPTER 61B T	105 ROCK O'DUNDEE RD	Mixed Use with Recreation
926	197.186547	CHAPTER 61B T	6 NONQUITT AVE	Mixed Use with Recreation
1398	6.73	CHAPTER 61B T	FISHER RD	Recreation
1561	22.25	CHAPTER 61B T	RUSSELLS MILLS RD	Recreation
1577	25.34	CHAPTER 61B T	RUSSELLS MILLS RD	Recreation
1681	18.08	CHAPTER 61B T	FISHER RD	Recreation
1865	7.59	CHAPTER 61B T	FISHER RD	Recreation
1876	38	CHAPTER 61B T	OLD WESTPORT RD	Recreation
1877	11.43	CHAPTER 61B T	FISHER RD	Recreation
1878	9.19	CHAPTER 61B T	FISHER RD	Recreation
2198	60	CHAPTER 61B T	FISHER RD	Recreation
2202	17.81	CHAPTER 61B T	LUCY LITTLE RD	Recreation
2203	53.6	CHAPTER 61B T	LUCY LITTLE RD	Recreation
2213	7.32	CHAPTER 61B T	LUCY LITTLE RD	Recreation
2215	3.1	CHAPTER 61B T	LUCY LITTLE RD	Recreation
2452	4.11	CHAPTER 61B T	CHASE RD	Recreation

2457	4.04	CHAPTER 61B T	CHASE RD	Recreation
3095	20.21	CHAPTER 61B T	BUTTERFLY TR	Recreation
3183	13.29	CHAPTER 61B T	SONGBIRD DR	Recreation
3184	1.19	CHAPTER 61B T	SONGBIRD DR	Recreation
3186	2.35	CHAPTER 61B T	SONGBIRD DR	Recreation
3187	90.23	CHAPTER 61B T	SONGBIRD DR	Recreation
3188	1.45	CHAPTER 61B T	SONGBIRD DR	Recreation
3189	1.61	CHAPTER 61B T	SONGBIRD DR	Recreation
3190	11.15	CHAPTER 61B T	SONGBIRD DR	Recreation
3191	1.85	CHAPTER 61B T	SONGBIRD DR	Recreation
3324	10.81	CHAPTER 61B T	MARY'S WY	Recreation
3540	79.736547	CHAPTER 61B T	1316 N HIXVILLE RD	Mixed Use with Recreation
3773	14	CHAPTER 61B T	N HIXVILLE RD	Recreation
3822	56.226547	CHAPTER 61B T	465 COLLINS CORNER RD	Mixed Use with Recreation
4306	4.89	CHAPTER 61B T	SALTERS POINT	Recreation
4350	8.92	CHAPTER 61B T	OCEAN AVE	Recreation
4366	0.66	CHAPTER 61B T	BUZZARDS BAY AVE	Recreation
4369	0.71	CHAPTER 61B T	OCEAN AVE	Recreation
4638	1.03	CHAPTER 61B T	NONQUITT AVE	Recreation
4639	0.23	CHAPTER 61B T	NONQUITT AVE	Recreation
4694	20.48	CHAPTER 61B T	70 NONQUITT AVE	Mixed Use with Recreation
4698	21.916547	CHAPTER 61B T	15 ROCK O'DUNDEE RD	Mixed Use with Recreation
4708	4.61	CHAPTER 61B T	O SMITH NECK RD	Recreation
4714	11.43	CHAPTER 61B T	SMITH NECK RD	Recreation
4726	0.23	CHAPTER 61B T	NONQUITT AVE	Recreation
4727	0.23	CHAPTER 61B T	NONQUITT AVE	Recreation
4728	0.23	CHAPTER 61B T	NONQUITT AVE	Recreation
4729	0.23	CHAPTER 61B T	NONQUITT AVE	Recreation
4730	1.8	CHAPTER 61B T	NONQUITT AVE	Recreation
4731	1.15	CHAPTER 61B T	NONQUITT AVE	Recreation
4733	0.21	CHAPTER 61B T	NONQUITT AVE	Recreation

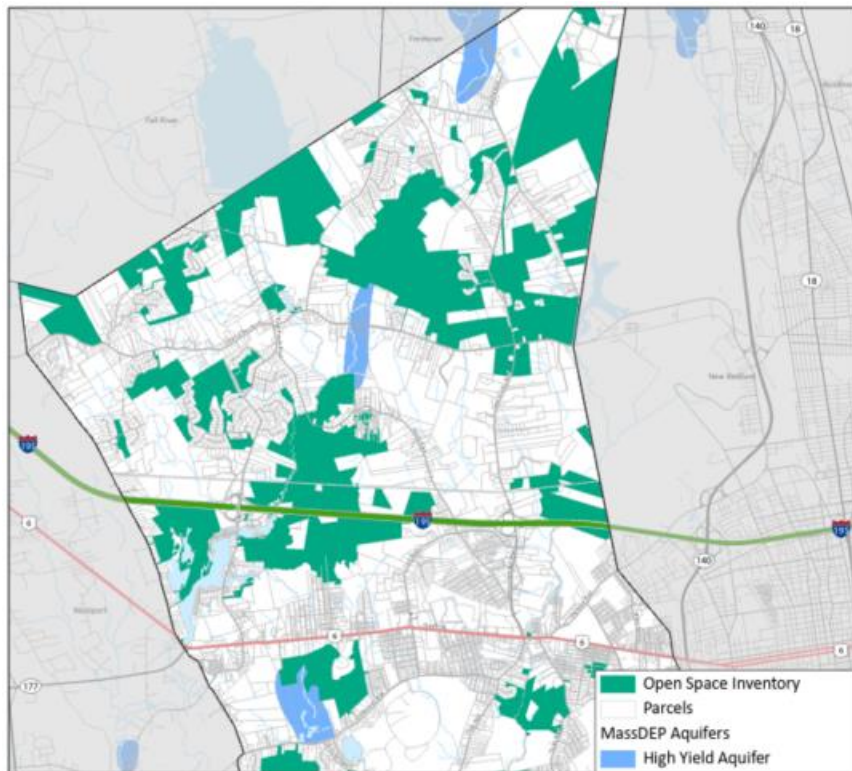
4756	1.49	CHAPTER 61B T	NONQUITT AVE	Recreation
4758	0.23	CHAPTER 61B T	NONQUITT AVE	Recreation
4801	5	CHAPTER 61B T	SMITH NECK RD	Recreation
4803	6.26	CHAPTER 61B T	0 SMITH NECK RD	Recreation
4849	32.176548	CHAPTER 61B T	685 SMITH NECK RD	Mixed Use with Recreation
5050	1.940005	CHAPTER 61B T	39 ELM ST	Mixed Use with Recreation
5051	10.3	CHAPTER 61B T	RICKETSON PT	Recreation
11415	15.8	CHAPTER 61B T	STATE RD	Recreation
12807	5.280005	CHAPTER 61B T	143 HIXVILLE RD	Mixed Use with Recreation
12881	5.2	CHAPTER 61B T	72 HATHAWAY RD	Recreation
12890	1.12	CHAPTER 61B T	BRYANT ST	Recreation
103450	1	CHAPTER 61B T	COLLINS LN	Recreation
103451	0.06	CHAPTER 61B T	COLLINS LN	Recreation
103652	81.806547	CHAPTER 61B T	657 HIXVILLE RD	Recreation
TOTAL RECREATION ONLY	719.8			
TOTAL MIXED USE WITH RECREATION	526.6			
TOTAL CH 61B	1,246.4			

There are several types of land that are high priority for future preservation. Without identifying specific parcels, please refer to the maps below, which indicate areas with important features alongside currently preserved lands. These maps can be referenced as parcels become available or as preservation entities consider new lands to work toward preserving.

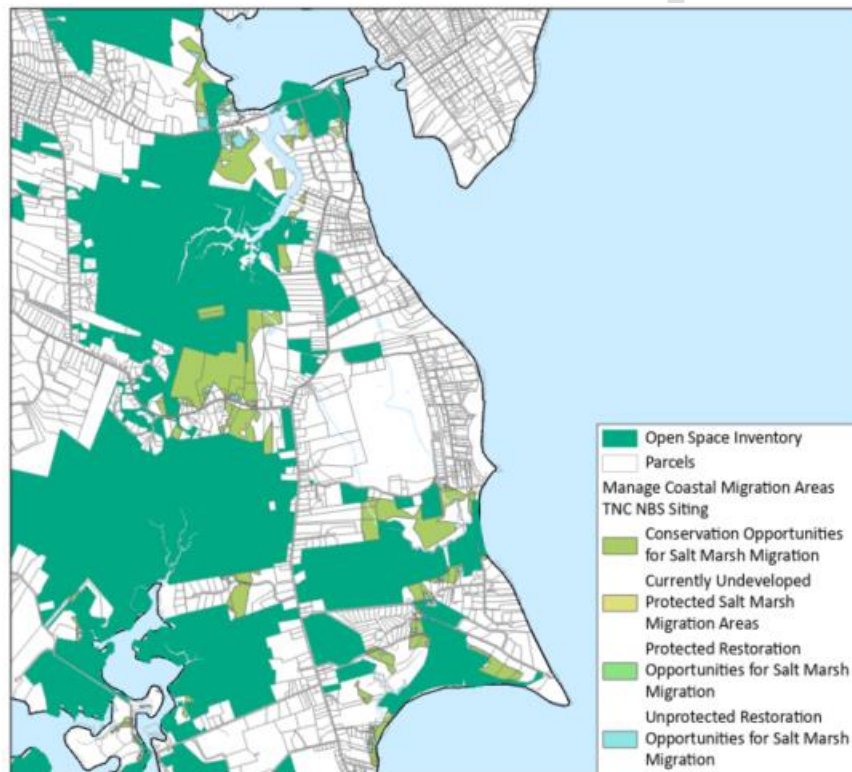
Forested Land – Areas in and around BioMap Forest Core



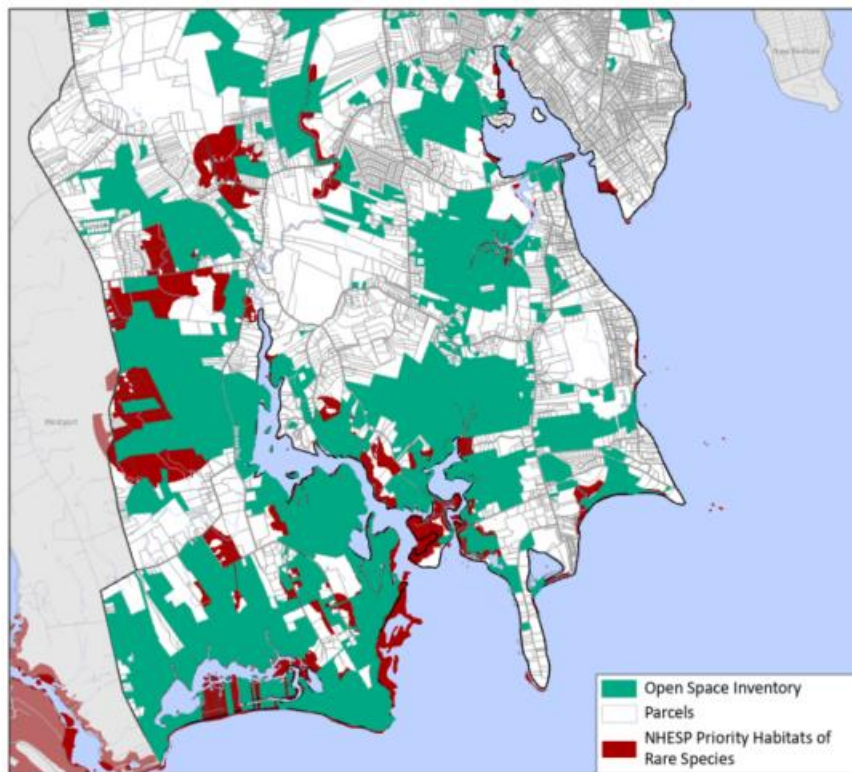
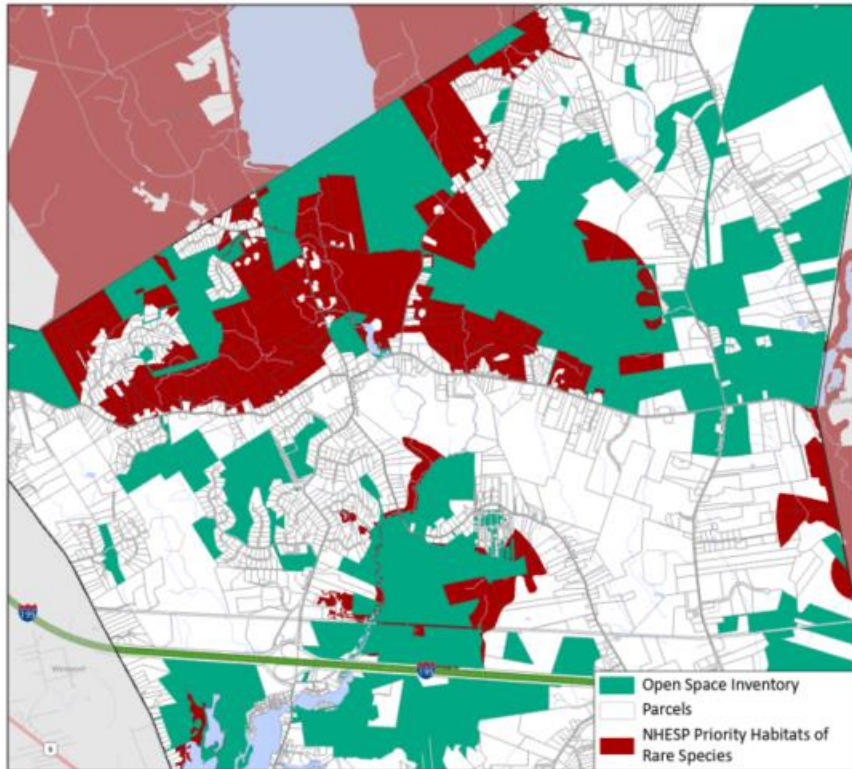
Land over High Yield Aquifers

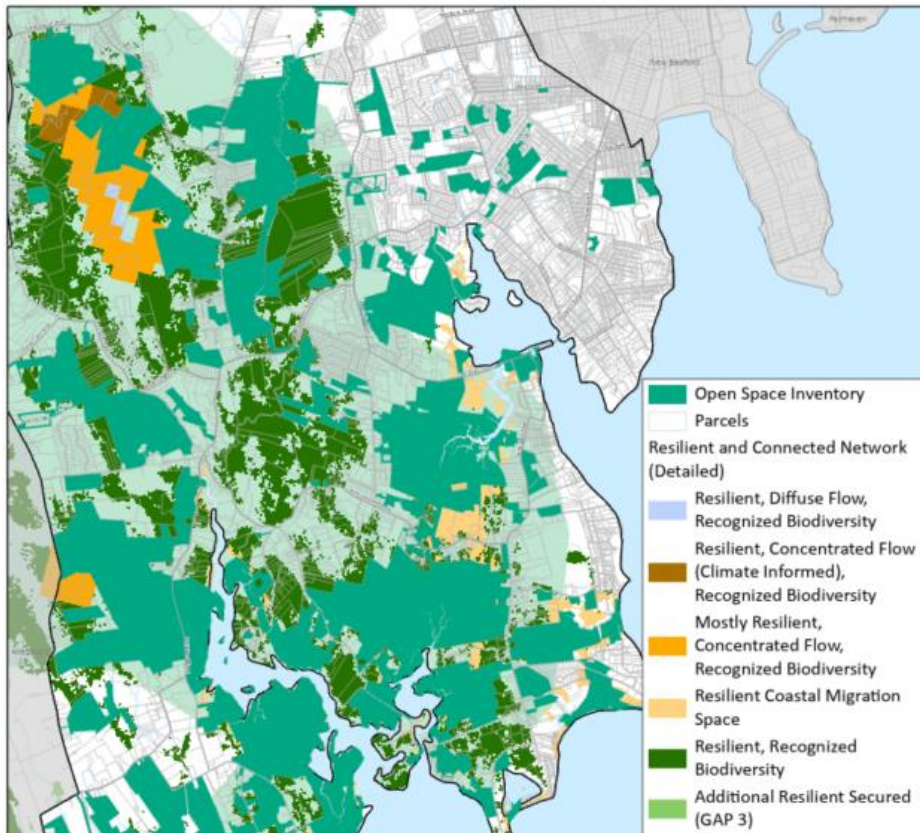


Areas for Marsh Migration – as identified by The Nature Conservancy

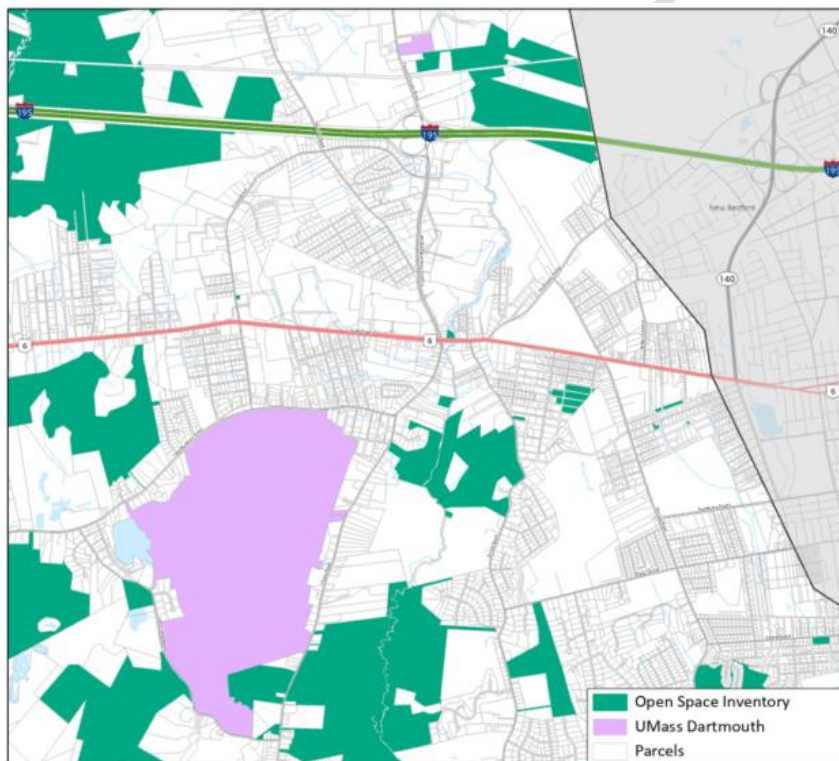


Areas for Protection of Rare Species – NHESP identified areas and areas important to wildlife movement as identified by The Nature Conservancy





Major Institutional Holdings: UMass Dartmouth Campus



C. Public and Nonprofit Parcel Inventory

Permanently Protected Public Parcels

Permanently protected public conservation and recreation resources consist of federal, state, and municipal lands and facilities for conservation and recreational use. The tables below split this category into those lands that are preserved mainly for public park access and usage, and those that are preserved for conservation. As shown in the table below, lands held for park usage total approximately 1,780 acres.

Inventory of Permanently Preserved Park Parcels Held in Public Ownership in Dartmouth												
Map	Block	Lot	Acres	Protection	Zone	Parcel Address	Current Use / Recreational Potential	Ownership	Control / Manager	Condition	Access	Funds
10	6		219.83	PARK P	SR-B	BARNEYS JOY RD	DEMAREST LLOYD STATE PARK - state beach	Comm. of Mass.	Division of State Parks & Recreation	Excellent	yes	gift
10	7		1.717	PARK P	SR-B	BARNEYS JOY RD	DEMAREST LLOYD STATE PARK	Comm. of Mass.	Division of State Parks & Recreation	Excellent	yes	
18	3		473	PARK P	SR-B	HORSENECK RD	Dartmoor Wildlife Management Area	Comm. of Mass.	Department of Fish & Game	Good	yes	purchase
23	46		1.54	PARK P	SR-B	50 HORSENECK RD	Russells Mills Landing	TOWN OF DARTMOUTH	DPR	Excellent	yes	Town
28	34		0.36	HPR	SRB	1205 Russells Mills Rd	Eldridge, Shubael House, NRDIS, LHD, C 1871	Town of Dartmouth				
34	5		3.3	PARK P	SR-B	RUSSELL S MILLS RD	Paskamansett Park	Town of Dartmouth	Dartmouth Natural Resources Trust	Good		CPC / gift
61	13		11.26	PARK P	LI	REED RD	Vacant Land	TOWN OF DARTMOUTH	DPR	Good	landlocked	donated
61: 24, 26, 27, 29-31, 35, 40, 41 & 62: 14			133.5	PARK P	varies	HIXVILLE RD	Noquochoke Wildlife Management Area	Comm. of Mass.	Department of Fish & Game	Good	yes	
70	15, 17		43.3	PARK P	SR-B	OLD FALL RIVER RD	SE Massachusetts Bioreserve	Comm. of Mass.	DCR/DFG	Good	yes	purchase
71	35/41		4.53	PARK P	SR-B	707 OLD FALL RIVER RD	Cornell Pond	TOWN OF DARTMOUTH	DPR	Good	yes	donated
72	27	1	0.225	PARK P	SR-B	443 OLD FALL RIVER RD	DRPT	TOWN OF DARTMOUTH	DPR	Excellent	yes	USH/Town
72	28	4	0.463	PARK P	SR-B	443 OLD FALL RIVER RD	DRPT	TOWN OF DARTMOUTH	DPR	Excellent	yes	USH/Town
72	36		298	PARK P		OLD FALL	DRPT	TOWN OF DARTMOUTH	DPR	Excellent	yes	USH

						RIVER RD						
73	24, 25		426.12 (total for all 1971 properties)	PARK P	SR-B	HIGH HILL RD	Acushnet Cedar Swamp; rare Atlantic White Cedar swamp	Comm. of Mass.	Division of State Parks & Recreation	Good	yes	purchase 1971
73	35		-	PARK P	SR-B	HIGH HILL RD	Acushnet Cedar Swamp; rare Atlantic White Cedar swamp	Comm. of Mass.	Division of State Parks & Recreation	Good	yes	purchase 1971
74	2		11.15	PARK P	SR-B	N HIXVILLE RD	SE Massachusetts Bioreserve	Comm. of Mass.	DCR/DFG			
76	15		12.75	PARK P	SR-B	HIGH HILL RD	DRPT	TOWN OF DARTMOUTH	DPR	Excellent		USH/Town
77	46, 47, 49, 50, 51		-	PARK P	SR-B	HIGH HILL RD	Acushnet Cedar Swamp; rare Atlantic White Cedar swamp	Comm. of Mass.	Division of State Parks & Recreation	Good	yes	purchase 1971
80_24, 80_26, 82_33			-	PARK P	SR-B	HIGH HILL RD	Acushnet Cedar Swamp; rare Atlantic White Cedar swamp	Comm. of Mass.	Division of State Parks & Recreation	Good	yes	purchase 1971
82	34		11.24	PARK P	GI	HIGH HILL RD	Acushnet Cedar Swamp; rare Atlantic White Cedar swamp	Comm. of Mass.	Division of State Parks & Recreation	Good	yes	purchase
84	8	9	13.64	PARK P	GI	SAMUEL BARNET BLVD	Acushnet Cedar Swamp; rare Atlantic White Cedar swamp	Comm. of Mass.	Division of State Parks & Recreation	Good	yes	purchase
90	10		30.5	PARK P		231 SMITH NECK RD	Round Hill Beach	TOWN OF DARTMOUTH	DPR	Good	Beach	Town
109	60	1	1	PARK P	SR-B	10 MARY CRAPO WY	Motha's Park	TOWN OF DARTMOUTH	DPR	Closed	no	transfer
109	67		4.66	PARK P	SR-B	RUSSELL S MILLS RD	Paskamansett Park	Town of Dartmouth	Town of Dartmouth	Good	canoe launch	CPC / gift
109	67		0.26	PARK P	SR-B	RUSSELL S MILLS RD	Paskamansett Park	Town of Dartmouth	Town of Dartmouth	Good	canoe launch	CPC / gift
111	11		3.94	PARK P	SR-B	77 GULF RD	Apponagansett Park	TOWN OF DARTMOUTH	DPR	Good	yes	USH
111	12		2.2	PARK P	SR-B	75 GULF RD	Arthur Dias Town Landing	Town of Dartmouth	Select Board	Excellent	yes	Urban Self-Help Funds
122	131		0.67	HPR	GR	762 Dartmouth St	Akin, Elihu House, C 1762	Town of Dartmouth	MHC			
125	61		13.373	PARK T		580 RUSSELL S MILLS RD	DYSA Fields	TOWN OF DARTMOUTH	DPR	improve parking	yes	Town

128	209		4.23	PARK P	GR	746 DARTMOUTH ST	Dartmouth Community Park	Town of Dartmouth	DPR	Good	yes	PARC grant
133	238		43.754	PARK T		654 DARTMOUTH ST	Outbuildings	TOWN OF DARTMOUTH	DEMELLO SCH./DPR	Good		donated
134	41		10.9	PARK P	GR	66 ST JOHN ST	Jones Park	TOWN OF DARTMOUTH	DPR	Good	yes	donated

As shown in the table below, lands held for public conservation purposes total approximately 3,230 acres. (In the Manager column below, Con. Comm. is an abbreviation for the Dartmouth Conservation Commission.)

Inventory of Permanently Preserved Conservation Parcels Held in Public Ownership in Dartmouth												
Map	Block	Lot	Acre	Protection	Zone	Parcel Address	Current Use / Recreation Potential	Ownership	Control / Manager	Condition	Access	Funds
8	12		3.37	CONCOMP	SR-B	HORSENECK RD	Vacant Land	Town of Dartmouth	Con. Comm.			
17	7		22.9	CONCOMP	SR-B	DIVISION RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	gift
17	8		9.39	CONCOMP	SRB	594 DIVISION RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
19	44		24.18	CONCOMP	SR-B	POTOMSKA RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
19	46		94.3	CONCOMP	SR-B	ROCK O'DUNDEE RD	trails	Town of Dartmouth	Con. Comm.			gift
20	14		1.7	CONCOMP	SR-B	LITTLE RIVER RD	Vacant Land	Town of Dartmouth	Con. Comm.		Permission	Gift
20	31		.22	CR P	SR-B	SOUTH AVE	Water Department Land / water tank	Town of Dartmouth	Dartmouth Water Department			gift
24	16	1-3	3.14	CONCOMP	SR-B	ROCK O'DUNDEE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
25_20-23, 27 & 30_3			47.87	CONCOMP	SR-B	ROCK O'DUNDEE RD / SMITH NECK RD	Vacant Land	Town of Dartmouth	Con. Comm.			
29	10		11.8	CONCOMP	SR-B	BAKERVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
29	15		11.2	CONCOMP	SR-B	BAKERVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
29	54	2	40	CONCOMP	SR-B	BAKERVILLE RD	Dike Creek / saltmarsh	Town of Dartmouth	Dartmouth Conservation Commission, also has CR held by TTOR			NAWC A funds
30	5		71.64	CONCOMP	SR-B	GULF RD	Vacant Land / Dike Creek	Town of Dartmouth	Con. Comm.		Permission	Gift
32	25		42.4	CONCOMP	SR-B	GIDLEY TOWN RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	gift
33	33		22.4	CONCOMP	SR-B	RUSSELLS MILLS RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift

33	34		7	CONCOM P	SR-B	WOODCOC K RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
33	39	3	11.25	P	SR-B	LONGMEAD OW RD	Water Dept Land	Town of Dartmouth	Dartmouth Water Department			
33	54		5.863	CONCOM P	SRB	PEMBROKE DR	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
33	72		137	P	SRB	687 Chase Rd	Water dept land	Town of Dartmouth	Dartmouth Water Department			
38	21	1	77	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
38	32	1	19.77	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
39	17		4.768	CONCOM P	SR-B	RUSSELLS MILLS RD	Vacant Land / Cranberry Bog	Town of Dartmouth	Con. Comm.		No	Gift
39	20		8.814	CONCOM P	SRB	RUSSELLS MILLS RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
39	25		26.19	CONCOM P	SRB	TUCKER RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
39	26		6.743	CONCOM P	SRB	TUCKER RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
40	3		11.38	CONCOM P	SR-B	STAR OF THE SEA DR	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
40	4		47.17	CONCOM P	SR-B	STAR OF THE SEA DR	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
41	6		5.92	CONCOM P	SR-B	FISHER RD	Vacant Land	Town of Dartmouth	Con. Comm.			
41	44		8.924	CONCOM P	SR-B	FISHER PINES WY	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
41	63		22.24	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	64		21.27	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	69		4.48	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	70		5.176	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	71		18.55	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	72		3.75	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	73		3.1	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	74		5.4	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	75		3.15	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
41	76		4.75	CONCOM P	SR-B	LUCY LITTLE RD	Vacant/rec potential	Town of Dartmouth	Con. Comm.		No	Gift
42	29		15.45	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
42	30		26.6	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
42	33		15.13	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
42	34		5.377	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
42	35		3.826	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
42	41		0.4	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.			

42	42		0.42	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
42	43		0.5	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
42	49		44	CR P	SR-B	CHASE RD	Water Department Land / wells	Town of Dartmouth	Dartmouth Water Department			
42	55		23.3	CR P	SR-B	CHASE RD	Water Department Land	Town of Dartmouth	Dartmouth Water Department			
43	14		10.1	CONCOM P	SR-B	FAIRWAY DR	Paskamansett River Wetlands / Vacant Land	Town of Dartmouth	Con. Comm.		No	Self-Help
43	15		22.23	CONCOM P	SR-B	TUCKER RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
44	41		171.6	CONCOM P	SR-B	LUCY LITTLE RD	Deerfield Swamp	Town of Dartmouth	Con. Comm.		Yes	gift
44	42		10.57	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
45	1		11.53	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
45	2		2.227	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
45	3		4.152	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
45	7		10.1	CONCOM P	SR-B	LUCY LITTLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
45	47		0.549	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
45	50		29.03	CONCOM P	SR-B	CHASE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
46	3		74	CONCOM P	SR-B	TUCKER RD	Vacant Land on the Paskamansett River	Town of Dartmouth	Con. Comm.		No	Gift
46	4	1	18	CONCOM P	SR-B	COUNTRY CLUB BD	Paskamansett River Wetlands / Vacant Land	Town of Dartmouth	Con. Comm.		No	Self-Help
44_45-50, 48-9			123.6	P	SR-B	Fisher RD / Old Westport RD	Water Dept. Land / Vacant	Town of Dartmouth	Dartmouth Water Department			
48	2	18	17.16	CONCOM P	SR-B	KAREN LN	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
48	6		45	CR P	SR-B	OLD WESTPORT RD	Water Department Land / wells	Town of Dartmouth	Dartmouth Water Department			
48	31	7	8.48	CONCOM P		Blossom Court	Dartmouth Preserve CR	Town of Dartmouth	Con. Comm.			
48	33		107.401	CR P	SR-B	408 OLD WESTPORT RD	Slocum Road Multi-purpose Area / Deed restricted as water supply, conservation, or park and recreation only	Town of Dartmouth	Dartmouth Board of Selectmen			

48	34		15.66	CR P	SR-B	STATE RD	Water Department Land	Town of Dartmouth	Dartmouth Water Department			DWSP
48	35		14.74	P	SR-B	STATE RD	Water Department Land	Town of Dartmouth	Dartmouth Water Department			
48	37		15.6	CR P	SR-B	STATE RD	Water Department Land / pumping station	Town of Dartmouth	Dartmouth Water Department			
50	1		.47	CR P	SR-B	TUCKER RD	Water Department Land	Town of Dartmouth	Dartmouth Water Department			
51	14		170.3	CONCOM P	SRB	HIGHLAND AV	Former Inter- Church Council / Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Self- Help
52	7		15.7	P	SRB	STATE RD	Water Dept. Land / Vacant	Town of Dartmouth	Dartmouth Water Department			
54	16		47.99	CONCOM P	SR-B	HIGHLAND AV	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Sale
55	1		70	CONCOM P	LI	REED RD	Town Forest Property: trails	Town of Dartmouth	Con. Comm.	Yes		Gift
55	2		1.39	CONCOM P	LI	REED RD	Town Forest Property: trails	Town of Dartmouth	Con. Comm.			
55	3		17	CONCOM P	LI	REED RD	Town Forest Property: trails	Town of Dartmouth	Con. Comm.	Yes		Gift
55	4		6	CONCOM P	SR-B	REED RD	Town Forest Property: trails	Town of Dartmouth	Con. Comm.	Yes		Gift
55	5		4.2	CONCOM P	SR-B	REED RD	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Gift
55	7		10.63	CONCOM P	SR-B	REED RD	Town Forest Property: trails	Town of Dartmouth	Con. Comm.	Yes		Gift
55	12		1.67	CONCOM P	SR-B	VALLEY ST	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Gift
55_13-14 & 181_8, 12			32.18	CONCOM P	SR-B	MELROSE AVE, CONNECTIC UT AVE / CROSS RD	Vacant Land	Town of Dartmouth	Con. Comm.			
55	15		14.88	CONCOM P	SR-B	REED RD	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Gift
55	16		2.363	CONCOM P	SR-B	REED RD	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Gift
55	17		0.757	CONCOM P	SR-B	REED RD	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Sale
55	18		12.23	CONCOM P	SR-B	REED RD	Vacant Land	Town of Dartmouth	Con. Comm.	Yes		Gift
55	19		53	CONCOM P	SR-B	REED RD	Town Forest	Town of Dartmouth	Con. Comm.	Yes		Gift

							Property: trails					
56	15		49.76	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
56	17	1	2.53	CONCOM P	SR-B	STATE RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
56	17	2	0.56	CONCOM P	LI	ROUTE #195	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
56	17	20	31.7	P	LI	HIXVILLE RD	Former Brady Estates Lot Vacant Land	Town of Dartmouth	Con. Comm.			
61	21		41.24	CONCOM P	LI	REED RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
61	42	14	3.37	CR P	SR-B	HIXVILLE RD	Souza Lagasse Open Space Covenant	Town of Dartmouth	Dartmouth Board of Selectmen			
62	6		12.66	CONCOM P	LI	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
62	21		11.67	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
63	19	2	15.59	CONCOM P	OFD	FAUNCE CORNER	Vacant Land	Town of Dartmouth	Con. Comm.			
63	34		2.43	CONCOM P	LI	FAUNCE CORNER	Vacant Land	Town of Dartmouth	Con. Comm.			
63	35		2.13	CONCOM P	LI	FAUNCE CORNER	Apponagan sett Swamp / Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
63	39		4.64	CONCOM P	LI	FAUNCE CORNER	Vacant Land	Town of Dartmouth	Con. Comm.			
63	40		5.18	CONCOM P	LI	FAUNCE CORNER RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
63	41		0.176	CONCOM P	LI	FAUNCE CORNER RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
66	20		13.3	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
67	3		8.849	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
69	2		7	CONCOM P	SR-B	OLD FALL RIVER RD	Sylvia Property	Town of Dartmouth	Con. Comm.			gift
69	3		107.9	CONCOM P	SR-B	OLD FALL RIVER RD	Deed Restriction - Landfill	Town of Dartmouth	Con. Comm.			gift
69	4		7.197	CONCOM P	SRB	OLD FALL RIVER RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
69	11		13.53	CONCOM P	SRB	OLD FALL RIVER RD	Outbuilding s	Town of Dartmouth	Con. Comm.		Yes	Gift
69	12		71.25	CONCOM P	SRB	OLD FALL RIVER RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
72	33		1.77	CR P	SR-B	OLD FALL RIVER RD	Water Department Land / water tank	Town of Dartmouth	Dartmouth Water Department			
72	45	30	9.13	P	SR-B	IVY WAY	Vacant Land	Town of Dartmouth	Con. Comm.			gift
72	45	31	48.84	P	SR-B	IVY WAY	Vacant Land	Town of Dartmouth	Con. Comm.			gift
72	45	32	25	P	SR-B	SUNFLOWE R DR	Enclave Subdivision - Vacant Land	Town of Dartmouth	Con. Comm.			gift

73	13		77	CR P	SR-B	795 FAUNCE CORNER RD	High Hill Reservoir / reservoir	City of New Bedford	City of New Bedford Water Dept			
73	14		17.28	CONCOM P	SR-B	FAUNCE CORNER RD	Orchard Subdivision	Town of Dartmouth	Con. Comm.			gift
74	12		48.51	CONCOM P	SR-B	11 COPICUT RD	Former Copicut Farms /Atlantic white cedar grove	Town of Dartmouth	Con. Comm.			
74	14		8.89	CONCOM P	SR-B	COPICUT RD	Conservatio n Commission Lot - Dutch Belt Farm	Town of Dartmouth	Con. Comm.			
75	11		83.8	CR P	SR-B	COLLINS CORNER RD	Fall River Water Department Land / Copicut Reservoir Land	City of Fall River	Fall River Water Department			
77	53		58.41	CONCOM P	SR-B	HIGH HILL RD	High Hill Road	Town of Dartmouth	Con. Comm.			
79	5	1-3	5.52	CONCOM P	SRB	COLLINS CORNER RD	Vacant Land	Town of Dartmouth	Con. Comm.			
79	5	4	2.6	CONCOM P	SRB	COLLINS CORNER RD	Vacant Land	Town of Dartmouth	Con. Comm.			
79	31	5	6.47	CONCOM P	SRB	PINE ISLAND RD	Vacant Land abutting Shingle Island River	Town of Dartmouth	Con. Comm.			
80	1	30	25.93	CONCOM P	SRB	HIGH HILL RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
80	23		24.9	CR P	SR-B	HIGH HILL RD	New Bedford Water Dept. Land / conduit - right of way	City of New Bedford	City of New Bedford Water Dept			
104	1	10	40	CONCOM P	SR-B	SMITH NECK RD	Vacant Land	Town of Dartmouth	Dartmouth Conservatio n Commission			Gift
104	9		14.5	CONCOM P	SR-B	SMITH NECK RD	Hughes Property	Town of Dartmouth	Con. Comm.			BBNEP mini- grant funds
107	17		0.22	CONCOM P	SR-B	SMITH NECK RD	Vacant Land with beach	Town of Dartmouth	Con. Comm.		Yes	Gift
109	48		3.239	CONCOM P	SR-B	RUSSELLS MILLS RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
109	49		13.54	CONCOM P	SR-B	GULF RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
109	60		10.48	CONCOM P	SR-B	10 MARY CRAPO WY	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
109	63		0.757	CONCOM P	SR-B	RUSSELLS MILLS RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
112	27		5	CONCOM P	SR-B	W. SMITHNECK RD	Vacant Land with Rocky Beach	Town of Dartmouth	Con. Comm.		Yes	Gift
114	54	1	0.1	CONCOM P	SR-B	RUSSELLS MILLS RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift

126	15 2	6	1.66	CONCOM P	SR-B	STAR OF THE SEA DR	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
131	81	1	3.49	CONCOM P	SRA	UTICA LN	Vacant Land on the Paskamansett River	Town of Dartmouth	Con. Comm.		No	Gift
133	42	11- 13	13.99	CONCOM P	GR	RUSSELLS MILLS RD	Vacant Land	Town of Dartmouth	Con. Comm.			
133	76		0.154	CONCOM P	GR	GARDEN ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	
135	71		0.85	CONCOM P	SR-A	TUCKER RD	Vacant Land	Town of Dartmouth	Con. Comm.			
136	26		15.8	CONCOM P	SR-A	SLOCUM RD	Vacant Land	Town of Dartmouth	Con. Comm.		Yes	Gift
139_181- 182, 134_13			1.89	P	GR	ST JOHN ST	Hooker Landing Parking lot for boat launch ramp; ALU	Town of Dartmouth	Dartmouth Waterways Committee			
141	23		13.70	CONCOM P	SR-A	TUCKER RD	Vacant Land	Town of Dartmouth	Con. Comm.			
144	97		1.942	CONCOM P	SR-A	SHARP ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
148	84	16	15.07	CONCOM P	SR-A	ALLEN ST	Vacant Land	Town of Dartmouth	Con. Comm.			
156	16		0.48	P	SR-B	SHARON AVE	Water Dept Land	Town of Dartmouth	Dartmouth Water Department			
158	48	2	2.11	CONCOM P	SR-B	OLD WESTPORT RD	Vacant Land	Town of Dartmouth	Con. Comm.			
159	14		.63	CONCOM P	SR-A	TUCKER RD	Vacant Land	Town of Dartmouth	Con. Comm.			gift
159	41		0.556	CONCOM P	SR-A	CARROLLTO N AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
159	42		2.37	CONCOM P	SR-A	CARROLLTO N AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
159	43		1.819	CONCOM P	SR-A	CARROLLTO N AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
159	60		1.35	CONCOM P	SR-A	CARROLLTO N AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
160	50		0.294	CONCOM P	SRA	METROPOLI TAN ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
160	51		1	CONCOM P	SRA	METROPOLI TAN ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
160	95		0.364	CONCOM P	SR-A	HUNTINGT ON AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
160	10 9		0.092	CONCOM P	SR-A	LONGWOOD D AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
162	11		.6	CR P	SR-B	STATE RD	Fall River Water Department Land / Pumping Station on Lake Noquo.	City of Fall River	Fall River Water Department			
167	73		0.72	CONCOM P	GB	282 STATE RD	Service Shop	Town of Dartmouth	Con. Comm.		Yes	Gift
168	53		2.487	CONCOM P	SR-A	WOOLEY ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
168	92		0.554	CONCOM P	SR-A	RICKETSON ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift

168	92	1	0.563	CONCOM P	SR-A	BEVERLY ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
168	93		0.073	CONCOM P	SR-A	RYDER ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
169	22		0.16	CONCOM P	SR-A	WOOLEY ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
174	74		.3	CR P	GB	CROSS RD	Water Department Land / water tank	Town of Dartmouth	Dartmouth Water Department			
179	42		3.61	CR P	SR-B	REED RD	Fall River Water Department Land / Island in Lake Noquochoke	City of Fall River	Fall River Water Department			
187	1		0.965	CONCOM P	SRB	3 GROVE ST	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
187	5		0.228	CONCOM P	SRB	LAKESIDE AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
187	8		0.165	CONCOM P	SRB	LAKESIDE AV	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
191	1		0.11	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	3		0.14	CONCOM P	SRA	SIXTH STREET	Vacant Land	Town of Dartmouth	Con. Comm.		No	
191	5		0.55	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	7		0.05	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	15		0.09	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	17		0.432	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
191	18		0.22	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	20		0.4	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	23		0.22	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	24		0.768	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
191	33		0.18	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
191	37		0.39	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	39		0.15	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
191	40		1.138	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
191	45		1.391	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
191	52		1.205	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
192	11		0.113	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
192	15		0.079	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
192	19		0.06	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	22		0.04	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			

192	22	1	0.05	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	24		0.37	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	25		0.072	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
192	26		0.22	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	28		1.241	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	Gift
192	30		0.04	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	30	1	0.05	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	31		0.04	CONCOM P	SR-A	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	31	1	0.05	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	33		1.25	CONCOM P	SR-A	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	gift
192	34		0.07	CONCOM P	SR-A	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	35		0.26	CONCOM P	SR-A	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.		No	
192	36		0.15	CONCOM P	SR-A	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	38		0.04	CONCOM P	SR-A	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	38	1	0.01	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	42		0.04	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	42	1	1.04	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	48		0.14	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	50		0.28	CONCOM P	SRA	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			
192	50	1	0.05	CONCOM P	SRB	HIXVILLE RD	Vacant Land	Town of Dartmouth	Con. Comm.			

Nonprofit Lands

Permanent protection is also afforded to properties of the local land trusts and similar private nonprofit conservation organizations. These properties are documented in the table below, with the vast majority owned and/or managed by the Dartmouth Natural Resources Trust (DNRT) or MassAudubon. They amount to approximately 2,730 acres of land in Dartmouth.

Inventory of Permanently Preserved Conservation Parcels Held in Conservation Nonprofit Ownership in Dartmouth											
Map	Block	Lot	Acres	Protection	Zone	Parcel Address	Current Use / Recreational Potential	Ownership	Control / Manager	Access	Funds
1	7	1	73.563	APR-P & AUDUBON		1280 HORSENECK RD	Allens Pond Wildlife Sanctuary APR	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	1		11.666	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		

2	11		1.25	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	23		3.35	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	24		5.43	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	25		6.4	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	28		5	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	29		5.5	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	30		5.4	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	31		3.13	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	33		3	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	35		4.6	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	36		2.5	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	37		5.7	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	38		9.1	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	39		3.2	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	42		3	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
2	43		6.6	AUDUBON	SR-B	ALLENS POND	Allens Pond Wildlife Sanctuary	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
4	5	2	82.986	AUDUBON	SR-B	ALLENS POND	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
4	6	1	74	AUDUBON	SR-B	ALLENS POND	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
5	4		41.545	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
5	5		6.051	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
6	10	0	5.04	DNRT & CR	SR-B	BARNEYS JOY RD	Wylde Reserve	DNRT	DNRT	yes	gift

8	14	1	2.33	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
8	20	1	9.69	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
8	20	2	0.24	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
8	20		104	APR P	SR-B	786 HORSENECK RD	Stone Barn Farm	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		NCWCG funds - federal
8	22	1	1.07	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
8	22		1.42	AUDUBON	SR-B	HORSENECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
9	36	2	59.28	APR P	SR-B	ALLENS NECK RD	Ocean View Farm Reserve	DNRT	DNRT	yes	NAWCA
9	37		146.08	AUDUBON	SR-B	90 ALLENS NECK RD	Vacant Land	MASSACHUSETTS AUDUBON SOCIETY	AUDUBON		
10	8	0	3.515	DNRT P	SR-B	BARNEYS JOY RD	Piney Island Reserve - II	DNRT	DNRT	yes	gift
11	5	0	0.6	DNRT P	SR-B	LITTLE RIVER RD	Bergh Reserve	DNRT	DNRT	waterfront	gift
11	13	0	18.171	DNRT P	SR-B	LITTLE RIVER RD	Teal Rock Reserve - I	DNRT	DNRT	no	gift
13	25		2	DNRT P		SLOCUM'S RIVER	Barnes Reserve (island)	DNRT	DNRT	by water	gift
13	29	2, 3, 7, 8	53	2	DNRT P	BARNEYS JOY RD	Agricultural	DNRT	DNRT	none	DNRT
14	3	0	0.818	DNRT P	SR-B	BARNEYS JOY RD	Piney Island Reserve - I	DNRT	DNRT	yes	gift
14	3		0.83	DNRT P	SR-B	BARNEYS JOY RD	Stetson/Piney Island / Saltmarsh, upland island	DNRT	DNRT		gift
14	13		37	DNRT P		LITTLE RIVER RD	Sweetser Reserve salt marsh	DNRT	DNRT	no	gift
15	32		3.61	APR P	SR-B	SMITH NECK RD	Smith Farm/McKee	DNRT	DNRT	yes	gift
15	28 (part)		7.5	CR P	SR-B	POTOMSKA RD	King Reserve / Salt marsh in Little River	DNRT	DNRT	yes	gift
18	3	4	2	DNRT P		HORSENECK RD	Dartmoor Lot / Vacant Land	DNRT/TTOR	DNRT/TTOR	yes	TTOR/DNRT
18	8		47	DNRT & CR	SR-B	HORSENECK RD	Slocum's River Reserve	DNRT/TTOR	DNRT/TTOR	trails	S/P/T
18	9		17.5	DNRT P		SLOCUM'S RIVER	Grosswendt Reserve - upland islands	DNRT	DNRT	Water front	gift
18	11		1.55	DNRT P	SR-B	Upper Cedar Island	Upper Cedar Island Reserve / Saltmarsh island in Slocums river	DNRT	DNRT	Water front	gift

18	25		2.67	DNRT P	SR-B	WADSWORTH	New Bedford Garden Club	DNRT	DNRT	yes	gift
18	35		4.241	DNRT & CR	SR-B	GAFFNEY RD	Wadsworth Reserve	DNRT	DNRT	no	gift
18	40&49		13.5	DNRT & CR		WADSWORTH LANE	Hawes Reserve	DNRT	DNRT	no	gift
19	40	1	42.5	DNRT P	SR-B	POTOMSKA RD	Frank Knowles Reserve	DNRT	DNRT	trails	gift
19	42	2	39	DNRT & CR		POTOMSKA RD	Little River Reserve - II	DNRT	DNRT	trails	DNRT
19	45		54.5	DNRT P	SR-B	300 ROCK O'DUNDEE RD	Little River Reserve (Oliver Property) / stream, wetland, headwaters of Little River	DNRT	DNRT	trails	NAWCA funds
19	43&35		40	DNRT P		POTOMSKA RD	Little River Reserve - I	DNRT	DNRT	trails	DNRT
20	13		7.5	DNRT P		LITTLE RIVER RD	Whitney Reserve	DNRT	DNRT	yes - no trails	gift
20	15		8.24	DNRT P	SR-B	ROCK O'DUNDEE RD	Jonny Point Reserve / Preserves 3,000 ft of river frontage and salt marsh	DNRT	DNRT	Water front	
20	16		8.48	DNRT P	SR-B	ROCK O'DUNDEE RD	Jonny Point Reserve / Preserves 3,000 ft of river frontage and salt marsh	DNRT	DNRT	Water front	
20	19		131.9	APR P	SR-B	SMITH NECK RD	Cornell Farm	The Trustees of Reservations	The Trustees of Reservations	trails	NAWCA grant
20	55	1	54	DNRT P	SR-B	SMITH NECK RD	Smith Farm/McKee - Extensive Trail System	DNRT	DNRT	trails	gift
20	55		69	DNRT P	SR-B	SMITH NECK RD	Smith Farm/McKee - Extensive Trail System	DNRT	DNRT	trails	gift
21	1		14	DNRT P	SR-B	SMITH NECK RD	Smith Farm/McKee - salt marsh	DNRT	Smith Farm/McKee	Yes	gift
23	10		31	APR P	SR-B	HORSENECK RD	Dartmoor Farms	DNRT/TTOR	DNRT/TTOR	Yes	
23	18		29	DNRT & CR		HORSENECK RD	Parsons Reserve - II	DNRT	DNRT	trails	gift
23	31	2-4	29	DNRT P	SR-B	704 ROCK O'DUNDEE RD	Peter's Creek Reserve (aka Spindler)	DNRT	DNRT	Trails	NAWCA funds
25	5	2	4.4	DNRT P		ROCK O'DUNDEE RD	White Pine Reserve	DNRT	DNRT	Yes	gift
28	5	2	5.64	DNRT P	SR-B	SLADES CORNER RD	Destruction Brook Woods / Mill pond,	DNRT	DNRT	yes	

							freshwater stream				
28	5		284.7	DNRT & CR		SLADES CORNER RD	Destruction Brook Woods	DNRT	DNRT	trails	S/P/T
28	28		29.40	APR P	SR-B	1157 RUSSELLS MILLS RD	Paradise Farm	DNRT	DNRT	yes	LAND, CPC
28	80		3.5	DNRT P		HORSENECK RD	Parsons Reserve - I	DNRT	DNRT	trails	gift
29	46	2	76.52	DNRT P		0 BAKERVILLE RD	Dike Creek Reserve	DNRT	DNRT	yes	
32	18	6	5.25	DNRT P	SR-B	FISHER RD	Ashton Reserve	DNRT	DNRT	no trails	gift
35	4		1.112	DNRT P	SR-B	GULF RD	Children's Museum Lot	DNRT	DNRT	yes	DNRT
39	18		5.969	DNRT P	SR-B	RUSSELLS MILLS RD	Brassells Reserve	DNRT	DNRT	no	gift
40	1, 1_4, 5		43.75	DNRT P	SR-B	STAR OF THE SEA DR	Star of the Sea Reserve	DNRT	DNRT	trails	gift
45	11		36.83	DNRT, HRP P	SR-B	318 CHASE RD	Helfand Property, Winslow, Ezra House, R 1850	DNRT	DNRT	yes	
50	5	2	9.84	DNRT P	SR-B	CHASE RD	Paskamansett Woods Reserve / Contains walking trails	DNRT	DNRT	trails	gift
50	5	13	1.4	DNRT P	SR-B	KYLE JACOB RD	Paskamansett Woods Reserve / Contains walking trails	DNRT	DNRT	trails	gift
55	8		21	DNRT P	SR-B	DEERFIELD LANE	Irvin Reserve	DNRT	DNRT	trails	gift
63	15	5	19.2	DNRT P	LI	LEDGEWOOD BLVD	Ledgewood Reserve	DNRT	DNRT	limited	Purchase
63	24		75.47	DNRT P		HATHAWAY RD	Augustine/Souza Reserve	DNRT	DNRT	no	gift
63	33		8.34	DNRT P	SR-A	FAUNCE CORNER RD	Smith Reserve - I	DNRT	DNRT	no	gift
63	38		1.988	DNRT P		FAUNCE CORNER RD	Smith Reserve - II	DNRT	DNRT	no	gift
70	14		27.55	DNRT P	SR-B	ALBRO AVE	Wernick Farm Reserve / Contains walking trails	DNRT	DNRT	Trails	NAWCA, CPC
70	21		33.26	DNRT P	SR-B	150 ALBRO AVE	Wernick Farm Reserve / Contains walking trails	DNRT	DNRT	Trails	NAWCA, CPC
71	33		21.544	DNRT P	SR-B	N HIXVILLE RD	Howland Reserve	DNRT	DNRT	trails	gift
75	12		52.16	DNRT & CR		Collins Corner Rd	Ridge Hill Reserve - II	DNRT	DNRT	trails	DNRT
75	16		35.83	DNRT & CR		Collins Corner Rd	Jason Phillips Mill Site	DNRT	DNRT	trails	DNRT
75	31		38.57	DNRT & CR		Collins Corner Rd	Barzabiel Washburn Reserve	DNRT	DNRT	no	DNRT

75	8&13		89.24	DNRT & CR		Collins Corner Rd	Ridge Hill Reserve - I	DNRT	DNRT	trails	DNRT
76	13		8	DNRT P		FLAG SWAMP RD	Faunce Reserve	DNRT	DNRT	yes	DNRT
76	24	8	9.5	DNRT P		SHINGLE ISLAND LANE	ASM Realty Reserve	DNRT	DNRT	no	gift
79	48		112	DNRT P	SR-B	FLAG SWAMP RD	Shingle Island River Reserve	DNRT	DNRT	trails	gift
87	3		5.791	DNRT P	SR-B	LITTLE RIVER RD	Teal Rock Reserve - III	DNRT	DNRT	no	gift
87	7		6.49	DNRT P	SR-B	BEACH LN	Teal Rock Reserve - II / salt marsh	DNRT	DNRT	no	gift
87	16		6.153	DNRT P	SR-B	LITTLE RIVER RD	Windsor Reserve	DNRT	DNRT	no	gift
89	17	1	10.619	DNRT P	SR-B	LITTLE RIVER RD	Griswold Reserve	DNRT	DNRT	partial	gift
95	9,10,5-1	1	18	DNRT P	SR-B	MATTAREST LN/Nonquitt	Nonquitt Marsh Reserve (beach salt marsh)	DNRT	DNRT	no	gift
96	11		1.75	DNRT P		WASHBURN LANE	Wellington	DNRT	DNRT	no	gift
96	14		7.075	DNRT P	SR-B	WASHBURN LANE	Gray Reserve	DNRT	DNRT	no	gift
96	5 6 7		10.75	DNRT P	SR-B	WASHBURN LANE	Wellington Farm	DNRT	DNRT	no	gift
96	9,10		1.699	DNRT P	SR-B	Off WASHBURN LN	Chambers Reserve	DNRT	DNRT	no	gift
97	1		2.75	DNRT P	SR-B	NONQUITT MARSH	Nonquitt Marsh (barrier beach)	DNRT	DNRT	Water front	gift
98	21		5.214	DNRT P	SR-B	SMITH NECK RD	McBratney Reserve	DNRT	DNRT	yes	gift
101	6		6.35	DNRT P	SR-B	SMITH NECK RD	Jane Crocker Reserve / forested upland and forested wetland, BioMap Core habitat	DNRT	DNRT	no	gift
102	33&34		9.5	DNRT P		North Ave/Nonquitt	Eliot Knowles Reserve	DNRT	DNRT	no	gift
105	3		25.78	TTOR P	SR-B	SMITH NECK RD	Birchfield Farm Area	THE TRUSTEES OF RESERVATIONS	The Trustees of Reservations		
111	6,11&13	0	29.5	DNRT P	SR-B	SMITH NECK RD	Knowles Reserve	DNRT	DNRT	trails	gift
127	63	0	4.515	DNRT P	GR	STONEBROOK LN	Strongman, Stoneybrook Reserve	DNRT	DNRT	no	gift
127	81	2	3.93	DNRT P	GR	ELM ST	Strongman, Elm Street Reserve	DNRT	DNRT	no	gift
130	33		5.075	DNRT P	SR-A	TUCKER RD	Macomber Reserve	DNRT	DNRT	Limited	gift
132	51	0	27.035	DNRT P	GR	RUSSELLS MILLS RD	Dodge Reserve	DNRT	DNRT	yes	gift

171	70		6.789	DNRT P		REED RD	Mosney Reserve	DNRT	DNRT	no	gift
171	75	2	0.25	DNRT P	SR-B	PIERCE ST	Mosney Reserve	DNRT	DNRT	No	gift
171	76		5.54	DNRT P	SR-B	REED RD	Mosney Reserve	DNRT	DNRT	No	gift
180	8		0.99	DNRT P	SR-B	REED RD	Mosney Reserve	DNRT	DNRT	No	gift
180	9	1	0.02	DNRT P	SR-B	REED RD	Mosney Reserve	DNRT	DNRT	no	gift

Other Public Unprotected Lands

Finally, Dartmouth's historic and contemporary cemeteries are functionally preserved.

Map	Block	Lot	Acres	Protection	Zone	Parcel Address	Current Use / Recreational Potential	Ownership	Control / Manager	Access
22	13		0.038	CEMETERY	SR-B	DIVISION RD	Vacant Land	CEMETERIES		
25	60		1.527	CEMETERY	SR-B					
28	14		0.546	CEMETERY	SR-B	SLADES CORNER RD	Vacant Land	PRIVATE		
32	59		0.039	CEMETERY	SR-B	FISHER RD	Vacant Land	PRIVATE		
51	18		0.481	CEMETERY	SR-B	HIGHLAND AV	Vacant Land	PRIVATE		
54	1		0.057	CEMETERY	SR-B	HIGHLAND AV	Vacant Land	PRIVATE		
62	39		0.606	CEMETERY	LI	HIXVILLE RD	Cemetery	TOWN OF DARTMOUTH	DPR	
66	6		0.703	CEMETERY	SR-B	OLD FALL RIVER RD	Vacant Land	PRIVATE		
71	3		0.595	CEMETERY		OLD FALL RIVER RD	Vacant Land	PRIVATE		
71	63		8.38	CEMETERY		OLD FALL RIVER RD	Cemetery	TOWN OF DARTMOUTH	DPR	
79	17		0.86	CEMETERY	SR-B	PINE ISLAND RD	Cemetery	TOWN OF DARTMOUTH	DPR	
84	12		0.11	CEMETERY	GI	QUANAPOAG RD	Vacant Land	PRIVATE		
117	65		0.75	CEMETERY	GR	WILLIAM ST	Vacant Land	PRIVATE		
122	77		14.186	CEMETERY	GR	507 ELM ST	Outbuildings	SOUTH DARTMOUTH CEMETERIES		
122	79		2.062	CEMETERY	GR	BUSH ST	Vacant Land	SOUTH DARTMOUTH CEMETERY	ASSOCIATION	
126	146		0.253	CEMETERY	SR-B	RUSSELLS MILLS RD	Vacant Land	PRIVATE		
127	72		0.325	CEMETERY	SR-B	RUSSELLS MILLS RD	Vacant Land	PRIVATE		
150	127		25.295	CEMETERY	SR-A	ALLEN ST	Vacant Land	CORP OF THE CHURCH OF ST JOHN	THE BAPTIST IN NEW BEDFORD	
151	5		20.276	CEMETERY		WINTERVILLE RD	Vacant Land	SOUTH DARTMOUTH CEMETERIES	ST JOHNS CEMETERY	

158	56		1.45	CEMETERY	SR-B	CHASE RD	Vacant Land	GLYNN MARCIA CORNELL ET AL		
160	30		0.128	CEMETERY	SR-A	MANCHESTER LN	Vacant Land	PRIVATE		
178	139		30.008	CEMETERY		40 WILBUR AV	Vacant Land	ROMAN CATHOLIC BISHOP OF	FALL RIVER / CEMETERIES	
183	76		0.553	CEMETERY	OP	FAUNCE CORNER MALL RD	Cemetery	TOWN OF DARTMOUTH	DPR	
183	84		1.069	CEMETERY	GB	OLD FAUNCE CORNER RD	Vacant Land	SOUTH DARTMOUTH CEMETERIES		
185	28		0.108	CEMETERY	SR-A	HATHAWAY RD	Vacant Land	PRIVATE		

D. Local Recreation and Open Space Interests Narrative

Recreation Interests

Dartmouth's recreation programs are made possible by both public facilities, the town's Recreation and Parks Departments, several town committees, and several private recreation groups. Each entity contributes to Dartmouth's overall recreation portfolio. These groups and individuals include the following:

Town of Dartmouth

1. Pathways Committee

The mission of the Dartmouth Pathways Committee is to improve bicycle and pedestrian infrastructure in Dartmouth through advocacy and education, while supporting coordinated regional efforts to link existing and future pathways throughout the Southcoast, improving recreational opportunities and fostering a healthier community for residents and visitors. As of this plan writing, the Pathways Committee is active and recruiting members. The committee's goals include:

- Developing a long-term plan for bicycle and pedestrian infrastructure for the Town and seeking long term outside funding for these plans.
- Developing affordable short-term improvements for bicycle and pedestrian infrastructure in the Town that can be completed with local funds.
- Working with surrounding towns and regional organizations to develop a Southcoast pathway from Providence to Provincetown.
- Making the Dartmouth Pathway Committee part of the public hearing process so that improvements in bicycle and pedestrian infrastructure will be a consistent consideration in all development proposals and road improvements.

The Pathways Committee is currently working in conjunction with the South Coast Bikeway Alliance towards a 50-mile continuous system of bike paths (or multi-use paths) and bike lanes that will connect Rhode Island to Cape Cod. The Massachusetts communities included in the planned route are Swansea, Somerset, Fall River, Westport, Dartmouth, New Bedford, Fairhaven, Mattapoisett, Marion, and Wareham. The South Coast Bikeway Alliance is conducting a feasibility study with SRPEDD to close the gap between Fall River and New Bedford through Westport and Dartmouth, and has gathered public input on the best, most favorable route through town.

2. Dartmouth Board of Parks and Recreation and Parks and Recreation Departments

The Board of Parks and Recreation was formed to be a centralized group considering the needs of parks and recreation in Dartmouth.

Dartmouth Parks & Recreation (DPR) offers seasonal programs throughout the year for residents of every age. In addition to outdoor recreational opportunities available at Dartmouth's park and beach facilities, youth and adult "how to classes" and other programming are offered year-round at the Smith Neck Road Recreation Center. Weekend and evening classes are offered during the school year, while full day youth programs are offered at town playground and swim facilities during the summer. There are also several youth sports leagues throughout the year. Participation fees for programs allow DPR to provide these programs at no cost to the town.

Summer has the greatest offering of seasonal activities in Dartmouth. In addition to summer youth programs and beach access, residents can attend weekly concerts on Tuesday, Wednesday, and occasional Friday evenings at Apponagansett Park. Residents can purchase a seasonal sticker to access the town's beach and park facilities. Continued increases in annual sales of these stickers demonstrates the growing popularity of Dartmouth's outdoor recreational facilities and the need for additional resources to meet summer recreation demands. Ongoing improvements to ADA accessibility at outdoor parks and beaches are making these spaces more accessible for all, and the town is undertaking a needs study for a multigenerational community facility to continue to meet the growing demand for Dartmouth's recreational resources.

Table 26. Seasonal Offerings provided by Dartmouth Parks and Recreation

Season	Activity
Winter	<ul style="list-style-type: none">• Theater classes• Art and dance classes• Youth sports leagues
Spring	<ul style="list-style-type: none">• Theater classes• Art and dance classes• Youth sports leagues
Summer	<ul style="list-style-type: none">• Town beaches• Playground Centers• Sports lessons (golf, tennis, paddle sports)• Theater classes• Art and dance classes• Weekly Summer Concert Series at Apponagansett Park (Wednesday evenings)• Weekly Community Band performances at Apponagansett Park (Tuesday evenings)
Fall	<ul style="list-style-type: none">• Theater classes• Art and dance classes• Youth sports leagues

Dartmouth School System

The public school system provides a mixture of outdoor and indoor active recreation facilities for all children in Dartmouth. While each school-age child utilizes the recreation facilities in

traditional physical education classes, students also have the option to participate in school-sponsored sports programs outside of the traditional curriculum. A large participation rate leads to situations where the existing fields are over-used and oftentimes over-scheduled.

School system properties contain fields and facilities for basketball, tennis, track, soccer, field hockey, football, softball, and baseball. In addition to these facilities, the school department maintains ownership of two additional acres of land associated with its administration building and the alternative school both of which are in the southern portion of Dartmouth and include a small softball diamond and basketball court. The school facility details are as follows:

- **Andrew B. Cushman School** (elementary) includes 3.5 acres of land with an on-site parking lot. There are two open field areas, a full-size softball field that is used by the Dartmouth Girls Little League, a basketball court and a timberline playground set.
- **Joseph DeMello School** (elementary) includes 49 acres of total land, much of which is densely wooded. The property abuts the western boundary of Jones Park and has potential for connection with that facility and the adjoining Council on Aging center. DeMello also includes open field area and a softball area.
- **George H. Potter School** (elementary) includes 11.5 acres of land with parking. Potter School, like the other elementary schools, maintains a playground facility, open fields and a baseball field.
- **James M. Quinn School and the adjoining Dartmouth Middle School** contain 63 acres of land. This figure includes the stadium, a number of practice fields for athletic teams and the High School Band, a full-size outdoor track, six tennis courts, 3 multi-use fields, a full-size baseball diamond and two softball diamonds.
- **Dartmouth High School** is adjacent to the Dartmouth Youth Soccer Association fields. Recreational facilities at the high school consist of gymnasium with indoor track and outdoor football and baseball fields (practice only). The Dartmouth High School Athletic Program offers 25 sports, with additional intramural offerings.

Private / Non-Profit Entities

1. Dartmouth Youth Athletic Association

The Dartmouth Youth Athletic Association (DYAA) was formed and incorporated in 1955 when a group of individuals decided to form a Youth Baseball League. Over time, it was expanded to also include basketball. The DYAA sees itself as an organization that provides opportunities for the youth of Dartmouth to be involved with athletics. Every youth who signs up is placed on a team and plays every game. The Association teaches sportsmanship, leadership, and valuable cooperation skills. The Crapo Fields on Slocum/Russells Mills Road is the only property currently held by the DYAA. The fields at Gidley, Potter and DeMello schools are also used by the DYAA but are considered inadequate. Arrangements for field use are made through verbal commitments on an as needed basis and the DYAA cooperates with other groups interested in using these fields while retaining first rights to use them.

In the 2007 Master Plan, a growth of participants prompted a recommendation for additional fields. DYAA estimated that it needed 5 new little league fields and 2 new pony league fields to adequately run its programs. DYAA has been interested in linking town owned land with Crapo

field by acquiring an abutting farm. A re-evaluation of this continued need and a strategy for addressing it continues to be recommended in this Master Plan.

2. Dartmouth Girls Athletic League

The Dartmouth Girls Athletic League (DGAL) is a non-profit organization intended for the enjoyment and participation of young women who are residents of Dartmouth and are in the grade levels of kindergarten through twelfth grade. Depending on availability, DGAL welcomes young women from the surrounding towns to participate in their softball, basketball, and field hockey programs. DGAL's mission is to promote women's sports in town by developing good players, promoting fun and team spirit, and advocating and teaching good sportsmanship to all players, coaches, parents, and fans. DGAL primarily uses fields at the elementary schools, Bush Street, Cushman, DeMello, Dartmouth Friends Academy, Dartmouth Middle School, and Memorial Stadium.

3. Burgo Basketball Association / Joseph Burgo Memorial Basketball Complex.

In 2002, The Burgo Basketball Association built a new indoor basketball facility on Slocum Road. The facility provides basketball activities to area youth aged 8 and older. The Complex is a regional facility and serves the entire Southcoast, attracting players from New Bedford, Dartmouth, Fairhaven, Wareham, Freetown, Rhode Island and as far away as Connecticut.

4. Dartmouth Youth Soccer Association

The Dartmouth Youth Soccer Association (DYSA) was formed as a way of bringing together the youth of Dartmouth for organized team soccer play in a schedule that is broken-up into a spring and fall program and a summer camp. This is one of the most active youth-based recreation programs in Dartmouth primarily based at the fields on Russells Mills Road and at the University of Massachusetts Dartmouth. The Russells Mills fields are on a 40-acre site owned by the Parks Department with a lease to DYSA. The fields about the Dartmouth High School. DYSA maintains the fields at a high level.

5. Dartmouth Youth Football – Cheer League

The Dartmouth Youth Football League (DYFL) was formed in 2005. The League currently practices on the Dartmouth Middle School fields and the cheerleaders use the DMS gym every October. The League uses Memorial Stadium for all home games. DYFL has been doing maintenance work to improve their borrowed facilities including maintaining the concession stand and stadium stands, fertilizing, watering, and lining the fields, and other general improvements.

There are issues with their current locations including no bathrooms at practice, insufficient lighting outdoors at practice, cost to use the DMS gym for cheerleading, and storage issues. DYFL would like to pursue their own facility because of issues with using the school's properties. A centralized athletic complex for DYFL would ideally include a football game field, practice fields, a large indoor space for the cheerleaders and a storage space for equipment.

6. The Dartmouth Youth Lacrosse

The Dartmouth Youth Lacrosse Association (DLAX)'s mission is to provide a fun, educational, and safe environment for girls and boys in Dartmouth grades 3 through 8 to learn the sport of lacrosse. DLAX does not keep standings, has no league championship or playoffs, and plays all

children as equally as possible. All practices and games are at Friends Academy on Tucker Road and at Jones Park. Their needs are to have permanent fields to practice and hold games.

7. University of Massachusetts Dartmouth

According to Chancellor Jean McCormack, “the University continues to see itself as a public university and institution; to that end it wishes to continue offering its campus as a resource” to Dartmouth residents “for both educational and athletic programs.” The campus continues its tradition of welcoming residents who have used its “ring road” for jogging, walking, rollerblading, and the like. These activities, along with the public use of its tennis courts, are encouraged to the extent that they do not interfere with the organized University programs.

8. Dartmouth YMCA

The YMCA Dartmouth, a satellite location of the YMCA of Greater New Bedford, opened in 2000 and is housed on the site of the former Children's Museum on Gulf Road. The facility includes an outdoor pool, a summer camp called “Camp Metacomet” and environmental education and recreational classes. The site offers walking and hiking trails. The YMCA also advances public health and well-being through other programs. During the COVID-19 pandemic, YMCA Southcoast partnered with Greater Boston Food Bank to launch the Full Plate Project at five participating Y branches, including Dartmouth, to address the growing lack of access to healthy, affordable food during economic struggles. The project distributed one million pounds of food in 2021.

Open Space and Natural Resource Interests

There are a variety of public and civic-minded non-profit organizations whose mission involves the protection and enhancement of Dartmouth's open space lands.

Town of Dartmouth

1. Dartmouth Conservation Commission

In Massachusetts, a Conservation Commission is the primary governmental agency charged with the acquisition and protection of open space. Massachusetts General Law (G. L. Chapter 40 §8C) and Article 97 of the Massachusetts Constitution give Conservation Commissions the ability to purchase properties or receive properties as gifts to be placed in permanent protection as passive recreational open space.

The Dartmouth Conservation Commission was one of the earliest Commissions in Massachusetts. From its inception in 1961 through 1972, the Commission's time was spent analyzing open space, prioritizing open space acquisition, coordinating open space activities with other governmental and non-governmental agencies and performing other tasks related to the protection and enjoyment of open space. In 1972 the Conservation Commission was also assigned the task of administering the Massachusetts Wetlands Protection Act (G. L. Chapter 131 §40).

In 2011 and 2014 the Conservation Commission conducted a review of every deed for property thought to be in control of the Commission. Where necessary, a corrective deed was recorded at the Registry of Deeds. Efforts to ensure the proper legal permanent protection for all properties controlled by the Conservation Commission continue to this day.

2. Dartmouth Agricultural Commission

The Dartmouth Agricultural Commission was created in 1980 in response to the Town Growth Management Plan and the struggle to promote farm viability in a period of development pressure and high real estate values. The Agricultural Commission facilitates and encourages the pursuit of agriculture in Dartmouth and promotes agricultural-based economic opportunities in town. Their mission is to preserve, revitalize and sustain the Dartmouth Agricultural Industry and its lands; encourage the pursuit of agriculture in Dartmouth; and promote agricultural-based economic opportunities.

3. Dartmouth Agricultural Preservation Trust Council

The DAPTC was established in 1998 by a vote at the Fall Town Meeting. This action also carried an appropriation of \$2.75 million to establish a fund for the purpose of preserving existing productive agricultural lands and supporting and revitalizing the Dartmouth agricultural industry. The Council is made up of one representative from each of the following: the Agricultural Commission; Planning Board; Select Board; Conservation Commission; Finance Committee; Capital Improvement Committee; the Dartmouth Natural Resource Trust (DNRT); and two citizens-at-large. The DAPTC manages the fund and has preserved over 500 acres of farmland to date, but funds are running low. The town may be at a point of needing to replenish the trust.

4. Harbor Management Plan Implementation Committee (HMPIC)

The 2019 Padanaram Harbor Management Plan (PHMP) was adopted after an extensive public process. The PHMP includes recommendations to address known issues and advance opportunities to improve the upper and lower harbor and its adjacent shores, making it an important and relevant document for town open space and recreation considerations. After plan adoption, the Harbor Management Plan Implementation Committee (HMPIC), was appointed by the Select Board in February 2021 to address and facilitate the implementation of the PHMP.

Private / Non-Profit Groups

1. Dartmouth Natural Resources Trust

Dartmouth Natural Resources Trust (DNRT) is a member-supported non-profit land trust founded in 1971 to preserve and protect wildlife habitats, farmlands, historic sites, and open spaces of Dartmouth through land acquisition, public awareness, and responsible land stewardship for present and future generations. Bolstered by extraordinary support from its 1,330 members, DNRT has protected over 5,500 acres in Dartmouth since its inception 50 years ago. By setting aside scenic lands, productive farms, natural woodlands, stream corridors, and coastal habitat, DNRT has worked hard to protect the natural beauty and productive lands that characterize Dartmouth.

DNRT has been able to advance its mission by forging partnerships with other conservation entities. Partnerships with organizations like The Nature Conservancy, the Massachusetts Audubon Society, the Buzzards Bay Project, the Buzzards Bay Coalition, the Department of Environmental Management, the Bay Lands Center and the MA Executive Office of Energy and Environmental Affairs have helped to protect thousands of acres of open space.

The Slocums River Conservation Project was a prime example of how successful partnerships can effectively preserve open space. DNRT worked with The Trustees of Reservations, the MA

Agricultural Preservation Restriction Program, the MA Division of Fisheries and Wildlife, the Town of Dartmouth, and the Architectural Heritage Foundation to protect nearly 1,100 acres within the Slocums River watershed. The purchase of the 116-acre Island View Farm in January 1999, the 641-acre Dartmoor Farm in January 2000 and the 300-acre Destruction Brook Woods property in November 2000 were outstanding accomplishments for the effort to preserve open space in Dartmouth. From 1996 – 2001, DNRT was able to protect a total of 1,400 acres of permanently protected and sustainable farmland, woodlands complete with walking and equestrian trails, as well as vitally important river frontage on the Slocums, Shingle Island and Little Rivers. Today, DNRT owns 40 reserves with over 40 miles of trails.

DNRT has five full time staff and additional interns, working hard to protect even more open space and make DNRT Open Space Reserves more accessible to the public. The land trust has been headquartered at the DNRT Center at Helfand Farm, located at 318 Chase Road, since 2016. DNRT has been a leader of environmental and open space protection in the Town of Dartmouth for many years and will continue its mission for years to come.

2. Massachusetts Audubon Society

Massachusetts Audubon Society (MAS) is the largest conservation organization in New England, concentrating its efforts on protecting the nature of Massachusetts for people and wildlife. The Society protects over 29,000 acres of conservation land, conducts nature education programs for 200,000 children annually, and advocates for sound environmental policies. Across the state, MAS operates 41 wildlife sanctuaries that are open to the public and serve as a base for conservation, education, and advocacy efforts. MAS has been diligently working with the United States Fish and Wildlife Service and DNRT in an ongoing effort to protect as much of the Allen's Pond watershed as possible. MAS consistently applies for and receives grant funding to improve the Allen's Pond sanctuary.

3. The Trustees of Reservations

The Trustees was founded in 1891 by a small group of open space visionaries led by landscape architect Charles Eliot, a protégé of Frederick Law Olmsted. Witnessing the dramatic loss to development of large amounts of open space in the Boston metropolitan area, this group successfully campaigned for the establishment of what became the first private, statewide conservation and preservation organization in the nation. The Trustees is a nonprofit, 501C3 organization formed to preserve land for scenic, historic, and ecological value in Massachusetts and to protect special places across the state. The Trustees owns and cares for 120 reservations totaling more than 47,000 acres of land, was instrumental preserving 1,100 acres within the Slocums River watershed, and joint manages the Slocums River Reserve and the Cornell Farm site with DNRT.

4. The Katharine Nordell Lloyd Center for Environmental Studies

The Lloyd Center is a not-for-profit education and research organization located in South Dartmouth whose mission is to help create the next generation of environmental stewards through education and research. The Center provides educational programs to students and their parents about our unique and fragile coastal environments and our special responsibility to them. The Center also promotes and conducts research on rare and endangered species and habitats, biodiversity issues, and estuarine environments in Southeastern New England. The

Center and its work commenced in 1978 when Karen Lloyd donated the original building and 55 shorefront acres as a living memorial to her mother for whom the Center is named.

5. The Buzzards Bay Coalition

The Buzzards Bay Coalition (BBC) is a membership-supported non-profit organization dedicated to the restoration, protection and sustainable use and enjoyment of our irreplaceable Bay and its watershed. The Coalition works to improve the health of the Bay ecosystem for all through education, conservation, research, and advocacy.

Founded in 1987, The Coalition is supported by more than 10,000 members. Active programs at BBC include BayWatchers, a Citizen's water quality monitoring program; pursuing water quality protection from nitrogen pollution, oil spills, toxic pollution, and bacterial contamination; and pursuing land-based watershed protection through land conservation, rivers and streams restoration, and nitrogen-minimizing cranberry production practices.

VI. COMMUNITY VISION

A. Description of Public Visioning Process

The OSRP visioning process began with the efforts of the Open Space and Recreation Plan Steering Committee and SRPEDD, the project consultant, considering potential options for community-wide engagement and support. The OSRP Steering Committee did the initial work of examining the previous OSRP goals, objectives, and action items to determine what had been complete, what was incomplete and still relevant, and what was incomplete but unlikely to still have relevance given changed circumstances in town.

Building on this initial review of previous plan goals and consideration of various public engagement approaches, the Steering Committee determined that the goal of public engagement in preparing the OSRP was to understand resident usage and enjoyment of open space and recreation lands and facilities, and desired improvements for the future. To maximize participation, the Town of Dartmouth and SRPEDD facilitated two kinds of engagement opportunities: in-person community workshops and an online survey.

Survey questions were meant to gauge the public's satisfaction with the current state of conservation, open space, and recreation lands, facilities, programs and policies within the town, as well as to help chart a course for future improvements. The resulting 29 question survey was posted on the town website and the SRPEDD website, advertised by members of the Open Space and Recreation Committee, and was available from March 16, 2022 through July, 31, 2022. Limited paper copies were also available at the Dartmouth Senior Center/Council on Aging and the Town Hall. A total of 715 respondents engaged with the survey, but a core group of approximately 420 respondents completed the survey fully, skipping few, if any, questions.

The project team also held four in-person public workshops throughout the OSRP planning process. The first three workshops were identical; participants went through the same prioritization exercise at each workshop. Holding three sessions of the public workshop enabled the project team to distribute them throughout Dartmouth (the town is of substantial size at 64 square miles in area). The variety of days of the week and times furthered made greater opportunity for participants to select a meeting time and location combination that best enabled their attendance. These meetings were held in April, May and June of 2022, as detailed in Section 2. The final meeting was held in January 2023, as a "meet your plan" public meeting to verify once more that the draft goals, objectives and action items developed throughout the planning process accurately reflected the opinions voiced during the survey an initial in-person public workshop series.

At each of the three initial meeting iterations, SRPEDD followed a consistent public engagement process. The 2023 OSRP was developed in the context of numerous ongoing projects and planning work in the Town of Dartmouth, including the 2023 Master Plan (particularly public engagement on the open space, recreation, and natural and cultural resources chapters); the town's 2019-2020 Municipal Vulnerability Preparedness (MVP) planning process; and the town's 2019 Padanaram Harbor Management Plan. Thus the OSRP presented a unique opportunity to integrate goals, ideas, objectives, and action items from all of these existing planning materials,

and to specifically engage the public on their priorities coming out of this recent work related to open space and recreation community assets.

Workshop participants were provided with a list of action items generated in these plans in the areas of conservation, recreation, and water access, and were asked to work in a small, facilitated group to categorize these actions as short-term priorities versus items that could happen with flexible timing, and as either higher or lower priority. Blank sticky notes were also provided to record new ideas and prioritize these into the matrix. The pre-populated list of recommendations pulled from other plans served as a jumping off point, soliciting some feedback on the urgency of existing recommendations, but also as a means of sparking conversation that the small group facilitators encouraged with follow-up questions and attempts to have group participants refine, revamp, edit, or revise these general ideas, with that conversation also yielding new insights and ideas. All in all, six small groups conducted this exercise across the three workshops.

A full OSRP Public Engagement Report was prepared to synthesize the results of the survey and in-person workshops, included in Appendix A. After the preparation of this report, the OSRP Steering Committee met to discuss the results and the implications for OSRP goals, objectives, and action items.

B. Statement of Open Space and Recreation Goals

In 2023, the stewardship of existing assets, coupled with the challenges of developing new opportunities for the public, makes establishing sound conservation planning strategies a municipal priority. The data gathering, public engagement, and OSRP Steering Committee guidance process described in Section 6A above resulted in the articulation of five (5) goals that describe an ideal version of Dartmouth's open space and recreation system. These goals fit community needs and honor the town's unique characteristics and landscapes.

GOAL 1: Provide decision makers, including town residents and voters, with effective policies and tools to protect and enhance those qualities that support open space and recreational activities within the town.

GOAL 2: Conserve and protect the unique coastal, agricultural, rural, and scenic qualities that give Dartmouth its characteristic landscape.

GOAL 3: Preserve, protect, and maintain the quality of the Dartmouth's natural resources.

GOAL 4: Provide a range of active and passive recreational facilities and programs that address the needs of all Dartmouth residents.

GOAL 5: Manage and channel growth in a manner that retains the character of the town and its natural, cultural, and historical assets.

VII. ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs

Dartmouth has several significant resource protection needs. Public support behind addressing particular resource protection needs was brought to light by responses to the community survey and from participant feedback at in-person workshops. The following section summarizes these identified needs.

Dartmouth residents love many things about their town. Chief among these are the coast and sea, open space and access to nature, rural and small-town feel, farmland, scenic beauty, the sense of community, and convenience. Eighty eight percent (88%) of respondents support additional land conservation in Dartmouth, and residents had definitive ideas about what kind of land should be preserved. When asked to rank their priorities, residents thought that Dartmouth should focus on preserving lands that provide or protect (1) water supply protection; (2) forests/woodlands; (3) wildlife habitat; (4) farmlands; (5) access to the waterfront and water-based recreation; (6) opportunities for passive recreation; (7) opportunities to mitigate climate change impacts; and (7) wetlands. In some cases, particular tracts of land might provide multiple benefits, a criterion itself that could be factored in to prioritizing land preservation opportunities.

Overall, Dartmouth residents are most concerned about the protection of drinking water, the reduction of pollution into waterbodies (from several sources, including residences, septic systems, agriculture, and roadway runoff), and threats from the loss of agricultural land and the related sense of rural qualities.

Preserve Lands that support Water Quality and Abundance for Drinking Water

Dartmouth relies on both public and private drinking water infrastructure to service the needs of all town residents. With increasing drought cycles and depleted aquifers, it is becoming more and more urgent to safeguard all water supply systems. Section 5 contains an image of high yield aquifers in Town, and the preserved and unpreserved lands that encompass them for reference against future preservation priorities.

Preserve Forests and Wildlife Habitat

In-person feedback supported the survey's second highest focus on preserving forests and woodlands, prioritizing the development of Forest Management Plans for woodland conservation properties in town as a high priority over a flexible timeline. Participants saw a clear link between Forestry Management Plan and resilience and noted that resilient forests have a rotation of classes that can thrive over time and species diversity. There was acknowledgement by multiple groups that the town may have a capacity issue in this realm – right now there is just one staff member for the Conservation Commission, and the town has so many properties, limiting capacity to address them all at once. These plans could be a vehicle for regular forest maintenance, and for planning clean up after intense weather events. Some specific priority properties mentioned were Town Forest, behind DeMello, and the interchurch land at Noquchoke (off Highland).

Preserve Lands that support Farming and Agriculture

The most specific suggestions for new conservation areas were associated with particular farms, with priorities for preservation including: the Tucker Road/Bakersville Road corridor; Old Fall River Road, Tavares Farm, Zuber Farm (Old Fall River Road); Vincent Farm (Rock O'Dundee Road); and John George Farm. Tavares and Vincent are in South Dartmouth and John George and Zubar are in North Dartmouth, providing diverse geographic distribution. Farmland plays a critical role in local food security and community resilience, and supporting farms is a chosen way of life for many residents. Locally grown produce is very important to the Dartmouth community, with positive response rates above 90% for the importance of local produce, the ongoing purchase of local produce, and a willingness to pay a premium for locally grown produce. Residents identified the conservation action item to continue to support locally grown produce including locations to sell this produce as a high priority, immediate need. While Dartmouth does have farmers markets in place, participants thought that access would be improved if they were more spread out through town. The Agricultural Commission can also help by updating the town's farm brochure listings.

Preserve Lands that support Water Quality for Recreation

Similar to farmland, the action item to support the acquisition and / or land use restriction on major parcels within the watershed of Padanaram Harbor, especially those near the shoreline, was identified as a high priority action that is likely best pursued continually over time. Depending on the location and form of preservation, this action could also add to the resilience of the Harbor area.

Preserve Lands that Mitigate Climate Change / Wetlands

Wetland preservation was also particularly important to workshop participants, who supported the action item to prioritize protection of lands behind salt marshes to allow marsh migration landward with rising seas as a high priority, immediate need. There was some difference in baseline understanding about where the town is with this task, with some participants portraying the town as in the initial stages of this work, with a need to take action to assess significant salt marshes for ecological health and potential restoration needs, with an eye toward climate change and resilience, specifically including marsh areas at the Cowyards, Little River, Apponagansett Bay, and Allens Pond. This action would identify certain locations and help to develop a list and pick the parcels that can facilitate marsh migration. Others commented that this work is already in progress through a current grant. It is possible that the progress of these projects should be described to the community so that there is wider awareness.

Respondents were most in favor of the town supporting the use of zoning mechanisms such as OSRD and cluster bylaws that create open space dedications and set-asides. The town should take a more cautious approach to tools that involve raising taxes and town purchase of land – these measures had support, but respondents tend to want to use these measures with limitations. Potential reuse of the old police station came up in the open-ended responses, mainly framed as a desire to explore recreation potential at existing town property before pursuing new projects. For this question we acknowledge that a “do not pursue” option should have been provided.

B. Summary of Community Needs

State SCORP

The Statewide Comprehensive Outdoor Recreation Plan (SCORP), Massachusetts Outdoor 2017, is a five-year plan developed by the Commonwealth's Executive Office of Energy and Environmental Affairs (EEA). The plan is required for state participation in the federal Land and Water Conservation Fund (LWCF) grants programs. The SCORP also provides an overview of the recreational preferences of the citizens of each geographic region of the Commonwealth as determined through a public participation and outreach process. The profile of recreational use afforded by the SCORP also provides municipalities with a planning tool for addressing the future needs and uses of our outdoor recreational resources.

The SCORP's summary of information, collected at both public events and through other methods of survey (online and telephone), showed that people participate in outdoor activities primarily for physical fitness, but also to be close to nature. Despite having access to nearby facilities, lack of time (55%) was the number one reason that people gave for not using these facilities more often. While recreational programs were also important to responders, 88.2% that it was either somewhat or very important to have more programs for those aged 4 to 12 years, and 91.2% responded similarly regarding programs for teens.

Survey data also indicates that: water based activities, such as boating – canoe, kayak, power boat; fishing; swimming – at beaches, lakes, rivers, pools, paddle boarding, tubing; and, trail-based recreation, such as hiking, biking (on and off-road), cross-country skiing, walking/jogging on trails, and mountain biking, provide the most popular recreational outlets for families in the regions. The SCORP also revealed that the types of projects that respondents would like to see funded in the future are: trails (hiking, biking, paved walkways, trails for people with disabilities); playgrounds (for ages 2-5, for people with disabilities, for ages 6-12, and for ages 6 months – 2 years), and; water (swimming pool, canoe/kayak access, and fishing areas).

Finally, it should also be noted that the SCORP also called out the need to recognize and address the needs of underserved populations (citizens with disabilities, teens, and senior citizens) and areas of a community (areas that are lacking facilities, environmental justice neighborhoods) when planning for and designing parks and conservation areas.

Results of the Dartmouth OSRP Survey

When asked what their top three open space and recreation issues were for Town, respondents approached this question with both general themes and specific facilities in mind. Related to general themes, respondents want to maintain and expand access to open space and recreational opportunities, particularly in North Dartmouth, and along Dartmouth's waterfront. Respondents also commonly highly value protecting open space as a means of preserving the town's current rural character, expanding the availability of team and organized sports facilities, and protecting agricultural lands and practices. For specific facilities, responses focused on bike-specific paths, a multi-purpose recreational facility with indoor space for use during the winter and inclement weather, multi-purpose trails throughout town, and more swimming options, including indoor and/or outdoor pools.

Right now, the top activities that residents take part in within Dartmouth are walking / hiking trails, wildlife viewing/birdwatching, swimming, biking, agrotourism, cultural tourism, activities on the water, and use of playgrounds / picnicking areas. Dartmouth residents tend to go elsewhere to participate in softball. In future, people would like to be able to engage in more walking and hiking in town, more swimming, more biking, suggesting the continued maintenance or addition of new trails and/or facilities. They would also like additional opportunities for softball and field hockey in town.

Residents are generally knowledgeable about the major recreational offerings in town, but there were some significant differences for certain facilities in the number of people who are aware of them, and the number of people who use them. The least difference between awareness and usage rates were for Dartmouth's beaches and DNRT properties, suggesting that people who know about these areas tend to use and enjoy them.

Water Based Recreation

When it comes to water-based recreation activities, according to respondents, Dartmouth needs new or more swimming pools, canoeing/kayaking opportunities, places to fish and shellfish, moorings, and a small boat marina. The town should focus on improving the existing public beaches and motorized boat ramps. Respondents were generally satisfied with sailing facilities. Additional activities to consider are a splash pad (perhaps in north Dartmouth), providing boat storage opportunities, and organizing swimming lessons at town beaches.

In-person workshop participants also supported increasing opportunities for fishing, particularly the action to continue to pursue efforts to develop a fishing pier extending off the causeway. There was also a related idea of installing floating piers parallel to / below the causeways for fishing. This action would help to address controversy and close votes where the town has been allowing fishing off of the causeway, which does present some conflicts with cyclists and pedestrians. It would be very important to engage the fishing community in Dartmouth to plan the design of a structure like this, given their knowledge of what environments and infrastructure make for good fishing. Shellfishing may be more difficult to expand, as the limiting factor is water quality, but connecting with Mashpee Shellfish for ideas may be helpful.

Another high priority action item for in-person participants was to determine the feasibility of creating additional boating facilities and secure in-water and landside storage options for watercraft and kayaks. This action has recently been initiated, with an ongoing application for approval and permits and funding obtained to construct an extension of the pier at Dias Landing. Additional facilities for watercraft will be created.

There was also a clear desire for additional connections with the Paskamanset River, along with more kayak and canoe put-ins generally. An action to increase the number and awareness of Paskamanset River access locations was classified as a high priority immediate need. Initial ideas for put ins at the Friends Academy and New Police Station are not feasible, as these are sensitive public spaces that do not typically encourage widespread public access to their grounds. Participants stated that the Paski is beautiful, and it would be great to increase access for paddlers. A study of alternative put-in locations is required. To further support the Paskamanset,

regular volunteer cleanings would make recreation more pleasant, as would the removal of two existing dams.

Finally, the number one high priority, immediate need item for participants was the develop a descriptive inventory of existing public water recreation access points, ways or sites. The town could consider the creation of a Recreational Waters Access Plan. DNRT has similar products that could act as a model.

Round Hill Beach is a favorite and widely-used water access point. About an equal number of people have and have not recreated at Demarest Lloyd. Slightly more people have not recreated at Dias Landing / Apponagansett Beach than people who have. Most people have not recreated on the Paskamanset River. Each access point has a particular barrier to usage that was most frequently cited: parking at Round Hill Beach, water quality at Dias Landing / Apponagansett Beach, the condition of the beach at Demarest Lloyd State Park, and a lack of awareness of recreational opportunities for the Paskamanset River. In-person participants agreed that there are parking and circulation issues at and around Round Hill Beach. Additional parking, if possible, is a high priority immediate need. Expanded parking, however, might directly conflict with marsh protection, another high priority action. Round Hill Beach Road also routinely floods. Repaving the road is not necessarily feasible, but stormwater improvements along the right-of-way might assist in mitigating the flooding issue. Additional parking was also desired at Dias Landing and Apponagansett Park (in process with Dias Landing pier project).

Land Based Recreation

According to respondents, Dartmouth needs new or more ice-skating facilities, pickleball courts, multi-use fields, tennis courts, lacrosse fields, field hockey fields, and basketball courts. The town should focus on improving the existing baseball fields (especially the High School baseball facility), Quinn field (drainage issues), and the Middle School practice football field (lighting needed). Respondents were generally satisfied with soccer, softball, and youth football facilities. Expanded multi-purpose field options would allow for some of the additional write-in activities and themes to flourish, such as achieving more space for youth sports, more space for adult sports leagues, and spaces that are separate and apart from schools, so that they can be used during the day (when school being in session prevents the use of school-based facilities). Outdoor and indoor multi-purpose spaces are desired.

In-person participants also identified the need to evaluate practical options for a multi-purpose, indoor athletic complex as a high priority, immediate need. The town did conduct a feasibility for this type of facility, so this action item should now emphasize the completion of construction and implementation of a facility that is designed for many kinds of uses, including indoor field hockey, soccer, lacrosse fields, and similar. Participants pointed out that having a multi-use facility is also beneficial in that it could also play a role in preserving land, avoiding the development of greenfields for single-use recreational activities. They also supported as an immediate high priority the installation of pickleball courts, and fitness trails for adults. Pickleball players stressed that having a court is never singular – you need 4 or 8 courts. The town has made some progress, having installed a court at Smith Neck School and North Park Courts, but additional courts are needed, maybe at the crapo fields on Slocum Road. Where UMass

Dartmouth has specialized recreational facilities, such as a swimming pool, the town should act to negotiate greater use for town residents, where possible.

For lower impact, individual, and passive recreational opportunities, residents expressed that more than any other individualized activity, Dartmouth absolutely needs new or more paved dedicated bike lanes. In-person workshop participants strongly seconded the need for additional bicycling facilities, lanes, and trails in town. As a high priority need that can build over time, the town needs dedicated bike lanes, and should explore bike path opportunities like connections to South Coast Bikeway and development of the Heritage Trail. Unpaved paper streets would be used for connections between neighborhoods. A recent study examined different route configurations for connection with the South Coast Bikeway. This report could be the starting point to develop a fuller Town Bike Trail Plan, which would explore opportunities for both on- and off-road opportunities, and the different needs of those who would be biking to access daily goods and services, and those users who are focused on a more recreation-based experience, exploring the purposes behind bike trips throughout town and the needs of users.

In order of most responses in the “need new” category with a count of 100 or higher, Dartmouth would also benefit from additional areas for outdoor education, hiking trails, picnic areas, areas for nature study (including birdwatching), mountain biking, places to run/jog, outdoor fitness trail, a skate part, and campgrounds. Respondents were generally satisfied with existing hiking trails, equestrian trails, playgrounds, hunting access, and golf courses. Write-in responses also listed additional activities for consideration, including a community garden, additional places for dog walking, and a place for dirt bikes.

Most people do not have access to a playground within walking distance of their home, but it is unclear whether this status quo is an issue for residents in rural/suburban contexts where places to play may be available at home. In a departure from the survey results, in-person participants did explore and support the need for additional playgrounds, especially in denser neighborhoods currently lacking these facilities. While high priority, this action was classified as flexible, as an item the town could pursue over time as money is available so that facilities are sited where they are most needed. There is a “huge hole” and lack of a playground in North Dartmouth. There may also be opportunity on Russells Mills Road or at the Old Police Station. The overall priority might still lie in keeping existing playgrounds well-maintained. Perhaps the town could improve one playground a year. Cornell Pond, for example could use playground equipment as right now it only has a swing.

Special User Groups

The town has the most work to do in terms of addressing the recreational needs of teenagers. This age cohort was the only group where more respondents reported a low satisfaction with age-appropriate recreational offerings than those who reported at least a moderate level of satisfaction. Workshop participants suggested a few actions to pursue that could provide additional recreational options to teens. The skate park / pump track is the most intensive example. Other opportunities could be tied to water-based recreation, such as boating courses for youth and more educational programs on fishing for teens in fishing. Fishing events for teens could include more advanced topics like how to filet and shuck – these activities are part of the town’s cultural heritage and would like to see these activities continue.

In person, there was support for a skate park / bicycle pump track as a high priority, as an action with the potential to get kids and teens outside, doing something they really enjoy. Right now, they have to go to New Bedford or Fairhaven. A pump track is more specialized, but could complement a skate park, located around the outside of it (though skate parks are usually hard surface, whereas a pump track has a dirt surface. When the basketball courts next to Crapo were being built, there was a carve-out for a skate park, but it was not built. Contemporary ideas for skate park locations could be at the Old Police Station, or at a location on Route 6 (though these may be difficult to access from surrounding roads).

In 2020, the total population was 34,062. Dartmouth has a population of 6,888 people (or 20.2%) who are over 65 years old. Almost half of the 65 years older and older people (3,111) are 75 years or older. The median age in 2020 was 40.6 years old. Twenty percent of Dartmouth's population speak another language other than English. The majority of those people speak English very well with just a small percentage of those people did not speak very well. Dartmouth has a population of 4,188 with a disability. People with an ambulatory disability make up 45.3% (or 1,897) of the people with a disability. 617 people living in Dartmouth have a vision disability.

The Town has prepared a self-evaluation and transition plan for its recreational facilities as required under the Americans with Disabilities Act (ADA). These plans are carried out through a municipally appointed ADA Coordinator. The Coordinator is responsible for working to bring all municipal services, infrastructure, and buildings into compliance with the Act. The ADA Coordinator is not responsible for privately owned facilities. All future recreation facilities should be designed with the needs of citizens with disabilities in mind, in terms of site access, physical use, and ability to view events and cultural/scenic landscapes.

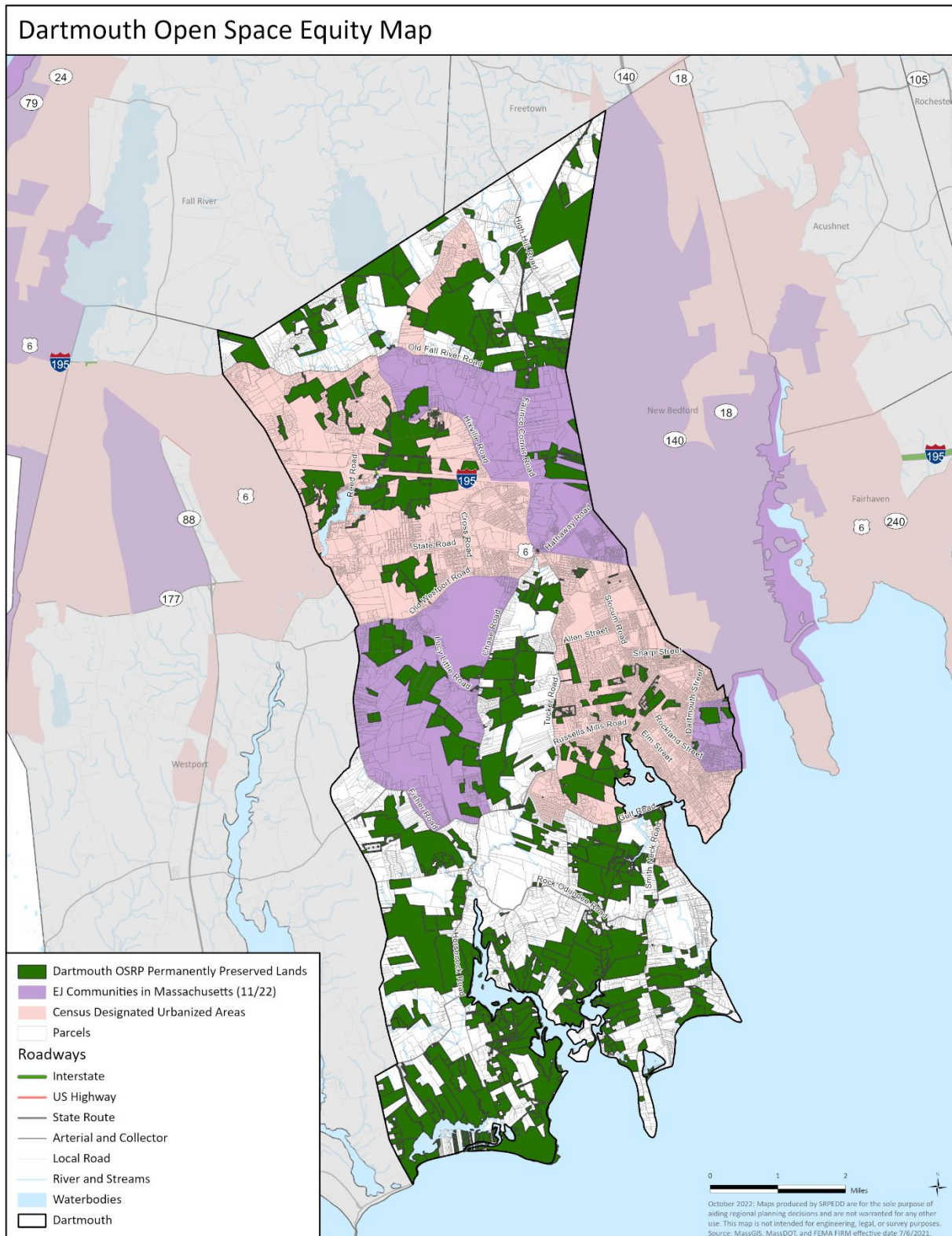
Recreation and the Transportation Network

Dartmouth's roads and sidewalks are being actively used by cyclists and pedestrians and should therefore be maintained and made safe for these types of uses. In-person workshop participants also stressed the need to construct a sidewalk along the water-side of Smith Neck Road extending the existing sidewalk at the causeway to the entrance to Bayview as a high priority. Participants stated that it is always nerve-wracking when cars/people pass each other here. One possible design is a shared use path on one side and a sidewalk on the other. There may be some push back from different constituencies, but this really is a safety issue. Overall, only about one quarter of respondents stated a need for more sidewalks on their street. Streets for which there was at least a margin of 2 respondents that wanted more sidewalks over those who do not include Reed Road, Prospect Street, Rock O'Dundee Road, Cross Road, Alpha Street, Bush Street, Collins Corner Road, Connecticut Avenue, Lexington Avenue, State Road.

C. Park and Open Space Equity

The OSRP team completed an OSRP Equity mapping analysis, the result of which is provided below. When layering the state's most recent Environmental Justice areas and the Census Designated Urbanized Area against the existing extent of the OSRP network, it is clear that there are gaps and limited access in northwest Dartmouth around Hixville Road, Faunce Corner Road, Hathaway Road, and Slocum Road.

Map 34. OSRP Equity Analysis Map



D. Management Needs, Potential Change of Use

Dartmouth has management needs for accomplishing the highest and best version of its open space and recreation network. Staffing capacity is one of the major limiting factors to the expansion of the OSR network. Additional staff are needed to maintain the database of lands owned by the town, with historical deed research a priority, on-going tasks. Staff are needed to maintain town-owned parkland, inclusive of creating and maintaining new trails and ensuring park cleanliness. It is likely that the town would need to hire to expand its capacity in these areas.

VIII. GOALS AND OBJECTIVES

As a result of the Open Space and Recreation Plan's inventory and analysis, survey results, Committee deliberations and public forums, the following goals, objectives, and strategies have been developed as a basis for policy decisions.

GOAL 1: Provide decision makers, including town residents and voters, with effective policies and tools to protect and enhance those qualities that support open space and recreational activities within the town.

OBJECTIVES:

5. Promote conservation, open space, cultural, historic, and recreation planning priorities in town decisions, actions, and plans where and when appropriate and practical.
6. Continue to make the Open Space and Recreation planning process open and accessible to the public and ensure that regular updates are provided on the implementation of the plan.
7. Take the actions needed and pursue the means necessary (administrative, fiscal, regulatory, partnerships, etc.), as feasible and practical, to accomplish the goals of this Plan.
8. Increase community awareness of and appreciation for the Town's cultural, historic, and natural resource assets.

GOAL 2: Conserve and protect the unique coastal, agricultural, rural, and scenic qualities that give Dartmouth its characteristic landscape.

OBJECTIVES:

5. Promote the practice of farming and the retention of agricultural land and business as an important local and regional economic engine.
6. Protect, preserve, and conserve Dartmouth's coast and coastal heritage.
7. Protect, preserve, and conserve Dartmouth's scenic coastal, open space, field, and forestland vistas.
8. Protect, preserve, and conserve the town's historical and cultural assets.

GOAL 3: Preserve, protect, and maintain the quality of Dartmouth's natural resources.

OBJECTIVES:

6. Protect the quality and quantity of the town's water supply, surface water, and groundwater resources.
7. Provide extra protection to the Town's most fragile and vulnerable natural resources.
8. Plan for and undertake the necessary physical/structural improvements to infrastructure and facilities that impact the quality of the Town's natural resources.

9. Prioritize the conservation of lands that have inherent climate resilience value.
10. Promote the preservation, retention, and quality of regionally significant natural resources.

GOAL 4: Provide a range of active and passive recreational facilities and programs that address the needs of all Dartmouth residents.

OBJECTIVES:

5. Increase and improve access for water-based recreation, including activities based in and around Dartmouth's coastal and inland waters.
6. Increase and improve access to open space holdings for active use and passive recreation and enjoyment.
7. Provide recreational programming that promotes opportunity for lifelong involvement and activity for people of all ages and abilities.
8. Develop new facilities, and upgrade or repurpose existing facilities, to enhance recreational use and opportunity.

GOAL 5: Manage and channel growth and infrastructure in a manner that retains the character of the town and its natural, cultural, and historical assets, and promotes recreation.

OBJECTIVES:

3. Consider the crossover needs of open space and recreation planning goals and objectives and the preservation of unique and sensitive environmental features and resources when drafting, recommending, and passing zoning code changes.
4. Promote a healthy and livable community that encourages multimodal transportation, including continuous improvements to the town's bikeway system.

IX. 2023-2030 SEVEN-YEAR ACTION PLAN

Dartmouth's Dynamic 15-Point Prioritized OSRP Action Plan

The following prioritized list is a living part of the Dartmouth Open Space and Recreation Plan. The Town has identified the top 15 priorities related to open space and recreation at the time of the Plan's adoption (March 2023). These 15 actions are drawn from the full list of action items, organized by goal and objective, below. As the Town accomplishes a priority action from this list, another recommendation from the OSRP's full list of action items will be added. This format will allow flexibility and consideration of changed context or needs as the town moves through the Plan's seven-year time horizon. Additional information for each action item, including potential funding sources and responsible parties, is found in the tables below.

1. Continue to advance the Open Space and Residential Design (OSRD) subdivision option as the preferred option for development. Consider what can be done to further incentivize the use of this development option. *[Action Item ID: 1.1d]*
2. Develop maps and information for open space and recreation tracts held by the town. Model a similar type and level of information as is provided in comparable resources from DNRT, MassAudubon, and Buzzards Bay Coalition, and other towns (Rochester's Conservation Commission website has materials that are a good example.) *[Action Item ID: 1.4a]*
3. Improve wayfinding signage at recreation and open space areas. Develop a clear, consistent sign type to be used across town to indicate public access. *[Action Item ID: 1.4b]*
4. Develop a list of Agricultural Preservation Restriction (APR) targets as a coordinated effort between the town, key boards and commissions such as the Planning Board and Agricultural Commission, and local preservation-oriented non-profits and reevaluate at least once annually. *[Action Item ID: 2.1a]*
5. Develop a Recreational Waters Access Plan to ensure both passive viewshed and active recreational access to Dartmouth's coastal (and inland) waters. *[Action Item ID: 2.2b]*
6. Create more opportunities to connect Dartmouth residents with the town's historical character. Specifically, develop a Public Service Announcement style program to run on DCTV that shows historical photographs of the town. *[Action Item ID: 2.4h]*
7. Pursue solutions, including stormwater retrofits, that will improve water quality in Buttonwood Brook including BBC findings from their ongoing site monitoring. *[Action Item ID: 3.1a]*
8. Create a plan to support salt marsh migration as these lands are submerged by sea level rise into tidal flats. *[Action Item ID: 3.2a]*
9. Develop Forest Management Plans for town-owned properties that assess wildfire and pest vulnerabilities, species diversity, regular maintenance, cleanup plans. Start with Town Forest and the Interchurch Land at Noquochoke. *[Action Item ID: 3.4a]*
10. Construct/create more places available for fishing & shellfishing, especially a solution that resolves user conflicts along the Causeway. Engage the fishing community in possible alternatives/solutions. *[Action Item ID: 4.1d]*

11. Establish an indoor multi-purpose sports facility that can be used in the winter and by different types of users (adult sport leagues, youth sport leagues). Implement the next steps after the town's recent feasibility study for this type of facility. [Action Item ID: 4.3b]
12. Provide more pickleball and tennis courts. [Action Item ID: 4.4c]
13. Explore a partnership with UMass Dartmouth to identify a location for a new ice rink in town. [Action Item ID: 4.4e]
14. Construct a sidewalk along Smith Neck Road, extending the existing sidewalk at the causeway to the entrance to Bayview. [Action Item ID: 5.3a]
15. Develop a comprehensive Town Bike Trail Plan to explore opportunities for both on- and off-road routes, and connections to regional trail networks. [Action Item ID: 5.3d]

GOAL 1: OSRP TOOLS AND POLICIES

Provide decision makers, including town residents and voters, with effective policies and tools to protect and enhance those qualities that support open space and recreational activities within the town.

OBJECTIVE 1: Promote conservation, open space, cultural, historic, and recreation planning priorities in town decisions, actions, and plans where and when appropriate and practical.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
1.1a	Provide a copy of this OSRP to all town departments, boards, committees, and commissions for reference.	Open Space and Recreation Plan Committee	staff and committee member time	2023
1.1b	Integrate the goals, objectives, and action items of this OSRP into other town planning documents (Master Plans, Hazard Mitigation Plans, Specific Area Plans, Capital Plans and similar)	Town Administrator and all town departments, planning project consultants	staff and committee member time	On-going 2023-2030
1.1c	Review progress made on Open Space and Recreation Plan Action Items at an inter-departmental meeting at least once a year.	Town Administrator and all town departments	staff and committee member time	On-going 2023-2030
1.1d	Continue to advance the Open Space and Residential Design (OSRD) subdivision option as the preferred option for development. Consider what can be done to further incentivize the use of this development option.	Planning Board and Planning Department	staff and committee member time	On-going 2023-2030

OBJECTIVE 2: Continue to make the Open Space and Recreation planning process open and accessible to the public and ensure that regular updates are provided on the implementation of the plan.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
1.2a	Put the Open Space Plan on the Town Website, with Action Plan related tasks noted as they are completed, to keep the public and planning partners informed. The Public Engagement Portal could support this activity.	Town Administrator and all town departments, DCTV, town website coordinator	staff and committee member time	On-going 2023-2030
1.2b	Include progress updates in the town's Annual Report.	Town Administrator and all town departments	staff and committee member time	On-going 2023-2030
1.2c	Make physical copies of the plan available at various town facilities.	Open Space and Recreation Plan Committee	staff and committee member time	2023

OBJECTIVE 3: Take the actions needed and pursue the means necessary (administrative, fiscal, regulatory, partnerships, etc.), as feasible and practical, to accomplish the goals of this Plan.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
1.3a	As needed and feasible, hire additional support staff in key departments related to open space and recreation planning to ensure that there is adequate staff capacity to manage and maintain these lands and facilities.	Town Administrator, town budgeting and finance agencies and committees, town meeting, and all town departments	Town budget	On-going 2023-2030, as needed
1.3b	Keep current with grant programs that have a role in supporting Open Space and Recreation Planning, such LAND, PARC, MDAR, MassTrails, Complete Streets, and MVP grants, among others.	All town departments, but especially the Conservation Commission, Economic Development and Planning, Recreation, and DPW	staff and committee member time	On-going 2023-2030

1.3c	Continue to use CPA funds toward advancing open space and recreation and historical preservation goals, especially where these funds could serve as local match to other grant programs.	CPC Committee	staff and committee member time	On-going 2023-2030
1.3d	Partner with state and regional entities to advance specific action items where appropriate (regional bike groups, environmental non-profits, state agencies, Regional Planning Agency, etc.)	Town Administrator and all town departments	staff and committee member time	On-going 2023-2030

OBJECTIVE 4: Increase community awareness of and appreciation for the Town's cultural, historic, and natural resource assets.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
1.4a	Develop maps and information for open space and recreation tracts held by the town. Model a similar type and level of information as is provided in comparable resources from DNRT, MassAudubon, and Buzzards Bay Coalition.	Conservation Commission, Planning Department, Parks and Recreation Departments, town GIS staff, support from non-profits	Staff/intern and committee member time	On-going 2023-2030
1.4b	Improve wayfinding signage at recreation and open space areas with consistent, clear signs that indicate public access.	Town Administration, Conservation Commission, Parks and Recreation Departments, Planning Department, town GIS staff, support from non-profits	Staff and committee member time, town budget	2023-2026; ongoing thereafter
1.4c	Keep department, committee, commission, and board websites up to date with resources and recent activities.	Town Administrator and all town departments, DCTV, town website coordinator	staff and committee member time	On-going 2023-2030

GOAL 2: PRESERVE UNIQUE COMMUNITY LANDSCAPES

Conserve and protect the unique coastal, agricultural, rural, and scenic qualities that give Dartmouth its characteristic landscape.

OBJECTIVE 1: Promote the practice of farming and the retention of agricultural land and business as an important local and regional economic engine.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
2.1a	Develop a list of Agricultural Preservation Restriction (APR) targets as a coordinated effort between the town and local preservation-oriented non-profits and reevaluate at least once annually.	Agricultural Commission, DNRT, Select Board, Conservation Commission, SEMAP, MDAR	staff and committee member time	On-going 2023-2030
2.1b	Continue to promote opportunities for farmers, their CSAs, and their farmstands by helping them navigate through local regulations, including maintaining Chapter 61A status.	Agricultural Commission, SEMAP	staff and committee member time	On-going 2023-2030
2.1c	Update the town's farm brochure listings at least every-other year.	Agricultural Commission, SEMAP, DCTV	staff and committee member time	On-going 2023-2030
2.1d	Continue to collaborate and streamline the process of notifying all relevant town boards and committees when a Chapter 61A property comes up for sale.	Town Assessor, Economic Development Department, Agricultural Commission	staff and committee member time	On-going 2023-2030

OBJECTIVE 2: Protect, preserve, and conserve Dartmouth's coast and coastal heritage.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
2.2a	Look for opportunities to acquire parcels for preservation within the watershed area of Padanaram Harbor, both for recreational and water quality/community resilience purposes.	Town Administrator, Conservation Commission, Padanaram Harbor Plan Implementation Committee, DNRT, BBC	staff and committee member time, non-profit conservation agencies, LAND Grant, MVP Grant (where lands improve resilience)	On-going 2023-2030

2.2b	Develop a Recreational Waters Access Plan to ensure both passive viewshed and active recreational access to Dartmouth's coastal (and inland) waters.	Conservation Commission, Planning Board, consultants	staff and committee member time, town budget	2025
2.2c	Expand recreational programming related to the water, such as hosting fishing events for teens that explore more advanced topics like how to fillet and shuck catches.	Recreation Department, Harbor Master, DCR, Police	staff and committee member time	On-going 2023-2030

OBJECTIVE 3: Protect, preserve, and conserve Dartmouth's scenic coastal, open space, field, and forestland vistas.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
2.3a	Promote the retention of existing scenic roads, views, and vistas in development proposals.	Planning Board	staff and committee member time	On-going 2023-2030
2.3b	Update and continue to enforce Dartmouth's Scenic Road Bylaw, especially as it relates to existing tree and stonewall protection.	Planning Board, Planning Department, DPW, Conservation Commission, Select Board, Town Meeting	staff and committee member time	On-going 2023-2030
2.3c	Form a study committee to consider creating a Scenic Overlay District for the town's scenic landscape areas.	Select Board, Planning Board, Planning Department	staff and committee member time	2025
2.3d	Work with the Cultural Council, which has an annual wet paint event where artists get set up at scenic vistas, to identify special vistas that should be protected from future obstruction.	Cultural Council, Town Planning Department, Town Planning Board	staff and committee member time	2023

OBJECTIVE 4: Protect, preserve, and conserve the town's historical and cultural assets.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
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2.4a	Continue to develop, install, and maintain a system of signs, plaques, and street furnishings to mark historic resources and village centers.	Historical Commission	CPC funding, staff and committee member time	On-going 2023-2030
2.4b	Preserve the Smith Mills library through repair and reuse at a permanent location.	Historical Commission, Town Admin.	CPC funding, staff and committee member time	2027
2.4c	Continue to mark cemeteries with identifying signs.	Historical Commission	staff and committee member time	On-going 2023-2030
2.4d	Continue to work with the Massachusetts Historical Commission on preparing National Historic Register nominations.	Historical Commission	staff and committee member time	On-going 2023-2030
2.4e	Continue the survey of Historic Properties in Dartmouth as recorded on Massachusetts Historical Commission Form B's through 1900.	Historical Commission	staff and committee member time	On-going 2023-2030
2.4f	Identify, preserve, protect, and respect Native American historical sites. Maintain awareness of these historical assets within the overall community, where appropriate.	Historical Commission	staff and committee member time, town budget	On-going 2023-2030
2.4g	Utilizing the best historical and archeological assets baseline inventory available, evaluate which historical and cultural resources are at risk of flooding today and under storm magnitude/future sea level rise scenarios.	Historical Commission, Conservation Commission, Town GIS Staff, consultants	staff and committee member time, town budget	On-going 2023-2030
2.4h	Create more opportunities to connect Dartmouth residents with the town's historical character. Specifically, develop a Public Service Announcement style program to run on DCTV that shows historical photographs of the town.	Historical Commission, DCTV, Cultural Council/Center	staff and committee member time	2023-2024

GOAL 3: NATURAL RESOURCES

Preserve, protect, and maintain the quality of Dartmouth's natural resources.

OBJECTIVE 1: Protect the quality and quantity of the town's water supply, surface water, and groundwater resources.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
3.1a	Pursue solutions, including stormwater retrofits, that will improve water quality in Buttonwood Brook including BBC findings from their ongoing site monitoring.	Buzzards Bay Coalition, DPW, Conservation Commission, Waterways Management Commission	SNEP Network, SNEP SWIG Grants, MVP Grants	2024-2027
3.1b	Organize regular volunteer cleanings of the Paskamanset River.	Waterways Management Commission, Schools, Environmental Non-profits	staff and committee member time, volunteer time	On-going 2023-2030
3.1c	Continue to enforce and update as new data is available the town's Aquifer Protection Overlay Zoning District.	Planning Board, Select Board, Town Meeting	staff and committee member time	On-going 2023-2030
3.1d	Work with the state and local non-profits to accomplish TMDL's for class 5 identified waterbodies that are known to be impaired and require TMDLs.	Waterways Management Commission, Conservation Commission, BBC, State DEP	staff and committee member time	On-going 2023-2030
3.1e	Seek land preservation opportunities that also achieve crediting under the town's Water Management Act permit managing public water supply withdrawals.	Town Administrator, DPW, Conservation Commission, DPW Board	staff and committee member time, LAND Grants, MVP Grants (where land preservation has resilience benefits)	On-going 2023-2030

OBJECTIVE 2: Provide extra protection to the town's most fragile and vulnerable natural resources.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
3.2a	Create a plan to support salt marsh migration as these lands are submerged by sea level rise into tidal flats.	Town Administration, Planning Department, Conservation Commission, BBC, MassAudubon, UMass/other consultants	SNEP SWIG Grants, DER Grants, MVP Grants (where tied to resilience)	2025
3.2b	Evaluate potential vernal pools for certification and protections.	Conservation Commission, Volunteers	staff and committee member time, volunteer time	On-going 2023-2030
3.2c	Protect wildlife migration corridors, especially those that allow for movement as species react to climate changes.	Conservation Commission, Planning Department, DNRT, BBC, MassAudubon	LAND Grants, Conservation Restriction mechanisms	On-going 2023-2030
3.2d	Preserve Priority Habitats of Rare Species (NHESP).	Conservation Commission, Planning Department, DNRT, BBC, MassAudubon	LAND Grants, Conservation Restriction mechanisms	On-going 2023-2030
3.2e	Preserve areas of town that the Massachusetts Conservation Assessment and Prioritization System has identified as having a high Index of Ecological Integrity (see list of specific area in Section 4F of this Plan).	Conservation Commission, Planning Department, DNRT, BBC, MassAudubon	LAND Grants, Conservation Restriction mechanisms	On-going 2023-2030
3.2f	Evaluate amending the town's wetland protection bylaw to recognize and include allowable WMA protections for coldwater fisheries drainage areas.	Conservation Commission, Select Board, Town Meeting	staff and committee member time	2025
3.2g	Preserve additional areas adjacent to Destruction Brook Woods that would fill in missing links along a cohesive greenway corridor in this area of town.	Conservation Commission, DNRT, other conservation non-profits	LAND Grants, Conservation Restriction mechanisms	2023-2025

OBJECTIVE 3: Plan for and undertake the necessary physical/structural improvements to infrastructure and facilities that impact the quality of the Town's natural resources.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
3.3a	Evaluate the potential for dam removals along the Paskamanset River and Buttonwood Brook.	Waterways Management Commission, BBC, DNRT	Mass DER, SNEP SWIG Grant	2025
3.3b	Develop a plan for an alternative waste landfill site upon the closing of the Crapo Hill Landfill that minimizes harm to the environment. Establish residential composting program using aerobic digester to reduce landfill usage long term.	Town Administrator, Select Board, DPW and DPW Board, SMRP Grant	staff and committee member time	2025-2027
3.3c	Meet the town's MS4 requirements and upgrade the stormwater system with retrofits that use current Best Management Practices for mitigating pollutants from runoff.	DPW and DPW Board	Capital Budget, Stormwater Retrofit Grants	On-going 2023-2030

OBJECTIVE 4: Prioritize the conservation of lands that have inherent climate resilience value.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
3.4a	Develop Forest Management Plans for town-owned properties that assess wildfire and pest vulnerabilities, species diversity, regular maintenance, cleanup plans. Start with Town Forest and the Interchurch Land at Noquochoke.	Conservation Commission	Town Budget	2026
3.4b	Continue to have strict requirements for wetland protection in town, as wetlands buttress against flooding and actually have a greater carbon sequestration capacity than even forests.	Conservation Commission	staff and committee member time	On-going 2023-2030

3.4c	Take next steps to participate in the National Flood Insurance Program's Community Rating System.	Planning Department and Planning Board	staff and committee member time	2024-2025
3.4d	Promote regenerative farming practices that retain healthy soils.	Agricultural Commission, SEMAP	staff and committee member time	On-going 2023-2030
3.4e	Implement the recommendations of the Municipal Vulnerability Preparedness Plan that also support Open Space and Recreation goals (see list of overlapping action items below)	Town Administrator, Planning Board, Conservation Commission, Emergency Management	staff and committee member time, MVP Grants	On-going 2023-2030

OBJECTIVE 5: Promote the preservation, retention, and quality of regionally significant natural resources.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
3.5a	Familiarize residents and town staff with the regional Green Infrastructure Network, and work to protect these lands that provide substantial ecosystem services.	Conservation and Planning, bringing in environmental non-profits such as MassAudubon	staff and committee member time	2025
3.5b	Preserve farmland soils as the town's farms play a critical role in local and regional food security.	Agricultural Commission, farmers, MDAR, SEMAP, NRCS	MDAR Grants, NRCS Grants, staff and committee member time	On-going 2023-2030
3.5c	Implement the recommendations of the Padanaram Harbor Management Plan that also support Open Space and Recreation goals (see list of overlapping action items below)	Padanaram Harbor Management Plan Implementation Committee	staff and committee member time, grant possibilities vary by project	On-going 2023-2030

GOAL 4: RECREATION

Provide a range of active and passive recreational facilities and programs that address the needs of all Dartmouth residents.

OBJECTIVE 1: Increase and improve access for water-based recreation, including activities based in and around Dartmouth's coastal and inland waters.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
4.1a	Determine the feasibility of creating additional boating facilities and secure in-water and landside storage options for watercraft. Assist in the creation of such structures, if possible	Parks & Rec, Waterways Management Commission, Planning Dept, DPW, Harbormaster	Town budget	2025-2027
4.1b	Improve the access road to Round Hill Beach, including stormwater improvements.	Parks & Rec DPW	Town Capital Budget, Chapter 90 funds.	2023-2025
4.1c	Develop a descriptive inventory of existing public water-based recreation access points along the Bay and to inland rivers. Correct especially the lack of knowledge about recreational opportunities on the Paskamanset River.	Parks & Rec, Waterways Management Commission, Conservation Commission, town GIS staff, consultant	Town Budget, RPA DLTA Project potential	2023-2024
4.1d	Construct/create more places available for fishing & shellfishing, especially a solution that resolves user conflicts along the Causeway. Engage the fishing community in possible alternatives/solutions.	Parks & Rec, Waterways Commission, town fishing community	Town budget, explore possibilities with DCR	2023-2025
4.1e	Identify and create more places available for canoe/kayak put-in, especially along the Paskamanset River and Little River.	Parks & Recreation Departments, Waterways Commission	PARC grants	2023-2027
4.1f	Study the shoaling issue that limits the use of the Rogers Street Boat Ramp. Implement best practices for alleviating the issue.	DPW, Waterways Commission, consultant	Town budget	2023-2027

4.1g	Negotiate greater public usage for town residents at the UMass Dartmouth swimming pool, building on the “Town and Gown” agreement and lifeguard training connections between the town and the university.	Town Administrator, UMass Dartmouth	staff and committee member time	2023
4.1h	Work with New Bedford to address water quality issue notifications in the Clarks Cove area.	Town Administrator, New Bedford DPI	staff and committee member time	2023-2024

OBJECTIVE 2: Increase and improve access to open space holdings for active use and passive recreation and enjoyment.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
4.2a	Complete ADA improvements as needed in the town’s parks and recreation areas.	ADA Coordinator, Parks & Rec	Mass Office on Disability (MOD)	2023-2025
4.2b	Identify opportunities to accommodate more passive recreation activities at existing open spaces, including hiking trails, outdoor education and nature study areas, picnic areas, fitness trails.	Parks & Rec	CPA, DCS PARC Grants, MassTrails Grants	2023-2025
4.2c	Improve trails at the interchurch land – maintenance is needed.	Conservation Commission, Volunteers	CPA, DCS PARC Grants, MassTrails Grants	2023-2025
4.2d	Continue to support DNRT, MassAudubon, BBC, and other non-profits in their development and maintenance of new and existing trails through open space areas.	Town Administration and related partner Boards, Committees and Commissions that lend support, grant approvals, arrange CR’s, etc.	staff and committee member time, CPA	On-going 2023-2030

OBJECTIVE 3: Provide recreational programming that promotes opportunity for lifelong involvement and activity for people of all ages and abilities.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
4.3a	Provide multi-purpose sports fields at locations other than schools, so that they can be used by adults during the day.	Parks & Rec	CPA, DCS	2025-2027
4.3b	Establish an indoor multi-purpose sports facility that can be used in the winter and by different types of users (adult sport leagues, youth sport leagues). Implement the next steps after the town's recent feasibility study for this type of facility.	Parks & Rec	CPA, DCS Public Private Partnerships	2027-2029
4.3c	Provide more recreational opportunities for teens and young adults.	Parks & Rec	CPA, DCS	2023-2025
4.3d	Complete the establishment of a permanent dog park in town.	Parks & Rec	Town Budget	2023
4.3e	Assess the current distribution of playgrounds throughout town and take steps to provide playgrounds within walking distance of more Dartmouth residents in Dartmouth's more suburban areas (perhaps within the town's Urbanized Area as defined by the Census Bureau), especially in North Dartmouth.	Parks & Rec	CPA, DCS	2025-2027

OBJECTIVE 4: Develop new facilities, and upgrade or repurpose existing facilities, to enhance recreational use and opportunity.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
4.4a	Complete needed improvements at existing sports facilities: address drainage issues at Quinn Field; install lighting at middle school; improve the High School baseball facility	Schools	School Budget	2025-2027
4.4b	Develop additional multi-purpose field space for sports currently lacking space in town, i.e. field hockey, lacrosse, and softball.	Parks & Rec	CPA, DCS	2025-2027
4.4c	Provide more pickleball and tennis courts.	Parks & Rec	CPA, DCS	2025-2027
4.4d	Examine the feasibility of establishing a skate/bike park and restoring current.	Parks & Rec	CPA, DCS	2025-2027
4.4e	Explore a partnership with UMass Dartmouth to identify a location for a new ice rink in town.	Parks & Rec	CPA, DCS	2027-2029

GOAL 5: GROWTH AND INFRASTRUCTURE

Manage and channel growth and infrastructure in a manner that retains the character of the town and its natural, cultural, and historical assets, and promotes recreation.

OBJECTIVE 1: Consider the crossover needs of open space and recreation planning goals and objectives and the preservation of unique and sensitive environmental features and resources when drafting, recommending, and passing zoning code changes.				
Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
5.1a	Consult the OSRP (especially the data and maps in Section 4 that show important habitat and unique environmental features) when formulating zoning changes, especially any zoning changes that come about as a	Town Administrator, Town Planning Board and Planning Department, Select Board, Town Meeting	staff and committee member time	On-going 2023-2030

	result of South Coast Rail MBTA Communities Requirements.			
5.1b	Ensure that Low Impact Development options are enshrined in the town's zoning bylaw. Perform audits that would help to discern where bylaws could better incorporate LID techniques.	Town Administrator, Town Planning Board and Planning Department, Select Board, Town Meeting	staff and committee member time, assistants from MassAudubon / SRPEDD	2023-2025

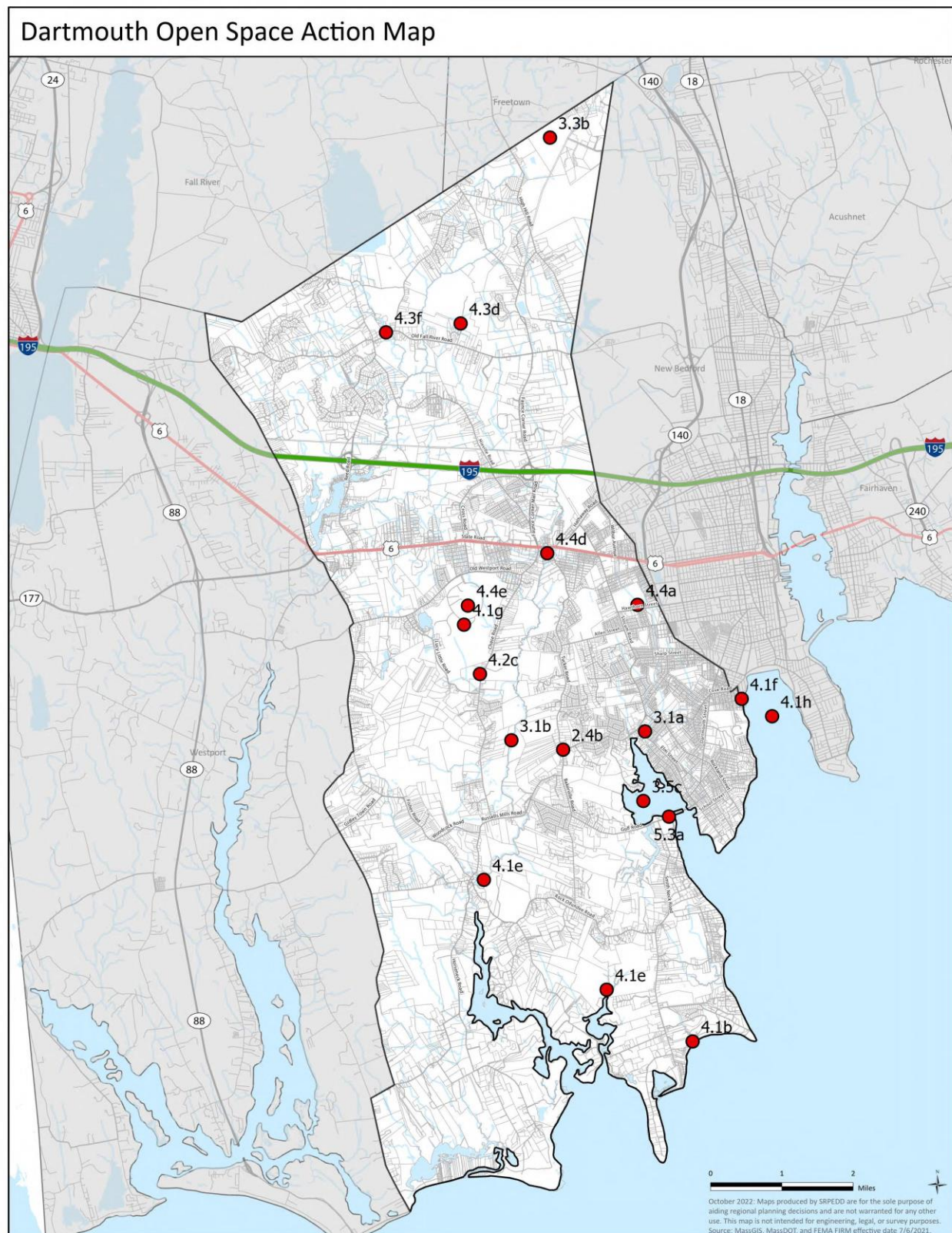
OBJECTIVE 2: Promote a healthy and livable community that encourages multimodal transportation, including continuous improvements to the town's bikeway system.

Action ID	Actions	Responsible Parties	Potential Funding Source	Implementation Year
5.3a	Construct a sidewalk along Smith Neck Road, extending the existing sidewalk at the causeway to the entrance to Bayview.	DPW	Chapter 90 funds, Complete Streets	2024-2026
5.3b	Construct sidewalks on roads where OSRP survey respondents supported additional sidewalks: Reed Road, Prospect Street, Rock O'Dundee Road, Cross Road, Alpha Street, Bush Street, Collins Corner Road, Connecticut Avenue, Lexington Avenue, and State Road.	DPW	Chapter 90 funds, Complete Streets	On-going 2023-2030
5.3c	Implement the town's Complete Streets Plan.	DPW	Chapter 90 funds, Complete Streets	On-going 2023-2030
5.3d	Develop a Town Bike Trail Plan to explore opportunities for both on- and off-road routes.	Pathways Committee, Planning Department, DPW,	Town Budget	2023-2025
5.3e	Construct more paved dedicated bike lanes especially in school zones.	Pathways Committee, DPW	Capital Budget, Complete Streets, MassTrails	On-going 2023-2030
5.3f	Continue to consider bicycle traffic accommodations, especially dedicated bike lanes, during ongoing road improvements	Pathways Committee, DPW	MassWorks/ Complete Streets	On-going 2023-2030

5.3g	Continue to work with local and regional partners to develop and grow regional multi-modal trails and paved bike routes, establishing local connections to the South Coast Bikeway and other planned regional trails. Implement the preferred routing strategies came out of the 2021 Route Study. Improve safety along South Coast Bikeway additions including the potential use of a pedestrian and bike bridge over 140.	Pathways Committee	Federal Trails Grants, MassTrails	On-going 2023-2030
5.3h	Reactivate the town's Heritage Trail as a potential bikeway including the use and maintenance of existing 30 miles of bike path.	Pathways Committee	staff and committee member time	2023-2025
5.3i	Map existing bicycle parking structures and identify potential needs for additional structures.	Pathways Committee, DPW, Town GIS Staff	staff and committee member time	2023-2025
5.3j	Consider the idea of developing a pump track.	Pathways Committee, Recreation Department	staff and committee member time	2023-2025
5.3k	Procure and implement a public bike share program	Pathways Committee, Town Administrator	staff and committee member time, Town Budget	2023-2025

While many OSRP action items are town-wide, for those that are site-specific, we have shown the location of the action on Map 35, the Open Space Action Map, keyed to the action's listing in the above tables.

Map 35. Open Space Action Map



Related recommendations from the 2019 Padanaram Harbor Management Plan

Recreation Section
Determine the feasibility of creating additional boating facilities and secure in-water and landside storage options for watercraft and kayaks. Provide the structures and facilities as appropriate.
Enhance current launch access points for kayaks, paddleboards, and other watercraft, and identify additional potential access points including those with parking for small craft use.
Increase awareness of existing transient boater moorings in the northern portion of the Harbor.
Where feasible, encourage use of the harbor's shoreline in such a way to promote uses and activities, particularly in town-owned areas.
Install security cameras to monitor various areas within the Harbor, including the launch area and small boat storage at the Arthur Dias Town Landing.
Define and publicize recreational areas in the Harbor, and consider adopting a by-law that identifies areas for specific uses within the Harbor.
Develop and disseminate educational and outreach materials for recreational users of Padanaram Harbor.
Review existing regulations to ensure that definitions are clear and that commercial and recreational uses of the Harbor are balanced.
Public Access
Develop a descriptive inventory of existing public access points, ways, or sites.
Make the results of the descriptive inventory available to town officials and the public-at-large via the town website, brochures, or other outreach mechanisms and materials.
Develop and utilize, wherever possible, uniform signage indicating public access points and sites as well as any limitations as to hours, activities, etc.
Construct a sidewalk along the water-side of Smith Neck Road extending the existing sidewalk at the causeway to the curves at the entrance to Bayview.
Develop a plan for a public accessway along the Padanaram Village waterfront south from the causeway to the New Bedford Yacht Club and north from the causeway along Water Street utilizing both existing sidewalks and access granted through Public Waterfront Act (Chapter 91) licenses.
Identify and provide signage for other significant public access areas adjacent to the Harbor established through the provisions of Chapter 91.
Wherever feasible, incorporate options to provide access to people with disabilities into planning and construction near the Harbor. This should be mandatory for town-funded projects. Additionally, where appropriate, requests for such accessibility should be part of the Planning Board's comments on Chapter 91 licensing applications.
The Town should clarify its vision for the current nature and the future of Padanaram Village.
Inventory the existing parking spaces within the Village, both public and private.
Identify potential additional parking options and implement.
Identify significant scenic vistas within the Padanaram Harbor planning area.
Develop techniques for protection of the identified scenic locations and vistas.

Identify mechanisms to minimize blockage of views of the Harbor from public area.
Recreational Fishing
Enforce existing by-laws relative to fishing from the Padanaram Bridge and causeway.
Continue to pursue efforts to develop a fishing pier extending off the causeway.
Petition the Massachusetts Division of Marine Fisheries to conduct a full sanitation survey in the northern portion of Harbor for purposes of exploring whether or not new sections can be opened for recreational harvesting.

Related recommendations from the 2020 Municipal Vulnerability Preparedness Plan

Action/Area	Theme	Description/Details
Stormwater Infrastructure Assessment	Flooding	Conduct a comprehensive vulnerability and resiliency assessment of all town drainage and flood-prevention infrastructure.
Floodplain Modeling Study	Flooding	Perform a town-wide floodplain modeling study.
Tree Planting Plan	Flora & Fauna	Conduct a town-wide tree planting plan to improve forested buffers and even-age forests throughout town.
Forest Management	Flora & Fauna	Develop forest management plans.
LID bylaw enforcements	Bylaw reform	Strengthen the ability of town boards to enforce bylaws requiring Low Impact Development techniques and enhanced floodplain protections for new developments.
Dam Assessments	Infrastructure	Conduct a feasibility assessment and concept plans for potential dam removals or upgrades.
Coastal erosion	Natural environment	Synthesize existing studies on coastal erosion that have been conducted and determine next actionable steps.
Habitat Loss	Flora & Fauna	Perform study to identify suitable parcels to protect and maintain native and rare species.
Top Priority Tidally Restricted Salt Marshes	Natural Environment	Target area for restoration and conservation.
High School Sports Field	Flooding	Conduct an engineering study to initiate design and installation of a mechanical flood gate to mitigate repeated flooding.
Horseneck Road at Destruction Brook	Flooding	Implement stormwater flood mitigation – vulnerability/drainage study to determine potential improvements.
Sol E Mar Street	Flooding	Implement tidal flood mitigation: stormwater controls aging, undersized, outdated - vulnerability assessment to determine areas where storm surge and runoff require additional evaluation for solutions to mitigate flooding.

Slocums River Corridor	Natural Environment / Flora & Fauna	Assess available parcels for acquisition in priority area, particularly along the eastern side of the Slocum River. Water quality and estuarine habitat concerns.
Round Hill Beach	Flooding / Natural Environment	Implement tidal flood mitigation and target area for marsh restoration and conservation. Beach nourishment feasibility study for this barrier beach. Revisit road elevation plans for feasibility for access roads.
Noquochoke Lake Floodplain	Flooding	Assess available parcels for acquisition.
Buttonwood Brook Watershed	Flooding	Implement stormwater flood mitigation and assess availability of parcels for acquisition, Potential regional project with New Bedford.
Paskamanset River Watershed	Flooding	Assess available parcels for acquisition.
Slocums River Watershed	Water Quality	Develop a watershed management plan for the Slocums River.

X. LETTERS OF SUPPORT

INSERT SRPEDD LETTER PICTURE

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INSERT SELECT BOARD LETTER PICTURE

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INSERT PLANNING BOARD LETTER PICTURE

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XII. APPENDICES

Appendix A: Community Engagement Report

Appendix B: Climate Change Basics

Appendix C: Americans with Disabilities Act, Section 504 Self-Evaluation

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Appendix B: Climate Change Basics

At our current moment in earth's history, proactive open space land preservation is tied to climate change mitigation and adaptation. Preserving open space tracts in particular locations or with specific features in Dartmouth is one action that the community can take as a means of local response to this global crisis.

Climate Change refers to a change in a region's climate conditions – particularly its temperature and precipitation levels – over a period of time. Climate change shifts have occurred naturally throughout earth's existence. Key elements of the climate change threat are communicated by the “3S's” of climate change:

Q1: How do we know climate change is occurring?

Answer: It's **simple**.

Our human actions are forcing the earth's system to retain more heat. When thermal energy in the form of sunlight reaches earth, two things can happen to it; either it is absorbed into the Earth's atmospheric system or it is reflected and able to emit back into space and dissipate. We can conceive of these phenomena as Earth's “energy budget.” If the energy that is reflected and emitted back to space equals the energy that is absorbed into the Earth's system, the energy budget is in balance. If more energy is emitted than absorbed, the Earth's system cools. If more energy is absorbed than emitted, the Earth's system warms. Certain gases, known as Green House Gases (Carbon Dioxide/CO₂, methane, and others) naturally increase the trapping capacity of the atmosphere, causing thermal energy to remain in the system, which causes the world to warm. The changing concentrations of these gases are measurable over time, and climatologists worldwide examining all available data have concluded that the rate of warming we are experiencing today cannot be explained solely by natural causes – it is a human-made phenomenon.

In previous eons, warming and cooling cycles have occurred in periods of roughly 100,000 years due to shifts in the planet's tilt, rotation and shape of its orbit. However, since 1900 there has been a massive increase in the global concentrations of atmospheric carbon dioxide, started by the Industrial Revolution and the burning of fossil fuels such as coal, oil, and gasoline. The global release of CO₂ is occurring at rates nearly **nine times greater** than in the hottest period of the past 800,000 years, and has created an environment fruitful for trapping thermal energy from sunlight within the earth's atmospheric system.

Q2: What harm will climate change cause?

Answer: It's **serious**.

Since 1895, the global temperature has increased 1.8 degrees Fahrenheit. Due to global differences in topography, wind patterns, and ocean circulation, this temperature increase is not felt evenly; in Massachusetts, the temperature increase has been even greater and since 1895 has increased 2.9 degrees Fahrenheit. There is also a large difference between the warming felt on land and in water. In fact, an astounding 90% of the excess thermal energy that has entered the Earth's system has sunk into the deep ocean. While this has kept us cooler on

land, it is extremely problematic for the ocean – higher sea surface temperatures mixed with excess carbon dioxide entering the water causes acidification, all with serious implications for aquatic species.

As temperature and precipitation change in the future, so too will the features of our natural and built environment that rely on them, such as forests and open space, agriculture, and disease/tick seasons, among others. In the northeastern United States, the increase in temperature will lead to less distinct seasons, with winter warming three times faster than summer, and earlier spring conditions. This change in turn will lead to a longer freeze-free period, and earlier leaf-out and bloom. Without a longer frost period to kill them off, more pests will survive season to season, and they will emerge earlier in the season as well. Changing temperatures will likely shift the habitable zone for plant, insect, and animal species, prompting their migration. Iconic trees such as Red Maple and Oak have started to migrate north and west, seeking more suitable climates.

A secondary impact of increased temperatures is the melting of ice sheets and glaciers throughout the world. Melting, in conjunction with thermal expansion of the ocean whereby hotter water takes up a greater volume, is causing sea levels to rise. Sea level rise along coastal Massachusetts could reach 2.4 feet by 2050 under the high emissions scenario (RCP 8.5). In Dartmouth, there are more than 350 housing units and additional various structures which are situated below the 5-foot-high level tide mark valued at nearly \$365 million. Preparing for sea level rise requires re-evaluating the costs of developing parcels located in the floodplain or along coastal regions and the siting of community infrastructure.

Climate change is bringing about an era of extremes. Rain falls more intensely in fewer rain events. Droughts are longer. More extreme precipitation events combined with overall conditions will increase the likelihood and risk of erosive flooding. Extreme precipitation can contribute to soil and riverbank degradation as quick-moving waters strip sediment away, and the loss of topsoil and riverbanks can impact agricultural and riverine uses. Precipitation will also increase pre-existing issues with flooding and contribute to an overall environment where it is difficult and dangerous to move around Dartmouth during storm conditions. Increased rainfall also leads to increased stormwater runoff, which can be a serious issue for contaminated surfaces, or further contribute to the pollution of important waterbodies.

Q3: What can we do?

Answer: It's **solvable**.

We are looking at an extremely different world by the end of this century if our high rate of CO₂ emissions continues unabated. However, there is some possibility for humans to change this harsh trajectory. Future emissions upon which various climate change scenarios are based have not yet occurred and are not set in stone. Climate scientists use a range of greenhouse gas emissions scenarios - called Representative Concentration Pathways (or RCP's) - as a basis to predict how temperature and precipitation might change in the future based on different levels of CO₂ emissions. Under lower emissions scenarios called RCP 2.6 and RCP 4.5, humans would decrease our overall emissions to limit global temperature increases between 2 – 6 degrees

Fahrenheit. This shift to meeting lower emissions scenarios, however, will take material changes to the way that we live, plan our communities, and consume.

Massachusetts climate scientists have projected the impacts of various RCP's at the watershed level, the most localized predictive scale possible under current models, to predict some of these impacts. In the Buzzards Bay watershed by 2050 there is expected to be a 3.7-degree Fahrenheit increase in temperatures under a medium CO2 emissions scenario, and a 5.1-degree Fahrenheit increase in temperatures under a high emissions scenario. By 2090, there may be a 4.9- and 8.8-degree Fahrenheit increase in temperature respectively. The implications of a five-degree change are much different than a nine-degree change. (Fig. 1)

Precipitation patterns in the Buzzards Bay watershed are also expected to change drastically. Under a high CO2 emissions scenario (RCP 8.5), by 2050 the watershed will see an increase of 2.2 inches of annual precipitation, and by 2090 an increase of 3.9 inches of rainfall. (Fig 2). This will occur most likely in the form of major precipitation events, as there will be an overall increase in 1.9 days with extreme precipitation events by 2050 under a high emissions scenario. There will also be an increase in the total number of consecutive dry days – by 2050 there will be a 0.7 and 1.5 day increase under a medium and high emissions scenario respectively. By 2090, those dry days are expected to shift to 2.1 and 0.5 days under a respective medium and high emission scenario. These ranges show us the importance of making choice to pursue climate change mitigation and adaptation now at the local level.

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