Town of Swansea

Open Space & Recreation Plan

2023 - 2027

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Special thanks to the many individuals, organizations, and agencies who gave their time and shared their knowledge of the community and its surroundings.

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I. PLAN SUMMARY

The 2023 Swansea Open Space and Recreation Plan (OSRP) is an update of the Town's 2002 Open Space Plan. The Plan is intended to act as a blueprint for the future development of Swansea's parks and recreational areas, as well as a guide for strategically preserving the integrity of Swansea's cultural, historical, agricultural, and natural resources.

The 2023 OSRP 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), for open space planning. 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 DCS. Having a current OSRP may also grant communities a competitive edge in other state grant programs.

The 2023 OSRP was developed in context with the Town's other ongoing planning projects. The Town is currently working to update their Comprehensive Plan at the same time and the steering committees for both plans helped to identify congruous objectives and goals for each. Both were written as development patterns and demographic trends continue to evolve and change in Town and will help the Town to plan accordingly. According to US Census Bureau counts, Swansea saw significant population growth from 2010 to 2020. Despite its strong population growth Swansea is a rural community and this OSRP aims to protect its most valued natural assets.

The first step in the plan update process was to appoint an Open Space Committee ("the Committee") as a steering committee to help guide plan development. The Committee was organized under the leadership of the Town's Community Development Director and Conservation Agent, who solicited participation from a variety of Town departments, community organizations, and non-profits. The Open Space Committee totaled four members; however, several meetings were held jointly with the Comprehensive Plan Committee to gather additional input from a larger group of community members. Both Committees helped identify progress made since the 2002 plan, reviewed the goals, objectives, and action items identified for this update, and commented on draft plan sections that pertained to their particular areas of expertise.

The Open Space Committee worked with their consultant, the Southeastern Regional Planning and Economic Development District (SRPEDD) to develop a public online survey to gather input on conservation, recreation, and open space needs from Swansea residents. Two public in-person workshops were held during the fall of 2022 and spring of 2023. The survey and workshops were hosted jointly with the

Comprehensive Plan Committee to streamline the public input process for both plans. Additionally, SRPEDD prepared an interactive mapping experience that was presented at community events and hosted at Town Hall. More details about the public engagement process can be found in Section III. B. Planning Process and Public Participation.

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 Open Space Committee re-evaluated, updated, and expanded the goals of the 2002 Plan to fit current needs and context. The Goals and Objectives of the 2023-2030 Swansea Open Space and Recreation Plan are:

Goal 1: Protect the public water supply, wetlands and waterways

Objective 1A. Assess and implement strategies to protect water supplies

Objective 1B. Identify, assess and protect water resource areas

Goal 2: Protect and preserve Swansea's natural, scenic, historical and cultural resources

Objective 2A. Negotiate the purchase and/or protection of priority conservation lands

Objective 2B. Preserve connected corridors through town for water movement, wildlife and community resilience

Objective 2C. Preserve areas of significant scenic, historical, and cultural integrity

Goal 3: Protect Swansea's Agriculture and Shellfishing Industries

Objective 3A. Support local farmers and protect farmland

Objective 3B. Restore shellfishing in the Palmer, Coles and Lees Rivers

Goal 4: Provide adequate staffing and facilities to meet the recreational needs of all Town residents

Objective 4A. Increase local capacity for management and maintenance of open space & parks

Objective 4B. Improve existing recreational facilities and programs

Objective 4C. Provide additional facilities and programs that meet the needs of the community

Objective 4D. Expand Swansea's hiking and biking trail network

Objective 4E. Improve public access to riverfront and coastal resources

Goal 5: Carry out the Open Space and Recreation Plan goals and objectives

Objective 5A. Establish a framework for implementing the action plan

Objective 5B. Coordinate a townwide regulatory approach that supports plan implementation

II. INTRODUCTION

A. Statement of Purpose

The Town of Swansea has historically been considered rural, and therefore beyond the perceived range of environmental problems that afflict more urbanized areas. But like many small New England towns, as Swansea exhibits the impacts of growth, there is an increasing concern for the quality of the environment. Furthermore, a growing population increases pressure on existing recreational amenities. Through its preparation of the Open Space and Recreation Plan and Comprehensive Plan, the Town is pursuing a variety of planning strategies to manage existing resources and guide future development in a way that provides for the community's needs while avoiding undesired environmental impacts.

The purpose of the plan is to provide the community of Swansea 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.

Swansea's most recent Open Space Plan was drafted in 2002. The 2023 OSRP is an opportunity for the Town to establish a new Open Space Committee and renew its commitment to the goals of protecting and enhancing open space and recreational assets to serve the current and future needs of the community. An important part of updating the 2002 OSRP was to understand and document the progress made by Swansea in addressing the previous plan's goals, objectives, and recommended actions. The following actions, recommended in the previous plan, have been completed or are in progress to address the 2002 open space goals (some of these are ongoing efforts that will be carried forward into the current action plan):

2002 Goal 1: To protect the public water supply, wetlands and waterways.

- Swansea Water District has acquired several properties surrounding Warren Reservoir and wellfields throughout town to provide additional protection to existing and potential community drinking water sources.

- Water service extensions in the Two Mile Purchase Area of Town were carefully managed to avoid overdrawing from local water sources.
- The Town has adopted a stormwater plan and bylaw, in compliance with its MS4 permit.
- The Town coordinated with various state agencies to update Wetland mapping and begin identification and mapping of vernal pools.

2002 Goal 2: To protect and preserve open lands, river and habitat corridors, scenic views, public access, and historic sites.

- Swansea's Selectboard worked with a committee to evaluate and negotiate Town acquisition of open space sites from the former Montaup Power Plant after it closed down in 2010.
- An Agricultural Preservation Restriction (APR) was secured for Baker Farm, protecting it from future development.
- The Town conveyed Sandy Beach to the care and custody of the Conservation Commission so that they will be protected from sale or development.
- The Community Preservation Act was adopted by the Town to establish a local Community Preservation Fund for open space, historical and affordable housing projects.
- The Conservation Commission instituted a 25ft no-touch buffer zone surrounding wetland resource areas in its local Wetland Protection Bylaw.
- The Town has been coordinating with a local community group, Swansea Safe Passage, to identify opportunities to improve public access to coastal waterways.
- The Town has been actively working with property owners along the Palmer, Kickamuit, Coles and Lees Rivers to establish a protected "greenbelt," including with the purchase of Medeiros Farm.

2002 Goal 3: To Protect Agriculture and Shellfishing Industries.

- The Town has met with owners of agricultural lands in Town to identify ways to support local agriculture.
- The Town has reviewed and identified agricultural land to prioritize for protection, should, the opportunity arise.
- The Town recently established a Harbor Advisory Committee who will work to restore local shellfish, among other priorities.

2002 Goal 4: To provide staffing and adequate facilities to meet the recreational needs of all Town residents.

- The Town has been constructing sidewalk improvements through its participation in the State's Complete Streets program.
- The Town has established trails around the former Covel Estate at Veterans Memorial Park.
- The Town has been working to improve access to and parking at parks.

2002 Goal 5: To preserve areas of significant scenic, historical, and cultural integrity.

- The Conservation Commission modified their wetlands protection regulations to offer stronger buffer protections for wetlands.

- The Town adopted the Community Preservation Act to set-aside dedicated funds for recreation and open space acquisition.

An updated Action Plan has been prepared for the new OSRP to direct the efforts of Town staff and committee members, as well as local community groups, in addressing the goals and objectives identified for open space and recreation in Swansea. This Action Plan includes a broad range of activities to be undertaken, each categorized by priority level and timeframe for completion to aid in strategizing a path forward. Among the top priorities identified by the Open Space Committee, as reflected in the action plan, include taking steps to secure the community's water supply, appropriately inventorying and mapping the Town's environmental resources, mitigating the impacts of stormwater runoff on water quality, expanding the Town's capacity to maintain its existing open spaces and improving public waterfront access. Essential to advancing each of the goals identified in the community's 2023 action plan is public education and engagement at all levels, in order to increase the public's awareness of and participation in protecting the community's resources. Without public interest, the Open Space and Recreation Plan will remain a static document rather than a vision and "Green Print" for action.

B. Planning Process and Public Participation

The process of creating a long-range plan is as important as the final document itself. An inclusive planning process allows for public participation and general education on issues and a means for all involved to reach a consensus on these issues.

With an awareness of the importance of process in plan development, the Open Space Committee (the "Committee") was established in June 2022 to guide the project and update the 2002 OSRP. Its members include:

Chair: Colleen Brown (Conservation Agent)

Vice Chair: Nanci Hedgcorth (Conservation Commission)

Clerk: Gil Almeida (Swansea Park Commission)

Member: Edward Hill (Community Preservation Committee)

The Committee conducted 5 meetings between June of 2022 and June of 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, review plan drafts, and to formulate new tasks moving forward. Committee meetings were held as needed, in alignment with key project needs or junctures. All meetings were posted and open to the public, in accordance with the Massachusetts Open Meeting Law. The Southeastern Regional Planning and Economic Development District (SRPEDD), acted as the Committee's consultant and facilitated all meetings and planning activities and drafted the OSRP document.

Throughout the OSRP update process, the Committee was active and instrumental in completing the following tasks:

- Reviewing goals, objectives, and action items from the 2002 Plan and noting progress or continued relevance;
- Updating the open space land inventory;
- Finalizing and distributing the online public OSRP survey questionnaire;
- Developing the public workshop format;
- Advertising and participating in public events;
- Reviewing OSRP Plan drafts; and
- Updating goals, objectives, and action items after review and synthesis of public engagement outcomes.

PUBLIC ENGAGEMENT

To ensure widespread and inclusive public participation in the development of the OSRP, the Committee and SRPEDD offered several opportunities and formats for the public to provide their input on open space and recreational needs in Swansea. To reduce the number of requests for the public's time and information, SRPEDD coordinated with both the Open Space Committee and Comprehensive Committee (who was working to simultaneously update the Town's Comprehensive Plan) to combine community engagement efforts. The project team wanted to be mindful of the community's time and found ways to collect input on both plans through a streamlined engagement plan.

First, the project team launched an online survey to reach as many people in the community as possible, that respondents could take at their convenience. The Town's Comprehensive Plan Survey was launched in June 2022 and included 12 questions, on page six of the survey, specific to Swansea's open space and recreational amenities (survey questions 37 – 48). 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 identify potential gaps in availability and opportunities for future improvements.

The survey was posted on the SRPEDD website, and was available from June 28, 2022, through October 5, 2022. A mailer with a QR code to the online survey was included in the annual tax bill to all residents in July 2022. The survey link was also shared on social media pages for SRPEDD, the Town and local community groups. The exact number of survey responses is difficult to gauge precisely, as it was possible for participants to skip individual questions. A total of 815 respondents engaged with the survey, but a core group of about 500 or more respondents completed the survey fully, skipping few, if any, questions.

An interactive in-person mapping activity was also prepared to solicit feedback on existing and needed open spaces and recreational facilities. A map of Swansea displaying existing open space and recreational parcels, color-coded by level of

protection (limited, none, in perpetuity or unknown) was provided on a 30" by 43" poster board. Individuals were provided 8 different types of stickers, which represented the following comment categories: new recreation amenity need, maintenance or beautification need, recreational programming need, bicycle pathway need, pedestrian pathway need, ADA access need, open space/resource conservation need, and cultural/historic resource need. Participants were instructed to place these stickers in locations on the map where that type of need or suggestion was desired, and then to write a unique number on that sticker matched to a corresponding numbered explanation or comment. Participants were also invited to share general comments that did not have a specific location associated with them by either writing that comment with no number associated with it or placing their sticker on a location on the map outside of the town boundary.

Several such maps were made available to the public to provide feedback. One map was displayed on a table hosted by SRPEDD at a popular annual community event, the Swansea Harvest Festival on September 10, 2022. SRPEDD staff were present at the table for the duration of this event and engaged attendees in discussion about open space and recreational needs and invited comments. A second identical map was displayed at the first public workshop, where SRPEDD staff similarly facilitated participating in the map activity. A third identical map was also made publicly available in the Town Hall for several weeks in October and November, 2022, with posted instructions to invite additional comments. The public was able to engage with this map independently, following the posted instructions. Details on these maps and the input each received are available in Appendix E: Public Engagement Report.

Two public workshops were held jointly with the Comprehensive and Open Space Committees. Both were held in an open house style format in which the public were invited to stop by at their own convenience during a two-hour time window and engage with several different planning topics at a series of stations available to visit throughout the public meeting window. Both meetings were hosted in the Case High School Library on weeknight evenings.

The first meeting on Wednesday September 28, 2022, from 6:30-8:30 PM, covered the following topics for public input: open space and recreation; transportation; and public facilities and services in Swansea. SRPEDD staff presented the interactive mapping exercise and discussed open space and recreational needs, facilitating the collection of comments and input from those in attendance.

The second meeting on Thursday May 4th, 2023, from 6:30 – 9:00 PM, covered the following topics: land use, housing, economic development, natural and cultural Resources, and climate resilience. At this meeting, SRPEDD staff presented an overview of conservation and recreation open space lands in Swansea and the draft open space and recreation action plan. Staff discussed the plan with attendees and invited comments and feedback on the recommended action and relevant priorities of each. Participants were invited to vote on priority actions using dot stickers. The number of

votes each action received was used to determine the priority level of each individual action recommended in the action plan.

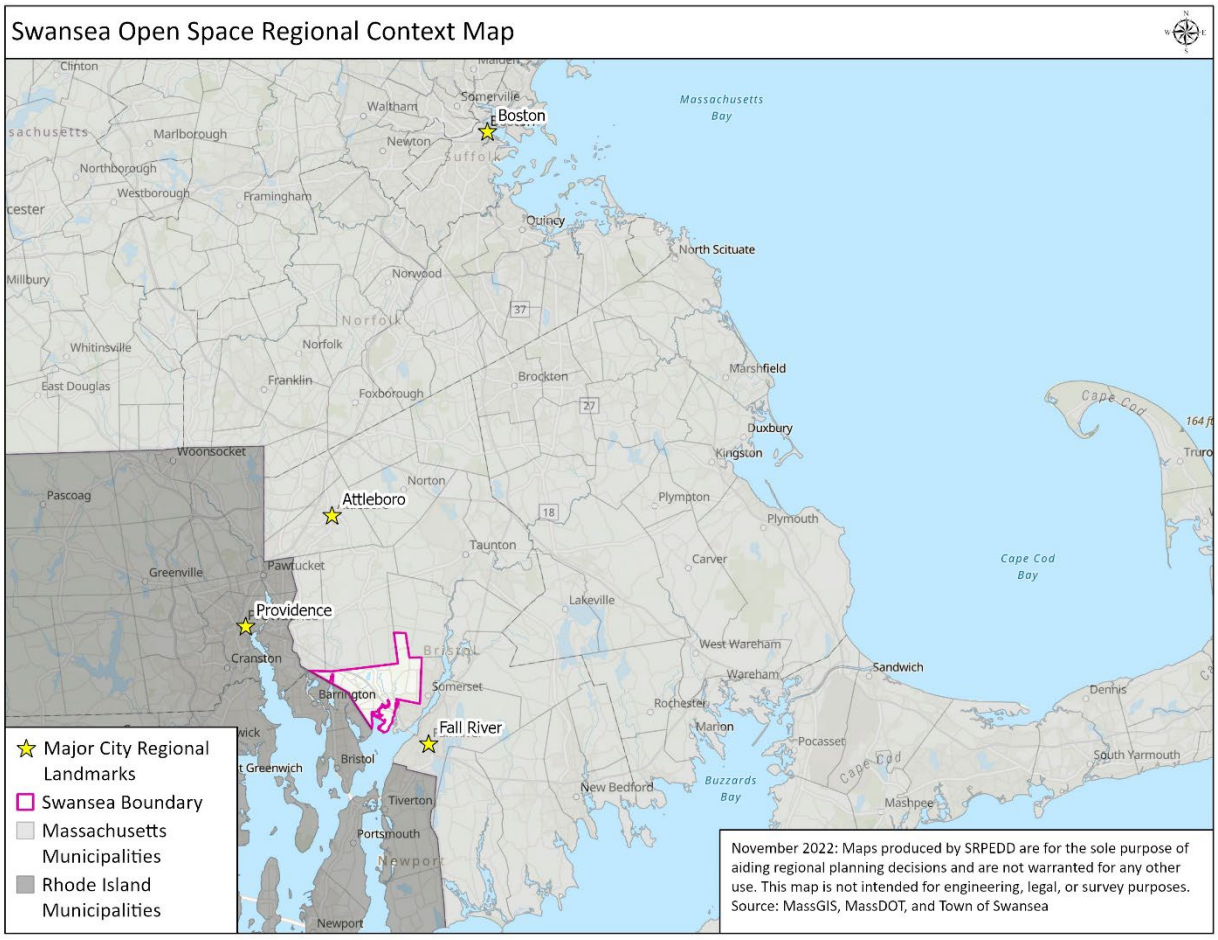
RELEASE OF DRAFT PLAN TO THE PUBLIC

The draft Open Space and Recreation Plan was released to the public and Town boards in September 2023. The draft plan was posted and advertised on SRPEDD's and the Town's social media pages and the Open Space Committee shared it in local community social media pages. Public comments were invited for two weeks. The final draft, reflective of all comments received, was released to the public and Town boards on [DATE TBD].

III. COMMUNITY SETTING

A. Regional Context

*Map 1 Swansea Open Space Regional Context Map**

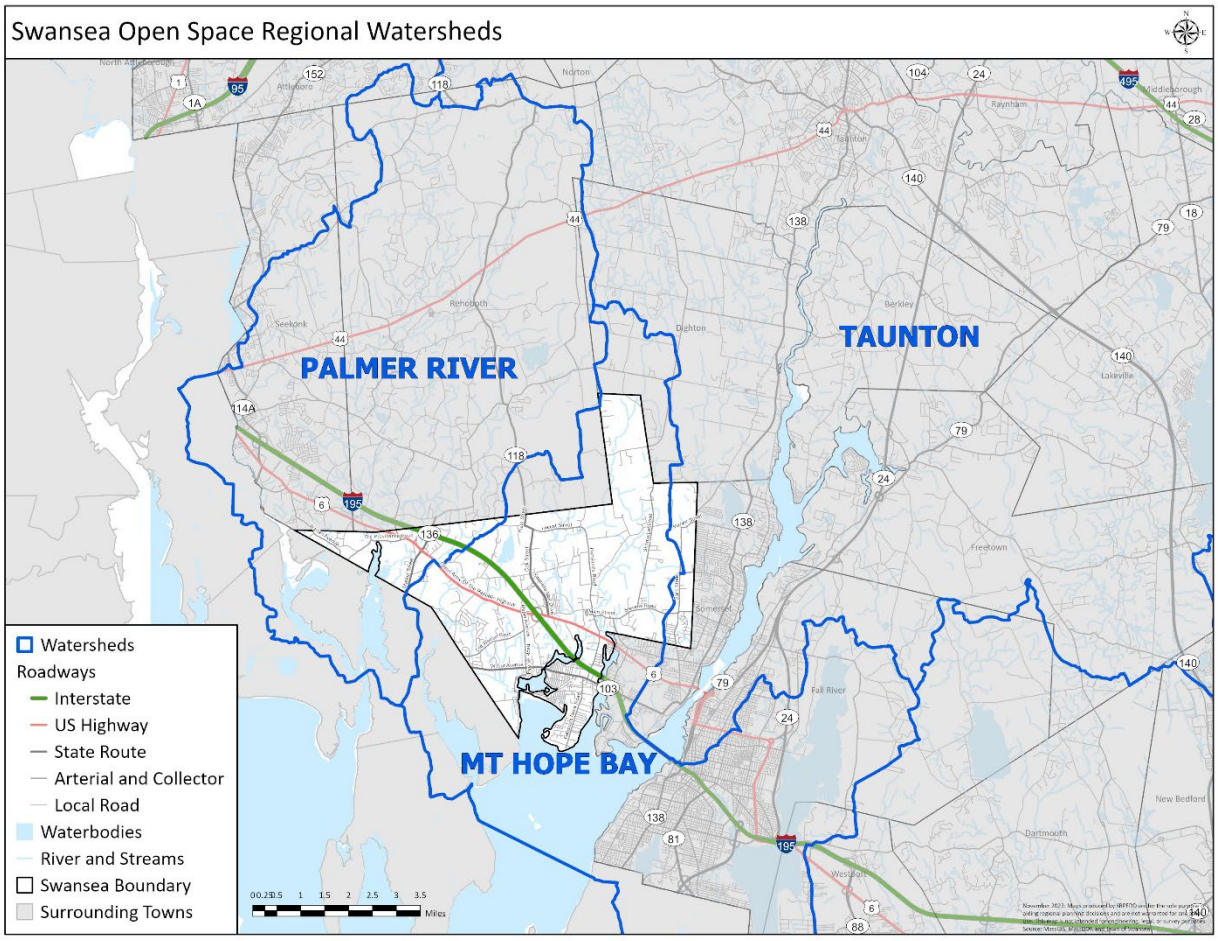


**There is a full-size version of this map in the appendix*

The Town of Swansea, comprising a total of 22.8 square miles, is part of Bristol County. The Town is approximately 50 miles south of Boston, 12 miles east of Providence and 4 miles west of Fall River. Swansea shares common borders with the Towns of Warren and Barrington in Rhode Island, and the Massachusetts communities of Dighton, Rehoboth, Seekonk, and Somerset. The Town has undulating topographic features, a myriad of inland and coastal wetlands, several large rivers, and a decidedly suburban, small-town character. Swansea is situated at the upper end of Mount Hope Bay, connected to Narragansett Bay. Several rivers that run through Swansea drain into Mount Hope and Narragansett Bays.

WATERSHED

*Map 2. Swansea Open Space Regional Watersheds Map**



**There is a full-size version of this map in the appendix*

The Town of Swansea is primarily located within the Narragansett Bay Watershed and part of the following three major sub-watersheds: the Palmer River, Mount Hope Bay and Taunton River Watersheds (see Swansea Open Space Regional Watersheds Map). These watershed boundaries are located along two high elevation ridges, one in the

eastern part and one in the western part of Town, both running roughly north to south. All water in Swansea west of the western ridge drains into the Palmer River and all water east of the eastern ridge drains into the Taunton River, both of which feed into Mount Hope and Narragansett Bays. The remaining area of Town between these two sub-watersheds drains directly into Mount Hope and Narragansett Bay.

REGIONAL SERVICE INTERDEPENDENCIES

Daily life in Swansea is integrated with surrounding communities in both Rhode Island and Massachusetts. State Routes 103 and 118, US Highway Route 6, and Interstate 195 connect residents in Swansea with destinations to the north and south in Rhode Island and east and west in Massachusetts. Local residents are also within driving distance of two major cities, 50 miles south of Boston and 15 miles west of Providence, RI. Additionally, the Southeastern Regional Transit Authority operates a regional bus transit route in Swansea. The Route 14 Swansea Mall line connects the communities of Fall River, Somerset, and Swansea, with the Swansea Mall property anchoring the route's northwestern endpoint.

Figure 1. SRTA Route 14 Regional Bus Transit Route Map

For public water and sewer service, the Town is currently exploring options that would integrate it with services and assets in other locations, moving toward more regional integration. At present, no part of the Town is served by public sewer, but the Town has been exploring potential tie-ins to sewer service along Route 6 from the neighboring Town of Somerset.

A majority of the Town is currently served by public water drawn from 9 wells and a desalination plant that processes surface water intake from the Palmer River, all located within Swansea. As of Summer 2023, the Swansea Water District is looking into several alternative water supply sources to supplement local water supplies. The Town received a grant from the State of Massachusetts allowing the establishment of a connection to Somerset's water line in case of emergency. Meanwhile, the District is exploring the opportunity to purchase Warren Reservoir from the Bristol County Water Authority in Rhode Island, which formerly relied on the Reservoir as a back-up source but has since secured an alternative. These sources would allow Swansea Water District to support the community as it continues to grow.

Swansea is part of the regional National Grid service area, which provides electricity to the Town. The Town has implemented an electricity aggregation program, enabling residents to choose renewable energy sources for their electricity needs. Swansea's landfill was capped in 2008. Currently, the Town enters into five-year contracts with prominent regional haulers to manage waste disposal operations.

REGIONAL GREEN INFRASTRUCTURE NETWORK

Swansea'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 developed for recreation or preserved for conservation, Swansea 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."[1]

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] 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.

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.[2]

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[3]. Communities can reference the GIN Map to identify significant Green Infrastructure land assets that are still unprotected, undeveloped, or both.

REGIONAL CLIMATE CHANGE CONTEXT

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

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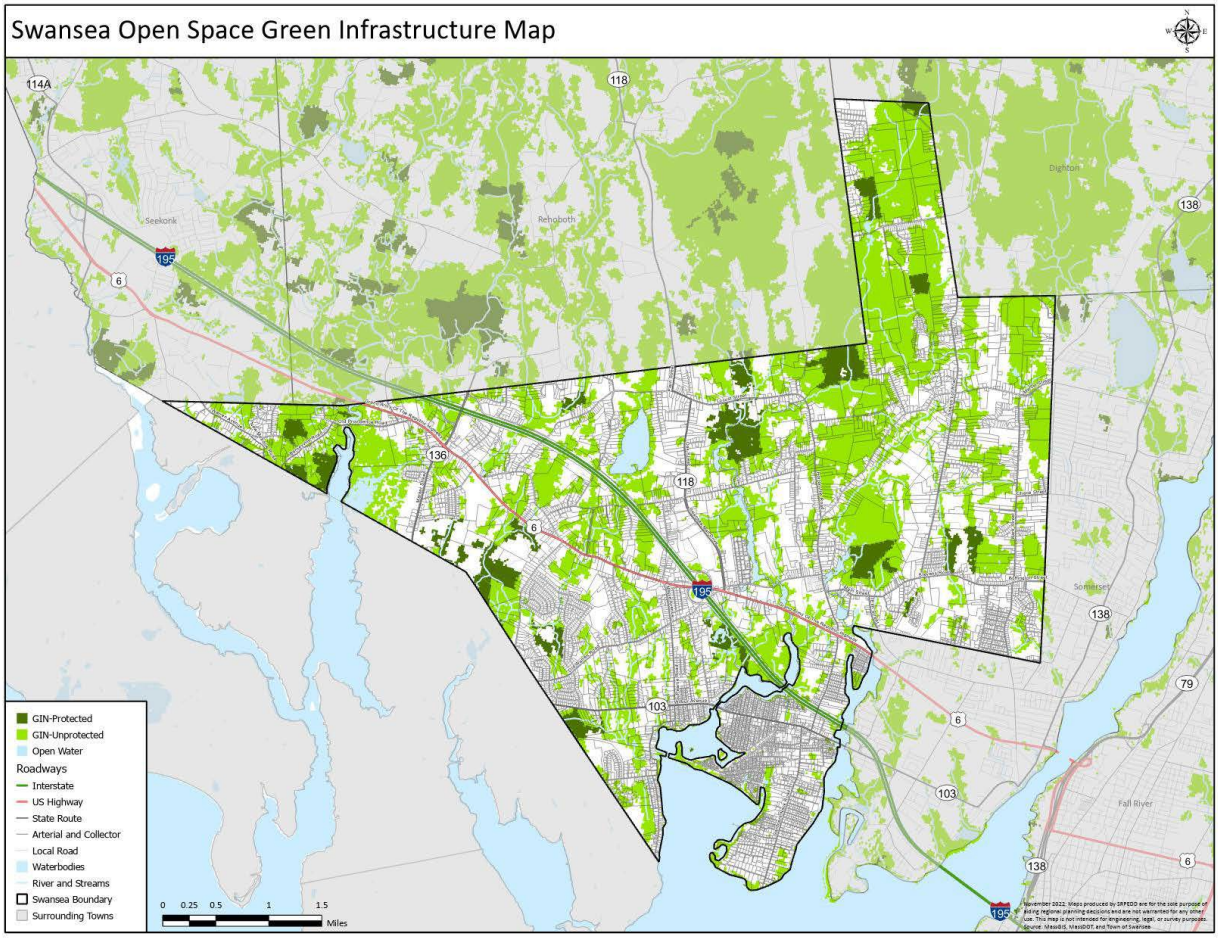
[2] David C. Rouse and Ignacio F. Bunster-Ossa (2013), Green Infrastructure: A Landscape Approach, American Planning Association, Planning Advisory Service Report Number 571, p.12.

[3] The Green Infrastructure Network originates from Manomet's *Green Infrastructure Analysis for the Taunton River Watershed, Massachusetts*: https://www.manomet.org/wp-content/uploads/old-files/Manomet_GreenInfrastructure_Analysis_for_TauntonWatershed_July2017.pdf. Mass Audubon applied this approach statewide in their 2020 *Losing Ground: Nature's Value in a Changing Climate*: https://www.massaudubon.org/our-conservation-work/policy-advocacy/local-climate-resilient-communities/losing-ground.

*Map 3: Green Infrastructure Network in Swansea**



**There is a full-size version of this map in the appendix*

temperatures require a regional - even national and global - response, with every local municipality acknowledging the role that their lands and policies play in the larger climate context.

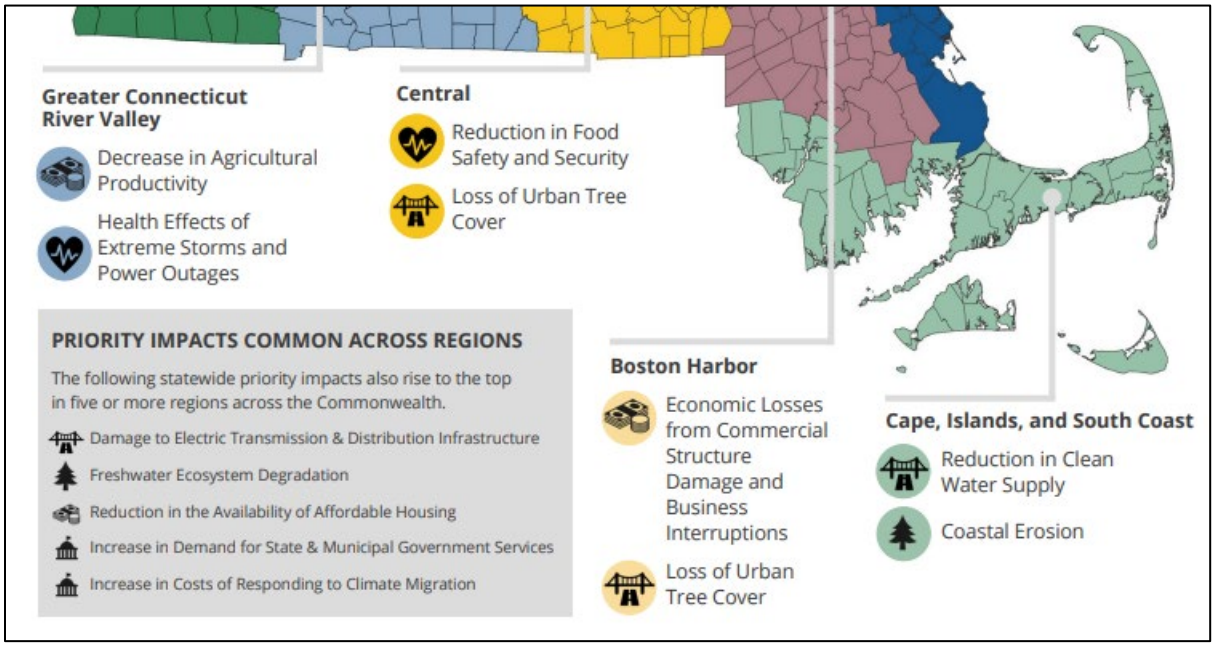
Climate change is a complex topic. We encourage anyone unfamiliar with the basics or with curiosity about the evidence that shows human-induced climate change is occurring, how serious it is for the southeast region, and how the ultimate outcome is dependent on choices we make today to see Appendix C: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

In the Narragansett Bay Watershed, Resilient MA's regional climate outlook predicts an increase in average annual temperature by 3.6 degrees when compared to the historic average (1950 – 2013) by 2030. By 2050, the sea surface temperature is estimated to rise 3.1 degrees, reducing marine fish catch and increasing risk of harmful bacterial infections. Looking forward to 2070, the 10% annual chance of daily rainfall events can potentially occur as much as five times more frequently. By the end of the century, the

frequency of tropical cyclones may increase by nearly 50%, resulting in damage from storm surge, heavy rains, and strong winds.

These changes in climate are expected to have impacts on all sectors: infrastructure, environment, government, economy, and society. Among these sectors, the most urgent impacts are likely to be seen in: increases in vector borne diseases, damage to electric transmissions and utility distribution infrastructure, reductions in clean water supply, marine ecosystem and coastal wetland degradation alongside coastal erosion, an increase in demands for state and municipal government services with a reduction in revenues, as well as a reduction in the availability of affordable housing, and a decrease in marine fisheries and aquaculture productivity. The 2022 Massachusetts Climate Change Assessment grouped regions by common areas of concern. Swansea is part of the Cape, Islands, and South Coast Region, where the two most significant unique impacts of climate change are expected to be **reduction in clean water supply** and **coastal erosion**.

Figure 2. Excerpt from the 2022 Massachusetts Climate Change Assessment - Unique Impacts of Concern by Region



Proactive open space planning enables communities to prepare for these impacts by taking steps to reduce stressors that exacerbate climate change while also building the community's capacity to cope with, or adapt to, its unavoidable effects. Swansea's "green" or natural infrastructure provides important climate resilience benefits that can help with both. For example, undeveloped natural areas help capture stormwater runoff, either returning it to the ground or storing it in wetlands, reducing neighborhood flooding. Trees not only help remove carbon from the atmosphere, mitigating the effects of climate change, but they also help neighborhoods adapt to extreme heat by providing cooling effects. Salt marshes protect coastal development from flooding and

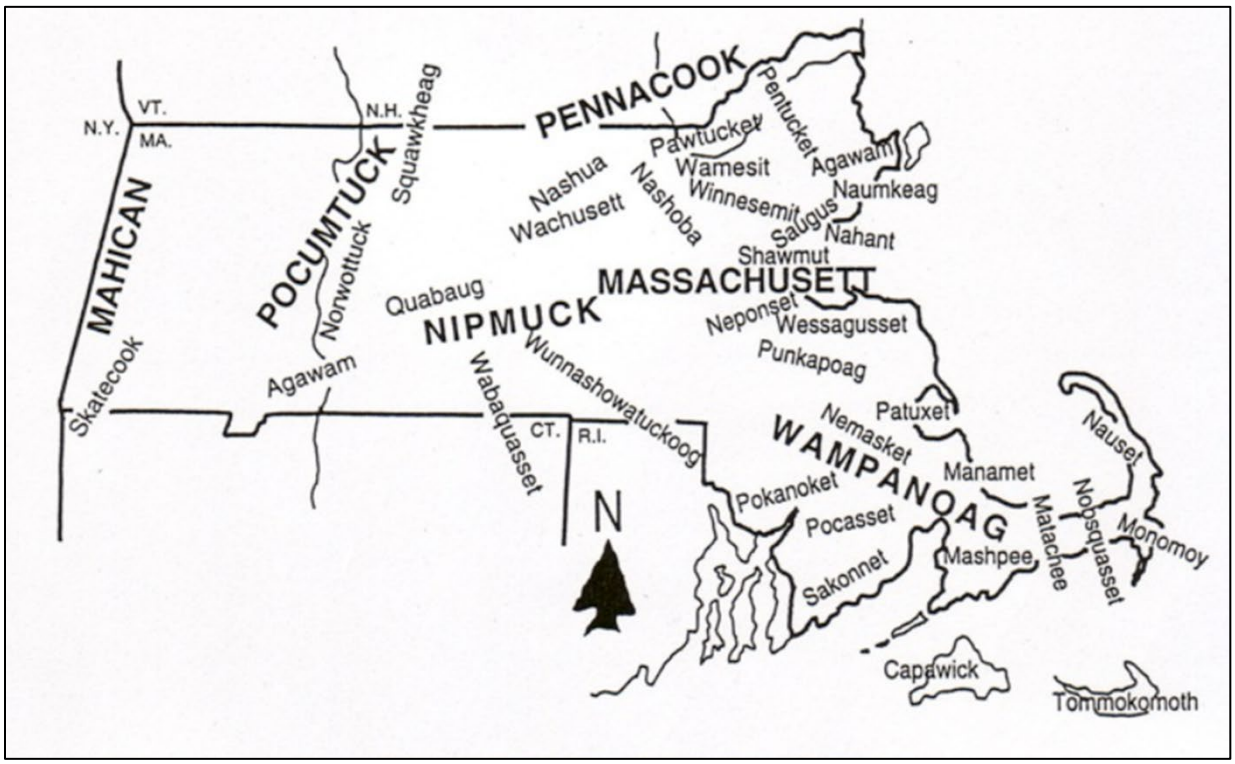
erosion associated with large storms; providing undeveloped spaces for these habitats to migrate inland as sea level rises enables these services to continue into the future.

B. History of the Community

LAND ACKNOWLEDGEMENT

The Town of Swansea is situated on the unceded ancestral territories of multiple Indigenous Tribes and First People's Nations. In order to shape the future of this land, it is crucial that we reflect on its past. We cannot fulfill our responsibility as caretakers without acknowledging and drawing lessons from the generations of Indigenous stewards who have resided here for thousands of years. It is vital for the present residents, workers, and visitors of Swansea to recognize the intricate history of colonialism, understanding the detrimental consequences that have shaped our current way of life. By doing so, we can foster a deeper appreciation for the land and work towards a more inclusive and equitable future.

Map 4: Algonkian Tribes of Massachusetts[4]



COLONIAL HISTORY

Swansea's location on Narragansett Bay, with access to both fresh and saltwater, a mild climate for the region, abundant resources and a network of water transportation

[4] Available Online at http://www.greenfutures.org/?content=1dImvMa2OssSaDJk, accessed 10/14/22.

and trade routes throughout Narragansett Bay's tributaries, supported some of the largest and most concentrated indigenous settlements of Algonquian Tribes that lived in New England when the early colonists arrived. The native settlers of this area along the northeastern shores of Narragansett Bay, called Sowams, would later become known as the Pokanoket and Wampanoag. Today, Sowams is where the communities of Barrington, Bristol, East Providence, Providence, and Warren, RI, and Rehoboth, Seekonk, and Swansea, MA, exist.

Swansea was first mentioned in the Plymouth Colony records of 1668. Traditional accounts refer to the existence of several indigenous settlement sites, such as Gardners Neck, occupied by the Pocassets in the early 1620's. Pokanoket settlements are known to have existed around landmarks in Swansea, such as King's Rock on Market Street near Swansea's border with Warren, RI, and Margaret's And Devil's Rocks south of Route 6 and Stoney Hill Road, at the time of the first English settlement in the area. This initial colonial settlement occurred in the late 1660's when a band of Baptists, led by the Reverend John Myles, settled in the area we now know as Swansea and Barrington, after being forced to leave Rehoboth because of their dissident religious beliefs.

In the Colonial period (1675-1775) the Swansea area was part of King Phillip's War. Swansea's proximity to Mount Hope Bay and the eastern shore of Narragansett Bay meant that its early 18th century economy fell within the sphere of colonial settlements in this region, particularly those that were engaged in shipbuilding.

The Federal period (1775-1830) was a time of slow growth, based primarily upon agriculture and fishing. Regional settlement patterns mainly consisted of dispersed farmsteads strung along the colonial road system, with no distinct civic core. Fishing continued to be a significant element of the economy, especially on Gardners Neck. By the early part of the 19th century, small cotton mills on the Coles River were the prototypes for the larger mills that were to be built later in Fall River.

During the Early Industrial period (1830-1870) transportation routes were improved and the Fall River, Warren, Providence railroad was opened in 1866. Agriculture continued to be the dominant form of economic activity, supplemented by fishing and shipbuilding. (Mason Barney's Yard on the Palmer River closed in 1861.)

In the late Industrial period (1870-1915) the population increased by 97%. The building of the South Swansea Station on the Fall River, Warren and Providence Railroad opened Gardners Neck to summer residents, particularly wealthy Fall River industrialists and merchants. By the end of this period, Touisset Park developed as a summer colony for wealthy residents. Concurrently, major development occurred in the Ocean Grove area as a settlement of summer cottages for middle income residents of Fall River. No provisions were made for year-round occupancy including, in particular, septic systems. The remainder of the Town continued as a rural agricultural district.

TWENTIETH AND TWENTY-FIRST CENTURIES

The 20th century has seen most of the dramatic changes in the physical and economic character of Swansea. In the early modern period (1915-40) the road systems were improved (Route 6 was opened in 1930) and the Town started to experience modest suburban growth in relationship to Fall River and Rhode Island urban communities. It is perhaps the late modern period (1945 to the present) that has seen the most dramatic growth in the development of Swansea. The opening of I-195 placed Swansea firmly in the path of suburban growth and induced regional commercial and service industries on a large scale as a suburb of Fall River and Providence.

The construction of the Swansea Mall and resultant spin-off ventures continue to confront the Town with larger-scale development pressures. Furthermore, demand for housing in an increasingly expanding market has also exerted pressures for extensive land use change in Swansea. The pace of suburban commercial and residential development has, in the last decades, made it clear that Swansea must be proactive in prioritizing the lands that are most valuable for preservation. A Comprehensive Plan and its critical sub-component, the Open Space and Recreation Plan are tools that can support the Town in setting priorities that will define land preservation and development into the middle of the 21st century.

Like other towns that exist near major urban centers, Swansea continues to face intense developmental pressures. As demand for residential and commercial sites continues to accelerate, greater attention must be paid to the preservation of the community's natural resources. The Town's open spaces and recreational facilities must be protected and maintained to provide adequate passive and active recreational opportunities to an expanding population. The Town must also look to the future and fashion a strategy that will preserve natural and cultural resources for the benefit of future generations.

C. Population Characteristics

POPULATION GROWTH AND CHANGE THROUGH TIME

The population of Swansea in 2020 was 17,144 persons, an increase of 11% since 1990. However, most of this growth in Swansea has happened in more recent years, despite the steadier growth seen in both Bristol County and Massachusetts over the past 30 years.

Table 1. Area Population Growth, 1990 - 2020

	1990	2000	2010	2020	% Change 1990 - 2020
Swansea	15,411	15,901	15,865	17,144	11.25%
Bristol County	506,325	534,678	548,285	579,200	14.39%
Massachusetts	6,016,425	6,349,097	6,547,629	7,029,917	16.85%

Source: U.S. Census Bureau, Decennial Census

However, even with the more recent increases in population, Swansea's average household size has remained approximately the same, with a 0.18 decrease in persons per household since 2000.

Table 2. Average Household Size, 2000 - 2020

	2000	2010	2020
Average Household Size	2.67	2.57	2.51

Source: U.S. Census Bureau, American Community Survey

POPULATION STRUCTURE – RACE, AGE AND SEX

Swansea's median age is 45.2 as of the 2021 American Community Survey. This is an increase of 4.7 years since 2000. As can be seen in the Population Age table, Retirement Age population (60+) has grown substantially since 2000. Meanwhile, the Working Age population (20 – 59) has remained at approximately the same level, and the School Age population (under 20) has declined. This may, in part, be due to residents having fewer children than in the past, having children later in life, and residents remaining in their homes longer after their children have moved; and may also be due to residents being older when moving into the community than in the past.

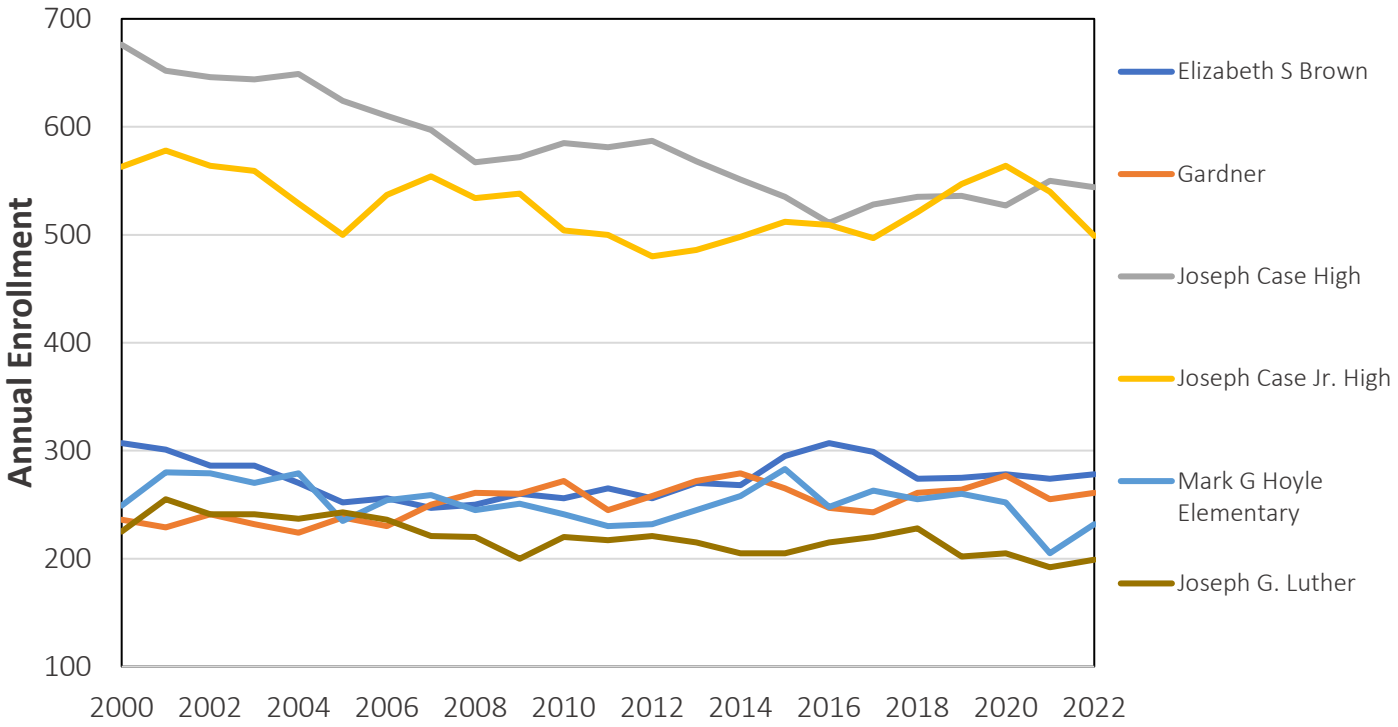
Table 3. Population Age, 2000 - 2020

	2000 Number	2000 % of Population	2010 Number	2010 % of Population	2020 Number	2020 % of Population
School Age (under 20)	4,062	26.7%	3,455	22.0%	3,265	19.6%
Working Age (20 – 59)	8,649	56.9%	8,335	53.1%	8,839	53.0%
Retirement Age (60+)	2,492	16.4%	3,893	24.8%	4,588	27.5%

Source: U.S. Census Bureau, American Community Survey

The declining population in school age children has mostly impacted the annual school enrollment in Joseph Case High and Joseph Case Jr. High, with other schools in the area seeing fluctuations in enrollment numbers year to year. Beyond this population trend, Joseph Case High enrollment is affected by students choosing other local high school options. This trend can be seen in the School Annual Enrollment, 2000 – 2022 figure below.

Figure 3. School Annual Enrollment, 2000 - 2022



Source: Massachusetts Department of Elementary & Secondary Education

The racial and ethnic composition of Swansea's population from 2010 to 2020 is presented below. This data depicts a predominantly White population that is slowly becoming more racially and ethnically diverse over time.

Table 4. Race and Ethnicity: Swansea, 2010 - 2020

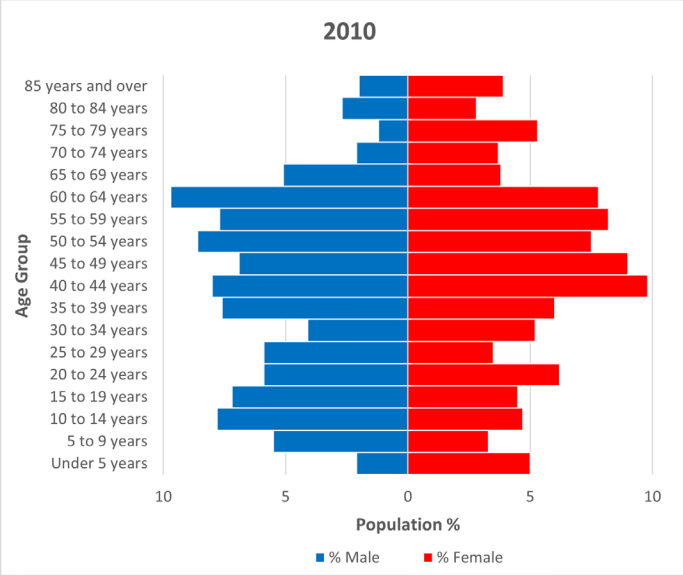
	2010		2020	
Race/Ethnicity	**Total**	**Percent**	**Total**	**Percent**
White	15,429	97.25%	15,883	92.64%
Black or African American	101	0.64%	104	0.61%
American Indian and Alaskan Native	13	0.08%	15	0.09%
Asian	110	0.69%	171	1.00%
Hawaiian/Pacific Islander	1	0.01%	2	0.01%
Other	39	0.25%	152	0.89%
Two Races	142	0.90%	751	4.38%
Three Races	27	0.17%	59	0.34%
Four or More Races	3	0.02%	7	0.04%

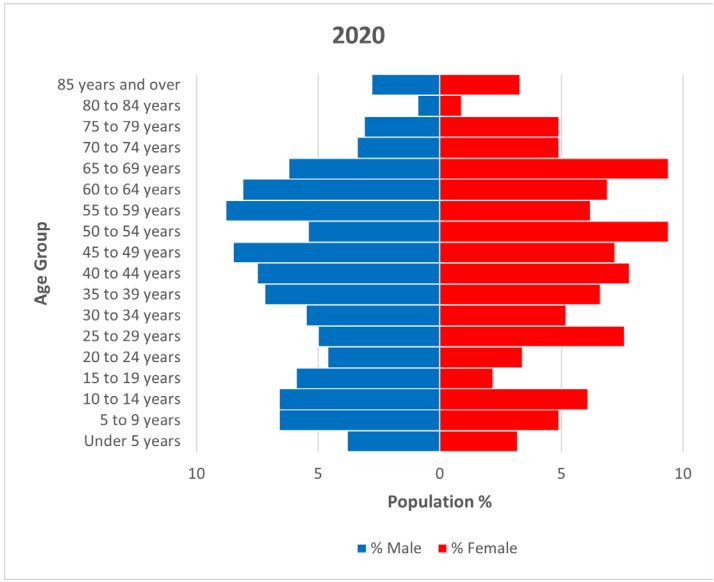
Total	15,865	100.00%	17,144	100.00%
Hispanic	191	1.20%	129	0.75%

Source: U.S. Census Bureau, Decennial Census

The Population Age and Sex Distribution, 2010 - 2020 figures below represent Swansea's population composition in the form of population pyramids. While the overall shape is similar, there are some subtle differences. Between 2010 and 2020, there is a notable increase in the number of 65-to-74-year old's, reflective of the increase in retirement age populations. Similarly, there is a notable decline in 15-to-24-year old's, reflective of the declining school age and working age groups.

Figure 4. Population Age and Sex Distribution, 2010 - 2020



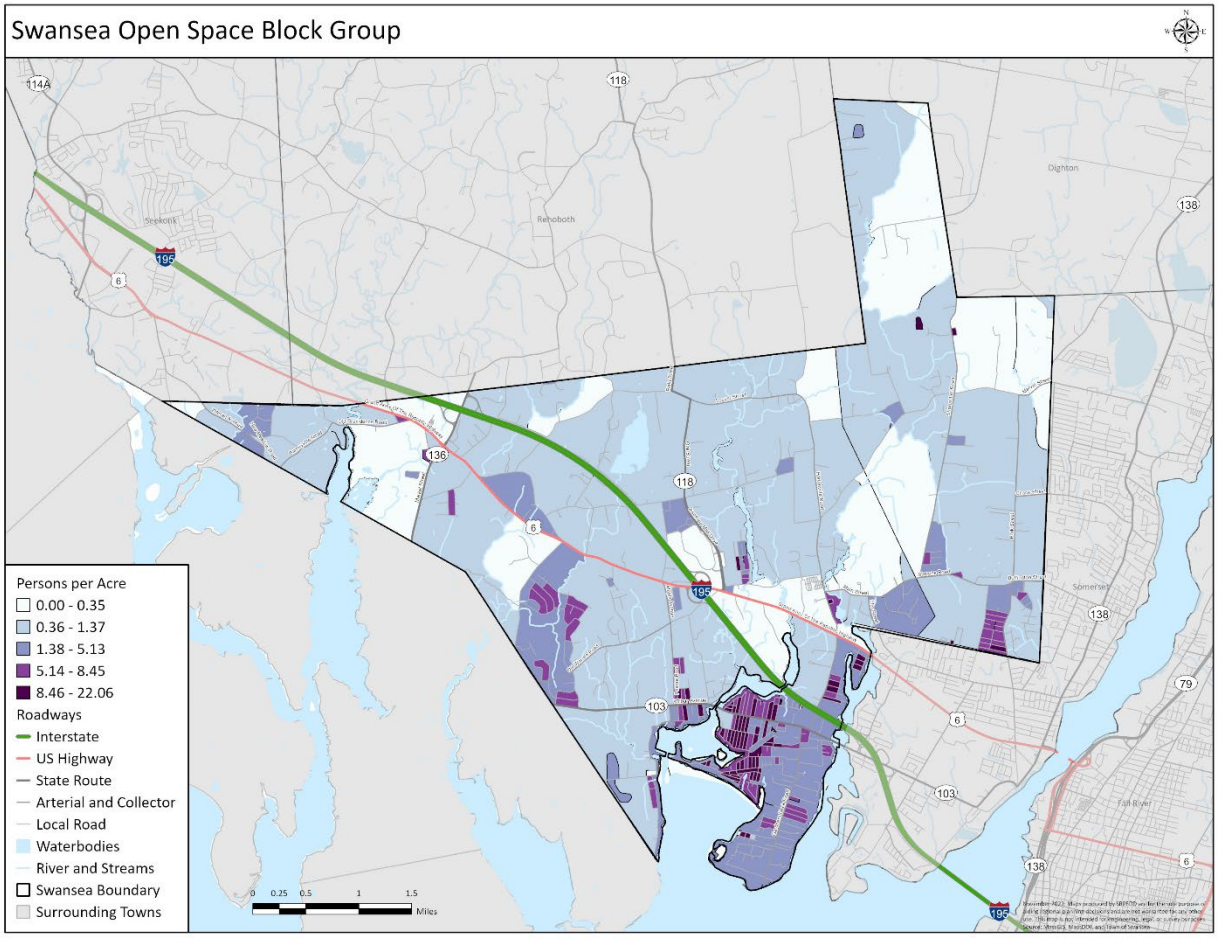


Source: U.S. Census Bureau, American Community Survey

POPULATION DENSITY

Swansea exhibits distinct patterns of population density. The southeastern region, particularly the Ocean Grove neighborhood, south of Route 195 and along the coast, accommodates the majority of the population. In this area, population density can reach as high as 22 persons per acre. Conversely, the northern and western parts of the Town feature significantly lower population concentrations, with numerous areas having less than 1 person per acre.

*Map 5. Population Density by Acre, 2020**



**There is a full-size version of this map in the appendix*

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;
- 25% or more of households lack English language proficiency; 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

Based on these State criteria, Swansea currently has no Environmental Justice populations.

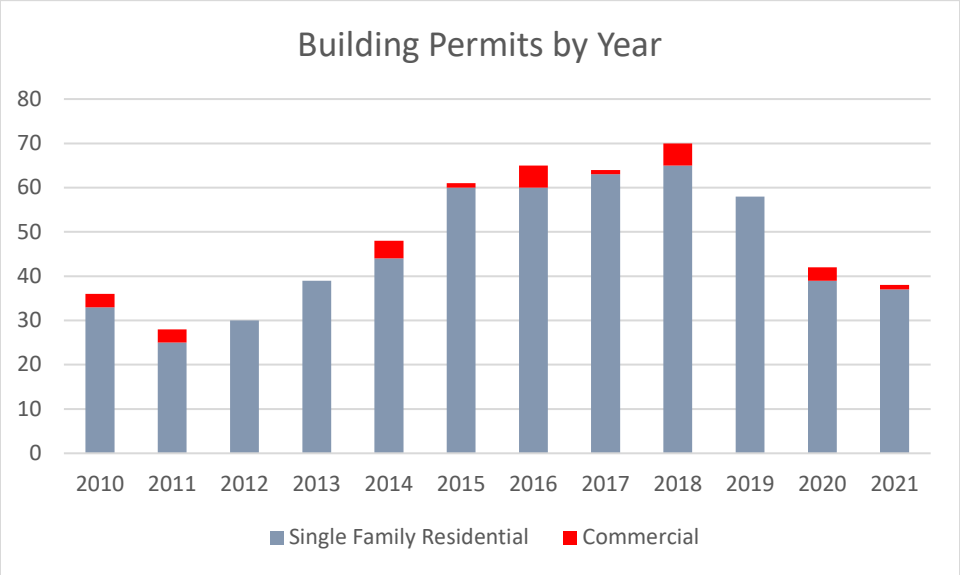
Prior to the State's 2022 update to the statewide EJ maps, Swansea did have one

qualifying block group in the Ocean Grove area, coinciding with some of the more densely populated areas in Town (as displayed in the Population by Density Map). The most recent maps utilize 2019 American Community Survey data, under which This block group does not qualify for the State's income criterion. The 2020 Census data reveal this neighborhood does meet the income qualification, so it is possible this neighborhood will requalify for EJ designation in the future.

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. Over half of the homes in Swansea were built between 1940 and 1980, at a rate of about 80 homes per year. Since then, home construction has slowed considerably. The Building Permits Issued in Swansea, 2010 - 2021 figure shows the number of new single family residential and new commercial building permits issued during each of those years.

Figure 5. Building Permits Issued in Swansea, 2010 - 2021



Source: Town of Swansea

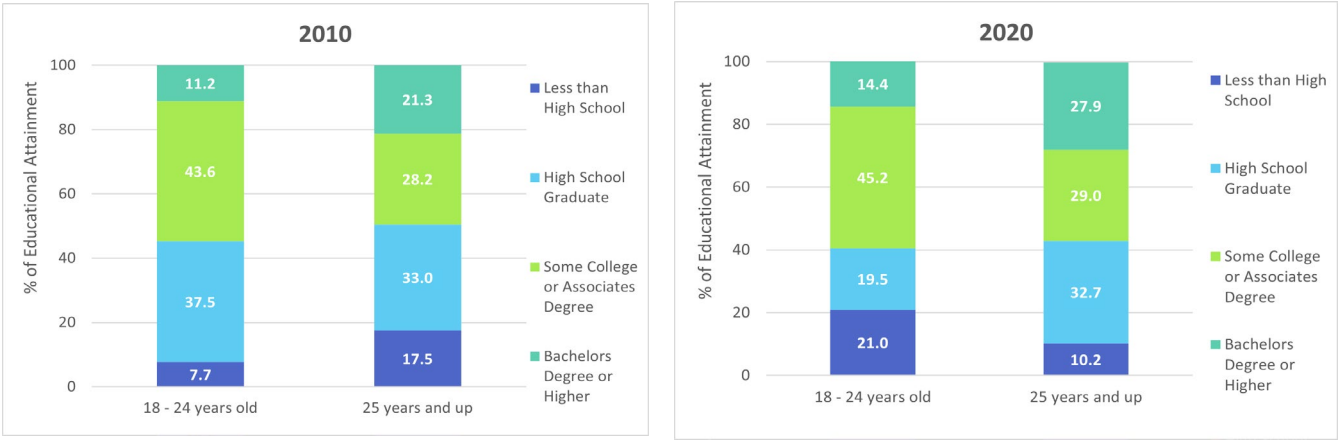
As can be seen from the Building Permits Issued in Swansea, 2010 - 2021 figure, new building permits for Single Family Residential in Swansea have fluctuated over the years. With the exception of 2011, Swansea saw at least 30 building permits issued for new single family residential each year. 2015 to 2018 saw a temporary spike in those numbers, with 60 or more new single family residential building permits each year. New commercial builds are less common, with approximately 2 building permits each year.

ECONOMIC CHARACTERISTICS

EDUCATION

The Educational Attainment in Swansea figure presents the educational level distribution of the population in 2010 and in 2020. The education level of Swansea's adult population generally increased between 2010 and 2020, as shown by the 6.6% increase in those with a bachelor's degree or higher. The proportion of the adult community with less than a high school level of education decreased by about the same magnitude over this period, with a 7.3% decrease in those with less than a high school level education.

Figure 6. Educational Attainment in Swansea



Source: U.S. Census Bureau, American Community Survey

INCOME

The median household income for Swansea has nearly doubled since 2010, increasing by 47.8%, with a current median household income of $101,703 in 2021. Median household income growth has outpaced the average for the SRPEDD Region, to which it was previously similar too, and remains consistently higher than Bristol County and Massachusetts as a whole.

Table 5. Median Household Income, 2010 - 2021

	Swansea	SRPEDD Region Average	Bristol County	Massachusetts
2010	$68,773	$72,204	$54,955	$64,509
2011	$71,716	$73,894	$55,813	$65,981
2012	$71,926	$74,001	$55,995	$66,658
2013	$70,991	$72,996	$55,298	$66,866
2014	$77,345	$73,786	$55,957	$67,846
2015	$73,168	$75,400	$56,842	$68,563
2016	$77,531	$78,215	$59,343	$70,954
2017	$81,125	$80,200	$62,514	$74,167
2018	$83,010	$83,495	$66,157	$77,378

2019	$86,637	$86,107	$69,095	$81,215
2020	$95,945	$87,727	$71,450	$84,385
2021	$101,703	$92,106	$74,290	$89,026

Source: U.S. Census Bureau, American Community Survey. SRPEDD Region Average Median Household Income values are the averages of the median household incomes for each SRPEDD community.

EMPLOYMENT AND UNEMPLOYMENT

Employment conditions in Swansea since 2010 have been steadily growing, with a small drop in 2021. Similar trends can be seen in neighboring communities, which is shown in the Total Jobs by Community table.

Table 6. Total Jobs by Community

	2010 Jobs	2018 Jobs	2019 Jobs	2020 Jobs	2021 Jobs	% Change 2010 - 2021
North Attleborough	15,329	16,182	16,299	16,058	16,531	7.8%
Swansea	8,492	8,734	8,790	8,980	8,937	5.2%
Dighton	3,776	4,423	4,473	4,446	4,500	19.2%
Fall River	38,613	39,721	39,484	39,848	42,061	8.9%
Rehoboth	6,042	7,012	7,157	7,149	7,173	18.7%
Seekonk	6,917	8,257	8,533	8,341	8,374	21.1%
Somerset	9,064	9,063	9,170	9,212	9,360	3.3%
Raynham	6,814	7,652	7,681	7,643	7,598	11.5%
Fairhaven	8,283	7,775	7,771	7,766	7,989	-3.5%
SRPEDD Region	227,958	252,755	252,471	229,628	-	0.7%*
Bristol County	206,978	228,540	228,620	283,747	289,204	39.7%
Massachusetts	3,151,206	3,586,110	3,633,365	3,615,725	3,667,019	16.4%

*Source: U.S. Census Bureau, American Community Survey; *note that total SRPEDD Region jobs in 2021 is unavailable at the time of drafting and the % change calculated for the SRPEDD region reflects the change in jobs from 2010 to 2020 (not 2021 as in each community).*

The Employment by Industry table shows the leading sectors in Swansea are: Retail Trade, Health Care and Social Assistance, and Accommodation and Food Services. The prominence of Retail Trade in Swansea is likely due to the Walmart Supercenter and the Cardi's Furniture Superstore, among others. The large number of Health Care and Social Assistance jobs are likely due to the Country Gardens and the Stevens Children's Home, and the Accommodation and Food Services jobs are likely due to the large number of restaurants and fast-food establishments in Swansea.

Table 7. Employment by Industry (Population 16+ years)

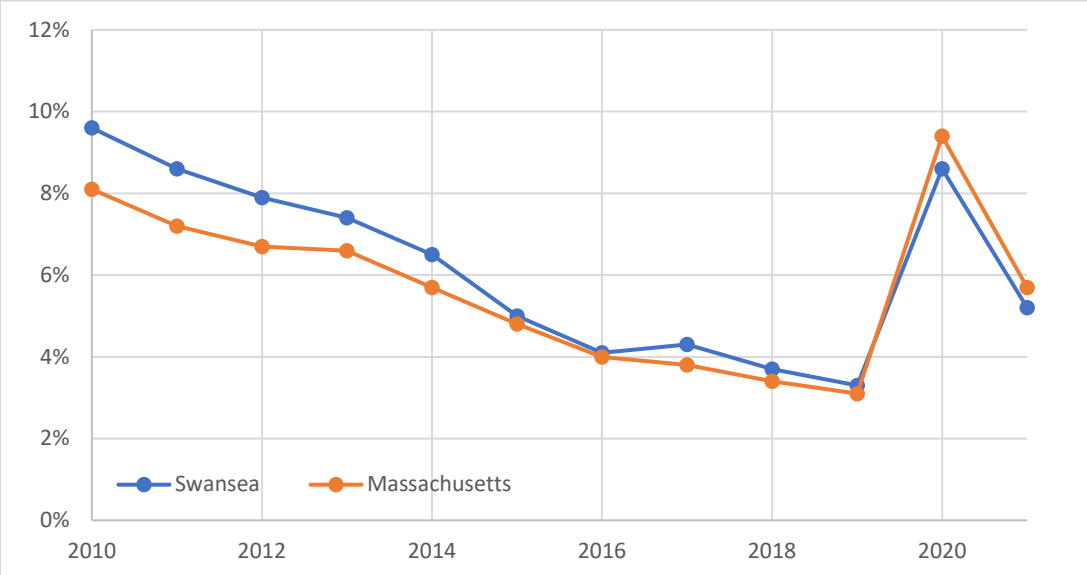
	2010 Jobs	2019 Jobs	2020 Jobs	2021 Jobs	% Change 2010-2021
Retail Trade	1,545	1,504	1,437	1,484	-3.9%
Manufacturing	111	139	111	123	10.8%

Accommodation and Food Services	715	592	437	495	-30.8%
Other Services, Except Public Administration	186	209	156	198	6.5%
Health Care and Social Assistance	754	991	917	953	26.4%
Construction	222	367	360	390	75.7%
Wholesale Trade	84	77	65	66	-21.4%
Professional and Technical Services	163	204	214	221	35.6%
Administrative and Waste Services	95	107	66	70	-26.3%
Arts, Entertainment, and Recreation	115	180	98	111	-3.5%
Transportation and Warehousing	60	61	57	90	50.0%
Information	41	43	27	25	-39.0%
Finance and Insurance	157	326	351	387	146.5%
Real Estate and Rental and Leasing	67	29	20	28	-58.2%
Total	4,315	4,829	4,316	4,641	7.6%

Source: MA Executive Office of Labor and Workforce Development

In the Unemployment Rates Compared, 2010 - 2021 figure, the trend in unemployment rates in Swansea is compared with those of the state. As can be seen from the figure, unemployment rates are juxtaposed between the two, with Swansea's rate trending slightly above that of Massachusetts until 2019. In 2020 and 2021, Swansea's unemployment rate dipped below the state's for the first time in recent years. This change is likely due to the COVID-19 pandemic impacting non-essential jobs; however, a large portion of the job market in Swansea is considered essential and were less susceptible to the increased unemployment caused by the pandemic.

Figure 7. Unemployment Rates Compared, 2010 - 2021



Source: MA Executive Office of Labor and Workforce Development

D. Growth and Development Patterns

PATTERNS AND TRENDS: POPULATION GROWTH AND CHANGE

Growth has been inconsistent in Swansea, with some decades growing moderately and others seeing negative growth. The Population Growth Rate: Swansea, 1990 – 2020 table shows the rate of population change in each decade. Swansea's total population has seen the biggest growth in recent years this past decade.

Table 8. Population Growth Rate: Swansea, 1990-2020

Year	Population	Numerical Change	Percentage Change
1990	15,411		
2000	15,901	490	3.2%
2010	15,865	-36	-0.2%
2020	17,144	1,279	4.1%

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. The Population Projections to 2040 in Swansea and Neighboring Communities table shows projected population changes in the region.

Table 9. Population Projections to 2040 in Swansea and Neighboring Communities

Community	2010	2020 Actual	2020* Predicted	2030*	2040*
Swansea	15,865	17,144	15,276	14,323	13,201
North Attleboro	28,712	30,834	29,108	29,136	28,958
Dighton	7,086	8,101	8,010	9,001	10,042
Fall River	88,857	94,000	87,606	84,917	81,813
Rehoboth	11,608	12,502	12,054	12,136	12,135
Seekonk	13,722	15,531	14,592	15,044	15,038
Somerset	18,165	18,303	17,820	17,175	16,555
Raynham	13,383	15,142	13,801	14,570	15,757
Fairhaven	15,873	15,924	15,784	15,356	14,542
SRPEDD Region	616,670	652,375	637,719	650,104	653,966

*Source: U.S. Census Bureau, Decennial Census, *SRPEDD*

Despite the population growth in 2020, Swansea is expected to decline in the coming decades. Using the RTP projections, The Population Projections to 2040 in Swansea and Neighboring Communities table shows a projected decrease in Swansea's population by about 4,000 residents through 2040. We caution again against taking these projections as fact. In 2023, SRPEDD is once again mobilizing to update the RTP, and we anticipate revised projections as that process unfolds.

PATTERNS AND TRENDS: LAND CONVERSION

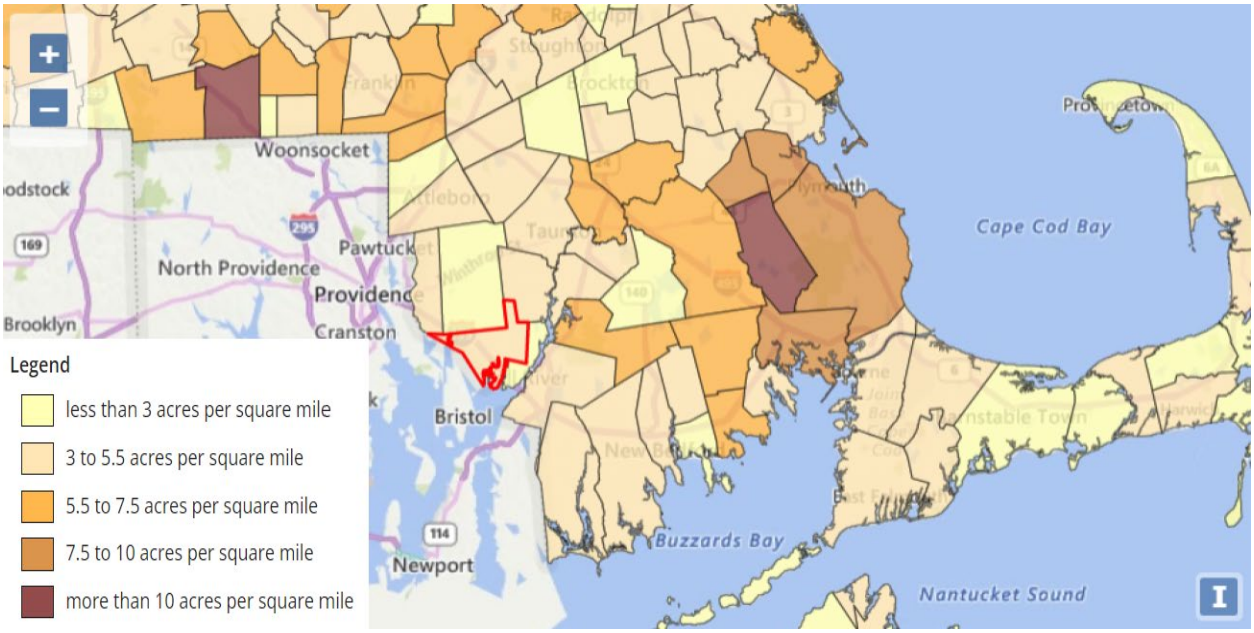
The rapid rise of regional and town-specific populations in recent decades also brought about swift land development. According to Mass Audubon's *Losing Ground: Nature's Value in a Changing Climate* Report (2020), Swansea was ranked 182nd of the state's 351 municipalities in acres of natural land, and 105th in terms of area of natural land developed between 2012 and 2017, at 86 total acres. In the context of the Mass 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, Swansea ranked as the 115th most rapidly developing community in the Commonwealth between 2012 and 2017, at a rate of 3.75 acres per square mile, as seen in the Rates of Development Across

Southeastern Massachusetts, 2012 – 2017 map. This rate is in the middle of Swansea's neighboring communities, as can be seen in the Rates of Development in Swansea and Neighboring Communities, 2005 – 2017 table. The highest rates of development during this period were experienced in neighboring Plymouth County.

These values have changed slightly from Mass Audubon's previous *Losing Ground* report in 2014, in which Swansea ranked 77th in the state in acres of natural and open land converted to development, between 2005 and 2013, at 104 total acres. The rate of development in Swansea during this time was slightly higher than the more recent rate, at 4.52 acres per square mile, which made it the 84th most rapidly developing community in the Commonwealth at the time.

Map 6. Rates of Development Across Southeastern Massachusetts, 2012-2017



Source: Mass Audubon, 2020

Table 10. Rates of Development in Swansea and Neighboring Communities, 2005-2017

Community	Rate of Development, 2005 - 2013	Rate of Development, 2012 - 2017
Swansea	4.52	3.75
North Attleboro	6.78	2.41
Dighton	3.89	4.53
Fall River	3.03	3.61
Rehoboth	3.64	2.76
Seekonk	5.03	4.55
Somerset	5.66	1.97
Raynham	7.10	5.53
Fairhaven	3.73	1.48

Source: Mass Audubon, 2020

EXISTING LAND USE

Based on land use classifications recorded in property assessment categories, about 50% of Swansea's land area is in parcels that contain development and development-based uses (shown in yellow in the Overall Amount of Land in Major Land Use Categories in Swansea, 2020 table). About 37% of Swansea'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 the Overall Amount of Land in Major Land Use Categories in Swansea, 2020 table).

Table 11. Overall Amount of Land in Major Land Use Categories in Swansea, 2020

Land Use Category	Total Acres	Percent
Residential	5,760	38.82%
Residential, Single Family	*5,312*	*35.80%*
Residential, Multi-Family	*444*	*2.99%*
Residential, Other	*4*	*0.03%*
Commercial	1,106	7.45%
Industrial	203	1.37%
Mixed Use, Residential / Other	343	2.31%
Agriculture	655	4.41%
Forest	204	1.37%
Open Land	4,466	30.10%
Recreation	32	0.22%
Right-of-way	1,053	7.10%
Tax Exempt	548	3.69%
Unknown	301	2.03%
Water	166	1.12%
Total	**14,837**	**100%**

Source: MassGIS Level 3 Parcel Data for Swansea, FY 2021

Residential Uses

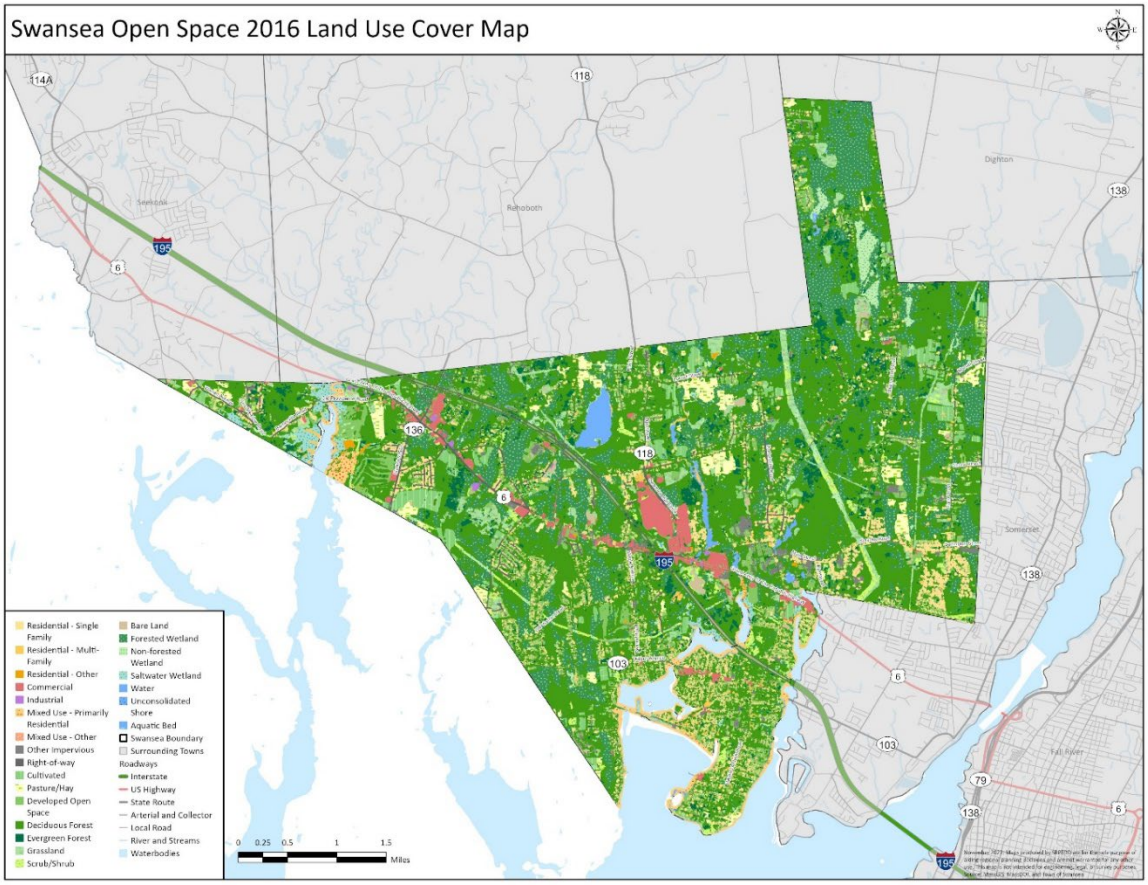
Residential development accounts for the largest share of Swansea's current land use, by area. Low density single-family residential lots account for approximately 36% of the Town's area, and higher density multi-family residential, other residential, and mixed-use residential, account for approximately an additional 5% of the Town. Residential uses are distributed throughout Town, though more concentrated in the southern part of Town and particularly along the coastline. Residential land cover elsewhere is more disjointed by distributed open land, agriculture and commercial uses.

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 1,061 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 permanent Deed Restriction; 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; and State of Massachusetts wildlife refuges or other protected lands. While the amount of development is increasing in Swansea, so is the amount of land placed under permanent preservation protections. 207 acres of land were newly conserved between 2012 and 2019, and the Town has purchased additional lands for conservation in recent years, with funds generated from the Community Preservation Act.

*Map 7. Existing Land Use**



**There is a full-size version of this map in the appendix*

Apart from permanent development restrictions, some of the land that is currently 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 is for forestry uses; Chapter 61A is for agriculture; and Chapter 61B is for 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 approximately 965 acres of Chapter land in Swansea, though the acreage fluctuates with property additions and removals.

More details and maps of Swansea's protected open spaces and Chapter 61 lands can be found in Section V. Inventory of Lands of Conservation and Recreation Interest.

Other Uses

After Residential and Open Lands in Swansea, the third most common use is Commercial, covering roughly 7.5% of the Town. These commercial areas are largely concentrated along the Route 6 corridor. Road rights-of-way make up 7.1% of the Town's area. A legacy of Swansea's agricultural history, agricultural uses cover 4.4% of the Town.

INFRASTRUCTURE

TRANSPORATION INFRASTRUCTURE

Historically, the creation of major roadways through Town, such as Route 6 and I-195, have spurred suburban development as travel to neighboring cities has become easier. Routes 6 and 103 have also developed as major commercial corridors through Town. Development pressures continue to grow in Swansea as demand for residential and commercial sites continues. Managing this development so that it does not happen at the expense of the community's open spaces will be important for ensuring access to adequate recreational amenities as the population continues to grow. Encouraging more infill along existing commercial corridors, such as redevelopment of the former Swansea Mall site, can enable further commercial development without risking loss of valuable natural areas.

PUBLIC WATER SUPPLY

Other than the Two Mile Purchase Area and other minor outliers, most of the Town is served by public water, which is drawn from wells located in Swansea. The Swansea Water District, a public water supplier that operates independently from the Town and was established in 1949, provides the community's water supply. It has over 6,300 service connections along approximately 120 miles of watermain. Water comes from twelve wells (nine of which are currently active) and two surface water sources, and is treated at three treatment plants distributed throughout its service area.

In the 1990's and 2000's, the District struggled to meet the community's water demands. A desalination plant was built and came online in 2015 to provide additional water. It pumps water from the Palmer River, which is treated in the Vinnicum Road treatment facility, then releases the resulting brine back into the Palmer River (see Swansea Desalination Plant Operations Map). Alterations to the nearby river channel as a result of a bridge replacement that occurred after the desalination plant's opening have impacted treatment operations. While the current water supply is serving the

needs of the community, projected population growth could strain future supplies. Therefore, the District continues to explore options to grow its water supply.

Swansea is actively looking into several alternative water supply sources, to supplement the current supply into the future. Swansea was a recipient of a regional Municipal Vulnerability Preparedness grant from the State of Massachusetts that explored the feasibility of establishing an interconnection between Swansea's and Somerset's water systems for emergency back-up supply. More recent funding secured through State Representative Haddad's office is enabling design for implementing such an interconnection.

Figure 8: Swansea Desalination Plant Operations Map

Source: Swansea Water District and Watek Engineering Corporation, 2021

Meanwhile, the Swansea Water District is in discussion with the Bristol County Water Authority of Rhode Island to acquire Warren Reservoir from them. They no longer require the Reservoir as a back-up supply and are interested in selling the property. The Town of Swansea wants to explore its potential to serve as a back-up water supply to the Town of Swansea, and if not suitable for water supply, then for public recreation.

Swansea has also been involved in regional studies, led by the City of Fall River, to explore the development of an intermunicipal water supply system to serve the region's water needs more adequately in the future. These potential shifts in the sources of Swansea's water supply would give the Town a more vested interest in land preservation in neighboring communities to protect water supply protection. In the meantime, limited water supply will restrict the extent of growth and development until additional sources can be secured; however, if and when additional water sources do come online, the Town will want to be prepared for the potential resulting development boom.

SEWER SERVICE

There are no sewers serving residences in Swansea. Much of Town utilizes private septic systems, which can be challenging because Swansea's poorly draining soil is not ideal for septics. This limits development somewhat, as providing adequate space for an on-

site septic system must be accommodated. This also limits the density of new residential development that must meet Title V requirements for on-site septic systems.

The Swansea Mall has a wastewater treatment facility that also serves some of the surrounding commercial facilities. The Town has been exploring potential tie-ins to sewer service along Route 6 from the neighboring Town of Somerset. Since that could spur a rapid growth in commercial development, the Town is approaching that possibility cautiously to ensure the resulting development happens in a responsible way.

STORMWATER MANAGEMENT

As the Town grows and more natural area is converted to development, stormwater runoff from these impervious surfaces becomes more of an issue. Much of the Town's aging stormwater infrastructure was designed for a time when development was less dense and rainfall was more predictable. The Town has taken steps in recent years to assess its stormwater infrastructure and is in the process of replacing and upgrading undersized structures to reduce the risk of future stormwater flooding.

As development continues throughout Town, planning for the associated stormwater runoff is integral. Preserving natural green infrastructure corridors alongside development and limiting the amount of impervious cover creation will require careful planning in order to minimize these negative tradeoffs (see section III. A. for more on green infrastructure). The Town can also take steps to encourage developers to incorporate low impact design principles that reduce stormwater runoff into future development, such as through zoning regulations, subdivision rules and regulations, and local permitting processes.

LONG-TERM DEVELOPMENT PATTERNS

Swansea has developed both as a coastal community and a rural agricultural town. The southern part of the Town, especially in the Gardners Neck area, is dominated by dense residential development on very small lots. Many of these homes were built as seasonal cottages, but most have now been converted to year-round use. North of Route 6, the community still has a fairly rural character, with several farms still in operation.

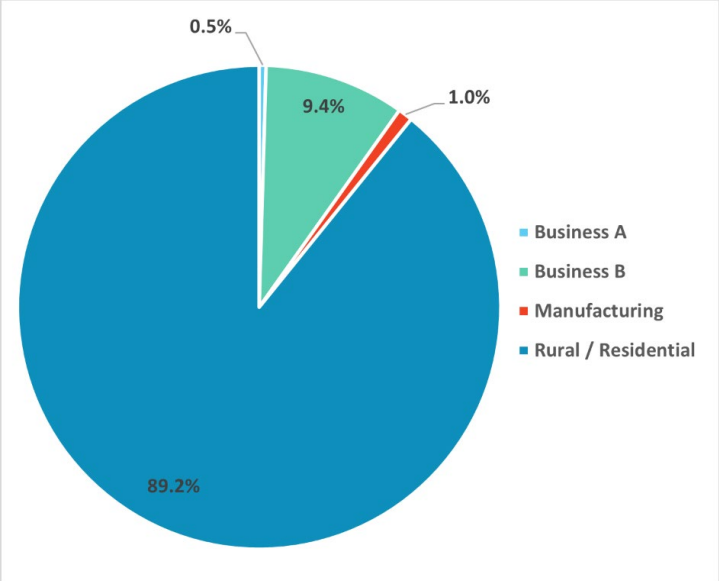
ZONING AND LAND-USE CONTROLS

Zoning districts regulate land uses within Swansea, 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.

The current Zoning Bylaw includes one residential district, two business districts, and one manufacturing use district. Most of the land in Swansea - 89.2% - is zoned for residential use. The land along the Route 6 corridor is zoned Business B. The land in the Ocean Grove around Route 103 is zoned Business A, and a small section of the land between

Interstate Route 195 and Route 6 is zoned manufacturing. (See the Base Zoning Districts in Swansea map)

Figure 9. Proportion of Swansea in each zoning district



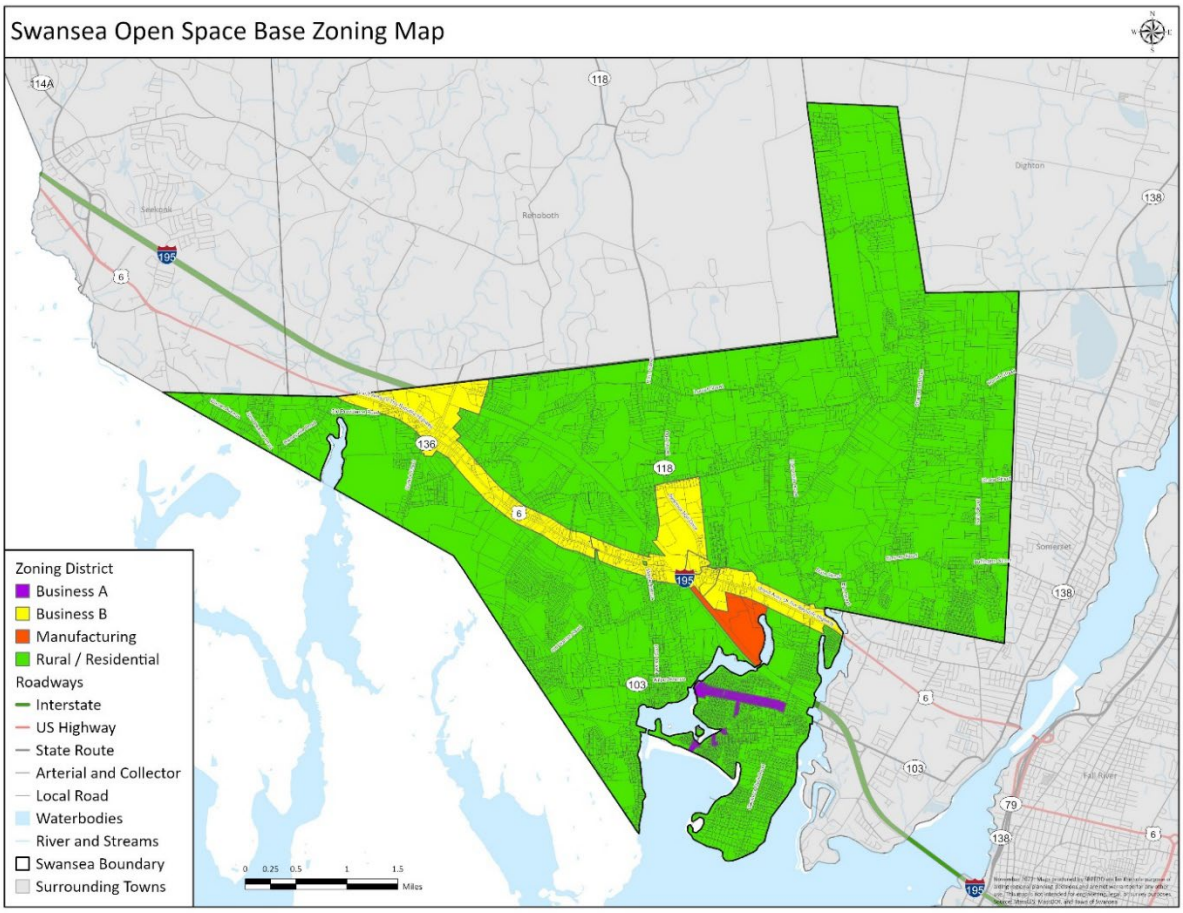
Source: Swansea Zoning GIS

Table 12. Lot Dimensional Requirements by Zoning District

Requirement	Rural Residential (RR)	Business A (BA)	Business B (BB)	Manufacturing (M)
Minimum Lot Size (square feet)	30,000; 60,000 in Aquifer Protection Overlay District	N/A	20,000	20,000
Frontage (feet)	150	150	100	100
Front Setback (feet)	35	35	40	40
Rear Yard (feet)	30	30	30; 50 if corner lot or abuts residential zone	30; 50 if corner lot or abuts residential zone
Side Yard (feet)	15; 30 if corner lot	15; 30 if corner lot	20	20
Maximum Building Height (feet)	38	35	N/A	N/A
Maximum % of Lot Covered	N/A	N/A	35	35

Source: Swansea Zoning Bylaws, accessed 02/08/2023

*Map 8 Base Zoning Districts in Swansea**



**There is a full-size version of this map in the appendix*

In addition to the Town's "base zoning" described above, there are four overlay districts that address specific concerns, either by applying additional performance standards and restrictions on the development permitted in the underlying area, or by expanding the uses permitted for a limited area with a specific purpose.

- Swansea's **Floodplain Overlay District** was created to ensure public safety by reducing the threats to life and personal injury resulting from development in the regulatory floodplain.
- Swansea's **Aquifer Protection Overlay District** was created to promote the health, safety, and general welfare of the community by ensuring an adequate quality and quantity of drinking water for the residents, institutions, and businesses of the Town of Swansea.
- Swansea's **Wireless Communication Overlay District** was created to regulate the placement of new wireless communication towers and the addition of wireless communication equipment to existing structures.
- The **Swansea Mall Redevelopment Overlay District** was created to encourage mixed-use redevelopment of the former Swansea Mall, promote efficient reuse

of existing development and parking and encourage energy efficient and sustainable building practices.

PRIORITY PRESEVERATUION AREAS AND PRIORITY DEVELOPMENT AREAS
Swansea has participated in regional planning efforts in preparation for construction of the South Coast Rail Project. Tied to local zoning and planning protocol, Priority Development Areas (PDA) and Priority Protection Areas (PPA) have been designated and mapped across the region. This community driven planning exercise was originally conducted in 2008 by the three regional planning agencies serving the thirty-one communities addressed in the South Coast Rail Corridor Plan. In 2013, the regional planning agencies, including SRPEDD, revisited the original process and choices as part of a five-year update. In 2023, SRPEDD is again in the process of updating these PPA and PDA designations, to be released in the next year or so.

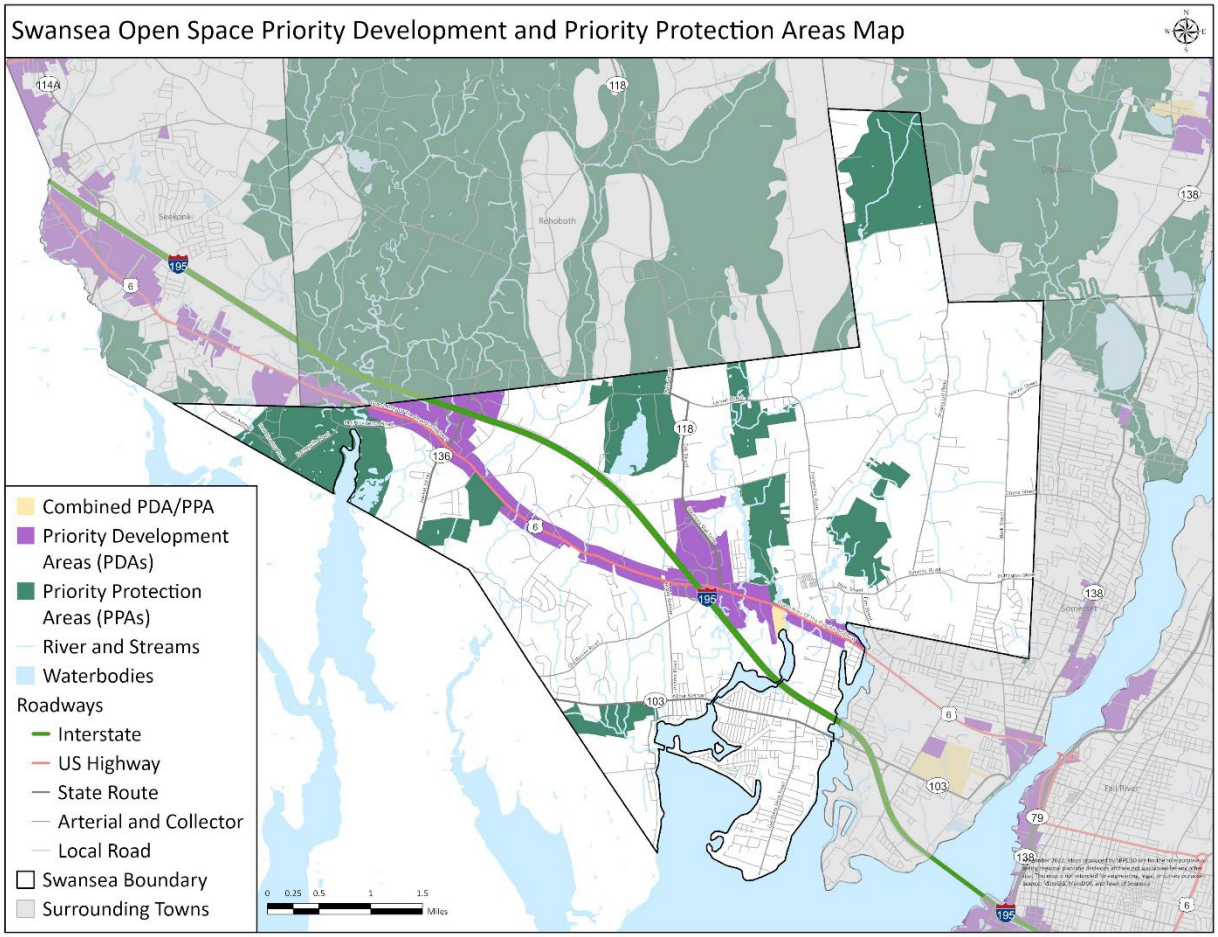
PDAs are areas that are appropriate for increased development or redevelopment due to several factors, including good transportation access; available infrastructure (primarily sewer and water); an absence of environmental constraints; and local support. PDAs can range from a single parcel to many acres, 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 can 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.

A community's Priority Area designations can guide municipal decisions about zoning revisions, infrastructure investments, and conservation efforts. In addition, these Community Priority Area designations are used as the foundation for developing Regional and State Priority Area designations. They are also considered in some state grant programs.

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. Construction for new stations and associated infrastructure for the South Coast Rail project began in 2021, with service anticipated to come online by late 2023. No station is planned to be located in Swansea; however, a new station will be opened in the nearby community of Fall River, which has the potential to influence future development in Swansea. The ongoing development of South Coast Rail has the potential to help leverage local and private investments in the priority areas.

*Map 9: Priority Development and Priority Protection Areas Map**



**There is a full-size version of this map in the appendix*

IV. ENVIRONMENTAL INVENTORY AND ANALYSIS

A. Geology, Soils and Topography

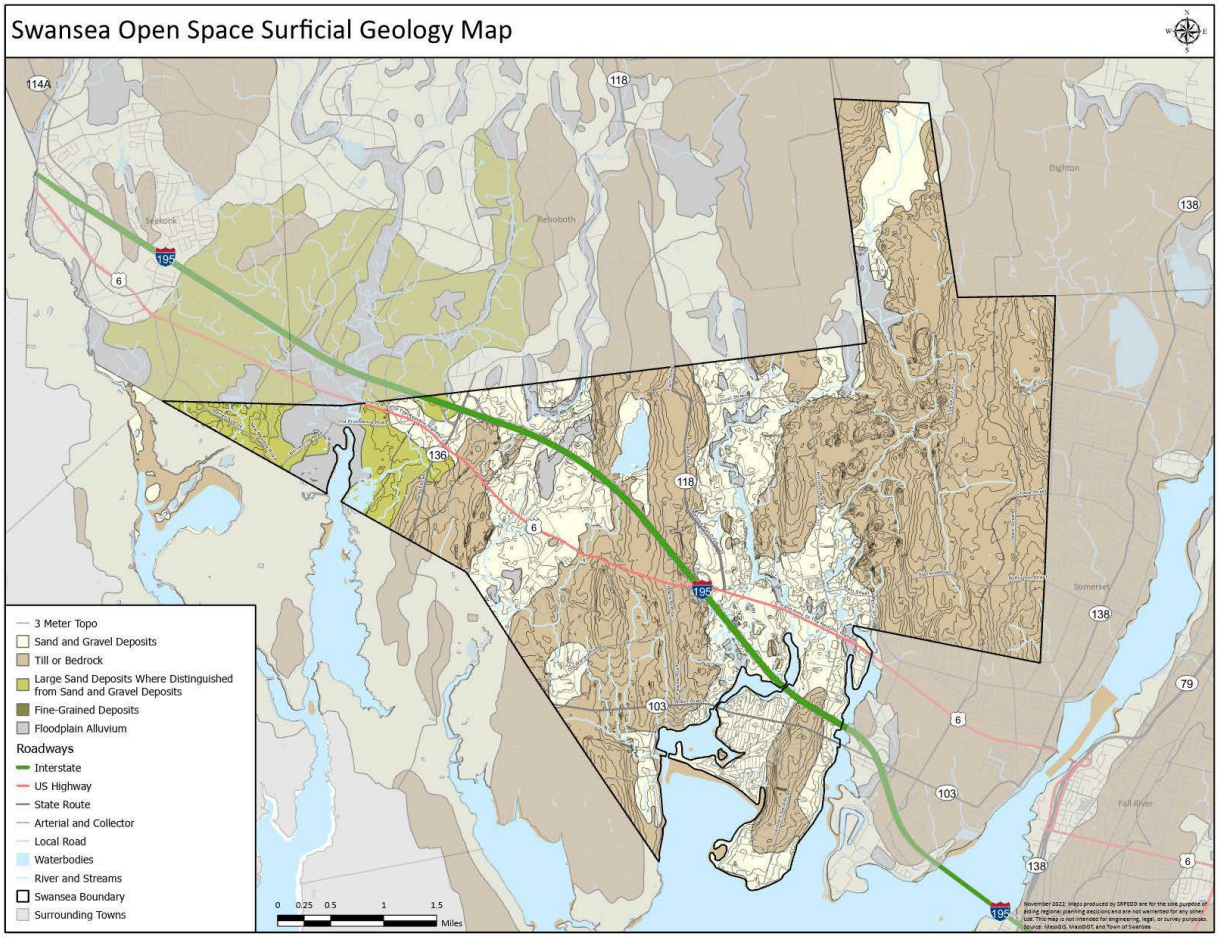
SURFICIAL DEPOSITS

The Eastern New England landscape results from relatively recent glaciation and deposits that accumulated during several ice sheet recessions. Swansea's surficial geology is generally unconsolidated, made up principally of till, gravels and sands laid down in complex tilting beds. These deposits are underlain with parent bedrock at variable depths. In many locations, this bedrock appears at or near the surface. This type of landscape is typically characterized by gently rolling hills and valleys, somewhat spreading dendrite hydrologic patterns (visually similar to the roots of a tree), extensive wetlands caused by impervious layers of clays at or near the surface, considerable

erratic rock deposits and very extensive sub-surface water held within the loosely compacted geologic deposits.

Low-lying areas of the Town, especially along the coast and the Palmer and Coles Rivers, are underlain with sand and gravel deposits. Till or bedrock dominate the central portion of the Town (along the Kickamuit River) and the eastern part of Town (see the Swansea Open Space Surficial Geology Map).

*Map 10. Swansea Open Space Surficial Geology Map**



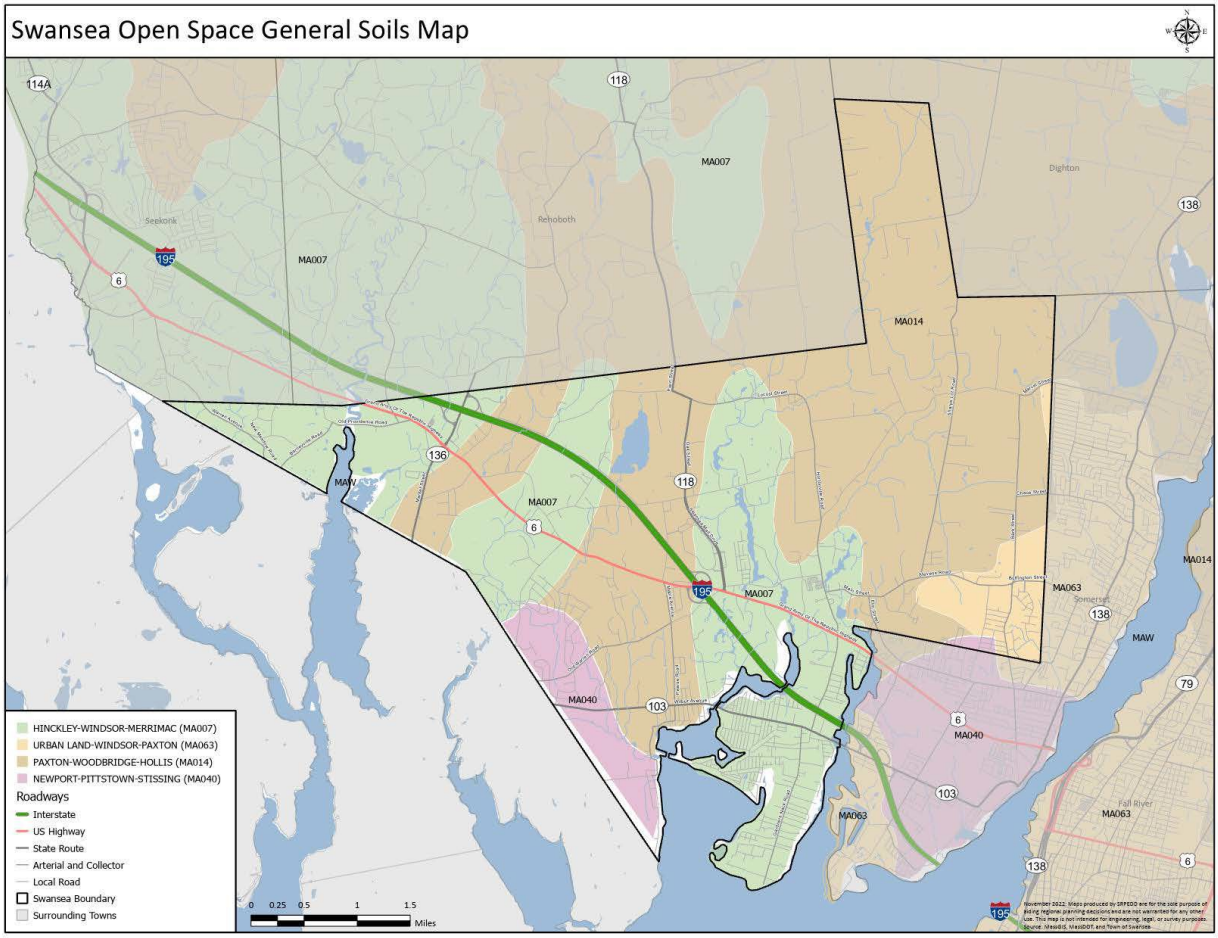
**There is a full-size version of this map in the appendix*

SOIL TYPES

The product of thousands of years of slow degradation of parent rock, supplemented by glacial deposition, hydrologic conversion and deposition, and general weathering, have formed a comparatively thin layer of soil over the surficial geology. These soils have physical and chemical characteristics that can be translated into potentials for effective use. It is therefore critical to know the type and location of all soils within Swansea.

The Natural Resources Conservation Service (NRCS) compiles soil survey data in the national Soil Survey Geographic database (SSURGO). Swansea's soil profile can be found in the Bristol County South soil survey map. The predominant soil types found in Swansea are of Paxton-Woodbridge-Hollis association, which are typically characterized by moderately to well drained loamy soils with nearly level to moderately steep slopes; Hinckley-Windsor-Merrimac association, which are typically excessively drained soils created by glacial outwash plains with relatively gentle slopes, and are generally seen along the major river corridors through Swansea; and Newport-Pittstown-Stissing association, which are well drained to poorly drained upland soils, and found along the Town's boundary with Warren, RI (see Swansea Open Space General Soils Map).

*Map 11. Swansea Open Space General Soils Map**



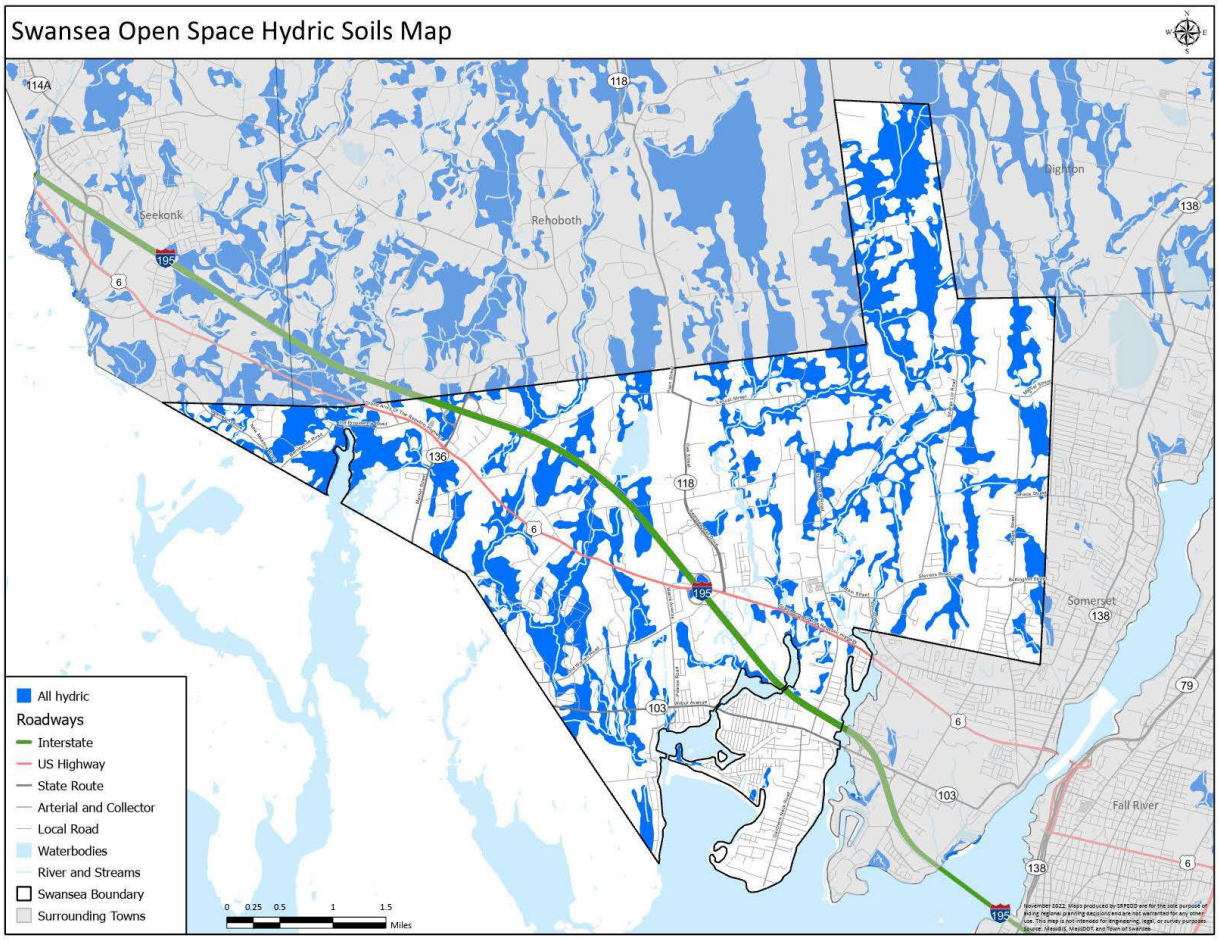
**There is a full-size version of this map in the appendix*

NRCS has established groupings of soils with potential for certain uses. Areas with potential for development can be estimated according to hydrologic soil groupings based upon runoff potential. Four groupings distinguish soils having A) high infiltration rates (low runoff potential), B) moderate infiltration rates C) slow infiltration rates, and D) very slow infiltration rates (high runoff potential). Although based on a single

characteristic, these groupings also capture other conditions that contribute to a soil's development capacity, for instance slope, water table, presence of large stones, and erosion. Generally, soils in group A have the best development potential, while soils in group B have some moderate limitations on development which may be overcome at a higher cost and/or with appropriate technology. Soils in groups C and D, often considered hydric or saturated soils, are least likely to be developed without prohibitive cost to remediate soil conditions and/or off-site wastewater treatment. In some cases hydric soils may also be indicative of wetlands, which are undevelopable due to state and local wetland protections. Soils with the highest infiltration rates (Group A), are also typically associated with aquifer recharge, and care should be taken to avoid contamination in these areas.

The Swansea Open Space Hydric Soils Map shows hydric soil groups C and D in Swansea. Based upon the classification, areas with the highest development potential are located along the Coles and Lees River corridors, and throughout the Aquifer Protection Districts. This can be taken as an indication that development pressures may be the greatest precisely in some of the areas which are most desirable to protect.

*Map 12. Swansea Open Space Hydric Soils Map**



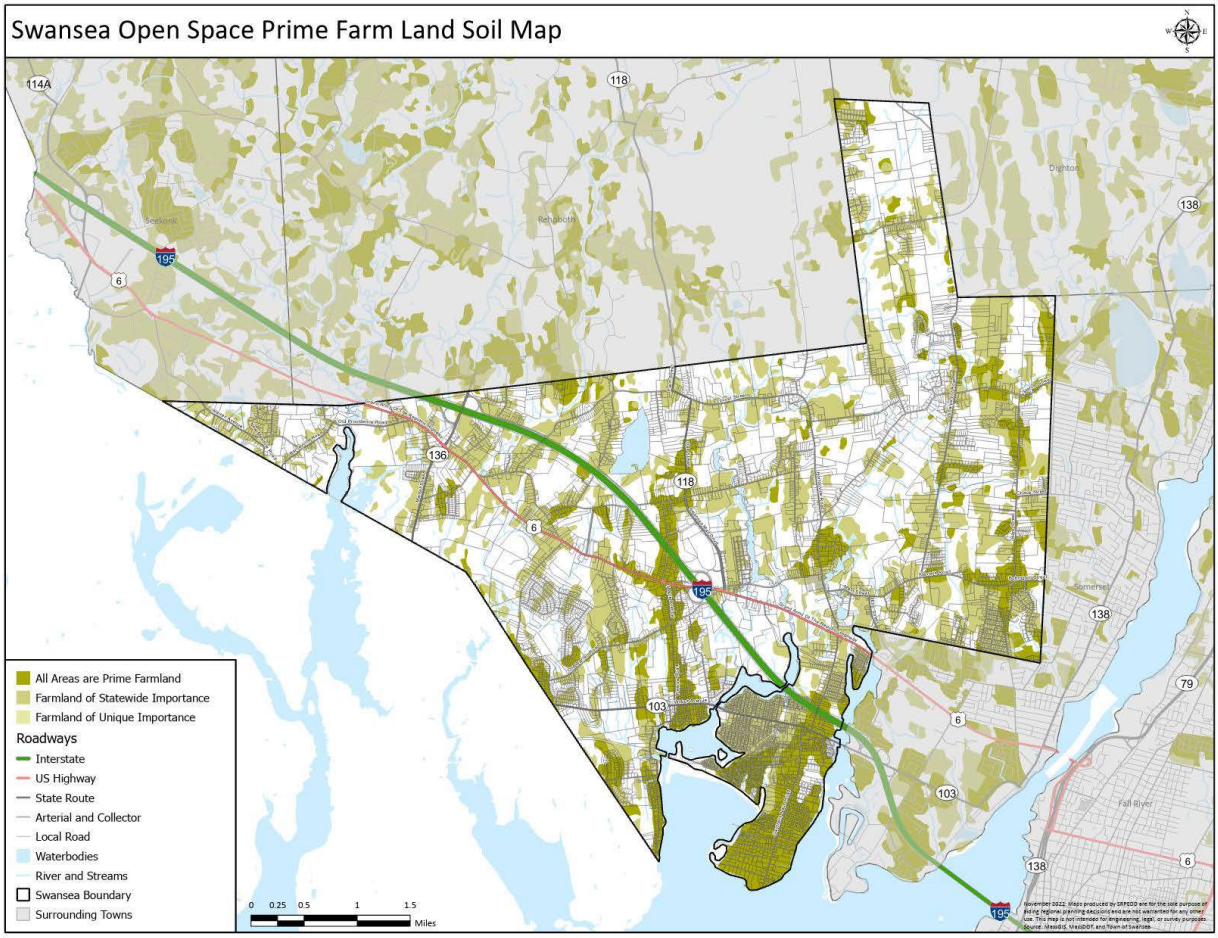
**There is a full-size version of this map in the appendix*

PRIME FARMLAND SOILS

NRCS also characterizes soil types by their potential use for agriculture. Prime farmland soils are those that have the best combination of physical and chemical characteristics for producing agricultural crops, based on soil quality, growing season, and moisture supply. Other important farmland soils that fail to meet one or more of the requirements of prime farmland, but are important for the production of food, feed, fiber or forage crops are designated as farmland of statewide importance, and lands that produce specific high value food and fiber crops are designated as farmland of unique importance.

The Swansea Open Space Prime Farm Land Soil Map shows the location of these farm land soils in Swansea. Pockets of prime farmland soils and substantial quantities of important farmland soils are scattered widely throughout the Town. Unfortunately, many areas with the best agricultural soils have already been developed, most notably the areas surrounding Mount Hope Bay. Many soils with development potential (hydrologic soil groups A and B) are also prime or important farmland soils.

*Map 13. Swansea Open Space Prime Farm Land Soil Map**



**There is a full-size version of this map in the appendix*

TOPOGRAPHY AND SLOPE

The Town varies in elevation from -6 feet above sea level to 187 feet above sea level. The areas of lowest elevation in Swansea run along the coast and around the Coles and Palmer Rivers. The watersheds surrounding these areas have relatively flat topography. Areas of higher elevation lie between these rivers, with a ridge running north to south between Sharps Lot Road and Bark Street.

Slope is extremely important in deciding what land uses should occur where. In certain circumstances disruption of sensitive sloping areas can lead to extensive erosion, subsequent flooding, and a possible disruption of the hydrological cycle. In combination with both surficial geology and soil knowledge, it is possible to assign specific developmental prohibitions to areas of excessive slope and easily erodible soils. It is also apparent that such areas have traditionally been the least available for development and have therefore sustained a fairly rich ecosystem in which a wide range of native plants and animals exists. As the availability of prime developable land diminishes, however, Swansea is likely to see an increase in development in such marginal areas.

B. Landscape Character

The rolling, sloping topography of Swansea is characterized by a series of drumlins, undulating hills of glacial till which subdivide this coastal town into several river basins. Each of the sub basins contain headwater areas of swamps and wetlands feeding a river corridor, which generally flows in a north to south direction into coastal estuaries located in Mount Hope and Narragansett Bays. Swansea's coastal areas along Mount Hope Bay contain saltwater shores and beaches. From the high point in Town, Wild Cat Rock located in Village Park, to Mount Hope Bay, there is a drop of approximately 200 - feet in elevation.

In the most recent open space survey of Swansea residents (2021), participants were asked to identify what makes Swansea special to them. In their responses, among the most commonly identified features included the small-town feel, and the proximity to the coast. In addition, Swansea residents were asked what their vision for Swansea's future is. Some of the most common responses to that question included limited development and concentrated growth, as well as the preservation of open spaces. From these two questions, it is apparent that Swansea's open spaces are important, and the residents of Swansea hope to keep these spaces even as the Town continues to grow.

According to Mass Audubon's 2020 *Losing Ground* analysis, Swansea is 30% developed, the 188th most developed of Massachusetts' 351 municipalities. Much of this development is concentrated along major roads through Town with relatively large swaths of natural land remaining in between. Route 6 is the community's primary commercial corridor with storefronts, including big box stores such as Target, Walmart, and a shopping mall, dotted along its course and particularly around major intersections such as with Routes 118 and 136 and I-195. Low density residential

development is scattered throughout Town, with denser residential areas concentrated particularly in the Ocean Grove and Gardners Neck areas of Town.

Large connected parcels of natural, open space exist within the center of Town, at Village Park, Veterans Memorial Park, Joseph A. Case High School and some of the surrounding properties. These parks offer a bounty of recreational opportunities, all within walking distance of Town Hall and the Swansea Public Library. There are also several agricultural and forested properties distributed through Town. Several rivers, streams and ponds mark the landscape, as further discussed in the water resources section (IV. C.). Southern Swansea sits on Mount Hope Bay, at the mouths of the Coles and Lees Rivers, with several areas of salt marsh and sandy beach located along the shoreline, though most of the shoreline is developed.

C. Water Resources

The rolling, relatively flat land formation and porous soils in Swansea serve as an ideal environment for containing water resources including surface water (streams, rivers, ponds, vernal pools, and the adjacent coastal bays), groundwater, wetlands, and floodplains. These water resources are easily impacted by the actions of homeowners and businesses with serious consequences for public health, safety, and physical environment.

Flooding, pollution of drinking water supplies, and destruction of natural habitats, recreation areas, and water bodies can result from inappropriate development and use of the natural environment. It is therefore important to carefully assess these water resources and the role they play in maintaining a quality of life for the residents of Swansea as well as those from adjacent towns in the watershed.

WATERSHEDS

A watershed is an area of land that drains to a common waterbody. Watershed extents, also referred to as basins, are defined by topography of the land that causes water to drain in a specific direction, from higher to lower elevations, toward a specific lake, river, and ultimately, ocean. Watersheds occur at different scales. A major watershed for a large waterbody, such as the Narragansett/Mt. Hope Bay Watershed, which encompasses all of Swansea, 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 as well as what is carried with it into waterbodies.

The Town of Swansea is located within the Narragansett Bay Watershed, with three sub-watersheds: the Palmer River, the Mount Hope Bay and the Taunton River Watersheds.

Palmer River Watershed

The Palmer River sub-watershed drains from north to south through Town, from Rehoboth and then into Warren, RI and, ultimately, into Narraganset Bay. It is dominated by the presence of several large golf courses. The Wampanoag Golf Course and Swansea Country Club abut the river on its eastern side in Swansea. The Town and other local environmental groups have worked with the owners of the Swansea Country Club to explore the possibility of securing a Conservation Restriction on the property that would protect it from future development and design a management plan to accommodate the migration of the tidal habitat along the river inland as sea level rises over time (see more about marsh migration in Section 4G. Environmental Challenges). The Town plans to keep this line of communication open to promote the long-term preservation of this important buffer habitat on the River. The western bank of the river across from Swansea Country Club is already protected by the regional conservation organization, Wildlands Trust, who owns Bell Preserve.

A recently formed Rehoboth-based Friends of the Palmer River group engages residents, businesses, and organizations on its social media pages to "restore and properly manage water and related natural resources within the Palmer River Watershed" (Friends of the Palmer River, n.d.).

Save the Bay is a non-profit organization whose "mission is to protect and improve Narragansett Bay" (Save the Bay, 2022). They offer educational programming for families and school groups at their centers in Rhode Island, but also work throughout the entire Narraganset Bay Watershed on advocacy, habitat restoration and community engagement initiatives. In Swansea, they have a history of supporting the Town on habitat assessment and restoration efforts along the Palmer and Coles Rivers. A current focus of Save the Bay's work includes enabling coastal habitat migration along the lower Palmer River corridor to accommodate ongoing sea level rise. This ongoing work, of which the Swansea Country Club habitat protection described above is a piece, involves collaboration with neighboring watershed communities in both Massachusetts and Rhode Island, as well as other environmental and regional planning groups.

The Palmer Watershed also hosts several historic and cultural landmarks. The Town is working with the Sowams Heritage Area Project to document historical resources and explore a potential National Heritage Area designation for this and other areas in Swansea and the broader region, due to their historic importance to local indigenous groups (see more about the Sowams Project in Section IV. F. Scenic Resources and Unique Environments).

Mount Hope Bay Watershed

The Mount Hope Bay sub-watershed covers the largest area in Town and includes three major rivers, from east to west: the Kickamuit River, Coles River and Lees River/Lewin Brook.

The Kickamuit River flows from Rehoboth in the north and into Warren Reservoir before running southwest through Town. It meanders through woods and wetlands, disrupted

by several road crossings and skirts around a few subdivisions. Heath Brook joins the Kickamuit from the west just before it crosses over into Warren, RI and flows into Narragansett Bay. This sub-basin is important to the Town's water supply, containing several public wells. It also includes the Town's largest surface water body, the Warren Reservoir. This watershed is also a part of the Sowams Heritage Area Project due to its historic importance to indigenous groups (see more about the Sowams Project in Section IV. F. Scenic Resources and Unique Environments).

The Coles River flows from a rural area in the northernmost area of Town, known as Two Mile Purchase, south through the center of Town to Mount Hope Bay. Fields, woodlands, and swamps characterize the Upper Coles Watershed. Several public water supply points are located in the Coles River watershed. Several residential subdivisions have developed throughout this sub-watershed, but there are several undeveloped Town-owned parcels of land (including Veterans Memorial Park) along Milford Pond and Mount Hope Pond, two impoundments on the lower Coles River.

There are several smaller tributaries to the Coles River on Touisset Neck along the Warren, RI Town border, opposite the Town Beach. The mouth of the Coles River is largely developed, with a few small coastal wetland and beach areas, including the Town Beach and Sandy Beach.

The Lees River and its estuary form the southeastern boundary of the Gardners Neck area of Town, also emptying into Mount Hope Bay. Its headwaters come from Lewin Brook in the swamps and wetlands in the eastern part of Town. It flows through Village Park and into Lewin Brook Pond, where it is impounded by the Swansdea Dam. It then flows further south, becoming the Lees River south of the Swansea Print Works Dam on Lee River Pond. This sub-basin contains the greatest variation in topography as the landscape is broken up by a dense series of relatively steep drumlins. It also contains some large expanses of open land, including Village Park.

Taunton River Watershed
The Taunton River sub-watershed is located on the eastern boundary of Town. High quality agricultural soils are located in this rural district. Tributaries of the Taunton River drain east through this area into Somerset and to the Taunton River. The Taunton River Watershed Alliance is a non-profit organization whose goal is to restore and properly manage the water and natural resources within the Taunton watershed.

SURFACE WATERS

Surface waters include rivers, streams, lakes, ponds and coastal waters. The surface water resources in Town are displayed on the Swansea Open Space Surface Water and Core Wetland Resources Map. Most visible are the Town's brooks, streams and ponds, which feed into Mount Hope and Narragansett Bays. The various rivers and brooks that flow through Town are discussed above in the Watersheds section.

The largest body of water located within Swansea, spanning 200 acres, is Warren Reservoir, created by the Warren Reservoir Dam on the Kickamuit River. The reservoir is

protected for drinking water supply and so recreational use is restricted, though some still use it for recreational fishing. A portion of the reservoir land is owned by the Bristol County Water Authority in Warren, Rhode Island, which has maintained the Reservoir for an emergency back-up water supply. They no longer need the Reservoir for that purpose and are in discussion with the Swansea Water District to potentially transfer their property and water rights.

Several important Swansea Water District wells already abut Warren Reservoir, and if acquired it could additionally serve as a surface water supply to Swansea. The Town has a particular interest in acquiring the Reservoir for its potential to supplement the community's water supply, and in protecting water quality for that purpose. If Warren Reservoir is deemed not suitable for water supply, however, the Town still has an interest in exploring its potential for public recreation.

The Coles River is impounded in several spots by dams, creating ponds. Milford Pond is located at Milford Road west of Joseph Case High School, and it consists of an upper and lower pond. It was created to serve the water needs of the former Montaup Power Plant in Somerset. When the plant closed down in 2010, Montaup transferred this and other properties to the Town. There is an informal kayak launch on Milford Pond, accessible by a trail from Milford Road. Just south of Milford Road is Mount Hope Pond, which is next to Veterans Memorial Park.

There are also several dams along Lewin Brook. Lewin Brook Pond is created by the Swansea Dam at Main Street, west of Joseph Case Junior High School and Village Park. It has fishing access from the parking lot on the west side of the dam, as well as throughout Village Park.

INLAND WETLANDS

The Town of Swansea is located in the Narragansett Bay Basin, a large geographic area referred to as the Southern New England Acidic Basin Fen, which extends into Fall River. Within this area, wetland communities are characterized by acidic conditions which combine with the soils structure, vegetative cover and high or exposed water tables (for much of the year) to produce a slow decay of organic matter. This combination of conditions creates peat bog/swamp areas populated predominately by sedges and tufted marsh plants, which often are the locus of vernal pools.

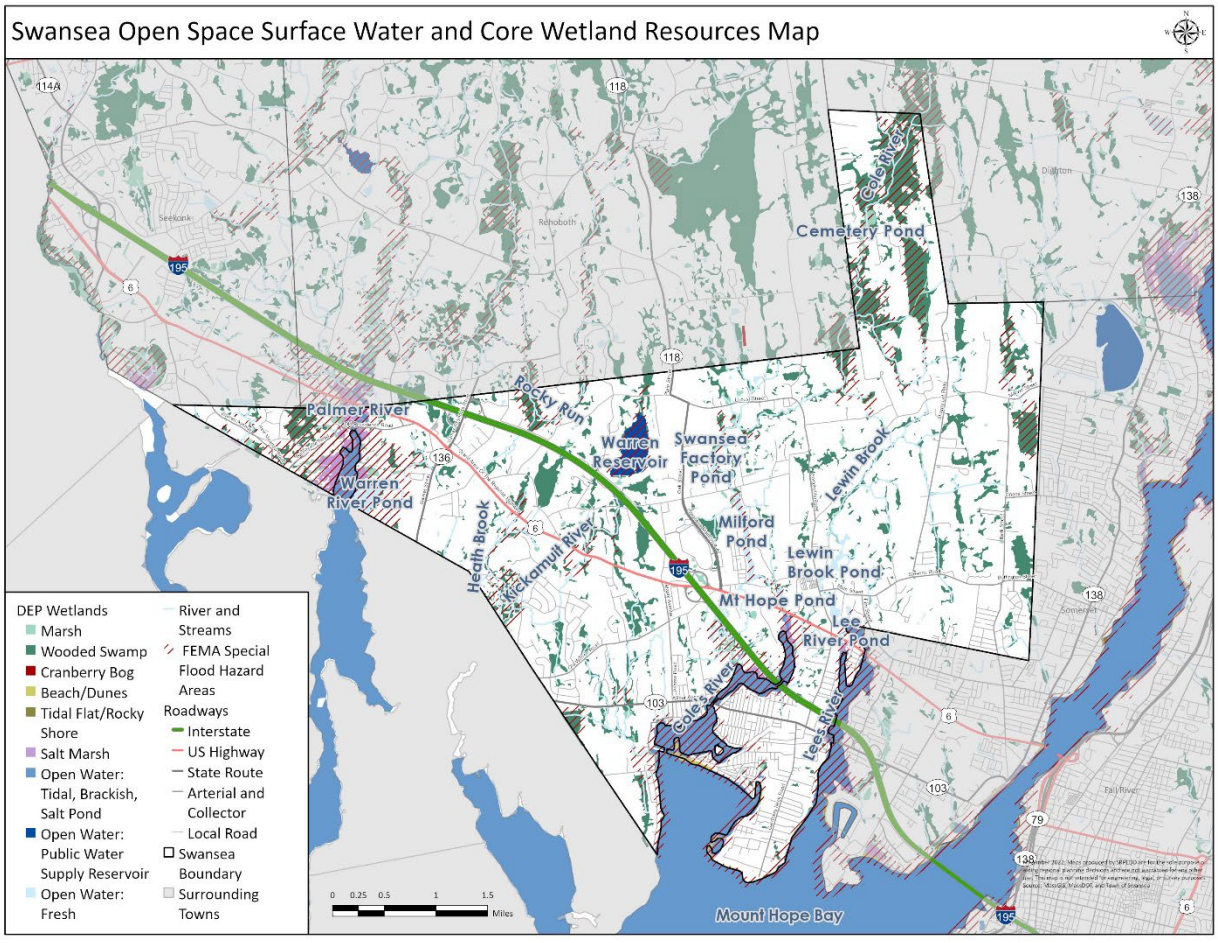
Wetlands, found primarily along streams and brooks, are scattered throughout the Town. The most significant expanses of wetlands are located along the Coles River and its tributaries in the northern part of the Town (in the "Two Mile Purchase" area), and along the Palmer River (see the Swansea Open Space Surface Water and Core Wetland Resources Map).

Swansea's wetlands, both coastal and inland, are protected by the Massachusetts Wetlands Protection Act (MGL c.131 sec. 40) and the Swansea Wetlands Protection Bylaw. Swansea's Wetlands Protection Bylaw was adopted in 1988 to protect the Town's wetlands, beaches, rivers, brooks, ponds and floodplains, and the various

resources and services they provide. All lands within 100 feet of these water resources are also subject to these protections, and any alterations occurring within these buffer zones require a permit from Swansea's Conservation Commission.

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. (Section IV.G. Environmental Challenges further addresses the issue of flooding.) This water is then slowly released into the ground to recharge the groundwater and contaminants are filtered out in the process. Furthermore, wetlands provide habitats and breeding places for wildlife and add to the diversity of the landscape. There is indeed good reason to protect wetlands from development.

*Map 14. Swansea Open Space Surface Water and Core Wetland Resources Map**



**There is a full-size version of this map in the appendix*

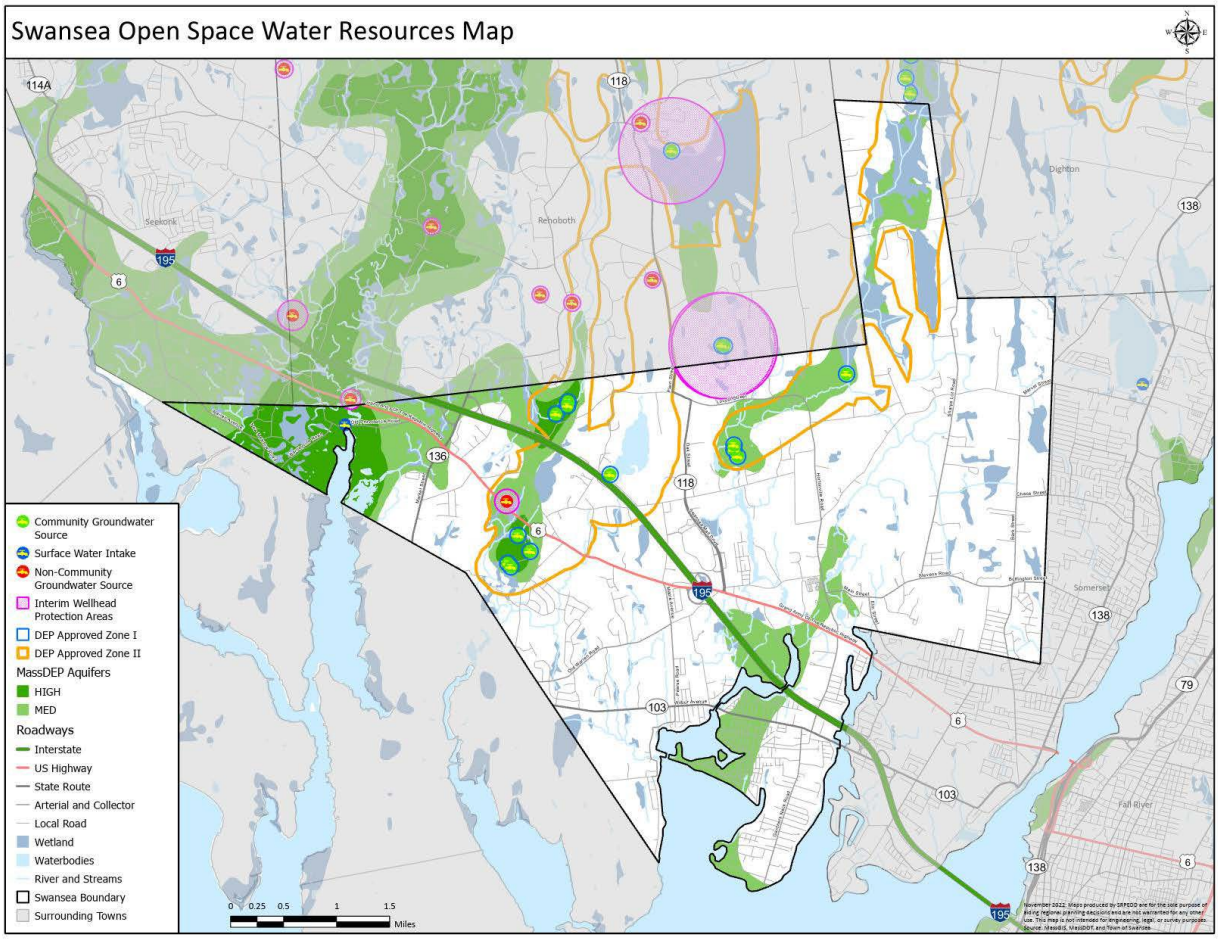
GROUNDWATER & AQUIFER RECHARGE AREAS

Groundwater is water that can be found underground in the soil. Rainwater, when it falls on natural surfaces, soaks into the ground and flows downwards until it reaches an

impermeable rock or soil layer. The groundwater deposits build up over time in a process known as recharging. Groundwater eventually discharges to swamps, rivers, and streams on the surface above, or may be pumped from an aquifer for water supply. Groundwater supports a healthy watershed by recharging surface waters during times of drought. Conversion of natural land to roadways, sidewalks and buildings creates impervious surfaces that disrupt groundwater recharge by creating a barrier that prevents rainfall from soaking into the ground.

About 95% of Swansea's population obtains its drinking water from municipal wells located off Bushee and Vinnicum Roads and along the northern portions of the Coles River (see the Swansea Open Space Water Resources Map). The remaining population utilizes private wells.

*Map 15. Swansea Open Space Water Resources Map**



**There is a full-size version of this map in the appendix*

The Massachusetts Department of Environmental Protection (MassDEP) designates Zone I and II Wellhead Protection Areas to identify aquifer areas that provide public drinking water, and therefore should be protected. In addition to existing water supply areas, potential high and moderate yield aquifers are located in the areas of Town which have the most well-drained soils, particularly along the Coles River, Kickamuit River and

in the low-lying area around the Palmer River. MassDEP identifies these areas as Interim Wellhead Protection Areas that could potentially be used for potable water in the future, and therefore any remediation of environmental contamination within those areas must meet drinking water standards.

Swansea has an Aquifer Protection Zoning Overlay District that establishes protections for these wellhead protection areas by limiting development that may interrupt groundwater recharge in these critical areas. The minimum developable lot size in the Aquifer Protection District is 60,000 square feet, which is twice the typical allowable lot size in Swansea's Zoning Bylaw. Taking measures such as these is important, especially in a growing community such as Swansea, in order to protect current and potential future water sources to ensure demand will not outpace supply.

FLOOD HAZARD AREAS

The areas that border streams, rivers, lakes and other water bodies subject to flooding are designated as floodplains. Similarly to wetlands, a natural floodplain plays an important role in protecting the public from flooding during periods of heavy rainfall or otherwise high flow in waterways. Swansea's floodplains are located primarily in low-lying lands adjacent to the coast as well as along the Town's waterways, particularly the Palmer, Kickamuit and Coles Rivers. Much of the land surrounding Swansea's rivers is relatively flat, leading to widespread flooding following significant rain events, such as the floods of 2010. Protecting as much of the undeveloped floodplain surrounding Swansea's waterways as possible will help to capture and store more floodwaters and reduce future flood threats to the surrounding development.

The Federal Emergency Management Agency (FEMA) compiles flood risk data for floodplain management and planning, as well as flood insurance ratings. FEMA identifies and maps flood zones based on their probabilities of flooding during various rainfall events. For example, the 100- and 500-year flood zones are those land areas predicted to be inundated during a flood event that is likely to occur once every 100 or 500 years (this is a 1% or a 0.2% chance of flooding in any given year). FEMA regulates the 100-year floodplain, designated as the Special Flood Hazard Area, which is displayed in the Swansea Open Space Surface Water and Core Wetland Resources Map. More information about these flood zones and associated hazards can be found in the Flood Hazard Areas section of IV. G. Environmental Challenges.

Both the Swansea Conservation Commission and Building Department use FEMA's Flood Insurance Rate Maps to administer floodplain management regulations in accordance with the Massachusetts State Building Code, the Massachusetts Wetlands Protection Act (MGL c.131 sec. 40) and Swansea's Wetlands Protection Bylaw and Inland Flooding and Floodplain Districts zoning regulations. These regulations protect floodplains from alteration and prevent new development from being placed in these hazard areas; however, there are areas in Town where development occurred within the floodplain before these regulations were in place. Furthermore, as discussed in the Regional Climate Change Context section in III. A., changing rainfall patterns and increasing

storm intensities are impacting the extent of the floodplain. FEMA's Flood Insurance Rate Maps are based on historic events and so do not account for future climate projections.

Understanding where these floodplains exist throughout Town and recognizing that these areas may change over time are critical when planning for future development. In order to protect property owners, the Town, and the wildlife that utilize these habitat areas, construction should be managed within and surrounding the floodplain carefully so as to minimize the impact on water flow and storage capacity and to ensure a more resilient future for Swansea's waterways and the community.

COASTAL WETLANDS AND BEACHES

Salt marshes are generally flat, open grassy areas along tidal waters commonly dominated by salt meadow cord grass and/or salt marsh cord grass. They can also be found in areas protected from open water (salt ponds, estuaries, etc). Salt marshes provide key habitat for plant and aquatic life and are important to the base of the marine food chain as well as for natural pollution mitigation. Swansea contains some 142 acres of salt marsh in the estuaries of the Palmer, Coles and Lees Rivers. Along the Palmer River in western Swansea, the Wildlands Trust's Bell Preserve has close to 40 acres of protected salt marsh habitat on the western bank, and the Swansea Country Club is located on the river's eastern bank.

Tidal flats are nearly level parts of coastal beaches which may extend from the mean low water line land-ward to a more steeply sloping face of the beach or may be separated from the beach by an area of deeper water. Tidal flats are exposed at low tide and can be found along the shoreline on the open ocean or within estuaries. Tidal flats help to lessen storm impacts, provide important shellfish habitat, provide material to down-current beaches and expedite the flow of plant materials and other nutrients from adjacent salt marshes. There are known tidal flat areas along the western bank of the Palmer River between Route 195 and Old Providence Road and in the Coles River north of the Town Beach.

Tidal shoreline extends for some 13.5 miles and includes around 22 acres of coastal and barrier beaches and dunes. The two areas in Town that have been identified as barrier beaches are the Town Beach and Cedar Cove. The Town Beach is located along a former railroad right of way traversing Mount Hope Bay on Ocean Grove Avenue. There is also a second public beach just east of the Town Beach called Sandy Beach, which can be accessed off Bluff Avenue. West of the Town Beach, at the end of Ocean Grove Avenue, is a public boat ramp from which boaters can access the Coles River. There is also a private marina further south on the Coles River, called the Swansea and Cole River Marina on Calef Avenue.

Coastal access is an important issue in Swansea. The Massachusetts Public Waterfront Act (MGL Ch. 91) protects the public's right to access the shoreline. The public is allowed to access, walk on, fish in and boat on any tidelands of the Commonwealth,

seaward of the mean high-water line (the average high tide level), and to access tidelands using a legal access point from the land. Any roadway right-of-way (any public road and/or sidewalk used for public transportation) that runs to the shoreline is a legal access point to the water. The local group Swansea Safe Passage is working with the Town to identify all such public rights-of-way and preserve public access to the waterfront by establishing clear signage to clarify which shorefront areas are public and private. The Town has a dedicated fund, appropriated from the Town's budget by public vote at Town Meeting, to survey coastal properties and identify and secure public access points.

Additionally, there are several Town-owned public waterfront parcels that offer additional shoreline access. In the Coles River Estuary, there is public waterfront at Pearse Landing off Circuit Drive, off Birchwood Avenue, and along Pearse Road and Seaview Avenue. Additional public access points along the Lees River shoreline include at the ends of Bayside Avenue, Ralph Chapman Road, 3rd Street and at the end of Little Neck Road and Front Street. More details on public open spaces can be found in Section V. Inventory of Lands of Conservation and Recreation Interest.

In addition to the recreational opportunities these coastal habitats provide, they also serve as an important line of defense, protecting the community from coastal storms and flooding. As wetlands, salt marshes play an important role absorbing tidal flow and storm surge. They also help purify runoff before it enters waterways, protecting water quality along the coast. Barrier beaches and sand dunes also provide an additional protective barrier, shielding properties from damage during hurricanes and excessively high tides.

For purposes of the Rivers Protection Act, a 1996 amendment to the Massachusetts Wetland Protection Act, the line between river and ocean frontage has been delineated at Bay Point. North of this line along both the Coles and Lees Rivers, the Conservation Commission has the authority to regulate activities within a riverfront buffer of 200 feet. South of this line in the Ocean, the Conservation Commission is limited to regulating a 100-foot buffer.

D. Vegetation

Much of the undeveloped land in Swansea is potentially valuable for water, natural resource and wildlife protection and recreation, as well as contributing to the Town's character. This land includes wetlands, open fields, and woodlands. The Town of Swansea contains approximately 3,059 acres of wetlands and water, 1,271 acres of open fields and grasslands, and 3,140 acres of woodlands. Together, these areas comprise 7,470 acres, roughly half of the Town. Despite all of this open space, only 1,061 acres, or 7% of the total Town area, is completely protected from potential future development.

OPEN FIELDS

Swansea has roughly 462 acres of grassland habitat scattered across Town. Furthermore, due to Swansea's agricultural history, there are many historic farms that present opportunities for recreation and conservation. Many of these open fields have become habitats for local wildlife. Additionally, these areas help to preserve the rural character of Swansea by allowing the passerby an unobstructed view of the greater landscape. There are many open fields distributed across the Town, many of which are actively farmed and/or have agricultural use restrictions on them that protect them from development (see more details in Section V. Inventory of Lands of Conservation and Recreation Interest).

FOREST LAND

Woodlands are forested plots of land that help to preserve the quality of the groundwater and protect the community from extreme heat and flooding. They slow down rapid runoff, which could cause pollution and siltation of the streams and ponds in Swansea. Woodlands also allow water to percolate into the groundwater to replenish it; and they are excellent sites for recreational activities like hiking. Swansea's woodlands are mostly hardwood deciduous forests or a combination of hard and softwoods including mostly White Pine. The dominant hardwoods include White and Black Oaks, Red Maple, Norway Maple, Hickories, American Elm, and Beech. These forests are well distributed, covering roughly 42% of the Town.

There are 10 forested properties in Swansea enrolled in the State's Chapter 61 program, which offers reduced tax rates for properties used exclusively for the growth of forest products and with a forest management plan. The properties have only temporary protections from development, as long as the land remains enrolled in the program (see more details about Chapter 61 properties in Section V. Inventory of Lands of Conservation and Recreation Interest).

Part of the Town's Village Park consists of woodland that is periodically harvested, the returns accruing to the Town. In 1983, the Conservation Commission developed a woodland management plan for this site while it was still owned by the Episcopal Diocese of Massachusetts. When ownership was transferred to the Town, that management plan remained in effect, continued by a Village Park Commission that was formed to maintain the property on behalf of the Town. Since the Commission became inactive, the Conservation Commission has taken over responsibility of implementing the management plan.

PUBLIC SHADE TREES

Aside from natural forestland, preserving individual or clusters of trees throughout the developed areas of Town also provides significant public benefits. Public shade trees are defined in Massachusetts General Law (MGL Ch.87, Section 1) as trees within the public way or on the boundaries thereof. Shade trees are an important part of the aesthetic in an urban environment. They can help preserve the rural feel of Town as it develops, and they also provide wind breaks, relief and shelter from the sun which

reduce neighborhood cooling costs and help to improve air quality. Ensuring the protection of large trees wherever possible during development helps to mitigate climate change by preventing the carbon stored within them from being released into the environment. However, requiring street tree plantings in new subdivision developments can also provide value.

AGRICULTURAL LAND

Swansea has had a long history of farming, particularly dairy and vegetable farms. Farmland, whether in active use or historic, is an important contributor to the diversity and complexity of Swansea's visual landscape. A number of these farms are located on what are considered prime agriculture soils (see more details in Section IV. A. Soil Types). It is important to support the existing farming operations and to minimize the irreversible loss of valuable agricultural land to other uses so that this industry can be maintained.

There are a number of strategies to protect agriculture. Taking advantage of Chapter 61A tax status is one strategy that provides at least temporary protection. Under this designation, property is assessed at a fraction of its market value for a fixed period of years as long as the owner continues with agricultural activity. If the property is to be sold, the Town has a right of first refusal and potentially, depending upon the number of years it has been in agriculture, the opportunity to recapture lost tax revenue. There are 19 farms in Town that operate under Ch. 61A tax status. This strategy provides some support for continued agricultural use but does not ensure any long-term protection. Agricultural use can be permanently protected with a permanent deed restriction, such as an Agricultural Preservation Restriction (APR) or Conservation Restriction (CR).

The Town owns two active farms. Paquette Farm is 82 acres and was acquired from the previous owner in 1977 with Massachusetts Self-help Program funds. While the land remains under the management control of the Conservation Commission, it is leased for private farming operations. In 2012, the Town purchased the 83-acre Herb Baker Farm on Wood Street with its local Community Preservation Fund. This property is also leased out for farming. Outside of growing season, these Town properties offer passive recreational opportunities, such as walking and wildlife viewing. In 2023, the Town is actively pursuing grant funds to establish a network of walking trails though Baker Farm and the surrounding properties.

There are additional privately owned active farms in Town as well. The Hale Farm, a 44-acre vegetable farm on Locust Street is protected both by Ch. 61A as well as a Conservation Restriction (CR), which means the development rights have been permanently removed. Three dairy and vegetable farms, D'Allesandro Farm (68 acres), Kenneth Baker Farm (95 acres, distinct from the Town-owned Baker Farm property), and the Chase Farm (127 acres), have been protected with Agricultural Preservation Restrictions (APRs). Mason Farm on Locust Street is partially enrolled in Ch. 61A and the Town has been supporting one of the owners to further protect these farmland parcels as well. Additional deed-restricted and Ch. 61A properties can be found in Section V. Inventory of Lands of Conservation and Recreation Interest.

Additionally, there are two equestrian farms in Swansea: Pinegate Farm and Saddle Brook Farm. These is also an Alpaca farm called Moonlight Rose Alpacas, and a cattle farm called Stony Creek Farm. These properties are privately owned and do not have any type of protections placed on them.

RARE PLANT SPECIES

Several rare plants were known to be located in Swansea, but have not been recently confirmed to exist including Canadian Sanicle and Pinnate Water-milfoil. These plants may have disappeared from Swansea due to fragmentation and loss of habitat, and competition with invasive species. MassWildlife's Natural Heritage and Endangered Species Program (NHESP), part of the State's Division of Fisheries and Wildlife, maintains an inventory of documented observations of rare species that are listed as endangered, threatened or of special concern under the Massachusetts Endangered Species Act. See the NHESP List of rare Vascular Plant species sighted in Swansea table for a complete listing of rare and endangered species in Swansea.

Table 13. NHESP List of rare Vascular Plant species sighted in Swansea

Common Plant Name	Scientific Name	Listing Status	Last Observed
American Sea-blite	*Suaeda calceoliformis*	SC	1909
Canadian Sanicle	*Sanicula canadensis*	T	1910
Long's Bittercress	*Cardamine longii*	E	2009
Pale Green Orchid	*Platanthera flava var. herbiola*	T	1907
Pinnate Water-milfoil	*Myriophyllum pinnatum*	SC	1912

Source: MassWildlife's 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 of Massachusetts.
- 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.

CONSERVATION ASSESSMENT AND PRIORITIZATION SYSTEM (CAPS)

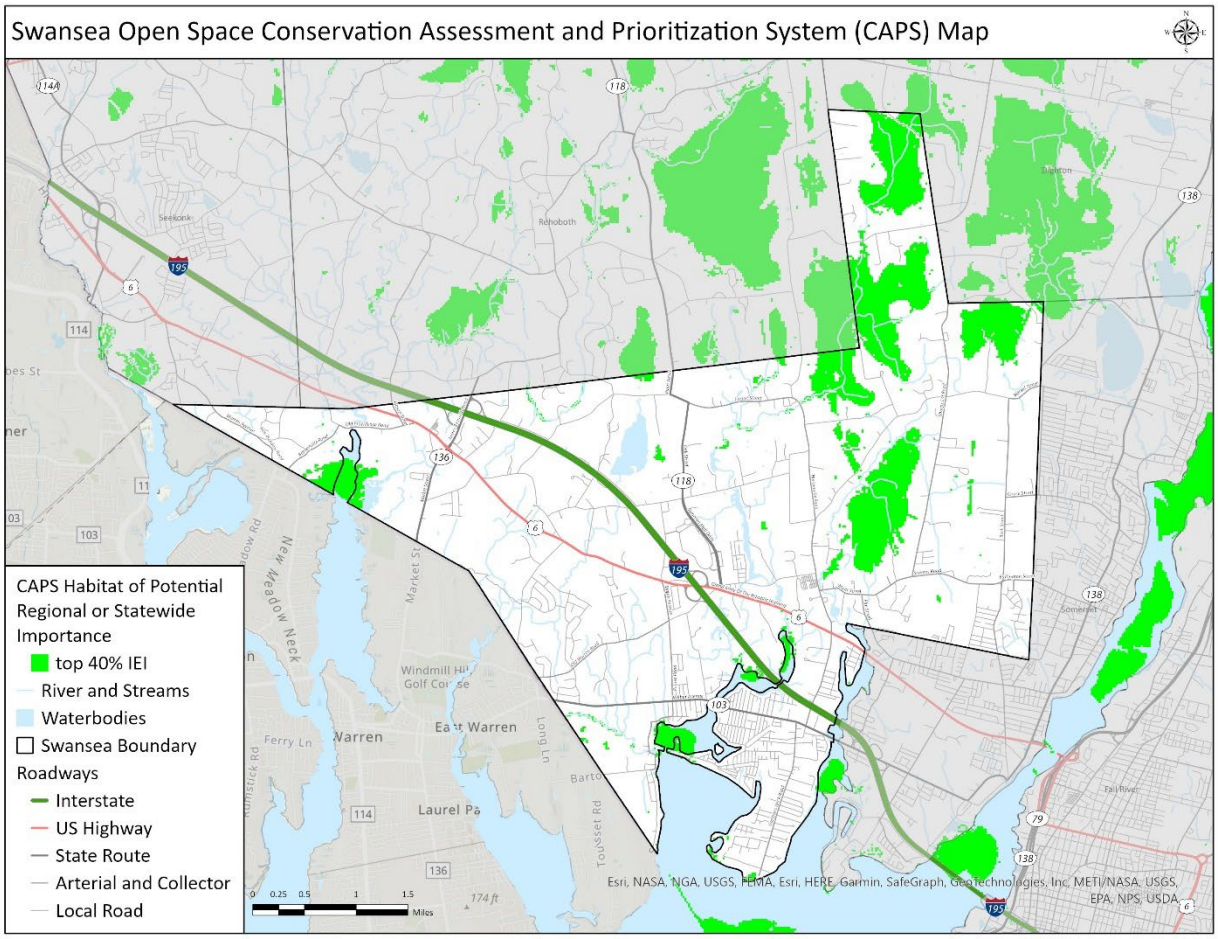
The Conservation Assessment and Prioritization System (CAPS) uses landscape ecology and conservation biology to help identify areas which can support biodiversity, also known as areas of ecological integrity. The CAPS process uses several key metrics, such as road traffic intensity, habitat connectedness, vulnerability to invasive species, soil pH, average temperature, and slope to assess the undeveloped landscape for potential areas of ecological integrity for different ecosystem types, including forests, shrublands, coastal uplands, coastal wetlands and freshwater wetlands. Each area is assigned an Index of Ecological Integrity (IEI), which is the relative habitat and biodiversity value of that point on the landscape. 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).

In 2006, MassDEP adopted the CAPS framework for assessing potential habitat impacts from work proposed in wetlands. "Habitat of Potential Regional or Statewide Importance" was identified based on the integrated IEI, as explained above. This statewide map includes areas scoring in the top 40% across the landscape and within each ecological community. For regulatory purposes, projects occurring within the jurisdiction of the Massachusetts Wetlands Protection Act that are also co-located with these Habitats of Potential Regional or Statewide Importance may require a more thorough review.

Swansea contains several such Habitats of Potential Regional or Statewide Importance (see Swansea Open Space Conservation Assessment and Prioritization System (CAPS) Map). There is important coastal wetland and aquatic habitat located within the Palmer, Coles and Lees River estuaries; freshwater wetland, aquatic and forest habitat throughout the northeastern part of Town as well as in the headwaters area for Lewin Brook between Hailes Hill Road and Sharps Lot Road in the east; pockets of important non-forested upland habitat along the power line corridor traversing the eastern part of Town, at the southern tip of Gardners Neck and east of Warren Reservoir; and additional freshwater wetland and aquatic habitat along some of the smaller streams throughout Town.

*Map 16. Swansea Open Space Conservation Assessment and Prioritization System (CAPS) Map of Habitat of Potential Regional or Statewide Importance**



**There is a full-size version of this map in the appendix*

E. Fisheries and Wildlife

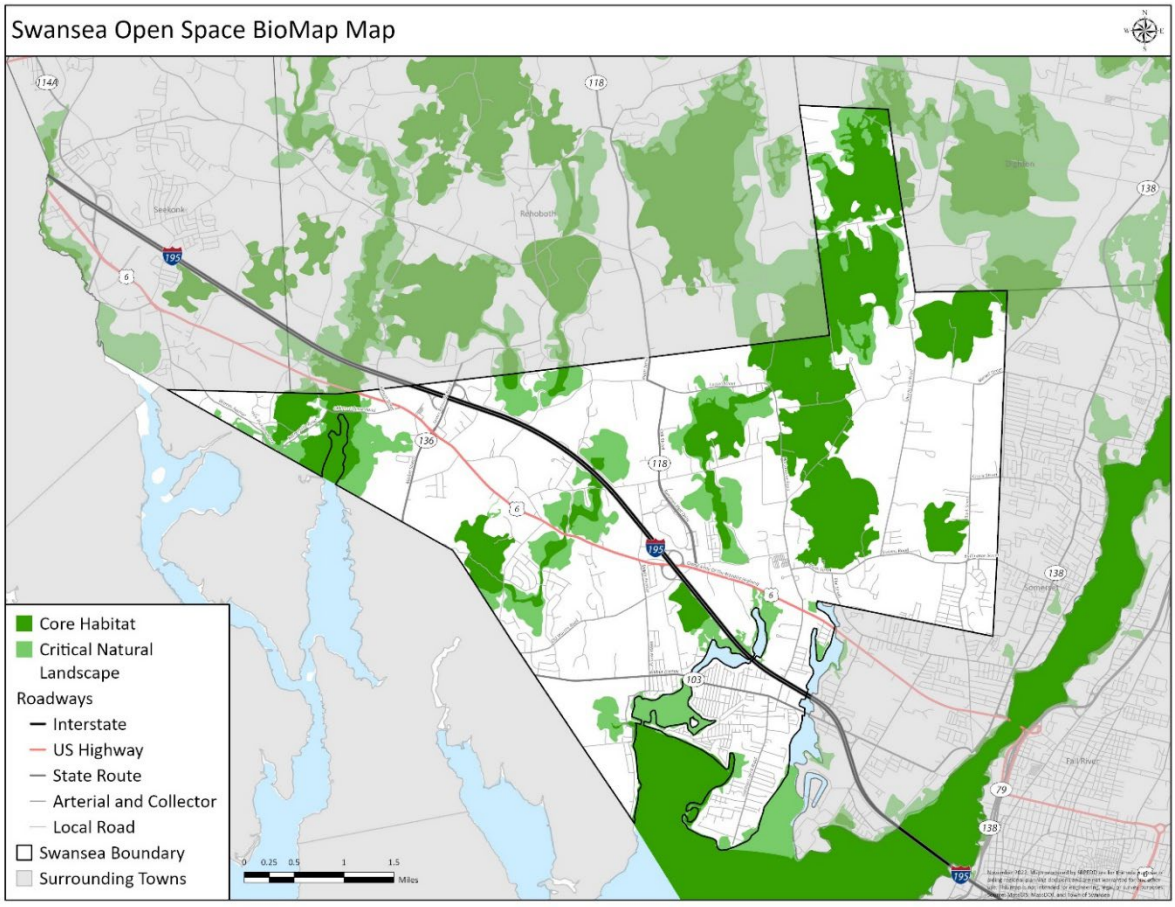
Swansea's wildlife is similar in characteristic to the surrounding region. Many species commonly found in the state can also be found in Swansea. Deer, raccoons, skunks, squirrels and many types of bird species are seen throughout Town. Conservation and habitat protections efforts, both locally and more widespread, have also enabled the return of former wildlife like river otters in the Kickamuit Watershed and fishers throughout local woodlands. Frog, toad and other amphibian species are also present, particularly in vernal pool areas such as Village Park and the Swansea Water Supply lands between Hornbine Road and Dillon Lane. Several turtle species live in and surrounding Swansea's wetlands. Ospreys have been observed nesting at several sites along the Coles, Lees and Palmer Rivers. Bald eagles have more recently been spotted in a couple areas in Town, with a nest in the Barneyville area and perhaps another in Ocean Grove in southern Swansea. Species and habitats of particular interest in Swansea are further details in the following sections.

BIOMAP

MassWildlife and The Nature Conservancy developed a comprehensive mapping tool, called BioMap, to guide habitat protection and stewardship that prioritizes lands and waters most important for biodiversity across the state. BioMap identifies Core Habitat and Critical Natural Landscapes that are most important to protect across the state. Core Habitat includes rare species habitat, exemplary natural communities and resilient ecosystems. Critical Natural Landscape includes large contiguous areas that are minimally impacted by development and buffer areas to core habitats that provide connectivity and resilience.

As shown in the Swansea Open Space BioMap Maps, extensive areas of "Core Habitat" have been identified in Swansea, especially in the eastern/central area north of Main Street between Sharps Lot Road and Hortonville Road and extending north into the relatively undeveloped area called Two Mile Purchase. This Core Habitat area is comprised of important rare species habitat, as well as core wetland and vernal pool habitat. There is additional core aquatic habitat located along the Kickamuit and Coles Rivers and within the Palmer and Coles River estuaries.

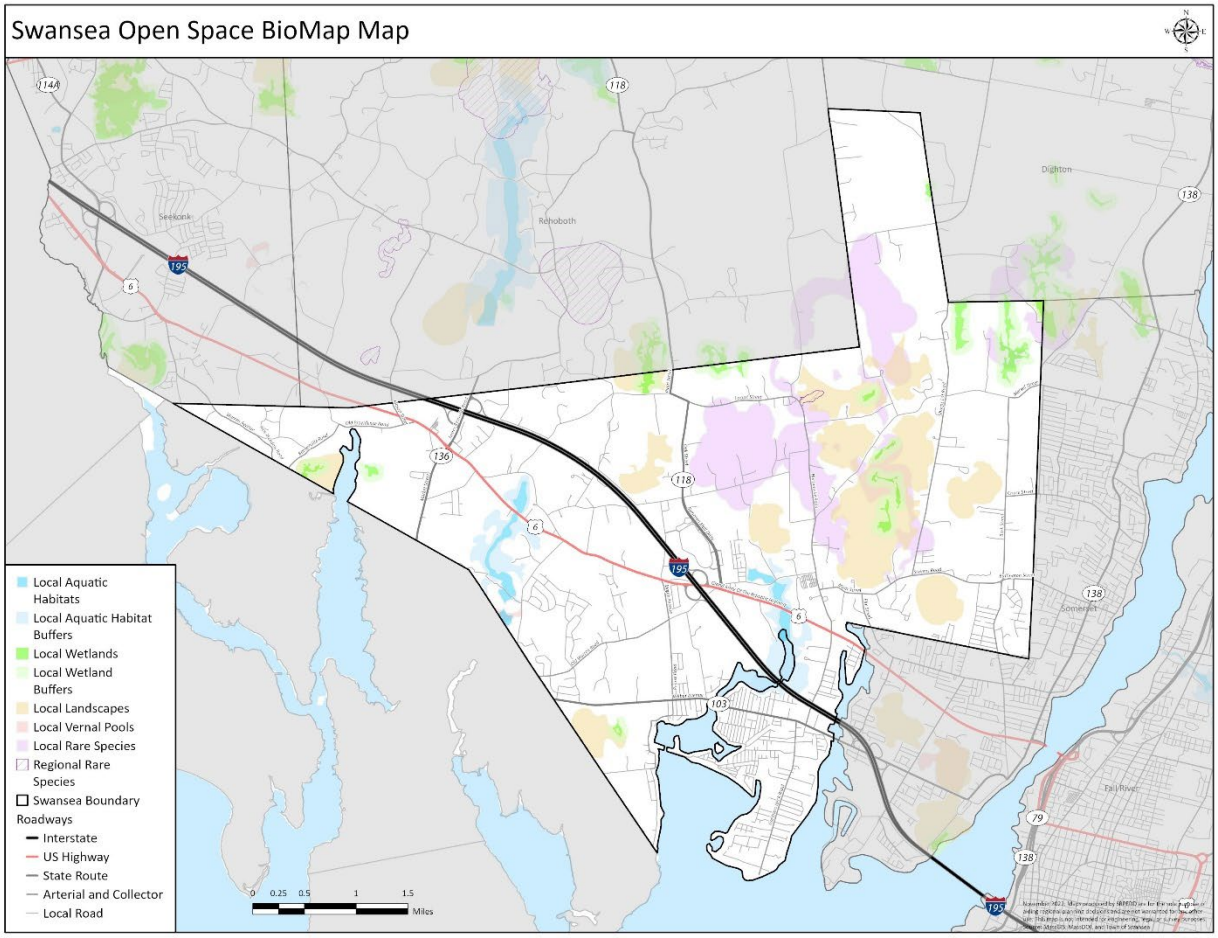
*Map 17. Swansea Open Space BioMap Map: Core Habitat and Critical Natural Landscape**



**There is a full-size version of this map in the appendix*

Critical Natural Landscape in Swansea includes buffers to these core habitats and additional areas of unique significance. There are landscape blocks of large connected habitat in the Two Mile Purchase area that extend into Rehoboth and Dighton. These minimally fragmented natural areas provide important migration corridors and support more dynamic and resilient ecosystems. Coastal Adaptation Areas, another component of Critical Natural Landscape, are located along each of Swansea's tidal rivers. These areas include important coastal habitat that is particularly vulnerable to the impacts of climate change, as well as adjacent upland with high potential to support the inland migration of these habitats as sea levels rise. Lastly, tern foraging habitat has been identified in the Coles and Lee River estuaries that is important to migratory tern species populations in Massachusetts.

*Map 18. Swansea Open Space BioMap Map: Habitats of Local and Regional Significance**



**There is a full-size version of this map in the appendix*

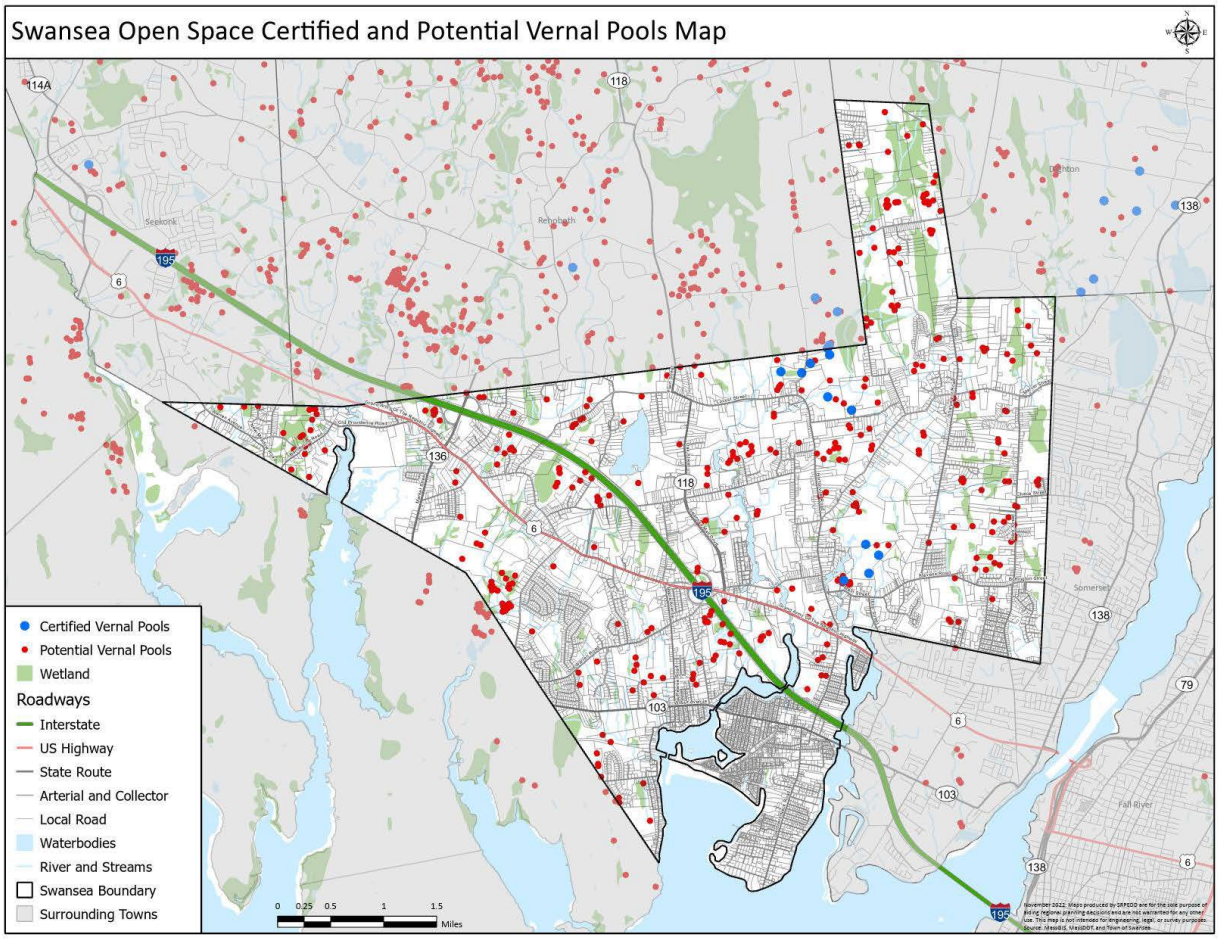
Furthermore, the most recent edition of BioMap, released in 2022, included additional local and regional components to Core Habitat and Critical Natural Landscape that supplement the state data at the local municipal level, and also identify habitats of particular importance across the Northeast as a whole. Additional local landscapes

and core habitats of particular importance to the Town of Swansea exist, again, in the eastern part of Town, as well as along Heath Brook and the Coles River. Swansea also contains 9.5 acres of rare species habitat of regional significance along the Cole River east of Hortonville Road.

VERNAL POOLS

Vernal pools are areas which are seasonally inundated with 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. The soil characteristics and relatively high water table in Swansea create ideal conditions for vernal pools throughout Town.

*Map 19. Swansea Open Space Certified and Potential Vernal Pools Map**



**There is a full-size version of this map in the appendix*

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. According to NHESP's most recent data, Swansea currently has 10 certified vernal pools and 346 potential vernal pools located throughout the Town, as shown on the Swansea Open Space Certified and Potential Vernal Pools Map. Potential vernal pools are identified using color infrared photos. NHESP relies on volunteer efforts to survey potential vernal pools and submit documentation for certification.

FISHERIES

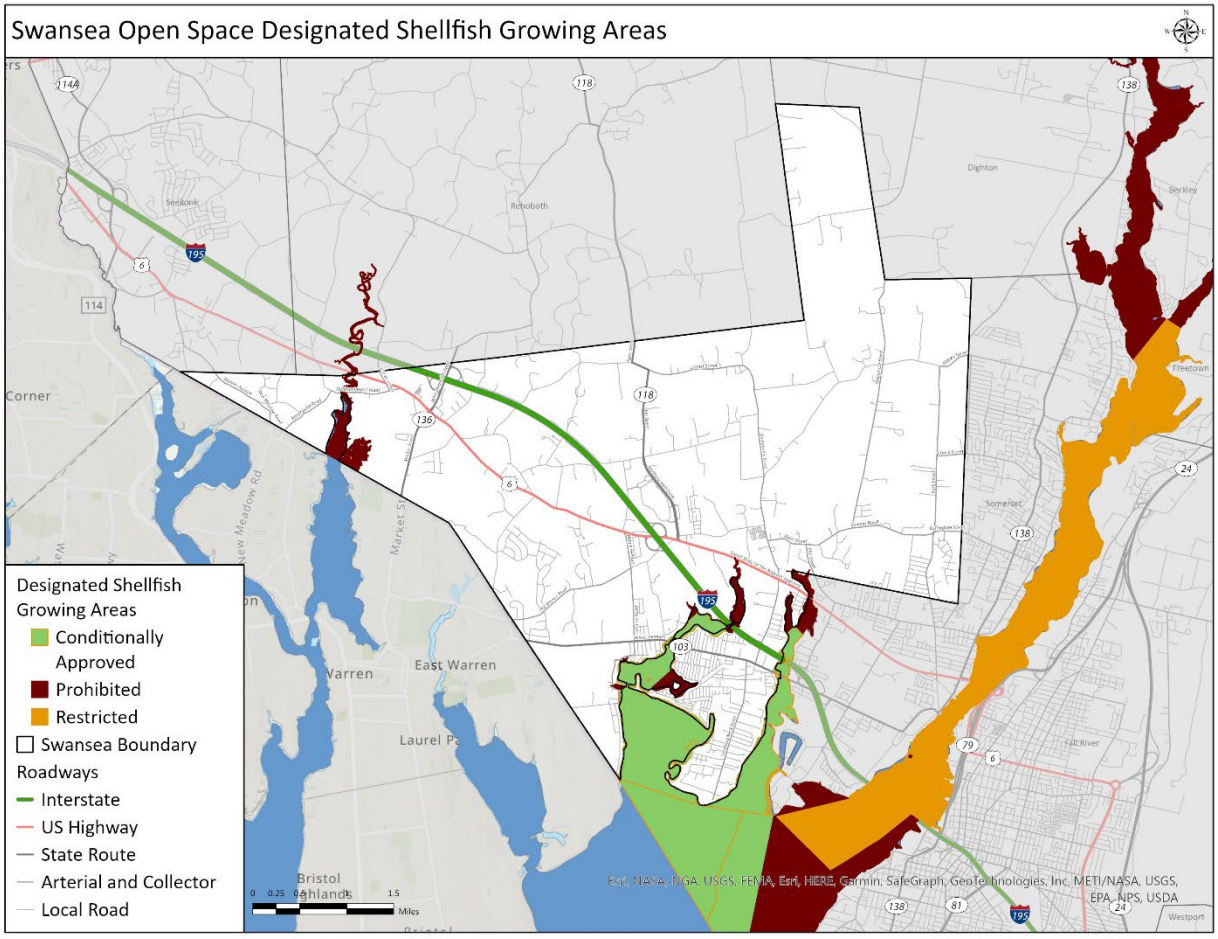
Historically, marine fisheries in Swansea consisted of approximately 647 acres of shellfish producing tidal areas in the Coles River. Of this total, some 560 acres were for quahogs and 87 acres for soft shell clams. In addition, at the mouth of the Lees River, 746 acres of quahogs and 2 acres of soft-shell clams were available. These beds were closed in the mid 1970's due to pollution in the river from failed septic systems, agricultural activities, and stormwater run-off.

Water quality improvements have allowed areas of the lower Coles and Lees River estuaries to reopen with conditional approval. This means that shellfishing is allowed in these areas, except during certain predictable times, such as following heavy rainfall or during certain times of the year, when expected poor water quality makes the consumption of shellfish unsafe. Water quality is tested before the season reopens each spring, and any rainfall event greater than half an inch triggers an automatic five-day closure.

Shellfishing areas in Swansea are identified in the *Swansea Open Space Designated Shellfish Growing Areas Map*, and local shellfishing regulations are posted on the Town website. Residential shellfish permits can be purchased at the Town Clerk's Office.

Sport Fishing in Mount Hope Bay for striped bass, bluefish, squeteague or weakfish, and Winter Flounder is still possible, though water quality impacts the safety of fish consumption. MassWildlife stocks Lewin Brook and Milford Ponds with trout each spring for recreational fishing.

*Map 20. Swansea Open Space Designated Shellfish Growing Areas Map**



**There is a full-size version of this map in the appendix*

RARE ANIMAL SPECIES

Several rare and endangered species are known to occur in the Town of Swansea, some of which are listed and protected by the Massachusetts Endangered Species Act (MGL c. 131A). The Eastern Box Turtle, the Wood Turtle, and the Spotted Turtle (the first two are listed as species of special concern), depend upon both uplands and wetland systems, which occur in Swansea for their habitats. The Marbled Salamander (listed as threatened) is largely terrestrial, and can live in both dry as well as moist areas, but requires vernal pools or shallow depressions such as occur in Swansea for breeding. The Least Tern (listed as special concern), a ground-nesting coastal water bird, is found along coastal beaches and barrier islands. Cedar Cove and the surrounding estuary at the mouths of the Coles and Lees Rivers have been identified as tern foraging habitat in BioMap (see BioMap section above). This species is threatened by predators, competition for nesting areas, and disturbance from humans and dogs. Ospreys, coastal raptors that migrate to the region in spring and summer, are not listed species

but are protected under the federal Migratory Bird Treaty Act. They have been observed nesting at several sites along the Coles, Lees and Palmer Rivers.

Table 14. NHESP List of rare animal and insect species sighted in Swansea

Common Animal Name	Scientific Name	Listing Status	Last Observed
Marbled Salamander	*Ambystoma opacum*	T	2014
Twelve-spotted Tiger Beetle	*Cicindela duodecimguttata*	SC	1913
Least Tern	*Sternula antillarum*	SC	1994
Eastern Box Turtle	*Terrapene carolina*	SC	2008
Northern Diamond-backed Terrapin	*Malaclemys terrapin*	T	2005
Wood Turtle	*Glyptemys insculpta*	SC	1991

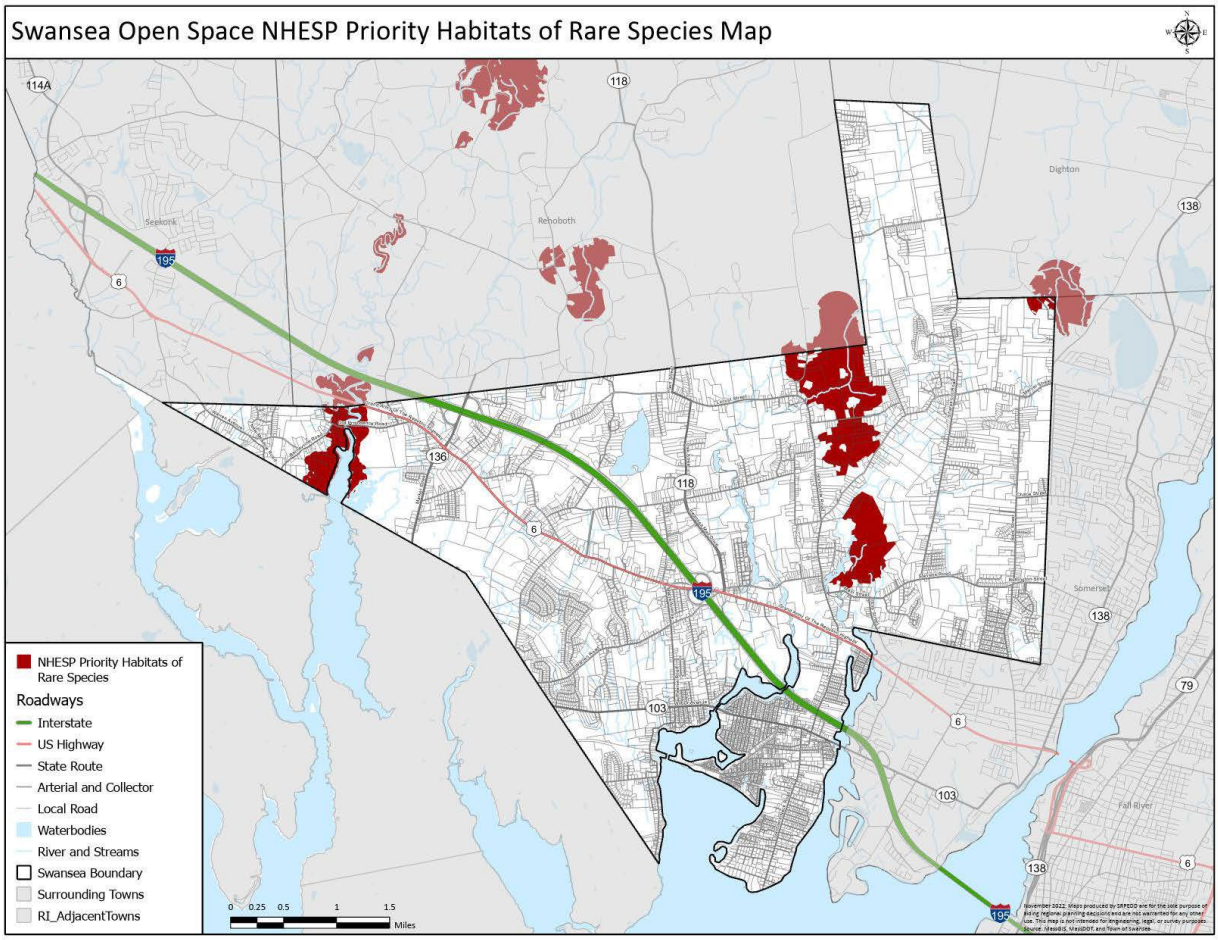
Source: MassWildlife's Rare Species Viewer

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.

NHESP designates Priority and Estimated Habitats of Rare Species, which determine whether a proposed project must be reviewed for compliance with the Massachusetts Endangered Species Act and Wetlands Protection Act. These Priority Habitat areas are known habitat for protected state-listed rare plant and animal species. The most recent Priority Habitat map (the 15th Edition Natural Heritage Atlas, released in 2021), identifies four separate rare species Priority Habitat areas in Swansea: one along the Palmer River, continuing north into Rehoboth; one in the Lewin Brook headwaters area in and surrounding Village Park; another large area north of Hailes Hill Road, between Hortonville/Hornbine Road and Sharps Lot Road, that continues north into Rehoboth; and a small area on the northeast corner of Town that connects with Dighton and Somerset (see Swansea Open Space NHESP Priority Habitats of Rare Species Map).

*Map 21. Swansea Open Space NHESP Priority Habitats of Rare Species Map**



**There is a full-size version of this map in the appendix*

F. Scenic Resources and Unique Environments

Swansea is an area that is rich in scenic and historic resources as well as unique natural environments. These resources are located within the coastal areas as well as inland rural landscapes. Taken together they create that special town character and quality of life that the community values. Special Landscape Features in Swansea are detailed below and in the Swansea Open Space Scenic and Unique Features Map. Many of these resources are threatened by inappropriately located and/or designed commercial and residential development which continue to fragment the existing landscape.

SCENIC LANDSCAPES

Swansea's prime scenic resources derive from the rolling landscape of rural farmland and wetlands which serve as the headwaters of five rivers that traverse primarily in a north to south direction, terminating in estuaries and coastal beaches. Included are the Palmer, Kickamuit, Coles, and Lewin Brook/Lees Rivers. The Coles is the longest river in

Town, connecting the rural area known as Two Mile Purchase to Milford Pond and then Mount Hope Bay. Lewin Brook drains a rolling landscape located north of Swansea Village where Lewin Brook Pond is located. These water bodies and freshwater vegetation attract diverse wildlife species including birds, mammals, reptiles, fish, and amphibians. Swansea also has 13.5 miles of tidal shoreline, including two designated barrier beaches (total of 33 acres), of which Cedar Cove has been identified as a habitat for rare and endangered species. The major areas of open water in Town are the Lewin and Milford ponds and the Warren Reservoir.

Two Mile Purchase (#1 on the Scenic and Unique Features Map) is a large, relatively undeveloped rural area extending into Rehoboth in the north of Town. The headwaters of the Coles River are located in the swamps which comprise this rolling landscape. There is no public water and the hydric soils cannot easily accommodate septic treatment. This area has been designated as part of the Town's Aquifer Protection District and the expanses of wetlands here are part of the regulated Special Flood Hazard District, Swansea's Green Infrastructure Network, BioMap Core Habitat and Critical Natural Landscape, and CAPS Habitat of Regional or Statewide Importance. Despite these important resources, much of this land remains unprotected and faces substantial development pressure. A few residential subdivisions have been created here in recent years.

The **Hailes Hill Road/Hortonville Triangle** (#2 on the Scenic and Unique Features Map) contains swamps and headwaters of Lewin Brook. The landscape here is hilly and relatively undeveloped. There is NHESP-designated Priority Habitat of Rare Species here, as well as core habitats of local and state significance, according to BioMap, here. Box turtles, salamanders, and unusual vegetation are found here, as well as herds of deer. This land is unprotected and residential development has been filling in around the edges of these unique resource areas.

The **Lewin Brook/Sharps Lot Road** area (#4 on the Scenic Features Map) is located south along Lewin Brook on the other side of Hailes Hill Road. This area is similar in character to the Hailes Road/Hortonville Triangle, and also contains Priority Habitat of Rare Species and BioMap Core Habitats of both local and state significance. Furthermore, a large portion of this area is considered CAPS Habitat of Potential Regional or Statewide Importance. There are several protected and open space properties here that have at least temporary or permanent protections from development.

Village Park (#3 on the map) is a large forested area of wetlands and upland owned by the Town. It contains a significant amount of wildlife, hiking and biking trails, and numerous Vernal Pools. From Wild Cat Rock formation, a high point in Town, one can see all of Mount Hope Bay. An archaeological survey of various locations in Swansea was carried out in 1980 as a preparatory component of the Wastewater Facilities Plan that was prepared for the Town. Most of the archeological sites of interest in the Town that were identified are located within Village Park. Abram's Rock, in particular, contains markings from native tribes who wintered in this area. The purchase of Village Park for conservation purposes was an important acquisition in terms of resource and

historical preservation. The protection of this land is essential to prevent fragmentation of habitat areas as well as to preserve these historic and scenic resources for public enjoyment.

Village Park was expanded to include the former Montaup Power Company Parcel, which was transferred to the Town when the Power Plant closed down in 2010 and the water rights to the property were no longer needed. This land includes a substantial number of unique resource areas. There are two ponds, Upper and Lower Lewin Pond. These ponds provide trout fishing and attract a significant amount of wildlife including ducks, geese, swans, owls, and hawks

Sears Farm (#5) is a vacant, 56 acre parcel owned by the Town located on the banks of the Coles River. The estuary embankment includes fresh and saltwater vegetation and a variety of wildlife. This is a very scenic location. Access is limited due to a narrow, shared right of way from Route 6. The Town uses this land for brush storage, but lack of a public access road limits recreational use of the property.

The **Jarabek & Borge Preserve** (#7) are located between I-195 and the Coles River. These parcels of some 100 acres, located near the estuary of the Coles River, with access off a local street from Wilbur Avenue, were once a gravel pit. The presence of wetlands and freshwater ponds attracts diverse wildlife including fish and inland birds, and vegetation including a number of rare species. Walking paths are maintained by the Wildlands Trust, but lack of parking limits access to the local neighborhood.

There are **Open Spaces on Gardners Neck** (#9) located off Gardners Neck Road and Route 6, behind Mr. Peeper's Ice Cream, on the Lees River. One is a 2 acre, privately owned parcel, a former gravel pit, currently used as a supply depot for a private company. Adjacent to this property is the Almeida Farm. Together these properties represent one of the last remaining coastal landscapes with a beautiful view of the Lees River. Two responses to Swansea's 2022 Open Space Public Survey specifically mentioned this property and its potential for a small waterfront park.

Little Neck (#11), south of Fifth Street, is a publicly owned Rocky landscape consisting mostly of conglomerate. This point of land, once a proposed sub-division, has a small field. The property provides boat access to the Lees River and estuary.

There are several **Power Line Corridors** (#12) traversing the Town carrying power from the former Brayton Point and Montaup power plants (Somerset). These corridors are currently utilized by wildlife as well as informally for walking and dirt bikes. A more formal public use of this property for recreation could be explored. Some of these grassy corridors are among the most ecologically valuable uplands in the state, as identified by CAPS, for the unique habitat they provide.

Ocean Grove (#22) is the neighborhood northeast of the Town Beach on the Coles River. It is characterized by relatively dense waterfront residential development. In Swansea's 2022 Open Space and Comprehensive Plan Public Survey, many people

called out this area of Town for having the ideal small-town, coastal suburb feel that people like about Swansea.

The **Locust Street Agricultural Corridor** (#23), the general area bounded by Locust Street in the north, Route 118 in the west, Hortonville Road in the east, and Delmage Road/Wood Street in the south, contains many historic and active farms. Several properties here are enrolled in Ch. 61A and/or have permanent Agricultural Preservation Restrictions. **Kenneth Baker Farm** (#24), which has been operated by their Baker family since 1880 (and another family for a hundred years before that), and the more recent Ice Cream Barn are located here. Several people mentioned this important landmark in Swansea's 2022 Open Space and Comprehensive Plan Public Survey.

Another important agricultural corridor identified in the 2022 public survey results is in southern Swansea, along Route 103. **Stony Creek Farm** (#25) is a cattle farm and retail store located here. This is the site of the Swansea Farmers Market and it also offers horse boarding and training, a petting zoo, and a venue for birthday parties and other events.

There is a forested area located in the center of Town in the **Milford Pond/Wood Street** area (#26) that received eight mentions in Swansea's 2022 public survey. This area also contains BioMap Core Habitat and Critical Natural Landscape of both state and local importance. There are several Town-owned properties here, including Joseph Case High School, Herb Baker Farm, and Delmac Orchard, offering great potential for passive recreation.

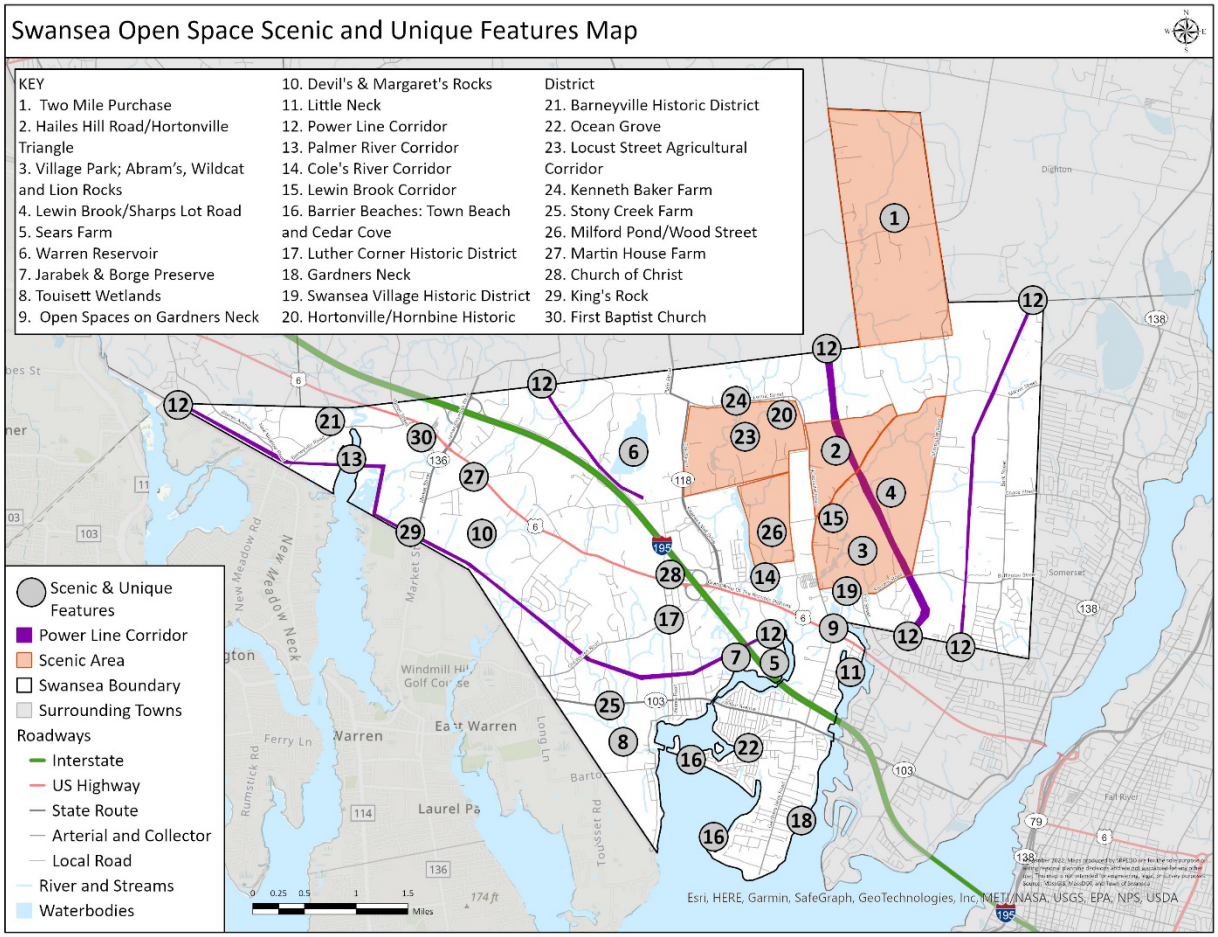
UNUSUAL GEOLOGIC FEATURES

Devil's and Margaret's Rocks (#10) are two unique landmarks located on 200-acres of privately owned property behind Shawmut Metal on Route 6. A portion of the area was once a gravel pit while the other portion of the area is owned by the Swansea Water District and is the site of the Bushee Well field. Private ownership and protection of the well field limit access to these landmarks. Devil's Rock marks a peak in Town and nearby Margaret's Rock is a rock shelter said to have housed Roger Williams in the winter of 1636 as he was cared for by a Wampanoag group, including a woman named Margaret who the rock is named for, while he fell ill fleeing Massachusetts.

Abram's, Wildcat and Lion Rocks are a series of large rock formations located in **Village Park** (#3), behind Swansea Town Hall. Abram's Rock is said to have been used as a shelter by a Wampanoag man who left his tribe until he was captured by King Philip. His sentence for deserting his tribe was either death or to attempt three leaps from the top of his rock. He chose the latter and the legend says he died after his third jump.

King's Rock (#29), located on Route 136/Market Street near Swansea's Town line with Warren, RI, is the site where indigenous tribes would gather to celebrate victories and develop peace treaties. A groove in the rock is thought to have been used to grind corn for feasts.

*Map 22. Swansea Open Space Scenic and Unique Features Map**



**There is a full-size version of this map in the appendix*

UNIQUE ENVIRONMENTS AND FEATURES

The unique environments include significant rural and coastal resource areas that often are a locus of biodiversity. These special places are located in wetland and river corridors, in the coastal estuaries and beaches found in Swansea. Because of their environmental and biological complexity, these areas are able to attract a diverse variety of wildlife including birds, plants, fishes, amphibians, and mammals. It is of utmost importance for both the human and natural community that these unique environments be protected.

The **Palmer River Corridor** (#13) is located primarily within Rehoboth and what is known locally as "North Swansea." As the Palmer River opens into Narragansett Bay in Rhode Island, both tidal freshwater and brackish saltwater marshes are located on the river banks in Swansea. Cedar trees line the banks of marshes which are home to several rare and endangered plant species, including one that is globally rare. The stream is inhabited by a rich diversity of aquatic habitat. This is also the locus of the Northern

Diamond-backed Terrapin (a state-listed threatened species) habitat. There is NHESP-designated Priority Habitat for Rare Species, as well as BioMap Core Habitat and Critical Natural Landscape located along the river.

The **Coles River** (#14) and **Lewin Brook** (#15) **Corridors** (14 & 15) are additional important stream corridors through Town. Their watersheds incorporate the prime undeveloped wetland and habitat areas of Swansea including the Two-Mile Purchase district, ponds, vernal pools, aquifers, Priority Habitat for Rare Species and BioMap Core Habitat and Critical Natural Landscape areas. These areas also supply several public wells.

Two **Barrier Beaches** (#16) are located within Town: the Town Beach and Cedar Cove. Both beaches are prone to flooding and thus have been designated an Undeveloped Coastal Barrier. The former, Town Beach, is located along a former railroad trestle. The latter, Cedar cove, is located at the tip of Gardiner's Neck. Cedar Cove is also identified as BioMap Core Habitat and Critical Natural Landscape, containing habitat for terns and eels.

Warren Reservoir (#6), the largest body of water in Swansea, is a 200-acre pond on the Kickamuit River in public and private ownership. This reservoir is a protected water supply and formerly served the water supply needs of Warren, Rhode Island. The Swansea Water District also has a well at the Southern end of the reservoir to serve Swansea's water needs, and is exploring the possibility of acquiring water withdrawal rights to the reservoir as well.

There are a series of streams and wetlands south of Wilbur Avenue/Route 103 in the **Touisset** area (#8), which extends into Warren, RI. This area contains a dense cedar forest in overgrown fields south of the railroad grade. Three perennial streams run through this area into Mount Hope Bay. Soil consists of rocky, glacial till. BioMap identifies Core Habitats of state and local importance here.

CULTURAL, HISTORIC AND ARCHEOLOGICAL AREAS

The history, culture, and character of an area are reflected in its buildings, structures and sites. These historic features provide a community with a continuing sense of its past and a tangible, visual example of its heritage. However, lack of foresight in planning as an area grows and develops often leads to significant historical resources being destroyed or changed beyond recognition, or to the encroachment of structures that are incompatible and detract from the historic value of an area.

The Massachusetts Historical Commission (MHC) keeps a statewide Inventory of Historic and Archaeological Assets that identifies significant historic resources throughout the Commonwealth. Properties on the National Register of Historic Places (the official federal list of districts, sites, buildings, structures, and objects that have been determined significant in American history, architecture, archaeology, engineering, and culture) are all listed in the State Register of Historic Places. According to the MHC, Swansea's inventory of historic resources documents 270 individual resources, including

150 resources that are recognized by the National Register. A list of these State and National Register resources appears in Appendix D.

Also listed in the State Register are those properties protected by a Preservation Restriction (PR), per the requirements of MGL Chapter 183, Sections 31-33. A PR runs with the deed and is one of the strongest preservation tools available. Swansea has one property that is protected by a PR, the Luther Store.

The Sowams Heritage Area Project has worked to document the history and historic locations within the Sowams area of southeastern Massachusetts and Rhode Island at the time colonists arrived, and how the land transformed thereafter. They have inventoried many of the indigenous locations and landmarks noted throughout this section, and host additional historical information on their website. The Town and surrounding communities continue to work with the Sowams Heritage Area Project to document and preserve local indigenous knowledge and cultural sites. They are currently participating in a feasibility study considering a National Heritage Area designation for the Sowams area, which would help attract federal support and funding for historic preservation, natural resource conservation, education and stewardship, and attract tourism that could boost economic development.

The following historic districts and sites have been identified in Swansea. In total these areas capture Swansea's evolution from indigenous to colonial to a rural farming and early industrial to a summer resort community. These changes are recorded in the landscape and architecture of these areas. Their preservation gives the Town a sense of identity and direction as it adjusts to the many challenges of accommodating new growth.

Luther Corner Historic District (#17 on the Scenic and Unique Features Map) is the location of an early colonial village settlement. A number of homes from the early 18th and 19th centuries still exist. The Town's historic museum, the Luther Store, is located here, as was the Cahoone Brickworks, which was founded and operated by William Colquhoun from 1673 to 1675. Colquhoun (pronounced Ca-hoon) came from Scotland, was one of the founders of Swansea in 1669 and was appointed the Town's official brick maker before he was killed in 1675. Several bricks from the original Brickworks are housed in the Luther Store Museum.

Gardners Neck (#18) was once utilized by indigenous tribes as a summer encampment. Fishing and hunting were relatively easy as the bluffs and coves were surrounded by wildlife. With colonization, a land grant extending from King Philips time led to the parcelization of this property. During the 19th century this area became a popular summer-time community. Within the last 40 years, homes have been converted for year-round use.

Swansea Village Historic District (#19), extending along Main Street from Gardners Neck/Hortonville Road to Base Lodge Road, has been the center of Town since the 18th century. At one time, a mix of residential and commercial structures such as dry goods, clothing, and groceries were located here. The Montaup Power company built

the Swansea Dam here. A number of fine residential estates have been converted to residential schools. In addition, the Town has built its Town Hall, Library, Joseph Case Junior High, and more recently, police, highway department and fire stations in this village. Village Park is also located here, with parking and an entrance behind the library for this popular Town Park.

The **Hortonville/Hornbine Historic District** (#20) is located along Locust Street. A historic grist mill was developed along the Coles River here and an early village developed around this mill.

Barneyville Historic District (#21) was the location of the Town's ship building industry. In the 19th Century, the Mason Barney Shipyard on the Palmer River was a significant location for the construction of three-masted ships. The Mason Barney Yard closed in 1861. The historic **Mason Barney Estate** was built for the Yard's owner in 1807. It is abandoned and in disrepair today, but still stands at Barneyville and Old Providence Roads. Across the street was the older **Myles Garrison House**, the home of Rev. John Myles that was used to house British troops at the opening of King Philip's War in 1675. It is now marked by a large stone with a plaque that names those in Swansea who were killed in King Philip's War.

The **Martin House Farm** (#27) is the site of an 18th century farm with a house, two barns and stone walls, surrounded by woodlands. The Martin Family lived there for over 200 years before it was given to the National Society of The Colonial Dames in The Commonwealth of Massachusetts in 1930. Today it is a museum, event venue, and hosts a living history program for schools. The Town has been working with The Colonial Dames to secure permanent protections for this important historical and cultural community asset.

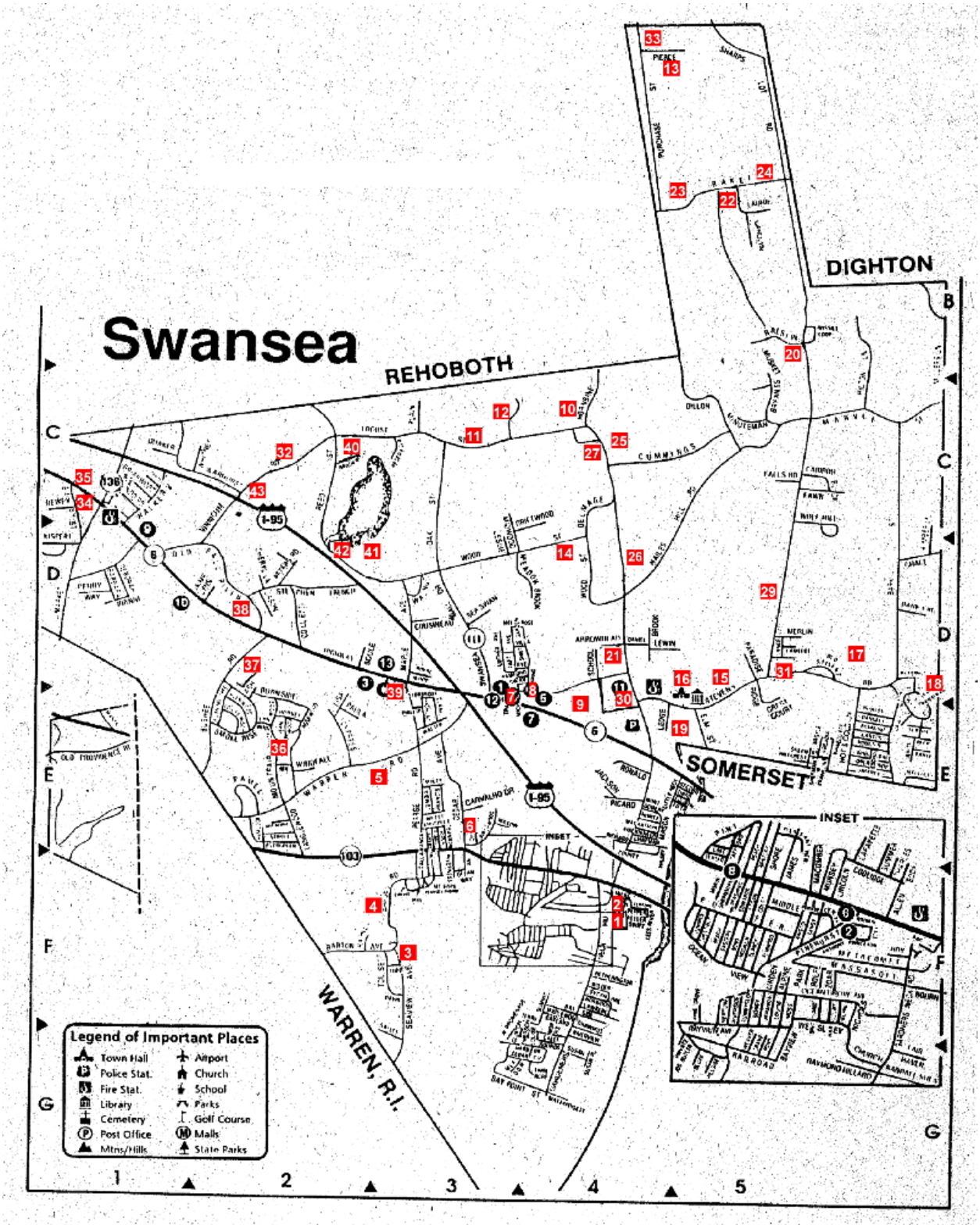
Church of Christ (#28), today called the First Christian Congregational Church, first gathered, informally, in 1680, and became organized under an ordained pastor in 1693, and has operated independently for much of its history, open to all Christians, regardless of their faith. It may have been the first church in New England to admit all as such.

First Baptist Church (#30), founded in 1663 by John Myles, is the oldest Baptist congregation in Massachusetts, and one of the oldest in the United States. It has changed locations several times and is now located in Barrington, RI. Its first meeting house was constructed in 1848 on Baptist Street in Swansea, and this was the fifth building occupied by the congregation.

Also worth noting are the many historic cemeteries located throughout Town, each with their own significance. A complete list of all these sites can be found on the unofficial Town website, swanseamass.org. One in particular, the **Swansea Small Pox Cemetery** (#9 on the Map of Historic Cemeteries in Swansea from swanseamass.org) on Milford Road near Veterans Memorial Park, was mentioned by the public during outreach as an important historic site that people like to visit and is in need of maintenance. Perhaps one of the earliest known cemeteries is the **Old Eddy Burial Ground** (#19 on the

Map of Historic Cemeteries), at the end of Ledge Road on Lewin Brook. It was established twenty years after the Town was established, in 1687.

Figure 10. Map of Historic Cemeteries in Swansea from swanseamass.org



The Commonwealth of Massachusetts provides a means for communities to preserve their historic resources through the establishment of local historic districts. As stated in the MHC's "Guideline for Establishment of Historic Districts," the purpose of the Historic District Act is to promote public welfare through:

a) the preservation and protection of the distinctive characteristics of buildings and places significant in the history of Massachusetts and its cities and towns;

b) to maintain and improve the settings of buildings and places, and;

c) to encourage new designs that are compatible with the existing buildings in a district.

Local Historic Districts are administered at the municipal level and distinguish special areas within a community where the distinctive characteristics of building and place are preserved and protected by local Historic District Commissions.

Though Swansea does contain historic districts inventoried in the National Register of Historic Places, it has not yet established any local historic districts. It does have a local Historical Commission (different from a local Historic District Commission, which would review projects proposed within a designated historic district) that coordinates community-wide historic preservation planning. The Swansea Historical Society is a private, non-profit organization that was established in 1941 to preserve local history records and collections and owns the Luther Store Museum.

G. Environmental Challenges

LANDFILLS

There is one closed landfill, the Borge Landfill, located at the DPW yard off Route 6. It is unlined and capped, and not considered an environmental hazard.

HAZARDOUS WASTE AND BROWNFIELD SITES

MassDEP's Bureau of Waste Site Clean-Up lists 91 records of sites/reportable releases in Swansea. Most of these sites do not constitute serious hazards to public health, reflecting minimal leaks of fuel oil and gasoline, and many have had at least some degree of resolution. See status details for all documented clean-up sites in the Hazardous Release Sites Compliance Status table.

Table 15. Hazardous Release Sites Compliance Status

Type	Count	Status Detail
Adequately Regulated	1	A release where response actions are being conducted following the rules of another state or federal regulatory program.
DEP Not a Disposal Site	1	(pre-1993) MassDEP determined that these locations did not need to be reported and are not considered waste disposal sites.

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 No Conditions	10	(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	56	(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.
RTN Closed	5	Future response actions are being addressed under a new "primary" Release Tracking Number (RTN). This occurs when multiple releases at one site are combined under one primary RTN for simplification.
Tier 1D	2	Site where the responsible party fails to provide a required submittal to DEP by a specified deadline (formerly Tier 1B).
Tier 2	1	Site has been classified as Tier 2. Any disposal site that is not Tier ID and does not meet the Tier I Criteria.
Waiver Completion Statement	1	(pre-1993) A Waiver Completion Statement has been submitted to DEP.
Unknown	12	Compliance status is blank in the Waste Site & Reportable Releases Data Portal, so current status is unknown.

Source: Massachusetts Executive Office of Energy & Environmental Affairs Waste Site & Reportable Releases Data Portal

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. Swansea has two Tier 1 sites and one Tier 2 site (details about each, including Release Tracking Numbers, or RTNs, can be found in the Chapter 21E Tier Classified Hazardous Sites table).

Table 16. Chapter 21E Tier Classified Hazardous Sites

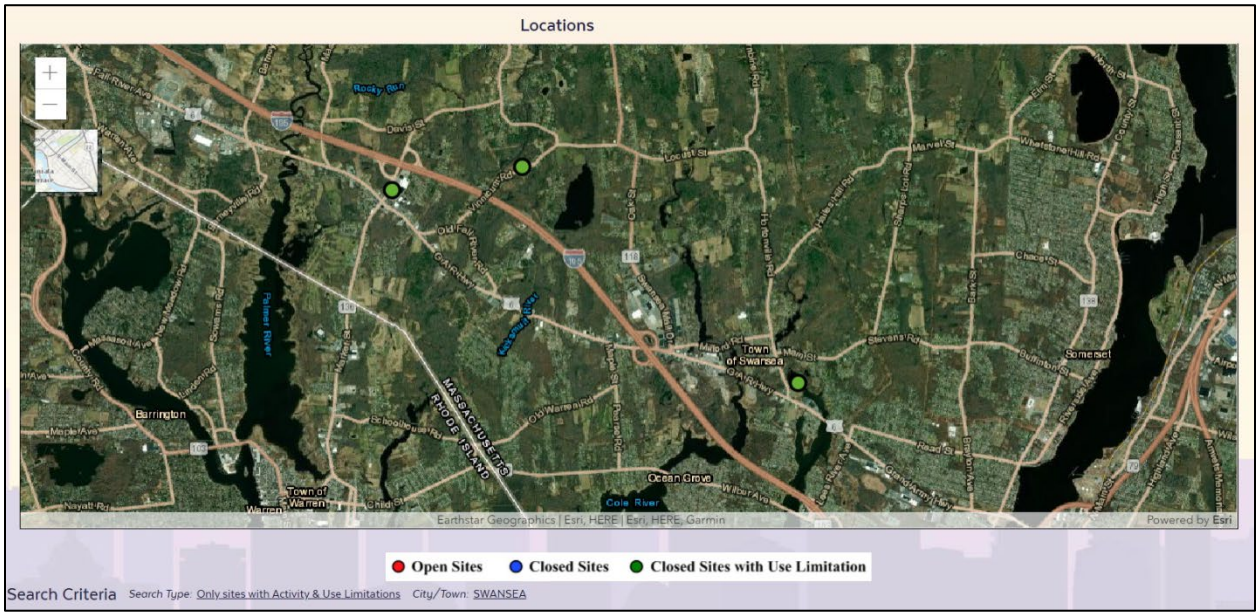
Category	Sites
Tier 1	n/a
Tier 1D	RTN 4-0028994 (75 Arcadia Road, residence) RTN 4-0026044 (231 Warhurst Ave., single family residence)
Tier 2	RTN 4-0018161 (2264 Grand Army Republic Hwy, Mutual Service Station)
Unclassified	n/a
Tier Classification Received, Unconfirmed by DEP	n/a

Source: Massachusetts Executive Office of Energy & Environmental Affairs Waste Site & Reportable Releases Data Portal

Three sites in Swansea are 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. As shown in the Hazardous Waste Release Sites with Activity Use Limitations (AULs) Post-remediation image, these sites are spread across Town.

Figure 11. Hazardous Waste Release Sites with Activity Use Limitations (AULs) Post-remediation



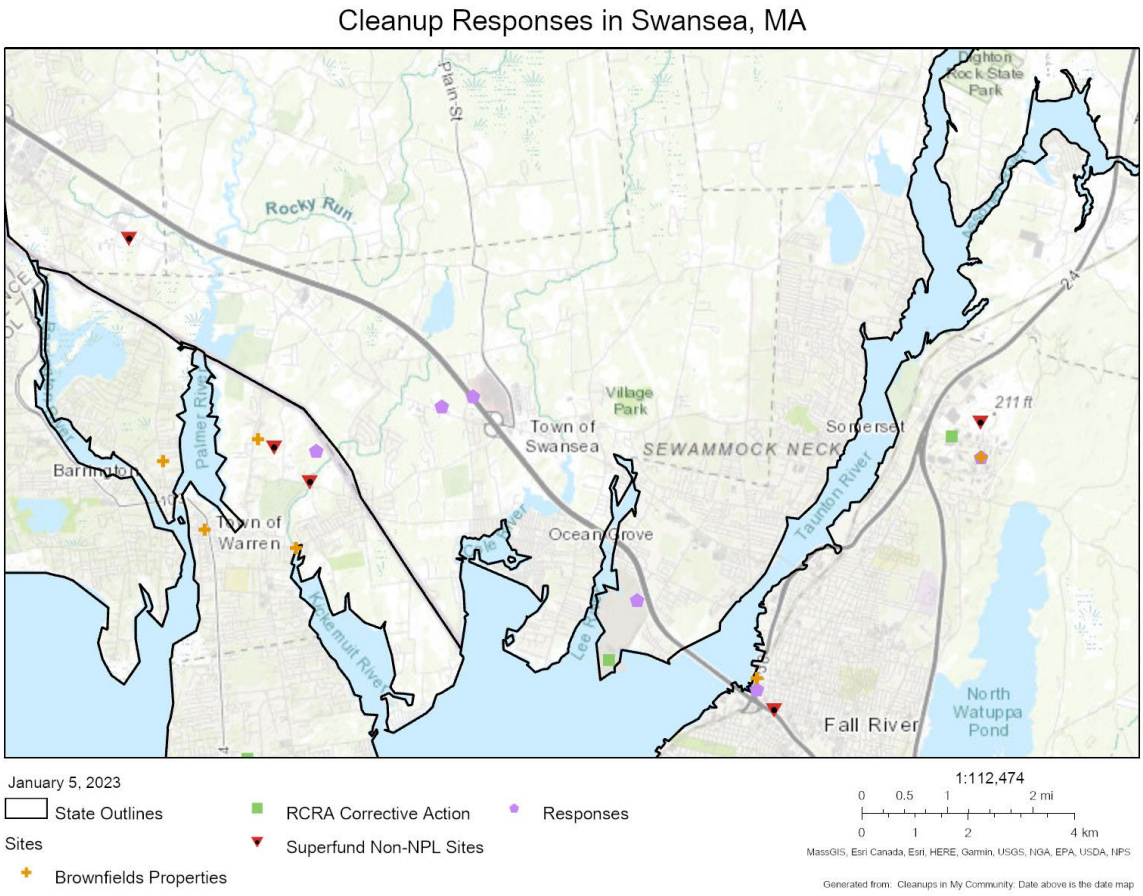
Source: Massachusetts Executive Office of Energy & Environmental Affairs Waste Site & Reportable Releases Data Portal

Swansea, in conjunction with federal, state, and local partners, has continued assessing, cleaning up, and promoting reuse opportunities on its contaminated sites. The EPA's Cleanups In My Community database shows two sites in Swansea that EPA responded to for cleanup assistance, as shown in the EPA Cleanups in My Community Database Map figure below.

The first site is at Kwik Lube N Tune on G.A.R. Highway. Oil was released on the site and reported to MassDEP on December 22, 2014. Some oil leaked into storm drains off-site and a stormwater weir on the Coles River. The following day, EPA responded to the site to oversee cleanup activities.

The second location is the site of gasoline tank truck that rolled over in an accident on I-195 near Maple Avenue, on November 16, 2008. 9,000 gallons of gasoline were spilled and some leaked into a nearby wetland. EPA and MassDEP responded the same day to oversee cleanup efforts on the highway and in the wetland.

Figure 12. EPA Cleanups In My Community Database Map



Source: EPA's Cleanups in My Community Map

EROSION AND SEDIMENTATION

Coastal erosion is a threat to any coastal community, particularly in sandy areas, such as at Swansea's Town Beach. The Town Beach has long experienced erosion challenges that impede recreation. The Town implemented a nourishment program in 2019 to address the problem.

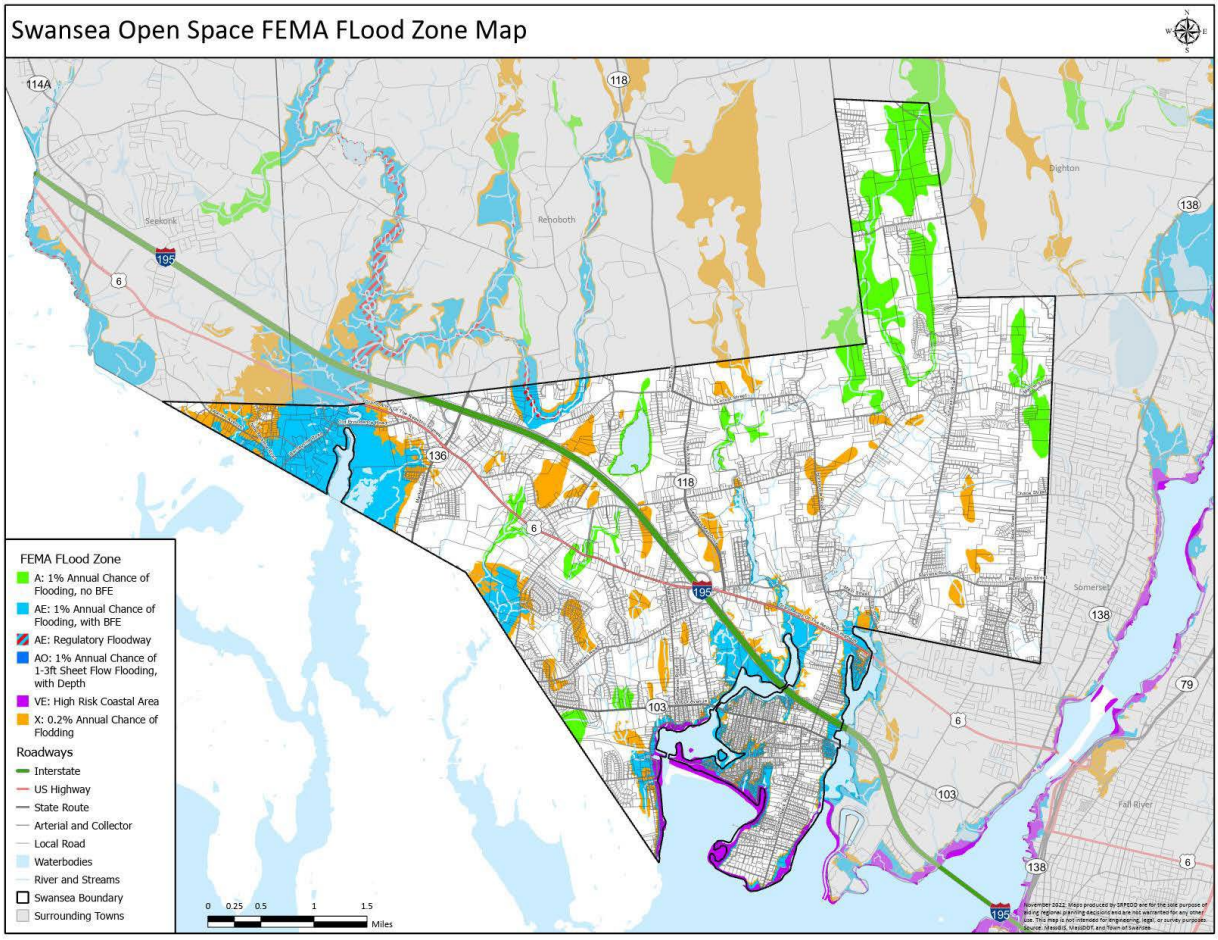
Swansea's 2017 Local Multi-Hazard Mitigation Plan did not characterize erosion as a significant threat relevant to other more sever hazards. Erosion may happen alongside flooding, but the impacts observed to date have been more localized and typically have not impacted structures in Town.

CHRONIC FLOODING

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 Swansea 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 zones beginning with "A" and "V" in the Swansea Open Space FEMA Flood Zone Map. These areas include locations flooded during hurricanes and identify wave velocity zones. 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.

*Map 23. Swansea Open Space FEMA Flood Zone Map**



**There is a full-size version of this map in the appendix*

The major areas impacted by flooding in Swansea are located within the Federal Emergency Management Agency (FEMA)-designated Flood zones and High Velocity flood zones, which are generally located along the major rivers and surrounding large water bodies and wetlands across Town. During seasonal storms, Swansea's coastal areas and the abutting residences are impacted by high winds and flooding. The

relatively flat topography of the Town has also led to inland riverine flooding, particularly following large storm events such as the severe floods that occurred in 2010.

FEMA's Special Flood Hazard Area encompasses nearly $500 million worth of building value. That is approximately 45% of the total building value in the entire Town that has a 1% chance of being impacted by flooding in a given year. As of 2015, Swansea had eight properties that experienced repetitive losses from flood events (two or more losses occurring within a 10-year timeframe, costing at least $1,000 each). To remain compliant with the National Flood Insurance Program (NFIP), the Town of Swansea maintains Inland Flooding and Flood Plain Districts Zoning, which regulates and places some limitations on development within FEMA's designated flood zone area.

It is also possible for flooding to occur outside of these designated flood zones following heavy rainfall events, due to stormwater runoff. This may happen within a more localized area surrounding a stormwater outfall location or culvert. Culverts convey water underneath a roadway, and many across Town were potentially installed many years ago. This means they were designed to convey volumes of water expected during historic rain events, and were not necessarily built to handle the larger volumes of water we are seeing more often today. Older infrastructure may become clogged or fail during extreme rain events, which can cause localized flooding and/or roadway damage. Lewin Brook has flooded Sharps Lot and Stevens Roads several times and the culvert that routes the Kickamuit River under Stephen French Road often backs up and causes serious flooding there, cutting off the only access to the Buckingham subdivision.

DAMS

These structures may be important for flood control. Issues of structural integrity, erosion and sedimentation, barriers to fish conveyance, unknown ownership and the related problems of liability need to be addressed. There are six dams in Swansea registered with the state Office of Dam Safety (see Registered dams in Swansea table). The Town owns several dams on the Coles River and Lewin Brook, Bristol County (RI) Water Authority owns the Warren Reservoir Dam, and a couple other dams are privately owned.

The Massachusetts Office of Dam Safety keeps records of all dams across the state and enforces maintenance and inspection of dams by their owners, dependent on their designated hazard potential level. The hazard potential indicates the severity of hazards that could impact communities if a dam were to fail, and the classes are categorized as follows:

- High Hazard: failure will likely cause loss of life and serious damage to home(s), industrial, commercial facilities, important public utilities, main highway(s) or Railroad(s)
- Significant Hazard: failure may cause loss of life and damage home(s), industrial or commercial facilities, secondary highway(s) or railroad(s) or cause interruption of use or service of relatively important facilities

- Low Hazard: failure may cause minimal property damage to others; loss of life is not expected
- N/A: no hazard code; non-jurisdictional dams do not have hazard codes except when owned and regulated by the Federal Government

Table 17 Registered dams in Swansea

Dam Name	Location	Owner	Hazard Level
Warren Reservoir Dam	Warren Reservoir (Reed St)	Bristol County Water Authority	Low
Coles River Pond Dam	Coles River, Swansea Factory Pond	Private	Low
Milford Pond Dam	Coles River, Milford Pond (Milford Rd)	Town of Swansea	Low
Mount Hope Pond Dam	Coles River, Cole River North/Mount Hope Pond (Rt. 6)	Town of Swansea	Significant
Swansea Dam	Lewin Brook, Lewin Brook Pond (Main St)	Town of Swansea	n/a – non-jurisdictional
Swansea Print Works Dam	Lee River, Lee River Pond (Gardners Neck Rd)	Private	Low

A fish ladder has been installed at the Lower Dam of the Coles river near Route 6 and Veterans Memorial Park (Mount Hope Pond Dam) to address that barrier to fish migration. The effectiveness of this fish ladder is in need of assessment, however, which the Town is looking into doing in partnership with Save the Bay as part of a larger water quality and habitat assessment of Mount Hope Pond.

DEVELOPMENT IMPACTS

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 the natural flow of water 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 older commercial and residential developments with current stormwater practices 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.

Swansea has seen a moderate rate of development in recent years. 86 acres of natural land were converted for development between 2012 and 2017 (that is a rate of 3.8

acres per square mile, the 115th highest rate among the 351 municipalities in Massachusetts). This loss of natural areas can fragment natural land and important wildlife habitat corridors, and decreases the capacity of the land to protect the community from extreme weather. Development also threatens important agricultural and cultural landscapes in Town, as well as prime agricultural soils that once lost, cannot be regained.

Proactive planning can reduce these negative consequences often associated with development. The Open Space Plan will, along with the preparation of the Comprehensive Plan, address these concerns. Strategies for resource protection and the protection of Swansea's Greenbelt Corridors are being identified and incorporated into the Town's planning process.

IMPAIRED WATER BODIES

Coastal areas are particularly susceptible to contamination because they receive water from the immediate watershed as well as more distant watersheds through groundwater flows, rivers, and streams. In general, the longer water has to travel to reach the coast, the more opportunity there is for contaminants to filter out. However, in seaside communities such as Swansea, dense development is typically located close to the shore. Therefore, even where septic systems are not an issue, as they are in Swansea, the amount of impervious ground cover means that more polluted runoff will flow directly into coastal waters.

Shellfish beds are particularly sensitive to bacteria contamination as well as nutrient and other contaminants. Older failing septic systems can contribute significantly to bacterial and nutrient-loading. Conventional systems are not designed to reduce nitrogen inputs to groundwater, therefore even when fully functional they can impact shellfish habitat in the Bay. (See Section 4.E. Fisheries for more information about shellfishing in Swansea.)

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.

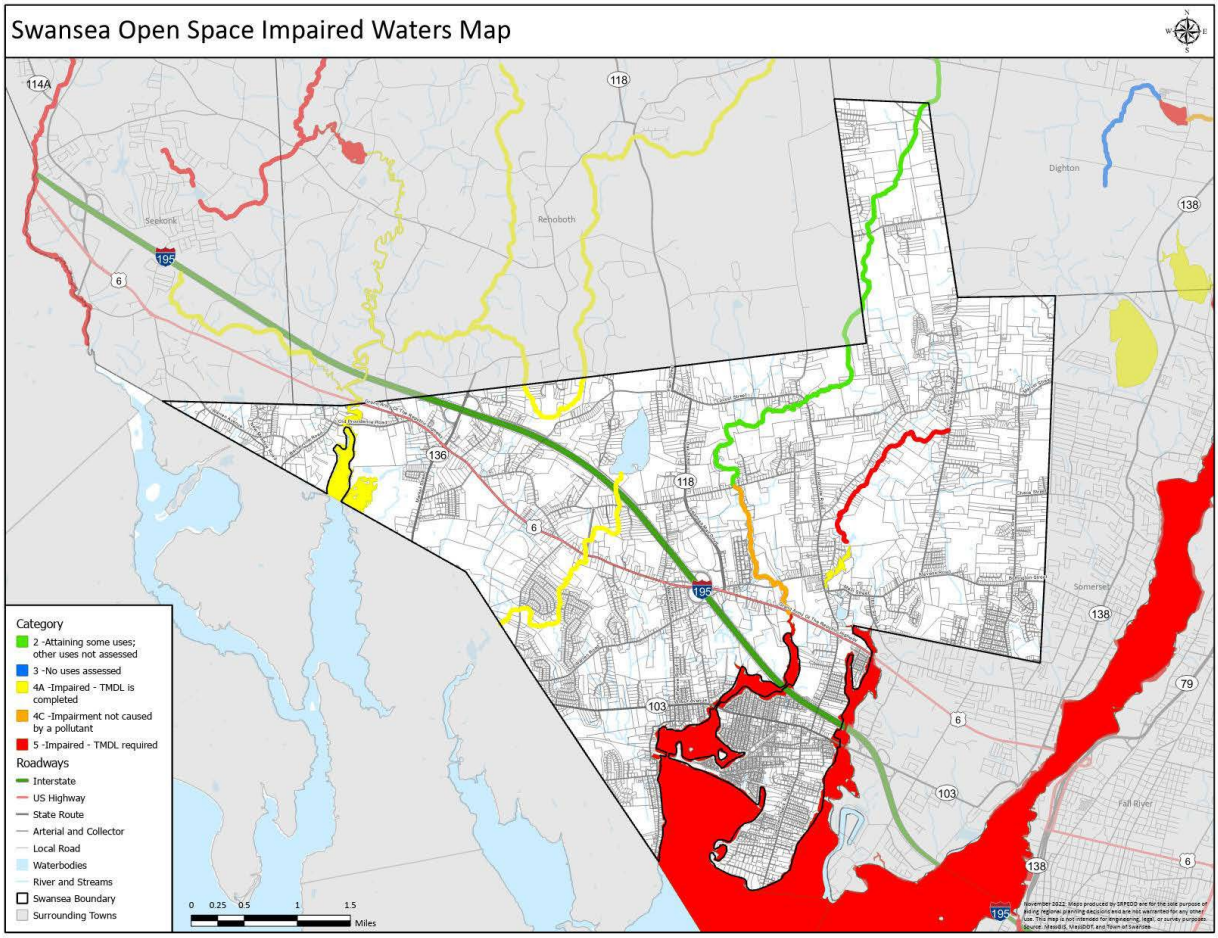
According to MassDEP's 2018/2020 Integrated List of Waters, several river segments and ponds are impaired for bacteria, nutrients, chlorophyll-a, dissolved oxygen and other impairments. All documented water quality impairments are listed in the table below and displayed in the Swansea Open Space Impaired Waters Map.

Table 18 Inventory of impaired waters in Swansea (MassDEP 2018/2020 Integrated List of Waters)

Waterbody	**Size**	**Documented impairments (MassDEP 2018/2020 Integrated List of Waters)**
Category 2: Unimpaired for some uses and not assessed for others		
Coles River (Headwaters, south of Wellington Street, Dighton to Wood Street, Swansea)	6.4 mi	Uses attained: aesthetic; fish, other aquatic life and wildlife; primary contact recreation; secondary contact recreation (others not assessed)

Category 4A: TMDL is completed		
Kickamuit River (Headwaters, outlet Warren Reservoir, Swansea, to state line, Swansea, MA/Warren, RI)	2.8 mi	Impairment(s): E. coli, fecal coliform
Lewin Brook Pond	11.0 ac	Impairment(s): mercury in fish tissue
Palmer River (From Route 6 bridge, Rehoboth to state line, Swansea)	0.11 Sq. mi.	Impairment(s): fecal coliform
Warren River Pond	0.06 sq. mi.	Impairment(s): fecal coliform
Category 4C: Impairment not caused by a pollutant; TMDL not required		
Coles River (Wood St. to Route 6)	1.6 mi	Impairment: fish passage barrier
Category 5: Impaired waters requiring a TMDL		
Coles River (Route 6, Swansea to the mouth at Mount Hope Bay at old railway grade)	0.35 sq. mi.	Impairment(s): chlorophyll-a; dissolved oxygen; fecal coliform; nitrogen
Lees River (From confluence with Lewin Brook to Route 6)	0.02 sq. mi.	Impairment(s): fecal coliform; nutrient/eutrophication biological indicators
Lees River (Route 6 to mouth at Mount Hope Bay)	0.51 sq. mi.	Impairment(s): chlorophyll-a; dissolved oxygen; fecal coliform; nitrogen
Lewin Brook (Headwaters, west of Sharps Lot Road to the inlet of the unnamed impoundment north of Lewin Lane)	1.90 mi.	Impairment(s): E. coli
Mount Hope Bay (from mouth of Coles River (at old railway grade), to state border to the line from Brayton Point, Somerset to MA/RI border approximately 3/4 of a mile due east of Spar Island, RI to the line between Bay Point, Swansea and Brayton Point, Somerset (the mouth of the Lee River).	1.84 sq.mi.	Impairment(s): chlorophyll-a; dissolved oxygen; Enterococcus; fecal coliform; fish bioassessments; nitrogen

*Map 24 Swansea Open Space Impaired Waters Map**



**There is a full-size version of this map in the appendix*

ENVIRONMENTAL EQUITY

The majority of Swansea is highlighted by the US Census Bureau as a Designated Urbanized Area. The Town does not have any qualifying Massachusetts Environmental Justice populations. However, SRPEDD regularly reviews disparities throughout their region that may not show for across the state. Looking at income variations for the region, the southern part of Swansea has an area of higher density low-income residents. This area is particularly urbanized and lacking open space. The patches of open space in this area are very small in comparison to other open spaces in Town, indicating a lack of equity in the availability of open space amenities and environmental services across the community. More details can be found in Section VII. C. Park and Open Space Equity.

POWER LINES

Several power line corridors traverse in a north/south direction the Lewin Brook and Bark Street areas of Town (see Swansea Open Space and Unique Features Map, Section IV. F.). These pose a unique opportunity yet simultaneous challenge. While they may provide walking trails and grassland habitat not seen elsewhere in Town, they are still alterations of the natural habitat. These corridors cut through rural, environmentally sensitive areas, including Village Park, vernal pools, Priority Habitat areas, farms, wetlands, and streams. It is important the Town works with the power company on appropriate maintenance of these corridors and protection of resource areas. Additional power lines traverse in an east/west direction north of Wilbur Avenue. Aside from the power line easements, the New England Power Company and Somerset Power LLC both own a significant amount of open space in Swansea, much of which is located along river corridors and other areas of environmental significance. These lands are not protected, and for the most part could potentially be developed.

SEA LEVEL RISE

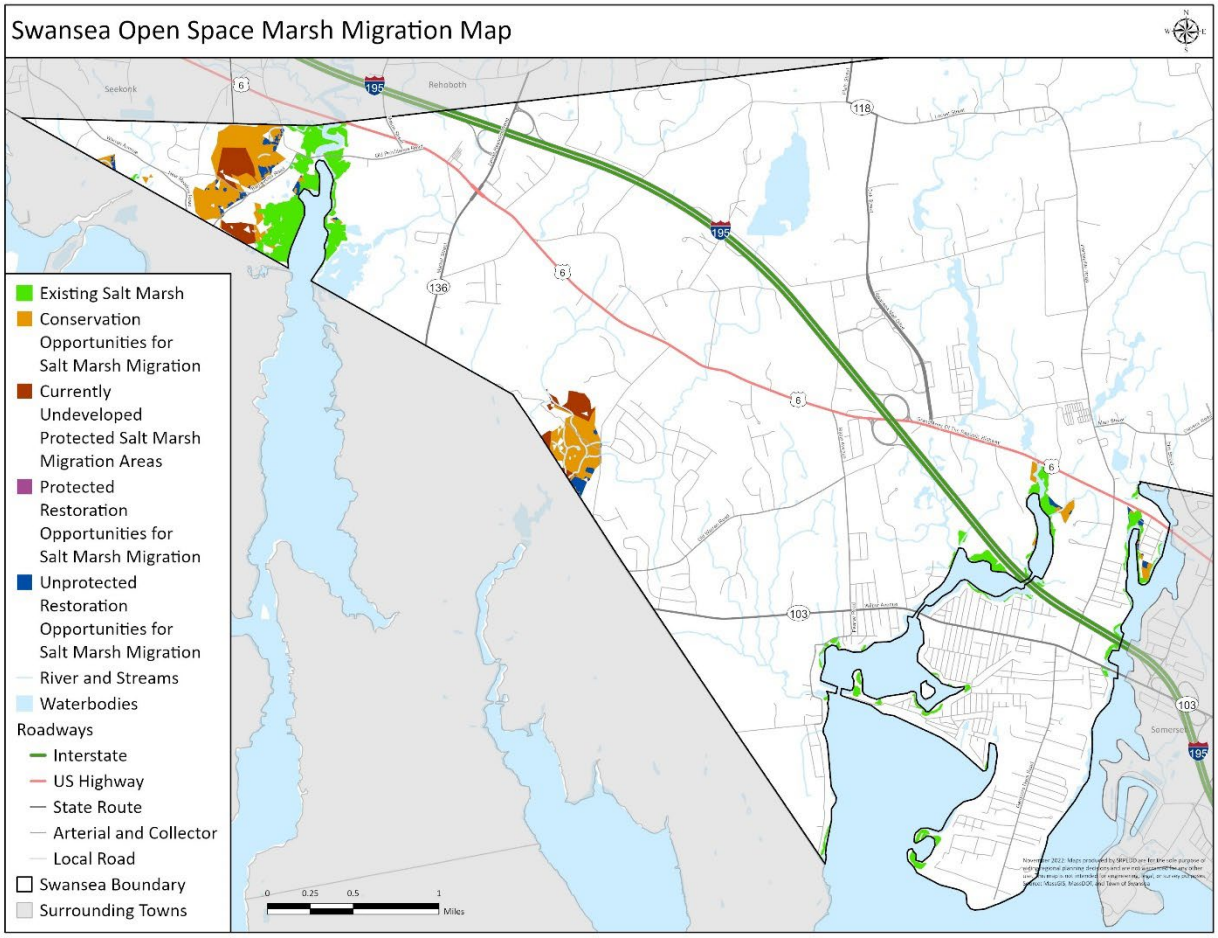
As a coastal community, Swansea is particularly vulnerable to the impacts of sea level rise, which not only impacts coastal infrastructure but natural communities as well (more details in Appendix E: Climate Change Regional Overview). Swansea's coastal saltmarshes, which provide important wildlife habitat, 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 Swansea'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. The Swansea Open Space TNC-Identified Existing Salt Marshes and Marsh Migration Map displays existing salt marsh habitat and their potential migration areas in Swansea. Migration areas, identified by The Nature Conservancy, 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.

Several large undeveloped areas bordering the Palmer and Kickamuit Rivers are identified as potential marsh migration areas, some lacking protection and opportunities for conservation. Additionally, a separate modeling effort conducted in Rhode Island to similarly determine potential marsh migration areas identified parcels of land east of the Palmer River, within and surrounding Warren River Pond, as potential future marsh habitat. There is currently a golf course located here, but potential future restoration could allow for marsh migration. These adjacent uplands will play a critical

role in protecting Swansea's coastal habitats—and the nearby community—in the future.

*Map 25 Swansea Open Space TNC-Identified Existing Salt Marshes and Marsh Migration Areas Map**



**There is a full-size version of this map in the appendix*

V. INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

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. In order 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 Swansea not only to maintain the rural character treasured by many residents, but also to protect farmland, drinking water supplies and habitat, and provide outdoor recreation opportunities.

Swansea'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 developments 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.

These open space properties can be *protected, unprotected* or somewhere in between. ***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.

Parcels owned by the Town's Conservation Commission and/or 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.

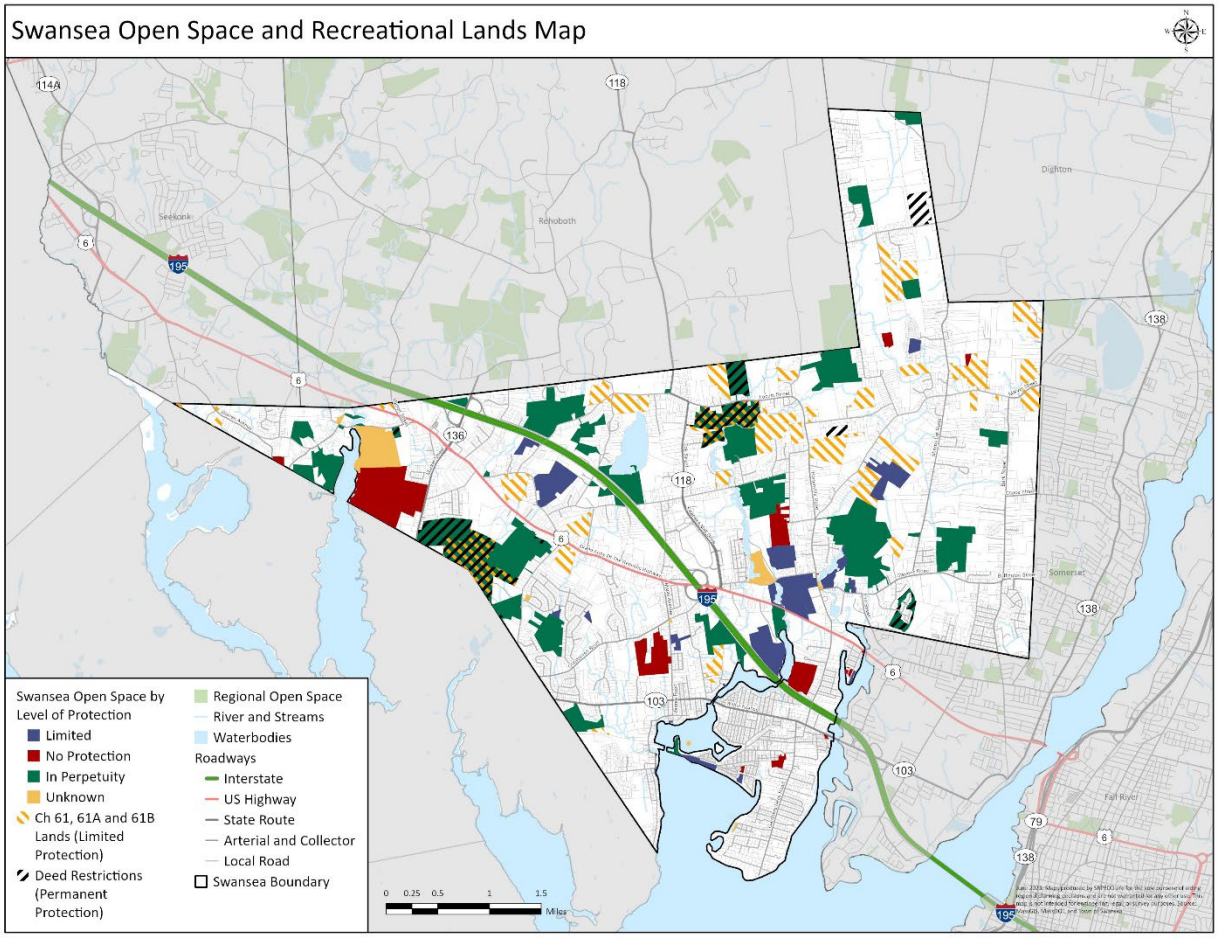
Town owned park lands dedicated under MGL Chapter 45, Sections 3 or 14, are also protected under Article 97. Lands protected by Article 97 are often owned by the municipal conservation commission, recreation commission, water department, or by a state conservation agency (i.e., state EOEEA agencies). 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.

Properties may have ***limited***, or temporary, protections dependent on their current use, which could change. School lands and cemeteries, for example, do not have any formal protections but their use as such (and unlikeliness that this will change) grant that land some level of protection from development. Another form of temporary protection is lands that are enrolled in Chapter 61 tax incentive programs, which offer a tax break to landowners who keep their land in forestry, agricultural or recreational use. Landowners may choose to withdraw from these programs however and the land loses that protection. More details on Chapter 61 programs is below.

It is important to note that some land that currently looks like open space, or that is experienced as open space by Swansea community members may not, in fact, be permanently protected. These ***unprotected*** 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 open space lands in Swansea by level of protection, and includes lands temporarily preserved as Chapter 61, 61A, and 61B properties.

*Map 26 Swansea Open Space Lands by Level of Protection**



**There is a full-size version of this map in the appendix*

A. 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)***. Deed restrictions offer a way for farm, natural or historic land to be protected in perpetuity from future development, while allowing their continued use in support of the type of restriction. For example, the APR program pays farmers the difference between "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction, which allows continued farming while precluding any other use of the property that might have a negative impact on its agricultural viability. In Swansea, there are approximately 418 acres of deed restricted land held in private ownership.

Private Deed Restricted Properties in Swansea									
Site Name	**Location**	**Owner**	**Management Agency / Restriction Holder**	**Current Use**	**Recreation Potential**	**Type of grant used to purchase and/or renovate the property**	**Public Access**	**Zoning**	**Acres**
Baker Kenneth M APR	Locust Street	Baker Kenneth M	Department of Agricultural Resources/ Town of Swansea	Agriculture	None	Unknown	No	RR	6.2
Baker Kenneth M APR	Locust Street	Baker Kenneth M	Department of Agricultural Resources/ Town of Swansea	Agriculture	None	Unknown	No	RR	49.5
Baker Kenneth M APR	Locust Street	Baker Kenneth M	Department of Agricultural Resources/ Town of Swansea	Agriculture	None	Unknown	No	RR	34.7
Baker Kenneth M APR	Locust Street	Baker Kenneth M	Department of Agricultural Resources/ Town of Swansea	Agriculture	None	Unknown	No	RR	5
Birch Stevens Farm	Stevens Road	The Birch Stevens Farm Conservation Tr	Town of Swansea Conservation Commission	Conservation	None	Unknown	Yes	RR	32.42
Chace Doris V APR	Bushee Road	Southern New England Farm Preservation	Department of Agricultural Resources/ Town of Swansea	Agriculture	None	Unknown	No	RR	1

			Conservation Commission						
Chace Doris V APR	Market Street	Southern New England Farm Preservation	Department of Agricultural Resources/ Town of Swansea Conservation Commission	Agriculture	None	Unknown	No	RR	92
Chace Doris V APR	Birch Swamp Road	Southern New England Farm Preservation	Department of Agricultural Resources/ Town of Swansea Conservation Commission	Agriculture	None	Unknown	No	RR	20
Chace Doris V APR	Bushee Road	Southern New England Farm Preservation	Department of Agricultural Resources/ Town of Swansea Conservation Commission	Agriculture	None	Unknown	No	RR	14
D'Allesandro Americo P APR	Market Street	D'Allesandro Farm Llc	Department of Agricultural Resources	Agriculture	None	CR grant from state in 1987	No	RR	68
Hale CR	Locust Street	Hale Richard And Maria	The Trustees of Reservations	Conservation	None	Donation	No	RR	43.9
Robert Eddy CR	Baker Road	Mello Damian W & Mary A Best-Mello	Town of Swansea Conservation Commission	Conservation, habitat protection	None	Donation	No	RR	38.17
Vieira CR	Hortonville Road	Vieira John T & Janice E	Town of Swansea Conservation Commission	Conservation, habitat protection	None	Donation	No	RR	12.82

Additionally, private open space lands can fall under Chapter 61 designation, where property is assessed at a fraction of its market value for a fixed period of years, dependent on continuation of a designated use for the land, which restricts development. If the property is to be sold, the Town has a right of first refusal to purchase the land and potentially, depending upon the number of years it has been enrolled, the opportunity to recapture lost tax revenue. Three are three types of Chapter 61 designations: Ch.61 is for lands dedicated to forestry use, Ch.61A is for agricultural/ horticultural use, and Ch.61B is for recreational use. All of the Town's existing farms (except for those which have permanent protection) operate under Ch.61A tax status. This strategy provides some support for its continued use but does not ensure any long-term land protection. In Swansea, there are approximately 985 acres of Chapter 61 lands.

Private Chapter 61 Properties in Swansea

Owner's Name	Location	Program	Current Use	Recreation Potential	Public Access	Zoning
Anderson Jon Mason	0 Locust Street	61A	Vacant, Farm-Related Land	Limited	No	RR
Baker Kenneth M	0 S S Locust Street	61A	Outbuildings, Pasture	Limited	No	RR
Baker Kenneth M	0 S S Locust Street	61A	Vacant, Field Crops	Limited	No	RR
Baker Kenneth M	0 S S Locust Street	61A	Vacant, Farm-Related Land	Limited	No	RR
Baker Kenneth M	0 S S Locust Street	61A	Vacant, Field Crops	Limited	No	RR
Baker Kenneth M	0 S S Locust Street	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Baker Kenneth M	Locust Street	61A	Vacant, Farm-Related Land	Limited	No	RR
Baker Robert D Trust	0 N S Locust Street	61	Vacant, Forest Land	Limited	No	RR
Berard Robert O	0 S S Gar Highway	61A	Vacant, Field Crops	Limited	No	RR/BB
Camara Holly & Mark A	0 Marvel Street	61A	Vacant, Field Crops	Limited	No	RR
Caron Laurie & Desmarais Elaine	0 S S Marvel Street	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Carreiro Mary J Le	0 N S Cummings Road	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Chadwick William T	0 Hortonville Road	61A	Outbuildings, Field Crops	Limited	No	RR

Chadwick William T	0 Hortonville Road	61B	Vacant, Nature Study	Limited	No	RR
Farrell Lela D	0 W S Hortonville Road	61A	Vacant, Field Crops	Limited	No	RR
Four Town Farm Inc	0 E S Warren Avenue	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Four Town Farm Inc	0 S S Warren Avenue	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Four Town Farm Inc	0 W S George Street	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Guay Raymond A & Marcia J	0 Paradise Lane	61	Vacant, Forest Land	Limited	No	RR
Hale Richard W & Maria	0 S S Locust Street	61A	Vacant, Field Crops	Limited	No	RR
Howard Gilbert A Life Estate	0 W S Hornbine Road	61B	Vacant, Nature Study	Limited	No	RR
Lapointe William H & Donna M	0 W S Colletti Lane	61	Vacant, Forest Land	Limited	No	RR
Lebeau Randy & Holly Te	0 N Of Cummings Road	61	Vacant, Forest Land	Limited	No	RR
Levesque Scott & Daura M	0 Hailes Hill Road	61B	Vacant, Hiking	Limited	No	RR
Marsden Stephen J & Josefina G Te	0 E S Millers Lane	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Marsden Stephen J & Josefina G Te	0 E S Millers Lane	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Marsden Stephen J & Josefina G Te	0 W S Millers Lane	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Marsden Stephen J & Josefina G Te	0 W S Millers Lane	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Mason Thomas A & Anderson Mabel	0 N S Vinnicum Road	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Mason Thomas A & Anderson Mabel	0 S S Vinnicum Road	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Noons Steven A & Tammy	0 Gar Highway	61A	Vacant, Truck Crops - Vegetables	Limited	No	BB
Noons Steven A & Tammy	0 Mason Street	61A	Vacant, Truck Crops - Vegetables	Limited	No	BB

Noons Steven A & Tammy	0 Mason Street	61A	Vacant, Truck Crops - Vegetables	Limited	No	BB
Orzechowski Paul	0 E S Hailes Hill Road	61	Vacant, Forest Land	Limited	No	RR
Pontes Darby L Trustee	0 Marvel Street	61A	Vacant, Field Crops	Limited	No	RR
Pontes Darby L Trustee	0 S S Marvel Street	61A	Vacant, Field Crops	Limited	No	RR
Reynolds Lisa A & Thomas	0 E S Cedar Avenue	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Reynolds Lisa A & Thomas	0 E S Cedar Avenue	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Reynolds Lisa A & Thomas	0 E S Cedar Avenue	61A	Vacant, Field Crops	Limited	No	RR
Reynolds Lisa A & Thomas	0 N Of Cherry Lane	61A	Outbuildings, Truck Crops - Vegetables	Limited	No	RR
Reynolds Thomas & Lisa A	0 E S Cedar Avenue	61A	Outbuildings, Field Crops	Limited	No	RR
Rousseau Andrea J &	0 S S Old Fall River Road	61B	Vacant, Nature Study	Limited	No	RR/BB
Rousseau Andrea J & Rousseau Dian	0 S S Old Fall River Road	61B	Outbuildings, Nature Study	Limited	No	RR/BB
Silvia Thomas	0 E S Sharps Lot Road	61A	Outbuildings, Truck Crops - Vegetables	Limited	No	RR
Simcock David	0 S S Marvel Street	61A	Vacant, Wet/Scrub/Rock Land	Limited	No	RR
Simcock James R & Beverlyann P	0 N S Marvel Street	61A	Outbuildings, Truck Crops - Vegetables	Limited	No	RR
Simcock James R & Beverlyann P	0 N S Marvel Street	61A	Vacant, Pasture	Limited	No	RR
Simcock James R & Bevery Ann P	0 W S Hilton Lane	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Simcock James R + Beverly Ann	Hilton Lane	61A	Vacant, Truck Crops - Vegetables	Limited	No	RR
Somerset Sportsmans Club Inc	0 E S Breslin Path	61	Vacant, Forestry	Passive	Limited	RR

Somerset Sportsmans Club Inc	0 W S Breslin Path	61	Vacant, Forestry	Passive	Limited	RR
Somerset Sportsman'S Club Inc	0 E S Breslin Path	61	Vacant, Forestry	Passive	Limited	RR
Southern New England Farm	0 E S Market Street	61A	Vacant, Pasture	Limited	No	RR
Southern New England Farm Preservation	0 E Off Birch Swamp Road	61B	Vacant, Nature Study	Limited	No	RR
Southern New England Farm Preservation	0 W S Bushee Road	61B	Vacant, Nature Study	Limited	No	RR
The Trustee of Martha Sanford	0 S S Wilbur Avenue	61	Vacant, Forest Land	Limited	No	RR
Wheeler Cheryl E	0 Marvel Street	61	Vacant, Forest Land	Limited	No	RR
Wightman Richard P & Joanne J	0 N S Wood Street	61A	Vacant, Field Crops	Limited	No	RR

Lastly, there are three properties in Swansea that are used for recreational purposes and held by private owners, with no protections. These properties account for approximately 346 acres of land in Swansea.

Private Unprotected Recreational Properties in Swansea

Site Name	Location	Owner	Current Use	Recreation Potential	Type of grant used to purchase the property	Level of Protection	Zoning	Acres
Wampanoag Golf Course	Old Providence Road	Par Four Llc	Recreation (Golf Course)	Active	Unknown	Unknown	RR	86
Touiset Country Club	Pearse Road	Touiset Country Club	Recreation (Golf Course)	Active	Unknown	None	RR	52.8
Swansea Country Club	Market Street	Palmer River Golf Club Limited	Recreation	Active	Unknown	None	RR	207.08

B. Public and Nonprofit Parcels

The following properties are all owned by the Town of Swansea and are often managed by either the Conservation Commission or Highway Department. There are approximately 981 acres of Town-owned public properties in Swansea, with varying levels of protection. Of these Town-owned properties, 11 (totaling 104 acres) have a predominantly recreational use.

Town-Owned Conservation Properties in Swansea										
Site Name	**Location**	**Town Management Agency**	**Current Use**	**Condition**	**Recreation Potential**	**Type of grant used to purchase and/or renovate the property**	**Public Access**	**Level of Protection**	**Zoning**	**Acres**
Baker Farm	Wood Street	Conservation Commission	Agriculture, Recreation	Excellent	Limited	CPA	Limited	In Perpetuity	RR	83
Barneyville Road Town Land	Barneyville Road	Conservation Commission	Wetland, Waterway Access, Stormwater Control	Good	None	N/A (Town Purchase)	Limited	In Perpetuity	RR	15.9
Brown Elementary School	Gardners Neck Road	School Dept.	School, Playground, Field	Good	Limited	N/A (Town Purchase)	Limited	Limited	RR/BB	11.49
Burning Tree Road Recreation Area	Burning Tree Road	Unknown	Recreation	Fair	Possible	40B	Limited	Unknown	RR	1.12
Clifford Street Coastal Access	Lees River Drive / Clifford Street	Conservation Commission	Wetland	Good	None	Tax-title	Limited	None	RR	0.91

Coles River Buffer Land	GAR Highway, Sears Road	Conservation Commission	Conservation, Stormwater Control, Riparian Buffer	Good	None	Donation	No	In Perpetuity	BB/M/ RR	17.77
Delmac Orchard	Wood Street	Highway Dept	Natural, Undeveloped	Good	Being Assessed For Recreation al And Municipal Use	CPA	TBD	None	RR	38.83
Dillon Lane Conservati on Area	Dillon Lane	Conservation Commission	Conservation, Wetland	Good	None	Tax-title	No	None	RR	8.08
Front St Property	South Street	Parks Commission	Recreation: Field, Unpaved Paths	Good	Active/Pass ive	Unknown	Yes	None	RR	2.19
Front Street Coastal Access	Front Street	Conservation Commission	Wetland, Stormwater Control	Good	Possible	Tax-title	No	None	RR	0.2
Gardner Elementary School	Nichols Street	School Dept.	School, Playground, Ball Fields	Good	Limited	Unknown	Limited	None	RR	7.23
Hallock Property	Richard Road	Highway Dept	Wetland, Riparian Buffer	Unknown - Newly Acquired	TBD	CPA Funds	No	None	RR	39.43
Hilton Lane Conservati on Area	Hilton Lane	Conservation Commission	Conservation	Good	None	Tax-title	No	None	RR	4.75
Hoyle Elementary School	Communit y Lane	School Dept.	School, Playground, Ball Fields	Good	Limited	Unknown	Limited	Limited	RR	65
Joseph Case High School	Milford Road	School Dept.	School, Sports Fields	Good	Limited	Unknown	Limited	Limited	RR	11.28

Joseph Case Junior High School	Main Street	School Dept.	School, Sports Fields	Good	Limited	Unknown	Limited	Limited	RR	16.24
Lees River Drive Coastal Access	Lees River Drive	Conservation Commission	Vacant	Good	Possible	Tax-title	Limited	None	RR	0.09
Lewin Brook Pond Coastal Access	Hortonville Road	Conservation Commission	Vacant	Good	Possible	Donation	Yes	None	RR	0.17
Little Neck Coastal Access	South Street	Parks Commission	Vacant	Good	Possible	Unknown	Yes	None	RR	0.71
Littlefield Estates Conservation Area	Morgans Way	Conservation Commission	Conservation, Recreation	Good	Passive	Open Space Residential Development	Limited	In Perpetuity	RR	36.3
Long Point	Long Point	State of MA	Recreation: Boat Ramp	Good	Active	Unknown	Yes	In Perpetuity	RR	4.76
Luther School	Pearse Road	School Dept.	School, Playground	Good	Limited	Unknown	Limited	Limited	RR	3.5
Mason Barney Monumnent	Old Providence Road	Highway Dept	Historical	Good	None	Unknown	Yes	Unknown	RR	1.7
Medeiros Farm	Bark Street	Parks Commission	Recreation, Conservation	Good	Town Assessing Reuse Potential	CPA	Yes	In Perpetuity	RR	22
Milford Pond Coastal Access	Spring Street	Conservation Commission	Vacant	Good	Active/Passive	Unknown	Yes	None	RR	0.32

Milford Pond Dam	Milford Road	Highway Dept	Informal Kayak Launch, Undeveloped	Good	Active/Passive	Unknown	Limited	Unknown	RR	22
Mt. Hope Cemetery	Milford Rd	Highway Dept	Cemetery	Good	Limited	N/A (Town Purchase)	Yes	Limited	RR	13.24
New Meadow Rd Reserve	New Meadow Road	Conservation Commission	Wetland, Vacant, Stormwater Control	Fair	None	Unknown	Limited	None	RR	4.26
Off Birchwood Ave Property	Birchwood Dr	Highway Dept	Coastal Access, Undeveloped	Good	Limited	Tax-title	Yes	Limited	RR	0.62
Off Circuit Dr Property	Circuit Drive	Highway Dept	Coastal Access, Undeveloped	Good	Limited	Unknown	Yes	Limited	RR	0.48
Off Front St Property	Front Street	Parks Commission	Wetland, Coastal Access	Good	Limited	Unknown	Yes	Limited	RR	1.31
Off Long Point Property	Coles River Island	Unknown	Vacant	Unknown	Passive	Unknown	Limited	Unknown	RR	2.5
Off Mt Fair Property	Mountfair Circle	Conservation Commission	Conservation, Stormwater Control	Fair	None	Donation	No	In Perpetuity	RR	55.56
Off Pearse Rd Property	East Of Pearse Road	Highway Dept	Coastal Access, Undeveloped	Good	Passive	Unknown	Yes	Limited	RR	0.14
Off Seaview Ave Property	Seaview Avenue	Highway Dept	Coastal Access, Undeveloped	Good	Passive	Unknown	Yes	Limited	RR	0.62
Old Providence /Barneyville Rd Site	Barneyville Road	Conservation Commission	Wetlands	Good	None	Unknown	No	In Perpetuity	RR	0.9

Paquette Farm	Old Stevens Road	Conservation Commission	Agriculture, Informal Trails On Property	Good	Limited	Self Help Grant	Limited	In Perpetuity	RR	80.62
Peters Pond	Gardner Avenue	Highway Dept	Recreation: Pond, Bench	Good	Limited	Unknown	Yes	None	RR	0.4
Pine Street Coastal Access	Pine Street	Highway Dept	Coastal Access, Undeveloped	Fair	Limited	Unknown	Yes	Unknown	BA	0.03
Rosewood Ave Property	Rosewood Road	Parks Commission	Recreation: Field	Good	Active	Unknown	Limited	Limited	RR	23.46
Sandy Beach	Bluff Avenue	Highway Dept	Recreation: Beach	Good	Active	Unknown	Yes	Limited	RR	2.54
Sears Farm	GAR Highway	Highway Dept	Municipal Use, Limited Access	Fair	Limited	Unknown	No	Limited	M	56.01
Sharps Lot Road Conservation Area	Sharps Lot Road	Conservation Commission	Conservation	Good	None	Unknown	Yes	In Perpetuity	RR	14.61
Smoke Rise Cir Property	Smokerise Circle	Parks Commission	Recreation: Ball Fields	Good	Active	Unknown	Limited	Limited	RR	0.2
Swansea Dam	Hortonville Road	Highway Dept	Dam, waterfront access	Good	Limited	Unknown	Yes	Unknown	RR	0.48
Swansea Independent Baseball League	Nike Site Access Rd	Parks Commission	Recreation: Ball Fields	Good	Active	Donation	Yes	Limited	RR	8.9
Town Beach	Long Point	Highway Dept	Recreation: Beach	Good	Active	N/A (Town Purchase)	Yes	Limited	RR/BA	9.59
Town Hall And Library	Main Street	Highway Dept	Municipal Buildings	Fair	Limited	Donation	Yes	In Perpetuity	RR	2.29

Veterans Memorial Park	Gardners Neck Road	Highway Dept	Recreation: Sports Fields, Pedestrian Paths To Coles River	Good	Active	N/A (Town Purchase)	Yes	Limited	RR/BB	29.25
Village Park	Main Street	Conservation Commission	Conservation / Recreation, Trails	Good	Passive	Unknown	Yes	In Perpetuity	RR	188.9
Vinnicum Woods Cemetery	Rt 195 / Vinnicum Rd	Highway Dept	Cemetery	Good	Limited	Unknown	Yes	Limited	RR	44.56
Warren Avenue Conservation Area	Warren Ave	Conservation Commission	Conservation, Stormwater Control	Good	Passive	Town Purchase with Funds from Wildlands Trust	Yes	In Perpetuity	RR	21.58
West Promenade Street Coastal Access	W Promenade Street	Highway Dept	Coastal Access, Undeveloped	Good	Passive	Unknown	Limited	Unknown	RR	0.45

There are two publicly owned, deed restricted properties, providing permanent protection from development, in Swansea, one Town-owned and one owned by the Swansea Water District. Both are protected for the purpose of public water supply protection. These properties account for approximately 7 acres in Swansea.

Public Deed Restricted Properties in Swansea										
Site Name	**Location**	**Owner**	**Management Agency / Restriction Holder**	**Current Use**	**Condition**	**Recreation Potential**	**Type of grant used to purchase and/or renovate the property**	**Public Access**	**Zoning**	**Acres**
Maker and Borge Water	GAR Highway / Bushee Road	Town Of Swansea	Swansea Water District	Water Supply Protection	Good	None	Unknown	No	RR/BB	2.12

Supply CR										
Swansea Water Supply CR	Old Providence Road	Swansea Water District	Town of Swansea Conservation Commission	Water Supply Protection	N/A	None	N/A	No	RR	4.74

In addition to Town-owned lands, there are also properties owned by other public entities, such as Bristol County, RI, and Bristol County, MA, in Swansea. The Swansea Water District is another public entity, separate from the Town, whose lands provide for and/or protect the public's drinking water supply. Local land trusts and similar private nonprofit conservation organizations are also considered public property. These properties are documented in the table below, with the vast majority owned by the Wildlands Trust or the Swansea Water District. These properties amount to approximately 691 acres of land in Swansea.

Public Non-Profit Properties in Swansea

Site Name	Location	Owner	Current Use	Recreation Potential	Type of grant used to purchase and / or renovate the property	Public Access	Level of Protection	Zoning	Acres
Barneyville Road Conservation Area	Barneyville Road	Barrington Land Trust	Conservation	Passive	Unknown	Yes	In Perpetuity	RR	6.48
Bell Preserve	Old Providence Road	Wildlands Trust	Conservation	None	Transferred From Former Swansea Land Trust In 2007	No	In Perpetuity	RR	2.75
Bell Preserve	Barneyville Road	Wildlands Trust	Conservation	None	Transferred From Former Swansea Land Trust In 2007	No	In Perpetuity	RR	35
Borge Preserve	GAR Highway	Wildlands Trust	Conservation	None	Transferred From Former Swansea Land Trust In 2007	No	In Perpetuity	RR	12
Breslin Path Water Supply Land	Breslin Path	Swansea Water District	Water Supply Protection	None	Unknown	Yes	In Perpetuity	RR	19.4

Bristol County Water Supply Land	Bushee Road	Bristol County Water Co	Water Supply Protection	None	Unknown	No	In Perpetuity	RR	9.56
Bristol County Water Supply Land	Peters Rd	Bristol County Water Co	Water Supply Protection	None	Unknown	No	In Perpetuity	RR	10.86
Bristol County Water Supply Land	Reed Street	Bristol County Water Co	Water Supply Protection	None	Unknown	No	In Perpetuity	RR	29.45
Bushee Rd Water Supply Land	Bushee Road & Gar Highway	Swansea Water District	Water Supply Protection	None	Aquifer Lands Acquisition (State)	No	In Perpetuity	RR/BB	108.94
Christ Church Cemetery	Main Street	Christ Church	Cemetery	Passive	Unknown	Limited	Limited	RR	10.03
Etter Preserve	Paradise Lane	Wildlands Trust	Conservation	None	Transferred From Former Swansea Land Trust In 2007	No	In Perpetuity	RR	6.2
Fillessey Preserve	Warren Ave/ Barneyville Rd	Wildlands Trust	Conservation	None	Transferred From Former Swansea Land Trust In 2007	No	In Perpetuity	RR	6.25
Hailes Hill	Hailes Hill Road	Bristol County	Conservation	Limited	Unknown	No	Limited	RR	49.88
Jarabek Preserve	Cedar Avenue	Wildlands Trust	Conservation, Hiking Trails	Passive	Transferred From Former Swansea Land Trust In 2007	Limited	In Perpetuity	RR	41.75
Locust Plain Water Supply Land	Locust & Plain Stree	Swansea Water District	Water Tower	None	Unknown	No	In Perpetuity	RR	1.16
Luther Store Museum	Old Warren Road	Swansea Historical Society	Historical Museum	Limited	Unknown	Yes	Unknown	RR	0.29
Medeiros Swansea Preserve	Wilbur Avenue	Wildlands Trust	Conservation	None	Purchased In 2008 (Private Funds)	No	In Perpetuity	RR	31.26

Midwood Drive Water Supply Land	Midwood Drive	Swansea Water District	Water Supply Protection	None	Unknown	No	In Perpetuity	RR	55.58
Old Cemetery	Main Street	Unknown	Cemetery	Passive	Unknown	Yes	Limited	RR	0.37
Sears Preserve	Old Fall River Road / Gar Highway	Wildlands Trust	Conservation	None	Transferred From Former Swansea Land Trust In 2007	No	In Perpetuity	RR	0.71
Sharps Lot Water Supply Land	Sharps Lot Road	Swansea Water District	Water Supply Protection	None	Unknown	No	In Perpetuity	RR	1.45
Swansea Water Supply Land	Bushee Road	Swansea Water District	Water Supply Protection	None	Unknown	No	Unknown	RR	19.5
Swansea Water Supply Land	Reed Street	Swansea Water District	Water Supply Protection	None	Unknown	No	Unknown	RR	13.8
Swansea Water Supply Land	Old Providence Road	Swansea Water District	Water Supply Pump House & Infrastructure	None	Unknown	No	Unknown	RR	0.62
Swansea Water Supply Land	0 W S James Reynolds Road	Swansea Water District	Water Supply Protection	None	Unknown	No	Unknown	BB	5.56
Swansea Water Supply Land	Cummings Road	Swansea Water District	Water Supply Protection (Hornbine Well & Buffer, Treatment Plant, Gas Line)	None	Unknown	No	In Perpetuity	RR	77.5
Vinnicum Road Water Supply Land	Vinnicum Road	Swansea Water District	Water Supply Protection	None	Unknown	No	In Perpetuity	RR	134.76

VI. COMMUNITY VISION

A. Description of Process

In order to capture the community's vision and needs with regards to open space and recreation, the OSRP Committee provided several engagement opportunities throughout the planning process. Input was solicited both in person at several public events, as well as through an electronic survey advertised at in-person events, on social media, and in residents' annual tax bills.

An interactive in-person mapping activity was prepared to solicit feedback on existing open spaces and recreational facilities as well as additional needs. A map of Swansea displaying existing open space and recreational parcels was provided with stickers for participants to place in areas of need on the map. The stickers represented eight different comment categories: new recreation amenity need, maintenance/ beautification need, recreational programming need, pathway need – bicycle, pathway need – pedestrian, ADA access need, open space/resource conservation need, and cultural/historic resource need. Participants were instructed to place these stickers in locations on the map where that type of need or suggestion was desired and provide an explanation of the need. Participants were also invited to share general comments or Town-wide needs that did not have a specific location associated with them. Three identical maps were displayed at various public locations and events: one was presented on a table hosted by SRPEDD at the Swansea Harvest Festival on September 10, 2022; one was displayed at a public open house in the Case High School Library on Wednesday September 28, 2022; and one was hosted in the Town Hall from October 11, 2022 to November 17, 2022, with posted instructions for visitors to participate in the activity.

To ensure that public participation in Plan development was widespread and available beyond attendance at in-person meetings, the committee also created an online survey that respondents could take at their convenience. Survey questions were designed 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 identify areas for improvements.

The suggestions provided through all avenues of participation were synthesized in a public engagement report to compare themes across each, and the number of times various ideas arose were tracked in order to determine which improvements were most important to the community. By tracking repeat ideas, the Committee was able to prioritize the specific improvements and actions that were most in line with the community's vision and goals for Swansea.

B. Statement of Open Space and Recreation Goals

In terms of open space and recreation, one major theme arose as a dominant interest among community members and steering committee members alike: Swansea values its waterfront. Protecting and improving access to Swansea's coastline and riverfront

areas was frequently recommended in public meetings and in survey comments. Similarly, land protecting water resources is also important to the community.

The community also values Swansea's existing natural, scenic, and rural landscapes. People want to see the Town's existing character protected from development and take advantage of passive recreational opportunities on lands that protect natural resources. Walking and biking are important local activities that residents would like to participate in more throughout Town.

The community recognizes the existing resources and opportunities that exist throughout Swansea but expressed a desire to see them better maintained and improved upon. Improving existing trail networks and providing new amenities at existing sites, plus improving access to and awareness of what is available at these sites are priorities. To enable improved management, the community expressed a need for more local resources devoted to open space maintenance, better coordination among Town Departments and partners to promote natural resource management, and more community involvement in local committees and boards and volunteering to help care for local parks.

VII. ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs

Swansea has several significant resource protection needs. Public support behind addressing local 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.

Swansea residents indicated that they wanted to continue to preserve open space in their town and were concerned that not enough land had been placed under conservation to date. Survey respondents identified areas of space that they were passionate about protecting from development, including farmland, forests, land protecting water resources and drinking water supplies, open space for passive recreation, and beaches and/or waterfront access. The majority of respondents were supportive of either purchasing these lands with partial state reimbursement (for example, using CPA funds) or protecting land through zoning.

Overall, Swansea is most concerned with long term protection of land for water quality and abundance, maintaining a rural atmosphere, and passive recreation. The Town would like to work towards inventorying existing land parcels that could be combined into the Town s green belt or contribute to the scenic views of the town to prioritize these open spaces.

Preserve Forests, Farming and Agriculture

Survey results and public meetings demonstrated that preserving land was essential to maintaining the rural characteristic of the Town. Several respondents noted that they felt land preservation was no longer worth attaining because of the existing and ongoing development, but the majority shared a desire to keep as much open space preserved as possible. The most popular type of land that respondents want to conserve is farmland. Thirty-three (33) respondents, or about 1/3 of those who provided an answer to this question, mentioned farmland in their response. Some indicated a generalized interest in preserving any farmland possible in Swansea (14 respondents), while others mentioned specific farm parcels in need of protection.

Forests and wooded areas were the second most popular land type that respondents want to preserve. In very close second, 32 respondents, or about 1/3 of those who provided an answer to this question, mentioned forests or wooded areas in their response. Some indicated a generalized interest in preserving any wooded areas possible in Swansea (5 respondents), but more respondents identified three specific parts of Town as having woodlands that need priority protection: in the eastern part of Town around Sharps Lot Road and Marvel Street; in the center of Town in the vicinity of Hortonville and Wood Street; and in the southwestern part of Town around Wilbur Avenue.

Preserve Lands that support Water Quality for drinking and Recreation

Swansea relies on both public and private drinking water infrastructure to service the needs of all Town residents. Survey results indicated that of all listed land types for conservation, land protecting water resources and drinking water supplies rose above other conservation purposes in importance. With increasing drought cycles and depleted aquifers, it is becoming more and more urgent to safeguard water supply systems. By continuing to preserve land around current and proposed future wellheads the Town can protect the resilience of these resources.

Land surrounding waterbodies and the Mount Hope Bay shoreline was the next most popular category (18 total mentions). Most of these comments (12 mentions) specified the need to protect the waterfront, including Town Beach, and highlighted the fact that the Town needs to maintain, expand, and enforce public access to the waterfront. Residents would like to be proactive about potential damage to the shore from sea level rise. Protecting the Coles River Corridor was cited three times, as was the need to preserve the Town's wetland areas. Conserving land buffering waterways will help maintain water quality, recharge ground water and protecting surrounding development from floods.

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 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% stated 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 the following activities are the most popular recreational outlets for families in the region: 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. The types of projects that respondents would like to see funded in the future include 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 (individuals with disabilities, teens, and the elderly) and areas of a community (areas that are lacking facilities, environmental justice neighborhoods) when planning for and designing parks and conservation areas.

SWANSEA COMMUNITY INPUT

Public outreach events and the OSRP survey helped identify key points of improvements for open space and recreation in the Town of Swansea. Overall, the number of facilities and parks was satisfactory for respondents of the survey. The largest

concern for participants appeared to be the state of existing facilities. There were many suggestions captured in the survey and during public events that noted that there is a limited budget for this part of the community.

Respondents to the survey were very interested in public recreational opportunities. When asked about the influence of public recreational opportunities on their decision to live in Swansea, 44.97% noted it was very important, and an additional 39.80% noted it was somewhat important. The following summary is a breakdown of the needs to create and improve recreational opportunities for the community of Swansea.

Water Based Recreation

The preservation of waterfront land was identified as a priority in Swansea. Survey respondents identified waterfront areas and beaches as the best form of open space in Town. When asked what activities respondents would like to see more of, eight (8) responses mentioned better public access to the waterfront for a number of different activities, including for simple sightseeing/viewscapes as well as more active uses like fishing, kayak launches, events, and waterfront dining. A public mapping exercise revealed that there is a need for new kayak launches and helped identify potential sites. 59.2% of respondents also stated there are "not enough" swimming pools in Town. Within open ended survey questions, people noted multiple times that there was a need for more public waterfront access and that protecting public access was important. Creating clear signage to show these dedicated spaces was also requested.

Land Based Recreation

Most respondents indicated they are "satisfied" with (31.7%) or "neutral" (30.9%) towards recreational services in Swansea. Survey respondents were then asked to rank the quantity of these spaces. Very few respondents noted more than enough on any category. Golf courses, ATV/off-road vehicle trails, and baseball/softball fields received a few votes for more than enough. For each of those categories the majority of respondents selected enough. Boat ramps, public beaches/waterfront access, playgrounds, tracks, tennis/pickleball courts, and baseball courts also had a majority ranking of "enough". Activities respondents felt there were "not enough" of included outdoor event venues (336, 63.0%), swimming facilities (320, 59.2%), local neighborhood parks (318, 58.6%), hiking and walking trails (317, 58.2%), community gardens (310, 57.4%), bike paths (311, 57.3%), picnic areas (287, 53.0%), dog parks (285, 52.6%), ice skating rinks (282, 52.5%), conservation areas (280, 52.0%), and recreation centers (259, 48.3%).

Additional amenities that respondents would like to have available in Swansea are mostly related to different types of special community events, particularly outdoor concerts, movie nights and/or a drive-in movie theater, farmers markets and other

types of community festivals and events (35 responses total). Ten (10) responses requested a splash pad. Ten (10) responses were related to more regular types of recreational programming and activities for different age groups, such as fitness and craft classes, and especially youth group activities.

Maintaining Recreational Spaces

Residents reported being particularly concerned about the cost of maintaining recreation fields and centers. Public input from both the survey and events identified that there is a very limited budget for maintenance staffing of recreation spaces. The biggest areas for concern when it comes to open space and recreational activities in Swansea are a lack of conservation, upkeep and maintenance of these spaces, and lack of awareness and signage. In an open-ended survey question regarding the expansion of activities or facilities for recreation, two respondents noted that there should be no additional services to keep costs to the Town low. An additional 17 comments recommended maintenance or improvement of existing facilities. Some of the facilities where people suggested such improvements included Memorial Park, junior high soccer field, tennis courts at Memorial Park and Hoyle School, the Town Beach, Village Park, the Y, and general sports fields. When asked which open spaces need the most repairs and upgrades specifically, hiking/walking trails, paved bike and pedestrian paths, and waterfront areas/beaches were ranked highest overall. The concerns of financial burden to the Town and the need for funding to continue improving existing spaces was echoed during in person events.

Special User Groups

In 2020, Swansea's total population was 17,144, with 3,584 people, or 20.9% of the population, over 65 years old. Of the 65 years and older population, 1,388 are 75 years or older. The median age in 2020 was 45.2 years old. 2,037 people (12%) speak a language other than English. The majority of those people speak English very well; 5% do not speak English very well.

Swansea has a population of 2,120 with a disability. People with an ambulatory disability make up 45% (or 954) of people with a disability and about 25% (224) have a vision disability. Over 40% of survey respondents selected that open spaces and recreational facilities are only somewhat accessible and useful to seniors and those with disabilities. The next largest category was unsure. Only 37 of 532 respondents noted that the open space and recreation facilities were very accessible.

An ADA assessment and transition plan prepared for the Town in 2023 supports the survey results. The Town's consultant, Institute for Human Centered Design, assessed six municipal facilities and three parks, and the Town assessed the remaining parks and open spaces. The assessment revealed that newer and recently renovated facilities in

Town are generally accessible since the Town has taken steps to incorporate ADA accessibility considerations in all new projects. Unfortunately, many of the older facilities and less formalized open space and recreational amenities in Town do not meet the same accessibility standards. Key steps the Town can take to improve accessibility at its recreational facilities include providing accessible routes to outdoor spaces and amenities, and providing designated accessible parking spaces and aisles closer to park entrances.

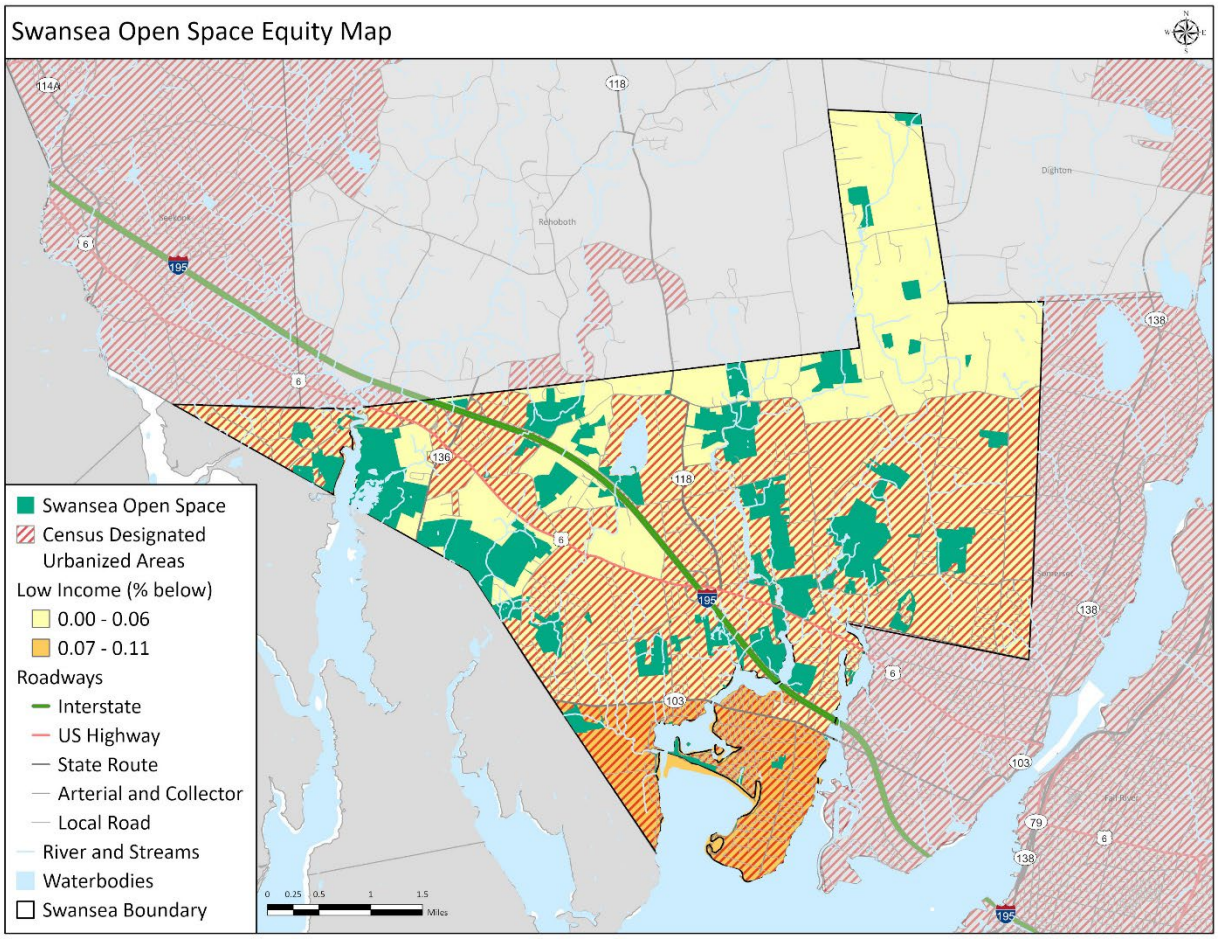
The OSRP survey asked residents what could be done to provide more recreational opportunities to those with disabilities and seniors. The majority of responses suggested there needs to be better awareness around recreational opportunities available to elderly and disabled individuals in Swansea (23 responses), followed by a need for more sidewalks (14 responses), and a need for specific recreational programming, as well as more accessible parking (11 responses each). The survey identified that there is limited knowledge about the accessibility of spaces for those with disabilities and the importance of improving this.

As noted in land-based recreation, there is a want for more age-specific activities. The community also wants more outdoor event spaces. Teens and seniors are specifically noted as needing better access to recreation. The results indicate a need to both design new programming and increase public awareness of ongoing events that they can take part in.

C. Park and Open Space Equity

The OSRP team completed an OSRP Equity mapping analysis, the result of which is provided below. The majority of Swansea lies within a Census Designated Urbanized Area. The Town of Swansea does not have a qualifying Massachusetts EJ population. SRPEDD annually reviews disparities throughout the region that may not arise in statewide analyses. Looking at income variations for the region, the southern part of Swansea has an area of higher density and low-income residents. This area is particularly urbanized and lacking open space. The patches of open space in this area are very small in comparison to other Open Spaces in Town. This part of the community is visibly isolated from those larger park spaces.

*Map 27 Open Space Equity in Swansea**



**There is a full-size version of this map in the appendix*

D. Management Needs, Potential Change of Use

Currently, there is a very limited budget and staff to maintain the already existing open space and recreation facilities in Swansea. During public engagement activities and the survey, there was a repetitive acknowledgement of funding needed for already existing spaces. Adding facilities to meet the needs of residents will over stress this budget. In order to further the goals of the Town, a formal staffed recreation department and a standing Open Space and Recreation Committee were identified as needs are recommended. The Committee can work to establish corporate partnerships and non-profit partnerships for volunteer coordination and property maintenance. Similarly, stewardship partner programs, for those interested in community service, can be used for public trail projects and maintenance. This will help to limit the number of staff needed for general upkeep and deepen community involvement and engagement.

The Open Space and Recreation Committee could also update social media and news outlets with upcoming events in the community and areas that are publicly accessible for recreation purposes to showcase the existing spaces in Town. The survey identified that several large open spaces were underutilized due to limited knowledge about the space. Better accessibility and usage of these spaces will limit the pressure of needing to add new spaces that also require upkeep.

VIII. GOALS AND OBJECTIVES

As a result of the Open Space and Recreation Plan's inventory and analysis, public survey results, Committee deliberations and public input received to date, the following goals and objectives have been developed as a basis for policy decisions moving forward. Specific strategies for achieving each are further outlined in Section IX.

Goal 1: Protect the public water supply, wetlands and waterways

Objective 1A. Assess and implement strategies to protect water supplies

Objective 1B. Identify, assess and protect water resource areas

Goal 2: Protect and preserve Swansea's natural, scenic, historical and cultural resources

Objective 2A. Negotiate the purchase and/or protection of priority conservation lands

Objective 2B. Preserve connected corridors through Town for water movement, wildlife and community resilience

Objective 2C. Preserve areas of significant scenic, historical, and cultural integrity

Goal 3: Protect Swansea's Agriculture and Shellfishing Industries

Objective 3A. Support local farmers and protect farmland

Objective 3B. Restore shellfishing in the Palmer, Coles and Lees Rivers

Goal 4: Provide adequate staffing and facilities to meet the recreational needs of all Town residents

Objective 4A. Increase local capacity for management and maintenance of open space & parks

Objective 4B. Improve existing recreational facilities and programs

Objective 4C. Provide additional facilities and programs that meet the needs of the community

Objective 4D. Expand Swansea's hiking and biking trail network

Objective 4E. Improve public access to riverfront and coastal resources

Goal 5: Carry out the Open Space and Recreation Plan goals and objectives

Objective 5A. Establish a framework for implementing the action plan

Objective 5B. Coordinate a townwide regulatory approach that supports plan implementation

IX. SEVEN-YEAR ACTION PLAN

#	Action Items	Responsible Parties	Priority	Timeframe for Implementation	Potential Funding Source(s)
Goal 1: Protect the public water supply, wetlands and waterways.					
	Objective 1A: Assess and implement strategies to protect water supplies.				
1	Develop a Comprehensive Water Resource Management Plan (CWRMP) that addresses drinking water supplies, water quality threats, and wastewater management	Swansea Water District, Board of Health, Conservation Commission, Planning Board, Building Department, Sewer Commission, Highway Department, Town Administrator	High	2-5 years	U.S. Economic Development Administration (EDA), Municipal Budget/regular operations
2	Continue to coordinate on and support acquisition of additional land area around existing and proposed wellheads	Swansea Water District, Conservation Commission, Planning Board, Selectboard, Open Space Committee	High	Ongoing	DCS Drinking Water Supply Protection Grant Program
3	Revitalize River Aware public awareness campaign for the Palmer, Lees, Coles, and Kickamuit Rivers (coordinate with Save The Bay and Friends of the Palmer River)	Harbor Advisory Committee, Conservation Commission, Open Space Committee, Planning Board	High	2-5 years	Southeast New England Program (SNEP), Narragansett Bay Estuary Program (NBEP)
4	Launch a public awareness campaign that educates residents about the importance of water conservation and ways to reduce unnecessary water consumption	Swansea Water District, Conservation Commission, Planning Board, Selectboard	High	2-5 years	Municipal & Water District Budget/regular operations, partner support; explore transferable models

					from other communities
	Objective 1B: Identify, assess and protect water resource areas.				
5	In coordination with state, utilize interns, staff and/or the Town's GIS contractor to remain current with local wetland and vernal pool maps and data, or with other data needs as requested by the Conservation Commission	Town Administrator, Conservation Commission	High	1-3 years	Municipal Budget/regular operations, partner support
6	Continue to certify potential vernal pools across Town (work with Wildlands Trust and other local environmental organizations, volunteers and school groups to support field verification and application process).	Narragansett Bay Watershed Team, Conservation Commission, RiverAware, Wildlands Trust	High	Ongoing	Municipal Budget/regular operations, partner support
7	Secure funding to complete habitat and water quality assessment of Mount Hope Pond on the Coles River (with Save the Bay)	Save The Bay, Conservation Commission, Harbor Advisory Committee	High	1-3 years	Southeast New England Program (SNEP), Narragansett Bay Estuary Program (NBEP), Municipal Vulnerability Preparedness (MVP) Program
8	Identify potential areas for stormwater infiltration and retrofits to improve water quality of impaired waters.	Stormwater Coordinator, Highway Department, Conservation Commission (with assistance from SRPEDD, Save the Bay)	High	1-3 years	Southeast New England Program (SNEP), Narragansett Bay Estuary Program (NBEP), Municipal Vulnerability

					Preparedness (MVP) Program
	Objective 1C: Plan for the resilience of Swansea's water resources in anticipation of climate change impacts.				
9	Identify and protect low-lying lands and marsh migration areas	Conservation Commission, Open Space Committee (with assistance from Save the Bay)	Medium	1-3 years	Municipal Budget/regular operations, partner support, CZM grants, MVP Action grant
10	Preserve and/or restore forested buffers along waterways, particularly unprotected lands along the Palmer and Lees Rivers (coordinate with Save The Bay and Friends of the Palmer River)	Conservation Commission, Open Space Committee	Medium	Ongoing	MVP Grants / SNEP Grants
11	Explore programs that fund local tree planting and maintenance, in order to protect water resources (i.e. Tree City USA)	Town Administrator, Conservation Commission, Parks & Recreation Commission	Medium	1-3 years	Tree City USA, Executive Office of Energy & Environmental Affairs (EEA) grants
Goal 2: Protect and preserve Swansea's natural, scenic, historical and cultural resources.					
	Objective 2A: Negotiate the purchase and/or protection of priority conservation lands.				
12	Consider conveyance of Bristol County Hailes Hill parcel to Town's open space network	Selectboard, Open Space Committee, Conservation Commission, Planning Board	Low	5-7 years	Community Preservation Fund, Division of Conservation Services (DCS) Grants

13	Review protection status of Town-owned open space parcels and consider transferring high priority parcels to the Conservation Commission for permanent protection	Selectboard, Open Space Committee, Conservation Commission, Planning Board	High	2-5 years	Municipal Budget/regular operations, partner support
14	Consider options for long-term preservation of the three country clubs/golf courses in Town, particularly to protect these properties from potential future development if sold	Planning Board, Conservation Commission (with support from Save The Bay, The Nature Conservancy, SRPEDD)	Low	3-5 years	Division of Conservation Services (DCS) grants
15	Acquire Warren Reservoir from the Bristol County (RI) Water Authority, assess its suitability for a supplemental drinking water source or recreation, and manage appropriately	Swansea Water District, Town Administrator	High	1-3 years	Division of Conservation Services (DCS) grants
16	Increase public education about conservation options for private property to ease responsibility on Conservation Commission to protect land	Conservation Commission (with resources from Mass Audubon and MassWildlife)	Low	Ongoing	Municipal Budget/regular operations, partner support
	Objective 2B: Preserve connected corridors through Town for water movement, wildlife and community resilience.				
17	Identify key open space corridors (including “Greenbelts” along the Palmer, Kickamuit, Coles and Lees Rivers) and, as opportunities arise and resources allow, acquire parcels along these corridors to protect them from sale or development (coordinate with property owners, the Town of Rehoboth, Save the Bay, Friends of the Palmer River)	Open Space Committee, Conservation Commission, Planning Board, Selectboard	Low	Ongoing	Municipal Budget, Division of Conservation Services (DCS) grants, Community Preservation Fund

18	Work with local and regional environmental organizations to advance habitat restoration and enable future marsh migration along the Palmer River	Conservation Commission, Open Space Committee, Planning Board (in partnership with Save the Bay, SRPEDD, Wildlands Trust, Friends of the Palmer River)	Low	Ongoing	Division of Conservation Services (DCS) grants, Municipal Vulnerability Preparedness (MVP) Program, Southeast New England Program (SNEP) grants
	Objective 2C: Preserve areas of significant scenic, historical, and cultural integrity.				
19	Conduct an inventory of important scenic and cultural landscapes (coordinate with Sowams Heritage Area Project)	Open Space Committee, Historical Commission, Selectboard, Planning Board	Low	2-5 years	Town staff and volunteer time
20	Work with local and Massachusetts Historical Commissions and other regional groups (such as the Sowams Heritage Area Project) to plan and fund resource protection efforts	Historical Commission, Conservation Commission, Planning Board	Low	Ongoing	Division of Conservation Services (DCS) Grants, National Park Service grants
21	Explore historical and cultural designations that could offer funding for preservation (i.e. Cultural District Designation for Main Street / Milford Road; Certified Local Government national designation, etc.)	Cultural Council	Low	1-3 years	Town staff and volunteer time

22	Secure permanent protection for the Martin House historical property.	Cultural Council, Conservation Commission, Open Space Committee, The Colonial Dames	Medium	5-7 years	Division of Conservation Services (DCS) Grants, National Park Service grants
Goal 3: Protect Swansea's Agriculture and Shellfishing Industries.					
	Objective 3A: Support local farmers and protect farmland.				
23	Form committee to coordinate with regional agricultural groups to assist local farmers and encourage new agricultural activities on prime soils	Conservation Commission, Planning Board, Selectboard	Low	3-5 years	Municipal operations, partner & volunteer support
24	Explore and/or encourage protection programs (i.e. APR, CR) on priority farmland	Open Space Committee, Conservation Commission	Low	Ongoing	Municipal budget/regular operations, partner support
25	Work with landowner to secure a permanent Agricultural Preservation Restriction on the Mason Farm property on Locust Street.	Conservation Commission, Open Space Committee	Medium	3-6 years	Massachusetts Department of Agricultural Resources technical assistance and grant programs
	Objective 3B: Restore shellfishing in the Palmer, Coles and Lees Rivers.				

26	Establish a shellfish restoration program that improves water quality in the Palmer, Coles and Lees Rivers and reduces shellfishing closures	Harbor Advisory Committee, Board of Health, Conservation Commission (in collaboration with Save the Bay, UMass Dartmouth)	Medium	1-3 years	CZM Grants, Municipal Vulnerability Preparedness (MVP) Program, Southeast New England Program (SNEP), Narragansett Bay Estuary Program (NBEP)
Goal 4: Provide adequate staffing and facilities to meet the recreational needs of all Town residents.					
	Objective 4A: Increase local capacity for management and maintenance of open space & parks.				
27	Identify and implement strategies to increase funding and staffing for facility management	Town Administrator, Selectboard	High	1-3 years	Municipal Budget, explore financing strategies through permitting and/or user fees
28	Seek Town support for expanding resources allocated to Town open space	Town Administrator, Parks & Recreation Commission, Open Space Committee, ADA Committee, Master Plan Committee	Medium	Ongoing	Municipal Budget/regular operations, support from partners and/or volunteers
29	Increase local volunteer support to assist Wildlands Trust in managing lands and offering more public trails	Town Administrator, Conservation Commission, Wildlands Trust	Low	Ongoing	Municipal operations, support from partners and/or volunteers

30	Assess Town committee and board volunteer needs and set goals and expectations to help recruit more community volunteers to participate	Town Administrator, Selectboard, Planning Board, Open Space Committee, Master Plan Committee	Medium	Ongoing	Municipal Budget/regular operations, support from partners and/or volunteers
31	Recruit volunteers to help maintain Town open space properties (i.e. "adopt-a-spot" program, "friends of" program, sponsorships, boy scout projects)	Town Administrator, Open Space Committee, Parks & Recreation Commission	Low	3-5 years	Municipal Budget/regular operations, support from partners and/or volunteers, support from private donors
	Objective 4B: Improve existing recreational facilities and programs.				
32	Identify funding to implement ADA transition plan, possibly in conjunction with other suggested improvements	Town Administrator, ADA Coordinator, Selecboard, Parks & Recreation Commission	Low	Ongoing	MA Office on Disability (MOD) grants, Community Preservation Fund
33	Provide picnic amenities in suitable locations	Town Administrator, Parks & Recreation Commission, Open Space Committee	Low	3-5 years	Community Preservation Fund
34	Formalize and expand parking areas at Town parks (especially at Sandy Beach to reduce congestion at boat ramp, Milford St Playground, athletic fields)	Parks & Recreation Commission, Highway Department, Town Administrator, Selectboard	Low	1-5 years	Municipal Budget, explore potential grant sources
35	Formalize the collection of parcels collectively known as Veterans Memorial Park and post signs to familiarize the public with this property	Parks & Recreation Commission, Highway Department, Town	Low	1-3 years	Municipal Budget/regular operations,

		Administrator, Open Space Committee			Community Preservation Fund
36	Formalize and mark trail network at Village Park (separating hiking and biking trails to reduce user conflicts) and develop trail maps	Parks & Recreation Commission, Open Space Committee	Low	3-5 years	Division of Conservation Services (DCS) grants, Community Preservation Fund
37	Install bike racks at Town open spaces to improve accessibility by bike	Town Administrator, Parks & Recreation Commission, Open Space Committee, Selectboard, Master Plan Committee, Highway Department	Low	3-5 years	Municipal Budget, Community Preservation Fund
38	Establish public database of public open spaces and allowed uses at each	Parks & Recreation Commission, Open Space Committee, Town Administrator	High	2-5 years	Municipal Budget/regular operations, SRPEDD technical assistance, support from partners and/or volunteers
	Objective 4C: Provide additional facilities and programs that meet the needs of the community.				
39	Identify parcels of recreation potential, especially in under-served areas (including Ocean Grove, Smokerise Circle, Rosewood), for playgrounds and neighborhood parks	Parks & Recreation Commission, Open Space Committee, Selectboard	Low	5-7 years	Division of Conservation Services (DCS) grants, Community Preservation Fund
40	Analyze & expand existing and establish new programs for elderly	Council on Aging, ADA Coordinator, Parks &	Low	4-7 years	Municipal budget/regular operations, support

		Recreation Commission, Open Space Committee			from partners and volunteers, explore potential grant sources
41	Explore options for an indoor recreational facility	Parks & Recreation Commission, Selectboard, Swansea Sports Corp	Low	3-5 years	Division of Conservation Services (DCS) grants, Community Preservation Fund
42	Assess recreational use potential at Town parcels on Little Neck	Parks & Recreation Commission, Open Space Committee	Low	3-5 years	Municipal budget, support from partners and volunteers
43	Organize more community events, such as outdoor concerts, movie nights, festivals	Town Administrator, Parks & Recreation Commission, Council on Aging, Open Space Committee, Master Plan Committee	Medium	4-7 years	Municipal budget, support from partners and volunteers
44	Offer more recurring organized activities, such as fitness and craft classes and youth group activities	Paks and Recreation Commission, School District, Open Space Committee, Master Plan Committee, Swansea Sports Corp, Council on Aging	Medium	4-6 years	Municipal budget, support from partners and volunteers
45	Establish one or more dog parks	Parks & Recreation Commission, Open Space Committee	High	2-5 years	Division of Conservation Services (DCS)

					grants, Community Preservation Fund
46	Establish one or more skate parks (consider Medeiros Farm as potential location)	Parks & Recreation Commission, Open Space Committee	Medium	4-7 years	Division of Conservation Services (DCS) grants, Community Preservation Fund
	Objective 4D: Expand Swansea's hiking and biking trail network				
47	Consider the establishment and completion of a cohesive green belt in the areas between Stevens Rd and Marvel St from Sharps Lot to Bark St; Town Farm, YMCA, Medeiros Farm, and open space land attached to OSRD's, which could be connected with trails	Open Space Committee, Parks & Recreation Commission, Conservation Commission	Low	5-7 years	Division of Conservation Services (DCS) grants, Community Preservation Fund, MassTrails grants
48	Explore potential for formalizing use of power lines for hiking and bike trails	Open Space Committee, Parks & Recreation Commission	Low	5-7 years	Municipal budget, support from partners and volunteers
49	Establish a trail network on the newly acquired Baker Farm and Delmac properties behind Case High School, with connections to existing trails nearby	Parks & Recreation Commission, Open Space Committee, Conservation Commission	High	1-3 years	MassTrails grants, Division of Conservation Services (DCS) grants, Community Preservation Fund
50	Formalize bike lanes along Warren Ave. and Route 103, exploring potential connections to the East Bay Bike Path	Parks & Recreation Commission, Open Space Committee, Master Plan Committee, Planning Board,	Medium	4-6 years	MassTrails grants, MassDOT Complete Streets funding, state earmarks,

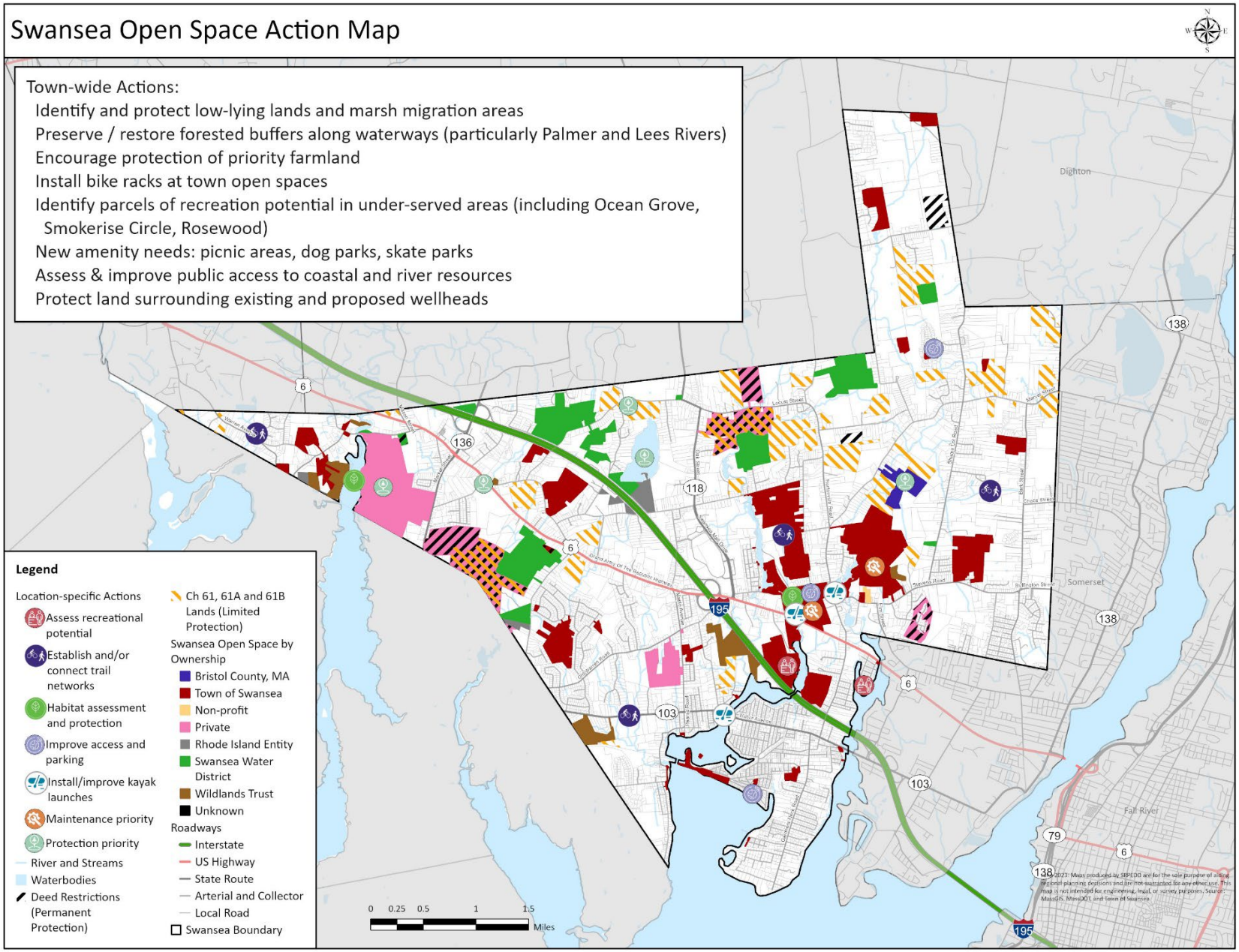
		Highway Department (with support from SRPEDD)			Community One-stop Grant
	Objective 4E: Improve public access to riverfront and coastal resources				
51	Assess potential uses of and public access to Sears Farm Town property	Highway Department, Open Space Committee, Conservation Commission, Parks and Recreation Commission	Low	7+ years	Municipal budget/regular operations
52	Continue to assess public access to coastal and river resources and prepare plans for improving access	Harbor Advisory Committee, Swansea Safe Passage, Selectboard, Open Space Committee, Save the Bay	Low	2-4 years	Municipal budget/regular operations, support from partners
53	Develop a roadside signage system of waterways to identify their names and characteristics to improve public awareness of water resources	Open Space Committee, Conservation Commission, Harbor Advisory Committee, Highway Department	Low	3-5 years	Municpal budget, partner support, explore potential grant opportunities
54	Assess town-wide canoe and boat access; improve access and parking areas	Parks & Recreation Commission, Open Space Committee, Harbor Advisory Committee, Selectboard, Highway Department	Low	3-5 years	Municipal budget/regular operations, support from partners and/or volunteers
55	Install new ADA accessible kayak launches (consider the following potential locations: Lewin Brook next to Joseph Case Junior High School; Lees River at Veterans Memorial Park; Cole River right-of-way south of Route 103)	ADA Coordinator, Parks & Recreation Commission, Highway Department, Harbor Advisory Committee	Low	5-7 years	Division of Conservation Services (DCS) grants, Community Preservation Fund

56	Place and monitor signage identifying public rights-of-way and distinguishing public vs private coastal access areas	Harbor Advisory Committee, Selectboard, Swansea Safe Passage, Save the Bay, Highway Department	Medium	3-5 years	Municipal budget/regular operations, support from partners and/or volunteers
57	Identify Town department / staff to oversee coastal access issues, enforce access rights and maintain signage and rights-of-way	Town Administrator, Harbor Advisory Committee, Selectboard	High	1-3 years	Municipal budget/regular operations
Goal 5: Carry out the Open Space and Recreation Plan goals and objectives.					
	Objective 5A: Establish a framework for implementing the action plan.				
58	Continue the Open Space Committee and formalize its responsibilities as a standing implementation committee (i.e. working with other town and regional staff and organizations on grant writing, planning)	Open Space Committee, Town Administrator	Medium	Ongoing	Municipal operations, volunteer board members
59	Circulate and publicize Action Plan to the community, encouraging public to take ownership and get involved in implementation	Open Space Committee, Master Plan Committee, Town Administrator, SRPEDD	Medium	1-3 years	Municipal budget/regular operations, support from partners and/or volunteers
60	Support the completion of the Town's Comprehensive Master Plan, ensuring open space priorities are incorporated	Master Plan Committee, SRPEDD, Town Planner	Low	1-3 years	Municipal budget/regular operations, SRPEDD technical assistance
	Objective 5B: Coordinate a townwide regulatory approach that supports plan implementation.				

61	Prepare a comprehensive resource protection zoning overlay district and bylaw (include water resources, scenic corridors/viewsheds, river corridors, etc.)	Town Planner, Planning Board, Zoning Board of Appeals, Conservation Commission, Historic Commission	Low	5-7 years	Municipal budget/regular operations, Executive Office of Energy and Environmental Affairs (EEA) Planning Grants, SRPEDD technical support
62	Adopt a preservation bylaw for delaying demolition of historic properties	Town Planner, Planning Board, Historical Commission, Zoning Board of Appeals	Low	2-5 years	Municipal budget/regular operations, SRPEDD technical assistance
63	Adopt road and sidewalk standards across departments to coordinate improvements and funding sources for implementation	Planning Board, Highway Department, Selectboard, Historical Commission, Town Administrator	Low	Ongoing	Municipal budget/regular operations; MassDOT grants, MassTrails grants for implementation
64	Assess the effectiveness of existing regulations to protect water resources and promote aquifer recharge, and identify any necessary improvements	Town Planner, Planning Board, Conservation Commission, Swansea Water District	High	2-5 years	Municipal Budget/regular operations, SRPEDD technical assistance, Executive Office of Energy and Environmental Affairs (EEA) Planning Grants

65	Review and improve, as needed, Conservation Subdivision Bylaw to aid in the protection of high quality natural areas	Conservation Commission, Town Planner, Planning Board, Zoning Board of Appeals	Low	3-5 years	Municipal Budget/regular operations, SRPEDD technical assistance, Executive Office of Energy and Environmental Affairs (EEA) Planning Grants
66	Continue to implement Town's Stormwater Management Plan, in compliance with MS4 permit	Stormwater Coordinator, Highway Department, Conservation Commission	Low	Ongoing	Municipal budget/regular operations, SNEP Network technical assistance
67	Identify opportunities within the Town's existing regulatory framework to incorporate tree protections and encourage tree planting in new development	Town Planner, Conservation Commission, Highway Department	Medium	3-5 years	Municipal budget/regular operations, SRPEDD Technical Assistance

*Map 28 Swansea Open Space Action Plan Map**



X. PUBLIC COMMENTS

[TBD]

XI. REFERENCES

Commonwealth of Massachusetts and The Nature Conservancy. 2022. BIOMAP: The Future of Conservation in Massachusetts. Retrieved on December 27, 2022 from https://biomap-mass-eoeea.hub.arcgis.com/.

Conservation Law Foundation. 2018. People's Guide to the Public Waterfront Act (Chapter 91). Accessed on August 7, 2023 from https://www.clf.org/wp-content/uploads/2018/12/CLF-Peoples-Guide-Public-Waterfront-Act-Dec18.pdf.

Department of the Interior, Bureau of Indian Affairs. (2021). Indian Entities Recognized by and Eligible to Receive Services from the United States Bureau of Indian Affairs. Federal Register, 86(18), 7554-7558.

Friends of the Palmer River. n.d. Facebook Page. Accessed December 20, 2022 from https://www.facebook.com/Friends-of-the-Palmer-River-100923995338828/.

Holtzman, Michael. 2016. Generations of Bakers talk past, future of Swansea family farm. *The Herald News*. 20 March 2016. Retrieved on December 27, 2022 from https://www.heraldnews.com/story/news/environment/2016/03/20/generations-bakers-talk-past-future/32363602007/.

Mass Audubon. (2020). *Losing Ground 2020: Data & Maps*. https://www.massaudubon.org/our-conservation-work/policy-advocacy/shaping-climate-resilient-communities/publications-community-resources/losing-ground/statistics.

Massachusetts Clean Energy Center. n.d. Montaup Power Plant. Accessed on December 20, 2022 from https://www.masscec.com/resources/montaup-power-plant.

Massachusetts Department of Agricultural Resources. n.d. MassGrown Map Farm Locator. Retrieved on December 22, 2022 from https://massnrc.org/farmlocator/map.aspx.

Massachusetts Division of Conservation Services. 2008. *The Open Space Planner's Workbook*.

Massachusetts Division of Marine Fisheries. n.d. Shellfish classification areas. Retrieved on December 27, 2022 from https://www.mass.gov/service-details/shellfish-classification-areas.

Massachusetts Executive Office of Energy and Environmental Affairs. 2017. *Massachusetts Statewide Comprehensive Outdoor Recreation Plan 2017*. Retrieved on August 8, 2022 from https://www.mass.gov/doc/scorp-2017/download.

Massachusetts Executive Office of Energy and Environmental Affairs. 2021. Final Massachusetts Integrated List of Waters for the Clean Water Act 2018/2020 Reporting Cycle. Retrieved on February 3, 2023 from https://www.mass.gov/doc/final-massachusetts-integrated-list-of-waters-for-the-clean-water-act-20182020-reporting-cycle/download.

Massachusetts Executive Office of Energy and Environmental Affairs. 2022. *Environmental Justice*. Retrieved May 2023 from https://www.mass.gov/environmental-justice.

Massachusetts Executive Office of Energy and Environmental Affairs. 2022a. Energy & Environmental Affairs Data Portal: Search for Waste Sites & Reportable Releases [Data set]. Retrieved on December 14, 2022 from https://eeaonline.eea.state.ma.us/Portal/#!/search/wastesite.

Massachusetts Historical Commission. MACRIS: Massachusetts Cultural Resource Information System [Data set]. Retrieved on December 14, 2022 from https://mhc-macris.net/.

MassDEP. 2020. Inactive & Closed Landfills & Dumping Grounds (January 2020). PDF accessed on December 29, 2022 from https://www.mass.gov/lists/massachusetts-landfills-transfer-stations-compost-sites-recycling-facilities.

MassGIS. 2012. MassGIS Data: Dams (February 2012) [Data set]. https://www.mass.gov/info-details/massgis-data-dams.

MassGIS. 2017. MassGIS Data: MassDEP Wetlands (2005) (December 2017) [Data set]. https://www.mass.gov/info-details/massgis-data-massdep-wetlands-2005.

MassGIS/ 2017a. MassGIS Data: Designated Shellfish Growing Areas (April 2017) [Data set]. https://www.mass.gov/info-details/massgis-data-designated-shellfish-growing-areas.

MassGIS. 2019. MassGIS Data: MassDEP Hydrography (1:25,000) (December 2019) [Data set]. https://www.mass.gov/info-details/massgis-data-massdep-hydrography-125000.

MassGIS. 2019a. MassGIS Data: 2016 Land Cover/Land Use (May 2019) [Data set]. https://www.mass.gov/info-details/massgis-data-2016-land-coverland-use.

MassGIS. 2020. MassGIS Data: Protected and Recreational Open Space (August 2022) [Data set]. https://www.mass.gov/info-details/massgis-data-protected-and-recreational-openspace.

MassGIS. 2021. MassGIS Data: Soils SSURGO-Certified NRCS (November 2021) [data set]. https://www.mass.gov/info-details/massgis-data-soils-ssurgo-certified-nrcs.

MassGIS. 2021a. Level 3 Tax Assessors Parcel Data: Swansea (assessed fiscal year: 2021) [Data set]. https://massgis.maps.arcgis.com/apps/View/index.html?appid=4d99822d17b9457bb32d7f953ca08416.

MassGIS. 2021b. MassGIS Data: NHESP Priority Habitats of Rare Species (August 2021) [Data set]. https://www.mass.gov/info-details/massgis-data-nhesp-priority-habitats-of-rare-species.

MassGIS/ 2021c. MassGIS Data: NHESP Estimated Habitats of Rare Wildlife (August 2021) [Data set]. https://www.mass.gov/info-details/massgis-data-nhesp-estimated-habitats-of-rare-wildlife.

MassGIS. 2022. MassGIS Data: MassDEP Wellhead Protection Areas (Zone II, Zone I, IWPA) (November 2022) [Data set]. https://www.mass.gov/info-details/massgis-data-massdep-wellhead-protection-areas-zone-ii-zone-i-iwpa.

MassWildlife's Natural Heritage & Endangered Species Program. n.d. Rare Species Viewer [Data set]. Retrieved December 27, 2022 from https://www.mass.gov/info-details/rare-species-viewer.

MassWildlife's Natural Heritage & Endangered Species Program. n.d. Regulatory Maps: Priority & Estimated Habitats. Retrieved on December 28, 2022 from https://www.mass.gov/service-details/regulatory-maps-priority-estimated-habitats.

The National Society of The Colonial Dames of America in the Commonwealth of Massachusetts. n.d. Martin House Farm. Retrieved on December 29, 2022 from https://nscdama.org/properties/martin-house-farm/.

Native Land Digital. 2021. Native Land map app. Retrieved August 7, 2023 from https://native-land.ca/.

Natural Resources Conservation Service (NRCS). n.d. Official Soil Series Descriptions (OSD) Database. Accessed 19 Dec 2022 from https://www.nrcs.usda.gov/resources/data-and-reports/official-soil-series-descriptions-osd.

New England Explorers. n.d. Margaret's Cave. Retrieved on December 29, 2022 from http://www.neexplorers.org/2013/10/27/margarets-cave/.

Pokanoket Tribe. 2018. Pokanoket Tribe / Pokanoket Nation. Retrieved on August 7, 2023 from https://pokanokettribe.com/.

Save the Bay. 2022. About Us. Retrieved on December 20, 2022 from https://www.savebay.org/about-us/.

Sowams Heritage Area. 2017. Sowams Heritage Area History. Retrieved on August 7, 2023 from https://sowamsheritagearea.org/wp/sowams-heritage-area-project/.

Sowams Heritage Area. N.d. Sowams Inventory. [Excel data base.] Retrieved on August 7, 2023 from https://docs.google.com/spreadsheets/d/1B1_6xyDZCgBOwm6EJBIXI_oaOFxPma7GIkSTT_2Knw/edit#gid=0.

Swansea Water District. N.d. Water Quality. Retrieved on May 18, 2023 from https://swanseawaterdistrict.com/consumers/water-quality.

Swansea Water District and Watek Engineering Corporation. 2021. Swansea Water District Desalination Facility: Presentation to SWD Board on Comprehensive Evaluation Report. Presentation retrieved on May 18, 2023 from https://swanseawaterdistrict.com/consumers/watek-desal-reports.

SwanWebWorks. n.d. Swansea Historic Cemeteries. Retrieved on December 29, 2022 from https://www.swanseamass.org/cemeteries.html.

Taunton River Watershed Alliance. n.d. Mission Statement. Retrieved December 20, 2022 from https://savethetaunton.org/about-us/mission-statement/.

Town of Swansea. 2002. Town of Swansea Open Space Plan. Prepared by Larry Koff & Associates for the Swansea Open Space Committee.

Town of Swansea. 2017. Local Multi-Hazard Mitigation Plan, 2017 Update. Prepared by Comprehensive Environmental Inc. for the Town of Swansea.

Town of Swansea. n.d. Historical Commission Responsibilities. Retrieved on December 29, 2022 from https://www.swanseama.gov/residents/historical_commission/historical_commission_responsibilities.php.

Town of Swansea. n.d. Shell Fish Information Open / Closed Status. Retrieved on December 27, 2022 from https://www.swanseama.gov/residents/shell_fish_information_open___closed_status/index.php.

UMass Amherst. n.d. CAPS GIS Data (CAPS 2020 data for Massachusetts) [Data set]. Retrieved on December 27, 2022 from https://umasscaps.org/data_maps/data.html.

United States Census Bureau. 2022. 2020 Decennial Census. Retrieved February 2023 from https://data.census.gov/.

United States Environmental Protection Agency. 2022. Cleanups In My Community Map (last updated date: 12/19/2022) [Data set]. Retrieved on January 5, 2023 from https://cimc.epa.gov/ords/cimc/f?p=cimc:MAP::::71:P71_WELSEARCH:MA|State|MA|||true|true|true|true|true|true|||-1|sites|N|basic.

The University of Rhode Island, Save the Bay, Narragansett Bay Research Reserve, Rhode Island Land Trust Council and Coastal Resources Management Council. N.d. Adapting to Sea Level Rise in Rhode Island: Land Preservation for Salt Marsh Migration. Retrieved on September 13, 2023 from https://ri-salt-marsh-conservation-edc.hub.arcgis.com/.

Weed, David S. n.d. Sowams Heritage Area Historical Overview. Retrieved on August 7, 2023 from http://www.drweed.net/SowamsHistoricalOverview.pdf.

APPENDICES

Appendix A: Full Size Maps

Appendix B: ADA Self-Assessment

Appendix C: Climate Change Regional Overview

Appendix D: Massachusetts Cultural Resource Information System (MACRIS) List of National and State Historic Register Resources in Swansea, Massachusetts Historical Commission (MHC)

Appendix E: Public Engagement Report