# 7.0 NATURAL RESOURCES, OPEN SPACE, AND AGRICULTURE

***Scituate will be a community that has preserved and protected its abundant natural resources for the benefit of current and future generations.***

Scituate's natural resources have played a defining role in the Town's development, settlement pattern, and character. Scituate enjoys a variety of important natural features and open space resources, including high quality agricultural lands and forests, but the Scituate Reservoir dominates the physical and natural environment, with the Reservoir's watershed occupying approximately 84% of the Town. Open space and natural resources in Scituate play a role in recreation, economic health, scenic value, natural hazard mitigation, and overall rural character and quality of life for residents. For all of these reasons, natural resource management and open space protection are critical components of this Comprehensive Plan and play an important role in planning for Scituate's future.

Because natural resources span so many topic areas it is important that this common theme is reflected in other elements of this plan. As an example, land use, economic development, and water supply are inextricably linked to open space and natural resources, as they are vital components of these other focus areas of comprehensive planning. In Scituate, to some degree, existing and potential economic development relies on natural resources being accessible, appropriately managed, and properly protected for the use and enjoyment of residents and visitors. The protected open space associated with the Scituate Reservoir ensures water quality for downstream water users. Water in itself is a natural resource, so planning for water availability and planning for natural resources are highly connected. These connections make open space and natural resource planning crucial to the overall health of a community.

This element has three primary goals: (a) the protection of the Scituate Reservoir watershed; (b) the protection of groundwater resources utilized for onsite well water supply; and (c) the protection of other open space and natural resources of local or statewide importance. Commonly, strategies designed and implemented for resource protection will have multiple benefits. For example, actions to protect the Reservoir will, in most cases, also protect groundwater quality and other natural resources. This element is categorized into the follow topics:

- An overview and inventory of the natural resources, open spaces and agricultural activities within the community **(Section 7.1 and 7.2)**.
- A discussion of the threats posed to the Town's natural resources **(Section 7.3)**.
- A summary of the Scituate Reservoir and its watershed as a natural resource for the Town and state **(Section 7.4)**.

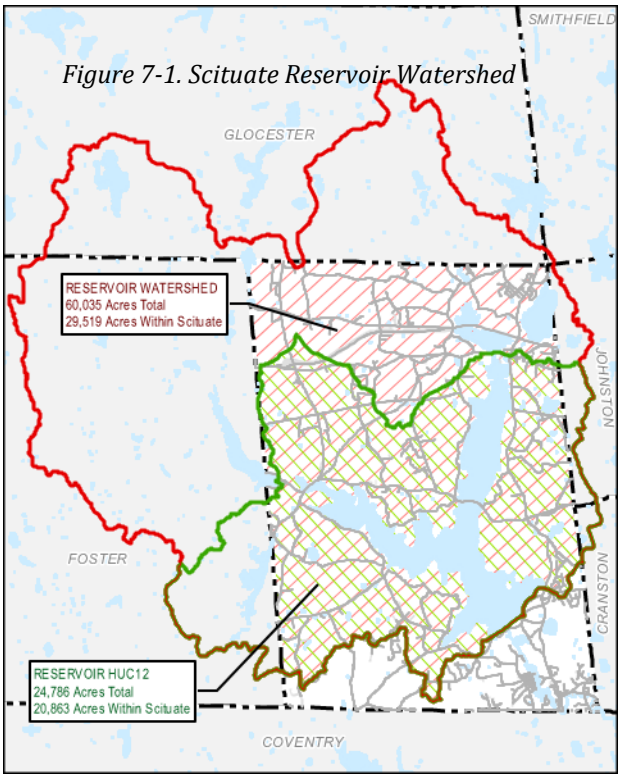



*Figure 7-1. Scituate Reservoir Watershed*

The following considerations are of a high priority when contemplating how natural resources should be managed and protected within the Town:

- Preserve and protect the valuable natural resources of the Town **(Policy #1, #4, #5, #6, Action #2, #5, #7, #8)**
- Reduce and manage the impacts of development on the Town's natural resources **(Policy #1, #3, #5, Action #1, #2, #3, #4, #7, #8)**
- Protect the Town's surface and groundwater resources for current and future populations **(Policy #2, #3, #5, Action #2, #3, #6, #7, #8)**

## 7.1 Natural Resources Inventory

In order to establish effective policies to protect the Town's natural resources, a proper inventory of these resources is required. This section includes an inventory of Scituate's natural resources under the following categories:

- Geology and soils
- Agriculture
- Floodplains
- Wetlands
- Habitat
- Surface water
- Groundwater

Due to the sensitive nature of the Scituate Reservoir and its associated watershed, the Town's natural resources have been extensively analyzed and mapped over the years.

### *7.1.1 Geology and Soils*

For the purpose of comprehensive planning geology can largely be divided into two general categories, bedrock and surficial. Bedrock geology, in the form of granite gneiss, underlies most of the Town. Although generally not visible at the surface, there are areas where bedrock is exposed. Land with bedrock outcroppings or bedrock close to the surface can present significant development constraints.

Till, an unsorted glacial deposit of variable grain size, covers most of the Town with an average depth of under five feet. The presence of till influences development potential due to seasonally high-water tables and slow percolation rates. Depending on the depth of water tables in till soils, the need for onsite wastewater treatment systems can also limit development potential. Almost half of the Town's soils are poorly drained or have a water table within three feet from the surface, making them non-buildable or with severe constraints for septic systems (RI State Planning Council, 1990).

The surficial geology of Scituate is characterized as outwash plains with highly permeable soils with an average depth of fifty feet to bedrock. The rapid permeability of outwash plains (hydrologic soil groups A and B) has the potential to cause pollution where there is not sufficient depth to groundwater to capture pollutants. Soils with slower infiltration rates (hydrologic soil groups C and D) attenuate pollutants better than those with rapid percolation. See Map NR-1 for additional information on geology and soils in Scituate.

### *7.1.2 Agriculture*

Scituate is home to many working and cooperative farms, which include pasture, cropland, orchards, and tree farms. Local farmers raise cows, sheep, hay, garden and orchard products and other popular produce that is either sold on premises, in farmers markets, or shipped to markets throughout the northeast. See Table 7-1 for an inventory of farms in Scituate.

| Table 7-1. Farm Inventory | | | |
|---|---|---|---|
| **Farm** | **Products** | **Location** | **Distribution** |
| *Blanchard Farm* | Fruits, Vegetables, Meat, Fish | 255 Greenville Road | Farm Stand |
| *Cedar Knoll Farm* | Meat | 7 Old Harmony Road, North Scituate | Meat |
| *Barden Orchard* | Fruits, Vegetables, Apple Cider, Baked Goods | 56 Elmdale Road, North Scituate | Farm Stand, You Pick |
| *Golden Rods Farm* | Meat | 627 Central Pike | |
| *Hopkins Southdowns* | Meat, Grains and Feed, Fiber, Breeding Stock | 1125 Danielson Pike, North Scituate | Market Mobile, Farmers Markets, Farm Stand, Wholesale |
| *Knowlton Farm* | Meat, Grains and Feeds | 377 Central Pike, North Scituate | Wholesale |
| *Martinelli's Farm and Charcuterie, LLC* | Fruit, Vegetables, Herbs, Dairy and Eggs, Meat, Nursery and Flowers, Spreads, Specialty, Breeding Stock | 56 Peeptoad Road | Market Mobile, Delivery, Pickup, Whole Foods, Dave's Markets, Farmers Markets, Farm Stand, Wholesale |
| *Red Dog's Roost* | Fruit, Vegetables, Herbs, Dairy and Eggs, Meat, Wood, Nursery and Flowers, Spreads, Baked Goods, Fiber, Breeding Stock | Hartford's Pike, North Scituate | Pickup, Farm Stand, Restaurants |
| *Sunset Orchard* | Apples, Apple Cider, Peaches | 244 Gleaner Chapel Road, North Scituate | Farm Stand, You Pick |
| *Tall Pine Farm* | Meat, Grains and Feeds | 49 George Washington Highway | Wholesale |
| *Timberdoodle Farm* | Vegetables, Herbs, Dairy and Eggs, Meat, Nursery and Flowers, Specialty, Breeding Stock, Family Fun | 337 Central Pike | Pickup, Farmers Markets, Farm Stand, PYO, Restaurants, Wholesale |

*Source: Farm Fresh RI, http://www.farmfreshri.org/, 2021.*

The amount of farmland in Scituate has decreased slightly in the last few decades, from 1,514 acres in 1988 down to 1,386 acres in 2011 (RIGIS). This matches the statewide recent trend of declining farmland (USDA, 2017). See Table 6-1 in the Land Use chapter for more detail. Crop and forestland agriculture is permitted in all districts in Scituate, while the raising of livestock and commercial nurseries are allowed on a more limited basis or by special use permit. Farmland is under pressure to become developed for other profitable land uses, especially when property taxes are assessed based on a property's potential value for development. Several properties have been protected through the state's Farmland Preservation Program, which purchases development rights from farmers as well as the Farm, Forest, and Open Space Program (see Section 7.4 for more information). For more information on the economic activities related to agriculture in the Town, see Chapter 13, *Economic Development.*

Proper soil conditions are key to successful agricultural practices that concentrate on the growing of crops. Prime soils are valuable agricultural soils that should be considered when allocating future land uses to preserve farming activities. Currently, there is correspondence between the prime soils and areas being farmed (Town of Scituate, 2003). Map NR-2 , located in Appendix B: Maps, shows the areas with prime agricultural soils in Scituate.

### *7.1.3 Flood Zones*

Flood zones are those area subject to temporary inundation during storm events or seasonal increase in rainfall or snow melt. Flood zones are defined as areas with a 1% chance of flooding in any given year. These zones play an important role in naturally protecting a community from flood damage. Flood zones are commonly associated with waterbodies and are designated and mapped by the Federal Emergency Management Agency (FEMA) by category. Scituate contains flood zones X and A.

The Scituate Zoning Ordinance regulates development within all floodplains in the Town. The Scituate Building Official has the authority to require a development permit for construction within a floodplain, and special building standards apply to structures erected in a floodplain. Additionally, building standards related to floodplain construction are mandated by the Rhode Island State Building Code.

### *7.1.4 Wetlands*

Wetlands generally occur in transitional areas between dry land and open water, and they support vital natural functions. They are typically areas of poor drainage and standing water, either on a seasonal or year-round basis. Rhode Island RIDEM identifies wetlands based on vegetation, water type, size, depth, soil types, and wildlife habitat. Only a site-specific evaluation by a trained professional can properly identify and define a wetland area. Wetlands in Rhode Island are divided into a number of categories, all with specific definitions. These categories define several ecological wetland types, thus protecting vegetated wetlands (such as swamps, marshes, and bogs) and open or flowing waterbodies (such as ponds, rivers, and streams). In addition, upland areas adjacent to vegetated wetlands and waterbodies are afforded certain protections. These areas are legally considered wetlands and are defined as perimeter wetlands, riverbank wetlands, and floodplains. The alteration of wetlands and their associated jurisdictional areas are regulated by RIDEM (RIDEM, 2008).

**Freshwater Wetland Regulated by RIDEM**
**Swamps, Marshes, Bogs,**
**Ponds, Rivers,**
**Streams and Intermittent Streams,**
**Emergent and Submergent Plant Communities,**
**Forested Wetlands,**
**Shrub Wetlands,**
**Special Aquatic Sites,**
**Perimeter Wetlands,**
**100 Foot and 200 Foot Riverbank Wetlands,**
**Floodplains,**
**Areas Subject to Flooding, and**

*Figure 7-2. Types of RIDEM Wetlands*
*Source: RIDEM, What's the Scoop on Wetlands, July 2008*

Most wetlands are associated with streams and waterbodies. As such they serve a number of functions such as: protective flood storage, providing productive wildlife habitats, and improving and maintaining water quality through nutrient and sediment retention and pollution abatement. For these reasons, wetlands are a valuable resource to both people and the ecology of the Town.

Approximately 2,405 acres, or 7%, of the Town's land area comprises wetlands. Refer to Map NR-3 in Appendix B: Maps.

### *7.1.5 Important Habitat Areas*

Scituate has a variety of wildlife habitats that play an important role in the ecological value of the area and the state. Rolling and forested terrain interspersed with large and small waterbodies and wetlands creates habitat for a variety of plant and animal species. This includes vernal pools, small wetlands that fill with water temporarily and are essential for amphibian reproduction. Many birds and mammals also make use of the contiguous, mature forest as their home. According to RIGIS's LULC data, 72% of the Town is forested, representing 25,258 acres. The predominant forest types are oak forest, mixed deciduous-conifer, forested swamp, and ruderal forests. The oak forest in particular faces challenges from lack of regeneration because of climate stress, deer browsing, and other factors.

The Rhode Island Ecological Community Classification (RIECC) was prepared to support development of a detailed ecological communities map and database to serve multiple conservation needs in Rhode island. The classification was developed to produce a digital ecological communities GIS database intended to serve the entire conservation community, resource managers, and cities and towns in the state. The RIECC is an amalgamation of the Northeaster Terrestrial Wildlife Habitat Classification (NTHC) and the Natural Communities of Rhode Island (NCRI). The RIECC is based on ecological systems which are defined as recurring groups of biological communities that are found in similar physical environments and are influenced by similar dynamic processes. They are intended to provide a classification unit that can be readily mapped, often from digital imagery, and readily identified by conservation and resource managers in the field (Enser, 2011). See Table 7-2 and map NR-4 for more information on ecological communities in Scituate.

**Table 7-2. Ecological Communities**

| Description | Area (acres) | Percentage of Town |
|---|---|---|
| **Agriculture** | | |
| Hayfields | 277.1 | 0.8% |
| Cropland | 272.7 | 0.8% |
| Pasture | 128.0 | 0.4% |
| Nursery/Christmas Trees | 113.2 | 0.3% |
| Orchard | 28.9 | 0.1% |
| **Developed Land** | | |
| Impervious | 1,651.9 | 4.7% |
| Medium Density Residential (1 to 1/4 acre lots) | 1,578.1 | 4.5% |
| Medium Low Density Residential (1 to 2 acre lots) | 524.4 | 1.5% |
| Low Density Residential (>2 acre lots) | 362.9 | 1.0% |
| Urban/Recreational Grasses | 204.6 | 0.6% |
| Medium High Density Residential (1/4 to 1/8 acre lots) | 62.2 | 0.2% |
| Extractive Industry | 27.0 | 0.1% |
| Water and Sewage Treatment | 18.9 | 0.1% |
| Institutional (schools, hospitals, churches, etc.) | 8.7 | 0.0% |
| Developed Recreation (all recreation) | 2.2 | 0.0% |
| High Density Residential (<1/8 acre lots) | 2.0 | 0.0% |
| Transitional Areas (urban open) | 1.5 | 0.0% |
| Other Transportation (terminals, docks, etc.) | 0.7 | 0.0% |
| **Water/Wetlands** | | |
| Forested Swamp | 2289.3 | 6.5% |
| Fresh Water | 4202.4 | 12.0% |
| Shrub Swamp | 69.6 | 0.2% |
| Emergent Marsh | 45.6 | 0.1% |
| **Shrubland/Forests** | | |
| Oak Forest | 15464.1 | 44.1% |
| Mixed Deciduous/Coniferous Forests | 4541.7 | 12.9% |
| Tree Plantation | 2108.3 | 6.0% |
| Ruderal Forest | 325.1 | 0.9% |
| Ruderal Grassland/Shrubland | 766.1 | 2.2% |

*Source: Rhode Island Geographic Information System, https://www.rigis.org/*

RIDEM, in coordination with the University of Rhode Island, The Nature Conservancy, and the Rhode Island Natural History Survey collect and analyze information on species occurrences in the state and the surrounding region. This ongoing effort produces a list of conservation interests for the state. Several of these areas, some of which are identified as Natural Heritage Areas, are located in Scituate. These areas are the estimated habitat and range of rare species and noteworthy natural communities throughout the state. Please refer to Map NR-5.

PW owns approximately 15,004 acres in Town, representing approximately 43% of the total area of the Town and 51% of the total watershed area that lies within Scituate. PW's ownership, although primarily for water supply protection purposes, provides a level of protection not provided under typical private ownership conditions, which helps to ensure the ongoing preservation of some of these important habitat areas. In 2011 Providence Water adopted an updated *Scituate Reservoir Watershed Property Plan: A Forest Stewardship Plan*. This plan was adopted to promote long-term ecosystem health by preserving natural riparian areas and forest cover that protect a high-quality water supply and other natural resources. The plan outlines Providence Water's active forest management strategies including harvesting timber to create growing strands of trees of all ages, reducing deer impacts to protect native plants and animals, managing invasive plants and promoting native vegetation, creating or restoring habitat for less common wildlife species, protecting older forest areas and artifacts of past settlement and land use, and proving appropriate opportunities for public visits and research (PWSB, 2011).

This watershed is also part of the Southern New England Heritage Forest (SNEHF), an almost 1.5-million-acre forest corridor that spreads across Rhode Island, Connecticut, and Massachusetts. This green oasis supports many species of wildlife who depend on its riparian corridors and forested habitat for survival. To protect this significant area, the Regional Conservation Partnership Program of the USDA Natural Resources Conservation Service (NRCS) was formed. Private owners of lands within the SNEHF are eligible for funding and technical support to develop forest management plans and manage their woodlands for conservation. See Map NR-5 for the blocks of unfragmented forest habitat that occur in the Town.

Development of land can threaten important habitat areas by causing breaks in contiguous habitat as well as overall loss of habitat. Fragmentation has a profound effect on wildlife, on species diversity, and ecological functioning. See Section 7.2 for an inventory of protected open space and 7.3 for further discussion of threats to Scituate's natural resources by development.

### *7.1.6 Surface Water*

Surface water is any body of water above ground, including oceans, streams, rivers, lakes, wetlands, reservoirs, and creeks.[1] Surface water plays a vitally important role as it is relied on for many human uses. It is an important source of drinking water and is used for irrigation of farmland. A watershed is a land area that channels rainfall and snowmelt to these surface waterbodies. The health and quality of a watershed is directly linked to the health and quality of its receiving surface waterbodies. The Town is comprised of portions of seven watersheds, the most prominent being that of the Scituate Reservoir Watershed, which occupies 84% of the Town's area. Other watersheds in the Town are the Barden Reservoir Watershed, the Pawtuxet River Watershed, the Moswansicut Reservoir Watershed, the North Branch Pawtuxet River Watershed, the Flat River Reservoir Watershed, and the Westconnaug Reservoir Watershed. Out of a total of 35,077 acres of land, of which 4,224 acres are surface water and 2,405 acres are wetlands, surface water resources in the Town account for approximately 19% of the Town's total area. Also, it is important to recognize that all activities within the watershed can have an impact on these

[1] National Geographic Resource Library, https://www.nationalgeographic.org/encyclopedia/surface-water/, accessed August 25, 2021

surface waters, and that is why land development and land use is closely tied to watershed protection measures. Human activity can have a significant impact on water quality.

Fresh surface water resources are classified by RIDEM regarding use and water quality goals. Table 7-3 below provides the five levels of freshwater water quality classification.

**Table 7-3. RIDEM Freshwater Water Quality Classifications**

| Classification | Description |
|---|---|
| AA | These waters are designated as a source of public drinking water supply or as tributary waters within a public drinking water supply, for primary and secondary contact recreational activities and for fish and wildlife habitat. These waters shall have excellent aesthetic value. |
| A | These waters are designated for primary and secondary contact recreational activities and for fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have excellent aesthetic value. |
| B | These waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. |
| B1 | These waters are designed for primary and secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. Primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges. However, all Class B criteria must be met. |
| C | These waters are designed for secondary contact recreational activities and fish and wildlife habitat. They shall be suitable for compatible industrial processes and cooling, hydropower, aquaculture uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. |

*Source: RIDEM, Water Quality Regulations, 2009.*

The classification of the Town's water bodies is provided in Table 7-4.

| Table 7-4 Water Quality Classification for Scituate Water Bodies | | | |
|---|---|---|---|
| **Water Body** | **Classification** | **Water Body** | **Classification** |
| **Pawtuxet River Basin** | | | |
| Barden Reservoir | AA | Pawtuxet River North Branch | B |
| Bear Tree Brook | AA | Peeptoad Brook | AA |
| Betty Pond | AA | Pierce Brook | B |
| Blanchard Brook | AA | Pine Swamp Pond | AA |
| Boyd Brook | B | Ponagansett River | AA |
| Brandy Brook | AA | Potterville Brook | AA |
| Brush Meadown Pond | AA | Quonopaug River | AA |
| Bullhead Brook | AA | Regulating Reservoir | AA |
| Burlingame Brook | B | Rush Brook | AA |
| Colvin Brook | B | Scituate Reservoir | AA |
| Cork Brook | AA | Soak Hide Brook | AA |
| Coventry Brook | AA | Spruce Brook | AA |
| Cranberry Brook | B | Swamp Brook | AA |
| Dolly Cole Brook | AA | Turkey Meadow Brook | B |
| Huntinghouse Brook | AA | Unnamed to Scituate Reservoir | AA |
| Kent Brook | AA | Unnamed #1 to North Branch Pawtuxet River | A |
| King Brook | AA | Unnamed #2 to North Branch Pawtuxet River | A |
| King Pond | AA | Unnamed from Moswansicut Pond | AA |
| Mosquitohawk Brook | | Unnamed to Betty Pond | AA |
| Moswansicut Pond | AA | Unnamed to Westconnaug Reservoir | AA |
| Moswansicut Stream | AA | Westconnaug Reservoir | AA |
| Pawtuxet River North Branch | A | Westconnaug Stream | AA |
| | | Wilbur Hollow Brook | AA |

*Source: State of Rhode Island Department of Environmental Management, Office of Water Resources, Water Body Classification. 2018-2020.*

### *7.1.7 Groundwater*

Generally, drinking water comes from surface or groundwater supplies. Groundwater water supplies can be tapped from rock, gravel, sand, and silt that hold water deep below the ground surface where it may collect in the voids of these unconsolidated materials. Large volumes of underground water-saturated materials are referred to as aquifers or sometimes groundwater reservoirs.

Groundwater also feeds surface waterbodies. Surface waters can be thought of as the combined expression of groundwater and collected surface flow from storm events. During wet periods stormwater contributes a larger fraction of flow but during dry periods groundwater feeds streams, lakes, ponds, and reservoirs and may prevent them from drying out.

Many of the protective measures put in place for the Scituate Reservoir have also contributed to the protection of groundwater resources in the Town. Except for a small area of Hope served by public water supplies, the majority of local water users rely upon individual drinking water wells. Although home to the largest surface water reservoir in Rhode Island, only a small fraction of Scituate homes or businesses use water from the reservoir.

Outwash soils are the best source of groundwater in Scituate. Wells in typical outwash deposits will yield from 20 to 100 gallons per minute (gpm). As previously noted, outwash soils are susceptible to pollution because of their high permeability. This is highlighted in North Scituate Village where a concentration of homes and businesses on relatively small lots have experienced water quality problems due to improperly functioning onsite wastewater treatment systems. Many homes in the Village have more than one dwelling unit, exacerbating the issue. There is one community wellhead protection area and several wellhead protection areas in the northern portion of the town. Refer to map NR-3 for details.

Till and bedrock are less productive sources of groundwater. Commonly, yield from these soils is about five gpm. There have been reports of wells sited in till going dry. Please see Chapter 11 *Services and Facilities* for more information about the Town's water supplies.

## 7.2 Open Space

Open space is vital to a community's health, economy, and well-being. Open space serves many functions when we consider that many open space parcels have restricted access and conserve land for wildlife and resource protection. Some areas considered open space are also used for passive recreation. The Rhode Island Comprehensive Planning and Land Use Regulation Act references open space and outdoor recreation together within the same section of the law (RIGL 45-22.2-6(b)(4)). This plan has intentionally placed the discussion and analysis of open space within the *Natural Resources* Chapter, as opposed to the *Recreation* Chapter, to avoid any confusion about open space solely being land that is set aside for recreation purposes. The term open space is often interpreted to include natural or conservation areas that are not intended for recreational use, although many open space areas allow for passive use such as hiking. Therefore, there is overlap between this Chapter and the *Recreation* Chapter, for these reasons.

## 7.3 Open Space Inventory

Maintaining adequate open space was identified in the 2021 Scituate Comprehensive Plan Community Survey as an issue of high importance among survey respondents (see Section 7.5 for further information on survey results). Natural resources occur throughout the town, and conservation land (or protected, undeveloped land) significantly contributes both to protecting natural resources and shaping Scituate's quality of life for residents. Of the 35,077 acres of land that comprise the Town, 25,739 acres are undeveloped, more than 73% of the Town's land area[2]. Residents place a high value on open space preservation and access. Recreational use is only allowed in some conservation areas. See Chapter 10 *Recreation* for more information about recreational open space. There are no set standards for conservation areas except that the area cannot allow development and should be large enough to protect the resource of concern. Table 7-5 provides detailed information related to conservation and open space properties.

**Table 7-5. Open Space Inventory**

| Property | Location | Type of Conservation Land | Acreage | Ownership | Uses |
|---|---|---|---|---|---|
| Harris Preserve | Harmony Road | Conservation Easement | 50.4 | Audubon Society of RI | Limited public access |
| Huntinghouse Brook | Rocky Hill | Fee Interest | 31.7 | Audubon Society of | Limited |

[2] Providence Water owns approximately 15,077 acres of land that contribute to the undeveloped land total but are not considered open space, as there is no public access permitted.

| Table 7-5. Open Space Inventory | | | | | |
|---|---|---|---|---|---|
| **Property** | **Location** | **Type of Conservation Land** | **Acreage** | **Ownership** | **Uses** |
| | Road/Tourtelot Road | | | RI | public access |
| Otter Point | Robinwood Drive | Fee Interest | 10.9 | Audubon Society of RI | Limited public access |
| Pine Swamp/Cranberry Brook | Cranberry Drive | Easement | 31.2 | City of Providence/Audubon Society of RI | Limited public access |
| Adjacent to Beach area (Parcel A) | Ryefield Road | Fee Interest | 5.7 | Hope Associates | Limited public access |
| Barn and Land | Ryefield Road | Fee Interest | 3.4 | Hope Associates | Limited public access |
| Barrett Parcel | S Doctors Lane | Fee Interest | 17.2 | Hope Associates | Public access permitted |
| Brown University Parcels | North Road/Doctors Lane | Fee Interest | 6.3 | Hope Associates | Public access permitted |
| Jorgensen | Green Lane/Colvin Street | Conservation Intent | 30.0 | Hope Associates | Limited public access |
| Perry Parcel | N Doctors Lane | Fee Interest/ Easement | 10.4 | Hope Associates | Public access permitted |
| Studly Bros, Inc. | Green Lane/Colvin Street | Conservation Intent | 2.6 | Hope Associates | Limited public access |
| Trott Parcel | N Doctors Lane | Easement | 12.6 | Hope Associates | Public access permitted |
| Lawton Farm | Seven Mile Road | Fee Interest | 16.6 | Scituate Land Trust | Public access permitted |
| Lawton Farm | Seven Mile Road | Fee Interest | 39.5 | Scituate Land Trust | Limited public access |
| Westconnaug Meadows | George Washington Highway | Fee Interest | 28.8 | Scituate Land Trust | Limited public access |
| Esek Hopkins Park | Danielson Pike/Battery Meetinghouse Road | Fee Title | 95.1 | State | Public access permitted |
| Cork Brook | Gentry Lane | Fee Interest | 16.8 | Town of Scituate | Public access permitted |
| Darby Road | Darby Road | Fee Interest | 41.5 | Town of Scituate | Public |

| Table 7-5. Open Space Inventory | | | | | |
|---|---|---|---|---|---|
| **Property** | **Location** | **Type of Conservation Land** | **Acreage** | **Ownership** | **Uses** |
| Conservation Area | | | | | access permitted |
| Doctors Field | N Doctors Lane | Fee Interest | 3.2 | Town of Scituate | Public access permitted |
| Huntinghouse Brook | Rockland Road | Fee Interest | 7.9 | Town of Scituate | Public access permitted |
| Old Clayville Dump | George Washington Highway | Fee Interest | 37.3 | Town of Scituate | Limited public access |
| Plainfield Pike | Plainfield Pike | Fee Interest | 16.6 | Town of Scituate | Public access permitted |
| Ridge Road | Ridge Road/Spruce Brook | Fee Interest | 15.4 | Town of Scituate | Public access permitted |
| Rocky Hill Road | Rocky Hill Road | Fee Interest | 1.5 | Town of Scituate | Public access |
| Rush Brook | Hartford Pike | Fee Interest | 27.2 | Town of Scituate | Public access permitted |
| Scituate Animal Shelter | George Washington Highway | Fee Interest | 33.2 | Town of Scituate | Public access permitted |
| Spruce Brook | French Lane/Spruce Brook | Fee Interest | 17.5 | Town of Scituate | Public access permitted |
| Swamp Brook | Chopmist Hill Road | Fee Interest | 33.3 | Town of Scituate | Public access permitted |
| Tasca Field | Hartford Avenue | Fee Interest/Easement | 12.9 | Town of Scituate | Public access permitted |
| Westconnaug Reservoir | Field Hill Road/George Washington Highway | Fee Interest | 8.9 | Town of Scituate | Public access permitted |
| **Total Acres** | | | 665.6 | | |

*Source: Scituate Conservation Commission, https://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=87e104c8adb449eb9f905e5f18020de5*

## Land Conservation Priorities

The Town has developed land conservation priorities for the 20-year planning horizon. These are based on discussions with town officials and residents. The Town of Scituate seeks to continue to preserve natural aesthetic areas within the town over the next 20 years, balanced with limited and measured growth in open lots while ensuring the preservation of our historic landmarks, our farmland, our forests,

and our scenic vistas. Protecting the valuable watershed continues to be a priority at the same time working with Providence Water to open selected protected areas to passive recreation such as walking, bird watching, hunting, and cycling without threatening the quality of drinking water. Specific topics to address over the next 20 years:

- Should there be constraints or a cap on residential growth? If so, when, and how much?
- Can we implement strategies for ensuring the quality and quantity of groundwater available to our residents (who rely on wells rather than reservoir water)?
- How do we build a constructive working relationship with the City of Providence regarding the preservation and stewardship of Providence Water land in Scituate?

### Providence Water Supply Board

Scituate offers a significant amount of protected land by way of properties owned by PWSB, but this land is not open to the public for use. Because of this, percentagewise, Scituate has more area devoted to conservation than most other, if not all, communities in Rhode Island. Providence Water holds more than 15,000 acres for the production and storage of water within the state. Over 88% of the Providence Water's property holdings are within Scituate. Under the current policies of the PWSB, no unauthorized recreational use of watershed lands is permitted, though a managed deer hunt is part of the forest management program.

### Conservation Land

In total, 665.6 acres of land in Scituate are protected from development as indicated in Table 7-5. See Map NR-5 for all conservation areas, including those held by state and local agencies.

The Town of Scituate and the Scituate Land Trust also own or hold conservation easements on just over 450 acres. Section 12 of the zoning ordinance authorizes the creation of permanent open space within a development, which can be conveyed to the Town or a nonprofit organization for protection.

Specific land holdings include the Alice Harris Memorial Wildlife Refuge (held by the Audubon Society and RIDEM), Darby Road Conservation Area (held by the Town), several sites associated with conservation developments, and important habitat along brooks, rivers, and reservoirs.

### Scituate Land Trust/Conservation Commission

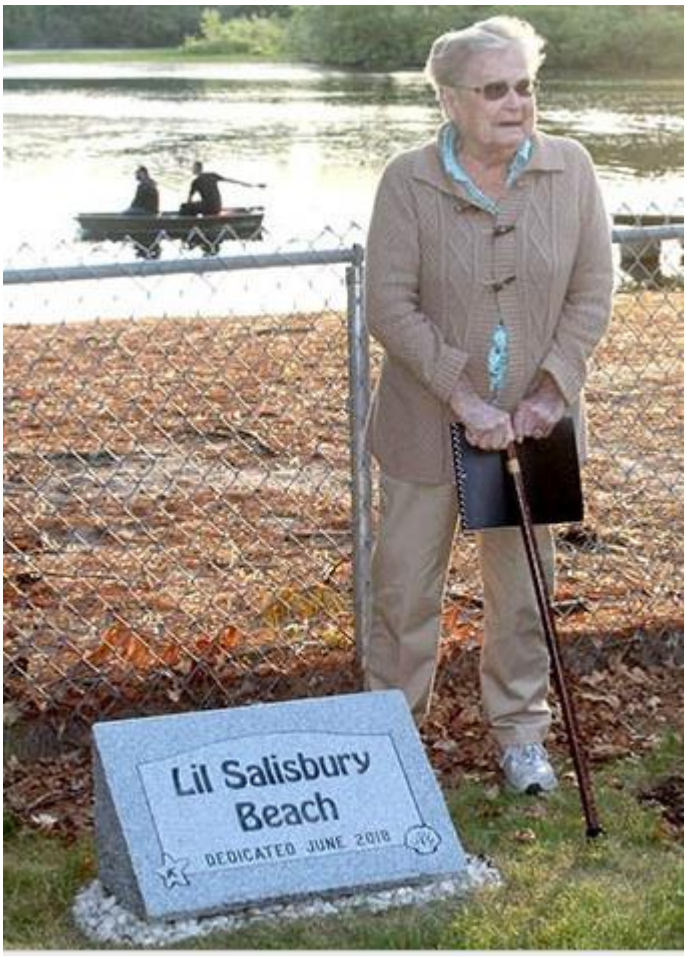
The Scituate Land Trust and Conservation Commission are established by statute as individual commissions of the Town, but have four seats with overlapping membership, serving on both boards. Because they work so closely, they have been conducting joint meetings and working together as a group towards a common goal. The Conservation Commission primarily focuses on open space planning, while the Land Trust's focus is related to acquisitions and purchases and identification of open space for preservation. Both organizations work to preserve open spaces, natural areas, scenic areas, drinking water sources, farmland, forests, and historic sites for the Town.

Since the Land Trust's establishment in 1990, four conservation areas have been obtained: Lawton Farm, Tasca Field, Esek Hopkins, and Westconnaug Meadows. Each was chosen for its unique values. Lawton Farm, for example, includes nesting grounds for the eastern meadowlark and the bobolink, and has been a site of University of Rhode Island research. These sites are in addition to the conservation easements held by the Land Trust.

### Hope Associates

Hope Associates, Inc. is a private, non-profit volunteer-based organization that is focused on the protection of open space in Scituate. Their overall mission is specific to provide passive recreation and conservation along the North Branch of the Pawtuxet River. An underlying focus of their open space and conservation efforts is to improve water quality in the Pawtuxet River. Properties owned by Hope

Associates are reserved for Scituate residents only and they have a lease agreement with the Town for the use of their properties for Town events and functions. Hope Associates is primarily funded by benefactor funds from Alice Howland, which was left with the Rhode Island Foundation. They draw from this fund for their annual income, which is primarily used to pay for their insurance policies related to their property ownership. They also apply for grant funding to help fund land acquisition.




Hope Associates owns Hope Pond, which is the only waterfront property in Town available for public swimming. They maintain the property for a variety of recreational uses such as swimming, kayaking, picnic space, and meeting space. The Town's Recreation Department has permission under the lease with the Town for the summer recreation program to use Lil Salisbury Beach as a swimming beach for Scituate residents. The Hope Pond property also contains Howland Barn, which is a renovated cow barn that is now used as a community meeting space. Hope Associates would like to secure funding in the future to upgrade the structure to use the second floor and create a more permanent community space. Hope Associates purchased a blighted property in the center of Hope Village and converted the space into a village green that is used for concerts, weddings, and other community events.

The Town, through the Conservation Commission and Land Trust, recently applied for a RIDEM grant to secure funding to improve the trail system on the Trot Perry Preserve, which is owned by Hope Associates. The Town was awarded $99,533 to improve the trails, add trail signage, trail kiosks, and a new parking area, which would be located on Town property. Please see Table 7-5 for a full list of conservation properties, including those held by Hope Associates.

### Farm, Forest, and OpenSpace

The Farm, Forest, and Open Space (FFOS) program is administered by RIDEM under the Farm, Forest, and Open Space Act. The purpose of the program is to help conserve land that is considered farmland, forestland and wetlands, and open space through tax abatement. RIGL 44-27 allows property enrolled in the FFOS program to be assessed at its current use, not its value for development. The purpose is not to reduce property taxes, but to conserve Rhode Island's productive agricultural and forest land by reducing the chance it will have to be sold for development.[3]

[3] A Citizens Guide to the Rhode Island Farm, Forest, and Open Space Act, http://www.dem.ri.gov/programs/agriculture/documents/ffosa_citizens_guide.pdf

The act establishes three categories of land eligible for enrollment in the program and authorizes RIDEM to establish regulations governing farm and forestland enrolled. The open space classification is administered by the tax assessor of the community where the property is located.

As if May 2021, the Town of Scituate has 200 parcels enrolled in the FFOS program, accounting for a total of 13,668 acres. Some of the acreage enrolled represents portions of a parcel of land, while in other cases the entire parcel is enrolled in the program. This total includes land owned by PW. Table 7-6 provide a further breakdown of the amount of land enrolled in each FFOS program category.

**Table 7-6. Farm, Forest, and Open Space Enrollment Acreage**

| Farm | Forest | Open Space |
|---|---|---|
| 303 acres | 11,835 acres | 1,530 acres |

*Source: Scituate Tax Assessor, retrieved April 2024*

**Land Classifications for Property Enrolled in the FFOS Program**

**Farmland**

Ornamental Crops
Vegetable and Orchards
Dairy and Livestock (including forage crops)

**Forest & Wetland**

**Open Space**

Sligh soil limitations
Moderate soil limitations
Severe Soil limitations

## 7.4 Threats to Natural Resources

A variety of land uses, and human activities pose a threat to the Town's natural resources. This section presents the most notable threats to the natural resources in Scituate.

### *7.4.1 Failing and Substandard Onsite Wastewater Treatment Systems*

Apart from a small area in Hope Village connected to a sewer system, all of Scituate relies on onsite wastewater treatment systems (OWTS), which include both septic systems and cesspools, for wastewater treatment. OWTS are located underground and if they fail to function properly, have the potential to contaminate ground and surface water. A cesspool is a buried chamber that receives sewage from a building for disposal into the ground. Cesspools were previously unregulated in Rhode Island. The Rhode Island Cesspool Act of 2007 (RIGL§23-19.15), as amended in 2015, mandates that all cesspools within the state must, over time, be removed from service. The structure served by the cesspool must either be upgraded to a new OWTS or connected to a sewer line if one is available. Septic systems are typically reliable and effective for sewage treatment, but poor design, installation, or maintenance can cause a failure which can pose a threat to ground and surface water.

The Town adopted an onsite wastewater management plan (OWMP) in 2004. The primary purpose of the OWMP is to provide an opportunity to get poorly functioning OWTSs out of the ground, voluntarily through loan assistance. This is accomplished through Community Septic System Loan Program (CSSLP).The Town's OWMP also provides a set of strategies and implementation items to ensure the proper management, inspection, use and maintenance of OWTS in the Town. CSSLP supports replacement of these systems, by making funding available to homeowners with failed and substandard onsite wastewater treatment systems to access low-interest loans and upgrade their systems. CSSLP has been in existence for over 20 years and 16 Rhode Island communities currently participate in it.

The Town recognizes that poorly managed OWTS are prone to failure with age, overuse, poor soil conditions, or improper installation, repair, or maintenance and that they jeopardize the health, safety, and welfare of the community. A properly developed and implemented OWMP can help to mitigate these circumstances and provide an efficient, environmentally safe, and cost-effective alternative to municipal sewers.

### *7.4.2 Unmanaged Stormwater Runoff*

Stormwater is rainwater or melted snow that runs off streets, roofs, pavement, and other impervious surfaces as well as lawns, woodlands, and other more pervious areas as they become saturated. As the water flows over these surfaces, it can collect pollutants and sediment that can contaminate water bodies.

Stormwater management is addressed by federal, state, and local regulations. Scituate's zoning standards prohibit unmanaged discharge of stormwater from development. The United States Environmental Protection Agency (USEPA) has determined that municipal separate storm sewer systems (MS4s)[4] are a major pathway for the introduction of pollutants to waterways and are a leading cause of the impairment of ambient water quality, for both fresh and coastal waters. The USEPA developed regulations and a general permit governing stormwater in association with industrial and construction activities and for MS4s in 40 CFR Part 122 and administers the regulations through an MS4 stormwater general permit. The Rhode Island Department of Environmental Management (RIDEM) is delegated by USEPA to administer the program in Rhode Island and has written and enforces equivalent regulations under the *Rhode Island General Permit for Stormwater Discharge from Small Municipal Separate Storm Sewer Systems (MS4s) and from Industrial Activity at Eligible Facilities Operated by Regulated Small MS4s* (MS4 Stormwater General Permit).

Scituate is one of the communities currently subject to MS4 jurisdiction in Rhode Island. Under this law, Rhode Island Department of Environmental Management requires subject communities to develop stormwater management program plans (SWMPPs) to address six minimum control measures. The six minimum control measures required in the SWMPP are:

- Public Education and Outreach on Storm Water Impacts
- Public Participation / Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention / Good Housekeeping for Municipal Operations

The Town of Scituate is one of 36 municipalities in Rhode Island, which are required to comply with the MS4 Stormwater General Permit. In compliance with the MS4 Stormwater General Permit, the Town issues an annual report outlining the steps taken in each of the six control measure areas listed above.

### *7.4.3 Unregulated Land Development*

Floodplains, wetlands, and unique habitat can be lost or degraded through certain development patterns. Providence Water owns approximately 15,000 acres directly adjacent to the reservoir, the majority of the watershed land outside that is in private ownership and is being increasingly fragmented by development (RIDEM, 2008). Land acquisition, conservation development techniques, and directing growth to appropriate locations are all strategies recommended for preserving valuable natural resources in the *Scituate Reservoir Watershed Greenspace Strategy (2008).* The plans also show areas where growth could continue, and indicate the historic densities, street layouts and development patterns that could be used in the design of new neighborhoods. Better and more strategic regulation of

[4] An MS4 is a drainage system in an urbanized area. See https://www.epa.gov/npdes/stormwater-discharges-municipal-sources for more information about the regulation of MS4s.

land development through these and other practices will assist in maintaining the water quality in the reservoir.

### *7.4.4 Unmanaged Agricultural Activities*

Agriculture can have a positive or a negative effect on natural resources. Agriculture is an essential part of the social and economic fabric in Scituate. Properly operated and managed agricultural operations can provide wildlife habitat and open space while providing food and economic activity. However, improperly managed agricultural practices can cause erosion, degrade soil, pollute waterways, and reduce ecological resilience. Operations that can cause nonpoint source pollution include poorly managed animal feeding operations; overgrazing; improper plowing practices; and improper application of pesticides, irrigation water, and fertilizer. There are government programs through the Natural Resource Conservation Service (NRCS) as well as best practice guidance through the Environmental Protection Agency (EPA) available that can help farmers with management of nonpoint source pollution. The Northern Rhode Island Conservation District (NRICD), through their partners at the USDA and NRCS, also provides free technical assistance and funding for implementing conservation practices on agricultural and forest land. One of the few certified organic operations in the state is in North Scituate, at the Elwood Orchard.

### *7.4.5 Uncontrolled Erosion and Sedimentation*

Land development, when not properly managed, can also have a detrimental effect on surrounding infrastructure and functioning of the natural environment. When proper site preparation and maintenance does not occur during development, excessive quantities of soil can erode from the site. This can result in costly repairs and damage to the environment. The sediment can clog stormwater infrastructure, muddy streams, and leave deposits of silt in ponds and reservoirs and is considered a major water pollutant.

The Town has adopted an erosion and sediment control ordinance to prevent soil erosion and sedimentation from occurring as a result of development. The ordinance applies to most activities that involve disturbance to the land, terrain, topsoil, or vegetative ground cover on nonagricultural property in the Town.

### *7.4.6 Other Pollution Sources*

Pollution sources come in various forms. Land uses like junkyards and salt storage areas pose a significant and obvious threat to natural resources, by degrading water resources and the species that depend on them. The Town does not allow junkyards as a permitted use, but often these items can accumulate on private property and pose a similar threat. These types of issues on private property often go undetected for long periods of time and can be more difficult to remedy once they have been discovered.

The Town does use road salt for winter roadway treatment. The salt is stored covered and protected from the weather to ensure that there is no threat to ground or surface water contamination from the storage piles. The Town will explore options to improve its storage practices and work with the state to implement best management practices for roadway application considering the sensitivity of the drinking water resource of the Scituate Reservoir.

In addition to large-scale sources, many households and small businesses contribute to pollution of the natural environment. Improper disposal and storage of paints, household cleaning chemicals, solvents, and waste oil can cause significant environmental pollution. Often, these issues can be avoided through proper education of residents on proper storage and disposal methods for various items.

Additionally, improper application of fertilizers, herbicides, and pesticides can have dramatic effects on water quality and ecological resources. These are of specific concern within the Scituate Reservoir Watershed, and a collaborative effort was initiated in 1993 to educate the public about these threats,

called the Scituate Reservoir Watershed Education Program. The Town has collaborated with the Northern Rhode Island Conservation District and Providence Water to co-sponsor the Neighbor-to-Neighbor Program, which gives new residents information about the watershed and land use activities.

Light can be a source of pollution that impacts not only humans, but wildlife. Artificial light can wreak havoc on natural body rhythms in both humans and animals. Light pollution is known to impact animal behavior such as migration patterns, wake-sleep habits, and habitat formation. The Town should make it a priority to minimize nighttime lighting on their Town owned properties and buildings, as well as during the site plan review process for new and rehab construction.

### *7.4.7 Climate Change and Invasive Species*

> ***"Changing weather and environmental conditions in Rhode Island caused by climate change are already placing communities, coastlines, forests and aging, vulnerable infrastructure at risk."***
>
> *Source: Resilient Rhody: An Actionable Vision for Addressing the Impacts of Climate Change in Rhode Island*

Climate change poses many threats to and impacts on Scituate's natural resources. Rising temperatures will cause more heat waves that will exacerbate energy demands to keep the community cool, furthering a local heating effect. Heat may stress native species and lead to disease in plants and animals. The frost-free season and the growing season will lengthen in the Northeast, causing a mix of impacts. The subsequent shorter winters will help farmers in some ways but can also contribute to the rise of pests that affect economic activities and natural systems. Precipitation patterns are also projected to increase over the coming years, as observed already in the last decade of record. Heavy precipitation can lead to increased flooding and damage to forests and streams if stormwater management is not properly updated to accommodate climate change. This will also lead to more strain on local dams due to changing upriver flows. Also, climate change is predicted to cause stronger, more frequent, and more intense hurricanes. Changes in regional climates could also bring southern hurricanes into New England, which can defoliate forests or significantly change wildlife habitat with winds and intense rainfall.

Climate change will affect local ecosystems and biodiversity. Changes in climate can also drive native species out of their homes or create inviting environments for invasive species. Invasive species drive out our native species and feed on or inhibit the growth of local crops. As sea levels rise, likely between one and eight feet by the year 2100, coastlines will be inundated with water and flooding, causing some people to relocate inland and putting further pressure on local resources. Planning for increased storms, heat, and other changes in climate should include consideration of nature-based solutions for resilience and protection of natural resources. Through planning, the effects of climate change can be somewhat mitigated by reducing fossil fuel consumption, water use, reducing waste, and sourcing products and services locally.

## 7.5 Scituate Reservoir

Developed between 1920 and 1926, and built to serve the City of Providence, the Scituate Reservoir and its protected, forested watershed occupy approximately 84% of the Town's land area. The creation of the reservoir greatly shaped the geography, economy, and population of present-day Scituate. Because several villages were displaced by construction of the Reservoir, the land area within Scituate is now dominated by rural watershed land with just a few settlements.

The lands south of the watershed boundary drain to the Pawtuxet River, and the land in the north part of the Town drains to the Reservoir. Fed by over 140 miles of streams and brooks, the total storage of the Scituate Reservoir system is 41.2 billion gallons, making it the largest fresh waterbody in the Rhode Island. An earth filled dam spans the North Branch of the Pawtuxet River, and an aqueduct transports water to the Phillip J. Holton water treatment plant. Average daily flow from the water treatment plant

is 73.1 million gallons per day (mgd). The Gainer (Kent) Dam, while a significant structure in the Town, is not a at significant risk of failure as it is well maintained at this time (2016 HMP).

The Scituate Reservoir and its watershed are essential components of a system that provides drinking water for approximately 60% of Rhode Island residents. Incorporating the Scituate Reservoir and five tributary reservoirs, the system is fed by a 93 square mile watershed, which includes most of the Towns of Scituate and Foster, and portions of Glocester, Johnston, Smithfield, and Cranston. The watershed predominantly consists of sparsely developed areas and forested land, representing about 9% of the land area of the state (RI Division of Planning, 2012).

When considering protection of the Scituate Reservoir, one must consider the associated watershed, and not just the reservoir itself. The major threat identified for the Scituate Reservoir is land use change and development. Only the core of the Scituate Reservoir watershed (about 25%) is protected from development. The remaining watershed land in private development is regulated by each individual Town. The PWSB and watershed municipalities work together to protect the high-quality water of the watershed. Providence Water is actively monitoring the watershed, land use, and acquiring conservation land to protect water quality. Protecting the watershed's ability to filter surface runoff saves the City-owned public utility in Providence from having to invest in additional expensive treatment facilities.

Another concern with the reservoir is that water supply entitlements as stated in legislation exceed supplies, especially as future demands increase from growing communities. Recommendations for zoning changes that would protect the quality of the reservoir and guide future growth in Scituate, Foster, and Glocester were made in the 1998 *Scituate Reservoir Watershed Zoning Project.*

In 1990 the Rhode Island Division of Statewide Planning completed and adopted the *Scituate Reservoir Watershed Management Plan,* State Guide Plan Element 125 (herein the "Scituate Reservoir Plan"). A major goal of the Scituate Reservoir Plan was to establish a long-term strategy to protect the water quality of the Scituate Reservoir. This Plan was incorporated into *Water Supply Plan 2030*, State Guide Plan Element 721 (herein "Water 2030") in 2012. The focus of *Water 2030* is similar to the Plan, but it takes a broader, more comprehensive look at water supply throughout the state. *Water 2030* sets two goals related to the Providence Water Reservoir System:

- Protect the health and ecological functions of the water resources (WRM-2)
- Ensure a reasonable supply of quality drinking water for the State (WRM-3)

For the Scituate Reservoir, achieving these goals means encouraging proactive watershed management and developing tools to minimize water quality impacts as well as pursuing water reuse, water efficiency, and promoting incentives to reduce demands. Recommendations for the Reservoir from *Water 2030* also include forest management, land acquisition and conservation, water sampling and water quality protection, land use planning and policy engagement, and education and outreach.

The *Scituate Reservoir Watershed Greenspace Strategy* report and associated 'greenspace maps' published in 2008 illustrate what Scituate Reservoir Watershed residents identify as the region's most important natural, cultural and recreational resources and how they think these resources should be protected. Physical plans and action strategies are identified for protecting the landscape and quality of life for residents throughout the watershed. Recommended actions include incorporating the findings into municipal Comprehensive Plans, and the policies and actions in this comprehensive plan reflect consideration of specific strategies to promote sustainable development while preserving community character and protecting the environment.

## 7.6 Opinion Survey of Scituate: Natural Resources

In May 2021, the Town posted an online survey for residents as part of the comprehensive planning process. The survey asked several questions related to the services and facilities provided by the Town

and school district. A full summary of the survey results can be found in Appendix A. In summary, the survey reported the following principal findings related to natural resources:

- A majority of survey respondents ranked open space as either very important (63.2%) or important (28.2%) to their quality of life in Scituate.
- When asked what types of measures it is important for the Town to engage in, 65.4% of respondents identified natural resource protection as very important, while 27.8% of respondents identified it as important.
- Survey respondents were asked to identify the types of activities that the Town can take that would be supported. Respondents overwhelmingly (73.9%) identified conserving wildlife habitat, while 21.7% indicated they would be supportive of such efforts. Similarly, 54.2% of respondents indicated they would be very supportive of efforts to promote and support agricultural activities, while 29.4% of respondents indicated they would be supportive of such efforts.
- Survey respondents were asked to rate how they felt about certain statements. When asked if the Town has done a good job of protecting its natural and environmentally sensitive features, 18% of respondents strongly agreed while 39.1% reported agreeing with such a statement. Only 7.9% of respondents indicated they disagreed, with 3.8% strongly disagreeing, with that statement.

These survey results indicate that overall, residents are satisfied with the Town's level of effort regarding natural resource protection, and that the community is relatively supportive of continuing and improving upon these efforts. Survey respondents appeared to link the value of natural resources in Town directly to their quality of life and indicated that they would be supportive of the Town's continued efforts to protect these resources.