

# TOWN OF SOUTH KINGSTOWN COMPREHENSIVE COMMUNITY PLAN 2021



**ADOPTED**  
South Kingstown Town Council - May 24, 2021

# TOWN OF SOUTH KINGSTOWN

## COMPREHENSIVE COMMUNITY PLAN

### 2021

---

#### OPEN LETTER FROM THE PLANNING BOARD AND TOWN COUNCIL

---

Dear fellow residents,

The Town's Comprehensive Community Plan represents a vision for a better South Kingstown, as articulated by its residents in conjunctions with the Town's Boards and Commissions. The aspirational aspects of the vision strongly support increasing property values, affordable housing options for our children, parents, and diverse workforce, and shared commercial and recreational spaces that are inviting, safe, connected, accessible, active and sustainable.

The overriding goal of the plan is to protect and harness the Town's rich historic heritage which include vibrant villages, natural landscapes, magnificent coastlines and topographical diversity, while addressing the challenges brought on by growth, climate change, and technological advances. The plan promotes a vision for orderly growth patterns that are appropriately scaled based upon the natural, cultural and historic character of the town and includes the promotion of value-added services and amenities that will meet the emerging needs of the 21st century and solidify our reputation as a sustainable, sought after, model community.

The very important relationship between the two functions of planning and zoning ensure that future actions correlate a seamless coordinated process by means of long-range planning. As dedicated Town stewards for the planning and zoning process, the Board and Council is particularly pleased to present to you the vision for South Kingstown for the future.

Sincerely,

Able Collins, President  
Town Council

F. Steven DiMasi, Chairman  
Planning Board

The South Kingstown Comprehensive Community Plan was adopted by the South Kingstown Town Council on [DATE], with approval by the Rhode Island Division of Statewide Planning in [DATE]. This Plan was prepared under the direction of the South Kingstown Planning Board, in accordance with Rhode Island General Laws Chapter 45-22.2, the "Rhode Island Comprehensive Planning and Land Use Regulation Act." The preparation of this Plan was supported by staff from the South Kingstown Planning Department and the consulting firm, Horsley Witten Group, Inc. This Plan supersedes all previously adopted versions of the South Kingstown Comprehensive Community Plan.

# TOWN OF SOUTH KINGSTOWN

## COMPREHENSIVE COMMUNITY PLAN

### 2021

---

#### ACKNOWLEDGEMENTS

The Town of South Kingstown sincerely thanks the residents, advocates, community leaders, stakeholders, and staff who have assisted in the development of this comprehensive community plan. The time and commitment to the planning process has been instrumental to the vision articulated in the plan.

---

#### South Kingstown Town Council

Able G. Collins, President  
Rory Mcentee, Vice President  
Deborah Bergner  
Deborah Kelso  
Jessica Rose

#### South Kingstown Planning Board

F. Steven Dimasi, Chair  
Maria H. Mack, Vice-Chair  
Peter J. Distefano  
Paul Jordan  
Joseph T. Murphy  
Pamela B. Rubinoff, Secretary  
Susan Spranger Axelrod  
*Jean (John) A. Riendeau (Former Member)*

#### South Kingstown Town Manager

Robert Zarnetske

#### South Kingstown Planning Board Staff

James D. Rabbitt AICP, Director of Planning  
Jay Parker, AICP, Cfm, Principal Planner  
Brian Wagner, Senior Planner  
Lynn Smith, Planning Associate  
Carol Baker, Gis Administrator  
*Kaela Gray, Former Dir. of Planning*

Conservation Commission	Economic Development Committee
Affordable Housing Collaborative	Historic District Commission
Union Fire District	Kingston Water District
Zoning Board Of Review	South Kingstown Land Trust
RIDEM Division Of Agriculture	University of Rhode Island
Peace Dale Neighborhood Revitalization, Inc	

# A VISION FOR SOUTH KINGSTOWN

SOUTH KINGSTOWN will continue its legacy as a welcoming, diverse, vibrant, and sustainable community, in which the tradition of high-quality village development balances seamlessly with the enduring value of the community's rich historic, cultural, and natural resources.

SOUTH KINGSTOWN officials will make decisions based on the desire to maintain the Town's social, economic, and environmental sustainability.

SOUTH KINGSTOWN will fight sprawl, choosing to focus development in the defined village areas, where the infrastructure, transportation, and social networks are best suited to support new growth.

SOUTH KINGSTOWN will continue to recognize the strength of its involved and proactive citizenry, the needs of its residents, businesses, students, and tourists, and the importance of the Town's abundant natural resources in planning for the future.

# TABLE OF CONTENTS

INTRODUCTION .....	1
CITIZENS .....	7
LAND USE .....	27
HOUSING .....	67
ECONOMIC DEVELOPMENT .....	107
NATURAL HAZARDS & CLIMATE CHANGE .....	129
NATURAL RESOURCES & OPEN SPACE .....	159
CULTURAL & HISTORIC RESOURCES .....	191
RECREATION .....	203
SERVICES & FACILITIES .....	223
ENERGY .....	254
CIRCULATION .....	269
UNIVERSITY OF RHODE ISLAND .....	287
IMPLEMENTATION .....	309

## AS SEPARATE DOCUMENTS:

**APPENDIX 1:** NATURAL RESOURCES AND OPEN SPACE INVENTORY

**APPENDIX 2:** VULNERABILITY MATRIX

**APPENDIX 3:** CULTURAL AND HISTORIC RESOURCES INVENTORY

**APPENDIX 4:** WATER SYSTEMS EXECUTIVE SUMMARIES

**APPENDIX 5:** RIDOT HIGHWAY FUNCTIONAL CLASSIFICATION SYSTEM

## LIST OF MAPS

### LAND USE

MAP 1: VILLAGES .....	31
MAP 2: SEWER SERVICE AREAS .....	32
MAP 3: EXISTING LAND USES .....	36
MAP 4: FUTURE LAND USE MAP .....	37
MAP 5: CURRENT ZONING .....	39
MAP 6: ZONING OVERLAY DISTRICTS .....	40
MAP 7: ZONING AND FUTURE LAND USE MAP ANALYSIS .....	50
MAP 8: BUILD-OUT ANALYSIS .....	55

### HOUSING

MAP 9: AGE OF RESIDENTIAL STRUCTURES .....	76
MAP 10: VILLAGE-CENTERED DEVELOPMENT FRAMEWORK .....	95

### NATURAL HAZARDS AND CLIMATE CHANGE

MAP 11: FEMA FLOOD ZONES IN SOUTH KINGSTOWN .....	138
MAP 12: HURRICANE INUNDATION IN SOUTH KINGSTOWN .....	139
MAP 13: SEA LEVEL RISE INUNDATION, MIDDLEBRIDGE AREA .....	140
MAP 14: SEA LEVEL RISE INUNDATION, EASTERN SALT PONDS AREA .....	141
MAP 15: SEA LEVEL RISE INUNDATION, SOUTH SHORE SALT PONDS .....	142
MAP 16: SEA LEVEL AFFECTING MARSH MIGRATION (1 FT SLR) .....	143
MAP 17: SEA LEVEL AFFECTING MARSH MIGRATION (3 FT SLR) .....	144
MAP 18: SEA LEVEL AFFECTING MARSH MIGRATION (5 FT SLR) .....	145
MAP 19: SHORELINE CHANGE IN WESTERN SOUTH KINGSTOWN .....	148
MAP 20: SHORELINE CHANGE IN EASTERN SOUTH KINGSTOWN .....	149

### NATURAL RESOURCES AND OPEN SPACE

MAP 21: PROTECTED OPEN SPACES .....	166
MAP 22: WETLANDS .....	167
MAP 23: WATERSHEDS .....	168
MAP 24: CRITICAL & ENVIRONMENTALLY SENSITIVE AREAS .....	169
MAP 25: GROUNDWATER RESOURCES .....	170
MAP 26: AGRICULTURAL RESOURCES .....	171
MAP 27: FORESTED AREAS.....	172

**CULTURAL AND HISTORIC RESOURCES**

MAP 28: CULTURAL & HISTORIC RESOURCES ..... 194

**RECREATION**

MAP 29: PASSIVE RECREATION SITES IN SOUTH KINGSTOWN ..... 208  
MAP 30: ACTIVE RECREATION SITES IN SOUTH KINGSTOWN ..... 209  
MAP 31: GEOGRAPHIC DISTRIBUTION OF SOUTH KINGSTOWN PARKS ..... 215

**SERVICES AND FACILITIES**

MAP 32: PUBLIC INFRASTRUCTURE ..... 230  
MAP 33: PUBLIC WATER SERVICE AREAS ..... 235

**ENERGY**

MAP 34: SMALL-SCALE SOLAR ENERGY SYSTEMS ..... 261  
MAP 35: MEDIUM-SCALE SOLAR ENERGY SYSTEMS ..... 262  
MAP 36: LARGE-SCALE SOLAR ENERGY SYSTEMS ..... 263

**CIRCULATION**

MAP 37: CIRCULATION SYSTEM ..... 272

**UNIVERSITY OF RHODE ISLAND**

MAP 38: DISTRIBUTION OF URI ALUMNI, FACULTY & STAFF (2018) ..... 291  
MAP 39: URI OWNED PROPERTIES ..... 292

## LIST OF TABLES

### CITIZENS

TABLE 1: SOUTH KINGSTOWN POPULATION AS PERCENT OF RI OVER TIME .....	8
TABLE 2: MEDIAN AGE .....	12
TABLE 3: RACE IN SOUTH KINGSTOWN .....	16
TABLE 4: 2018 AREA MEDIAN INCOME LIMITS BY HOUSEHOLD SIZE .....	23
TABLE 5: 2018 AREA MEDIAN INCOME LIMITS BASED ON PERCENTAGE OF AREA MEDIAN INCOME .....	23
TABLE 6: 2018 FEDERAL POVERTY LEVELS .....	26

### LAND USE

TABLE 7: COMPARISON OF ZONING DISTRICTS & FUTURE LAND USE DESCRIPTIONS .....	43
TABLE 8: RESULTS OF MUNICIPAL BUILD-OUT ANALYSIS .....	55
TABLE 9: TOTAL POTENTIAL UNITS & POPULATION .....	55
TABLE 10: COMPARISON OF 2010 & 2018 BUILD-OUT UNITS .....	55

### HOUSING

TABLE 11: CHANGES IN HOUSEHOLD TYPE SINCE 2000 .....	81
TABLE 12: HOUSEHOLDS WITH CHILDREN UNDER 18 .....	81
TABLE 13: EXISTING LMI HOUSING UNITS .....	88
TABLE 14: CONSTRUCTED/APPROVED LMI HOUSING UNITS .....	89
TABLE 15: PROJECTED LMI HOUSING PRODUCTION THROUGH 2030 .....	98
TABLE 16: POTENTIAL LOCATION SUMMARY CHART .....	99

### ECONOMIC DEVELOPMENT

TABLE 17: SOUTH KINGSTOWN EMPLOYMENT BY SECTOR .....	112
--	-----

### NATURAL HAZARDS AND CLIMATE CHANGE

TABLE 18: SOUTH KINGSTOWN NATURAL HAZARD FREQUENCY .....	132
TABLE 19: SOUTH KINGSTOWN NATURAL HAZARD RISK .....	133
TABLE 20: SOUTH KINGSTOWN PRIORITY IMPACTS OF NATURAL HAZARDS .....	136
TABLE 21: ADAPTATION APPROACHES .....	150
TABLE 22: NEEDS & OPPORTUNITIES RELATED TO PRIORITY IMPACTS .....	153

### NATURAL RESOURCES AND OPEN SPACE

TABLE 23: NATURAL RESOURCE-RELATED ZONING OVERLAY DISTRICTS .....	172
---	-----

TABLE 24: SOUTH KINGSTOWN OPEN SPACE ACREAGE (2018) ..... 173

**RECREATION**

TABLE 25: SOUTH KINGSTOWN-OWNED FACILITIES INVENTORY, CONDITIONS & SUMMARY .....210

TABLE 26: INVENTORY OF OTHER RECREATIONAL FACILITIES IN SOUTH KINGSTOWN . 211

TABLE 27: SUMMARY OF RECREATIONAL FACILITIES IN SOUTH KINGSTOWN ..... 211

TABLE 28: NRPA PARK TYPE STANDARDS ..... 212

TABLE 29: SOUTH KINGSTOWN STANDARDS FOR FACILITY OFFERINGS ..... 213

TABLE 30: ADDITIONAL SOUTH KINGSTOWN PARK TYPE STANDARDS ..... 213

TABLE 31: COMPARISON OF TOWN-OWNED PARKS & COMMUNITY NEEDS ..... 214

TABLE 32: FUTURE (2026) ACTIVE RECREATIONAL FACILITY NEEDS ..... 218

**SERVICES AND FACILITIES**

TABLE 33: SEWAGE TREATMENT PLANT CAPACITY ..... 234

TABLE 34: WATER SYSTEMS FACTS ..... 236

TABLE 35: STORMWATER STRUCTURES IN SOUTH KINGSTOWN AS OF MARCH 2019 ... 238

TABLE 36: SOUTH KINGSTOWN SCHOOL DISTRICT TOTAL ENROLLMENT, ACTUAL & PROJECTIONS ..... 241

**CIRCULATION**

TABLE 37: PRIVATE VEHICLE ACCESS ..... 277

TABLE 38: COMMUTING PATTERNS ..... 278

TABLE 39: STATE PRIORITY FREIGHT PROJECTS ..... 281

**UNIVERSITY OF RHODE ISLAND**

TABLE 40: URI ENROLLMENT ..... 297

TABLE 41: URI UNDERGRADUATE ON-CAMPUS RESIDENCE ..... 297

TABLE 42: URI FACULTY, FULL-TIME EMPLOYEES ..... 298

TABLE 43: URI FY-2018-2023 CAPITAL IMPROVEMENTS ..... 301

## LIST OF FIGURES

### CITIZENS

FIGURE 1: SOUTH KINGSTOWN POPULATION .....	8
FIGURE 2: SOUTH KINGSTOWN POPULATION AS A PERCENT OF RI & WASHINGTON COUNTY .....	8
FIGURE 3: PERCENT POPULATION GROWTH PER DECADE .....	10
FIGURE 4: ON- & OFF-CAMPUS POPULATION, 2000 & 2010 .....	13
FIGURE 5: SOUTH KINGSTOWN POPULATION BY AGE GROUP, 2000 THROUGH 2017 .....	14
FIGURE 6: SOUTH KINGSTOWN POPULATION CHANGE BY AGE GROUP, 2000-2010 & 2010-2017 .....	15
FIGURE 7: SOUTH KINGSTOWN PERSONS IDENTIFYING AS HISPANIC OR LATINO .....	16
FIGURE 8: SOUTH KINGSTOWN AVERAGE ANNUAL UNEMPLOYMENT RATE .....	17
FIGURE 9: TYPE OF EMPLOYMENT IN SOUTH KINGSTOWN .....	18
FIGURE 10: OCCUPATION IN SOUTH KINGSTOWN .....	18
FIGURE 11: SOUTH KINGSTOWN EMPLOYMENT BY INDUSTRY .....	19
FIGURE 12: EDUCATIONAL ATTAINMENT .....	20
FIGURE 13: MEDIAN HOUSEHOLD INCOME .....	21
FIGURE 14: MEDIAN ANNUAL INDIVIDUAL EARNINGS IN SOUTH KINGSTOWN, AGE 25+ .....	21
FIGURE 15: SOUTH KINGSTOWN HOUSEHOLD INCOME GROUPS .....	22
FIGURE 16: SOUTH KINGSTOWN HOUSEHOLDS AT OR BELOW THE AREA MEDIAN INCOME .....	25
FIGURE 17: SOUTH KINGSTOWN HOUSEHOLDS AT OR BELOW THE AREA MEDIAN INCOME, BY TENURE .....	25
FIGURE 18: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL .....	26
FIGURE 19: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL, WITH HOUSEHOLDERS OVER AGE 65 .....	26
FIGURE 20: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL, WITH CHILDREN UNDER AGE 18 .....	27
FIGURE 21: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL, WITH A HOUSEHOLDER WHO WORKED IN THE PREVIOUS 12 MONTHS ...	27

### LAND USE

FIGURE 22: FUTURE LAND USE MAP CATEGORIES .....	40
---	----

## **HOUSING**

FIGURE 23: PERCENT INCREASE IN HOUSING UNITS .....	75
FIGURE 24: HOUSING TENURE .....	75
FIGURE 25: 2017 HOUSING UNIT OCCUPANCY .....	76
FIGURE 26: SEASONAL HOUSING .....	76
FIGURE 27: HOUSING TYPES IN SOUTH KINGSTOWN .....	77
FIGURE 28: YEAR BUILT, OCCUPIED HOUSING UNITS .....	79
FIGURE 29: NEW DWELLING UNITS SINCE 2004 BY TYPE .....	79
FIGURE 30: 2017 HOUSEHOLD SIZE BY TENURE .....	80
FIGURE 31: CHANGES IN HOUSEHOLD SIZE SINCE 2000 .....	81
FIGURE 32: SINGLE-FAMILY MEDIAN SALES PRICE .....	83
FIGURE 33: CONDOMINIUM MEDIAN SALES PRICE .....	83
FIGURE 34: INCREASE IN RENTAL PRICES SINCE 1990 .....	84
FIGURE 35: RENTAL PRICES SINCE 2006 .....	84
FIGURE 36: HOUSING COST BURDEN BY TENURE .....	90
FIGURE 37: HOUSING COST BURDEN BY INCOME LEVEL .....	91

## **ECONOMIC DEVELOPMENT**

FIGURE 38: MEANS OF TRANSPORTATION TO WORK .....	115
--	-----

## **NATURAL HAZARDS AND CLIMATE CHANGE**

FIGURE 39: COMMUNITY VULNERABILITY ASSESSMENT PROCESS .....	135
---	-----

## **NATURAL RESOURCES AND OPEN SPACE**

FIGURE 40: SOUTH KINGSTOWN FOOD OPPORTUNITIES – 2016 .....	177
FIGURE 41: SOUTH KINGSTOWN FOOD NEEDS – 2016 .....	178

## **ENERGY**

FIGURE 42: MUNICIPAL BUILDING ENERGY USAGE .....	260
--	-----

# INTRODUCTION

---



## WHAT IS THE COMPREHENSIVE COMMUNITY PLAN?

This Plan is a policy document designed to guide the future growth and development of South Kingstown by:

**ENVISIONING** a better future;  
Giving **VOICE** to needs;  
Recognizing **OPPORTUNITIES**;  
**GUIDING** decision-making; and  
**INSPIRING** action.

This Plan was crafted over a 24-month process, where the voices of over 450 residents, business owners, and other stakeholders came together to define the place South Kingstown wants to be and a path for moving towards that place.

It is through the Comprehensive Community Plan that South Kingstown articulates how it will sustain itself – economically, socially, and physically – while maintaining a high quality of life and preserving the aspects of the community that add to our sense of place and overall attraction. This Plan sets forth a vision for the community – a glimpse of what South Kingstown aspires to be in 20 years or more – and lays out the specific path that, if followed, will achieve the vision. This Plan broaches important topics that will be critical for South Kingstown’s continued success and livability, and gives foresight and purpose to future action.

This Plan is a valuable community tool, which can be used to guide local decision-making on important topics, give direction to private development, and encourage economically, socially, and environmentally sustainable community growth. This Plan, with its thoughtful and comprehensive goals, policies, and actions, protects the community’s vision and strengthens its every step.

**THIS IS WHY WE PLAN.**

---



## HOW TO USE THIS PLAN

### CHAPTER CONTENTS

The Comprehensive Community Plan is broken up into thirteen-chapters or elements. Each chapter addresses a different topic and the subject of each chapter are listed below:

**Citizens**

**Land Use**

**Housing**

**Economic Development**

**Natural Hazards & Climate Change**

**Natural Resources & Open Space**

**Cultural & Historic Resources**

**Recreation**

**Services & Facilities**

**Energy**

**Circulation**

**The University of Rhode Island**

**Implementation**

### INTERRELATIONS AND CROSS-CUTTING THEMES

#### INTERRELATIONS

The Town of South Kingstown recognizes that none of the elements of this Plan stand alone. Dividing this Plan into different chapters/elements is necessary for laying out all the data, research, goals, policies, and actions in a coherent way. However, each of these elements are interrelated with one another. A strong economy, the availability of homes of various types and prices, a robust transportation network, a healthy environment, and preservation of

sites and cultural assets all work together to support local quality of life and create a sense of place.

## CROSS CUTTING THEMES

To maintain awareness of these interrelations, the Town has identified several cross-cutting themes that span and weave through several elements. There are icons for each of these cross-cutting themes, and they have been placed

throughout the document as a simple visual reminder of how and where these themes impact aspects of the plan.



What do each of these cross-cutting themes mean?

### Social Resilience



Everything in this Plan is geared toward people. Social resilience is about improving quality of life and increasing opportunities for success for every South Kingstown resident.

### Sustainability



Decisions in Town are made with an eye toward their long-term impacts and viability, considering climate change, sea-level rise, air quality, and natural resources.

### Village-Centered Development



Land use in Town is focused on walkable communities, protection of rural areas, access to goods and services, more mixed-use, better transit connections, and infill development.

### Healthy Communities



The Town recognizes that the built environment is critical to good public health outcomes, from offering opportunities for active living to ensuring access to good quality local produce.

### Changing Population

The Town's population is changing. Millennials are having fewer children than previous generations, and the population is aging, which has implications for all chapters in this plan. If the Town creates places that are accessible to our aging residents, they will be accessible to all residents.

## SPECIAL CHAPTERS



## **CITIZENS**

The first chapter, Citizens, is different from the rest in that it exists to provide a picture of the people who live within South Kingstown. The data included in this chapter affects how we assess community needs, as well as what policies and actions are chosen to make progress towards goals. This chapter doesn't contain a vision statement, goals, guiding principles, or any of the other subjects explained in more detail below. It simply provides a summary of who we are as a community.

## **IMPLEMENTATION**

The last chapter of this Plan, Implementation, includes a matrix of all action items in the plan, including a time frame and responsible parties. It also includes a schedule by which the Town's zoning ordinance and zoning map will be amended to provide consistency with this Comprehensive Community Plan.

## **CHAPTER CONTENTS**

All other chapters in the document are formatted as follows.

### **VISION**

Each chapter begins with a vision statement, or a declaration of what South Kingstown wants to be in the future. Each vision statement fits within the overall vision for the Town, found in the opening (third page from cover page) of this document, but is specific to the topic being considered.

### **GOALS**

The Plan's Goals represent the end state to which the Plan and the community strives.

### **GUIDING PRINCIPLES**

Each chapter contains a set of Guiding Principles. The Plan's Guiding Principles are the foundational truths on which the Plan is based. These statements guide the Plan's assessment of needs and opportunities, and the selection of appropriate policies and actions. The Guiding Principles make clear and acknowledge the fundamental values of the community.

### **BASELINE SUMMARY**

Each chapter contains a baseline, summarizing key points and providing important information and data that should be acknowledged while reading the chapter.

### **CURRENT PRACTICE**

Also, within each chapter are statements about Current Practice. When

### **GOALS**

Desired outcomes of implementing the Plan. Simple, broad, high-reaching.

### **GUIDING PRINCIPLES**

The foundational values the community asserts to be true.

### **CURRENT PRACTICES**

The things the Town is currently doing to make progress toward its goals.

### **POLICIES**

Statements that guide municipal decision makers so that all decisions help achieve the goals.

### **ACTIONS**

Specific, measurable acts whose implementation will bring South Kingstown closer to achievement of its goals.

assessing needs and opportunities relative to a topic area, it is important to provide background information regarding what the Town is already doing to reach its Goals.

### **NEEDS & OPPORTUNITIES**

With the Goals, Guiding Principles, and Current Practices in mind, each chapter includes an assessment of the community's needs and opportunities relative to the topic. These assessments are based on the Town's existing conditions and community input. It is the needs and opportunities, the identification of gaps, whether in services, land use allocation, regulations, or community benefits, that lead to determining what should be done to achieve the vision.

Where appropriate, the data on which the assessments are based are included in the chapter. If you are interested in a more in-depth analysis of the existing conditions from which the needs and opportunities arise, check out the Existing Conditions Data in Appendix 1: Natural Resources and Open Space Inventory.



## POLICIES & ACTIONS

The Plan's policies and actions provide the path by which South Kingstown can achieve its vision. Within a Comprehensive Community Plan, policies and actions each have different purposes. Working together, the Plan's policies and actions lead to a future in which the goals and vision, are realized.

The full implementation matrix, including responsible parties and time frames, are found in the Implementation Chapter.

## PUBLIC INPUT PROCESS

Robust public participation is the cornerstone of effective community planning. During this update to the South Kingstown Comprehensive Community Plan, the public was engaged often and early. Members of the public were welcomed to join discussions during Planning Board work sessions, and three public outreach events were held to collect input. Citizens were provided with opportunities to engage both in person and electronically through creation of a project website and development of an "opt-in" email list.

## PUBLIC PARTICIPATION BY THE NUMBERS

**1 project website was created**

**244 people subscribed to the Comprehensive Plan email update list**

**Over 50 people** attended the **Public Kick-Off Event** held in January 2017

Approximately **100 people** visited the **Open House** held in January 2017

The Planning Board worked on the Plan during **13 public meetings**

Other than the Planning Board, **5 South Kingstown Boards and Committees provided advisory opinion** on elements of the Plan, including the Conservation Commission, Economic Development Committee, Bicycle and Pedestrian Advisory Committee, Affordable Housing Collaborative, Historic District Commission

**50 people** attended a **Public Workshop** in June 2018

**14 people** provided **written comments** on the full draft Plan during the final public comment period



Get Oriented Here!

WELCOME

# CITIZENS

---



**SOUTH KINGSTOWN** will continue to recognize the strength of its **involved** and **proactive** citizenry

---

This chapter provides information about the people who live in South Kingstown. The population's characteristics that affect how we define the community's needs, and the policies and actions we use to achieve desired goals. When planning for land use, housing, economic development, circulation - in fact all of the topics within the Comprehensive Community Plan - we begin with an understanding of who we are as a community.

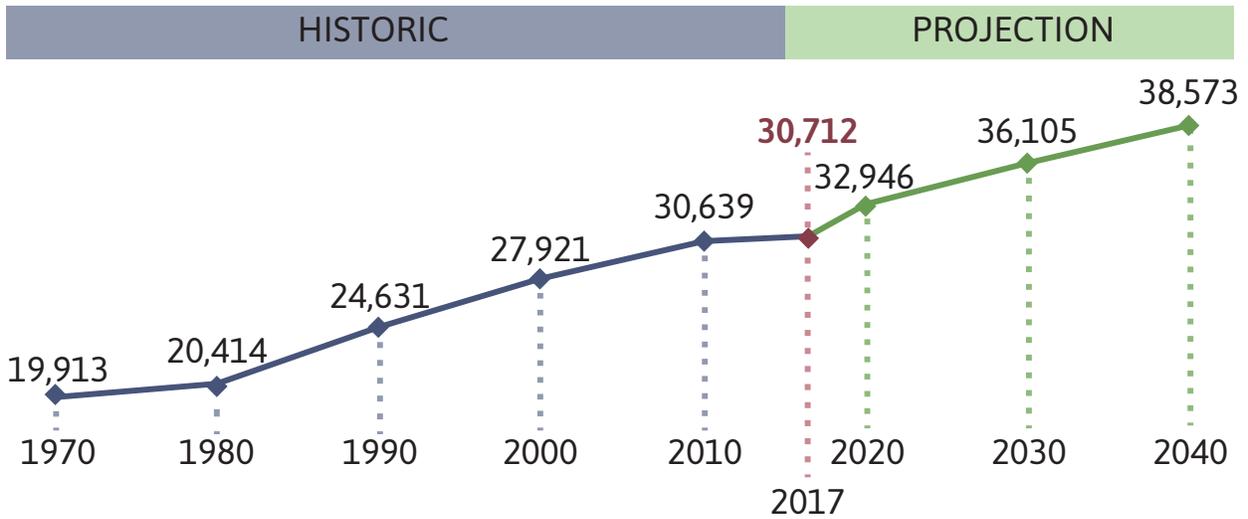


## POPULATION GROWTH

According to 2017 U.S. Census Bureau estimates, the population of South Kingstown was 30,712 representing a marginal increase over the population in 2010. The rate of population growth has decreased over the past three decades.

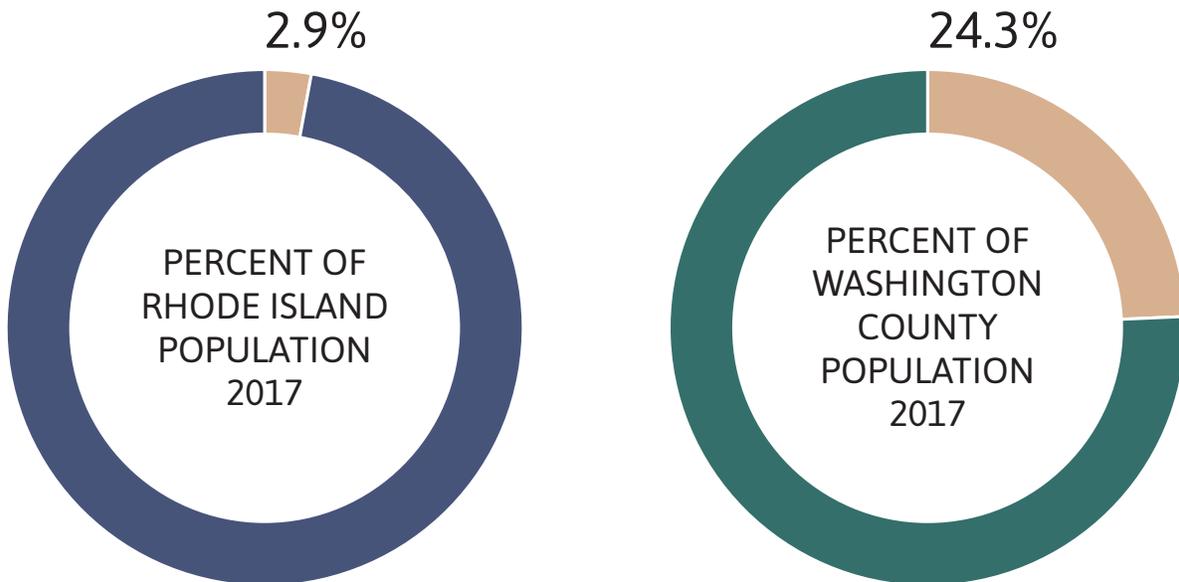
**FIGURE 1: SOUTH KINGSTOWN POPULATION**

Source: U.S. Census Bureau decennial census (historic); RI Division of Statewide Planning (projection)



**FIGURE 2: SOUTH KINGSTOWN POPULATION AS A PERCENT OF RI & WASHINGTON COUNTY**

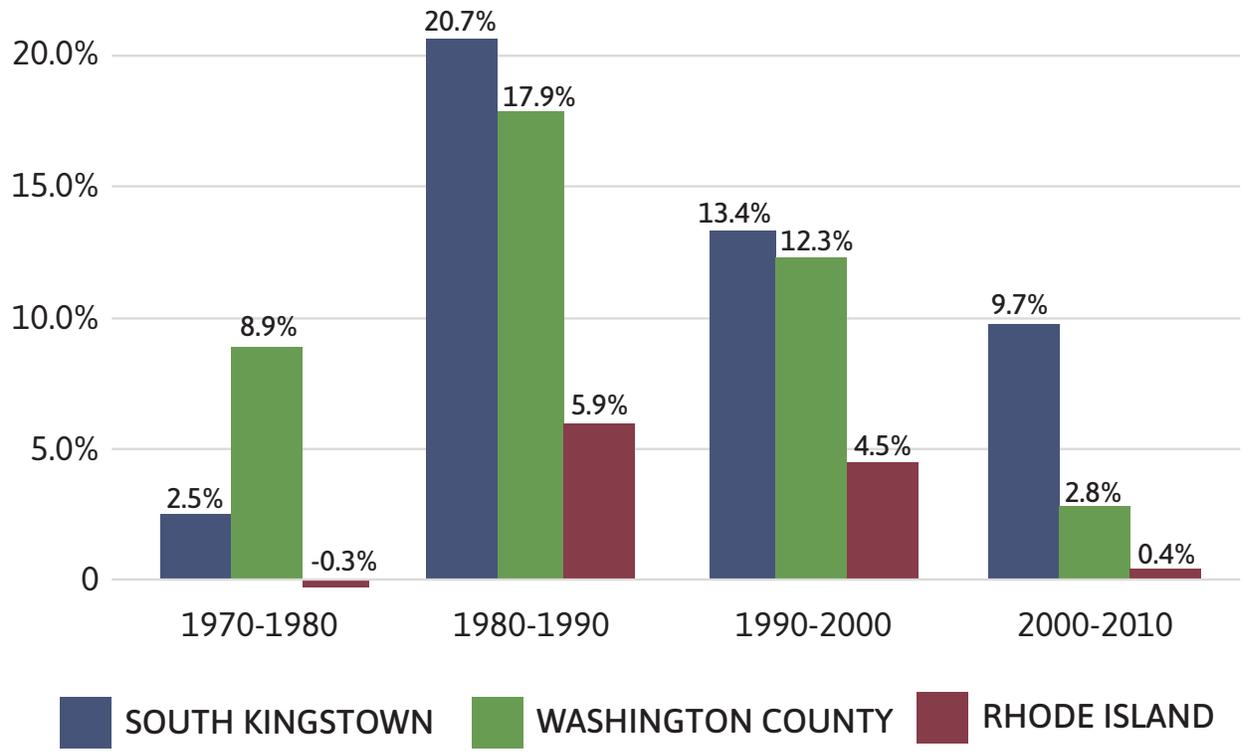
Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



The current South Kingstown population represents 2.9% of the State’s population and 24.3% of the population of Washington County. As the southern section of the State has continued to grow, the Town’s share of the State population has continued to increase (U.S. Census).

**FIGURE 3: PERCENT POPULATION GROWTH PER DECADE**

Source: U.S. Census Bureau decennial census



**TABLE 1: SOUTH KINGSTOWN POPULATION AS PERCENT OF RI OVER TIME**

Source: U.S. Census Bureau decennial census

YEAR	SOUTH KINGSTOWN POPULATION	PERCENT OF RHODE ISLAND POPULATION
1980	20,414	2.2%
1990	24,631	2.5%
2000	27,921	2.7%
2017	30,712	2.9%



## THE URI EFFECT

### POPULATION GROWTH

The U.S. Census Bureau gathers decennial census information while the University of Rhode Island (URI) is in session. Therefore, the population residing on-campus and in off-campus housing within South Kingstown is counted toward the Town’s overall population figure. The URI on-campus population shows up in the Census as the “non-institutionalized population living in group quarters.” The share of the total population falling into this category has increased over time.

Between 2000 and 2010, the U.S. Census Bureau records the Town’s population growth as 2,712 persons. However, when growth is further broken out between on-campus and off-campus populations, we find that nearly half (47%) of the population growth occurred on-campus.

### POPULATION AGE

URI students have an effect on the median age of South Kingstown’s population as well. While the population is generally aging the median age has historically been lower than that of Washington County and the State of Rhode Island as a whole.



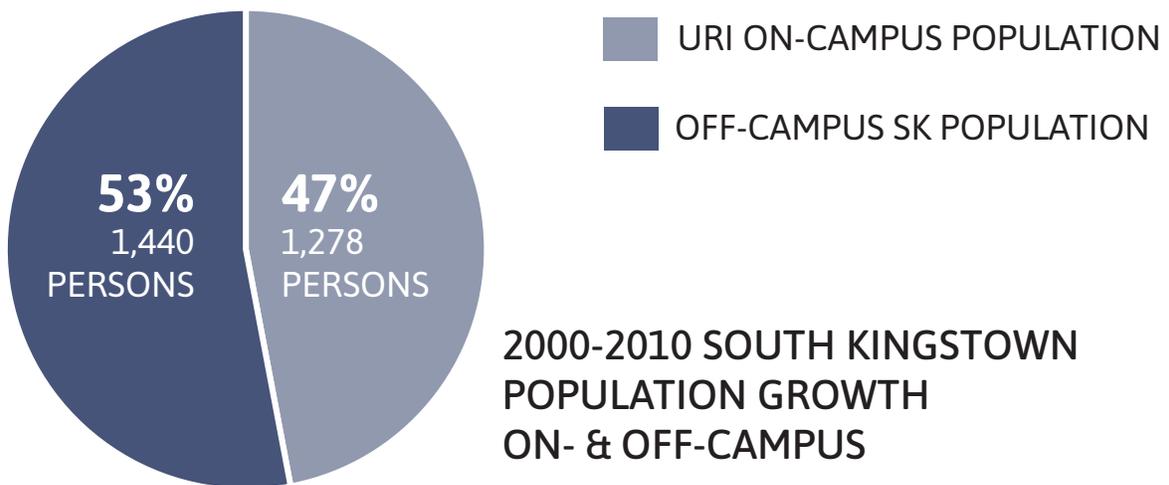
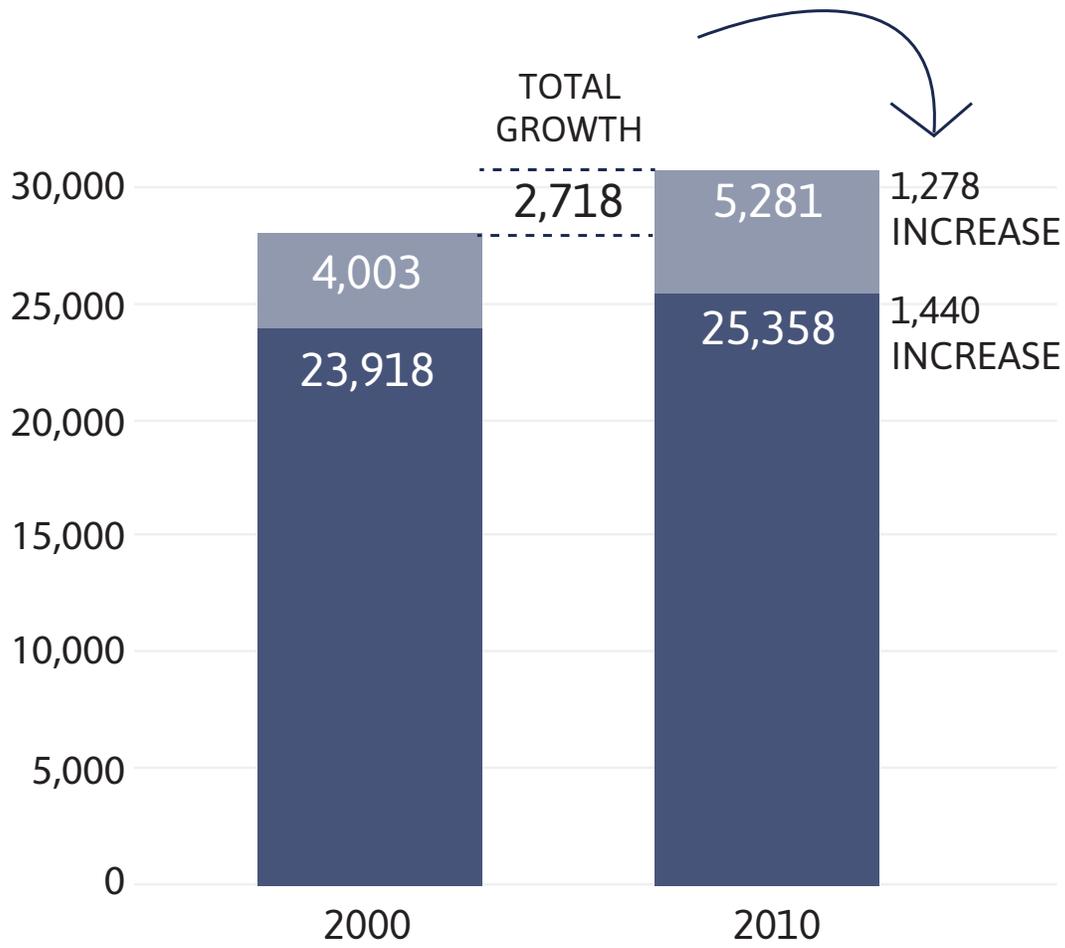
**TABLE 2: MEDIAN AGE**

Source: U.S. Census Bureau decennial census, 2013-2017 American Community Survey 5-Year Estimates

YEAR	SOUTH KINGSTOWN	WASHINGTON COUNTY	RHODE ISLAND
1980	24.3	28.5	31.7
1990	27.7	34.0	34.0
2000	33.6	37.4	36.7
2010	35.7	41.4	39.5
2017	36.4	44.1	39.9

### FIGURE 4: ON- & OFF-CAMPUS POPULATION, 2000 & 2010

Source: U.S. Census Bureau decennial census





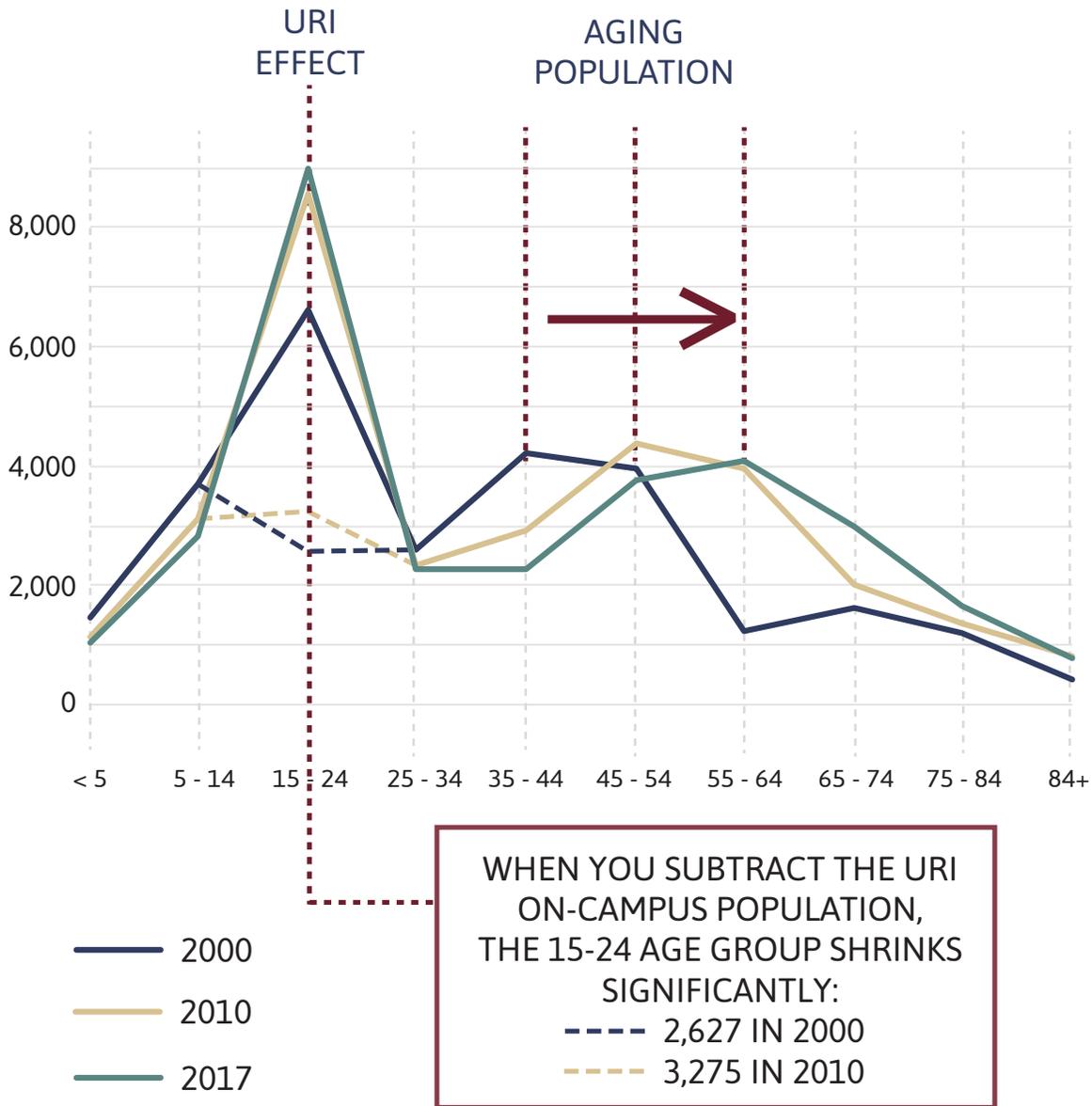
## AN AGING POPULATION

The population of South Kingstown is aging. While there remains a significant 15-18 year old population, this is largely due to the presence of URI in the community. Outside of this population group, the largest population group is made up of persons aged 55 to 64. Historic population data shows the aging of this population group over time.



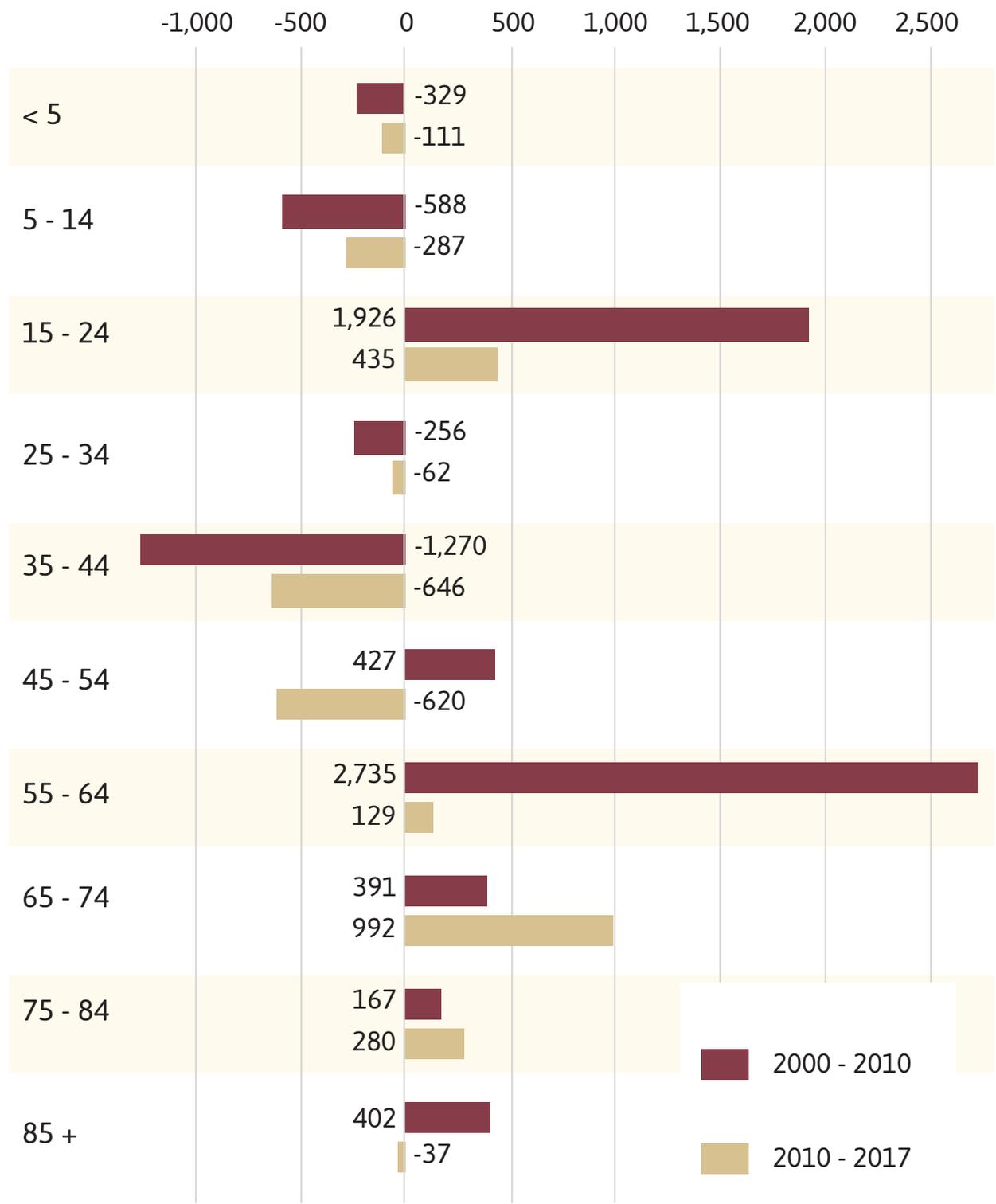
### FIGURE 5: SOUTH KINGSTOWN POPULATION BY AGE GROUP, 2000 THROUGH 2017

Source: U.S. Census Bureau decennial census, 2013-2017 American Community Survey 5-Year Estimates



**FIGURE 6: SOUTH KINGSTOWN POPULATION CHANGE BY AGE GROUP, 2000-2010 & 2010-2017**

Source: U.S. Census Bureau decennial census, 2013-2017 American Community Survey 5-Year Estimates





## RACIAL DIVERSITY

South Kingstown remains a community with little racial diversity. The U.S. Census Bureau estimates that 90.4% of the community currently identifies as “white alone.” However, while still representing a small portion of the population, the Hispanic or Latino community in South Kingstown is growing.

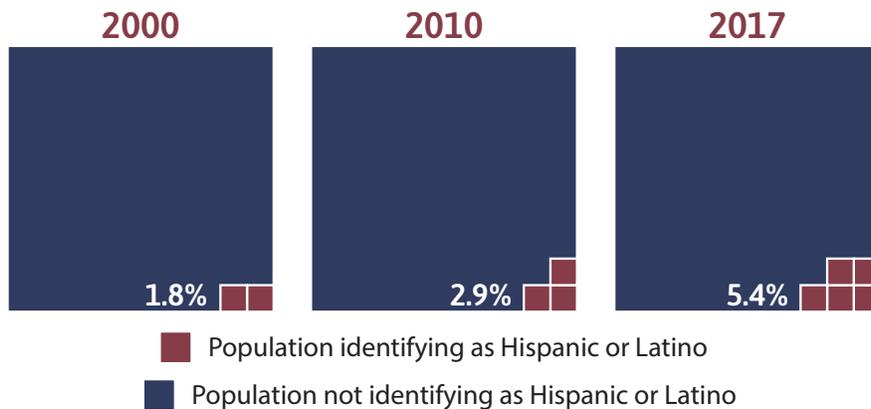


**TABLE 3: RACE IN SOUTH KINGSTOWN**

Source: U.S. Census Bureau decennial census, 2013-2017 American Community Survey 5-Year Estimates

	RACE	PERSONS	% OF SOUTH KINGSTOWN POPULATION
One Race	White	27,774	90.4%
	Black or African American	838	2.7%
	American Indian and Alaska Native	437	1.4%
	Asian	490	1.6%
	Native Hawaiian and Other Pacific Islander	0	0.0%
	Some Other Race	409	1.3%
	Two or More Races	764	2.5%
<b>TOTAL, NOT WHITE ALONE</b>		<b>2,938</b>	<b>9.6%</b>

**FIGURE 7: SOUTH KINGSTOWN PERSONS IDENTIFYING AS HISPANIC OR LATINO**

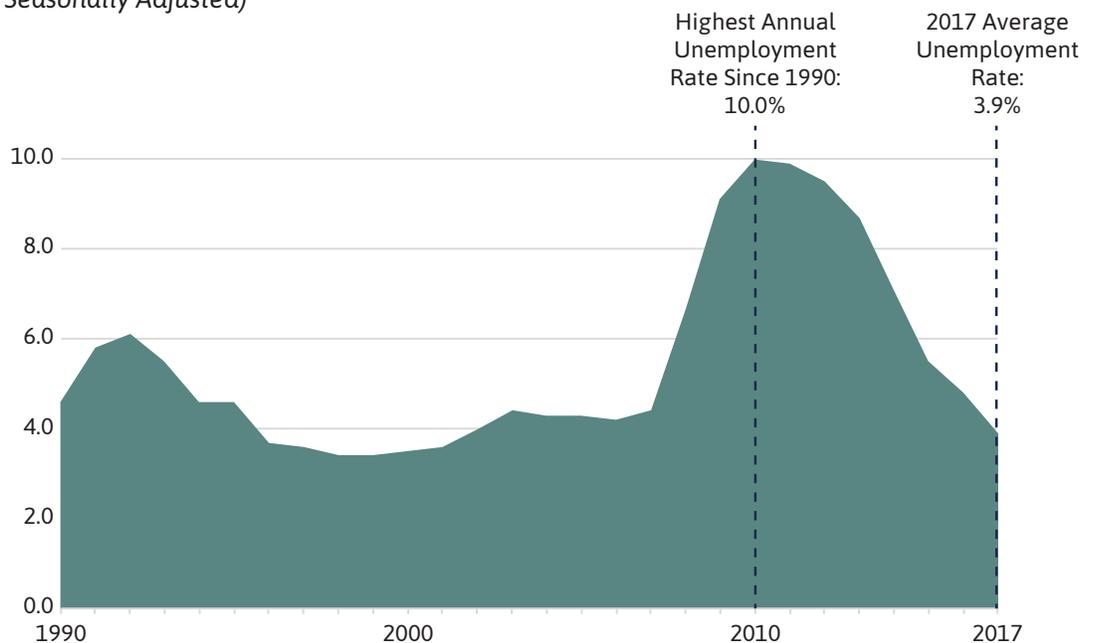


## EMPLOYMENT

The Rhode Island Department of Labor and Training reports that as of October 2018, the unemployment rate in South Kingstown was only **2.4%**.

### FIGURE 8: SOUTH KINGSTOWN AVERAGE ANNUAL UNEMPLOYMENT RATE

Source: Rhode Island Department of Labor and Training, Labor Force Statistics (Not Seasonally Adjusted)



- ◆ The U.S. Census Bureau estimates a total of **15,026** South Kingstown residents are within the civilian employed population, aged 16 and over.
- ◆ The majority of South Kingstown’s employed labor force are identified as “private wage salary workers” (73%).
- ◆ Over 20% of South Kingstown’s employed labor force work for a government entity.
- ◆ The largest occupational group is “management, business, science and arts occupations” (46.9%).
- ◆ Over 30% of the labor force identifies as within the “educational services, and health care and social assistance” industry.



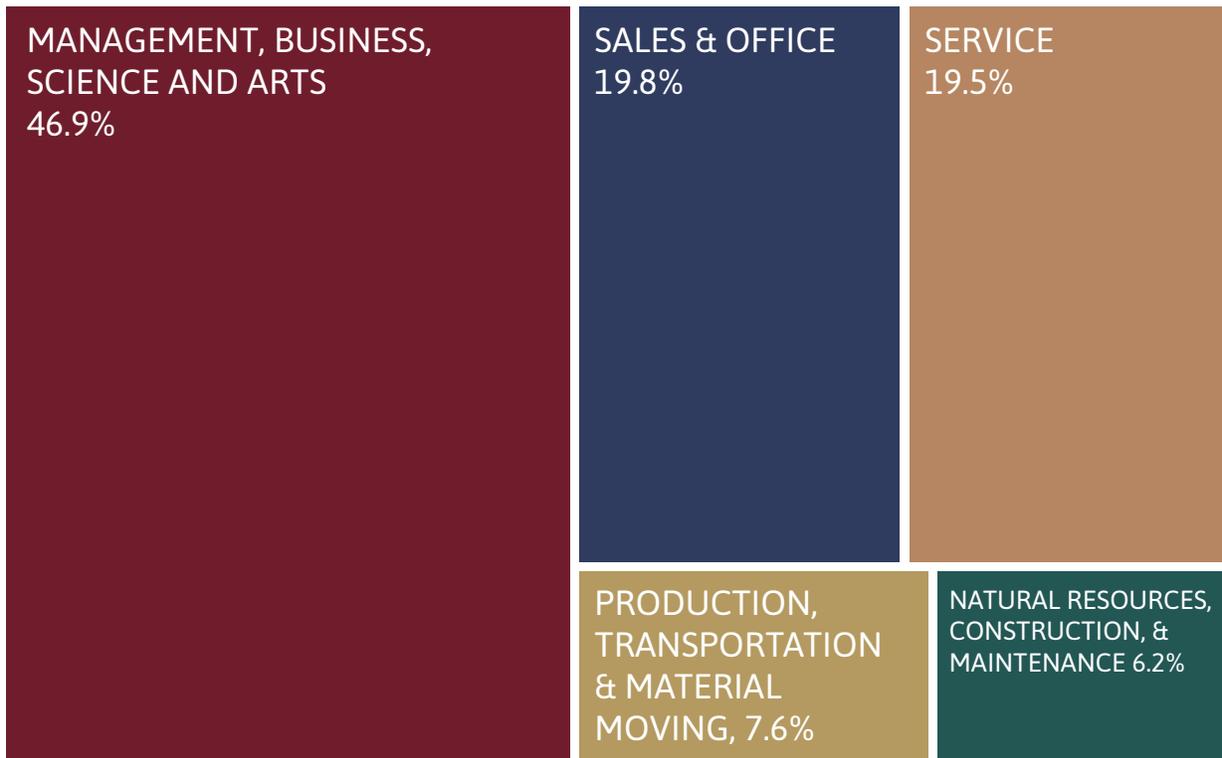
### FIGURE 9: TYPE OF EMPLOYMENT IN SOUTH KINGSTOWN

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



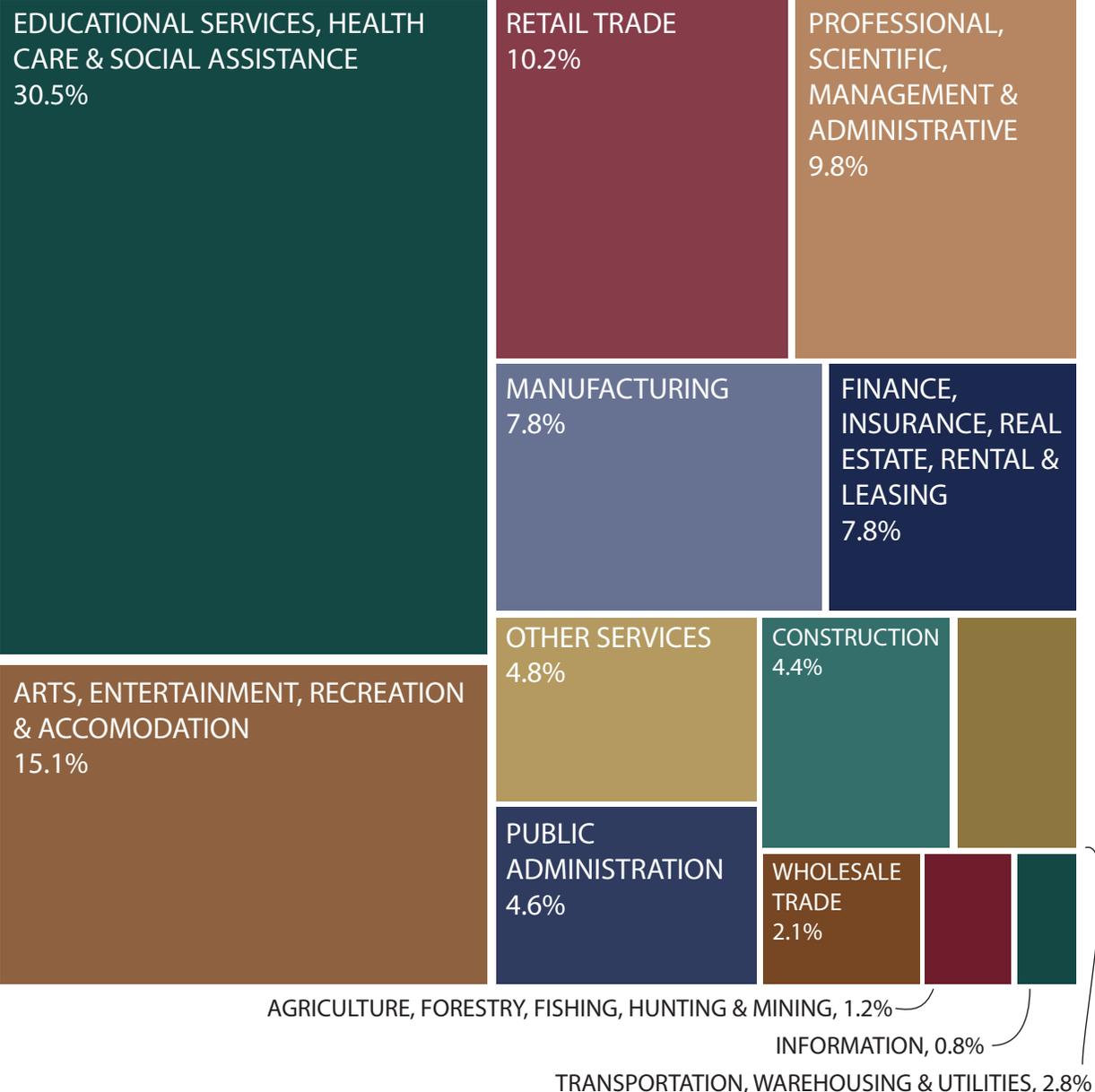
### FIGURE 10: OCCUPATION IN SOUTH KINGSTOWN

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



**FIGURE 11: SOUTH KINGSTOWN EMPLOYMENT BY INDUSTRY**

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates





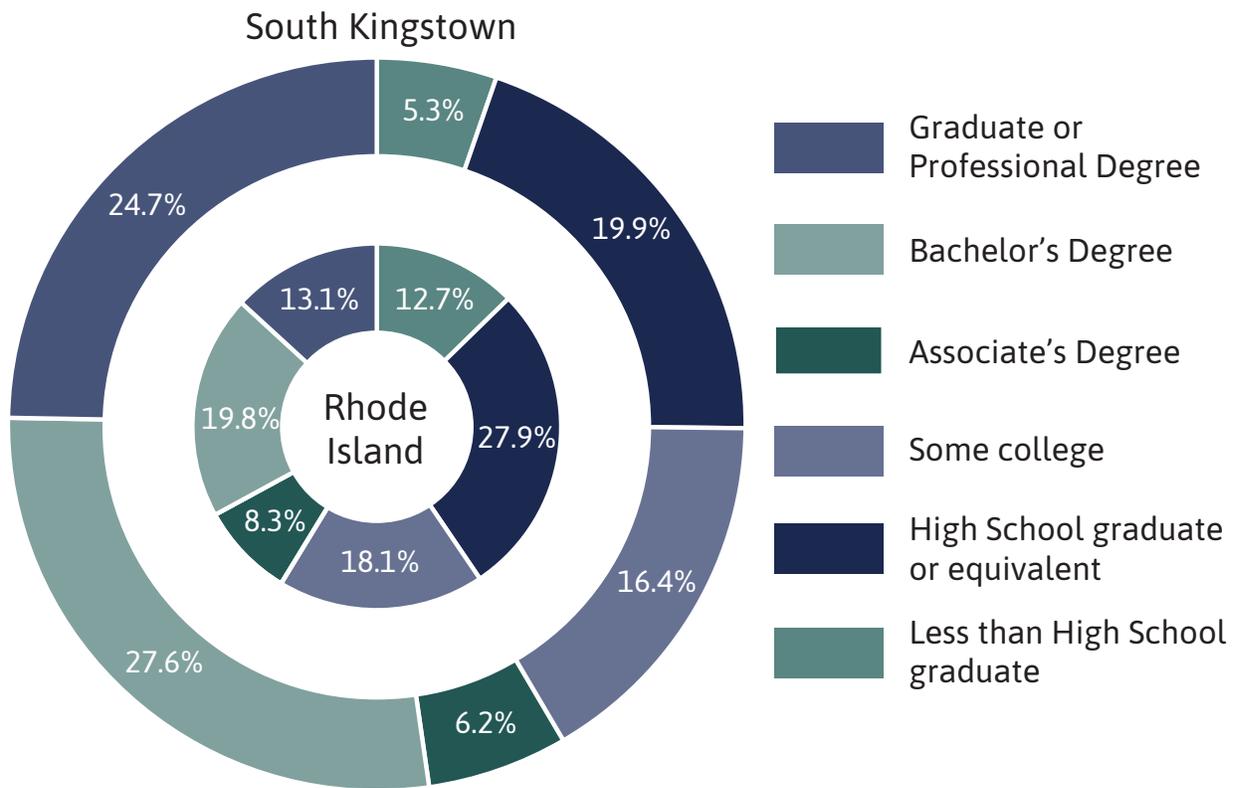
## EDUCATION

The citizenry of South Kingstown are generally well educated, especially when compared to the State as a whole. The Census Bureau estimates that 94.7% of South Kingstown’s citizens aged 25 and older have graduated high school or received high school equivalency, whereas only 84.7% of Rhode Island residents of the same age have received a high school diploma. Also, over 52% of South Kingstown residents aged 25 and older have received either a Bachelor’s, Master’s or other professional degree, whereas only 33% of the state population of the same age hold such degrees.

The educational status of South Kingstown’s citizens also influences earnings, as described in the following section.

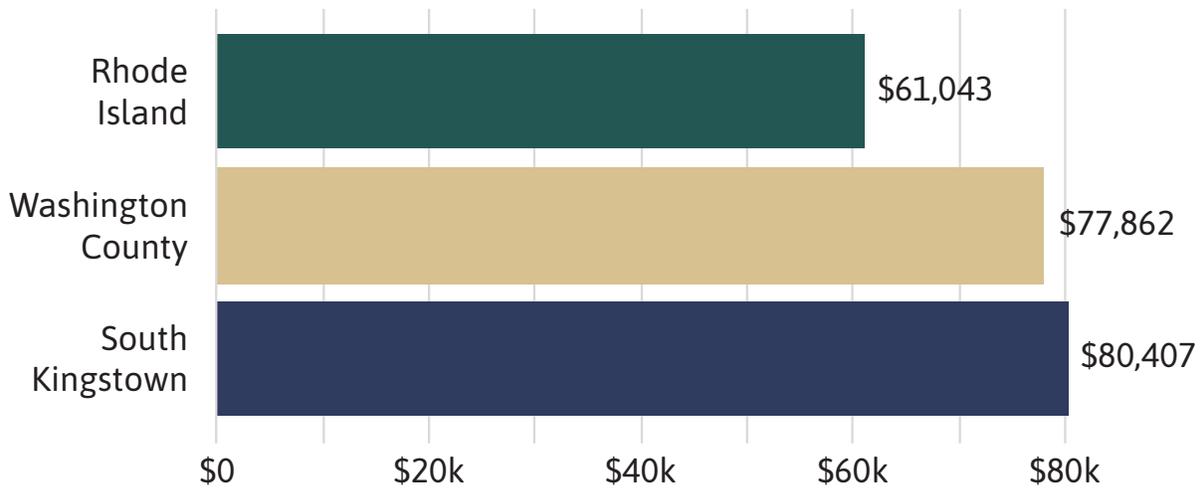
**FIGURE 12: EDUCATIONAL ATTAINMENT**

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



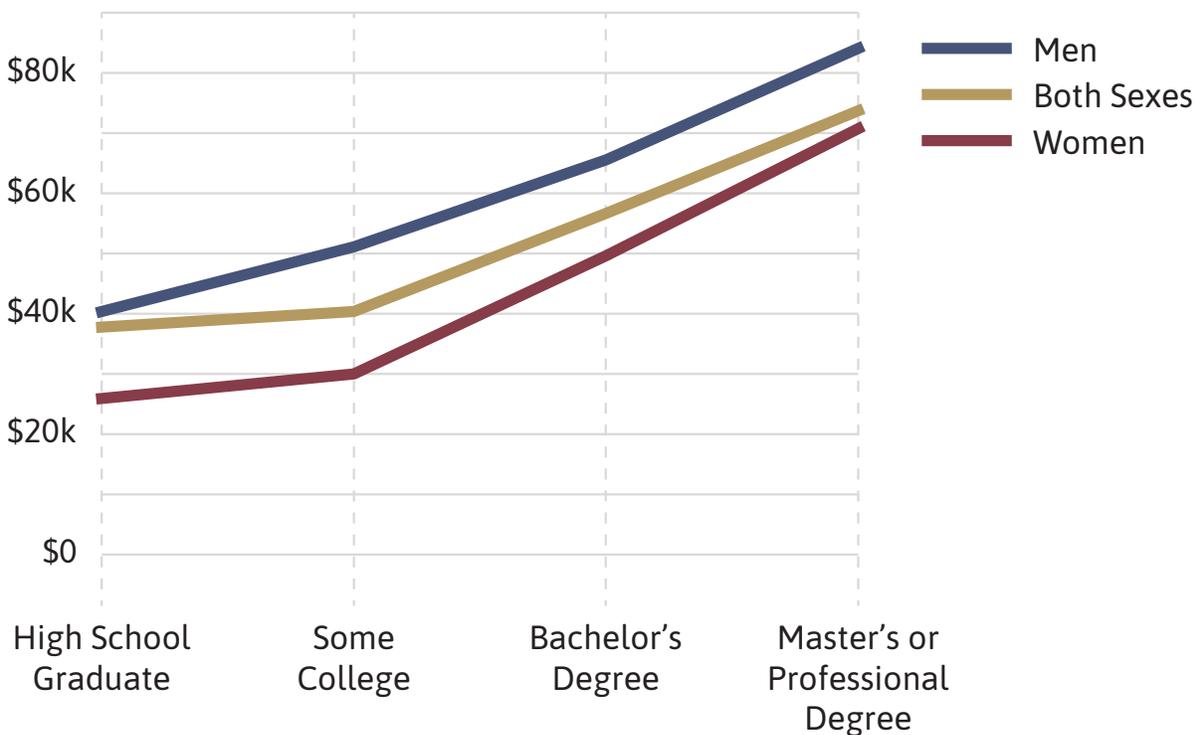
### FIGURE 13: MEDIAN HOUSEHOLD INCOME

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



### FIGURE 14: MEDIAN ANNUAL INDIVIDUAL EARNINGS IN SOUTH KINGSTOWN, AGE 25+

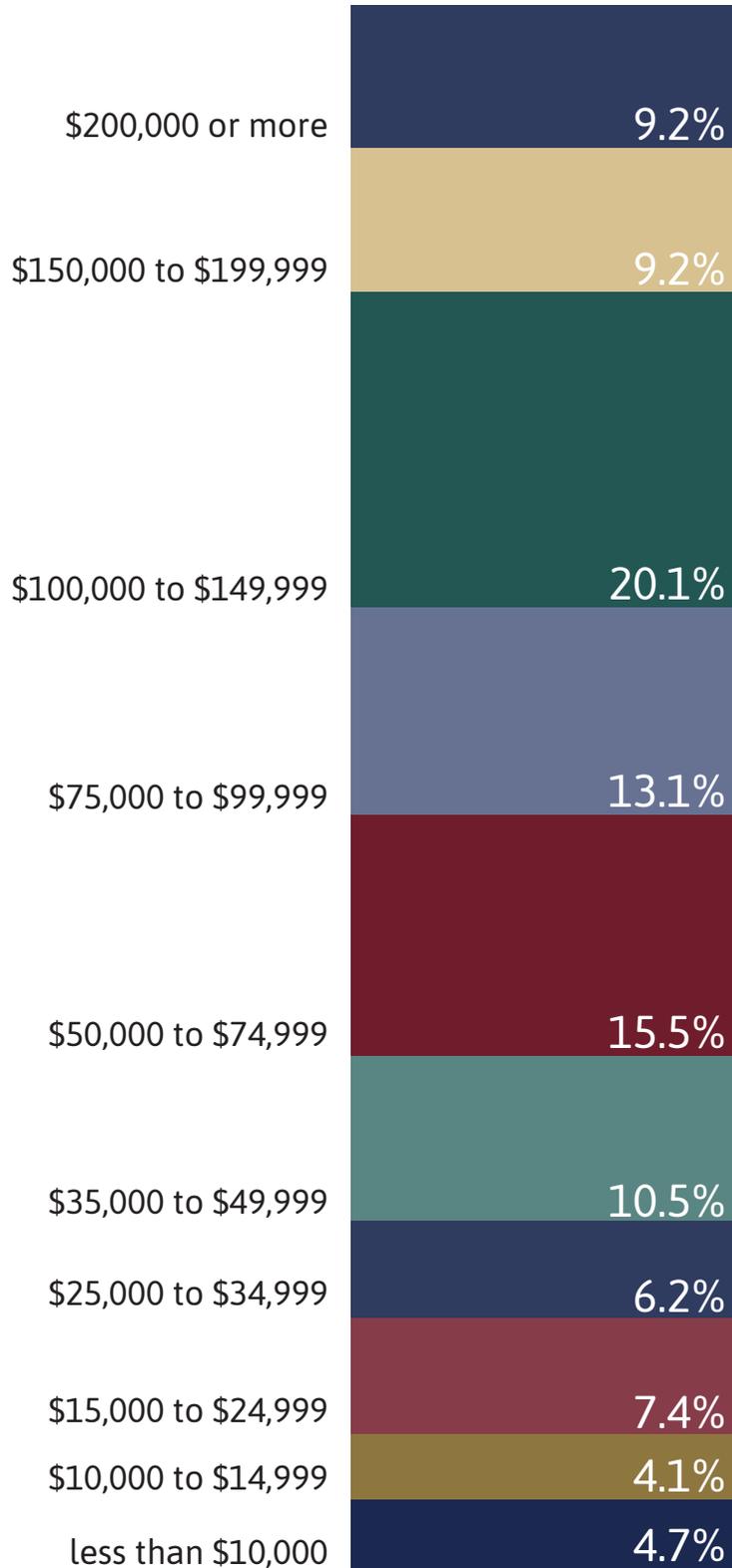
Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates





### FIGURE 15: SOUTH KINGSTOWN HOUSEHOLD INCOME GROUPS

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



## INCOME & EARNINGS

### MEDIAN HOUSEHOLD INCOME

The median household income in South Kingstown is estimated at \$80,407. This median income is higher than the median income for Washington County and the State of Rhode Island as a whole.. As expected, annual reported earnings increase with educational attainment.

### LOW & MODERATE INCOME

Area Median Income (AMI) is a statistic used by the U.S. Department of Housing and Urban Development (HUD) and the State of Rhode Island to determine overall income level for households.

AMI is determined by household size, assessing households within a HUD designated Fair Market Area (HFMA). South Kingstown lies within the Providence-Fall River, RI-MA HMFA. South Kingstown’s AMI is as follows:

Per Rhode Island General Law, a moderate-income household is considered to be one with an income at or below 120% of the AMI. A low-income household is considered to be one with an income at or below 80% of the AMI. A very low-income household is considered to be one with an income below 50% of the AMI.

**TABLE 4: 2018 AREA MEDIAN INCOME LIMITS BY HOUSEHOLD SIZE**

Source: U.S. Department of Housing and Urban Development

1-person	2-person	3-person	4-person	5-person	6-person	7-person	8-person
\$56,400	\$64,500	\$72,550	\$80,600	\$87,050	\$93,500	\$99,950	\$106,400

**TABLE 5: 2018 AREA MEDIAN INCOME LIMITS BASED ON PERCENTAGE OF AREA MEDIAN INCOME**

Source: U.S. Department of Housing and Urban Development

	1	2	3	4	5	6	7	8
30%	\$16,800	\$19,200	\$21,600	\$25,100	\$29,420	\$33,740	\$38,060	\$42,380
50%	\$28,000	\$32,000	\$36,000	\$39,950	\$43,150	\$46,350	\$49,550	\$52,750
80%	\$44,750	\$51,150	\$57,550	\$63,900	\$69,050	\$74,150	\$79,250	\$84,350
AMI	\$56,400	\$64,500	\$72,550	\$80,600	\$87,050	\$93,500	\$99,950	\$106,400
120%	\$67,150	\$76,700	\$86,300	\$95,900	\$103,550	\$111,250	\$118,900	\$126,600



HUD compiles data from the U.S. Census Bureau's American Community Survey (ACS) into a dataset known as the Comprehensive Housing Affordability Strategy (CHAS). The CHAS data provides a snapshot of the income levels and housing problems within a community. The CHAS data were most recently published in June 2018, using the ACS 2011-2015 estimates.

CHAS data indicate that approximately 56.3% of South Kingstown households have an income greater than the Area Median Income. Segregating the data into ownership and rental households, however, shows a different picture. While only 4.9% of ownership households report an income at or below 30% AMI, equating to 375 households, 23% of rental households, or 630 households report the same income level.

## POVERTY

Poverty level, defined by the Federal Department of Health and Human Services, is a measure of income used to determine eligibility for certain programs and benefits, including Medicaid. Poverty level is defined by family size.

**The poverty rate in South Kingstown is estimated to have increased from 3.9% of all families in 2010, to 5.2% of all families in 2017.**

South Kingstown's population is aging, as demonstrated on the previous pages, and accordingly the number of families with householders over age 65 is increasing (from 1,251 in 2010 to 1,755 in 2017). Of note, the percentage of such families with incomes below the poverty level is also increasing, meaning that more families with older adults are experiencing poverty.

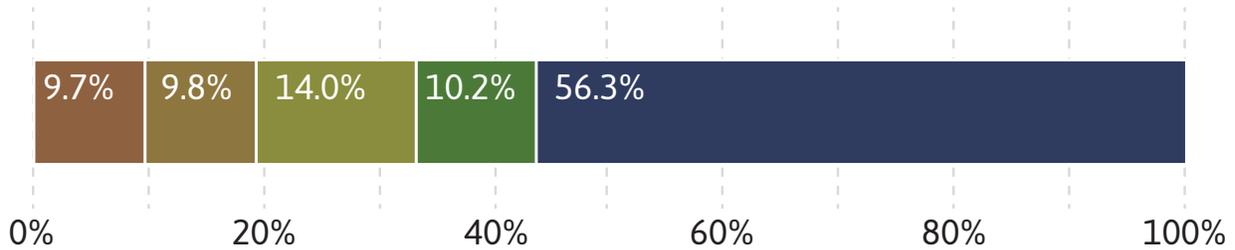
The population of families with children (under the age of 18) is also changing. While the percentage of all families with children under 18 experiencing poverty has risen (from 8.1% to 9.0%) the total number of such families experiencing poverty has declined. This is likely due to the significant decline in the overall number of families with children (from 3,048 in 2010 to 2,639 in 2017).

Also of note, while the overall number of families with a householder who worked in the previous 12 months decreased, the percentage of such families who are experiencing poverty increased. In 2010, none of the families experiencing poverty reported having full-time, year-round employment in the previous 12 months. However in 2017, it is estimated that 133 families had a householder with full-time, year-round employment, and still experienced poverty.



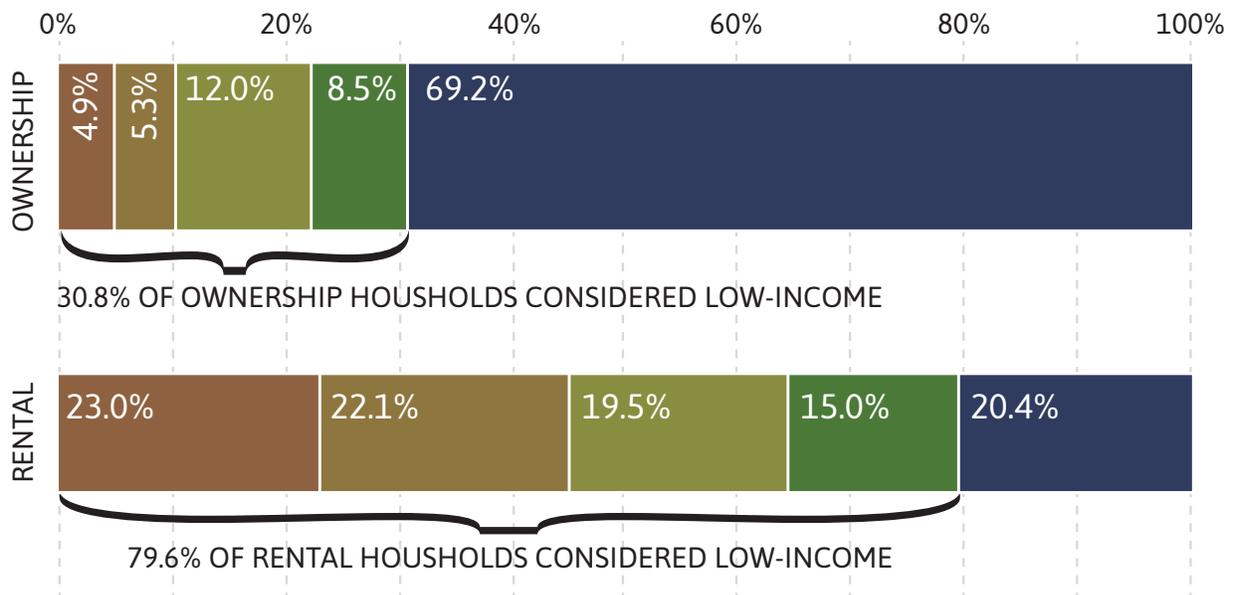
**FIGURE 16: SOUTH KINGSTOWN HOUSEHOLDS AT OR BELOW THE AREA MEDIAN INCOME**

Source: U.S. Department of Housing and Urban Development



**FIGURE 17 SOUTH KINGSTOWN HOUSEHOLDS AT OR BELOW THE AREA MEDIAN INCOME, BY TENURE**

Source: U.S. Department of Housing and Urban Development



Color	AMI Percentage	Income Range for 4 person Household
	Greater than 100% AMI	\$80,601 or more
	81% to 100% AMI	\$63,901 to \$80,600
	51% to 80% AMI	\$39,951 to \$63,900
	31% to 50% AMI	\$25,101 to \$39,950
	Less than or equal to 30% AMI	\$25,100 or less



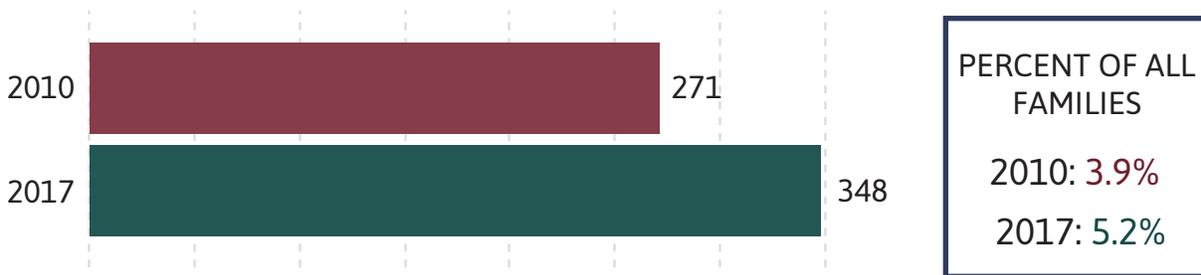
**TABLE 6: 2018 FEDERAL POVERTY LEVELS**

Source: U.S. Census Department of Health and Human Services, [www.healthcare.gov](http://www.healthcare.gov)

FAMILY SIZE	MAXIMUM INCOME
Individuals	\$12,140
Family of 2	\$16,460
Family of 3	\$20,780
Family of 4	\$25,100
Family of 5	\$29,420
Family of 6	\$33,740

**FIGURE 18: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL**

Source: U.S. Census Bureau decennial census 2010, 2013-2017 American Community Survey 5-Year Estimates



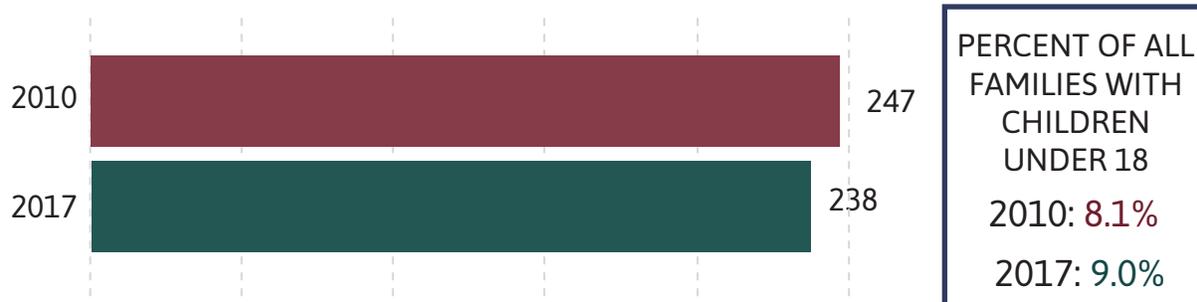
**FIGURE 19: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL, WITH HOUSEHOLDERS OVER AGE 65**

Source: U.S. Census Bureau decennial census 2010, 2013-2017 American Community Survey 5-Year Estimates



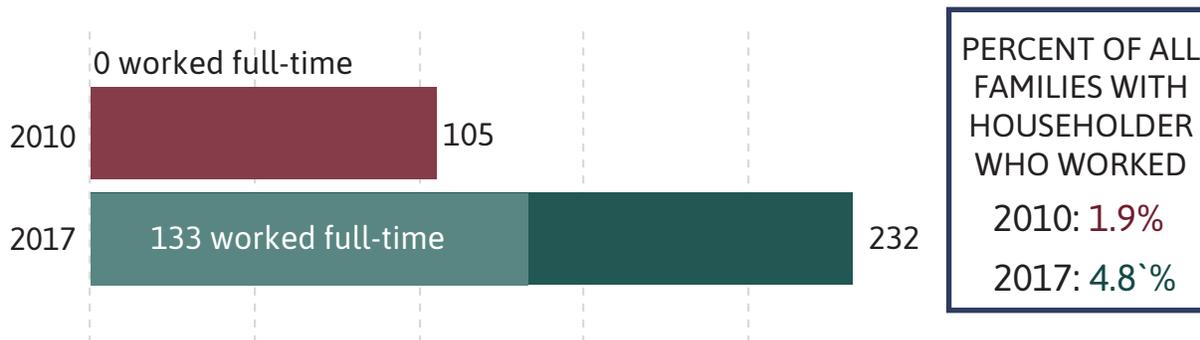
**FIGURE 20: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL, WITH CHILDREN UNDER AGE 18**

Source: U.S. Census Bureau decennial census 2010, 2013-2017 American Community Survey 5-Year Estimates



**FIGURE 21: SOUTH KINGSTOWN FAMILIES WITH INCOMES BELOW THE POVERTY LEVEL, WITH A HOUSEHOLDER WHO WORKED IN THE PREVIOUS 12 MONTHS**

Source: U.S. Census Bureau decennial census 2010, 2013-2017 American Community Survey 5-Year Estimates





# LAND USE

---



## VISION

To promote orderly **growth patterns** based upon the **natural, cultural and historic** character of the Town, the land's **suitability** for use, and the **aspirations** of its citizens.

The Land Use element of this Plan will preserve and enhance the unique quality of life of this civic-minded community settled among a dense core, rural villages and natural areas. This quality of life is dependent upon the health of the Town's abundant natural resources: beaches, salt ponds, and estuaries along the coast, in addition to large blocks of forested land, freshwater wetlands, rivers, streams and ponds inland, which provide habitat for threatened and endangered species and mitigate the impacts of a changing climate. Protection of the Town's extensive drinking water supply will remain a key priority of the community. The Town's Native American and historic legacy will continue to enrich this quality of life, providing a prehistoric context of locations important to the Narragansett Indian cycle of life, and historic stone walls, homes, factories and cemeteries.

The Town's traditional development pattern will continue and provide opportunities for walkable villages with diverse housing stock, resources, and commercial areas surrounded by rural landscapes, scenic roadways, and agricultural operations. Valuable assets at the University of Rhode Island (URI) will be fully utilized, and the Town and URI will be partners. South Kingstown will continue to be a community where people know their neighbors and treasure the close-knit, small town character and expansive (protected) open spaces. The rights of individual property owners will be carefully balanced with the rights of the community to maintain this quality of life.

---

## LAND USE GOALS

**Goal 1:** Land use policies will be consistent with “Land Use 2025: Rhode Island’s Land Use Policies and Plan”, and to maintain continuity with the 1992 South Kingstown Comprehensive Plan and previous Plan updates.

**Goal 2:** A sustainable rate of development will be maintained, which is consistent with the ability of the Town to provide essential services, to achieve a stable tax rate, to protect environmental, historic, and cultural resources, and to provide a healthy environment.

**Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

**Goal 4:** The integrity of the Town’s villages will be intact, and the village-centric approach to development, which recognizes each village’s unique objectives, will be strengthened.

**Goal 5:** To protect and preserve a diversity of landscapes within the Town that builds upon the unique natural, cultural, and historic resources of the Town as described in the Natural Resources & Open Space and Cultural & Historic Resources elements of this Plan.



## GUIDING PRINCIPLES

The purpose of land use planning is to **balance the needs and aspirations** of the community with the rights of private property owners.

- ◆ South Kingstown’s village character and natural resources must be protected and enhanced. (This can be done through land use regulations, design guidelines, and environmental protection, site planning and landscaping regulations.)
- ◆ The existing village areas are unique, each with its own identity and sense of place. The distinct characteristics must protected and enhanced when planning for appropriate growth.
- ◆ Residential development is appropriate within the existing village areas. Additional density in the villages will support the Town’s long-term economic sustainability.
- ◆ The village areas have high connectivity, and a development form that encourages walking and biking.



◆ Neo-traditional planning techniques, intended to enhance and improve sense of place, support of multi-modal transportation, and incorporate village-appropriate green spaces, are appropriate for the village areas.

◆ The villages are faced with economic, service, and housing affordability challenges that stand as obstacles to achieving the Town’s vision for supporting village-scaled growth.

◆ The recommendations contained within the Wakefield-Peace Dale, West Kingston, and Matunuck Village Plans are still relevant and have been integrated, where appropriate, into this Plan.

◆ The recommendations contained within the report, “South Kingstown: Designing a Healthier Community” are still relevant and have been integrated, where appropriate, into this Plan.

◆ Appropriate development in the village areas is of a scale and mass, with architectural design and site planning, that creates visual interest, activates the streetscape, and encourages walking, biking, and transit use.

◆ South Kingstown’s rural areas and natural resources must be protected and enhanced. (This can be done through land use regulations, design guidelines, and environmental protection, site planning and landscaping regulations.)

◆ The Town has the ability to utilize growth management tools, such as the Development Pacing and Phasing Ordinance, to provide for a sustainable rate of residential development, should such be necessary.

◆ South Kingstown’s farmlands must be protected and farming activities must be encouraged. (A combination of approaches must be used to do this, including regulatory changes, public and private funding sources, such as land trusts, easements, and purchase of development rights, and other economic strategies.)

◆ The report, “An Inventory and Analysis of the Village and Rural Qualities of South Kingstown,” remains an important baseline reference for the community.

## CURRENT PRACTICE

- The Town continues to utilize its growth management tools such as the biennial Growth Management Program and the Development Pacing and Phasing Ordinance to provide for a sustainable rate of residential development.

- The Historic District Commission and Conservation Commission are provided with training opportunities in order to expand their capacity in the development review process where appropriate.
- All major subdivisions and land development projects within the jurisdiction of the Salt Pond Regional Special Area Management Plan (SAMP) must comply with the density standards set forth within the SAMP, including a maximum density of 80,000 square feet per unit in areas categorized as Self Sustaining Lands, and a maximum density of 120,000 square feet per unit in areas categorized as Lands of Critical Concern.

## BASELINE INFORMATION

### OVERVIEW

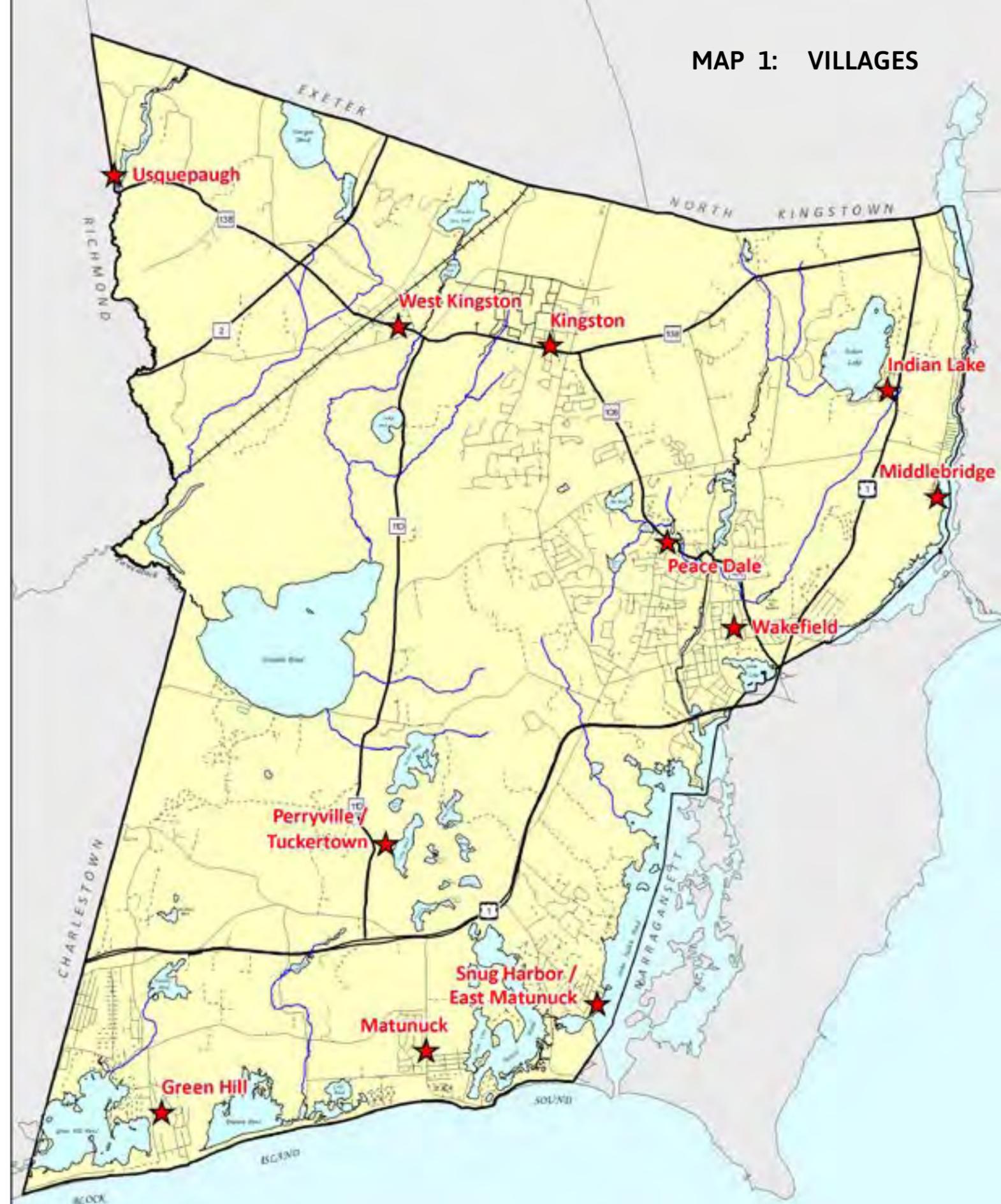
The purpose of the Land Use Element is to establish a plan for the future uses of land in South Kingstown in a manner which provides for the protection, development, use and management of the land and natural resources within the Town. This element will serve as a guide for thoughtful municipal decision making on how to best use our land. Within this element the reader will find a description of South Kingstown’s current and future land use based upon development trends, natural constraints, public services and facilities, and transportation systems. The Town endorses the use of this Comprehensive Plan and its implementation as a means to preserve its diverse landscape and rural, small-town character, to balance the diverse needs of its citizens and businesses, and to implement its land use policies.

South Kingstown continues to be one of the most desirable South County communities in which to live and work. Community reputation for competitively priced new residential construction, good schools, and employment opportunities, combined with access to beaches and recreation, continue to reinforce the attractiveness of South Kingstown for people moving from more urban parts of the State or relocating from out of the state (see **Map 3: Existing Land Uses**).

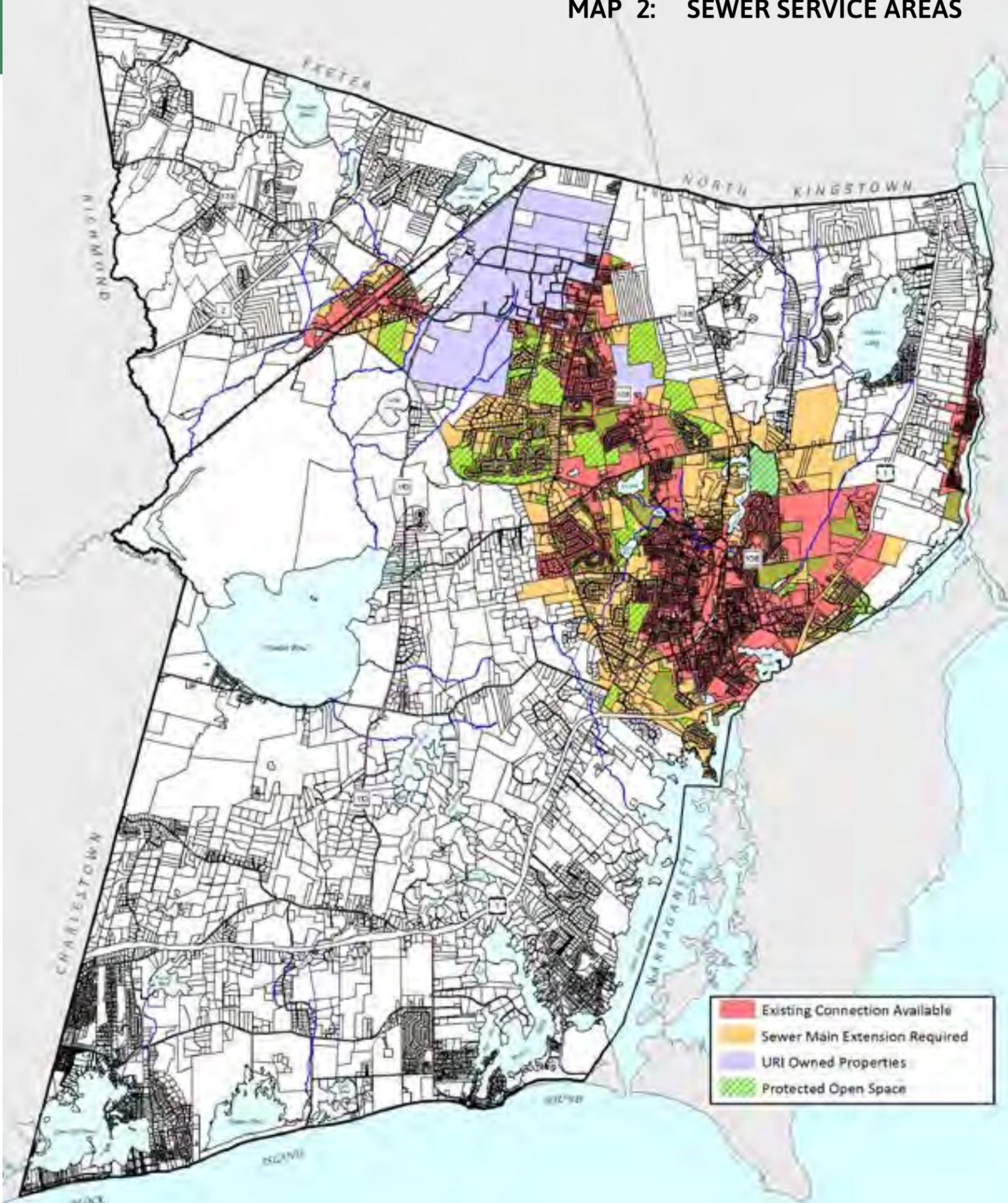
The village-centered pattern of development in South Kingstown, particularly in Wakefield, Peace Dale, and Kingston, has defined the historic pattern of development in the community (see **Map 1: Villages**). The Town has committed to preserving and reinforcing this pattern of development through its future sewer service area map (see **Map 2: Sewer Service Areas**), through the development of village specific plans, and through the designation of special management districts. Residential development within these villages is within walking distance of a variety of shops and services and the William C. O’Neil bike path connects to open space and community facilities. Commercial and residential infill within villages is encouraged to both protect outlying rural areas from development and to



MAP 1: VILLAGES



## MAP 2: SEWER SERVICE AREAS



provide a range of goods and services within walking or biking distance of village residents. The importance of providing an appropriate density for residential development within the villages is critical to providing affordable housing for low and moderate incomes, including modest starter homes on small lots, cottage communities, two-family and multifamily housing with form-based green design. Efforts to preserve and protect natural resources and outlying agricultural areas is supported through low density residential zoning and well-established conservation efforts.

### VILLAGE-CENTERED PATTERN OF DEVELOPMENT

Each of the eleven villages of South Kingstown is unique and planning efforts should seek to acknowledge and account for these unique environments. The following descriptions of villages were developed from existing Village Plans for Peace Dale, Wakefield, Kingston, West Kingston and Matunuck along with the report, "An Inventory and Analysis of the Village and Rural Qualities of South Kingstown," developed in 1998. The village-centered pattern of development in South Kingstown, particularly in Wakefield, Peace Dale, and Kingston, has defined the historic pattern of development in the community, residential zoning and well-established conservation efforts.

#### CENTRAL VILLAGES

- ◆ Wakefield is a dynamic and versatile village and serves as hub for business and cultural activity. The village provides a balance of historic structures, new development, and innovative infill strategies which create a seamless village environment. The village provides a diversity of housing options, an extensive mix of local businesses, and convenient access to recreational, institutional and cultural amenities and services. The core of the village centers on Main Street, a vibrant corridor with many essential services, a pedestrian friendly environment, and an activated street front. Main Street is strengthened by the presence of the Saugatucket River and William C. O'Neill bike path. Flexibility of land use and design in the area can enrich the historic fabric which helps define this unique village. The commercial highway zoned area of Wakefield located near Old Tower Hill Road, Kingstown Road, and Dale Carla Corner is an automobile-oriented area characterized by large footprint buildings and expansive parking lots.
- ◆ Peace Dale is a vibrant neighborhood with a village center that continues to reflect its historic buildings and industry through redevelopment of mill structures, while promoting new development. Peace Dale is home to a diversity of building scales and sizes that provide residential and business use in a compact setting with multi-modal connections to neighboring Wakefield. Commercial uses in Peace Dale have limited room for expansion. Diversity of the built

environment, the village economy, an arts and culture focus, and residents, are the cornerstones of the area. Existing transportation infrastructure provides challenges to predictable motorized circulation patterns and pedestrian activity and safety.

- ◆ Kingston is a regulated historic residential village at the north end of town dominated by the University of Rhode Island (URI) campus. Small areas of commercial zoning are present adjacent to URI. The area retains much of its rural atmosphere despite residential development in areas surrounding the University and growth at the URI campus. Kingston remains a center of village life for local residents with the Town library, churches, arts center, historical society, bookstore, and the Tavern Hall, a meeting place for civic groups. Significant traffic and parking issues exist in this area.

### SUMMER COLONIES

- ◆ Middlebridge is a densely developed residential area along the Narrow (Pettaquamscutt) River. Originally established as a summer colony, most single-family homes on small lots have been upgraded for year-round occupancy. This village area also includes low-density lots and second growth forest which dominate the scenic corridor along U.S. Route 1.
- ◆ Indian Lake is comprised of small lot residential development on the easterly shore of the lake surrounded by newer large-lot housing and farms, open fields and woodlands. The area does not contain any municipal buildings, commercial or institutional services.
- ◆ Snug Harbor/East Matunuck is a mix of village, rural and suburban residential areas in a scenic coastal environment including tidal salt marshes, coastal ponds, the working harbor at Galilee and Jerusalem, Block Island Sound, open fields and historic stonewalls. This village area contains a modest number and variety of commercial uses, many catering to the seasonal tourist trade, marina activities, and East Matunuck State Beach.
- ◆ Matunuck is a predominantly rural area along the south beaches and coastal ponds. The village of Matunuck is largely characterized as a summer vacation community consisting of small businesses, a church/chapel, the town beach, outdoor recreational opportunities, and approximately 1000 summer beach homes. Small farms, large estates, historic homes, and modern residential developments surround the village. The Matunuck Hills, located north of Route 1, is a sparsely settled area of dense woods, kettle hole ponds, and habitat for rare varieties of many plant species.

- ◆ The Green Hill area is a composite of farmland and forest, with very low-density residential development, a dense pond-side seasonal community, a barrier beach and newer suburban neighborhoods. Much of the area is preserved by the Trustom Pond National Wildlife Refuge.

### WESTERN/RURAL VILLAGES

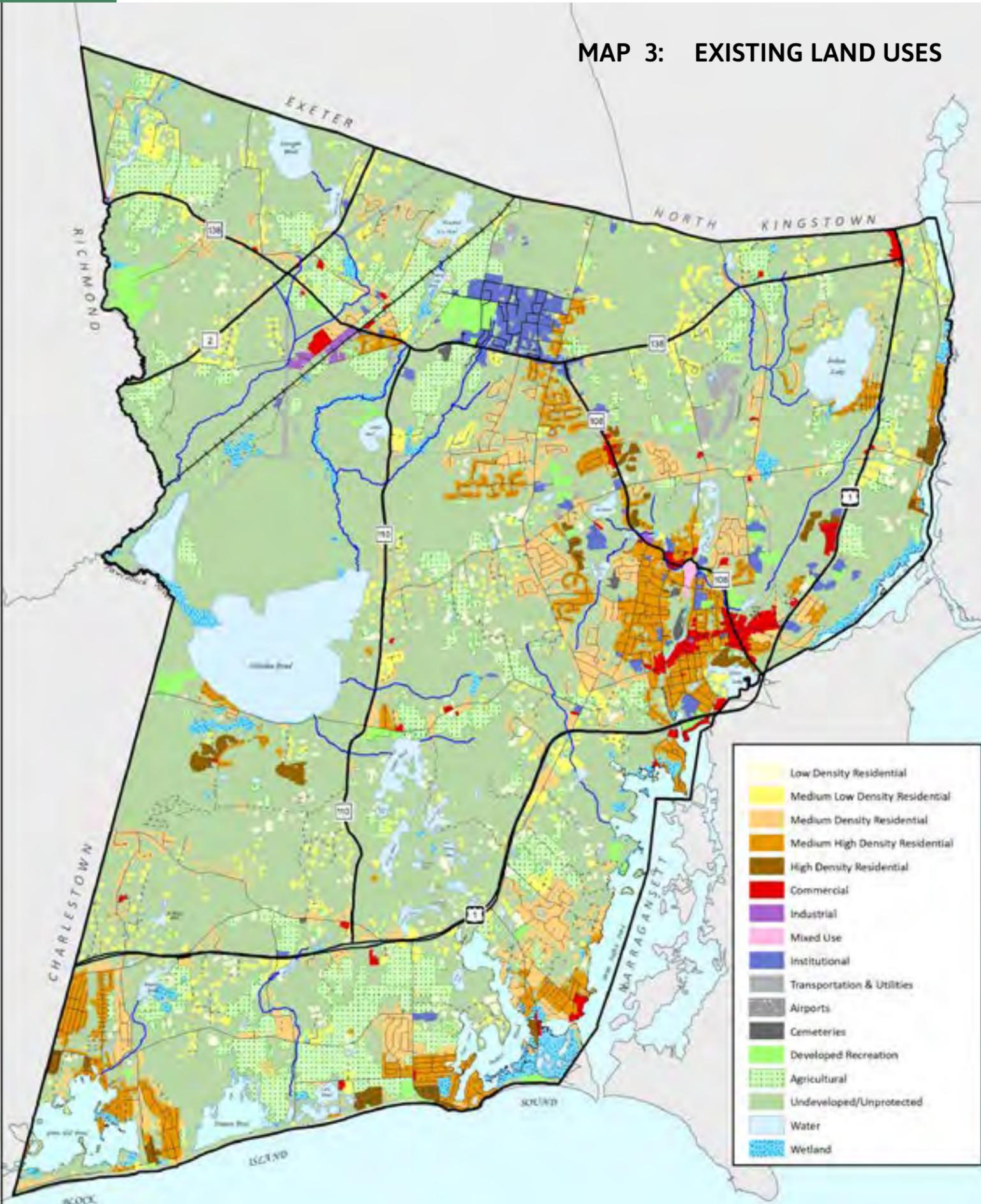
- ◆ West Kingston is a working village, with much of its land developed in industry, small businesses, turf farms, and increasing numbers of residential neighborhoods. The area is dependent upon the quality of its aquifers and its prime farmland. Despite the presence of high intensity industrial uses, traffic on Route 138, and the West Kingston Amtrak station the area retains the sense of a small-town village. Existing commercial activities in the area are located within residentially zoned areas along Route 138.
- ◆ Perryville and Tuckertown include several distinct areas: Perryville, Ministerial Road, Worden's Pond, Tuckertown Road, Gravelly Hill Road and Tuckertown Village. Although all are rural, each has a unique identity and sense of place based on historic use and development patterns. Perryville remains a hamlet, with a distinct village feel while Tuckertown's park facilities now serve the community as a whole. Winding rural roads, active agricultural areas, high quality water resources, public recreation, limited small scale commercial uses, and low-density residential development characterize this portion of town.
- ◆ Usquepaugh village, located partially in Richmond, is defined by the Queen and Usquepaugh Rivers, the post-industrial core village (with Kenyon Corn Meal Co.) and rural areas including those protected by the Audubon Society, previous sale of development rights, or partial protection by Farm, Forest, and Open Space designation. Residential parcel subdivision and development is increasing in these areas of the community.

### EXISTING LAND USE

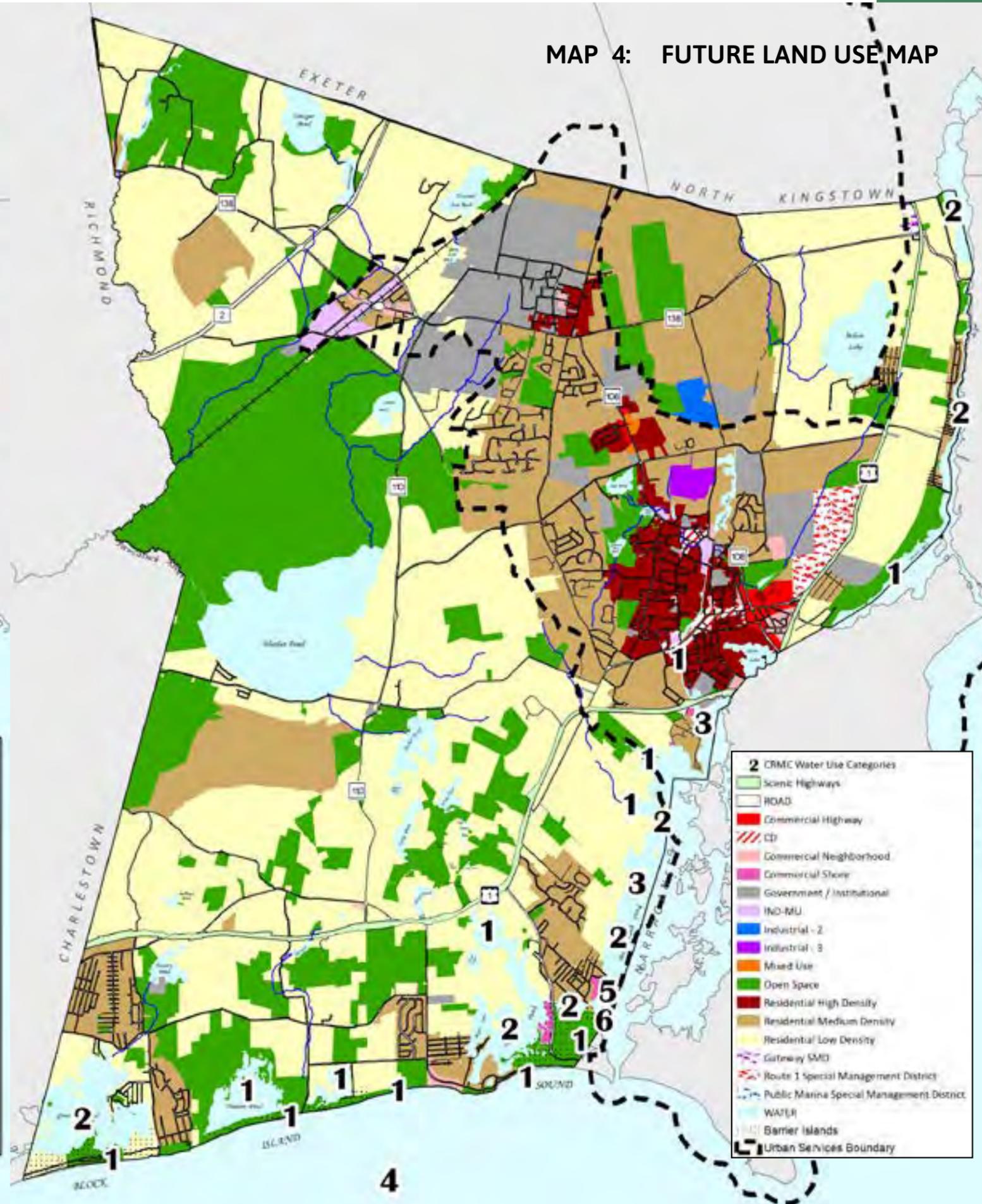
**Map 3: Existing Land Uses** (RIGIS 2011 Land Use, Land Cover) and the infographic below provide a snapshot of land cover in South Kingstown based on data from Rhode Island Geographic Information System (RIGIS). This data depict the distribution of different land cover classifications across town and provide a tool for the development of **Map 4: Future Land Use Map**.



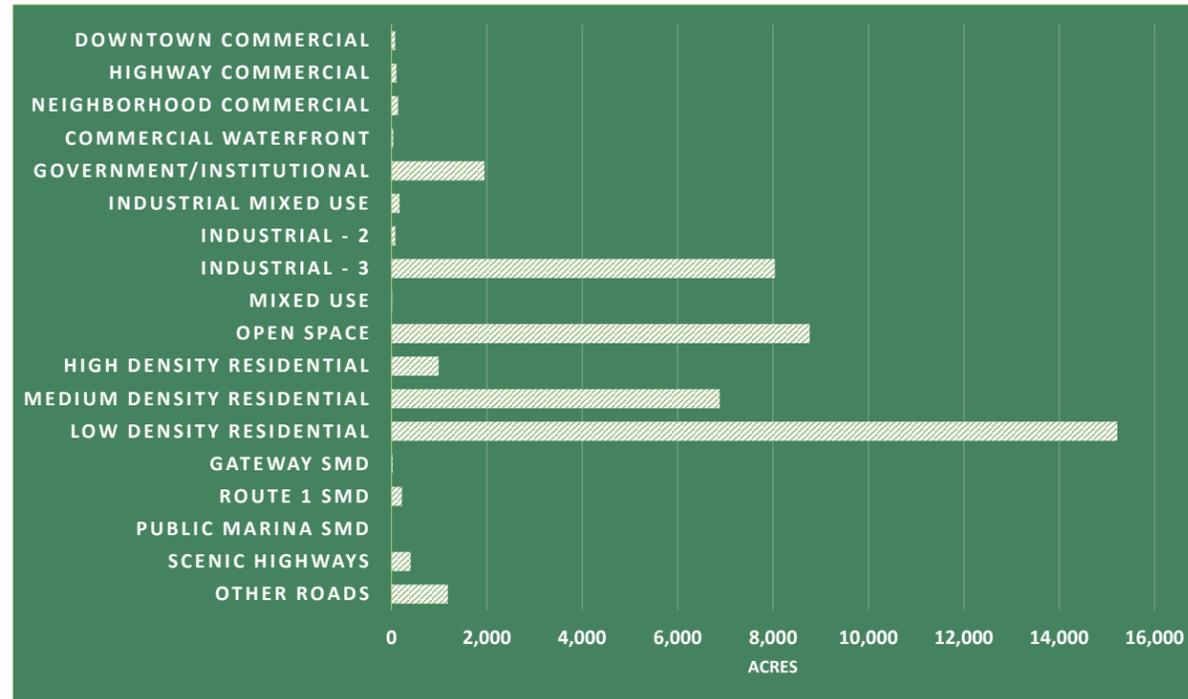
MAP 3: EXISTING LAND USES



MAP 4: FUTURE LAND USE MAP



**FIGURE 22: FUTURE LAND USE MAP CATEGORIES**



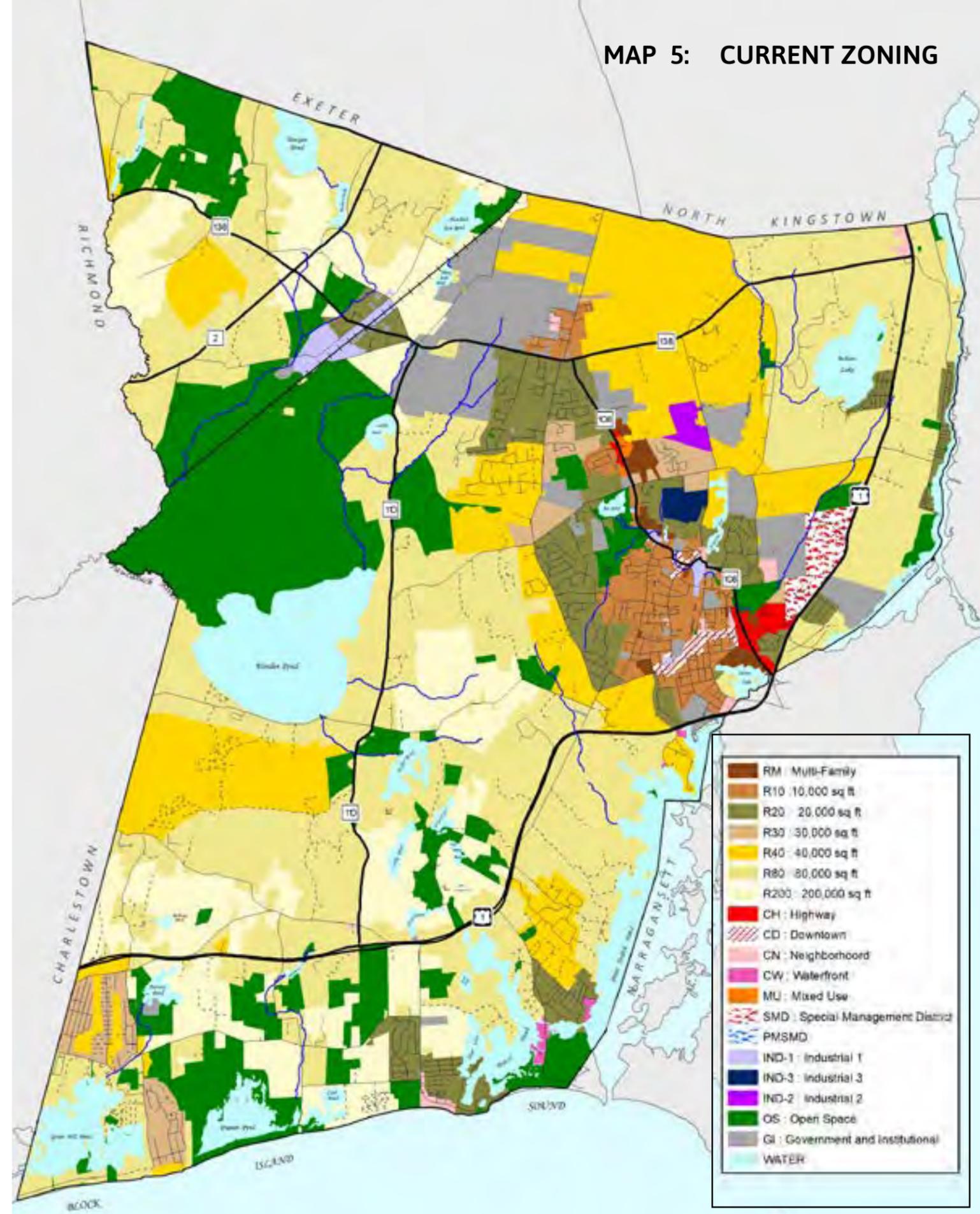
**FUTURE LAND USE**

Map 4: Future Land Use Map, identifies future desired development patterns through the Town of South Kingstown. The Future Land Use Map (FLUM) clearly illustrates the concept of a densely developed central area, or “core”, surrounded by a relatively sparsely developed rural “periphery”. The central core area consists of the areas in and immediately surround Wakefield, Peace Dale, and Kingston. The periphery consists of the remaining outlying areas of the Town. This concept was initiated in the 1986 Comprehensive Plan and follows the historical development pattern of the Town.

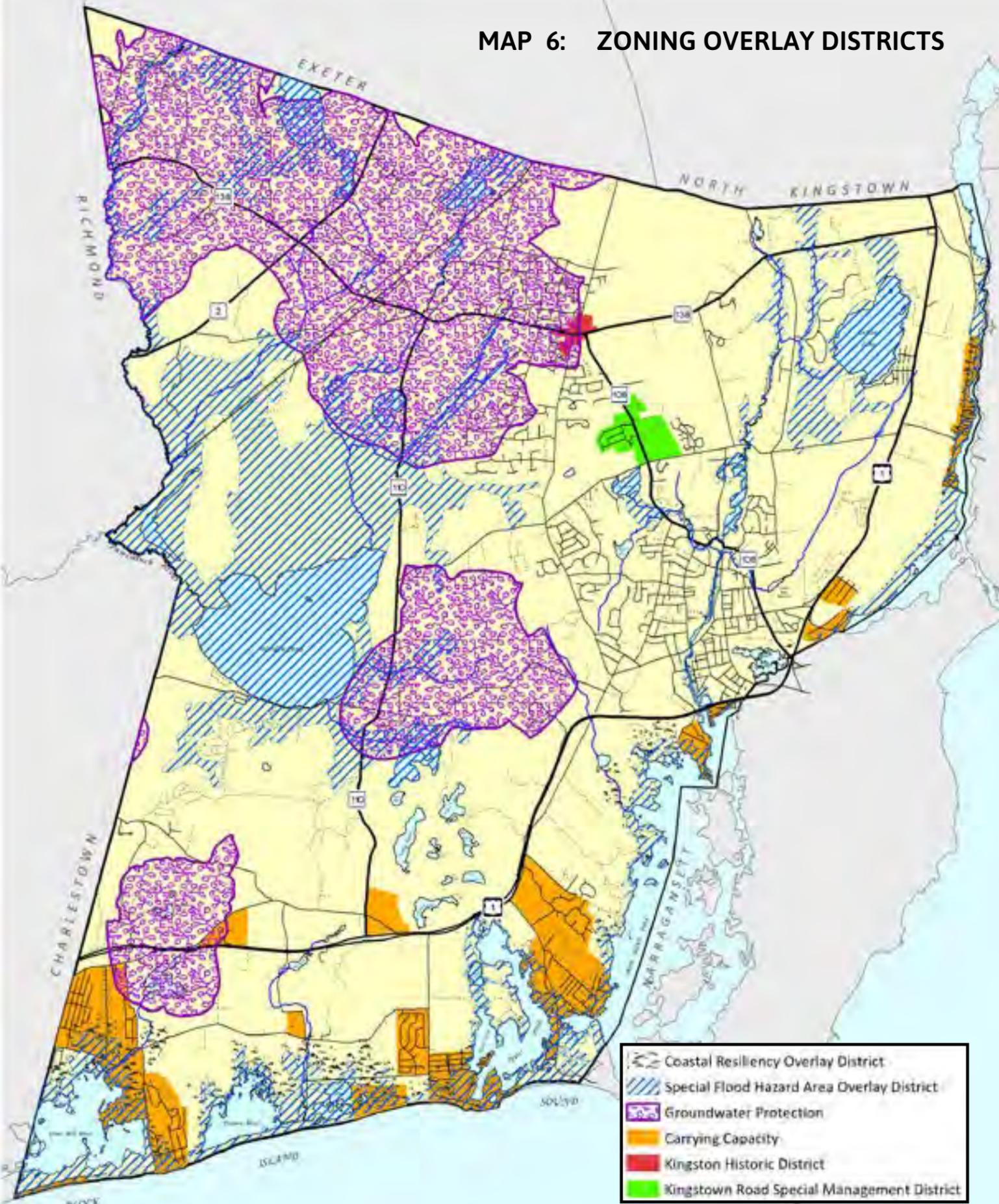
**ZONING**

Map 5: Current Zoning and Table 7: Comparison of Zoning Districts & Future Land Use Descriptions illustrate the Town’s Zoning Districts, which regulate development in a consistent vision with the Comprehensive Plan and the Land Use Plan Maps in accordance with state law. South Kingstown also has several Overlay Districts, which provide additional considerations and standards for development, as depicted on Map 6: Zoning Overlay Districts. The land use categories within Figure 22: Future Land Use Map Categories are naturally aligned with the Zoning Districts detailed in Table 7: Comparison of Zoning Districts & Future Land Use Descriptions however it should be noted that there are a number of inconsistencies as described further below.

**MAP 5: CURRENT ZONING**



### MAP 6: ZONING OVERLAY DISTRICTS



**TABLE 7: COMPARISON OF ZONING DISTRICTS & FUTURE LAND USE MAP (FLUM) DESCRIPTIONS**

RESIDENTIAL	DESCRIPTION
<p><b>Zone:</b> R200</p> <p><b>FLUM:</b> Low Density Residential</p>	<p><b>Purpose:</b> To protect environmental resources, such as groundwater resources and coastal pond watersheds</p> <p><b>Characteristics:</b> This district contains agricultural uses, very low-density residential development, and sensitive environmental resources, such as coastal ponds, barrier beaches, salt marshes, and groundwater resources. Clustered development which preserves large open spaces and farmland is preferred. Public water may be available in some locations but public sewers are discouraged.</p> <p><b>Allowed Uses:</b> Residential uses at a density of 0.2 dwelling units per acres, agricultural uses, and privately-owned open space are allowed. This district may also include open space and conservation lands and some public facilities such as public safety and educational facilities.</p>
<p><b>Zone:</b> R80</p> <p><b>FLUM:</b> Low Density Residential</p>	<p><b>Purpose:</b> To allow for low density residential development in areas which are primarily rural in nature and not served by public facilities.</p> <p><b>Characteristics:</b> This district contains rural land uses, such as low-density residential development, agricultural use, and large estates. Public water may be available in some locations, but public sewers are discouraged.</p> <p><b>Allowed Uses:</b> Single-family residential at a density of up to 0.55 dwelling units per acre and agricultural uses are allowed. This district may also include open space and conservation lands and some public facilities such as public safety and educational facilities.</p>
<p><b>Zone:</b> R40</p> <p><b>FLUM:</b> Medium Density Residential</p>	<p><b>Purpose:</b> To allow for medium density residential development designed to avoid environmentally sensitive resources. Flexible Design Residential Projects and other forms of conservation development techniques shall be encouraged.</p> <p><b>Characteristics:</b> This district contains large estates, farms, and large single-household residential lots. Additionally, environmentally sensitive areas such as wetlands and prime agricultural soils can be found in some areas. Public water and public sewer service may be available but are not required.</p> <p><b>Allowed Uses:</b> Single-family residential at a density of up to 1 dwelling unit per acre are allowed. This district may also include open space and conservation lands and agricultural uses.</p>

RESIDENTIAL	DESCRIPTION
<p><b>Zone:</b> R30</p> <p><b>FLUM:</b> Medium Density Residential</p>	<p><b>Purpose:</b> To allow for medium density residential development in areas located near or within existing villages of the municipality, with public facilities.</p> <p><b>Characteristics:</b> This district contains medium density single-household residential development found in Green Hill, Perryville, Usquepaugh, and the central villages of Wakefield, Peace Dale and Kingston. Public water is generally available and limited public sewers are provided. Land located in outlying villages should not be considered for sewer service with the exception of Middlebridge.</p> <p><b>Allowed Uses:</b> Residential at a density of up to 1.45 dwelling units per acre including single-family dwelling units and some duplexes are allowed. This district may also include open space and conservation lands and agricultural uses.</p>
<p><b>Zone:</b> R20</p> <p><b>FLUM:</b> Medium Density Residential</p>	<p><b>Purpose:</b> To allow for medium density residential development, infill, and limited mixed-use activities, similar to existing patterns and densities surrounding village centers. A village centered approach to development should take place in such areas.</p> <p><b>Characteristics:</b> This district contains medium density residential use and an historic set of mixed-uses surrounding existing village areas. This district is highly accessible and served by an established network of roads and public transit. Water and sewer service are generally provided in this area with the exception of Matunuck and Snug Harbor.</p> <p><b>Allowed Uses:</b> Residential at a density of up to 2.2 dwelling units per acre including duplexes and single-family dwelling units are allowed. This district may also include open space and conservation lands and agricultural uses.</p>
<p><b>Zone:</b> R10</p> <p><b>FLUM:</b> High Density Residential</p>	<p><b>Purpose:</b> To allow for higher density residential development in areas located in and adjacent to the core village centers of Wakefield, Peace Dale and Kingston.</p> <p><b>Characteristics:</b> This district contains medium-high density residential uses located in and adjacent to the core Villages of Wakefield, Peace Dale and Kingston. Public water and sewer are available in the district as well as an established network of roads, public transit.</p> <p><b>Allowed Uses:</b> Residential at a density of up to 4.35 dwelling units/acre, including multi-household detached structures for the elderly, duplexes, and single-family dwellings units are allowed. This area may also contain open space for recreational opportunities.</p>
<p><b>Zone:</b> RM</p> <p><b>FLUM:</b> High density residential</p>	<p><b>Purpose:</b> To allow for high density multi-family residential development in areas where existing village development patterns and public facilities support concentrated development.</p> <p><b>Characteristics:</b> This district contains multi-household housing development including apartment buildings, condominiums, and individual multi-household dwellings located in and near the core Villages of Wakefield and Peace Dale. Public water, sewer, and established networks of roads and public transit are available in these areas.</p> <p><b>Allowed Uses:</b> Residential density greater than 4.35 but less than 7.71 dwelling units per acre, including multi-household land development projects, duplexes and single family residential units are allowed.</p>

COMMERCIAL	DESCRIPTION
<p><b>Zone:</b> CH</p> <p><b>FLUM:</b> Commercial Highway</p>	<p><b>Purpose:</b> To permit and encourage revitalization and intensification so that the areas within the district are used to their peak potential.</p> <p><b>Characteristics:</b> This district located along Old Tower Hill Road and Dale Carlia corner is categorized by larger, often freestanding commercial development oriented toward the automobile, with extensive off-street parking and direct access to major highways. The predominant development pattern is the shopping center.</p> <p><b>Allowed Uses:</b> Retail uses, such as gas stations, fast food establishments, and larger supermarkets, as well as repair businesses, open lot sales, wholesale business, and storage are allowed in this district.</p>
<p><b>Zone:</b> CD</p> <p><b>FLUM:</b> Commercial Downtown</p>	<p><b>Purpose:</b> To continue the historic development patterns of the commercial core areas of Wakefield and Peace Dale to promote an appropriate mix of services and commercial establishments within proximity of densely developed village areas.</p> <p><b>Characteristics:</b> This district includes the central business districts located along Main Street in Wakefield, and along Route 108 in Peace Dale. These areas include a mix of historic and contemporary structures with pedestrian facilities, public water and sewer, well established road networks and buildings with an orientation to the street and a diversity of commercial establishments.</p> <p><b>Allowed Uses:</b> Neighborhood retail, commercial offices, restaurant and entertainments, and some residential uses are allowed uses in this zoning district.</p>
<p><b>Zone:</b> CN</p> <p><b>FLUM:</b> Commercial Neighborhood</p>	<p><b>Purpose:</b> To provide for small-scale retail establishments designed to provide local business service to residential neighborhoods throughout the Town.</p> <p><b>Characteristics:</b> This district includes smaller scale commercial development located adjacent to residential development associated with the existing villages of the Town. A small area of this land use can be found at the intersection of Route 1 and Route 138 which contains an existing automotive dealership, hotel, restaurants and gas station.</p> <p><b>Allowed Uses:</b> Small scale retail and personal service establishments including offices uses, and residential uses are permitted in this zoning district.</p>
<p><b>Zone:</b> CW</p> <p><b>FLUM:</b> Commercial Waterfront</p>	<p><b>Purpose:</b> To allow for the use of waterfront areas for marine-oriented businesses.</p> <p><b>Characteristics:</b> This district is categorized by marine-oriented businesses as marinas, fishing, marine services, and commercial docks primarily located in the Village of Snug Harbor and at Marina Park in Wakefield.</p> <p><b>Allowed Uses:</b> Limited commercial uses such as marinas, commercial docks, agriculture including aquaculture, and marine services are allowed uses in this zoning district.</p>

COMMERCIAL	DESCRIPTION
<b>Zone:</b> MU <b>FLUM:</b> Mixed Use	<p><b>Purpose:</b> To provide a mixture of residential and limited commercial uses in the area.</p> <p><b>Characteristics:</b> This district is located within the Kingstown Road Special Management District and includes a mixture of residential and limited commercial uses.</p> <p><b>Allowed Uses:</b> Limited commercial and residential uses are allowed in this district.</p>
<b>Zone &amp; FLUM:</b> Route 1 Special Management District	<p><b>Purpose:</b> To allow for new or expanded light industrial, commercial, or mixed-use zoning on lands located on the west side of Route 1.</p> <p><b>Characteristics:</b> The area has been developed into a mixed-use center that includes a wide-variety uses such as retail, commercial, office, hotel, theater, and dense residential condominium development. This district has been one of the most heavily developed areas in South Kingstown in recent years and is nearly built out.</p> <p><b>Allowed Uses:</b> Mixes uses including commercial, residential and light industrial use are allowed in this district.</p>
<b>Zone &amp; FLUM:</b> Public Marina Special Management District	<p><b>Purpose:</b> To preserve and enhance the historic uses of the town-owned waterfront properties as a marina basin at the north boundary of Point Judith Pond. The district is intended to provide for marine based commercial uses that are complementary to the historic land use pattern of the area and the public access and recreational resources of the Marina Park facility.</p> <p><b>Characteristics:</b> This area contains approximately 7.5 acres of land located on two parcels. Marine based commercial uses complementary to the historic land use pattern of the area and the public access and recreational resources of the Marina Park facility can be found in the area. Further, building and construction activities within this district are within the regulatory jurisdiction of the RI Coastal Resources Management Council (CRMC) and may require approval from such agency, in addition to a permit from the town, to proceed.</p> <p><b>Allowed Uses:</b> Marinas and yacht clubs, non-profit community parks, boat storage, and restaurants are allowed uses.</p>

{continued on next page}

INDUSTRIAL	DESCRIPTION
<b>Zone:</b> IND-1 <b>FLUM:</b> Industrial Mixed-Use	<p><b>Purpose:</b> To permit manufacturing, wholesale storage and distribution activities within existing manufacturing areas in West Kingstown and existing mills in Wakefield and Peace Dale.</p> <p><b>Characteristics:</b></p> <p><i>Wakefield/Peace Dale</i> - This district contains existing historic mill structures in the central core of South Kingstown. Public water and sewer are required. Industry or processes that create environmental hazards or generate hazardous waste or pollutants are prohibited.</p> <p><i>West Kingston</i> - This district contains existing manufacturing uses in the village of West Kingstown. The area has environmental limitations but was previously developed as a significant area of light manufacturing, wholesale operations, and storage facilities. This area is located within the Groundwater Protection Overlay District, as such, any activity which constitutes a threat to either groundwater, surface waters, or adjacent wetlands should not be allowed. Public water and sewer may be provided.</p> <p><b>Allowed Uses:</b> Industrial land uses including light manufacturing, wholesale operations, storage and distribution facilities are allowed. This district may also allow Use Code 21, Higher Educational Institution, Privately Owned and Operated, and Use Code 21.1 Higher Educational Institution, State Owned or Operated as an accessory use to permitted primary uses.</p>
<b>Zone:</b> IND-2 <b>FLUM:</b> Industrial 2	<p><b>Purpose:</b> To allow for proposed activities designated on the west side of Rose Hill Road. This district is created for certain businesses and/or industrial operations that do not require traditional industrial park or commercial district locations.</p> <p><b>Characteristics:</b> Uses within the district exhibit characteristics of industrial operation, as well as retail and wholesale business uses. They include automotive-related repair and service, outdoor yard storage, warehousing, multi-purpose trade centers, wholesale and retail sales of landscape and building materials and the like. Industries should be well screened from adjacent public streets and buffered from surrounding residential uses. Public water and sewer service is not a prerequisite but may be provided.</p> <p><b>Allowed Uses:</b> Extractive operations, including the storage of sand and gravel would be permitted, but processing of these materials or the manufacture of concrete or asphalt and similar operations would be prohibited.</p>
<b>Zone:</b> IND-3 <b>FLUM:</b> Industrial 3	<p><b>Purpose:</b> To allow for the continued existence and redevelopment of an existing manufacturing zone on the west side of North Road in Peace Dale.</p> <p><b>Characteristics:</b> Public water and sewer may be provided to these areas but are not required.</p> <p><b>Allowed Uses:</b> Permitted uses include extractive operations and processing of sand and gravel, and the manufacture of asphalt and concrete and related products.</p>

GOVERNMENT, INSTITUTIONAL & OPEN SPACE	DESCRIPTION
<b>Zone:</b> GI <b>FLUM:</b> Government & Institutional	<p><b>Purpose:</b> To recognize the extent of public and semi-public land holdings and to provide guidance to utilization of these lands should they be transferred to private ownership.</p> <p><b>Characteristics:</b> This district includes land holdings of the Town, State, and Federal governments or their agencies, major semi-public institutions, fire districts, and land designated under CERCLA. It includes land held by the University of Rhode Island and South County Hospital.</p> <p><b>Allowed Uses:</b> Certain limited primarily and secondary educational facilities, as traditionally provided by government agencies, which may be owned and operated by non-profit organizations. Certain limited multifamily household development as owned and operated by local, state, or federal housing agencies such as the US Department of Housing and Urban Development.</p>
<b>Zone:</b> OS <b>FLUM:</b> Open Space	<p><b>Purpose:</b> The purpose of this district is to protect valuable lands/resources</p> <p><b>Characteristics:</b> This district includes properties which are presently used for public recreation or conservation purposes such as the Great Swamp Management Area and Town-owned parks. It also includes quasi-public or privately-owned land where development rights have been conveyed or there is a reasonable long-term expectation of conservation, open space or recreational use, such as land held by the Audubon Society or the Nature Conservancy.</p> <p><b>Allowed Uses:</b> Conservation, and certain limited residential, recreational, agricultural and educational uses are permitted.</p>

OVERLAY DISTRICTS	DESCRIPTION
Historic Overlay District	<p><b>Purpose:</b> To provide special zoning restrictions which apply to all structural exterior building changes, street or traffic improvements, landscaping, erection of signs, and removal of trees.</p> <p><b>Characteristics:</b> This overlay district includes an area within the Village of Kingston designated as a Historic District and is listed on the National Register of Historic Places. For additional detail on the historic district and landmarks see the Historic and Cultural Resources in Appendix 3.</p>
Groundwater Protection Overlay District	<p><b>Purpose:</b> To protect, preserve and maintain the quality and supply of groundwater resources in the Town through regulation of land use activities and design considerations regarding groundwater recharge.</p> <p><b>Characteristics:</b> This overlay district contains significant groundwater resources including a drinking water supply groundwater reservoir and critical recharge areas classified as GAA, as defined by the Rhode Island Department of Environmental Management (RIDEM), and areas adjacent to Factory Pond which contribute to existing public water supplies.</p>

{continued on next page}

OVERLAY DISTRICTS	DESCRIPTION
Carrying Capacity Overlay District	<p><b>Purpose:</b> To provide municipal consideration of development within the areas classified as “Lands Developed Beyond Carrying Capacity” in the Rhode Island’s Salt Pond Region: Special Area Management Plan, and the Narrow River Special Area Management Plan, as prepared and amended by the RI Coastal Resources Management Council.</p> <p><b>Characteristics:</b> Lands in the area are located in sensitive environmental areas of the Town under the jurisdiction of the CRMC SAMPs stated above.</p>
Coastal Community Overlay District	<p><b>Purpose:</b> To provide additional land use controls and administrative allowances to manage and limit changes to these legal non-conforming uses of land.</p> <p><b>Characteristics:</b> Lands included in this overlay district includes seasonal occupancy campground facilities along the south shore area in the Villages of Matunuck and East Matunuck which are historic resources to the community which may be vulnerable to sea level rise and flooding.</p>
Kingstown Road Special Management District	<p><b>Purpose:</b> To establish land use development policies for the district; to provide the basis for regulations which will implement these policies; and to guide private land use decisions affecting future development in this corridor.</p> <p><b>Characteristics:</b> The area of Kingstown Road (Route 108) located between Peace Dale and Kingston is seen as being both dynamic and subject to considerable change. Kingstown Road is a principal arterial highway of the State. This roadway also serves as a connecting link between the University of Rhode Island and the urbanized downtown areas of Peace Dale and Wakefield, as well as Narragansett and the south shore areas. Due to its strategic location in the Town there is a need for specialized land use planning efforts. Such roads often develop into commercial strips which exacerbate traffic problems and create visual clutter.</p>
Special Flood Hazard Overlay District	<p><b>Purpose:</b> To ensure public safety, to minimize hazards to persons and property from recurring and dynamic flooding, to protect the health, safety, and general welfare of the residents of South Kingstown, and to promote more resilient development within at-risk coastal and riverine areas.</p> <p><b>Characteristics:</b> This overlay district is delineated by the boundary and overall extent of the Special Flood Hazard Areas (SFHAs) identified and shown on Federal Emergency Management Association (FEMA) Flood Insurance Rate Maps (FIRMs). These areas include all zones identified as ‘A’, ‘AE’, and ‘VE’ Flood Zones, which represent areas that have a 1% annual chance of flooding (also referred to as the base flood or 100-year flood).</p>
Coastal Resilience Overlay District	<p><b>Purpose:</b> To protect the public health, safety, and general welfare by promoting awareness of future projections of sea level rise and the associated impacts from flooding and storm surge to current and future property owners in this district.</p> <p><b>Characteristics:</b> Areas within this district includes those land areas depicted on the Coastal Resources Management Council (CRMC) StormTools Design Elevation Maps as being vulnerable to storm surge during a 100-year storm event with the presence of 5-feet of sea level rise (SLR) that lie outside of FEMA designated SFHAs.</p>

## FUTURE LAND USE MAP AND ZONING MAP INCONSISTENCIES

There are natural correlations between the Land Use Categories and the Zoning District as discussed above. The Zoning Map is intended to be consistent with the Future Land Use Map; however these two separate maps sets are not intended to match each other exactly. Areas of inconsistency for which the Town will pursue rezoning of properties and/or development of new zoning districts are depicted on **Map 7: Zoning and Future Land Use Map Analysis**.

The inconsistencies depicted in **Map 7: Zoning and Future Land Use Map Analysis** are numbered as follows:

- ◆ 1. Areas of West Kingston, zoned R-20 currently, depicted as Commercial Neighborhood in Future Land Use Map
- ◆ 2. Single parcel owned by URI, zoned R-40 currently, depicted as Government and Institutional in Future Land Use Map
- ◆ 3. Multiple parcels, split zoned as R-40 and GI currently, depicted as Residential Medium Density in Future Land Use Map, to correct portions Zoned GI currently.
- ◆ 4. Multiple parcels, zoned Commercial Neighborhood currently, depicted as a new special management district, entitled Gateway SMD in Future Land Use Map
- ◆ 5. Multiple parcels, zoned R-10 currently, depicted as Commercial Downtown in Future Land Use Map
- ◆ 6. Multiple parcels, zoned R-20 currently, depicted as Commercial Neighborhood in Future Land Use Map

In addition to the inconsistencies depicted above there are two differences between the Future Land Use Map and the Zoning Map which do not constitute inconsistencies. These differences can be found within the area designated as “Scenic Highways” and “Open Space.” Route 1 and Route 110 are classified as Scenic Highways on the Land Use Plan Map to illustrate the vision for these State rights of way. There is no classification for Scenic Highways on the Zoning Map and the zoning classification of these roads are the abutting Zoning Districts. Several parcels held as open space in fee simple terms by conservation organizations that are called out on the Future Land Use Plan Map but are not shown as Open Space Districts on the Zoning Map. The intent of the Land Use Plan Map Series is to show parcels which have been protected as open space through a variety of methods whereas they may not necessarily be “zoned” Open Space. Within the descriptions of the Residential Land Use Categories above several make a reference to

Zoning Districts in which Open Space is a consistent use with the intent of the district.

## ANALYSIS OF INCONSISTENCIES WITH NEIGHBORING TOWNS

In comparing the land use and zoning maps of South Kingstown with its immediate neighbors, it is clear that much coordination and cooperation has taken place over the years.

**Charlestown:** Along the Town’s southwestern border with Charlestown, medium density residential between Green Hill Pond and Route 1 matches well with the scale of residential uses on the Charlestown side. In this area, residential uses in South Kingstown have access to public water, where homes in Charlestown do not. One minor point of conflict is that commercial uses begin in Charlestown along Route 1 right at the towns’ border. Otherwise, the border between the two towns is made up of low density residential and open space.

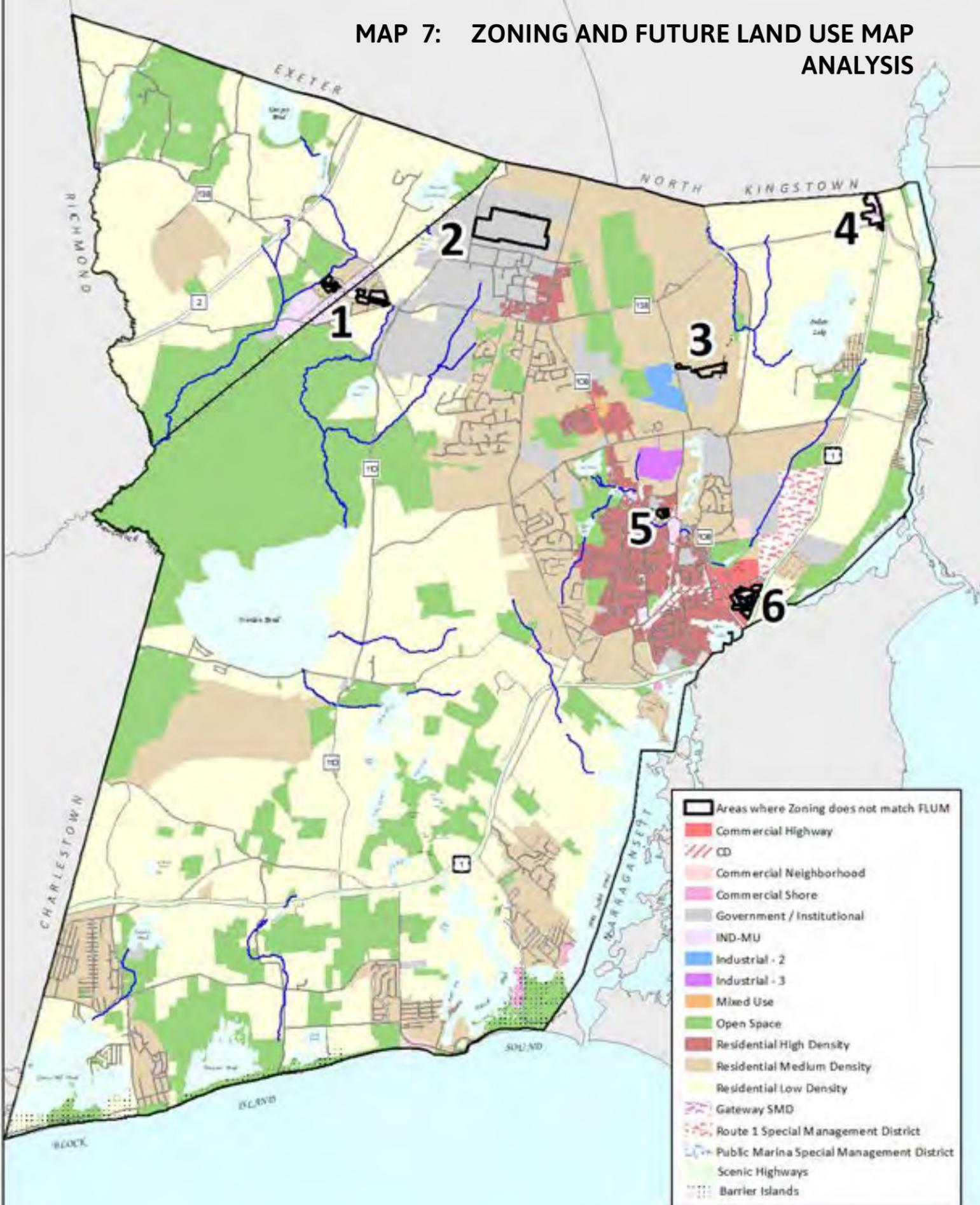
**Richmond:** Along the Town’s western border with Richmond, there is much open space and low density residential. The Richmond side includes overlays for aquifer, flood, and agriculture. At the village of Usequepaugh and north, the Richmond land use changes to medium density residential. While South Kingstown has medium density residential around the immediate village area, it changes back to low density residential to the north. This may lead to minor conflicts if this portion of Richmond is built out to full capacity at the border.

**Exeter:** The border with Exeter has similar issues as the border with Charlestown. By and large, both sides of the border consist of low density residential and open space, with a groundwater protection overlay on a good portion of the Exeter side. However, commercial uses begin in Exeter along Route 2 right at the towns’ border, whereas the roadway is not zoned for commercial anywhere along its length in South Kingstown. The far eastern portion of their border is zoned for medium density residential on both sides.

**North Kingstown:** The North Kingstown side of the border is made up almost exclusively of the lowest density land use in that town. If anything, the medium density residential on the South Kingstown side of the border may mildly conflict with the more rural land uses desired on the North Kingstown side.

**Narragansett:** The long border between Narragansett and South Kingstown is made up mostly of water bodies. The primary land connection occurs just south of Wakefield village, and abuts the largest commercial area in Narragansett. The northern portion of the border runs along the Narrow (Pettaquamscutt) River. The Narragansett side is largely high to

# MAP 7: ZONING AND FUTURE LAND USE MAP ANALYSIS



moderate density residential, while the South Kingstown side is a mix of medium high density residential and open space. The overall potential for land use conflicts along this border remains low.

## FLUM & LAND USE 2025 CONSISTENCY

In comparing the Future Land Use Map Series (FLUM) with the residential densities presented in Figure 21-02(1) of Land Use 2025: Rhode Island Land Use Policies and Plan, the following inconsistencies were identified.

**Sewered Urban Development:** Several areas within South Kingstown depicted as “sewered urban development” by Land Use 2025 do not provide a minimum residential density of five (5) dwelling units per acre. While this inconsistency is noted, South Kingstown finds the density proposed in the FLUM series to be the most appropriate residential densities for the community. The densities presented in the FLUM series build on the historic development patterns and character of these village areas. It is also important to note that the areas of land identified as high density residential on the FLUM are located within this area and conform to the minimum density set forth by the State.

**Urban Development:** Small areas located along the edges of the urban services boundary area in South Kingstown do not provide the minimum residential density of one (1) dwelling unit per acre prescribed by Land Use 2025. Two such areas of inconsistency contain residential subdivisions which contain individual building lots of less than 1 acre surrounded by private open space. Additional areas of inconsistency are found along in and near the Middlebridge area which abuts the Narrow River. This water body is governed by the Narrow River SAMP and the low-density residential areas located within are considered appropriate given this unique natural feature and the policies presented in the SAMP.

**Conservation/Limited, Reserve, Non-urban Development:** Two historic areas of development within South Kingstown are located in areas identified as conservancy, non-urban developed, prime active farmland, and major parks and open space in Land Use 2025. These areas, which consist of the villages of Matunuck and Snug Harbor, allow a maximum residential density greater than one (1) dwelling unit per acre. This inconsistency is associated with the historic development patterns established in these areas and are considered appropriate.

## BUILD-OUT ANALYSIS

The Town performs build-out analyses on a regular basis to estimate the development potential if it were to be entirely developed under the provisions of existing zoning. It is a hypothetical exercise which paints a picture of the end result of existing regulations and policies. There are

two major reasons for performing these analyses: 1) the numbers generated in these calculations can help identify critical issues (e.g. land shortage or surplus) which need to be considered in the formulation of policies and implementation strategies designed to address them; and 2) to adequately plan for future needs. It is emphasized that the build-out analyses developed by the Town are not endorsements of the development of certain areas of the Town which are relatively free of development constraints. Rather, they are an indicator of the future results of existing land use policies.

#### METHODOLOGY

The Town utilized updated RIGIS Land Use, Zoning and Tax Assessor data to complete the build-out analysis. The model was updated utilizing the following information:

- ◆ Parcels GIS data layer;
- ◆ Protected Open Space GIS data layer;
- ◆ Local Knowledge\*/Land Use GIS data layer;
- ◆ Residential unit tabular data from Building Official; and
- ◆ Pre-approved multi- and single-family residential unit information.

\*Local Knowledge” is defined as residentially-zoned parcels, such as cemeteries where no house will ever be built, or completed subdivisions known to be built-out due to restrictions placed on them at time of approval, as illustrated on **Map 8: Build-Out Analysis**. These parcels are removed from the Build-out to make the analysis more accurate.

The model excludes constrained areas like wetlands and protected open space from developable land. Assumptions are made for density, actual number of people, number of people per household and others. In general, the build-out analysis was run based on the following assumptions.

- ◆ All land that is not water or wetlands has potential for new units;
- ◆ Constrained land (non-residential zones, open space, local knowledge areas) removed;
- ◆ Minimum lot size per zoning;
- ◆ 15% subdivision efficiency;
- ◆ 50% subdivision efficiency on developed land;
- ◆ 50% hydric soils outside wetland areas;
- ◆ 2.56 persons / single-family unit; and
- ◆ 1.25 persons / multi-family unit.

#### RESULTS OF BUILD-OUT ANALYSIS

Under current assumptions regarding zoning density, site efficiency, and other assumptions, the results of the model show the Town with the potential for an additional 4,087 dwelling units (including 3,797 single-family dwelling units, 290 multi-family dwelling units, 433 of which are developed through inclusionary zoning requirements and incentives), and

**TABLE 8: RESULTS OF MUNICIPAL BUILD-OUT ANALYSIS**

BUILD OUT UNITS (includes inclusionary)	CENTRAL VILLAGES	OTHER AREAS	TOTAL
Multi-Family	277	13	<b>290</b>
Single-Family	1,116	2,681	<b>3,797</b>
<b>TOTAL</b>	<b>1,393</b>	<b>2,694</b>	<b>4,087</b>

POPULATION INCREASE	CENTRAL VILLAGES	OTHER AREAS	TOTAL
Multi-Family	346	16	<b>362</b>
Single-Family	2,857	6,863	<b>9,720</b>
<b>TOTAL</b>	<b>3,203</b>	<b>6,880</b>	<b>10,082</b>

**TABLE 9: TOTAL POTENTIAL UNITS & POPULATION**

	2015 BASE FIGURE	ADDITIONAL WITH AT BUILD-OUT	TOTAL
<b>RESIDENTIAL UNITS</b>	13,056	4,087	<b>17,143</b>
<b>POPULATION</b>	30,577	10,082	<b>40,659</b>

**TABLE 10: COMPARISON OF 2010 & 2018 BUILD-OUT UNITS**

		SINGLE-FAMILY	MULTI-FAMILY	TOTAL
<b>2010 BUILD-OUT UNITS</b>	Market-Rate	3,718	298	4,016
	Inclusionary	450	24	474
	<b>TOTAL</b>	<b>4,168</b>	<b>322</b>	<b>4,490</b>
<b>2018 BUILD-OUT UNITS</b>	Market-Rate	3,384	270	3,654
	Inclusionary	413	20	433
	<b>TOTAL</b>	<b>3,797</b>	<b>290</b>	<b>4,087</b>

an additional 10,082 residents at full build-out. This represents the future potential for a total population of 40,659 residents and 17,143 housing units by 2026 for multi-family (37.7 units / year) and 2091 for single-family units (52.4 units / year). The Municipal Build-out Analysis is included below as a reference and summarizes maximum future build-out under existing Zoning Ordinance provisions.

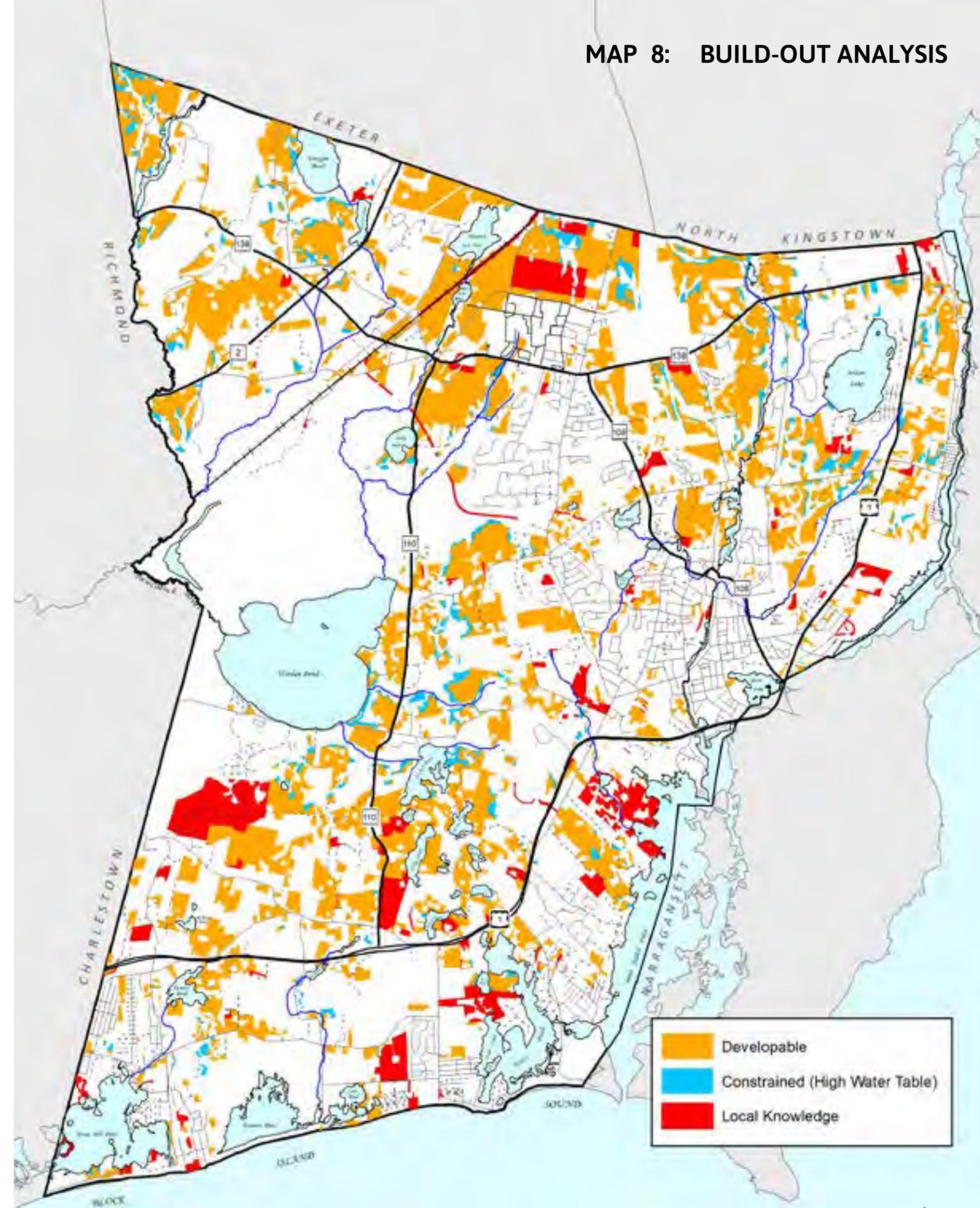
## NEEDS & OPPORTUNITIES

### COMMERCIAL & MIXED USE IN EXISTING VILLAGES

Less than 1% of land in South Kingstown is zoned for commercial activity. As such, existing opportunities for new commercial development and expansion are limited. The Town needs to assess existing commercial uses and zoning districts in order to provide additional opportunities for properly located, appropriately sized, and well-designed commercial and mixed-use development that builds upon historic development patterns. Additional needs and opportunities are listed by specific village or commercial area.

**Wakefield:** Wakefield contains two distinctly different areas: Main Street; and the Commercial Highway areas adjacent to Route 1, Old Tower Hill Road, and Dale Carlia Corner. Opportunities to increase density and permit a greater diversity and mix of uses exist in both areas. Along Main Street opportunities exist to promote development through evaluation and revision of parking regulations, implementation of traffic calming strategies, greening of streetscape, celebration of the Saugatucket River, and activation of commercial street fronts. Opportunities to promote mixed-use development that provides both commercial and residential uses exist along Main Street, included the eastern section of Main Street approaching Dale Carlia Corner. The Commercial Highway area of Wakefield is challenged by an automobile-oriented development pattern. Opportunities to increase density, allow more mixed-use development, improve traffic safety and circulation, and reduce the amount of impervious surface occupied by parking areas exist in this area. Additionally, more area for limited commercial development may exist within an area located south of Old Tower Hill Road to the east of Route 108. A need for small scale green spaces within this developed portion of Town is noted.

**Peace Dale:** Peace Dale contains areas of commercial and industrial zoning surrounded by residences. Opportunities exist to rezone the sites of redeveloped mill structures, currently zoned as Industrial, as an Industrial/ Commercial mixed-use zone to more appropriately reflect the current and intended diverse set of uses. These uses include offices, recreational uses,



a brewery and distillery. Within the center of Peace Dale improvements to traffic circulation including traffic calming, improved pedestrian and bicycle facilities, activation of the street, and potential parking requirement reductions provide opportunities to improve the area as a vibrant village center. A small number of residentially zoned parcels adjacent to commercial uses in Peace Dale provide an opportunity for additional commercial development in the village.

**Kingston:** Kingston contains a small area of commercially zoned activity adjacent to the University of Rhode Island campus. Traffic congestion and parking in the area provide significant challenges. Some rights-of-way in the area, including Briar Lane, may need improvement to accommodate appropriate development. Opportunities exist in this area to allow a mix of uses within the commercial area and promote pedestrian connectivity and activity. Kingston also contains a Historic Overlay District, regulated by the Zoning Ordinance.

**West Kingston:** West Kingston contains several commercial enterprises located around the village and existing industrial areas and the Kingston Station (Amtrak), which are surrounded by and integrated with existing agricultural operations. Opportunities to grow this village exist in allowing for more limited size and scale commercial operations in keeping with the character of the village. Areas along Route 138, which include existing commercial operations may be rezoned to bring existing uses into compliance and grow the village.

**Matunuck:** Matunuck contains a significant number of commercial uses that serve the local community and tourism sector. Traffic calming is needed in the area, along with expanded and safer pedestrian connectivity between residential areas, recreational assets, and the commercial neighborhood zone. Parking is a significant challenge in the area, thus a need to provide additional parking facilities and encourage multi-modal transportation alternatives is noted.

**Route 1 & Route 138:** A pocket of commercially zoned land currently exists in this location. This area has the opportunity to serve as a gateway to South Kingstown for traffic traveling along these major roadways including the Route 1 scenic highway. Appropriate landscaping standards and the design and scale of buildings are important in this area. As such, future development of an overlay or special management district may provide tools for the allowance and regulation of this area as a commercial gateway.

**Perryville and Tuckertown:** The villages of Perryville and Tuckertown are predominately residential in nature. Opportunities exist to further define these “village centers” and plan for their future through a collaborative process with area residents and property owners.



## REDEVELOPMENT OF SCHOOL FACILITIES

As the population of South Kingstown ages and average household sizes decrease, South Kingstown anticipates a reduction in the number of students served by the Town’s educational facilities. As the Town considers strategies for school consolidation, it is faced with a need to develop tools to support appropriate redevelopment and reuse of these large, centrally located structures. The development of a unique zoning overlay district and other innovative land use planning techniques for those parcels previously utilized for governmental and institutional use may be appropriate.

## SCALE & MASSING OF DEVELOPMENT

As South Kingstown continues to promote infill development within existing village and developed areas, needs and opportunities exist to ensure that development is in keeping with the character of each village or neighborhood. South Kingstown sees an opportunity in the development of guidelines and regulatory tools to ensure future development is of a scale and physical mass appropriate for a proposed location. Efforts should be made to identify those areas where standards are most needed and develop appropriate guidance.

## LAND USE ACTION PLAN SUMMARY

**Goal 1:** Land use policies will be consistent with “Land Use 2025: Rhode Island’s Land Use Policies and Plan”, and to maintain continuity with the 1992 South Kingstown Comprehensive Plan and previous Plan updates.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> Improve communication between the Planning Department and the citizens of this community regarding the Comprehensive Plan, other planning documents and processes, to increase understanding of planning-related issues.</p>  <p><b>Policy 1.2</b> Require that all formal amendments to this Plan include a public hearing to reflect any proposed change to the Zoning Ordinance, Zoning Map, or Subdivision and Land Development Regulations, where necessary.</p> <p><b>Policy 1.3</b> Ensure that regulations governing the development review process be clear, descriptive and utilize unambiguous language.</p> <p><b>Policy 1.4</b> Support regional planning with adjacent communities and other Washington County communities, including through participation with Washington County Regional Planning Council.</p> <p><b>Policy 1.5</b> Partner with the University of Rhode Island (URI) in all local planning and land use efforts regarding projects of mutual concern or impact.</p>	<p><b>Action 1-1</b> Amend the Comprehensive Plan in accordance with state level requirements or in accordance with the needs of the community.</p> <p><b>Action 1-2</b> Establish procedures to ensure that the goals of each element of this Plan are implemented and that any modification to goals or policies is evaluated for its conformity with the balance of the Plan.</p> <p><b>Action 1-3</b> Evaluate and implement appropriate measures to foster better communication and information sharing on planning issues and the general land use planning function within the community. Such measures may include: a departmental brochure, outreach efforts to community groups, and improved use of the town website and social media as a means to educate and inform interested parties.</p>  <p><b>Action 1-4</b> Utilize the Town website and other modern communication vehicles to provide information and increase awareness about the natural, cultural, and recreational resources of the community, and the programs and options available for protecting and enhancing these important community features.</p>   <p><b>Action 1-5</b> Review and revise the South Kingstown Zoning Ordinance, Subdivision and Land Development Regulations, and the Residential Design Manual Standards to improve implementation and to avoid ambiguity.</p> <p><b>Action 1-6</b> Consider an agreement with URI to work cooperatively to support a locally-based food system in South Kingstown through coordinating available resources and expertise.</p>   <p><i>(continued on next page)</i></p>

**Goal 1:** Land use policies will be consistent with “Land Use 2025: Rhode Island’s Land Use Policies and Plan”, and to maintain continuity with the 1992 South Kingstown Comprehensive Plan and previous Plan updates.

POLICIES	ACTIONS
	<p><b>Action 1-7</b> Use a Build Out Analysis, completed once every five years, to evaluate current development trends and identify appropriate growth management strategies.</p>  <p><b>Action 1-8</b> Pursue a Zoning Map amendment for portions of three residential parcels adjacent to the Rose Hill landfill from Governmental and Institutional (GI) to Medium Density Residential (R40) as depicted on the Future Land Use Map.</p> <p><b>Action 1-10</b> Pursue a Zoning Map amendment for the residential zoned parcel owned by the University of Rhode Island adjacent to the URI campus from Medium Density Residential (R40) to Government and Institutional (GI) as depicted on the Future Land Use Map.</p>

**Goal 2:** A sustainable rate of development will be maintained, which is consistent with the ability of the Town to provide essential services, to achieve a stable tax rate, to protect environmental, historic, and cultural resources, and to provide a healthy environment.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> The development review process will consider the fiscal, as well as the environmental, social, and cultural impacts of redevelopment projects and new development on raw land.</p>   <p><b>Policy 2.3</b> Consider the cost of community services and other such indicators to guide zoning decisions in order to maintain a healthy and sustainable mix of residential, commercial, industrial, and recreation/open space land uses in South Kingstown</p>    <p><i>(continued on next page)</i></p>	<p><b>Action 2-1</b> Develop mechanisms to measure and account for the cumulative impacts of development and address these impacts within the development review process. The Town shall formalize these metrics within regulations that will specify new requirements for applicants and provide clear criteria for decision-making authorities.</p>   <p><b>Action 2-2</b> Require multi-modal trip generation analysis for major subdivisions and land development projects.</p> <p><b>Action 2-3</b> Amend regulations to incorporate design standards for infrastructure improvements containing pedestrian and bicycle circulation for on-site facilities and connection to adjoining multi-modal networks, neighborhoods and villages.</p>   <p><i>(continued on next page)</i></p>



**Goal 2:** A sustainable rate of development will be maintained, which is consistent with the ability of the Town to provide essential services, to achieve a stable tax rate, to protect environmental, historic, and cultural resources, and to provide a healthy environment.

POLICIES	ACTIONS
<p><b>Policy 2.4</b> Maintain a sustainable rate of development in order to preserve its small-town character and provide for appropriate town services and facilities.</p>   <p><b>Policy 2.5</b> Support public investment in infrastructure expansions and improvements in order to catalyze private investment in land development and increase development density</p>  <p><b>Policy 2.6</b> Coordinate with State officials to encourage State investments in infrastructure that support the Town’s village areas.</p> 	<p><b>Action 2-4</b> Explore developing limits on impervious cover in areas where watershed and/or aquifer protection issues have been identified.</p>  <p><b>Action 2-5</b> Review the existing zoning regulations on the “upper Main Street corridor” (Columbia Corners to the Dale Carlia intersection) and explore opportunities to increase mixed-use development while retaining the residential character of the area. This area serves as a transition/buffer zone between Wakefield’s historic Main Street and the large scale commercial development along Old Tower Hill Road.</p> 



**Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> Encourage a diversity of landscapes that create identity and a sense of place, foster the creation of distinct neighborhoods and villages, and recognize the natural, historic and cultural features of the land and surrounding community.</p>     <p><b>Policy 3.2</b> Require landowners, builders, and developers to address the local impacts of development or redevelopment on the community. Such local impacts include, but are not limited to: adequacy of transportation infrastructure including multi-modal transportation opportunities; pedestrian connectivity; integration with the natural and built environment, including historic, cultural and recreational resources; and the provision of essential services to the site.</p>   <p><i>(continued on next page)</i></p>	<p><b>Action 3-1</b> Support a Low Impact Development (LID) approach to development and redevelopment by revising regulations to provide innovative standards for resource protection and site design.</p>  <p><b>Action 3-2</b> Evaluate expanding Historic District Overlays within the Zoning Map and the use of additional regulatory tools for the purpose of historic preservation planning.</p>  <p><b>Action 3-3</b> Evaluate and implement appropriate measures to preserve, protect and enhance the infrastructure, land uses and scenic characteristics of the southwestern approach (gateway) into Wakefield Village via Post Road/Main Street corridor which provide historic, scenic and cultural value.</p>   <p><b>Action 3-4</b> Adopt regulations that will require landowners, builders, and developers to minimize adverse impacts on the local community. These regulations shall specify requirements for applicants to explain and address local community impacts within their proposals and plans and provide review authorities with clear decision-making criteria.</p>  <p><b>Action 3-5</b> Adopt regulations that will require applicants to account for, consider, and address impacts on pedestrians and bicyclists.</p>  <p><b>Action 3-6</b> Provide the Planning Board with training opportunities to expand the capacity of its members to review potential development impacts and determine defensible findings of fact and appropriate conditions within their decisions.</p> <p><i>(continued on next page)</i></p>



**Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

POLICIES	ACTIONS
<p><b>Policy 3.3</b> Ensure high quality design of commercial development that provides an asset to the area, supports a healthy, walkable environment, and avoids the strip highway commercial development patterns characterized by suburban-type shopping centers dominated by parking lots.</p>  <p><b>Policy 3.4</b> Support a policy of improved “access management” for local and state roads to discourage the creation of multiple driveways along the frontage of existing public streets which may create traffic safety hazards and contribute to visual degradation of scenic roadside areas.</p> <p><b>Policy 3.5</b> Work with the RI Coastal Resources Management Council and RI Department of Environmental Management to ensure that assents and permits will be consistent with the community comprehensive plan and local zoning requirements, to the maximum extent allowed under the RI General Laws and regulations governing those agencies.</p> <p><b>Policy 3.6</b> Encourage the preservation and protection of trees within the built environment by supporting policies and principles of good urban and community forestry, in accordance with Element 156 of the State Guide Plan, “RI Urban and Community Forest Plan”.</p>  	<p><b>Action 3-7</b> Assist and improve the development review process by amending regulations to expand existing requirements for professional peer review to apply to major residential, commercial or industrial land development projects or redevelopment proposals, Comprehensive Permits, and Special Use Permits, where appropriate.</p> <p><b>Action 3-8</b> Amend the regulations for the Commercial Highway, Commercial Downtown, and Commercial Neighborhood Districts to address standards for mixed-use development, building scale, architectural elements, pedestrian access and connectivity, signage, landscaping, and design guidelines.</p>   <p><b>Action 3-9</b> Explore ordinance and regulatory amendments for the Central Core villages and adjacent commercial areas to encourage innovative commercial design, such as, commercial design standards, and/or a commercial development design manual to support pedestrian-oriented building design, the integration of a mix of uses, and the reuse of underutilized or vacant structures and parcels.</p>   <p><b>Action 3-10</b> Explore, evaluate and pursue revisions to parking requirements in Commercial Downtown and Commercial Highway zoning districts to reduce the amount of impervious surface on development sites, promote an activated street front, and reduce regulatory barriers to appropriate commercial development.</p>  <p><b>Action 3-11</b> Review allowed uses and dimensional regulations in commercial zoned areas of the Town to determine if changes to the mix of uses allowed and scale of structures is in keeping with the vision established by the Comprehensive Plan.</p>  <p><i>(continued on next page)</i></p>



**Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

POLICIES	ACTIONS
	<p><b>Action 3-12</b> Explore and pursue regulatory strategies, such as development of a floating zone, to effectively direct future reuse of parcels within the Government and Institutional zoning district, including but not limited school facilities planned for closure.</p>  <p><b>Action 3-13</b> Explore development of a special management district to include the Commercial Neighborhood zoning district at the intersection of Route 1 and Route 138 to recognize this area as a gateway to South Kingstown. Such a special management district may establish design standards and opportunities for appropriately sized expansion of commercial uses based upon clear performance standards.</p> 

**Goal 4:** The integrity of the Town’s villages will be intact, and the village-centric approach to development, which recognizes each village’s unique objectives, will be strengthened.

POLICIES	ACTIONS
<p><b>Policy 4.1</b> Support control of urban sprawl and dispersion by concentrating population density and infill development within the villages, as appropriate, and by providing these areas with mixed-uses, services, and facilities including public transportation, pedestrian and bicycle amenities, civic buildings, recreational resources, infrastructure improvements, and housing opportunities.</p>   <p><b>Policy 4.2</b> Document, support, maintain and enhance the unique qualities of each village.</p> 	<p><b>Action 4-1</b> Review and revise the Zoning Ordinance and regulations relating to villages to ensure that development and redevelopment will be complementary to the character of existing villages. This may include, but is not limited to, allowing for an appropriate mix of uses, revising standards controlling the size, shape, massing, scale and location of buildings and lots, and revising requirements for pedestrian access and connectivity, open space, parking signage, landscaping, and street widths and exploring design guidelines for commercial and residential development..</p> <p><i>(continued on next page)</i></p>

**Goal 4:** The integrity of the Town’s villages will be intact, and the village-centric approach to development, which recognizes each village’s unique objectives, will be strengthened.

POLICIES	ACTIONS
<p><b>Policy 4.3</b> Encourage a mix of commercial activities within the Town’s Villages to support a sustainable model of economic and community development.</p>  	<p><b>Action 4-2</b> Consider incentives for encouraging food outlets such as grocery stores, small markets, and other healthy food outlets to locate within village areas. Such incentives may take the form of reduced licensing fees for businesses providing healthy food and regulatory incentives such as increasing allowances for roadside stands and allowing small-scale grocery stores as accessory uses in commercial and mixed-use developments.</p>  
<p><b>Policy 4.4</b> Provide a diversity of housing within villages that can support a mix of businesses through localized residents that have diverse shopping and employment needs.</p>  	<p><b>Action 4-3</b> Review and revise regulations to ensure that there are opportunities to locate a range of housing types and sizes within the villages.</p>  
	<p><b>Action 4-4</b> Pursue Zoning Map amendments to rezone parcels located along Kingstown Road in West Kingstown from R20 (Medium High Density Residential) to Commercial Neighborhood as depicted on the Future Land Use Map.</p> 
	<p><b>Action 4-5</b> Pursue Zoning Map amendments to rezone residentially zoned parcels located to the south of Kersey Road in Peace Dale to Commercial Downtown as depicted on the Future Land Use Map.</p> 
	<p><b>Action 4-6</b> Pursue Zoning Map amendments to rezone residentially zoned parcels located to the south of Old Tower Hill Road between Route 108 and Route 1 to Commercial Neighborhood as depicted on the Future Land Use map.</p> 

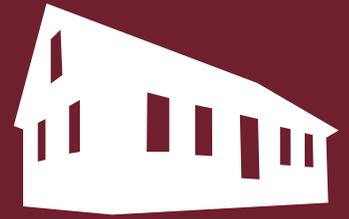
**Goal 5:** A diversity of landscapes will be protected and preserved within the Town building upon the unique natural, cultural, and historic resources described in the Natural Resources & Open Space and Cultural & Historic Resources elements of this plan.

POLICIES	ACTIONS
<p><b>Policy 5.1</b> Support the preservation of farmland for farming activities and encourage a local healthy food system by providing opportunities for local farmers to sell their products locally.</p>   	<p><b>Action 5-1</b> Conduct an audit of existing policies and land use ordinances regarding agricultural activities for consistency with the Rhode Island Agricultural Partnership’s Five Year Strategic Plan and recommendations from “South Kingstown: designing a Healthier Community” to ensure the viability of farming activities and to support a local food system.</p> 
<p><b>Policy 5.2</b> Raise resident and business owner awareness of resources and the tools needed to preserve the diverse landscapes with the Town through continuous dialogue and information sharing.</p>  	<p><b>Action 5-2</b> Expand the measures available for protecting cultural resources to provide maximum protection to South Kingstown’s historic and prehistoric resources.</p> 
<p><b>Policy 5.3</b> Expand the Town’s inventory of historic buildings and structures; and historic and prehistoric archaeological sites, to make sure that all aspects and periods of South Kingstown’s history are identified and preserved.</p> 	<p><b>Action 5-3</b> Explore and determine the feasibility of regulatory revisions to allow for reduced public improvement standards for very low-density subdivisions outside of village areas.</p> 
	<p><b>Action 5-4</b> Explore and adopt amendments to the Groundwater Protection Overlay District (GPOD) aimed at reducing impervious surfaces in areas of groundwater recharge, and to ensure no adverse impact upon the quality or supply of drinking water from new development within the district.</p> 



# HOUSING

---



## VISION

To keep South Kingstown a community that is **home** to a vital, diverse mix of people by maintaining a **wide range of housing options**.

The Town of South Kingstown will include a range of housing options for its diverse population, including families, young adults, seniors, and single-person households. The Town will strive to retain the diversity of its residents. Town programs and regulatory efforts will seek to provide appropriate housing opportunities in the community with a focus on infill development and redevelopment in the village areas.

The Town of South Kingstown views the provision of **high quality and diverse housing** as one of the most important ongoing issues within the community.

---

## GOALS

**Goal 1:** The valued sense of place and community represented in South Kingstown’s existing housing stock and traditional village development patterns will be enhanced.

**Goal 2:** Low and Moderate - Income Housing (LMI Housing) development will occur throughout the community in a manner that is reflective of South Kingstown residents’ physical, social, and financial limitations and resources, with the goal of achieving 10% of the year-round housing stock as deed-restricted for low- and moderate-income households.

**Goal 3:** A wide range of affordable and LMI Housing options will exist, developed through a combination of innovative regulatory mechanisms, public and private initiatives, and joint public and private partnerships to maintain residential diversity and to assure that local shops and offices will have a sufficient employment pool.

## GUIDING PRINCIPLES

- ◆ The South Kingstown Affordable Housing Collaborative, which serves as an advisory committee to the Town Council and Planning Board, is essential to carrying out the policies and actions called for in this Plan and educating the public on affordable housing issues.
- ◆ Appropriately scaled housing, in a variety of types and sizes and serving households with a variety of income levels, is critical to the long-term sustainability of South Kingstown.
- ◆ Opportunities to develop low and moderate-income housing on Town-owned lands, where appropriate, represent a valuable mechanism for increasing the supply of affordable housing in South Kingstown.
- ◆ Proper maintenance of the existing house stock is critical to achieving the Town’s long-term housing goals.
- ◆ Under-utilized mill complexes present an opportunity for development of additional housing units. Appropriate siting, scale, and design of such units can complement the historic legacy of these complexes and not detract from the economic development potential of these buildings.
- ◆ Low and moderate-income housing development proposals provide benefits to the community.
- ◆ Continuation and expansion of existing Federal and State programs that provide resources for the production of affordable housing are a benefit to the Town.



- ◆ Coordination with other Washington County communities on housing issues is a valuable tool in meeting the Town’s housing goals.
- ◆ State and Federal resources, including but not limited to Federal Low Income Housing Tax Credits (LIHTC) and Historic Tax Credits, assist in the creation and/or rehabilitation of low- and moderate-income housing.
- ◆ State initiatives, such as the “Neighborhood Opportunities Program,” increase resources available for low- and moderate-income rental opportunities.
- ◆ Local grants are a mechanism for providing valuable support to non-profit organizations that develop low- and moderate-income units.

## CURRENT PRACTICE

- The South Kingstown Affordable Housing Collaborative, which serves as an advisory committee to the Town Council and Planning Board, meets monthly. The Collaborative is essential in carrying out the policies and actions called for in this Plan and educating the public on affordable housing issues.
- The Town’s tax assessment policy for low- and moderate-income units is reflective of the unit acquisition cost, rather than the market value of the unit.
- The South Kingstown Rehabilitation Program, funded through the federal Community Development Block Grant program, assists eligible homeowners with home repairs (e.g. update of electrical, plumbing, and heating systems). The Town continues to explore the use of this program and other housing rehabilitation grant and/or loan programs (through CDBG funds) to fund renovations of existing homes owned by low and moderate-income residents and other programs designed to promote both the quality and quantity of affordable housing and preservation of existing housing stock
- The Town of South Kingstown takes advantage of State and Federal programs, resources, and initiatives whenever possible.
- The Town supports the use of the Affordable Housing Fund.
- The Town maintains the Growth Management Program consistent with the principles of sustainable development.
- The Town enforces minimum housing standards in the State Building Code and Property Maintenance Code to help improve and maintain the existing housing stock.

- The Building and Zoning Department conducts inspections of all low- and moderate-income housing units prior to resident move-in to ensure safe and sanitary conditions.
- The Town has existing partnerships with and provides funding to local homeless shelters and providers of services to assist the homeless and prevent homelessness.



## BASELINE INFORMATION

### OVERVIEW

The Town of South Kingstown views the provision of high quality and diverse housing as one of the most important ongoing issues within the community. Providing and maintaining quality homes throughout the Town are inextricably linked to issues of economic development, fiscal stability, social equity, and long-range environmental sustainability. Factors that affect housing policy and strategies in the community are complex and include high marketability, a strong historic and cultural fabric, sensitive landscapes, a complex transportation network, aging infrastructure, and the presence of a large university. As such, South Kingstown continually works to balance these perspectives in our attempts to guide future development policies, always mindful of the overarching goal to provide a good home for all residents today and into the future.

One of the major goals of the Housing Element is to build upon the established recommendations carried forward from the 2005 Affordable Housing Production Plan. This plan specifically targeted the development and maintenance of subsidized affordable housing as defined by the Rhode Island Low and Moderate Housing Income Act. The State’s definition of “low- or moderate-income housing” includes,

*“any housing whether built or operated by any public agency or any nonprofit organization or by any limited equity housing cooperative or any private developer, that is subsidized by a federal, state, or municipal government subsidy under any program to assist the construction or rehabilitation of housing affordable to low or moderate income households, as defined in the applicable federal or state statute, or local ordinance and that will remain affordable through a land lease and/or deed restriction for ninety-nine (99) years or such other period that is either agreed to by the applicant and town or prescribed by the federal, state, or municipal government subsidy program but that is not less than thirty (30) years from initial occupancy”* ([www.rilin.state.ri.us](http://www.rilin.state.ri.us)).

The criterion used to define this occupancy category is based upon the relationship of community income statistics to its surrounding Metropolitan Statistical Area (MSA). Low to moderate income (LMI) households include



those reporting incomes below 80 percent of the MSA median household income.

Throughout this element, the term “LMI Housing” will refer to subsidized housing units that count toward the Town’s low or moderate-income housing goals. The term “affordable housing” will refer to any home that is generally affordable to the occupant, whether market rate, subsidized, owner-occupied, or renter-occupied.



South Kingstown is a community of densely developed villages with outlying low-density development and agricultural land. The pattern of housing types reflects the past development of the Town as a series of mill villages. Housing in each village includes structures ranging from the stately homes of the mill owner to historic multifamily mill-worker housing and includes newer construction and apartments.

The diversity of well-maintained historic housing in the community is reflected in the establishment of both local and national historic districts, which provide a strong reference pattern for the village environs. Outside of these established districts, the community boasts an impressive collection of somewhat scattered historic structures. These provide cultural anchors within their neighborhoods which help to inform future development and property improvements.

Traditionally, single-family homes dominate the housing stock in the community, providing nearly 80 percent of the housing. However, recent years have seen a trend towards multi-family and apartment housing comprising an increasing percentage of all units constructed. Of the 1,374 new housing units constructed between 2004 and 2017, 757 were single-family units, 13 were duplex units, 583 were condominium units and 21 were mobile homes.

In the short term it is expected that this relative balance will continue as several multi-household developments build out. It is also anticipated that with an improving economy the local housing market will return to a more normal status with single-household construction reasserting itself in proportion to multi-household construction. It is not expected that a return to the boom years of the mid 1980’s and early 2000’s will occur during the next five- to ten-year period. This is due to a diminished stock of larger parcels with minimal constraints to development.

Housing in town is an eclectic mix of historic structures, post WWII construction, and new subdivisions. According to the 2015 American

Community Survey (ACS) estimates, the median year homes were built in South Kingstown is 1975, making the median age 42 years. Over 20% of the housing stock was built prior to 1940. The Town’s Pacing and Phasing Program has been dormant for several years as there has been excess capacity in the local school system. Impact fees will continue to address the actual costs of providing services to new construction.

**HOUSING STOCK**

Housing production in South Kingstown has kept pace with population growth in the Town. From 2000 to 2010, the number of housing units in South Kingstown increased from 11,291 to 13,218—a 17.0% increase in units. The 2015 ACS shows a total of 12,836 housing units, or a slight loss since 2010. However, given the margin of error, this may be more an indication of the number of housing units remaining steady as opposed to declining. In any event, the 2015 estimate still represents a 13.7% (1,545) rise in housing units since 2000 – a significant amount. Increases in housing over the past 40 years are shown in **Figure 23: Percent Increase in Housing Units**.

**TENURE**

Ownership units are the predominant occupancy type in South Kingstown, as shown in **Figure 24: Housing Tenure**. Owner-occupied units continue to increase as a percentage of the total. Renter-occupied units in South Kingstown, while up from 2000 levels, are still considerably less than they were in 1980 and 1990, and much less than the state as a whole.

**OCCUPANCY**

Estimates show that unit occupancy has remained constant since 2010, with approximately 79% of available units occupied, and 21% vacant. (See **Figure 25: 2017 Housing Unit Occupancy**.)

**SEASONAL UNITS**

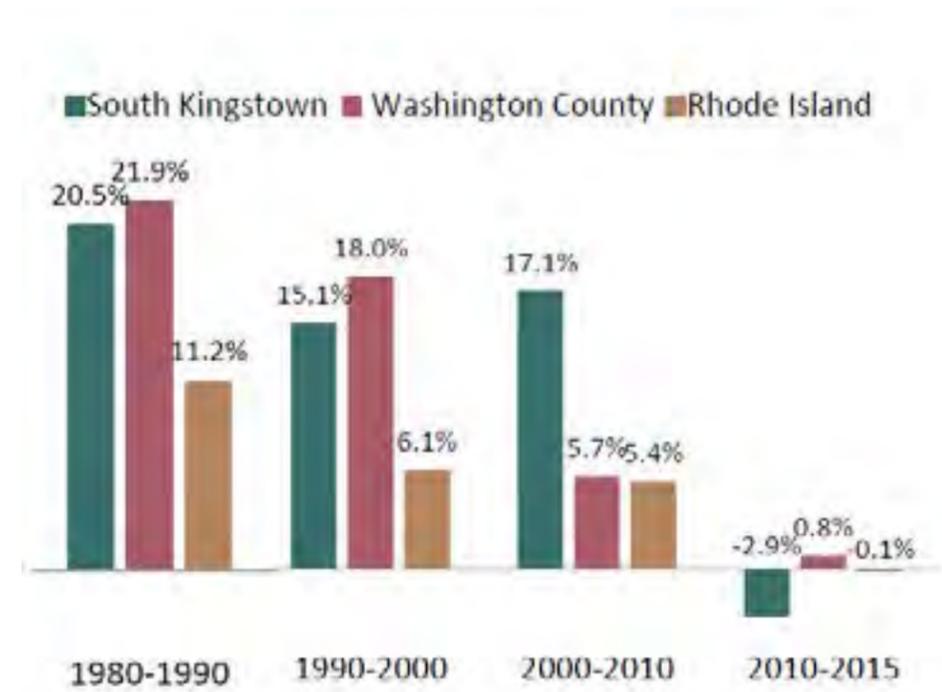
Seasonal housing units, which are a significant portion of South Kingstown’s housing stock, also increased from 1,726 in 2000 to 2,251 in 2015 (see **Figure 26: Seasonal Housing**). Seasonal units now account for 17.5% of all housing units (with the remainder serving as year-round housing units). This could be attributed to the economic downturn and more people choosing to rent their second/vacation homes for additional income.

The proliferation of seasonal homes in South Kingstown contributes to the number of vacant housing units in town. At 2,511, as of the 2015 ACS, vacant housing units represent 19.6% of the Town’s housing units, a much higher percentage than the state overall (11.3%). However, when seasonal homes are removed from the equation, vacant homes make up only about 2.5% of year-round housing units.



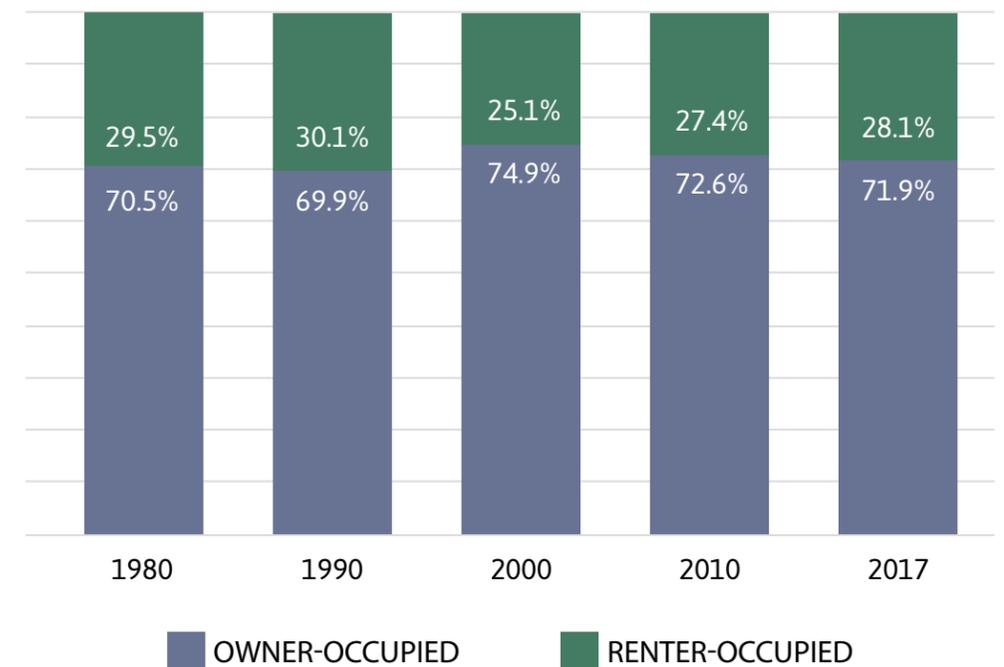
**FIGURE 23: PERCENT INCREASE IN HOUSING UNITS**

Source: U.S. Census Bureau decennial census 1980, 1990, 2000 and 2010, 2011-2015 American Community Survey 5-Year Estimates



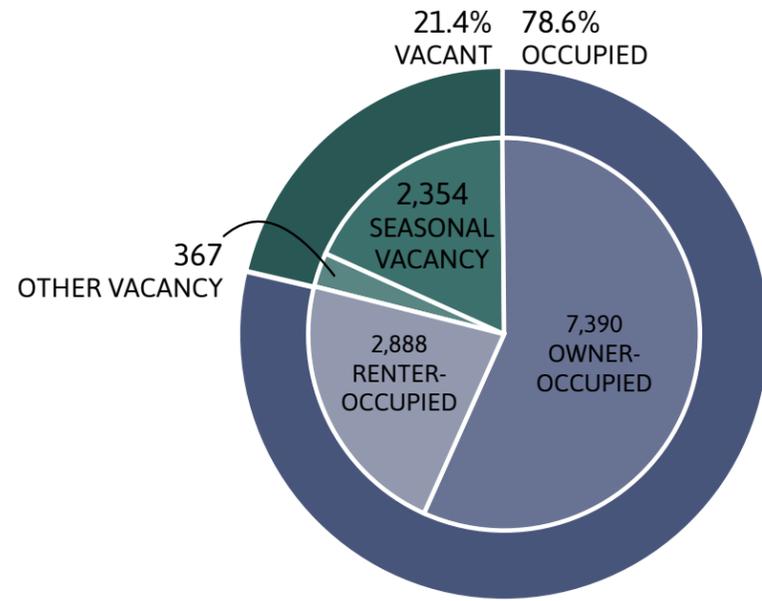
**FIGURE 24: HOUSING TENURE**

Source: U.S. Census Bureau decennial census 1980, 1990, 2000 and 2010, 2013-2017 American Community Survey 5-Year Estimates



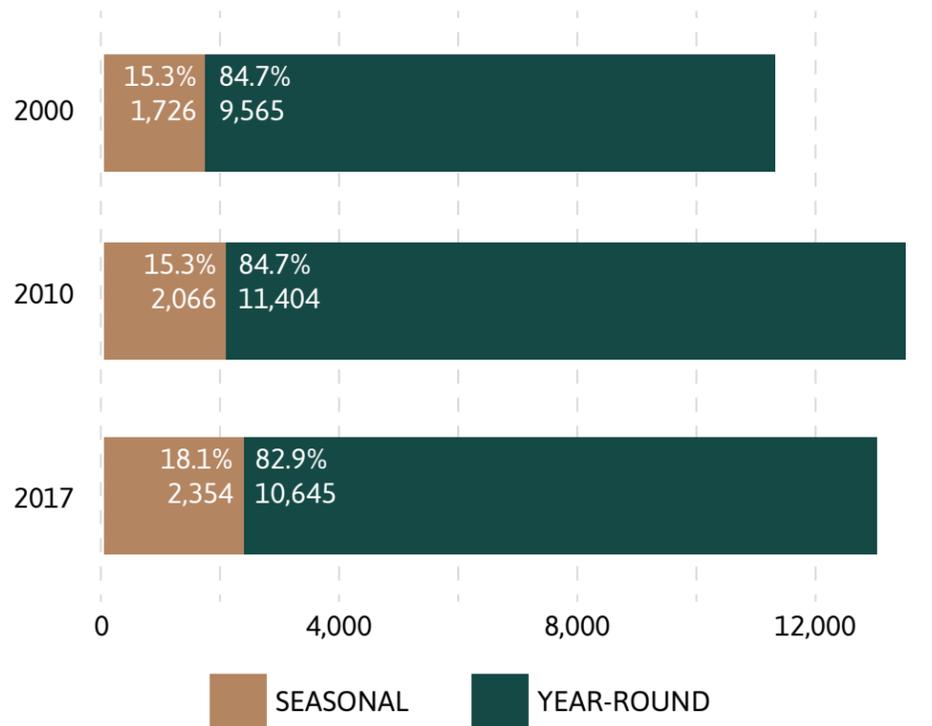
**FIGURE 25: 2017 HOUSING UNIT OCCUPANCY**

Source: U.S. Census Bureau 2013-2017 American Community Survey 5-Year Estimates



**FIGURE 26: SEASONAL HOUSING**

Source: U.S. Census Bureau decennial census 2000 and 2010, 2013-2017 American Community Survey 5-Year Estimates



**UNIT TYPES**

Single family homes are the predominant unit type in South Kingstown. **Figure 27: Housing Types in South Kingstown**, gives a breakdown and comparison of unit distribution for single family attached, multifamily, and other types of housing units in the Town, according to the ACS. **Figure 28: New Dwelling Units since 2004 by Type** provides an overview of the new dwelling unit types constructed since 2004.

**UNIT AGE**

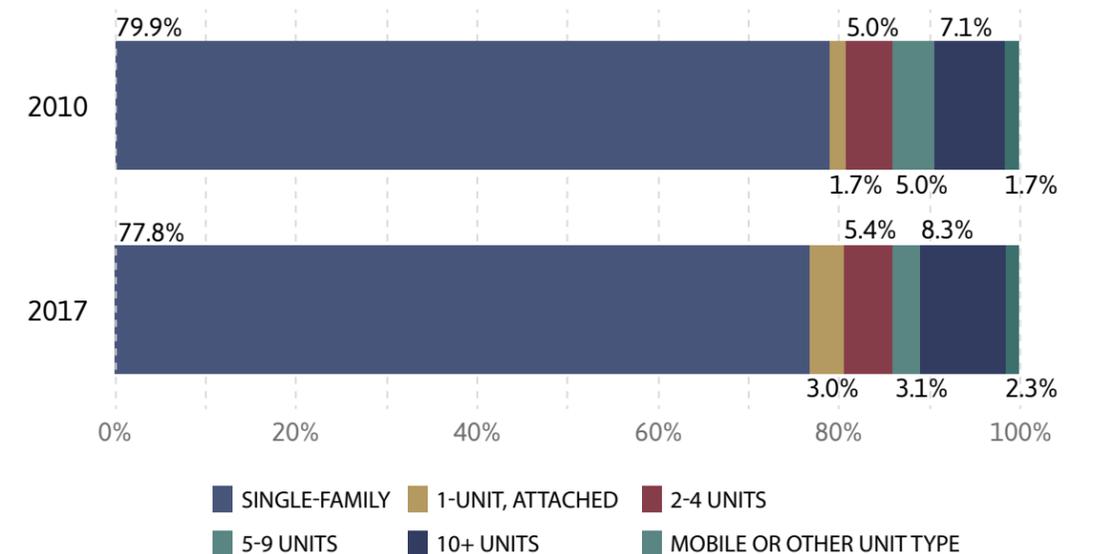
South Kingstown's housing stock is an eclectic mix of historic structures (some dating to the late 17th century), homes built during the boom years after World War II, and many newer homes as well. **Map 9: Age of Residential Structures** depicts the age of housing through Town, while **Figure 29: Year Built, Occupied Housing Units** compares the age of occupied units.

**HOUSEHOLDS**

As shown in **Figure 3: Percent Population Growth Per Decade** (Page 9) and **Table 1: South Kingstown Population As Percent of RI Over Time** (Page 9), South Kingstown experienced a significant population growth from 2000-2010, growing from a Town of 27,921 according to 2000 Census data, to a Town of 30,639 in 2010. This increase of 9.7% is significantly more than the population growth experienced by the State as a whole. From 2000 to

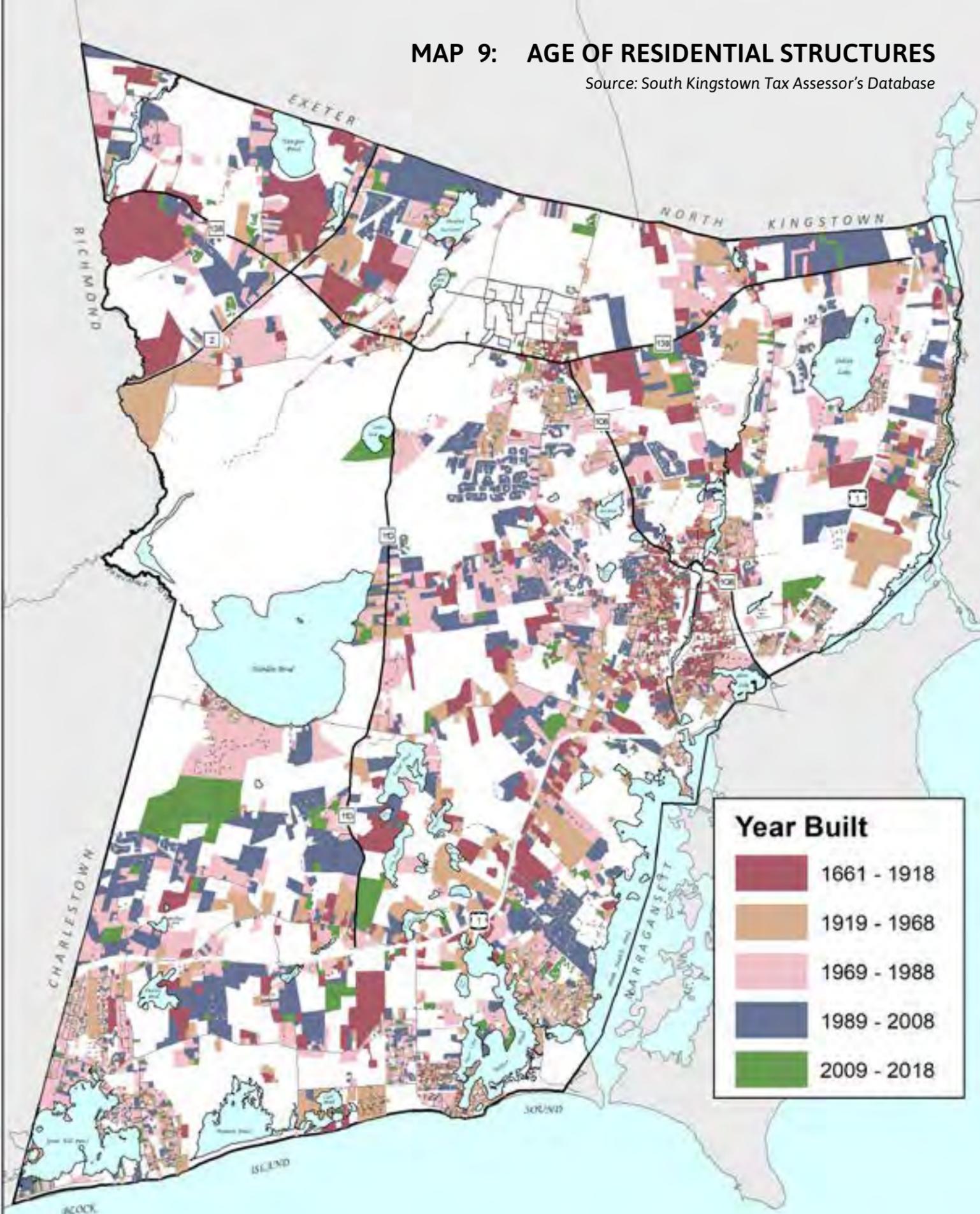
**FIGURE 27: HOUSING TYPES IN SOUTH KINGSTOWN**

Source: U.S. Census Bureau decennial census 2010, 2013-2017 American Community Survey 5-Year Estimates



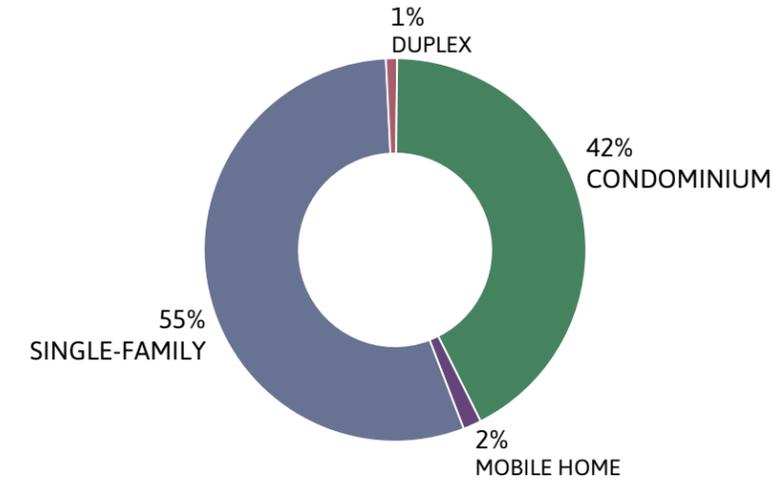
### MAP 9: AGE OF RESIDENTIAL STRUCTURES

Source: South Kingstown Tax Assessor's Database



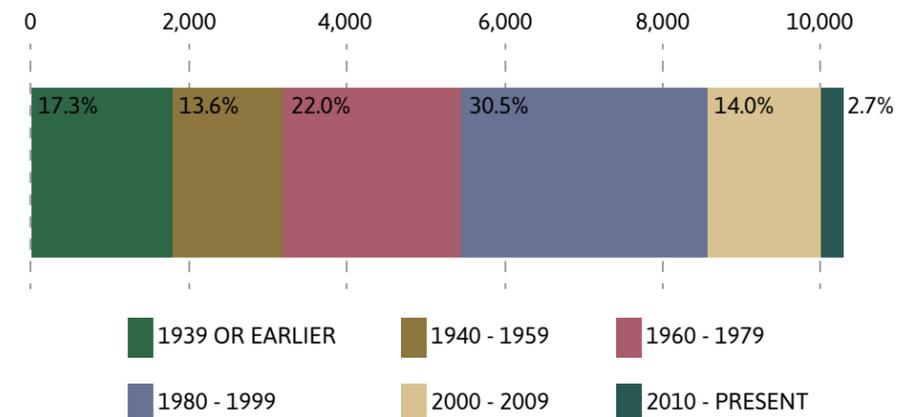
### FIGURE 28: NEW DWELLING UNITS SINCE 2004 BY TYPE

Source: South Kingstown Building and Zoning Department, Building Permit Data



### FIGURE 29: YEAR BUILT, OCCUPIED HOUSING UNITS

Source: 2013-2017 American Community Survey 5-Year Estimates



2010, Rhode Island grew 4.0%, from 1,048,319 to 1,052,567. Estimates from 2015 suggest that the Town's population growth has stalled in recent years while the state overall has ticked up a bit. Also, the average household size, while still larger than the state as a whole, has been on a consistent decline for several decades.

Nevertheless, the town's population projections suggest an increase of approximately 7,500 people over the next 20 years (see **Figure 1: South Kingstown Population - page 10**). This expected steady increase in South Kingstown's population will continue to put pressure on housing opportunities—particularly affordable housing opportunities—within the Town. Further, should the trend in shrinking household size continue, the

types of housing most in demand will start to skew toward smaller homes and there will likely be a greater demand for more housing units in the aggregate.

### SIZE

The Census Bureau reports that the average household size in South Kingstown has decreased slightly since 2000, but remained generally constant since 2010. However, the percentage of households containing one or two people is increasing, from 58.3% in 2000 to an estimated 64.6% in 2017, and the percentage of households with three or more persons is declining, from 41.7% in 2000 to an estimated 35.4% in 2017. See **Figure 30: 2017 Household Size by Tenure** and **Figure 31: Changes in Household size since 2000**.

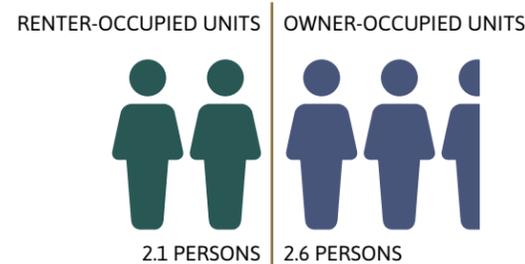
Household size varies substantially between owner- and renter-occupied households, as shown below. The 2017 estimated household size for owner-occupied units is just over 2.6 persons per unit, where the renter-occupied household size is just under 2.1 persons.

### COMPOSITION

The composition of households is also changing. In 2000, the Census Bureau reported that 68.8% of households identified as “family,” while that percentage was estimated at 65.0% for 2017. Similarly, the percentage of households with children under 18 has also declined, from 34.6% in 2000 to 25.7% in 2017 (see **Table 11: Changes in Household Type Since 2000** and **Table 12: Households with Children under 18**).

**FIGURE 30: 2017 HOUSEHOLD SIZE BY TENURE**

Source: 2013-2017 American Community Survey 5-Year Estimates



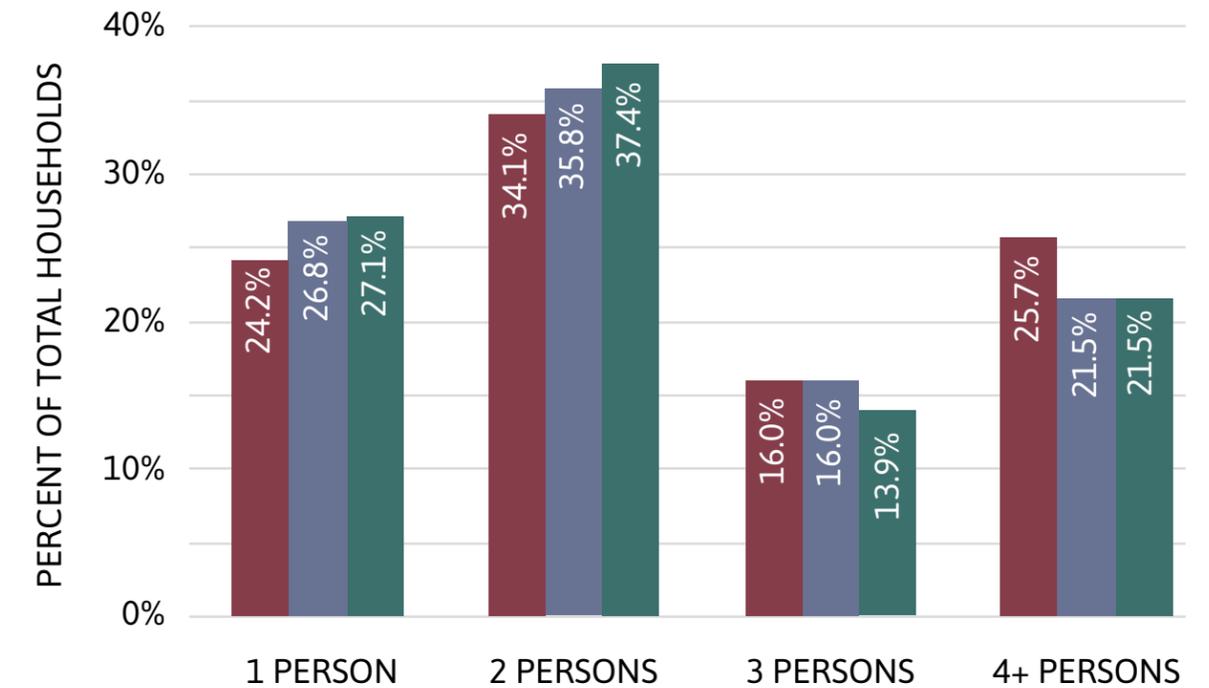
### COST OF HOUSING

#### SALES PRICE

The median sale price of a single-family home in South Kingstown surged dramatically leading up to the Great Recession of 2008, topping out at \$374,500 in 2005, and then dropped to \$197,000 in 2011. However, since

**FIGURE 31: CHANGES IN HOUSEHOLD SIZE SINCE 2000**

Source: U.S. Census Bureau decennial census 2000 and 2010, 2013-2017 American Community



**TABLE 11: CHANGES IN HOUSEHOLD TYPE SINCE 2000**

Source: U.S. Census Bureau decennial census 2000 and 2010, 2013-2017 American Community Survey 5-Year Estimates

HOUSEHOLD TYPE	2000	2010	2017
Family Household	68.8%	64.4%	65.0%
Non-Family Household	31.2%	35.6%	35.0%

**TABLE 12: HOUSEHOLDS WITH CHILDREN UNDER 18**

Source: U.S. Census Bureau decennial census 2000 and 2010, 2013-2017 American Community Survey 5-Year Estimates

HOUSEHOLD TYPE	2000	2010	2017
Households with Children Under 18	34.6%	26.3%	25.7%
Households without Children Under 18	65.4%	73.7%	74.3%

that time, the sale price has been increasing steadily, and it exceeded pre-recession levels in 2017 with a median price of \$390,750. The end-of-year median price for 2018 dropped to \$339,000, but this figure is still over twice the 2000 median price of \$165,000.

While condominium median sales prices in South Kingstown were affected by the Great Recession of 2008, the swing of prices was not quite as dramatic. The median sales price for condominiums was \$460,000 in 2006 and 2007, and it fell to \$329,900. Condominium sales prices have not recovered as well as single-family prices, the median sales price being \$408,973 at the close of 2018.

Single-family and condominium sales prices have historically been higher than those of Rhode Island as a whole, and post-recession prices continue this trend. The median single-family sale price for all of Rhode Island in 2018 was \$264,950 vs. \$305,000 in South Kingstown. The divide is even greater in the condominium market, with Rhode Island's median at \$216,000 in 2018, and South Kingstown's at nearly double that figure.

**RENTAL PRICE**

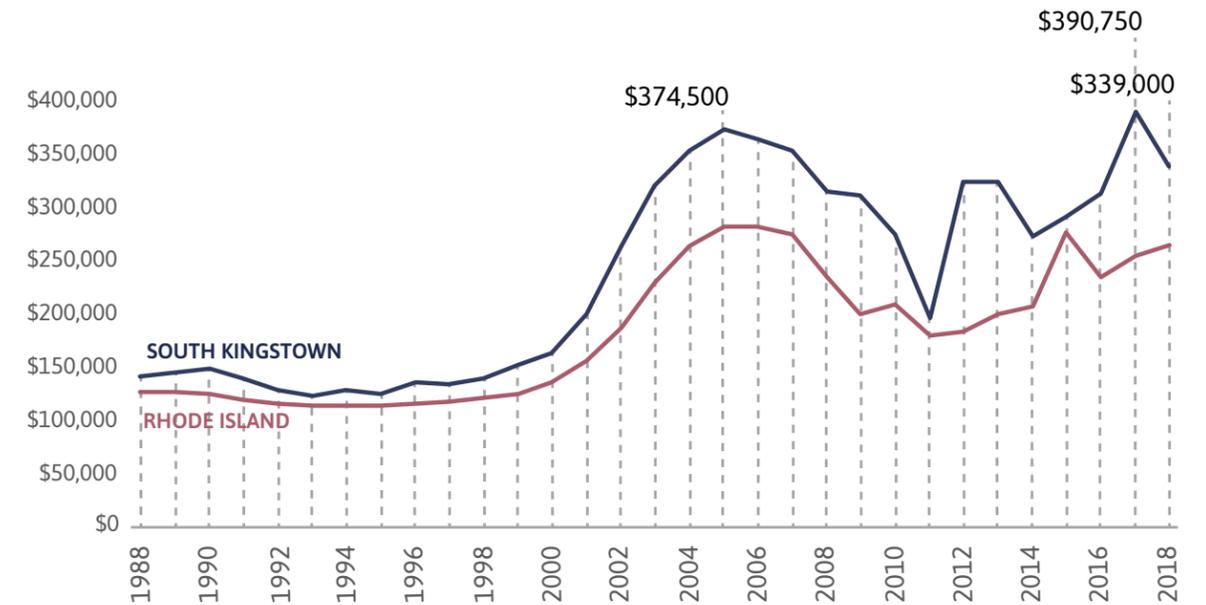
The average rental cost of a two-bedroom apartment in South Kingstown in 2017 was \$1,355. Available data from Rhode Island Housing and Housing Works RI shows that rental prices have been relatively consistent since 2006. However, rental rates seem to have increased dramatically since 1990. The rate of increase in rental prices over this time period exceeds the rate of increase for single-family homes.

**Figure 34: Increase in Rental Prices Since 1990** compares the changes in average rental rates in South Kingstown from 1990 to 2017. It must be noted that the rental rates given by the decennial census (1990 and 2000) are lower than other reported rental rates advertised in local newspapers. The data found in the following table should be used to generally understand and illustrate the dramatic increase in rental rates over the past several decades.

For instance, according to this table, rental rates increased 159% in South Kingstown from 1990–2010. This increase is actually higher than the increase in ownership housing prices during the same time period. When broken out by the number of bedrooms, it is clear that rental units, regardless of size, have bounced back to meet or exceed pre-recession prices. Furthermore, this leap in rental housing prices is disproportionate to the increase in the median income in South Kingstown from 2000–2015, which rose only 62.5%. These statistics clearly demonstrate that South Kingstown families, both owners and renters, will continue to be priced out of the housing market if recent trends persist.

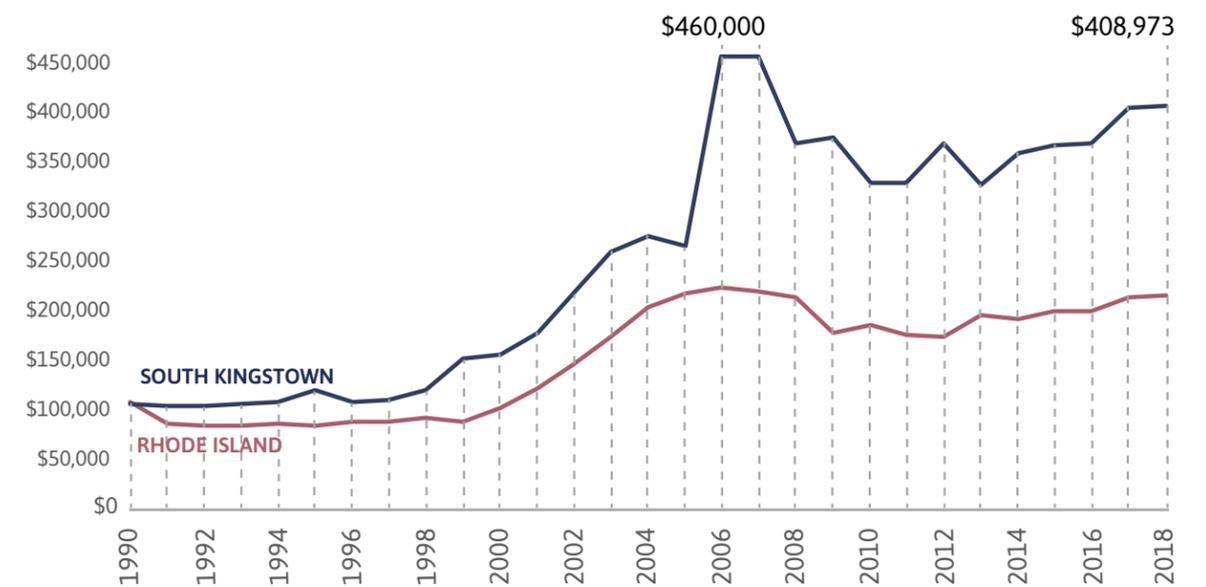
**FIGURE 32: SINGLE-FAMILY MEDIAN SALES PRICE**

Source: RI Realtors Association, accessed at [www.riliving.com](http://www.riliving.com)



**FIGURE 33: CONDOMINIUM MEDIAN SALES PRICE**

Source: RI Realtors Association, accessed at [www.riliving.com](http://www.riliving.com)



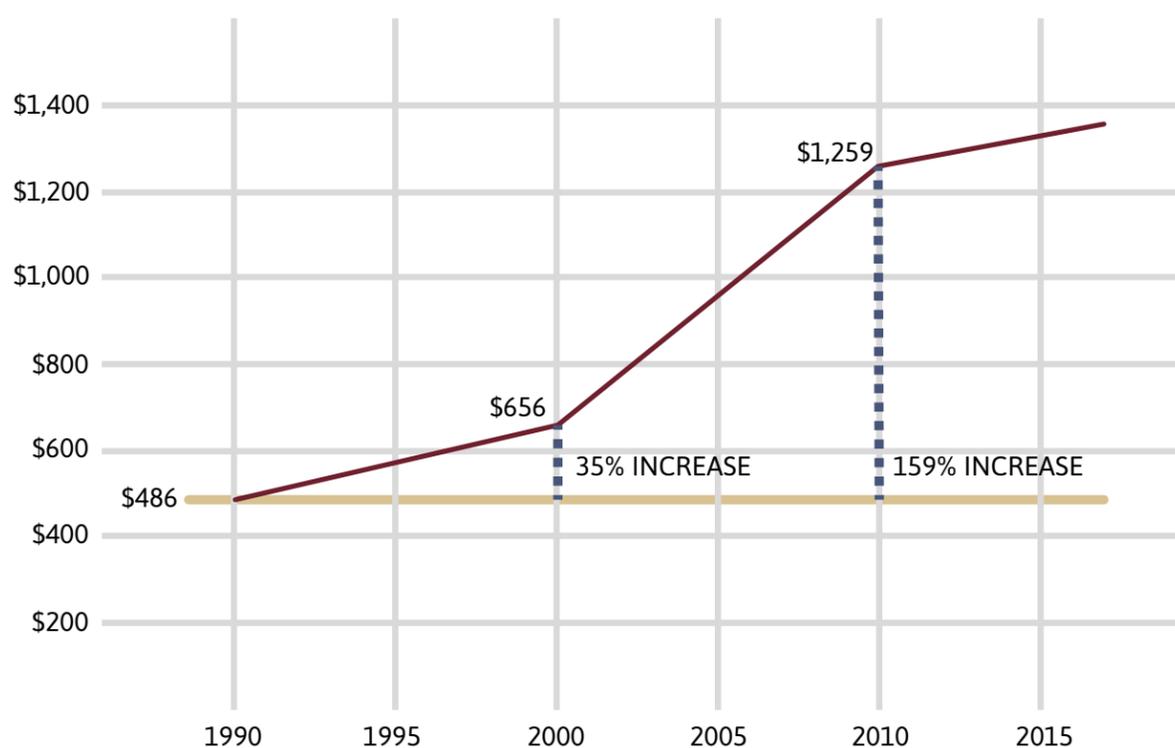
**FIGURE 35: RENTAL PRICES SINCE 2006**

Source: Rhode Island Housing Rent Survey, Housing Works RI

YEAR	1-BEDROOM UNIT	2-BEDROOM UNIT	3-BEDROOM UNIT
2006	\$972	\$1,308	\$1,635
2007	\$1,034	\$1,346	\$1,624
2008	not available	\$1,436	\$1,552
2009	not available	\$1,204	\$1,676
2010	not available	\$1,259	\$1,857
2011	not available	\$1,237	\$1,756
2012	\$975	\$1,274	\$1,407
2013	\$943	\$1,296	\$1,669
2014	\$1,081	\$1,301	\$1,732
2015	\$1,047	\$1,434	\$1,940
2016	\$1,018	\$1,344	\$1,749
2017	\$994	\$1,355	\$1,798

**FIGURE 34: INCREASE IN RENTAL PRICES SINCE 1990**

Source: U.S. Census Bureau decennial census 1990 and 2000, Housing Works RI



## HOMELESSNESS

Shelter is a basic human need. Protection from the elements and a place of security are essential needs. Housing is a fundamental social and economic need. Housing, like most economic commodities, responds to supply and demand. But the market alone cannot provide the housing types, affordability, and supportive services often needed to prevent or remedy homelessness.

Beyond the homeless population in South Kingstown using area homeless shelters, homeless encampments can be found in several spots in town, including behind the Salt Pond Shopping Plaza, the Old Mountain Field Skateboard Park, the Kingstown Road CVS, and various other parks throughout the warmer months. It should be noted that there are likely a number of unidentified homeless individuals and families, or those who may be at risk of homelessness. The Town should work with regional groups that specialize in finding and providing services for such individuals and families. Further, the economic downturn in the state forced many individuals and families to lose jobs and homes. The impacts of this are likely still reverberating throughout the community.

Tri-County Community Action Agency in Wakefield provides services to many residents that help prevent homelessness, including Head Start, weatherization, food, clothing and housing assistance, youth programs, emergency services, and job training and placement. Washington County Community Development Corp. provides services designed to increase housing stability for low- and moderate-income households, including administration of the Town's CDBG Housing Rehabilitation Set Aside program. The Welcome House of South County is a leading provider of homeless services in southern Rhode Island. It consists of four distinct but integrated services:

- 17 bed homeless shelter located at 8 North Road.
- A meal site serving lunch to the local community, also located at 8 North Road.
- Administrative Offices at 22 North Road.
- Peace Dale Winter Shelter located at 261 Columbia Street, operated in conjunction with the Peace Dale Congregational Church from November 1 to March 31 each year.

In 2016, the Welcome House tracked 116 people using their main shelter over the course of the year and 80 using the shelter at Peace Dale Congregational Church. Approximately 20 people daily are served lunch at its soup kitchen, which runs Monday through Friday. According to Welcome House, about 1/3 of its intake comes from shelters outside of South Kingstown, and another

1/3 come from inpatient settings such as Rhode Island, Butler, and South County Hospitals. Anecdotally, most of these people and families come to South Kingstown because they have some connection here, whether they were born here or have family in the area. It is unusual for people without any connection to the Town to be homeless in South Kingstown. The Rhode Island Emergency Shelter Annual Report from 2013 (the latest date for which local data are available) states that 78 people identified South Kingstown as their last place of residence, totaling 1.8% of the homeless population. This is the largest number of homeless individuals for any town in Washington County.

South Kingstown has several group homes maintained under the direction of the State Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDHH). There are 78 group home beds in South Kingstown. Under the definitions in Rhode Island General Law these beds also qualify as “affordable housing” units and are credited towards the Town’s 10% LMI housing goals. Assistance is also available from Rhode Island Center Assisting those in Need (RICAN). RICAN maintains a food pantry and is seeking to expand its services to include housing assistance. The Education Exchange, a non-profit corporation in Peace Dale, works in partnership with other community-based organizations, Chambers of Commerce, and the business community, to provide adult training and education services at little to no cost. Finally, the Jonnycake Center, also of Peace Dale, works to provide comprehensive assistance for families and individuals in need of food, clothing, and household items and through direct advocacy for its clients. All of these organizations provide invaluable services for making sure South Kingstown residents don’t slip through the cracks and experience homelessness.

### LOW AND MODERATE - INCOME HOUSING

In response to a drastic shortage of affordable housing in Rhode Island, in January 2002, the State designed The Rhode Island Low and Moderate Income Housing Act (45-53), which mandates cities and towns to meet or have plans to meet a 10% affordability goal. To comply with the Act, in 2005, Rhode Island communities, including South Kingstown, developed strategies to ensure that a minimum of 10% of the total housing stock will be accessible to low and moderate-income households.

Over the past decade, the Town has made incremental progress towards achieving its 10% goal. According to Rhode Island Housing, the official count of LMI Housing in South Kingstown for the 2016 calendar year stands at 5.61% of the total year-round housing units, or 612 units out of 10,900 total year-round units (2010 Census figure). Between the years 2003 and 2012, an estimated 111 units of LMI Housing were built in the Town of South Kingstown, with an additional 23 between 2012 and 2016. **Table 13: Existing LMI Housing Units** lists the composition of existing affordable housing

within the Town of South Kingstown for the calendar year 2016. There are also a number of units that are built, under construction, or approved and pending construction. The Town anticipates an additional 31 units, shown in **Table 14: Constructed/Approved LMI Housing Units**, that include both rental and home ownership opportunities.

The Town is also consulting with developers on additional projects that will include affordable units. These projects are anticipated to be constructed in the next 10 years, but actual unit projections are estimated due to many factors that influence the number of housing units a developer proposes in its final plans, and what percentage, if any, will be dedicated as affordable units.

## NEEDS & OPPORTUNITIES

### LOW- & MODERATE-INCOME HOUSING



South Kingstown recognizes the need and the advantages to provide subsidized workforce LMI Housing that will be counted by the state toward its local LMI Housing inventory and meeting the 10% goal. The restrictions associated with these properties ensure that future resale will occur in a manner that provides continued access to these homes for families and individuals of low to moderate income. The Town also recognizes that the pursuit of this goal is part of a larger, more comprehensive housing strategy that is designed to meet the needs of all demographic groups and this Housing Element reflects that more comprehensive approach. Further, the Town continues to pursue strategies that will create affordable housing units that may not be recognized by the state and counted toward the local LMI Housing inventory. Allowances for accessory dwelling units, the use of Section 8 vouchers, and the future development of cottage housing represent a few examples these strategies, which will continue to diversify high quality housing within the community.

### HOUSING COST BURDEN

In addition to LMI Housing, the Town is concerned with whether housing is generally affordable to the population, or whether households are experiencing a housing cost burden. The U.S. Department of Housing and Urban Development’s (HUD) Comprehensive Housing Affordability Strategy (CHAS) data assembles information from the U.S. Census Bureau’s American Community Survey (ACS) to provide a snapshot of the housing problems within a community, including housing cost burden. The CHAS data was most recently published in June 2018, using the ACS 2011-2015 estimates.

The data show that nearly 35% of South Kingstown’s households experience some level of housing cost burden. Housing cost burden is more predominant in rental households than ownership.

**TABLE 13: EXISTING LMI HOUSING UNITS**

Source: Rhode Island Housing

DEVELOPMENT NAME	TYPE	TENURE	TOTAL UNITS
<b>ELDERLY POPULATION</b>			
Brandywyne	RIH Elderly	Homeownership	10
Indian Run Village	RIH Elderly	Rental	115
La Casa Apartments	HUD 202	Rental	70
Peace Dale Estates	RHS 515	Rental	32
Peace Dale House	HUD 202	Rental	99
Village Gardens	Public Housing - Elderly	Rental	18
ELDERLY TOTAL			344
<b>FAMILY POPULATION</b>			
Branch Street	RIH Family	Homeownership	2
Champagne Heights	Public Housing - Family	Rental	40
East Matunuck Farms	Inclusionary Zoning	Homeownership	5
Fournier Estates	Public Housing - Family	Rental	12
The Glen at Saugatucket	Inclusionary Zoning	Homeownership	2
Green Street	RIH Family	Rental	4
Kersey Road	RIH Family	Rental	5
Kingstown Road	RIH Family	Homeownership	2
Lewis Lane	RIH Family	Homeownership	5
Meadowbrook	RIH Family	Rental	47
Meadowbrook II	RIH Family	Rental	12
Monticello Drive	Inclusionary Zoning	Homeownership	2
Old North Village	Comprehensive Permit	Homeownership	4
Rocky Brook Condos	Comprehensive Permit	Homeownership	15
Stone Soup Farm	Inclusionary Zoning	Rental	2
Sunset View Boulevard	Housing Land Trust	Homeownership	1
Tupelo Road	Housing Land Trust	Homeownership	1
FAMILY TOTAL			161

**TABLE 13: EXISTING LMI HOUSING UNITS (CONTINUED)**

Source: Rhode Island Housing

DEVELOPMENT NAME	TYPE	TENURE	TOTAL UNITS
<b>SPECIAL NEEDS POPULATION</b>			
Group Home Beds	Group Home Beds	not applicable	78
High Street	Supportive Units	Rental	6
Kenyon Terrace	RIH Special Needs	Rental	6
Kingstown Road	Supportive Units	Rental	3
North Road	Supportive Units	Rental	3
Rodman Street	Supportive Units	Rental	1
Bayberry Court	HUD 811	Rental	10
SPECIAL NEEDS TOTAL			107
TOTAL LMI HOUSING UNITS			612

The above table does not reflect Section 8 Housing Certificates administered by the South Kingstown Housing Authority, because such units do not qualify as LMI Housing.

**TABLE 14: CONSTRUCTED/APPROVED LMI HOUSING UNITS**

Source: South Kingstown Planning Department

PROJECT	TYPE	STATUS	TOTAL UNITS
Domestic Violence Resource Center of Washington County	Transitional Housing - Special Needs	Approved	5
Heritage Estates	Inclusionary Zoning	Constructed	2
Whittier Estates	Inclusionary Zoning	Under Construction	2
Hopkins Green II	Inclusionary Zoning	Approved	4
Stone Soup Farms	Inclusionary Zoning	Approved	1
Woods at Stone Soup	Inclusionary Zoning	Approved	1
South County Trail	Inclusionary Zoning	Approved	3
Castle Farm	Inclusionary Zoning	Approved	6
TOTAL			31

## OTHER HOUSING PROBLEMS

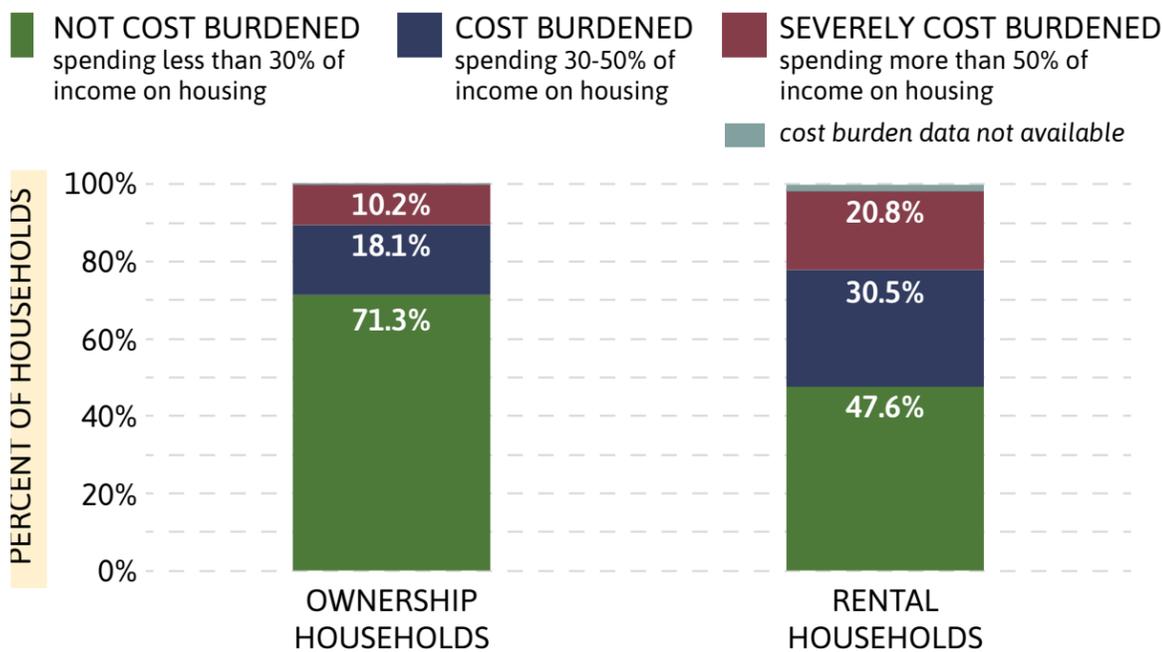
In addition to housing cost burden, the CHAS data provides information about households with other housing problems. Housing problems are defined as either housing without complete kitchen facilities, housing without complete plumbing facilities, overcrowded households, or cost-burdened households, or a combination of these conditions.

The 2018 CHAS data revealed that 2,845 (or 78.2%) of South Kingstown’s low income households faced one or more housing problems. These 2,090 households represent 27.6% of all households regardless of income, and are split fairly evenly between homeowners and renters.

The data indicated that the lower the income, the more likely it was that a household would experience housing problems. Over 83% of households with extremely low incomes (making less than 30% of the area median income) had one or more housing problems compared to 59% of households making between 50-80% of the area median income. However, housing problems are not strictly an issue for low income households. The data showed nearly 20% of households making more than 80% of the area median income (moderate income households and greater) also had one or more housing problems.

**FIGURE 36: HOUSING COST BURDEN BY TENURE**

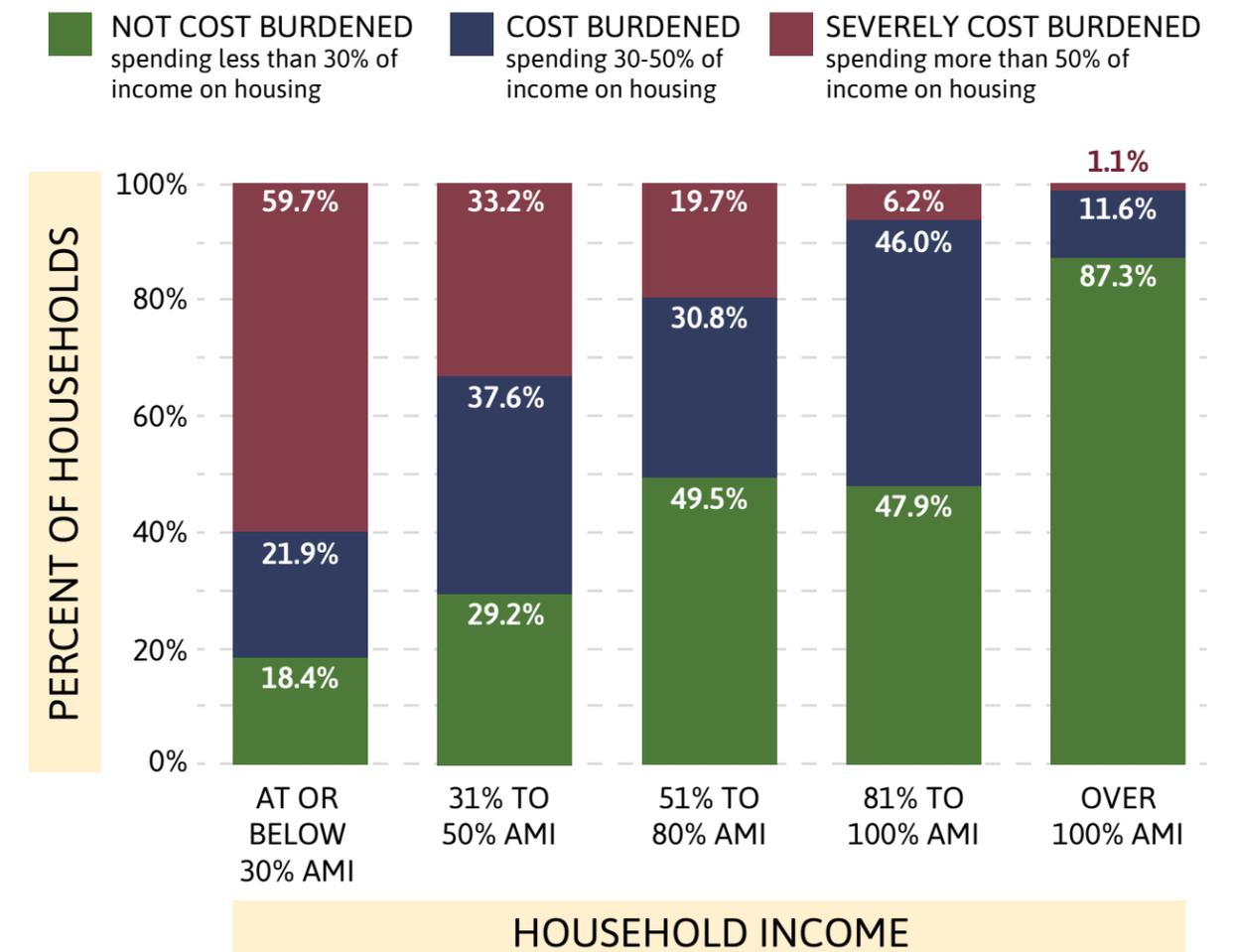
Source: U.S. Department of Housing and Urban Development



**A household is considered housing cost burdened when it spends more than 30% of the household income on housing, which includes utilities, taxes and insurance. A severe cost burden is said to exist when a household spends more than 50% of its income on housing.**

**FIGURE 37: HOUSING COST BURDEN BY INCOME LEVEL**

Source: U.S. Department of Housing and Urban Development



## RAMIFICATIONS FOR SOUTH KINGSTOWN

These data offer some perspective on the impact of rising housing costs and stagnant incomes. These households were split fairly evenly between renters and homeowners. The average rental cost of a two-bedroom apartment in South Kingstown in 2017 was \$1,355. This price is affordable for households earning at least \$57,360 per year. Since over one third of South Kingstown households earned less than \$50,000 per year in 2015, many were forced to spend more than 30% of their incomes on household expenses. Based on these housing costs, low income households, both renters and homeowners, benefit from LMI Housing.

A deeper look into the data shows that the Town has not been meeting the overall current needs of its very low-income households, who very well may be leaving South Kingstown to find more affordable options. According to the U.S. Census, the percentage of low and very low-income households, as well as households with incomes greater than 100% of the median income, both increased from 2000 to 2010. During that time frame, households with incomes near the median decreased. However, this trend appears to be reversing. Between 2010 and 2015, households making between \$35,000 and \$100,000 a year increased by 1.5%, while those making less than \$35,000 or more than \$100,000 declined by 14% and 1.8% respectively.

It is possible that a portion of the decrease in lower income households has come from such households moving up the income later. However, the 14% drop in very low-income households vs. the relatively small percentage gain of middle-income households suggests that the bulk of the decline has come from very low-income households leaving South Kingstown. This underscores the continued need for both affordable and LMI housing in the community.

Looking to the future, the age of residents is an important factor in measuring anticipated LMI Housing needs. Baby boomers (born between 1945 and 1965) are one of the largest demographic groups. In 2010, the first wave of boomers retired. In South Kingstown, residents over the age of 65 increased from 11.6% of the population in 2000, to 13.7% in 2010, to 16.8% in 2015, and is likely to continue to grow over the time frame of this plan. In retirement, incomes become fixed and the number of older residents living alone increases. Under both circumstances, households can move down the income ladder. A once affordable home can become unaffordable. If lower-cost housing options are not available for downsizing, older residents may choose to move elsewhere. Many seniors want to stay in their neighborhoods and remain active parts of the communities they contributed to, in some cases over decades. On the flip side, a number of people, many of whom are likely wealthier retirees, are buying seasonal homes and spending the colder months elsewhere. The number of seasonal homes in Town had a marginal increase of 2.5% from 2000 to 2015, but the

total number of seasonal units represents 17.5% of the Town's total housing units. It does not appear at this time that these seasonal homes are being rented during the high season or to students, but this type of activity should be monitored. For developers, building these types of homes can be more lucrative than developing LMI Housing or market rate affordable housing. The Town must evaluate its strategies for developing a diversity of housing affordable for year-round residents, to ensure that incentives exist for both the Town and potential developers.

## REVIEW OF STRATEGIES

It is important to examine several of the developments that have been or are in the process of being approved to see whether the housing policies of South Kingstown create homes that truly meet the needs of the community. An evaluation of current strategies to meet the state-mandated 10% goal revealed that they have been effective to varying degrees, and that development has been slow to recover from the housing bubble and credit market crash in 2008. Resources once available to develop affordable housing have also been reduced drastically across the country. These financial resources are critical to local non-profits in meeting area demand. It is uncertain when conditions will truly improve in the region and the State, and if they will return to the robust activity of the early 2000s.

Given these constraints, the Town of South Kingstown has had modest but steady successes in promoting and achieving affordable housing in the community. In 2004, the affordable unit inventory stood at 485 units or 5.07%. In 2012, it rose to 589, comprising 5.39% of the year-round units in the Town. As of 2016, the number is up to 612 or 5.61%. Housing units "in the pipeline" (Table 14) show the potential for an additional 31 units of affordable housing. Much remains to be done and the Town has worked diligently in this area. The Affordable Housing Collaborative has consistently promoted and advocated for affordable housing in the Town and will continue to do so.

## COMPREHENSIVE PERMITS

Comprehensive permits have been the dominant strategy to develop affordable units in South Kingstown and the Town will continue to pursue this strategy to meet the demand.

Recent submittals include Kenyon Terrace, which provides housing for persons with disabilities. It completed renovations to create six 1-bedroom apartments in 2015. Such Comprehensive Permit applications are supported by the Town due to the way they combine "smart growth strategies" such as redevelopment and infill with the need to provide high percentages of affordable units to specific groups of residents.



SOCIAL RESILIENCE



CHANGING POPULATION

Comprehensive Permits are development proposals submitted under RIGL § 45-53-4 which provide a minimum of 25% of the units as deed-restricted LMI

The South Kingstown Housing Authority has excess land that could allow for expansion of their existing 40 family rental units at Champagne Heights and a comprehensive permit would be the best option for this project. The Housing Authority has shown interest in pursuing the development of additional units, but funding programs that would support this type of project have been limited.

### INCLUSIONARY ZONING

In addition to the targeted Comprehensive Permits that have been supported by the Town, more incremental “scattered site” approaches have also been embraced. Since the adoption of the Inclusionary Zoning ordinance, the Town has added two units of affordable housing into new subdivisions. The Inclusionary Zoning ordinance was adopted coincidental with the economic downturn which greatly limited new building activity. The Town expects to see additional unit production in the near term with an improving economy and as projects now under review come forward.

Although this model does not provide large numbers of workforce housing units as part of individual developments, it does integrate deed restricted units into market rate neighborhoods in a manner that is socially sustainable. The Town acknowledges this preference for integrating deed restricted housing into new neighborhoods (through Inclusionary Zoning) or into established neighborhoods (through accessory apartments) as central to its overall approach to this important issue.

The Town’s inclusionary zoning section of its zoning ordinance (Sec. 502.6) has been amended to comport with RIGL § 45-24-46.1. The Town allows developers to utilize alternative methods of affordable housing production through inclusionary zoning, including off-site construction or rehabilitation and donation of land suitable for development of the required affordable units. Regardless of the method chosen, developers subject to inclusionary zoning receive density bonuses to offset differential costs of below-market units.

### ACCESSORY DWELLING UNITS

Town regulations permit accessory units in most residential zones by right (maximum 750 square feet and one bedroom). There has been modest interest in this option, and production is in the range of six to 12 units per year on average; however current ordinances do not require the units to meet LMI requirements. Because this strategy still poses an opportunity to integrate affordable units into existing neighborhoods, the Town will continue to target resources that may offer incentives that encourage property owners toward deed restricting the units as LMI.

Inclusionary zoning provisions require a minimum number of units within proposed a development to be provided as deed-restricted LMI Housing.



### DUPLEXES

Duplex construction and conversion is allowed by right in R-10 and R-20 zones. There has been little interest in this approach. Some property owners have indicated that financing for such uses and the practical aspects of conversion have stymied this approach. Town regulations currently do not require any units to meet LMI requirements for either conversion or new construction. As with accessory dwelling units, this strategy still presents an opportunity to integrate LMI units into existing neighborhoods. The Town will continue to promote duplex construction and conversion, and support funding sources that incentivize their creation as LMI units.

### SCATTERED REHABILITATION

The Town administers a CDBG residential rehabilitation program designed to address health and safety deficiencies in the homes of income qualifying residents. Additionally, South County Community Action Agency helps income eligible Washington County residents address basic housing code issues through programs such as weatherization and emergency boiler repair or replacement. Funding is available to both owner-occupied units as well as rental properties with homeowner permission.

### CHALLENGES

While many of the tools of the 2005 Plan were implemented and have resulted in an increase in workforce housing in the community, economic conditions since 2005 have severely limited opportunities to further increase the number of affordable homes in South Kingstown. It is expected that, with an improving economy and the various planning efforts and regulatory tools that the Town has adopted, additional production will result in further progress toward achieving the 10% goal. It is important to note that the production of subsidized workforce housing typically requires a variety of resources from various sources to be successful. Recent years have witnessed a reduction of resources from the Federal and State government; this trend must be acknowledged insofar as it will make the production of affordable units on the local level more difficult. More than ever before, the production of workforce housing in South Kingstown will benefit from multi-layered collaborations between local government, non-profit housing agencies, state officials, and private developers. These collaborations will occur on the development front with new housing units and the restoration of older buildings and will also occur on the policy front with continued discussions on how to better account for the use of accessory dwelling units and Section 8 voucher rentals in the local affordable housing inventory.

It is also important to acknowledge the Town of South Kingstown’s commitment to ‘truly integrate’ affordable housing throughout the community, not solely based on hard numbers (achieving the 10% goal),

but also in consideration of blending development with carrying capacity (efficient use of land, existing infrastructure, municipal services) and quality of life.

### REACHING THE 10% GOAL

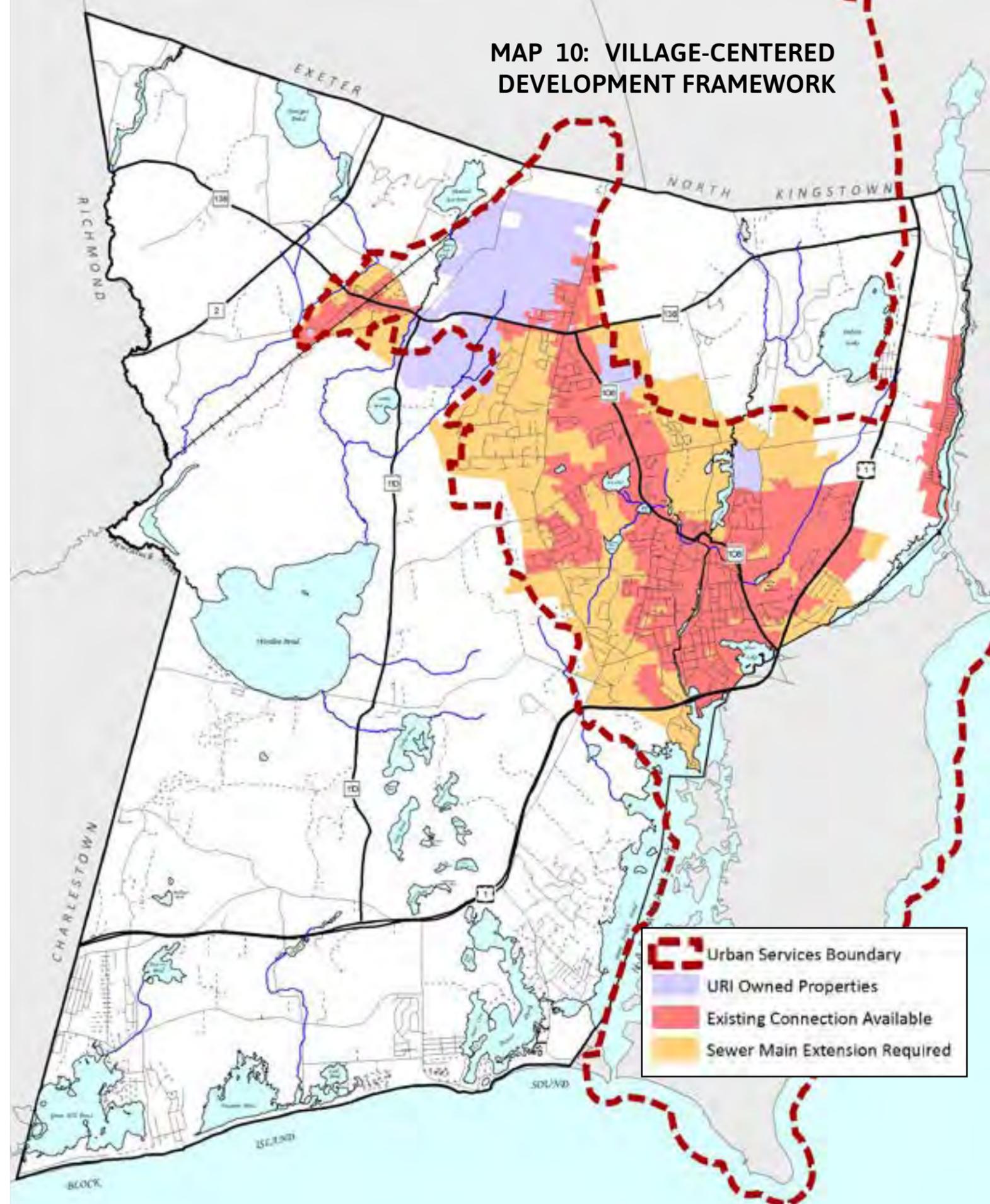
As part of the 2005 Housing Production Plan, the Town of South Kingstown developed an estimate of where LMI housing would be developed in the community and the number of units that would be associated with different techniques. The Town was initially very specific in looking at these different strategies, identifying streets and individual sites that could accommodate housing. Since that time, the Town has learned that the level of detail associated with that approach was not very helpful toward achieving their objectives and, in some cases, provided a misleading picture of what the Town would pursue as property ownership, market opportunities, funding streams, and other conditions changed. As such, the Town has revised its approach to identifying the location and intensity of housing to better suit evolving conditions and the “smart growth” framework provided by Statewide Planning’s Land Use 2025.

**Map 10: Village-Centered Development Framework** illustrates the geographic planning framework that will serve as one of the organizing principles for South Kingstown in its efforts to provide housing for a diverse population. As indicated by the map, the location of the local sewer service area is generally consistent with the state’s Urban Services Boundary. Both of these areas illustrate a preference for concentrating future development and redevelopment toward the four villages best equipped to handle growth in South Kingstown: Wakefield, Peace Dale, Kingston, and West Kingston. Each of these villages is truly unique with regard to the opportunities and constraints associated with future development and the community will carefully assess future opportunities against the individual conditions within each village. In general, however, following the “Village Model” of modest, village-scale growth that has made South Kingstown so successful, these four villages will be the focus for meeting the housing needs of the community.

In examining the strategies to produce LMI housing, South Kingstown will rely primarily on the techniques listed in **Table 15: Projected LMI Housing Production Through 2030** to meet/exceed the 10% statutory threshold. **Table 16: Potential Location Summary Chart** provides the general distribution of housing within the village areas targeted as part of efforts to be consistent with local and state land use planning. As noted above, the current 10% goal for LMI housing in South Kingstown is 1,090 units based upon the 2010 census baseline. For calendar 2016, the Town inventory of LMI housing was 612 units or 5.61% (per RI Housing, see Table 13). This represents a shortfall of 478 affordable units under current conditions.



MAP 10: VILLAGE-CENTERED DEVELOPMENT FRAMEWORK



	Urban Services Boundary
	URI Owned Properties
	Existing Connection Available
	Sewer Main Extension Required

To project LMI housing need over the 20-year time frame of this plan, new housing units to accommodate expected population growth needed to be calculated. The following methodology was used. Technical Paper 162 (Statewide Planning Program; April 2013) contains projected population for South Kingstown which we have used to project housing for this time frame. First, the 2010 population count was adjusted to subtract the number of students residing on the URI campus: 30,637 – 5,281 = 25,356. The same process was used for the 2040 population: 38,573 (est.) - 5,281 (assumed at 2010 levels). The resulting off-campus resident population is estimated at 33,292 persons which represents an increase of 7,936 persons between 2010 and 2040. Based upon an average household population of 2.43 persons per unit, (2010 Census) an additional 3,266 housing units would be required to accommodate this population increase. However, given the shrinking trend in household sizes, this number may very possibly be on the low end. Even if the average household population dips slightly to 2.35 persons per unit, the additional housing needed would rise to 3,377. This translates to a year-round housing base for 2040 of 14,277 units (10,900 [2010] + 3,377 = 14,277). Ten percent of this figure is 1,428 LMI housing units for South Kingstown as the targeted standard. As such, and considering our existing affordable inventory, this requires 816 new LMI housing units to meet the State’s 10% threshold goal.

**TABLE 15: PROJECTED LMI HOUSING PRODUCTION THROUGH 2030**

STRATEGY	PROJECTED BY 2010	ACTUAL BY 2010	2010-2015	2015-2020	2020-2025	2025-2030	TOTAL NEW UNITS
Inclusionary Zoning	112	0	42	99	99	98	338
Duplexes in Core Area	12	0	0	0	0	0	0
Accessory Dwelling Units	15	0	3	8	10	15	36
Scattered Rehabilitation	12	0	8	9	10	10	37
Comprehensive Permits	150	88	79	85	93	85	342
<b>PROJECTED TOTAL UNITS</b>	<b>301</b>	<b>88</b>	<b>132</b>	<b>201</b>	<b>212</b>	<b>208</b>	<b>753</b>

Figures in columns 1 and 2 (Projected by 2010 and Actual by 2010) are not shown in the total units column at the right of the Table. These projections (column 1 only) compared to actual production, are taken from the Affordable Housing Production Plan/Housing Element in the 2005 version of the Town’s Comprehensive Community Plan.

As a rough estimate, this analysis assumes that half of the 3,377 additional housing units will be part of developments of 6 units or more, and therefore subject to inclusionary zoning requirements. This would mean that 20% of 1,689 housing units subject to inclusionary zoning would count as LMI housing units, or a total of 338 housing units.

**Table 15: Projected LMI Housing Production Through 2030** indicates that even with aggressive assumptions about the various approaches to LMI housing production, South Kingstown is likely to fall short in reaching its 10% goal. Rather than adjusting the numbers to make it look on paper that reaching 10% is currently feasible by 2040, the Town would prefer to take an honest look at this gap. To remedy this, the Town has invested money in its current fiscal year budget for a comprehensive evaluation of existing regulation applicable to the development of low and moderate income

**TABLE 16: POTENTIAL LOCATION SUMMARY CHART**

APPROACH	# of Low- and Moderate-Income Units
<b>Inclusionary Zoning through Single-Family and Multi-Family</b>	
Peace Dale	30
Wakefield	35
Kingston	20
West Kingston	20
Rural Areas	233
Subtotal	338
<b>Scattered Rehabilitation &amp; Comprehensive Permits</b>	
Peace Dale	87
Wakefield	91
Kingston	49
West Kingston	49
Rural Areas	103
Subtotal	379
Accessory Dwelling Units	36
<b>TOTAL AFFORDABLE UNITS</b>	<b>753</b>
<b>REMAINING GAP</b>	<b>63</b>

Inclusionary Zoning units are distributed across village areas based on assumed capacity and municipal policies on growth within these areas.

housing. This evaluation will assess the impacts of current regulation and propose regulatory revisions aimed at boosting LMI housing and affordable housing development to reach our target.

The Town anticipates that 753 LMI housing units will be developed incrementally over the next 20 years, and that the results of the new affordable housing production plan will lead to strategies that can help fill the 63-unit gap within that time frame. Unit production is broken out into five-year increments in **Table 15: Projected LMI Housing Production Through 2030** (for 753 units). This table also indicates the units projected to be completed by 2010 in the 2005 plan. It should be noted that the milestone was not met, and the reasons are detailed in the Town’s review of its affordable housing strategy. These units are redistributed based on those that are recently approved and the anticipated level of interest seen in each strategy over the past ten years. Those identified as being completed by 2015 include units outlined in **Table 14: Constructed/Approved LMI Housing Units**.

## HOUSING ACTION PLAN SUMMARY

**Goal 1:** The valued sense of place and community represented in South Kingstown’s existing housing stock and traditional village development patterns will be enhanced.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> Raise awareness of housing needs throughout the community.</p> 	<p><b>Action 1-1</b> Conduct public forums/working meetings that address local housing needs.</p> 
<p><b>Policy 1.2</b> Discourage future residential growth which contributes to monotonous suburban-style subdivisions and encourages a high quality of design in the creation of new neighborhoods. The process of growth must be directed towards the creation of communities and directed away from urban sprawl.</p>  	<p><b>Action 1-2</b> Maintain an updated database of local housing, including the number and type of new housing starts each year, the number of LMI units both permitted and constructed (including those developed through Inclusionary Zoning), the number of age-restricted housing units, etc.</p> 
<p><b>Policy 1.3</b> Encourage subdivision design and redevelopment projects that support active healthy lifestyles through providing pedestrian-oriented environments, connectivity to nearby recreation resources, bicycle amenities, access to public transit, and home-based food production when appropriate.</p>  	<p><b>Action 1-3</b> Update the “South Kingstown Residential Design Manual” and the regulations for Flexible Design Residential Projects to improve standards for flexible frontage, landscaping and transportation improvements.</p> 
<p><b>Policy 1.4</b> Utilize policies and regulatory tools to support and maintain quality housing opportunities and sustainable residential development that is accessible by all populations, ages, abilities, and modes of transportation.</p>  	<p><b>Action 1-4</b> Review regulations with the intention of formally integrating green building design standards and sustainable development practices within regulations for development and redevelopment projects.</p> 
<p><b>Policy 1.5</b> Improve and maintain the Town’s existing housing stock, including the preservation and rehabilitation of its older and historic housing stock.</p> 	<p><b>Action 1-5</b> Actively partner with programs (whether federal, state, local, intuitional, or community-based) designed to help make existing and new homes more resilient and energy efficient (e.g. financing or incentives for solar panels, innovative septic systems, LID strategies, etc.).</p> 
<p>(continued on next page)</p>	<p>(continued on next page)</p>

**Goal 1:** The valued sense of place and community represented in South Kingstown’s existing housing stock and traditional village development patterns will be enhanced.

POLICIES	ACTIONS
<p><b>Policy 1.6</b> Support appropriately scaled housing, in a variety of types and sizes and serving households with a variety of income levels.</p> 	<p><b>Action 1-6</b> Conduct a massing and scale study for the development and redevelopment of multi-family homes, with the goal of developing new design standards that help make multi-family homes more compatible with their surroundings.</p> 
<p><b>Policy 1.7</b> Consider changing demographic trends (i.e. reduction in household size, rental needs for family households, etc.) when enacting policies and regulations.</p>  	<p><b>Action 1-7</b> Consider developing context sensitive design guidelines for ‘tear-downs’ and reconstruction to assure new residential construction reflects and is compatible with the existing neighborhood context, in terms of massing and scale.</p> 
	<p><b>Action 1-8</b> Review regulations with the intention of achieving ‘green’ housing development/redevelopment throughout the community by integrating Low Impact Design (LID) techniques, energy conservation/efficiency, and the use of innovative building technologies within the Town’s regulations.</p> 
	<p><b>Action 1-9</b> Develop standards for reviewing the mix of residential uses into mixed use districts where appropriate in order to provide more sustainable housing choices and to support retail business.</p>  
	<p><b>Action 1-10</b> Identify a source of information and training to educate town residents and property owners on appropriate techniques for residential property maintenance, rehabilitation, historic preservation, and energy and water conservation (Preserve RI, Grow Smart and RIHPHC).</p>  
	<p><i>(continued on next page)</i></p>

**Goal 1:** The valued sense of place and community represented in South Kingstown’s existing housing stock and traditional village development patterns will be enhanced.

POLICIES	ACTIONS
	<p><b>Action 1-11</b> Identify opportunities where public improvements (e.g., streetscape improvements and/or publicly funded project improvements to signage, entryways, pedestrian connectivity, and façades) can aid in the integration of infill housing developments.</p>  
	<p><b>Action 1-12</b> Conduct a study of new ways to finance the renovation of existing market rate homes, with a particular emphasis on the Town’s older and historic housing (i.e. housing over 50 years old).</p> 
	<p><b>Action 1-13</b> Review and consider revisions to the regulations of the Industrial-1 zoning district, in which the Town’s historic mill complexes are located, to allow small-footprint housing units as a complementary use to the permitted office and manufacturing uses.</p> 

**Goal 2:** LMI Housing development will occur throughout the community in a manner that is reflective of South Kingstown residents’ physical, social, and financial limitations and resources, with the goal of achieving 10% of the year-round housing stock as deed-restricted for low- and moderate-income households.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> Identify opportunities to integrate LMI Housing into existing neighborhoods.</p>  	<p><b>Action 2-1</b> Define, support and incorporate the concept of ‘work force’ housing into the more general category of ‘affordable’ housing.</p> 
<p><b>Policy 2.2</b> Develop a range of LMI home ownership and rental opportunities throughout the Town of South Kingstown.</p> 	<p><b>Action 2-2</b> Develop a Cottage Housing Ordinance using the language provided in the “South Kingstown Village Study, Villages of Wakefield and Peace Dale” as a starting point.</p> 
<p><i>(continued on next page)</i></p>	<p><i>(continued on next page)</i></p>

**Goal 2:** LMI Housing development will occur throughout the community in a manner that is reflective of South Kingstown residents' physical, social, and financial limitations and resources, with the goal of achieving 10% of the year-round housing stock as deed-restricted for low- and moderate-income households.

POLICIES	ACTIONS
<p><b>Policy 2.3</b> Develop LMI Housing opportunities for the homeless and residents with special needs.</p> 	<p><b>Action 2-3</b> Conduct outreach to local financial institutions to improve public awareness of and access to opportunities and programs that will reduce the cost burden of housing (e.g., first time home buyers, down payment assistance, closing costs, rental assistance, etc.).</p> 
<p><b>Policy 2.4</b> Develop LMI Housing opportunities for elderly persons.</p> 	<p><b>Action 2-4</b> Look for opportunities to expand starter home opportunities (e.g., RI Housing reduced rate mortgage programs and Targeted Assistance Program).</p> 
<p><b>Policy 2.5</b> Continue to coordinate with state officials to encourage Comprehensive Permit Projects that contribute to the community through high quality design and an inclusive planning process.</p> 	<p><b>Action 2-5</b> Utilize Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds to create a program that provides down payments and closing cost assistance for affordable housing buyers.</p> 
<p><b>Policy 2.6</b> Support amendments to the Rhode Island General Laws that would permit local resident Section 8 certificates, managed by the South Kingstown Housing Authority, to be counted toward as low- and moderate-income housing.</p> 	<p><b>Action 2-6</b> Explore alternatives to the U.S. Department of Housing and Urban Development's Section 811 Program to fund the development of LMI housing and accessible market rate affordable housing for South Kingstown's disabled and special needs population, including through private financing and local requirements for physically accessible first-floor homes in multi-family developments.</p> 
	<p><b>Action 2-7</b> Actively engage the South Kingstown Housing Authority (SKHA) and other non-profit organizations to utilize Federal 202 funds and USDA funds to create additional elderly housing units.</p> 
	<p>(continued on next page)</p>

**Goal 2:** LMI Housing development will occur throughout the community in a manner that is reflective of South Kingstown residents' physical, social, and financial limitations and resources, with the goal of achieving 10% of the year-round housing stock as deed-restricted for low- and moderate-income households.

POLICIES	ACTIONS
	<p><b>Action 2-8</b> Engage state officials in an active dialogue concerning the trend of comprehensive permit applicants attempting to seek broad relief from local planning requirements that contribute to good design and quality of residential projects. Such dialogue will attempt to identify opportunities to amend state and local plans, statutes, ordinances and regulations to better achieve our shared goal of encouraging quality developments that provide affordable housing.</p> 
	<p><b>Action 2-9</b> Establish standards for granting density bonuses relative to suitability of the land to support development without adverse environmental impacts (ensure high quality development with safe water supply, reliable wastewater treatment, and proper stormwater management).</p> 
	<p><b>Action 2-10</b> Review the inventory of Town-owned land to determine the potential for development of low- and moderate-income housing on such lands.</p> 

**Goal 3:** A wide range of affordable and LMI Housing options will exist, developed through a combination of innovative regulatory mechanisms, public and private initiatives, and joint public and private partnerships to maintain residential diversity and to assure that local shops and offices will have a sufficient employment pool.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> Maintain municipal programs and resources that support affordable and LMI housing opportunities.</p> 	<p><b>Action 3-1</b> Investigate whether the Town can and should build LMI Housing itself.</p> 
<p><b>Policy 3.2</b> Form partnerships that will provide greater opportunities for affordable and LMI housing.</p> 	<p><b>Action 3-2</b> Evaluate potential means to provide a steady source of income for its Housing Fund.</p> 
<p><b>Policy 3.3</b> Continue the use of regulatory techniques that support and increase affordable and LMI housing opportunities.</p> 	<p><b>Action 3-3</b> Look to support a coalition on non-profit developers to develop affordable housing in South Kingstown.</p> 
<p><b>Policy 3.4</b> Improved communication between the Town and the citizens of this community regarding the creation of affordable and LMI housing opportunities will result in better understanding of this specific issue within the community.</p> 	<p><b>Action 3-4</b> Connect and encourage discussions between housing developers, both for profit and non-profit, in order to facilitate LMI Housing construction. For example, if a for profit developer wants to deed land for LMI Housing development but does not want to develop the housing itself, the Town may broker a partnership with another for profit or non profit developer to build the homes.</p> 
	<p><b>Action 3-5</b> Actively engage non-profit housing developers and local/regional community development corporations (e.g., South County Habitat for Humanity) to better understand their siting needs/criteria, in order to refine the Town's geographical prioritization of investments and incentives for LMI Housing.</p> 
	<p><b>Action 3-6</b> Financially support the efforts of the South Kingstown Housing Authority (SKHA) in the maintenance and stewardship of existing SKHA properties, to make sure these homes remain safe and healthy for years to come.</p>  
	<p>(continued on next page)</p>



**Goal 3:** A wide range of affordable and LMI Housing options will exist, developed through a combination of innovative regulatory mechanisms, public and private initiatives, and joint public and private partnerships to maintain residential diversity and to assure that local shops and offices will have a sufficient employment pool.

POLICIES	ACTIONS
	<p><b>Action 3-7</b> Work with the South Kingstown Housing Authority to develop educational campaign materials to share with all residents and managers of rental LMI Housing that encourage pride of place, proper maintenance, and good stewardship of these homes.</p>  
	<p><b>Action 3-8</b> Annually review and, where appropriate, revise the mandatory Inclusionary Zoning Ordinance to ensure it is producing the number of units intended.</p> 
	<p><b>Action 3-9</b> Monitor the growing trend of age-restricted LMI Housing development proposals, in comparison to the family unit needs identified in the Comprehensive Plan, in an effort to make sure that the total number of age-restricted and family appropriate LMI Housing units is roughly equivalent.</p>  
	<p><b>Action 3-10</b> Review current policies that allow age-restricted housing in parts of town where other LMI Housing is not currently allowed. Such areas may help increase the availability of parcels where family appropriate LMI Housing may be built.</p>  
	<p><b>Action 3-11</b> Evaluate and implement appropriate measures to foster better communication and information regarding affordable housing opportunities within the community. Such measures may include a departmental planning procedure and outreach efforts to community groups.</p> 



SODA FOUNTAIN

SUNNY ESSENTIA

PRESCRIPTIONS  
PHARMACY  
HAPPY FLOATS

# ECONOMIC DEVELOPMENT



## VISION

To follow a path of **balanced economic growth** having the following attributes:

- ◆ protection of sensitive environmental areas;
- ◆ provision of economic opportunities;
- ◆ protection of the public health, safety and welfare;
- ◆ high quality, authentic design in commercial development, compatible with community character; and
- ◆ stabilization of an affordable municipal tax rate.

The Town of South Kingstown will continue to value and support its business community as a source of jobs and as a means to provide the goods and services required by residents and tourists alike. The Town will continue to support the development of shops and offices located in walkable village settings through appropriate zoning. These small businesses, many of which are locally owned, help reinforce the “small town” character of South Kingstown. The charm of the seaside villages of the community will be preserved while attracting development to create appropriately scaled tourism opportunities. The Town will support current businesses and properly-sized expansion of commercial and light industrial development, while protecting the quality of the Town’s finite natural and cultural resources, as this may relieve the current tax burden on residential land use while providing additional tax revenue for municipal services.

Future commercial and industrial development must not overwhelm the unique character of the community. Future development should take advantage of multi-modal transportation opportunities at Kingston Station while providing diverse job opportunities for local residents. Economic development initiatives must also protect our natural and cultural resources. Opportunities for mill reuse and infill of commercial development through expansion of existing shops and stores (investment in place), construction of new, or renovation of existing out-of-date or inadequate structures, can foster sustainability of the central core while protecting outlying “greenfields” from development pressure. Finally, and perhaps most importantly, all of these efforts are first and foremost about improving the quality of life for all of our residents. This work will mean very little if not coupled with investments in education, job training, and other pathways for people young and old to take advantage of the many opportunities presented by the economies of South Kingstown, Rhode Island, and the greater Southern New England region.

## GOALS

**Goal 1:** The local economy will provide opportunities for a diverse collection of business and industry.

**Goal 2:** Local economic development assets will be identified that the Town, local boards and commissions, the local business community, and/or future investors can build upon together.

**Goal 3:** Economic development within our existing villages that contributes to a high quality of life and a resilient future will be actively supported.

**Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

**Goal 5:** Commercial development will be held to a high standard of quality design.

**Goal 6:** Business models that help to define South Kingstown's unique character and history will be identified and fostered.

## GUIDING PRINCIPLES

- ◆ Appropriate commercial development in the village areas is of a scale and mass, with architectural design and site planning, that creates visual interest, activates the streetscape, and encourages walking, biking, and transit use.
- ◆ The protection of historic resources, landmarks, and scenic landscapes is a critical component to preserving an authentic sense of place and supporting the local economy.
- ◆ The recommendations contained within the study entitled, "Revisions to the South Kingstown Zoning Ordinance to Promote New Urbanism and Traditional Downtown Development and Redevelopment," are still relevant and have been integrated, where appropriate, into this Plan.
- ◆ State and Federal agencies and programs have the potential to affect development in the community.
- ◆ It is important that the Town maintain an open dialogue with investors, property owners, and business owners.





- ◆ A regional approach is necessary when addressing State agencies whose policies affect the scenic, cultural, natural, and recreational resources of South County.



- ◆ Tourism is an important part of South Kingstown's economy.

- ◆ The resiliency of public infrastructure is a vital part of business resiliency. Businesses should be able to rely on quick restoration of services if subject to the impacts of severe storms, flooding or other natural hazards.

- ◆ South County Hospital is a significant asset to South Kingstown's long-term economic sustainability.

- ◆ Underground utility lines in the village areas provide multiple benefits, including enhancement of the streetscape and resiliency from storms.



- ◆ A comprehensive system of bikeways, walkways, linear parks, and related pedestrian and biking infrastructure is an economic development asset to the Town.

- ◆ Town regulations and ordinances that are overly complex are a hindrance to economic development.



- ◆ A diversity and abundance of housing options in the village areas is essential to the Town's long-term economic viability. Housing creates a customer base for local businesses and provides places for local employees to live.

## CURRENT PRACTICE

- Several organizations already exist whose mission is to promote economic development opportunities in South Kingstown's villages, including the Wakefield Village Association, the Peace Dale Revitalization Association, and the South County Chamber of Commerce.

- The Capital Improvement Program remains an important tool for planning for infrastructure upgrades and enhancements that support the economic development needs of the community.

- The Town has recently moved to an online building permit and business licensing system and has trained staff to assist customers in the use of the system.

- The Town provides data to the Rhode Island Food Policy Council that contributes to annual updates of its RI Food System Snapshot for South Kingstown. Data on existing healthy food resources throughout the community may include but not be limited to farmers' markets,

community gardens, sites available for small-scale agriculture, community kitchens, food pantries, food-based business incubators, locally owned grocery stores, roadside stands, and compost facilities. This Town will circulate its snapshot to the public to increase awareness of healthy food resources and promote linkages between local growers, processors, distributors, institutions (e.g., URI and South County Hospital) and other food stakeholders.

- The Town works with the State, adjacent municipalities, and various conservation groups to promote a comprehensive system of bikeways, walkways, linear parks, and related pedestrian and biking infrastructure and amenities.

## BASELINE INFORMATION

### OVERVIEW

South Kingstown is fortunate to have multiple assets that support its economy and provide a high quality of life for its residents. The Town recognizes that its economy depends on so much more than businesses and jobs. The foundation of the economic development element is in recognizing our strengths and unique assets and then building from that base.

Our spectacular coastal location has always defined who we are and continues to be a critical resource for our future through aquaculture, tourism, and marine technologies. Our village centers each have their unique history and character. Our nearby farms, fields, and forests provide an easily accessible refuge for locals and visitors alike and play an ever-increasing role in a vibrant local food economy. Our connection with the University of Rhode Island not only attracts students from around the country and the world, but also provides an important pathway to better economic futures for those who have grown up here. Our close-knit community is also an asset. Our abilities to convene, collaborate, develop networks, and harness the creativity of the diverse talents of our residents have and will continue to put South Kingstown at the forefront of innovation. Such innovation will be necessary as the town continues to deal with the changing face of bricks and mortar retail throughout the country, issues

Businesses within the Village of Peace Dale





of climate change, including sea-level rise, flooding, and increased storm frequency and intensity, that threaten our infrastructure and businesses, and expanding commercial and light industrial activities in ways that complement and enhance the Town's character.

South Kingstown is recognized as a predominantly residential community with a limited commercial and industrial base. Although the number of jobs in town nearly equals the number of residents in the work force, most residents commute to jobs outside South Kingstown and significant numbers of employees commute in to town daily. Major employers include the University of Rhode Island (URI), Schneider Electric (formerly American Power Conversion), South County Hospital, and the Town of South Kingstown. Historically, the residential construction sector was a strong component of the local economy supporting a broad range of associated businesses. After the 2008 Great Recession and housing crisis, this sector of the economy has been, and will undoubtedly continue to be, slow for some time. Tourism opportunities continue to play a critical role in the local economy drawing people who want to enjoy recreation opportunities at local fresh and saltwater beaches, harbors, freshwater ponds, salt ponds, and bike paths.

Like many traditional New England communities, South Kingstown's local economy is shaped by the community character and quality of life that define the Town. Businesses emerge and thrive in the villages of South Kingstown to provide essential services to the community and to take advantage of the amenities that draw tourists and pedestrian activity to the area. Large mill structures provide unique opportunities to bolster the local tax base and require a sophisticated planning and regulatory framework to be successful. South Kingstown will continue to build upon its strengths to maintain its viable local economy. Engagement of its major employers and support of mill redevelopment represent examples of strategies that address individual economic objectives. Equally important, however, are the broader strategies that indirectly support the economy, acknowledging that successful economic development is tied to sound environmental, housing and transportation policies.

## EMPLOYMENT

In 2016, the annual, average labor force in the Town of South Kingstown was **16,503** with employment at **15,701**, yielding an average unemployment rate of **4.9%**. Statewide, the unemployment rate was 5.3%.

Between 2012 and 2016, employment in South Kingstown increased by **354 (2.6%)** jobs. Private sector employers reported a gain of **318 (3.3%)** jobs, and the public sector employment also rose slightly, by **36 (0.9%)** jobs. Statewide, job growth was on a similar trajectory. Overall, jobs increased by **22,144, or 4.9%**. See **Table 17: South Kingstown Employment by Sector**.

**TABLE 17: SOUTH KINGSTOWN EMPLOYMENT BY SECTOR**

Source: Rhode Island Department of Labor & Training Quarterly Census of U.I.-Covered Employment and Wages, City and Town Report – 2011-2016

INDUSTRY/SECTOR	2012	2013	2014	2015	2016	CHANGE 2012- 2016
Private Sector	9,698	9,934	10,094	9,985	10,016	318
Government	3,838	3,802	3,798	3,773	3,874	36
<b>TOTAL</b>	<b>13,356</b>	<b>13,739</b>	<b>13,893</b>	<b>13,757</b>	<b>13,890</b>	<b>354</b>
Accommodation & Food Service	1,394	1,431	1,453	1,447	1,543	149
Administrative Support & Waste Management	278	311	325	311	313	35
Agriculture, Forestry, Fishing & Hunting	68	73	77	83	97	29
Arts, Entertainment & Recreation	217	224	209	225	235	18
Construction	305	325	327	348	376	71
Educational Services	296	304	306	314	308	12
Finance & Insurance	289	277	275	277	293	4
Health Care & Social Assistance	2,609	2,760	2,839	2,806	2,814	205
Information	171	148	155	157	132	-39
Management of Companies & Enterprises	16	*	21	23	32	16
Manufacturing	583	569	579	574	562	-21
Mining	*	*	*	*	*	-
Other Services, except Public Administration	722	708	737	705	675	-47
Professional & Technical Services	327	342	357	390	388	61
Real Estate, Rental & Leasing	193	201	208	207	209	16
Retail Trade	1,287	1,276	1,273	1,279	1,264	-23
Transportation & Warehousing	136	170	210	154	140	4
Unclassified Establishments	-	-	-	-	*	-

\*Some data are not shown due to the possibility of identifying data of a specific employer.



In short, Rhode Island in general and South Kingstown in particular have recently reached a far healthier and more robust economy than was the case in the years immediately following the Great Recession.

Trends in employment by sector provide clues as to the future investments the Town may consider in supporting the local economy. Which sectors are on the rise, and what does that mean for local residents? Which sectors are declining and need extra support? Which are declining and unlikely to come back?

### HEALTH CARE & SOCIAL ASSISTANCE

In raw numbers, jobs in this sector continue to rise, as has been the case throughout the state and around the country, particularly in places with an increasing elderly population. This sector is likely to support an increasing number of local jobs for years to come. Jobs in health care range significantly in wage rates, low-wage health care workers experience the same challenges as workers in the accommodations food services and retail sectors.



CHANGING  
POPULATION

### ACCOMMODATION, FOOD SERVICES, & RETAIL

In raw numbers, jobs in this sector continue to rise and are second only to jobs in Health Care & Social Assistance. Generally speaking, these jobs offer lower wages than other sectors. As housing prices continue to rise, it will be more and more difficult for people who work in these jobs to live in South Kingstown. This could lead to more traffic as more people commute from outside of South Kingstown for these jobs and increased need for reliable and timely public transportation alternatives. The same can be said about the Retail sector, which is the third largest sector in town. However, retail jobs have been stagnant over the past few years, and are unlikely to grow in the near future, given declining national trends in “bricks and mortar” retail.

### AGRICULTURE, FORESTRY, FISHING & HUNTING

While small in aggregate numbers, jobs in this sector rose almost 43% in five years. In fact, jobs in this sector represented over 9% of all private sector job growth during this period. This is particularly impressive given that agriculture-related jobs made up less than 1% of all private sector jobs in 2016. This is an indication that the demand for agriculture and aquaculture products has been strong, and that the Town’s policies have been allowing this sector to expand.

### CONSTRUCTION

Construction jobs are up over 23% since 2012, another good sign that the economy is getting stronger and that local firms are building again.

## MANUFACTURING

In communities throughout Rhode Island, the number of manufacturing jobs has been plummeting for many years. While South Kingstown's manufacturing jobs decreased by 3.6% during this period, manufacturing is holding steadier here than elsewhere and still accounts for 5.6% of all private sector jobs.

## EDUCATION

The educational attainment of South Kingstown's residents is described in the Citizens chapter, within the Section entitled **Education**. To summarize, the Census Bureau estimates that 94.7% of South Kingstown's citizens aged 25 and older have graduated high school or received high school equivalency, and over 52% of South Kingstown residents aged 25 and older have received either a Bachelor's, Master's or other professional degree. For more information, see **Figure 13: Educational Attainment**.

## COMMUTING TYPES

By and large, the commuting types for South Kingstown residents are very similar to those of the state overall. Perhaps the most notable difference is that 7% of residents walk to work – nearly twice the percentage statewide. This suggests that South Kingstown has done a good job at making sure jobs and homes are located in proximity. It is therefore surprising to see that the share of bicycle commuters is so low and may suggest that South Kingstown has an opportunity to decrease the overall percentage of commuters driving alone by continuing to invest in more extensive and better-connected bicycle infrastructure like the recent extensions to URI and South County Commons. Among those who commuted to work, it took them on average 24.4 minutes, a slight increase of 1.5 minutes from 2009.

## NEEDS & OPPORTUNITIES

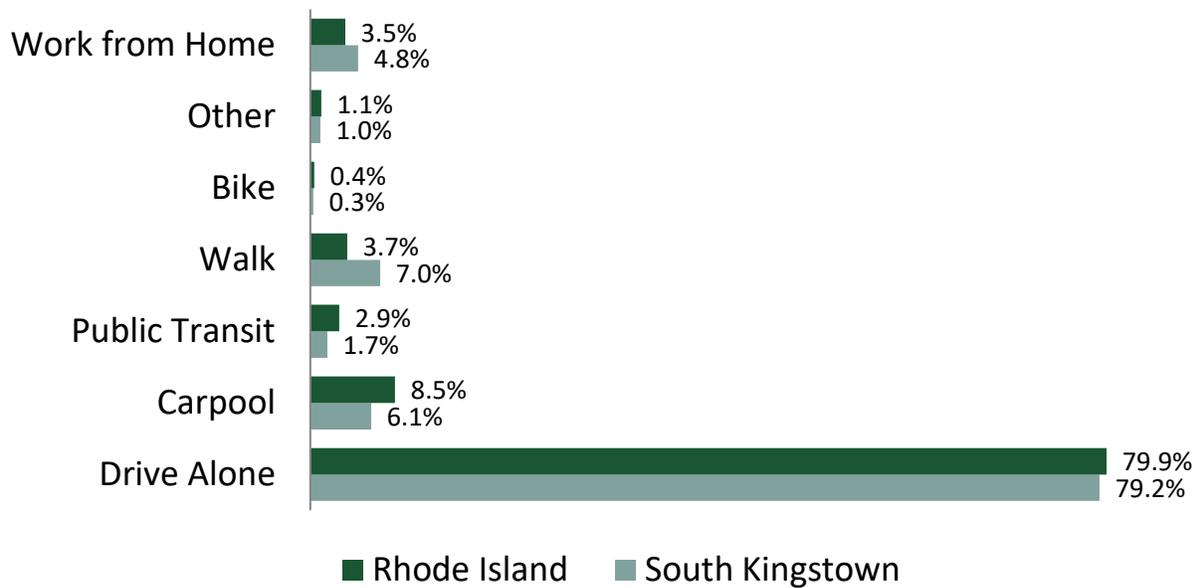
The following section summarizes the needs and opportunities related to economic development that emerged from input from the public, data and research. These comments and ideas have been clustered into five common themes:

- ◆ Supporting Economic Activity in a Changing Environment;
- ◆ Maintaining South Kingstown as a Year-Round Tourist Destination;
- ◆ Building Housing Diversity to Develop a Local Workforce and Support Local Businesses;
- ◆ Protecting Community Character to Attract New Business, and
- ◆ Providing a Clear Path for Business Investment.



### FIGURE 38: MEANS OF TRANSPORTATION TO WORK

Source: American Community Survey 2015 estimates



Each theme discusses, as relevant, opportunities to support local businesses, the services and infrastructure needed to support local business, related regulatory issues, and relevant local economic development plans, programs and incentives.

## **BUILDING ON THE VILLAGE-SCALE MODEL**

South Kingstown is a town of villages. Since its inception, South Kingstown’s economic activity has largely been centered in its villages, except for agriculture. However, building and construction is generally easier outside the village areas. Infill development within the villages is more complex, and potentially more expensive. The Town has an opportunity to make infill development more attractive for developers by investing in infrastructure and providing guidance on the scale and quality of design desired.

Town government is not alone in this effort. There are many community-based organizations focused on the economic development and general improvement of the villages. These organizations are critical for filling in needs that the government is unable to provide. There are many sources of funding available for village improvement and revitalization, and sometimes it is more competitive for local non-profits, rather than local government, to pursue these funding opportunities. There are also increased opportunities when the Town and all the members of such organizations communicate regularly and share information on potential resources. The Town can serve as the “hub” of communication and coordination among all these groups who are striving for the same ends.

The existing building stock in the villages is a major opportunity for reuse. Reuse and revitalization of mill buildings, commercial buildings, homes, and civic buildings can help provide distinctive locations for mixed-use development, providing the diversity of work spaces and homes needed to house our businesses and workforce.

South Kingstown has sought over many years to develop a growing economy based on its unique assets and places, rather than on development that could be “Anywhere, USA.” The town needs to more actively express to residents and the development community its values for commercial and industrial development, and the existing limitations in zoning that help prevent sprawling development (e.g., size limits on commercial construction that prevent big box retail uses).

## **ECONOMIC ACTIVITY IN A CHANGING ENVIRONMENT**

In an environment, nationally and regionally, where “bricks and mortar” retail is in decline, South Kingstown needs to continue to build on what makes it special, including the small-scale commercial spaces in its villages that provide opportunities for “mom and pop” businesses. And while manufacturing is on the decline in many parts of the country, the fact that





it is remaining more or less stable in South Kingstown may indicate that manufacturing has a future here, and the Town should make sure that sufficient land remains available to support the expansion of manufacturing

*Maker Spaces are creative “do it yourself” spaces where people can gather to create, invent, and learn. They often have 3D printers, software, electronics, craft and hardware supplies and tools, and more. (OEDB.org) - Open Educational Database*

and related production industries. For example, if a local start-up brewery wanted to expand, would it have places to go? Or do such businesses eventually have to move out of town? The Town also needs to be prepared for a future where more and more retail sales occur on line, and commercial buildings are occupied more by services, “makerspaces” and other light industrial production, recreation, unique retailers, and other uses.

## MAINTAINING SOUTH KINGSTOWN AS A YEAR-ROUND TOURIST DESTINATION

South Kingstown is a beautiful place, and its beauty will continue to attract visitors to its beaches, rivers, salt and freshwater ponds, forests, and other natural resources, as well as its historic villages, the University of Rhode Island, and cultural resources. South Kingstown needs to continue protecting all these resources in order to maintain a healthy tourism sector.

South Kingstown has an opportunity to expand tourism in a sustainable way by making sure that there is land zoned near tourist attractions for supporting complementary businesses and increasing tourist revenue. One major example of this is the food economy. Many tourists want to taste the best of what the area has to offer, which means ready access to farm stands, farmers’ markets, restaurants that source locally, and local producers of prepared foods and beverages. Linking these local businesses with visitors has arguably the primary benefit of keeping them economically viable so that they are available to residents as well. Another major draw for tourists is the arts community. Artists and artisans have a strong presence in South Kingstown, but more can be done to help coordinate and market their work to visitors. Another recent trend for visitors is destination events such as weddings, reunions, conferences, and other such events. Making sure that South Kingstown enables local property owners to host destination events, while being mindful of the impacts on their neighbors, can help strengthen the viability of local farms, museums, and other potential venues. Finally, making sure that South Kingstown’s villages have beautiful and functional infrastructure, such as street trees, benches, lighting, sidewalks, crosswalks, the bike path, etc., will make these areas all the more attractive to visitors.



SUSTAINABILITY

## BUILDING HOUSING DIVERSITY TO DEVELOP A LOCAL WORKFORCE & SUPPORT LOCAL BUSINESS

The increasing cost of housing in South Kingstown, including rental and ownership opportunities, makes it difficult for many people who work in town to live here. This is particularly problematic when you consider that 28% of the jobs in South Kingstown are in Accommodations & Food Service and Retail, with relatively low wages. An additional 28% of the jobs are in Health Care & Social Assistance, a sector that generally includes more lower-paid nursing aides, senior care givers, and social workers than higher paid doctors and other medical professionals. A diverse housing stock plays an important role in maintaining a strong, vibrant and sustainable local economy. Offering a diverse array of housing options near major employment hubs in town can help ensure that the people who work here and serve our residents can be residents themselves.

Small scale “cottage” housing and multi-family housing, whether market rate or Low-Moderate Income (LMI), are needed to attract and support our

*View of the Saugatucket River  
Walkway, Saugatucket River  
Falls (and fish ladder)*





workforce. Further, concentrating such homes in our village centers will provide the lower-maintenance, walkable housing opportunities desired by many seniors and young adults alike. More people living in our village centers also means more customers for local shops and services. All of South Kingstown's policies and actions in the Housing chapter are intimately linked with the health of the Town's economy.

### **PROTECTING COMMUNITY CHARACTER TO ATTRACT NEW BUSINESS**

In order to maintain and enhance its special character, the Town needs to communicate with developers that design and appearance matter. Construction needs to respect scenic roadways and landscapes, including our working farmland. The Town needs to explore more sophisticated standards regarding the aesthetic features of development within commercial zoning districts, such as architecture, scale and massing of structures, signage, and appropriate landscaping, to ensure these areas are more functional and beautiful. The Town should continue to make sure that local zoning and regulations encourage further growth in the agricultural sector and should look for ways to connect this sector with the growing food services sector.

### **PROVIDING A CLEAR REGULATORY PATH FOR BUSINESS INVESTMENT**

Business owners and developers are looking for clarity and consistency in local regulations and permitting processes. It is a good thing for South Kingstown to have high standards and expectations for business and development, but these should be clearly expressed, evenly enforced, and executed in a predictable time frame. The Town has an opportunity to establish a good working relationship with developers and business owners by continuing to revise and develop regulations that are clear and easy to interpret by local boards and applicants.

The Town already has several tools to assist local business, including a tax incentive program/ordinance, and needs to do a better job of advertising these tools. South Kingstown has an opportunity to make its expectations and standards even clearer by developing educational tools and processes.

## ECONOMIC DEVELOPMENT ACTION PLAN SUMMARY

**Goal 1:** The local economy will provide opportunities for a diverse collection of business and industry.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> Focus supportive efforts toward the local business community to reinforce existing investment and our traditional economy, employment opportunities and the provision of goods and services to our residents and visitors to the community.</p>   <p><b>Policy 1.2</b> Continue to pursue partnerships and collaborations that will provide technical expertise and resources to strengthen and diversify the Town's economy and offer opportunities for the education and job training residents will need to fully participate in the economy.</p>  <p><b>Policy 1.3</b> Take full advantage of the diverse contributions of URI to the local and regional economy, including education, training, research and development activities.</p> <p><b>Policy 1.4</b> Coordinate with Commerce RI and the URI Small Business Development Office to identify and develop programs and initiatives that support the local business community at a variety of scales.</p>  <p><b>Policy 1.5</b> Actively engage with State agencies to stay current with regulations and programs that may affect development potential in the community.</p>  <p>(continued on next page)</p>	<p><b>Action 1-1</b> Develop a biennial strategic economic development work plan that focuses on light industry/ maker spaces, research/development and commercial offices, as well as skills and training needed for residents to find employment in these fields.</p>   <p><b>Action 1-2</b> Review existing commercial and mixed-use zoning districts to make sure they can accommodate maker spaces and similar "clean" light industrial uses that are compatible neighbors of traditional commercial uses.</p>  <p><b>Action 1-3</b> Invite URI administration and faculty to an annual meeting to identify specific initiatives for which URI can serve as a resource for the Town and engage the University in an effort to implement these initiatives.</p> <p><b>Action 1-4</b> Improve communication with and provide supportive services to the local business community and institutions such as the Southern Rhode Island Chamber of Commerce, URI, South County Hospital, and others.</p>  <p><b>Action 1-5</b> Identify a specific department to regularly research potential economic development funding and training opportunities at the State and national level, whether through government, banks, or philanthropy.</p>  <p><b>Action 1-6</b> Actively engage local businesses and employers to better understand the housing needs of their employees, in order to gain evidence of the types and price points of housing most needed to support the local work force.</p>  <p>(continued on next page)</p>



**Goal 1:** The local economy will provide opportunities for a diverse collection of business and industry.

POLICIES	ACTIONS
<p><b>Policy 1.6</b> Engage South County Hospital on policy-setting and infrastructure improvements that have the potential to impact their business operations.</p> 	<p><b>Action 1-7</b> Work with URI to support research expansion and potential spin off of new businesses, utilizing the State of Rhode Island’s incentives for research and development.</p> <p><b>Action 1-8</b> Work with URI to promote local mill complexes as potential business incubators for small business startups that evolve out of the University.</p>  <p><b>Action 1-9</b> Explore the potential for the URI Cooperative Extension Service to provide programs, services, and resources that will enhance the skill and knowledge levels of the local workforce to better prepare them to be competitive for jobs in growing industries and fields.</p> 

**Goal 2:** Local economic development assets will be identified that the Town, local boards and commissions, the local business community, and/or future investors can build upon together.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> Work with URI to continue and expand transportation opportunities for students and staff to access local commercial and service areas.</p>  <p><b>Policy 2.2</b> Promote a well-connected pedestrian network to increase access to businesses in village areas, provide an equitable transportation system for all shoppers and workers, and support active modes of transportation.</p>  <p><i>(continued on next page)</i></p>	<p><b>Action 2-1</b> Research and pursue funding to assess drainage problems that regularly occur during heavy rain events.</p>  <p><b>Action 2-2</b> Explore the redevelopment of a summer “Trolley Program” by assessing the potential economic, transportation, and social benefits to be gained, and evaluating the amount of municipal support necessary, as informed by the experiences of Narragansett and Westerly.</p>  <p><b>Action 2-3</b> Explore and determine the costs and benefits of establishing a revolving loan fund for owners of historic buildings, and actively reach out to owners to encourage them to take advantage of this and all other financial and technical assistance available to them to keep their properties well maintained.</p>  <p><i>(continued on next page)</i></p>

**Goal 2:** Local economic development assets will be identified that the Town, local boards and commissions, the local business community, and/or future investors can build upon together.

POLICIES	ACTIONS
<p><b>Policy 2.3</b> Support the installation of a connected, comprehensive system of bikeways, walkways, linear parks, and related pedestrian and biking infrastructure.</p>   <p><b>Policy 2.4</b> Support economic development that enhances natural, cultural, historic, and recreational resources throughout the community.</p>    <p><b>Policy 2.5</b> Compile and maintain an inventory of agricultural operations in South Kingstown.</p>  <p><b>Policy 2.6</b> Support the installation of public art, where appropriate, to enhance the character of streetscapes, village neighborhoods, and mixed-use areas.</p>   <p><b>Policy 2.7</b> Encourage cooperation amongst South County communities, the South County Tourism Council and the South County Chamber of Commerce in support of year-round tourism opportunities.</p>  <p><b>Policy 2.8</b> Support the active farming of agricultural land through initiatives such as development right acquisition, and the State's Farm, Forest, and Open Space Program.</p>  	<p><b>Action 2-4</b> Assess the build-out capacity of local and State infrastructure (roads, drainage systems, water, sewer, stormwater, etc.), to determine current economic development and growth capacity.</p>   <p><b>Action 2-5</b> Compile and maintain an inventory of agricultural operations in South Kingstown.</p>  



**Goal 3:** Economic development within our existing villages that contributes to a high quality of life and a resilient future will be actively supported.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> As many of the Town’s centers of economic activity are located in areas prone to flooding and sea-level rise, and are also dependent on their waterfront locations, the Town will prioritize such areas for investments in more resilient infrastructure that will help businesses recover quickly.</p>  <p><b>Policy 3.2</b> Continue to work with and support local, grassroots, community-based organizations who promote economic development opportunities that support the Town’s village planning model.</p>  <p><b>Policy 3.3</b> Support the installation of underground utility lines in village areas.</p> 	<p><b>Action 3-1</b> Explore and report on the costs and benefits of installing green infrastructure within the public rights-of-way and on public lands in and near its commercial centers to mitigate the impacts of stormwater, such as infiltrating tree boxes, bioswales, rain gardens, and green roofs.</p>  <p><b>Action 3-2</b> Work with the University of Rhode Island and other institutions to help grow the economic opportunities of emerging resilience-based industries and explore and report on the viability of providing support, such as tax credits and other financial incentives, to facilitate the growth of this new industry.</p>  <p><b>Action 3-3</b> Meet with investors, property owners, and business owners on a regular basis to discuss opportunities for supporting redevelopment within the villages, and specifically relative to redevelopment of the historic mill complexes.</p> 

**Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

POLICIES	ACTIONS
<p><b>Policy 4.1</b> Pursue the Town’s economic development goals by establishing and enforcing high quality, transparent local regulations and guidelines.</p> 	<p><b>Action 4-1</b> Maintain a current inventory of any commercial and industrial buildings or properties that are underutilized or vacant. This inventory should be available to potential developers or business interests.</p>  <p>(continued on next page)</p>

**Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

POLICIES	ACTIONS
	<p><b>Action 4-2</b> Engage the community to define a vision for Old Tower Hill Road and Dale Carlia Corner. This effort will focus on strategies for increasing pedestrian access and improving building and site design aesthetics as well as opportunities for providing incentives for the redevelopment of commercial property and infrastructure improvements within the existing state right-of-way.</p> <p></p> <p><b>Action 4-3</b> Evaluate, prioritize, and implement findings of all of its Village Plans to promote appropriate economic growth within each unique village.</p> <p></p> <p><b>Action 4-4</b> Conduct an audit of the Kingstown Road Special Management District to determine if changes are needed to accommodate appropriate business growth and development.</p> <p></p> <p><b>Action 4-5</b> Explore any necessary modification of the zoning ordinance needed to implement the recommendations of the “Palisades Mill Reuse Feasibility Study.”</p> <p></p> <p><b>Action 4-6</b> Develop a policy initiative to actively promote the use of its ‘Tax Treaty’ program as a means to attract new business uses and expansion of existing businesses.</p> <p><b>Action 4-7</b> Evaluate and consider amendments to the use code table in the South Kingstown Zoning Ordinance that will modernize existing language and provide increased flexibility and utility of the ordinance from an economic development perspective.</p> <p><b>Action 4-8</b> Review the feasibility of expansion of limited commercial zoning (office and service type uses) in the Old Tower Hill Road corridor (between Old Tower Hill Road and Narragansett Avenue West).</p> <p></p> <p><i>(continued on next page)</i></p>



**Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

POLICIES	ACTIONS
	<p><b>Action 4-9</b> Develop a system and standards for reviewing and analyzing existing regulations for clarity and ease of use.</p> <p><b>Action 4-10</b> Review the Town’s permitting processes for clarity and efficiency and develop clear guidance for applicants on how to navigate the process.</p> <p><b>Action 4-11</b> Assign one or more current Town staff charged with coordinating all Town efforts related to economic development and facilitating competing interests.</p> <p><b>Action 4-12</b> Complete revision to the Subdivision and Land Development Regulations with the intent of clarifying the standards and reducing complexity of use.</p> <p><b>Action 4-13</b> Revise the Zoning Ordinance to permit “clean” industrial and manufacturing uses with compatibility standards where appropriate</p>

**Goal 5:** Commercial development will be held to a high standard of quality design.

POLICIES	ACTIONS
<p><b>Policy 5.1</b> Ensure that future development proposals in non-residential areas is of high-quality design and in-keeping with existing community character.</p>  <p><b>Policy 5.2</b> Encourage the clustering/village concept and scale for commercial development to prevent commercial strip design and support a healthy, walkable environment.</p> 	<p><b>Action 5-1</b> Develop a commercial development design manual for commercial development in all areas of town. This manual may be used to develop design guidelines or standards for different districts or neighborhoods within the community to ensure a proper fit of commercial/industrial uses in the surrounding community and provide an efficient and effective permitting process.</p>  <p><b>Action 5-2</b> Revise the parking requirements in the Zoning Ordinance and the Subdivision &amp; Land Development Regulations for commercial and industrial projects to:</p> <ul style="list-style-type: none"> <li>• Maintain appropriate parking ratios;</li> <li>• Promote the use of green infrastructure to manage runoff and flooding;</li> </ul> <p><i>(continued on next page)</i></p>

**Goal 5:** Commercial development will be held to a high standard of quality design.

POLICIES	ACTIONS
	<ul style="list-style-type: none"> <li>• Minimize the use of impervious surfaces;</li> <li>• Require buffering and landscaping of parking areas; and</li> <li>• Include provisions for street trees.</li> </ul>  <p><b>Action 5-3</b> Revise standards for parking, setbacks, use and other essential Zoning Ordinance elements to address the unique purpose of each commercial and industrial district. Specific issues to address may include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Standards for shared parking;</li> <li>• Reduction of parking standards in village centers; and</li> <li>• More flexible standards for renovations of existing and historic buildings.</li> </ul>    <p><b>Action 5-4</b> Review regulatory standards that apply to transitional areas between commercial, industrial, and mixed-use zoning districts and adjoining residential neighborhoods and identify design and performance standards that will ensure compatibility between these uses across district lines.</p>  <p><b>Action 5-5</b> Amend the regulations for the Commercial Highway, Commercial Downtown, and Commercial Neighborhood Districts to address standards for building scale, architectural elements, pedestrian access and connectivity, signage, landscaping, and street trees.</p>    <p><b>Action 5-6</b> Amend the zoning ordinance to encourage the clustering/village concept and scale for commercial development to prevent commercial strip design.</p>  <p><b>Action 5-7</b> Review the zoning ordinance to better nurture and promote business orientation to and access from the William C. O'Neill Bicycle Path.</p> <p><i>(continued on next page)</i></p>



**Goal 5:** Commercial development will be held to a high standard of quality design.

POLICIES	ACTIONS
	<p><b>Action 5-8</b> Amend regulations to require the installation of attractive bicycle parking facilities for any commercial development requiring development plan review.</p> 

**Goal 6:** Business models that help to define South Kingstown’s unique character and history will be identified and fostered.

POLICIES	ACTIONS
<p><b>Policy 6.1</b> Support the use of land for agricultural purposes including accessory uses and related operations and encourages a local healthy food system by providing opportunities for local farmers to sell their products locally.</p>  <p><b>Policy 6.2</b> Support the continued emergence of an “arts identity” in the community through arts-based industry and commerce.</p>  <p><b>Policy 6.3</b> Support the existing tourist economy both on a local and regional scale by working to preserve and enhance those features of our community that attract tourists.</p>  <p><b>Policy 6.4</b> Strive to structure and prioritize existing resources in a way that makes it easier for the types of businesses desired in South Kingstown to thrive.</p> 	<p><b>Action 6-1</b> Work collaboratively to prioritize and implement recommendations of the Saugatucket River study.</p>  <p><b>Action 6-2</b> Assess the feasibility of using Transfer of Development Rights (TDR) as a regulatory tool for protecting agricultural lands.</p>  <p><b>Action 6-3</b> Review local codes to ensure that arts-based commerce and “craft” industries, including “maker spaces”, breweries/distilleries, prepared food production, etc., and supporting uses are appropriately allowed in the community.</p>  <p><b>Action 6-4</b> Explore the possibility of providing financial incentives to artist operations such as “tax free” districts that allow artists to sell their wares without a sales tax or assistance to establish a local or regional “arts council” that may coordinate local arts activities.</p> 



# NATURAL HAZARDS & CLIMATE CHANGE

---



## VISION

To effectively plan for the impacts of natural hazards and climate change within South Kingstown in order to **protect the lives, property, infrastructure, and existing natural resources** that enrich and protect the community.

The Town will pursue and implement adaptation and mitigation strategies to improve resilience to natural hazards and reduce greenhouse gas emissions. As the severity and frequency of natural hazard events increases over time due to climate change, the Town will work to reduce the vulnerability of our community through education, structural improvements, and effective land use planning. The Town will encourage development that reduces dependence on personal vehicles and encourages the use of renewable energy sources for heating, cooling, and electrical needs. The Town will promote growth in those areas less susceptible to natural hazards and will work to reduce vulnerabilities where existing development is located in harm's way in an effort to create a more vibrant, dynamic, and resilient community. In these ways South Kingstown will lead by example within the community and the surrounding region.

---

## NATURAL HAZARDS & CLIMATE CHANGE GOALS

**Goal 1:** South Kingstown will be resilient to the impacts of natural hazards and climate change.

**Goal 2:** Carbon emissions generated within the municipality will be reduced through reduced energy consumption associated with lighting, heating, cooling and transportation.

## GUIDING PRINCIPLES

- ◆ A natural hazard is an event or series of events caused by forces of nature that has a negative impact on people, infrastructure or the environment.
- ◆ Natural hazards and climate change present significant and growing concerns for the safety and wellbeing of South Kingstown residents, property owners, and municipal government (i.e., public infrastructure, emergency resources).
- ◆ While natural hazards cannot be prevented, their impacts on lives, infrastructure, and property can be reduced or avoided through proper mitigation planning.
- ◆ When planning for natural hazards with the community, it is essential to also consider the impacts of climate change trends upon the frequency and intensity of natural hazards.
- ◆ Climate change trends demonstrate rising temperatures, rising sea levels, increased annual precipitation and increased frequency of intense rainfall in Rhode Island.
- ◆ Due to the impacts caused by natural hazards and effects of climate change effective planning is essential to reduce current and future vulnerabilities within the Town.
- ◆ The Town shall continue protection of critical roadway infrastructure where other mitigation approaches are determined infeasible, such as Matunuck Beach Road.
- ◆ This section of the South Kingstown comprehensive plan is not a stand-alone document. To gain a comprehensive understanding of the effects of climate change and natural hazards in the community, this element of the South Kingstown Comprehensive Plan must be considered alongside the remaining elements of this plan, the South Kingstown Multi-Hazard Mitigation Plan, South Kingstown Harbor Management Plan, and research, policy, and planning products developed by the Rhode Island Executive Committee on Climate



Change (EC4) and the agencies represented therein, Save the Bay, and the University of Rhode Island.

This element focuses on mitigation strategies to reduce impacts from natural hazards determined to cause the most devastating or costly impacts on the residents and municipality and efforts to reduce greenhouse gases which contribute to climate change. A complete assessment of all natural hazards that may affect South Kingstown and detailed mitigation action proposals may be found within the South Kingstown Multi-Hazard Mitigation Plan. Throughout this element the term “mitigation” will be used to describe actions and tasks which reduce exposure to, or lessen the impacts of natural hazards, and “adaptation” will be used to describe strategies which improve resilience to natural hazards.

## CURRENT PRACTICE

- The Town maintains an up-to-date Hazard Mitigation Plan, which takes an in-depth look at mitigation needs
- Applicants for development and subdivision review are required to indicate flood zone information on submittal documents
- The Zoning Ordinance currently contains a Special Flood Hazard Overlay District, the intent of which is to increase resiliency while preserving community character
- The Zoning Ordinance currently contains a Community Resilience Overlay District, the intent of which is to provide education to current and future property owners relative to sea level rise and flooding risks.

## BASELINE INFORMATION

### HISTORIC EVENTS & FREQUENCY

Historic records of natural hazards events in South Kingstown serve as a baseline for identifying which natural hazards and climate change trends may affect the community in the future. **Table 18: South Kingstown Natural Hazard Frequency** was developed by the Local Hazard Mitigation Committee (LHMC) for use in the 2019 Hazard Mitigation Plan Update. The Table lists the natural hazards considered by the LHMC, classified by potential frequency. The frequency categories used are: “highly likely”, those events with a near 100% probability of occurring within the next year; “likely”, events with an estimated 10% to 100% probability of occurring within the next year, or at least one chance in the next 10 years; “possible”, events with an estimated 1% to 10% probability of occurring within the next

year, or at least one chance in the next 100 years; and “unlikely”, events with a less than 1% probability of occurring in the next 100 years.

## PRIORITY HAZARDS

The historic record of natural hazards that have affected South Kingstown and the anticipated frequency of those hazards establish which hazards are most likely to occur in the community. However, to effectively consider and prioritize mitigation activities within the Town, the impact of these hazards must be considered. Impact is a term used to describe the effects of the hazard on the community and is often used to assess the anticipated or actual effects of a hazard on specific populations, infrastructure, and economic or natural resources. The natural hazards that are most likely to occur and may have the most devastating or costly impact(s) to South Kingstown are sea level rise, storm events (i.e., hurricane, nor’easter) coastal flooding and storm inundation, coastal erosion, and upland flooding. These hazards are considered priority hazards for the Town within the Comprehensive Plan.

**TABLE 18: SOUTH KINGSTOWN NATURAL HAZARD FREQUENCY**

Source: South Kingstown Local Hazard Mitigation Committee

HAZARD	FREQUENCY
Brushfire	Highly Likely
Coastal Erosion	Highly Likely
Drought	Likely
Earthquake	Possible
Flooding (Flash)	Highly Likely
Flooding (Saturation)	Highly Likely
Flooding (Riverine)	Highly Likely
Flooding (Coastal)	Highly Likely
Hail	Possible
High Winds	Highly Likely
Hurricane	Likely
Ice Storm	Likely
Lightning	Highly Likely
Nor’easter	Highly Likely
Tornado	Possible
Sea Level Rise	Highly Likely
Snow Storm	Highly Likely



**Table 19: South Kingstown Natural Hazard Risk** lists the natural hazards considered by the Local Hazard Mitigation Plan Committee in development of the 2019 Hazard Mitigation Plan Update, and provides the overall level of concern/risk ranking for each hazard. Those hazards with a “high” ranking are considered priority.

The map series on the following pages depicts those areas of the town at risk to South Kingstown’s priority hazards. These maps were developed from FEMA flood insurance rate (FIRM) mapping, hurricane inundation mapping, anticipated sea level rise analysis as completed by the State, and shoreline change maps as developed by the Shoreline Change Special Area Management Plan (Beach SAMP) effort of CRMC.

**TABLE 19: SOUTH KINGSTOWN NATURAL HAZARD RISK**

*Source: 2019 Hazard Mitigation Plan Update*

HAZARD	LEVEL OF CONCERN/RISK RANK
<b>Hurricane</b>	<b>High</b>
<b>Nor’easter</b>	<b>High</b>
<b>Flooding (Coastal)</b>	<b>High</b>
<b>Flooding (Saturation)</b>	<b>High</b>
<b>Flooding (Riverine)</b>	<b>High</b>
<b>Coastal Erosion</b>	<b>High</b>
<b>High Winds</b>	<b>High</b>
<b>Snow Storm</b>	<b>High</b>
Ice Storm	Medium
Flooding (Street)	Medium
Extreme Heat and Cold	Medium
Sea Level Rise	Medium
Brushfire	Medium
Drought	Low
Earthquake	Low
Hail	Low
Lightning	Low
Flooding (Flash)	Low
Tornado	Low

## IMPACT OF CLIMATE CHANGE & DEVELOPMENT PATTERNS

Climate change and land development patterns both yield significant effects on the frequency and impact of the priority hazards identified above. Each priority hazard is anticipated to increase in frequency and severity in the coming decades due to climate change. More frequent, heavier storms and precipitation events will increase the frequency and impact of upland and coastal flooding events and speed up the rates of coastal erosion along the south coast. Additionally, data show the rate of sea level rise is anticipated to accelerate as climate change trends continue. Existing development patterns, including the amount of impervious surfaces and location of development relative to coastal features, can exacerbate both the likelihood and the severity of the impact on coastal and upland flooding within South Kingstown.

## PRIORITY IMPACTS

Priority impacts are those specific impacts likely to cause loss of life or threats to public health and safety, significant damage that is costly to repair, or disruption of important community functions. To establish which potential impacts are priority impacts for the Town of South Kingstown a preliminary community vulnerability assessment was completed by members of the Planning Board and Planning Department. The steps in the assessment process are outlined in **Figure 39: Community Vulnerability Assessment Process**. To view the complete vulnerability matrix developed through this effort see [Appendix 2](#).

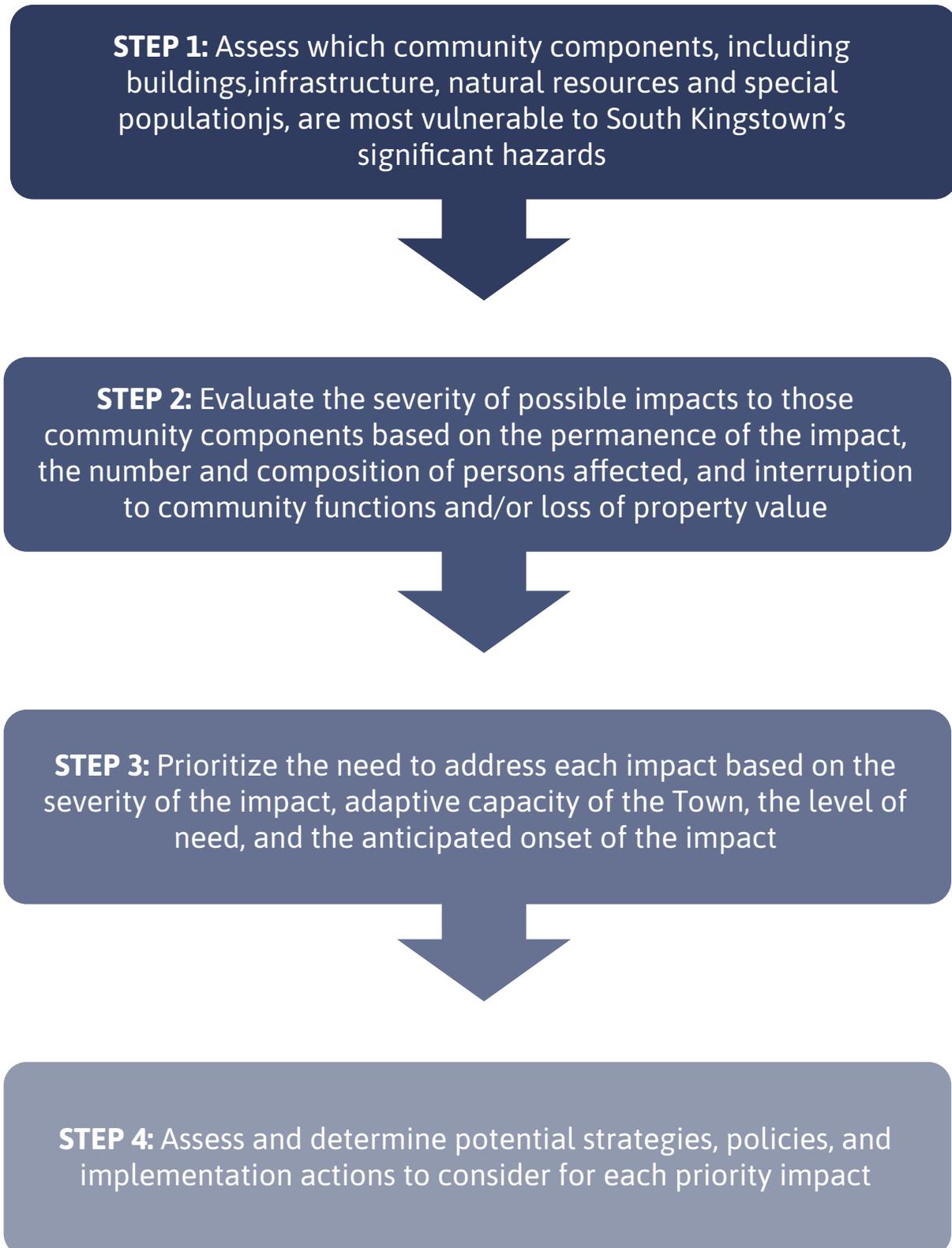
**Table 20: South Kingstown Priority Impacts of Natural Hazards** describes the impacts of natural hazards determined by the Planning Board's Natural Hazards and Climate Change Subcommittee to be high priority for adaptation actions.

## UPLAND FLOODING

Upland flooding, including both riverine and street or urban flooding, present unique needs and opportunities to plan for natural hazards and climate change. FEMA flood zone mapping shows significant areas of land in South Kingstown subject to inundation during 1% annual chance storms (100-year storm events). While a substantial amount of the land located in this flood zone is permanently protected from development as open space, such as the Great Swamp Management Area, some development and public infrastructure are located within the zone. As storm frequency and volumes of precipitation increase, the likelihood of damage to property from upland flooding increase as well.



**FIGURE 39: COMMUNITY VULNERABILITY ASSESSMENT PROCESS**



**TABLE 20: SOUTH KINGSTOWN PRIORITY IMPACTS OF NATURAL HAZARDS**

Source: Vulnerability Assessment completed by the Natural Hazards & Climate Change Subcommittee of the South Kingstown Planning Board

PRIORITY IMPACT	ASSOCIATED PRIORITY NATURAL HAZARD
Loss or damage to utility infrastructure in coastal areas <i>Example: Electric utilities and black-outs in developed areas such as Matunuck, Green Hill, and Middlebridge</i>	H, SLR, CF, CE
Loss or damage to roadway infrastructure in coastal areas <i>Example: Damage to Succotash Road and Charlestown Beach Road</i>	H, SLR, CF, CE
Loss or damage to residential property and structures in coastal areas <i>Example: Loss of Browning Cottages during tropical storm Irene and vulnerability of residential areas in Green Hill and Matunuck</i>	H, SLR, CF
Loss or damage to commercial property structures, and marinas in coastal areas <i>Example: Properties located in commercial neighborhood and commercial waterfront zones</i>	H, SLR, CF
Inundation of evacuation routes <i>Example: Succotash Road, Matunuck Beach Road, Ministerial Road, and river crossings along Route 138 vulnerable to over-topping</i>	H, SLR, CF, UF
Loss or damage to roadway infrastructure upland <i>Example: Worden's Pond Road, and bridges in Peace Dale and Middlebridge prone to inundation</i>	H, UF

H= Hurricane; SLR = Sea Level Rise; CF = Coastal Flooding; CE = Coastal Erosion; UF = Upland Flooding



## HURRICANES & SEVERE STORMS

As climate change occurs the number and intensity of severe storms such as hurricanes continue to rise. These storms can have devastating effects on public and private property located both along the coast and further inland due to storm surge, high winds and large volumes of precipitation. According to the most recent Hazard Identification and Risk Assessment (HIRA) completed by RIEMA, 11 hurricanes have directly affected Rhode Island since 1938. Two such hurricanes, Hurricane Irene and Hurricane Sandy have occurred since 2011. Hurricane season in the Atlantic Ocean lasts from June 1st to November 30th each year, with the peak season for tropical storms taking place in late August and September. **Map 12: Hurricane Inundation in South Kingstown** depicts anticipated hurricane inundation areas.

## SEA LEVEL RISE

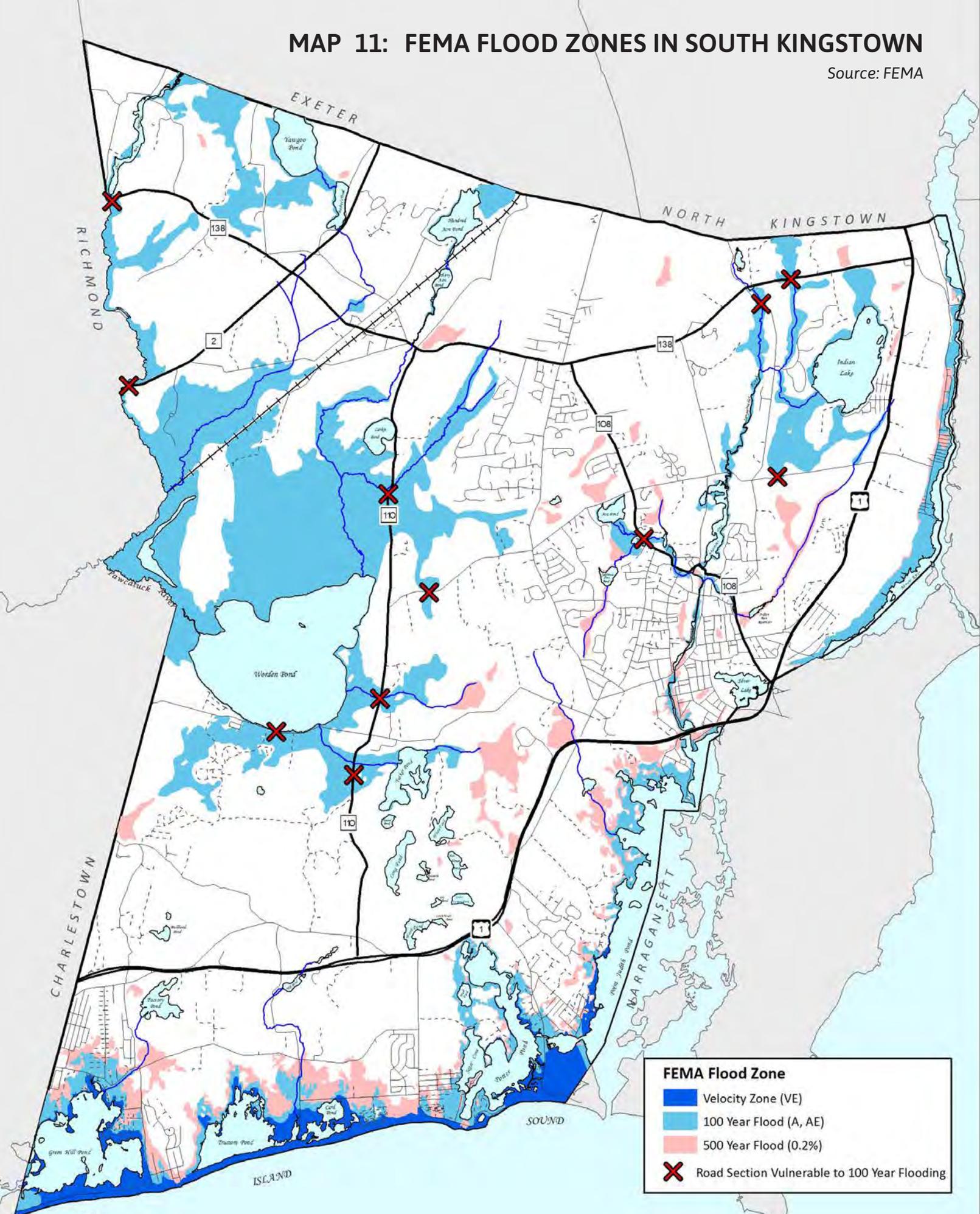
Sea level rise, like coastal erosion, presents a long term threat to and significant impact on property owners in and near South Kingstown's coastal areas. As the rate of sea level rise increases due to rising global temperature trends it poses a severe hazard for the community, its residents, and property owners. Global rates of sea level rise are increasing due to the expansion of ocean water as it warms, and melting of glaciers and ice sheet. However, these are not the only factors which affect local rates of sea level rise in the northeastern United States. Changes in land elevation and existing ocean currents create higher than average rates of sea level rise. CRMC and NOAA data collected from the Newport, RI tide gage indicate an average sea level rise rate of 0.11 inches annually from 1930 to 2018; equating to a change of 0.91 feet in 100 years. However, the rate of change has not been consistent and appears to be accelerating. The rate of SLR in the past 30 years is 3.86 mm/yr, 40% greater than the 1930 to 2018 average. This rate of sea level rise is expected to increase dramatically in the coming decades, particularly in the northeast where above average increases are projected. Consistent with the RI CRMC, South Kingstown utilizes the NOAA "High Curve" when planning for sea level rise. **As of 2017, projections anticipate approximately two feet (2') of sea level rise by 2040, five feet (5') by 2060, and 8.79' by 2100.** It is important to note that projected levels of sea level rise change frequently, the most recent [Army Corps Sea Level Change Calculator](#) provides the most up to date information.

**Map 13: Sea Level Rise Inundation, Middlebridge Area, Map 14: Sea Level Rise Inundation, Eastern Salt Ponds Area and Map 15: Sea Level Rise Inundation, South Shore Salt Ponds** depict projected sea level rise in South Kingstown.

Check out [CRMC's STORMTOOLS online viewer](#) and maps showing property level details about coastal hazards.

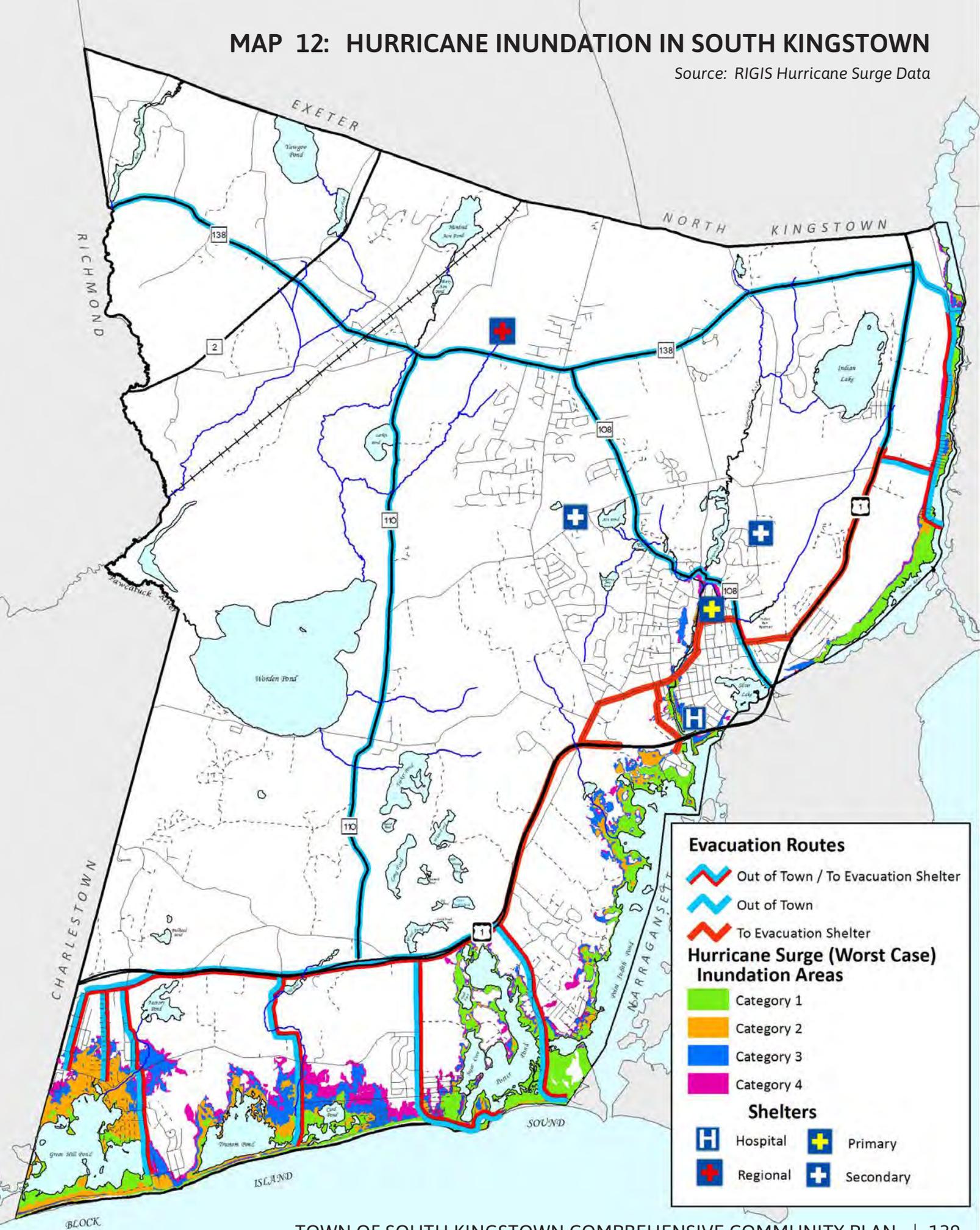
# MAP 11: FEMA FLOOD ZONES IN SOUTH KINGSTOWN

Source: FEMA



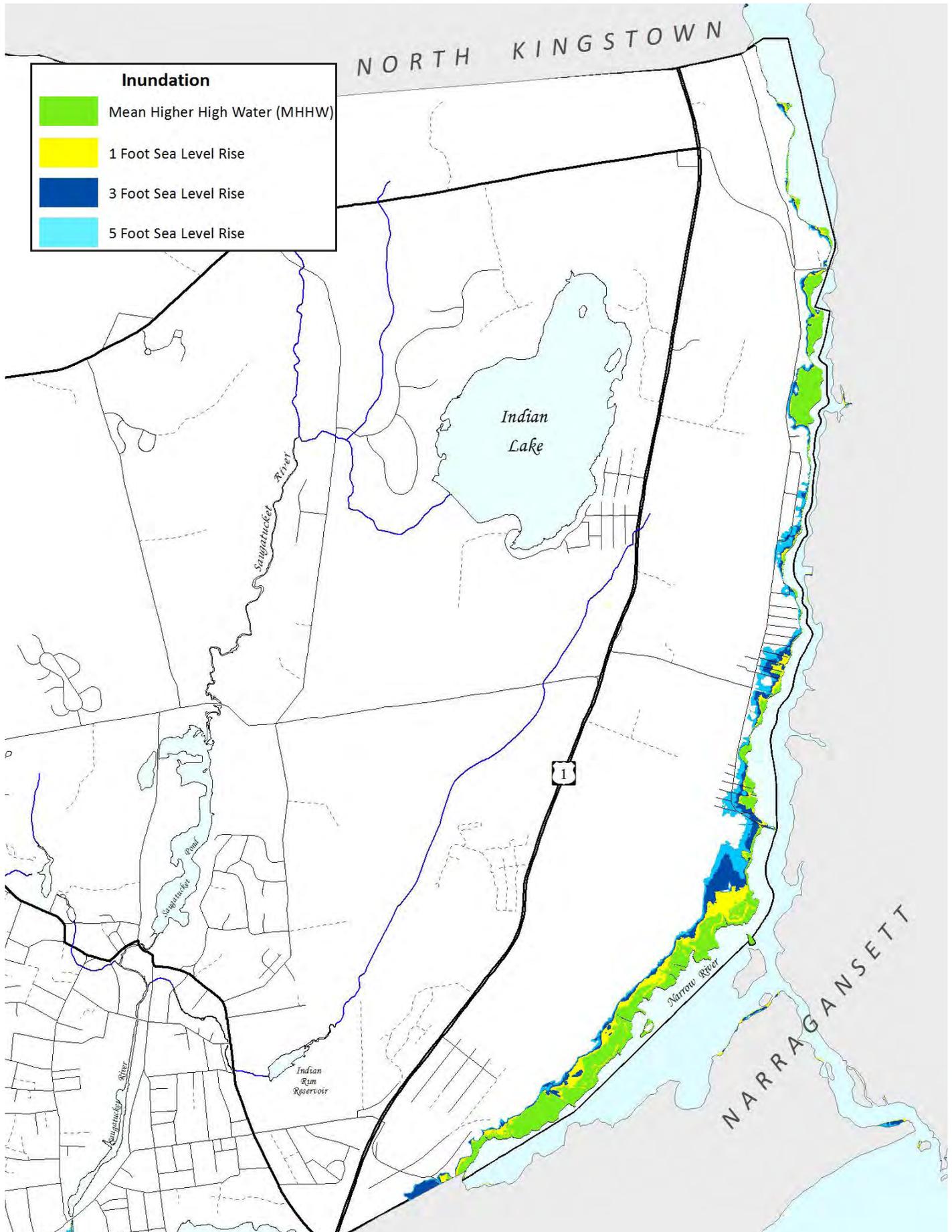
# MAP 12: HURRICANE INUNDATION IN SOUTH KINGSTOWN

Source: RIGIS Hurricane Surge Data



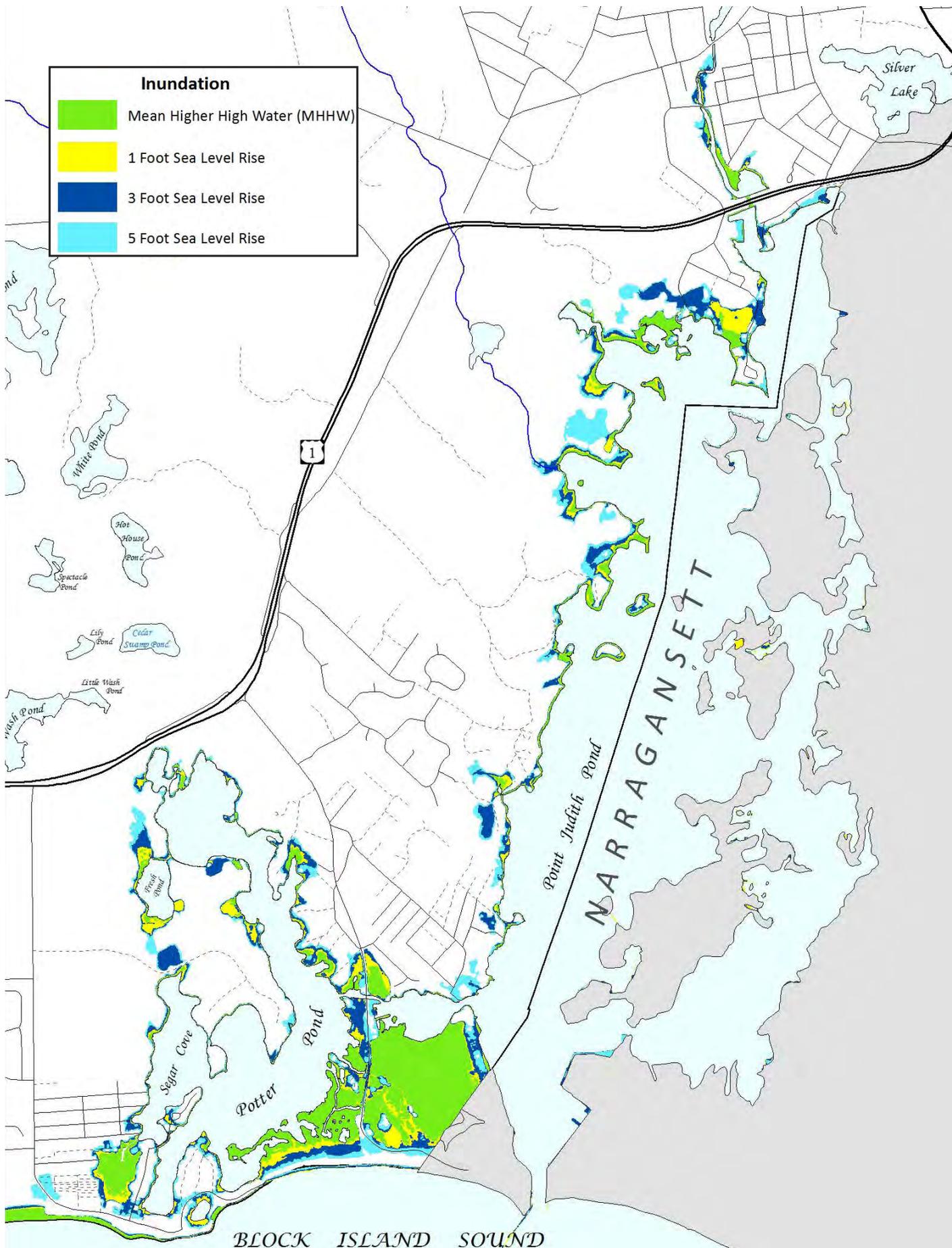
# MAP 13: SEA LEVEL RISE INUNDATION, MIDDLEBRIDGE AREA

Source: RIGIS Sea Level Rise Data, RI Division of Planning



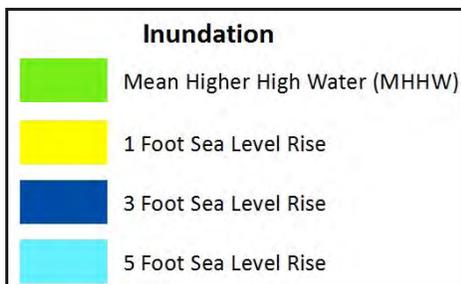
# MAP 14: SEA LEVEL RISE INUNDATION, EASTERN SALT PONDS AREA

Source: RIGIS Sea Level Rise Data, RI Division of Planning



# MAP 15: SEA LEVEL RISE INUNDATION, SOUTH SHORE SALT PONDS

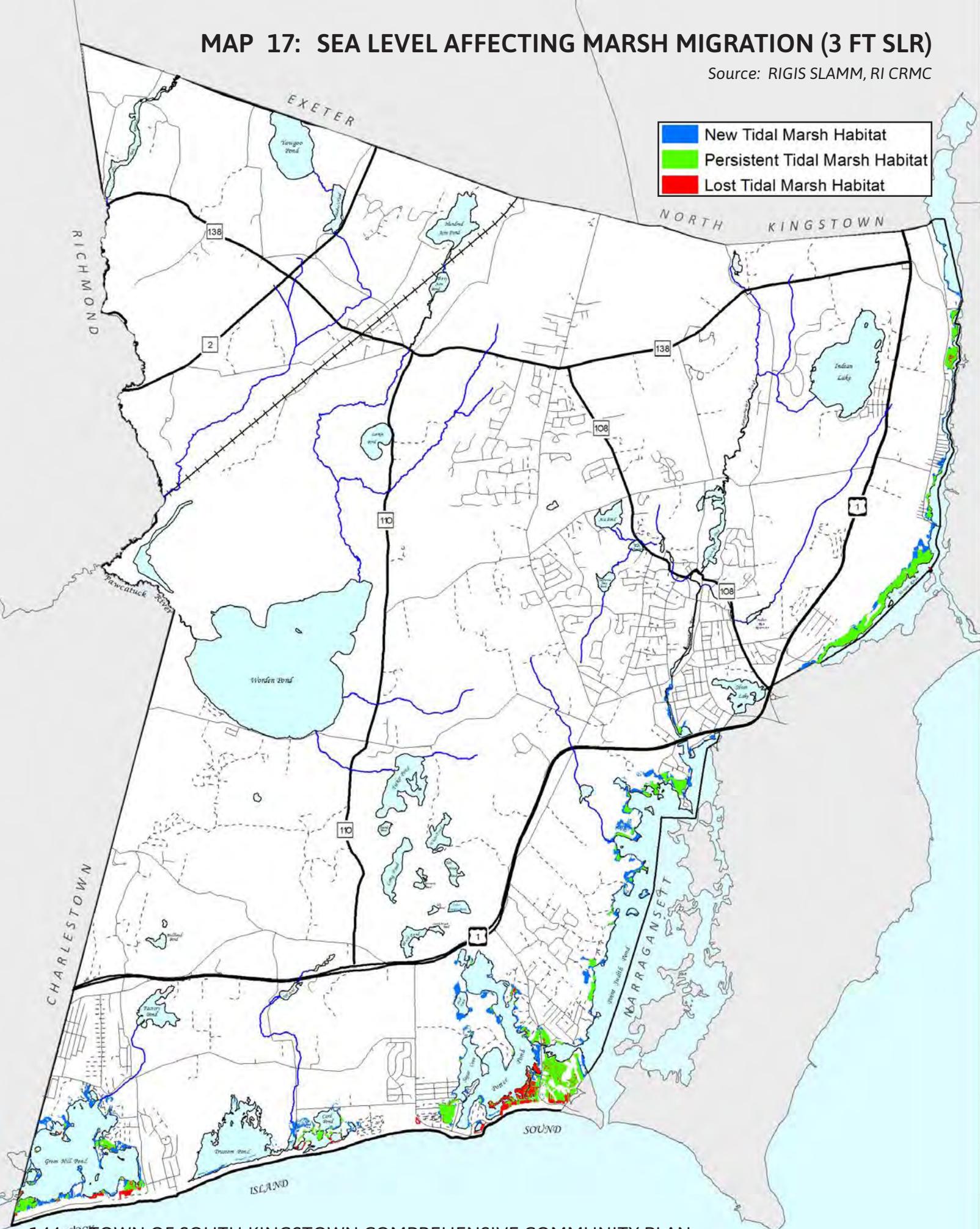
Source: RIGIS Sea Level Rise Data, RI Division of Planning





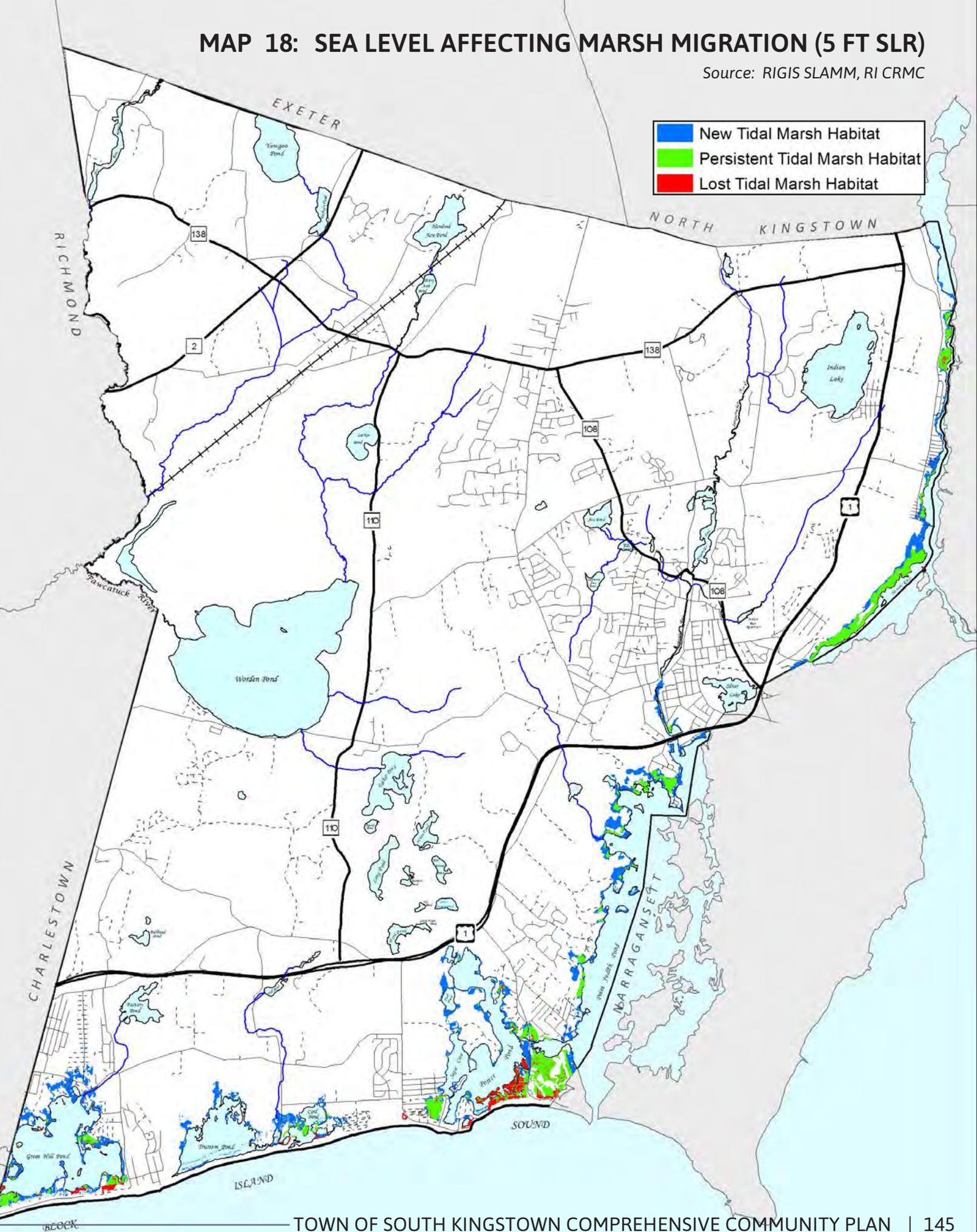
# MAP 17: SEA LEVEL AFFECTING MARSH MIGRATION (3 FT SLR)

Source: RIGIS SLAMM, RI CRMC



# MAP 18: SEA LEVEL AFFECTING MARSH MIGRATION (5 FT SLR)

Source: RIGIS SLAMM, RI CRMC



## COASTAL EROSION

Coastal erosion does not occur as a constant process; instead, it occurs during storm events including tropical storms, such as hurricanes and other cyclonic storms like nor'easters. Between 1939 and 2006 erosion along Matunuck Beach Road resulted in a loss of land between 145 and 200 feet. As depicted in [Map 19: Shoreline change in western South Kingstown](#) and [Map 20: Shoreline change in eastern South Kingstown](#), the amount and rate of erosion varies by exact location based upon the physical characteristics of the land, development patterns, and existing shoreline erosion mitigation measures. While the exact rate of erosion may vary by location, shoreline erosion presents a significant threat to the businesses, residential properties, and municipal infrastructure along the coast. [Click here to see CRMC Shoreline Change Maps for South Kingstown.](#)

### CUMULATIVE & SECONDARY IMPACTS:

In addition to those impacts classified as priority impacts in South Kingstown, a wide range of other impacts from natural hazards exist. Of particular consideration are those secondary impacts which result in ecosystem degradation and can exacerbate the effects of future hazardous events. An example of secondary impacts would include the loss of mature landscape (i.e., trees including understory) during severe storms. The loss of this portion of our ecosystem can decrease the community's resilience to future natural hazards such as rising temperatures. Damage from these storm events often alters the natural ecosystems and can present significant cumulative and secondary impacts which goes beyond the priority impacts shown to have the highest impacts in South Kingstown.



### NEEDS & OPPORTUNITIES:

#### CLIMATE CHANGE

As the rate of sea level rise and the number and intensity of storm events increase, it is essential for the Town to pursue thoughtful and timely mitigation actions to reduce vulnerability to individual hazards. It is also essential to recognize the interconnected nature of our climate, weather patterns and natural hazards. Hazards such as sea level rise, severe storms, and coastal erosion are closely correlated and exacerbate one another. As sea level rises, more land is exposed to coastal inundation, more severe storms lead to increased coastal erosion, and rising ocean temperatures make powerful storms more likely. For these reasons, it is not enough to plan for resilience alone; we must also identify ways to slow the progression of these climate change trends. South Kingstown recognizes the influence our behaviors and patterns of energy use and land development have on our changing climate. Efforts made to reduce carbon emissions by reducing energy consumption



associated with lighting, heating, cooling and transportation provide an opportunity to reduce the impacts of climate change by slowing its progress. Furthermore, the damage resulting from natural hazards, such as loss of marsh habitat from sea level rise and tree canopy from severe storms, reduces the function these ecosystem services provide, such as flood water storage and carbon sequestration.

### ADAPTATION APPROACHES:

The priority natural hazards and impacts discussed in the existing conditions section above provide a unique set of needs and opportunities for South Kingstown to reduce overall vulnerability and the impacts of natural hazards on government services, local residents, property, and the community as a whole. The Town must guide development to reduce encroachment upon the floodplains, wetlands, barrier beaches, and valuable natural resources which protect our community from the impacts of severe storms, flooding, and sea level rise. To effectively guide development, the Town must evaluate and determine the most appropriate adaptation approaches for various areas within the municipality based upon the unique conditions, anticipated future storm events and natural hazards, and existing vulnerabilities in each area. The best available data and information as developed by State and Federal agencies, such as FEMA flood zones and CRMC policies and mapping, must be used when delineating focus areas. Potential adaptation approaches may include: protection, accommodation, retreat, and preservation strategies, as outlined in **Table 21: Adaptation Approaches**.



SUSTAINABILITY

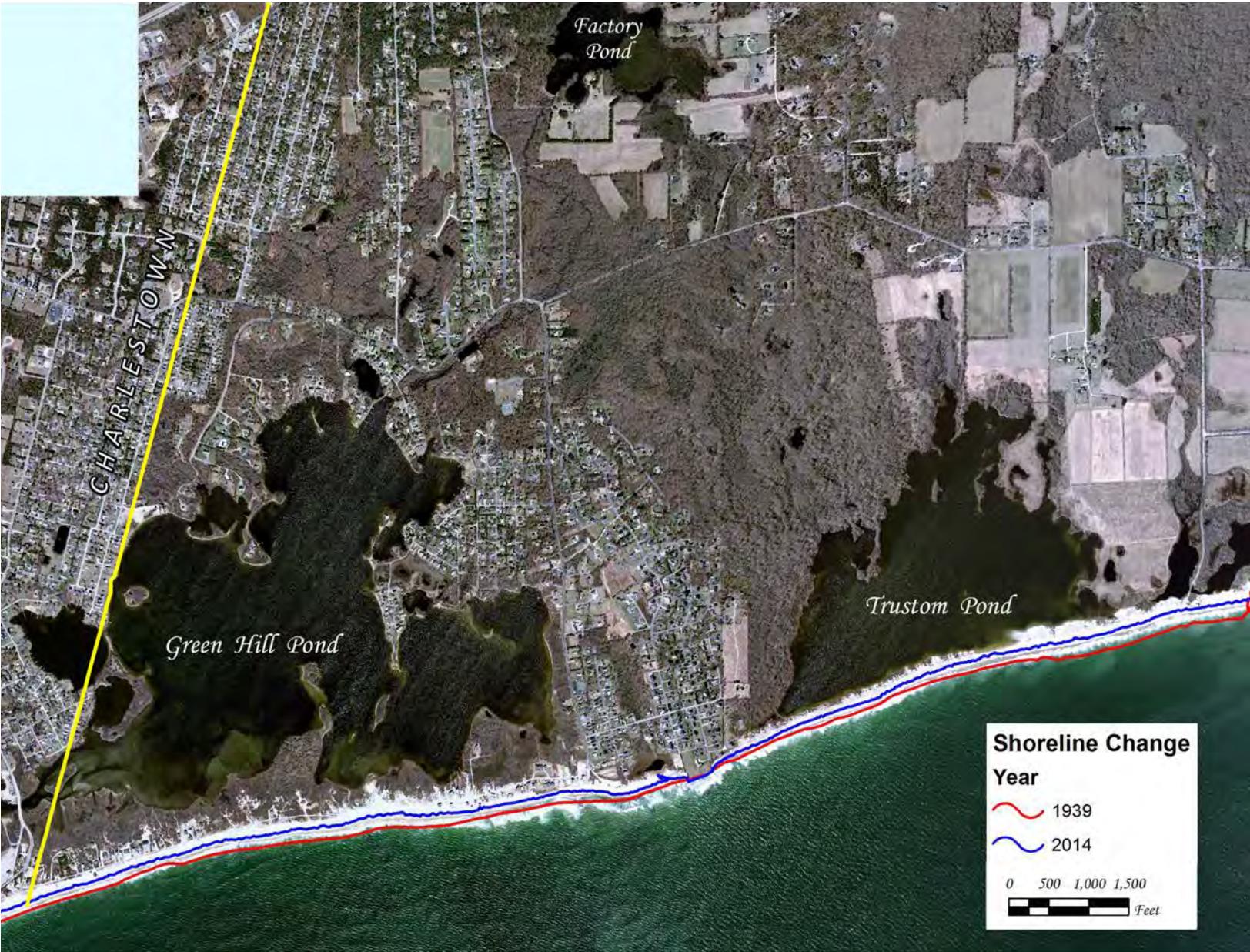
### SPECIAL POPULATIONS:

South Kingstown has several special populations who face unique or increased vulnerability to natural hazard events and climate change. In particular, seniors, low and moderate income residents, residents living in coastal areas, tourists, and local college students were identified as populations with unique needs. As the population of South Kingstown ages, seniors will require additional consideration when planning for natural hazards as mobility and health concerns can present unique challenges. Low and moderate income residents face additional challenges associated with lower than average access to personal vehicles and limited financial resources. South Kingstown's coastal setting and unique natural features draw a large number of tourists to the area. These tourists and seasonal residents may not be as familiar with available resources, location of evacuation routes, and the potential impacts of hazards. Finally, local University of Rhode Island students living off-campus may also be less familiar with available resources and the potential impacts of natural hazards in the area.

SOCIAL  
RESILIENCECHANGING  
POPULATION

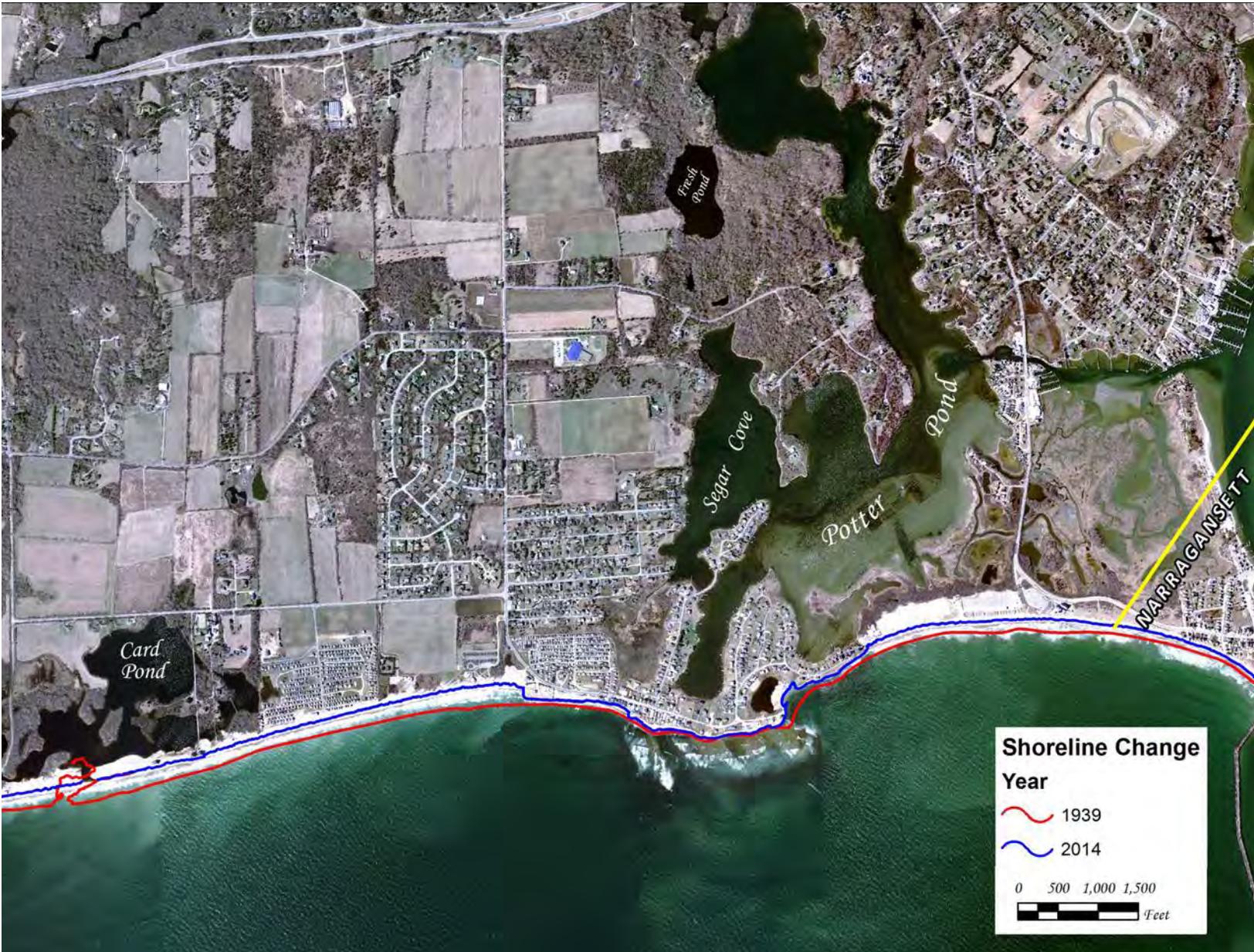
# MAP 19: SHORELINE CHANGE IN WESTERN SOUTH KINGSTOWN

Source: [www.beachsamp.org/coastal-erosion-maps/](http://www.beachsamp.org/coastal-erosion-maps/)



# MAP 20: SHORELINE CHANGE IN EASTERN SOUTH KINGSTOWN

Source: [www.beachsamp.org/coastal-erosion-maps/](http://www.beachsamp.org/coastal-erosion-maps/)



**TABLE 21: ADAPTATION APPROACHES**

APPROACH	FOCUS AREAS	CONSIDERATIONS	EXAMPLES
<b>Accommodation</b>	Areas that are designed to be temporarily flooded during storm events.	May be appropriate in areas prone to temporary inundation	Elevating structures or increasing the size of existing infrastructure such as culverts
<b>Protection</b>	Areas which may be hardened to prevent or minimize flood water intrusion, erosion, and/or structural damage	May be appropriate to protect existing critical infrastructure where feasible opportunities for relocation or accommodation is not available	Protecting the Town's critical infrastructure from erosion such as roads and utilities (i.e., Matunuck Beach Road)
<b>Retreat</b>	Areas where the retreat of structures and residents out of harm's way is required for reasons of public safety and/or fiscal necessity	May be appropriate where permanent or repeated inundation of the land, structures or infrastructure is anticipated	Relocation of existing public structures such as the Town beach pavilion or individual properties such as cottages at Roy Carpenter's Beach
<b>Preservation</b>	Areas in Town where permanent protection of natural resources can aid in mitigating threats from natural hazards	May be appropriate where valuable natural resources are present or anticipated to migrate	Conservation easements and preservation of areas such as coastal marshes and barrier beaches

## PRIORITY NATURAL HAZARDS:

### COASTAL EROSION

This hazard presents a significant need for policy and planning efforts within the community. As the frequency and intensity of storms increase due to climate change, rates of coastal erosion are anticipated to increase as well. Future projections of coastal erosion obtained from CRMC indicate an increase in the rate of coastal erosion. [The Coastal Shoreline Change Special Area Management Plan \(SAMP\), developed by CRMC](#), establishes formulaic multipliers to assist developers and municipalities in calculating future



rates of coastal erosion when planning for future development. In most instances, once land is lost it cannot be replaced. Due to the permanence of this hazard and its impacts, the Town must evaluate and employ a variety of possible mitigation approaches. Analysis of public and private properties impacted by coastal erosion must be completed to more precisely evaluate the opportunities and needs.

#### HURRICANES & SEVERE STORMS:

In South Kingstown, hurricane season overlaps with the area's booming tourist season during the summer and early fall. This provides additional concerns for the Town regarding hurricane preparedness for the tourists visiting South Kingstown's coastal areas in addition to permanent residents and property owners. Hurricane evacuation routes are often poorly marked as determined through the vulnerability assessment and are subject to roadway inundation from upland flooding (riverine or urban) in several locations. Hurricanes and severe storms are accompanied by high winds which often bring down trees that can interrupt power supply to areas of Town and obstruct evacuation routes. Development of a robust tree trimming program where existing trees interact with roadways and power distribution lines provides an opportunity to both preserve trees and reduce the likelihood of impacts upon private property, roadway infrastructure, and utility lines. Additionally, the areas impacted by hurricanes and tropical storms will continue to expand as sea level rise occurs.

#### SEA LEVEL RISE

Areas affected by sea level rise in South Kingstown are significant and include valuable cultural, historic, and environmental resources in addition to a substantial number of municipal, residential and commercial properties. The Town must carefully consider appropriate mitigation approaches for public resources, utilities, private properties, and natural ecosystems in these areas. Natural resources such as barrier beaches and saltwater marshes provide significant and diverse benefits (ecosystem services) to the community from protection during coastal storms and flooding events to unique habitat for a wide variety of flora and fauna. In the future, natural resources such as coastal marshes will be inundated in their current locations and efforts should be made to identify and protect adjacent areas where marshes can migrate as water levels rise.

#### COASTAL FLOODING

Coastal flooding associated with both tropical and extra-tropical storms impacts much of the same areas of town as severe storms and sea level rise. Coastal storm surge is a major source of damage during storm events. As storms intensify and sea level rises, coastal flooding will present more impacts to the South Kingstown community. Efforts should be made to protect resources where necessary by enforcement of the building code in

flood-prone coastal zones such as the FEMA velocity zone. Opportunities exist to strengthen our barrier beaches, nature's natural defense system through adaptation strategies such as beach nourishment, dune stabilization + restoration. These buffers can naturally shift during storms, unlike hard structures, such as seawalls and bulkheads. As waves hit a beach or dune and sediments move and shift, the wave energy is absorbed, protecting landward areas from the full brunt of the storm. The town can also develop regulatory and design strategies to direct development away from these sensitive and valuable areas.

## UPLAND FLOODING

**Map 11: FEMA Flood Zones in South Kingstown** above depicts 11 areas where public roadways are located within the FEMA designated floodplain. These roadways are areas of particular need with regard to upland flooding. Improvements to the roadways to reduce flooding may be necessary, particularly along roadways designated as local and regional evacuation routes. While FEMA flood zones identify infrastructure and areas which may flood based upon the impact of 1%, or 0.2% storm events multiple, smaller storm events in short periods of time can cause significant damage such as the floods of 2010 which were caused by multiple storms of lesser intensity in rapid succession.

Urban flooding presents additional flooding concerns in areas of South Kingstown beyond those located within designated flood zones. Large areas of impervious surface caused by concentrated development exist in village areas such as Peace Dale and Wakefield. Efforts should be made to improve drainage in these areas through retrofits of best management practices (BMPs) for stormwater both within the right-of-way and on private property. Low impact development, green infrastructure and BMPs such as bioswales, rain gardens, and the reduction of impervious surface provide opportunities to reduce the impact of street or urban flooding. Urban flooding and stormwater runoff have significant impacts upon impaired water bodies in Town, particularly water bodies with Total Maximum Daily Load (TMDL) regulations in effect. The Town must pursue improvements to stormwater management practices in order to reduce the pollutant loads of water bodies within the Town.

## PRIORITY IMPACTS:

Potential needs and opportunities for each priority impact were identified during the preliminary vulnerability assessment. These opportunities and needs were used to develop specific implementation actions and policies to improve South Kingstown's resilience relative to each priority impact.



**TABLE 22: NEEDS & OPPORTUNITIES RELATED TO PRIORITY IMPACTS**

IMPACT	NEEDS & OPPORTUNITIES
Loss or damage to utility infrastructure on coast	<p>Work with utility providers, such as National Grid, to identify critical electric lines and substations and develop additional protective measures at critical areas.</p> <p>Prioritize primary safety concerns and effective Town response actions during electric blackouts.</p> <p>Establish designated cell phone “charging stations” for residents during blackouts.</p> <p>Identify opportunities for burying critical utility lines when roadway improvements are planned.</p>
Loss or damage to residential property and structures in coastal areas	<p>Conduct fiscal analysis of tax implications for various scenarios of sea level rise and associated loss of coastal property.</p> <p>Engage with CRMC and RIDEM for flood protection and resiliency.</p> <p>Pursue revisions to regulations regarding flood protection and coastal development standards.</p> <p>Engage the community at the neighborhood level to build capacity for resilience and awareness of special populations such as seniors, tourists, low- and moderate-income residents, and students.</p> <p>Promote utilization of low-rate home improvement loans.</p> <p>Explore Army Corps of Engineers program for freeboard improvements.</p> <p>Evaluate municipal participation in the Community Rating System (CRS).</p> <p>Assess and develop a clear method for communicating specific risks associated with new or expanded development in vulnerable areas to property owners.</p> <p>Consider ways to improve outreach to property owners in vulnerable areas regarding property preparation for storm events.</p>

*(continued on next page)*

IMPACT	NEEDS & OPPORTUNITIES
Loss or damage to roadway infrastructure in coastal areas	<p>Develop a policy on funding repetitive loss transportation infrastructure such as Charlestown Beach Road, East Matunuck and Matunuck Steps pedestrian connection.</p> <p>Conduct feasibility study of various options for relocation of roadway infrastructure where necessary.</p> <p>Engage private property owners to understand where private land could be used to achieve alternative roadway or access connections.</p> <p>Continue with protection of critical roadway infrastructure.</p> <p>Collaborate with Save the Bay on best management practices for end of pavement areas on rights-of-way and with CRMC for BMP implementation and green infrastructure opportunities.</p> <p>Consider policies on roadway infrastructure design relative to the life span of the structure and predicted levels of sea level rise.</p>
Loss or damage to commercial property and structures in coastal areas (including marinas)	<p><i>See items listed under “loss or damage to residential properties” above.</i></p> <p>Develop a policy for removal of boats from town moorings during major storm events.</p> <p>Conduct analysis of anticipated loss of tax revenue associated with commercial zoned property.</p> <p>Consider opportunities for reasonable relocation of appropriate commercial zoning districts.</p> <p>Promote use of business continuity tools for business owners in the area following the examples of similar efforts in Newport and Westerly.</p>
Inundation of evacuation routes	<p>Coordinate with RIEMA and neighboring municipalities to revise evacuation routes to avoid roadways anticipated to be inundated during upland flooding events.</p> <p>Pursue structural improvements in areas where alternative routes are not practical.</p>
Loss or damage to upland roadway infrastructure	<p>Improve roadway and drainage system maintenance in preparation for anticipated upland flooding events.</p> <p>Develop inventory of historic critical road closures and bridge crossings to identify potential areas for planning improvement.</p>



# NATURAL HAZARDS & CLIMATE CHANGE ACTION PLAN SUMMARY

Goal 1: South Kingstown will be resilient to the impacts of natural hazards and climate change.	
POLICIES	ACTIONS
<p><b>Policy 1.1</b> Ensure that the local Hazard Mitigation Plan is up-to-date and utilizes the most recent available technical data to direct mitigation actions for natural hazards and climate change.</p> <p><b>Policy 1.2</b> Ensure consistency between regulatory and planning documents relative to natural hazards and climate change including the Hazard Mitigation Plan, the Comprehensive Plan, Special Area Management Plans (SAMPs), the Zoning Ordinance, and Subdivision and Land Development Regulations.</p> <p><b>Policy 1.3</b> Ensure that new municipal facilities are sited in areas not prone to flooding, sea level rise, or other hazards. The Town shall explore relocation or protection of existing critical facilities where located in areas vulnerable to natural hazards.</p> <p></p> <p><b>Policy 1.4</b> Ensure that all residents receive timely and effective communication before, during, and after storm events and are aware of evacuation procedures, local shelters, and transportation options.</p> <p></p> <p><b>Policy 1.5</b> Ensure that new development occurring within the municipality utilizes current best management practices and low impact development strategies to reduce stormwater runoff and associated flooding.</p> <p></p> <p><i>(continued on next page)</i></p>	<p><b>Action 1-1</b> Pursue amendments to the Zoning Ordinance and Subdivision and Land Development Regulations relative to parking requirements and design standards to promote reduction of impervious surfaces and utilization of Low Impact Development strategies and best management practices (BMPs).</p> <p></p> <p><b>Action 1-2</b> Pursue participation in the National Flood Insurance Programs (NFIP) Community Rating System (CRS).</p> <p> </p> <p><b>Action 1-3</b> Conduct a comprehensive analysis of consideration of commercial and residential properties vulnerable to various scenarios of sea level rise to determine appropriate adaptation strategies, including protection, accommodation, and/or retreat for each area of the town.</p> <p> </p> <p><b>Action 1-4</b> Develop criteria for establishing adaptation zones and appropriate adaptation strategies utilizing the best available data and mapping resources.</p> <p> </p> <p><b>Action 1-5</b> Explore and determine appropriate regulatory revisions for development in flood-prone and coastal areas based upon adaptation zones.</p> <p> </p> <p><b>Action 1-6</b> Evaluate roadway infrastructure vulnerable to coastal erosion and inundation from various scenarios of sea level rise and storm surge to determine appropriate adaptation strategies for each asset.</p> <p> </p> <p><i>(continued on next page)</i></p>

**Goal 1:** South Kingstown will be resilient to the impacts of natural hazards and climate change.

POLICIES	ACTIONS
<p><b>Policy 1.6</b> To protect critical roadway infrastructure where other adaptation approaches are determined infeasible.</p>	<p><b>Action 1-7</b> Explore adoption of a policy requiring investments in roadway and bridge infrastructure which are vulnerable to sea level rise to consider design modifications as may be necessary based upon the anticipated life of the infrastructure asset.</p>  <p><b>Action 1-8</b> Work with Save the Bay to identify specific rights-of-way abutting coastal features and the Narrow River to pursue pavement removal and incorporate best management practices for stormwater runoff.</p>   <p><b>Action 1-9</b> Coordinate with National Grid to identify the location of critical electrical lines and substations to develop appropriate protection measures and opportunities for burying critical utility lines.</p>  <p><b>Action 1-10</b> Coordinate with RIEMA and neighboring municipalities to revise existing evacuation routes in order to avoid road segments and associated infrastructure vulnerable to inundation such as Ministerial Road, Route 108, and sections of Route 138.</p>  <p><b>Action 1-11</b> Pursue structural improvements to road segments and associated infrastructure along evacuation routes where revision of the routes is not practical.</p>  <p><b>Action 1-12</b> Develop an inventory of programs and resources available to assist and educate owners of property significantly impacted by natural hazards, including but not limited to, CRMC, RIEMA, Rhode Island Infrastructure Bank, URI Sea Grant, and the Army Corps of Engineers.</p>  <p><i>(continued on next page)</i></p>



**Goal 1:** South Kingstown will be resilient to the impacts of natural hazards and climate change.

POLICIES	ACTIONS
	<p><b>Action 1-13</b> Identify publicly-owned land and facilities to evaluate opportunities for improved stormwater management systems.</p> <p> </p> <p><b>Action 1-14</b> Engage with known vulnerable neighborhoods in the community, such as Matunuck and Green Hill, to build capacity for resilience through education, basic emergency preparedness measures and strategic retreat.</p> <p></p>

**Goal 2:** Carbon emissions generated within the municipality will be reduced through reduced energy consumption associated with heating, cooling and transportation.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> Encourage the reduction of carbon emission through improved transportation efficiency, reduction of traffic congestion and encouragement of alternative modes of transportation.</p> <p> </p> <p><b>Policy 2.2</b> Promote infill development within existing village areas to reduce sprawl and promote compact development accessible by alternative modes of transportation in close proximity existing to services and amenities.</p> <p>  </p> <p><b>Policy 2.3</b> Promote the use of green infrastructure and low impact development strategies to reduce the volume of impervious surface within the community.</p> <p> </p>	<p><b>Action 2-1</b> Evaluate revision to the South Kingstown Zoning Ordinance and Subdivision and Land Development Regulations to allow more mixed-use development in appropriate districts of the Town to reduce dependence on automobiles for access to services and reduce total vehicle miles traveled.</p> <p>  </p> <p><b>Action 2-2</b> Evaluate the development of a robust tree planting program designed to offset trees that are lost with a focus on proper tree selection and location, to provide the right tree(s) in the right place. Such a succession program may provide environmental benefits such as carbon sequestration, improved stormwater infiltration, air quality, and cooling benefits.</p> <p> </p> <p><b>Action 2-3</b> Preserve existing tree canopy within the built environment and reduce pressure to build in undeveloped areas by using developed land more efficiently and creating value for forest habitat.</p> <p> </p>



# NATURAL RESOURCES & OPEN SPACE

---



## VISION

To **preserve, protect, and enhance** the Town's open spaces and natural resources for the well-being of the Town's citizens, and to ensure that our finite natural resources are able to **provide for future generations** by integration into the plan review and approval process.

The Town shall continue to work with the Community Partnership (a collaboration spearheaded by the South Kingstown Land Trust, including the Narrow River Land Trust, US Fish and Wildlife, RIDEM, The Nature Conservancy, the Audubon Society, and other environmental advocates) to protect natural resources and open space to increase resilience, protect groundwater and critical habitat, preserve scenic vistas, and enhance quality of life. Decisions on open space acquisition will be made through a comprehensive analysis including environmental needs, community vulnerabilities, economic benefits, and social equity.

The Town will preserve and protect its natural resources, recognizing their importance to the quality of life today and in the future.

---



## NATURAL RESOURCE & OPEN SPACE GOALS

**Goal 1:** The quality and quantity of the Town’s potable water supply will be protected and preserved.

**Goal 2:** Freshwater and coastal wetland resources, which serve many important ecological and economic functions, will be protected, preserved, and well-managed.

**Goal 3:** Agricultural land within the Town will be protected, preserved and maintained for the future health, character, and economy of the community.

**Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

**Goal 5:** Beach areas will be protected to allow for pedestrian-based recreation, to preserve the open-space character of the shore-front, and to protect the fragile ecology of the dunes.

## GUIDING PRINCIPLES

- ◆ The Coastal Resources Management Council’s Narrow River Special Area Management (SAM) Plan and the Salt Ponds SAM Plan, both adopted in 1999, are important guidance documents for the continued health of these water bodies.
- ◆ The South Kingstown Harbor Management Plan, last updated in 2011, is an important guidance document for the continued health and economic viability of the Town’s many harbors.
- ◆ The policies and regulations adopted by the Coastal Resources Management Council relative to areas within their jurisdiction are important to the continued health and viability of South Kingstown’s coastal areas and ecosystems.
- The South Kingstown Greenways Master Plan remains a valid planning document and, where appropriate, the recommendations contained within have been incorporated into this Plan.
- The documents, “Land Conservation Priorities South County - A Regional Plan” and “A Guide for Protecting Open Space in South Kingstown,” prepared by the South Kingstown Land Trust, remains an important tool for evaluating potential land acquisitions or development rights purchases.





- ◆ Open access to ocean beaches within the Town by all citizens is an important aspect of maintaining the quality of life within South Kingstown. Private enclaves and the erection and/or replacement of fences and barriers negatively impacts the overall enjoyment of these assets.

- ◆ The cultivation of locally-grown foods on private residential and commercial lots, including home-based food production, is appropriate in South Kingstown when such operations are designed to match the context of the area in which they exist.

- ◆ The impacts of climate change on natural resources and open space, from wetlands to farmlands, will be detrimental. The Town must promote greater awareness of these impacts.

- ◆ Participation in the Farm Land Preservation Act is valuable, encouraging the continued maintenance of South Kingstown’s historic landscapes.



- ◆ Educational opportunities regarding watershed-based land conservation planning are important.

- ◆ The Town’s Open Space Acquisition Program remains an important tool for conservation of properties with high natural resource value, through fee simple purchases or conservation and preservation restrictions.

- ◆ State and Federal funding are critical for acquisition and protection of high value natural resource areas.

- ◆ The findings and recommendations of the “Rhode Island Urban and Community Forest Plan” remain valid and have been incorporated into this Plan where appropriate.

- ◆ Without authorization to do so from the State legislature, the Town of South Kingstown cannot place a strict limitation on the rights of property owners to remove vegetation from their land.

- ◆ There is value in working with the other communities within Washington County in developing compatible resource protection plans.



- ◆ The Town values its partnerships with public and private non-profit organizations, such as the R.I. Audubon Society, The Nature Conservancy, RI Natural History Survey, local Conservation Districts, U.S. Fish & Wildlife Service, the Wood-Pawcatuck Wild and Secnic Rivers Stewardship Council and the South Kingstown and Narrow River Land Trusts, in the protection of environmentally sensitive areas through acquisition, easements, or purchase of development rights.



- ◆ There is value in the development of community spaces, which will enhance leisure experiences for residents and visitors on private, State, and Federal properties.
- ◆ The connectivity and accessibility of open spaces and greenway projects are important criteria considered by the Town in the allocation of funding.
- ◆ The Wood-Pawcatuck Wild and Scenic Rivers Stewardship Plan provides guidance for changes to and protection of the so designated Wild and Scenic Rivers in this watershed as well as their tributaries.
- ◆ The use of Fair Share Development fees for open space are a valuable tool to support land conservation within developing neighborhoods.



## CURRENT PRACTICE

- The Town’s Groundwater Protection Overlay District (GPOD) includes groundwater reservoirs and recharge areas delineated by the Rhode Island Department of Environmental Management. The purpose of the GPOD is to protect, preserve, and maintain the quality and supply of groundwater in South Kingstown.
- The Conservation Commission and Planning Department are responsible for reviewing and assessing projects within the GPOD and updating the regulations as necessary.
- Through the subdivision and development project review process, applicants are required to provide information relative to the existence of Natural Heritage Areas within a development parcel and, where appropriate, the Planning Board has the ability to enact conditions on any granted approval to protect sensitive biodiversity.
- The Town integrates groundwater issues into public education regarding things that individuals, families, and businesses can do regarding water conservation, proper handling of household hazardous waste, maintenance of septic systems, management of underground storage tanks (home heating fuel), handling and use of pesticides, and other groundwater protection information.
- The Town promotes the use of Best Management Practices (BMPs) for development adjacent to critical wetland resource areas.
- The Town supports water quality initiatives for salt ponds, marine estuaries, fresh water streams and ponds, including ongoing monitoring and restoration efforts.
- The Town provides advisory opinions and comments to CRMC to ensure that assents and permits granted in the SAMP areas of the community



are consistent with the goals and policies of the Comprehensive Community Plan.

- The Town promotes continued and new participation in the State's Farm, Forest and Open Space Program (FFOS). Promotion efforts include public education about the value of the program and active communication with existing participants about the benefits of continuing the program.
- The Town works with adjacent towns and the Washington County Regional Planning Council to develop compatible resource protection plans.
- The Town provides supportive services to assist the annual coastal clean-up program sponsored by the Ocean Conservancy (International Coastal Cleanup Program) and coordinated locally by Save the Bay.
- The Town works with private water suppliers and adjacent towns to develop compatible water protection plans to ensure the long-term protection of water resources.
- The Town works with partners like the University of Rhode Island to secured funding and construct important infrastructure like the multi-purpose trail connection from the Kingston Campus to the William C. O'Neill Bike Path.

HEALTHY  
COMMUNITIES

## BASELINE INFORMATION

### OVERVIEW

Preservation of open space by the Town and a consortium of Federal, State, and private non-profit agencies helps to maintain the character of the community, protect natural resources, and provide diverse opportunities for passive recreation. The conservation of land through the acquisition of open space land and easements also serves as a growth management tool for South Kingstown. The Town is strengthened by its abundant natural resources including Block Island Sound beaches, salt ponds, estuaries, and wetlands (see **Appendix 2** for a detailed description of the inventory). These marine and estuarine resources benefit not only residents, but also attract tourists from throughout New England. In addition to these coastal features, freshwater resources can be found in a series of ponds and rivers connecting upland resource areas with the tidal estuaries. Three rivers in Town - the Chipuxet, Queen-Usquepaugh, and Pawcatuck - are Federally designated Wild and Scenic Rivers. As noted in the Economic Development chapter, the Town believes Saugatucket River presents opportunities for further economic enhancement of the village of Wakefield.



Open space areas contribute to the small-town character that many residents value. Open space can be used to preserve and protect groundwater resources, agricultural lands, wildlife habitat, scenic vistas, significant passive recreation areas, and essential ecosystems, such as salt marshes. **Map 21: Protected Open Spaces** shows all of the permanently protected open spaces in South Kingstown. **Map 22: Wetlands** depicts generalized wetland areas, by type. **Map 23: Watersheds** provides the boundaries of all watersheds and sub-watersheds within Town.

The varied aquatic and terrestrial landscape of South Kingstown provides critical habitat to more threatened and endangered species than any other Rhode Island community (see **Map 24: Critical & Environmentally Sensitive Areas**). The Chipuxet aquifer (see **Map 25: Groundwater Resources**), a sole source aquifer, provides high quality groundwater to the four public water suppliers in town, many private wells, and most of the Town of Narragansett. Finally, South Kingstown’s farmlands are not only important resources for the Town’s economy, but critical components of the Town’s outdoor environment (see **Map 26: Agricultural Resources**).

The Saugatucket River





## CRITICAL NATURAL RESOURCES

The protection of each of the Town's critical natural resources is a complex and intricate process supported by the Town's Open Space Acquisition Program, the Rhode Island Department of Environmental Management (RIDEM), the Coastal Resources Management Council (CRMC), as well as local, state, and federal conservation agencies and organizations. The following excerpts taken from the Natural Resources and Open Space Inventory, found in **Appendix 1**, demonstrate the existing conditions of natural resources and open space within South Kingstown.



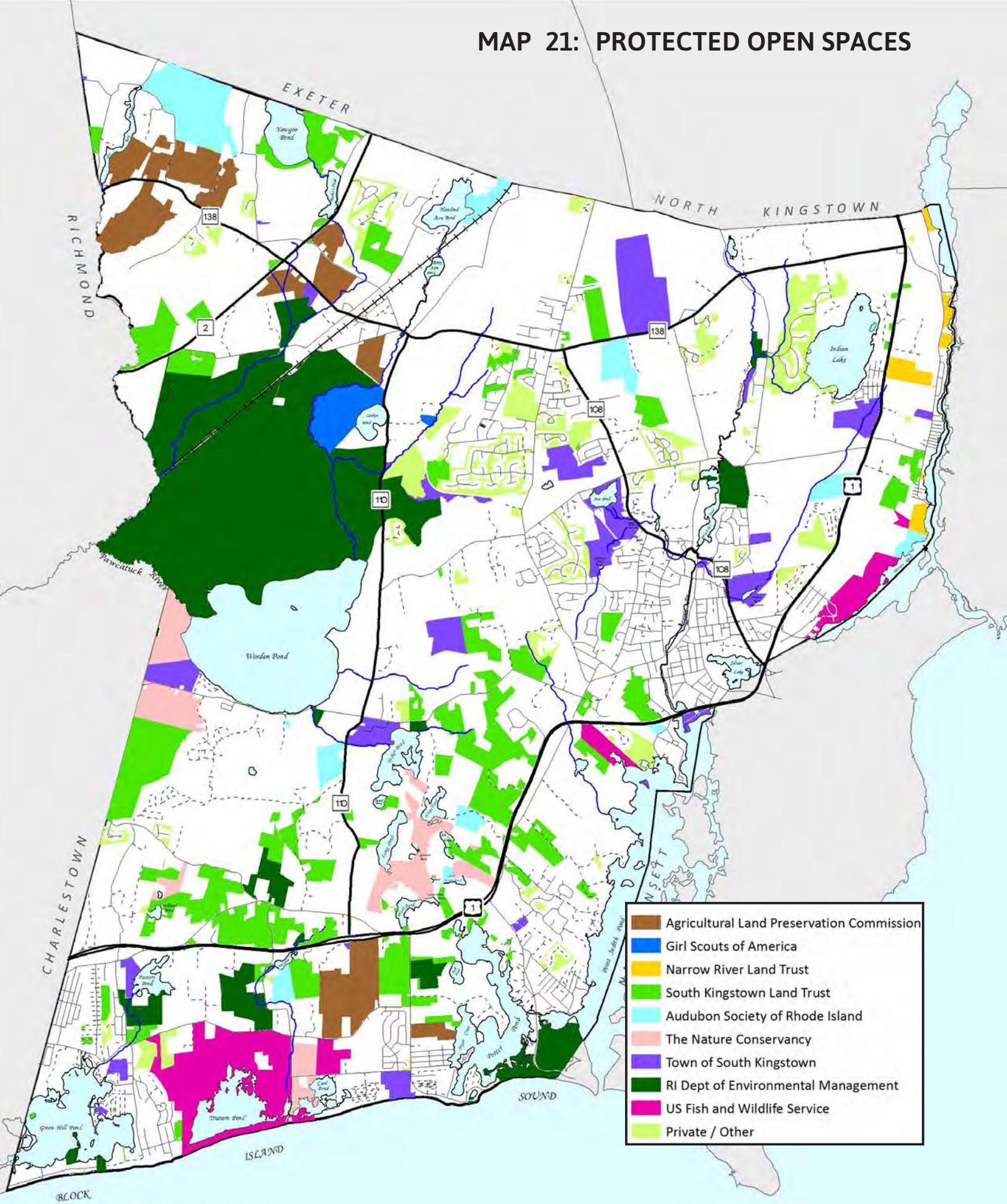
Village Green Park

## GEOLOGY & SOILS

The geology of South Kingstown includes bedrock geology, surficial geology, and coastal geology found beneath our soils. The predominate bedrock found in Town is a combination of igneous and metamorphic rock. The surficial geology and general topography of South Kingstown are the result of glacial erosion and deposition. Most notable are the extensive marshes and wetlands, which provide beneficial services for people, aquatic resources, and wildlife. Some of these services, or functions, include protecting and improving water quality, providing fish and wildlife habitats, storing floodwaters and maintaining surface water flow during dry periods. The unique coastal geology of South Kingstown with dynamic features such as salt-water marshes, bays, estuaries, barrier beaches, spits, sand dunes and salt ponds is constantly changing.

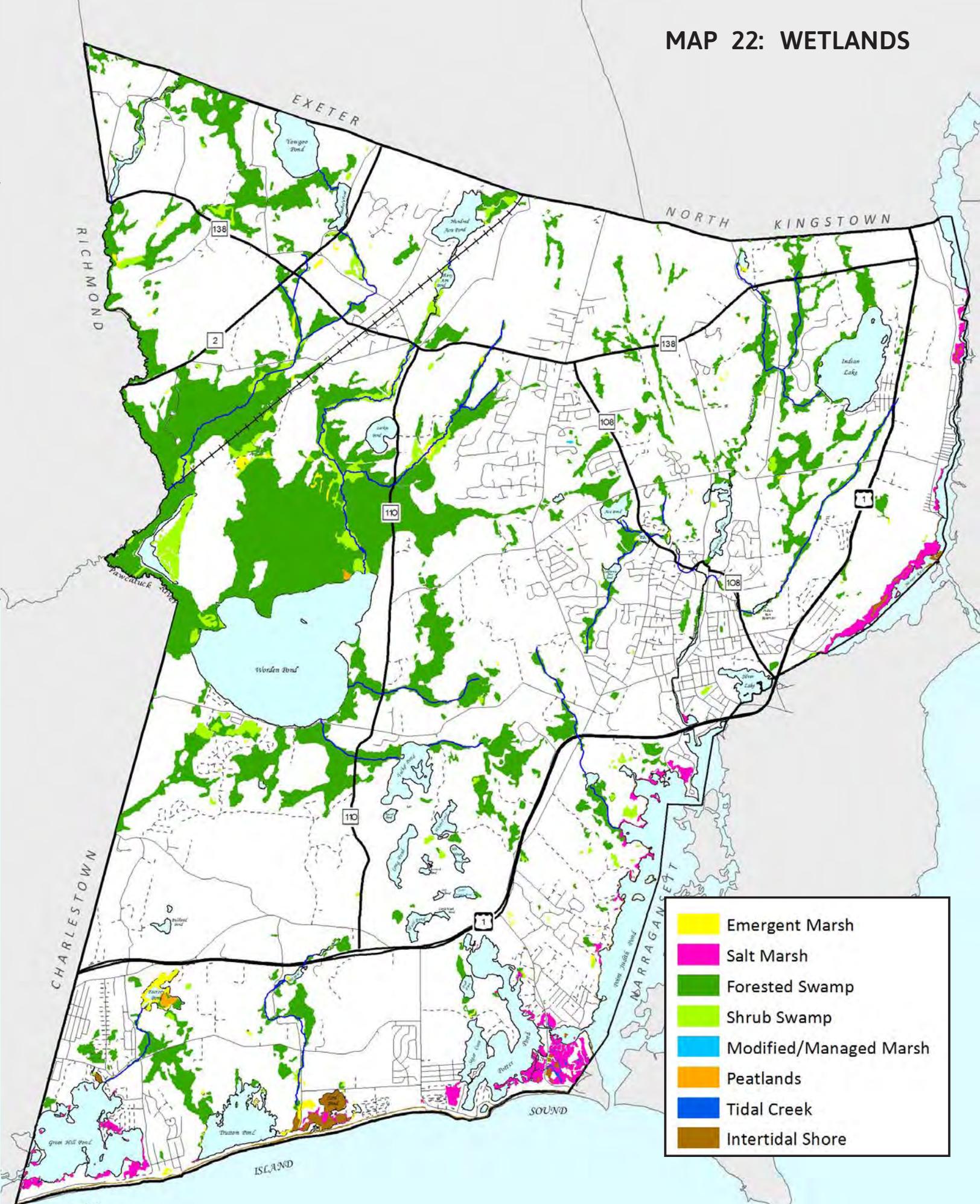
The Soil Survey of Rhode Island identifies 134 soil types within South Kingstown (NCRS 2012). Specific characteristics of each soil type effects the type of development it can support; its susceptibility to erosion; and its ability to accept wastewater discharges (i.e., on site waste water systems/ septic systems). Careful regulation of development in areas shown to present limitations on development is essential to prevent the permanent loss or degradation of our natural resources.

# MAP 21: PROTECTED OPEN SPACES



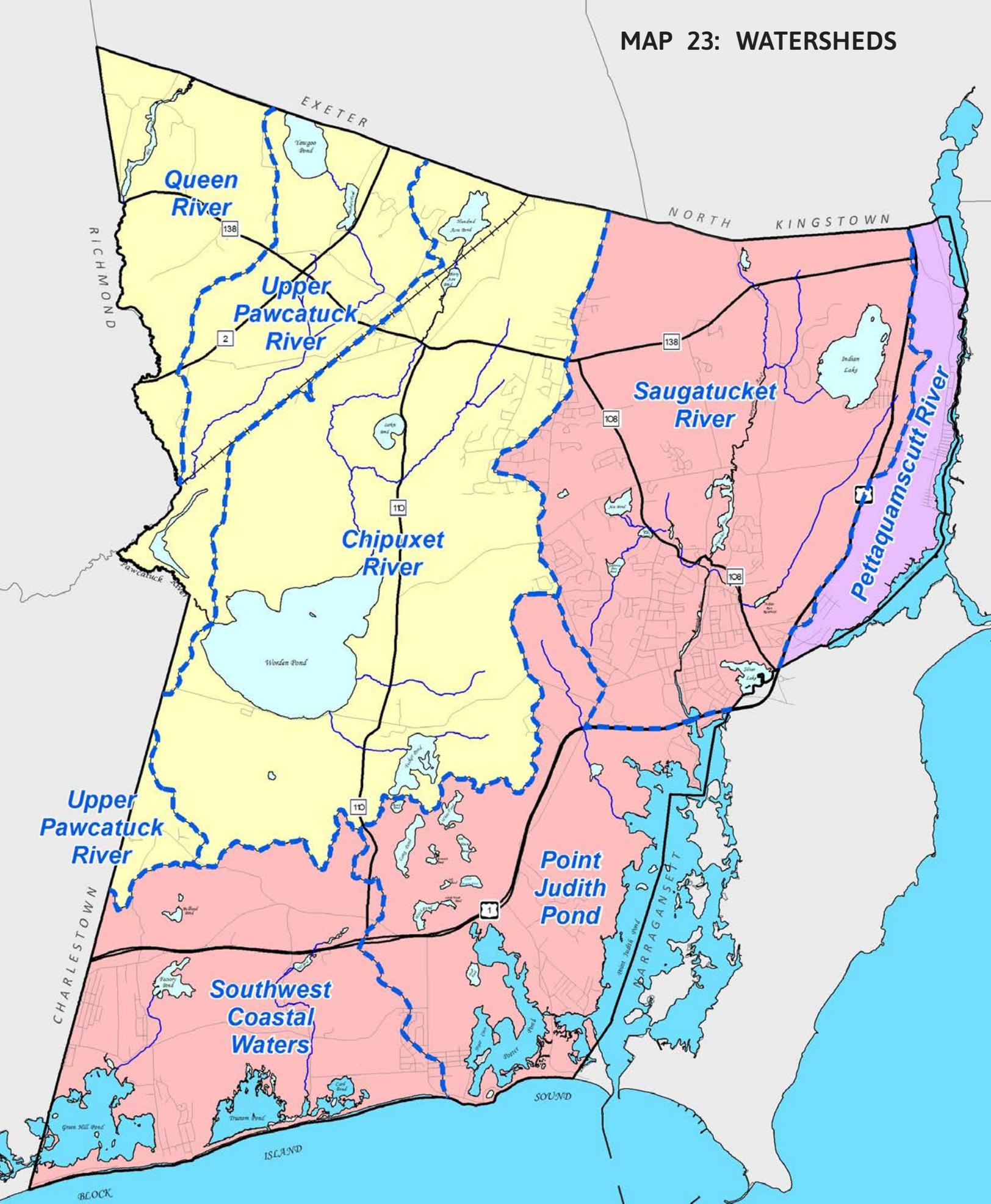
- Agricultural Land Preservation Commission
- Girl Scouts of America
- Narrow River Land Trust
- South Kingstown Land Trust
- Audubon Society of Rhode Island
- The Nature Conservancy
- Town of South Kingstown
- RI Dept of Environmental Management
- US Fish and Wildlife Service
- Private / Other

# MAP 22: WETLANDS

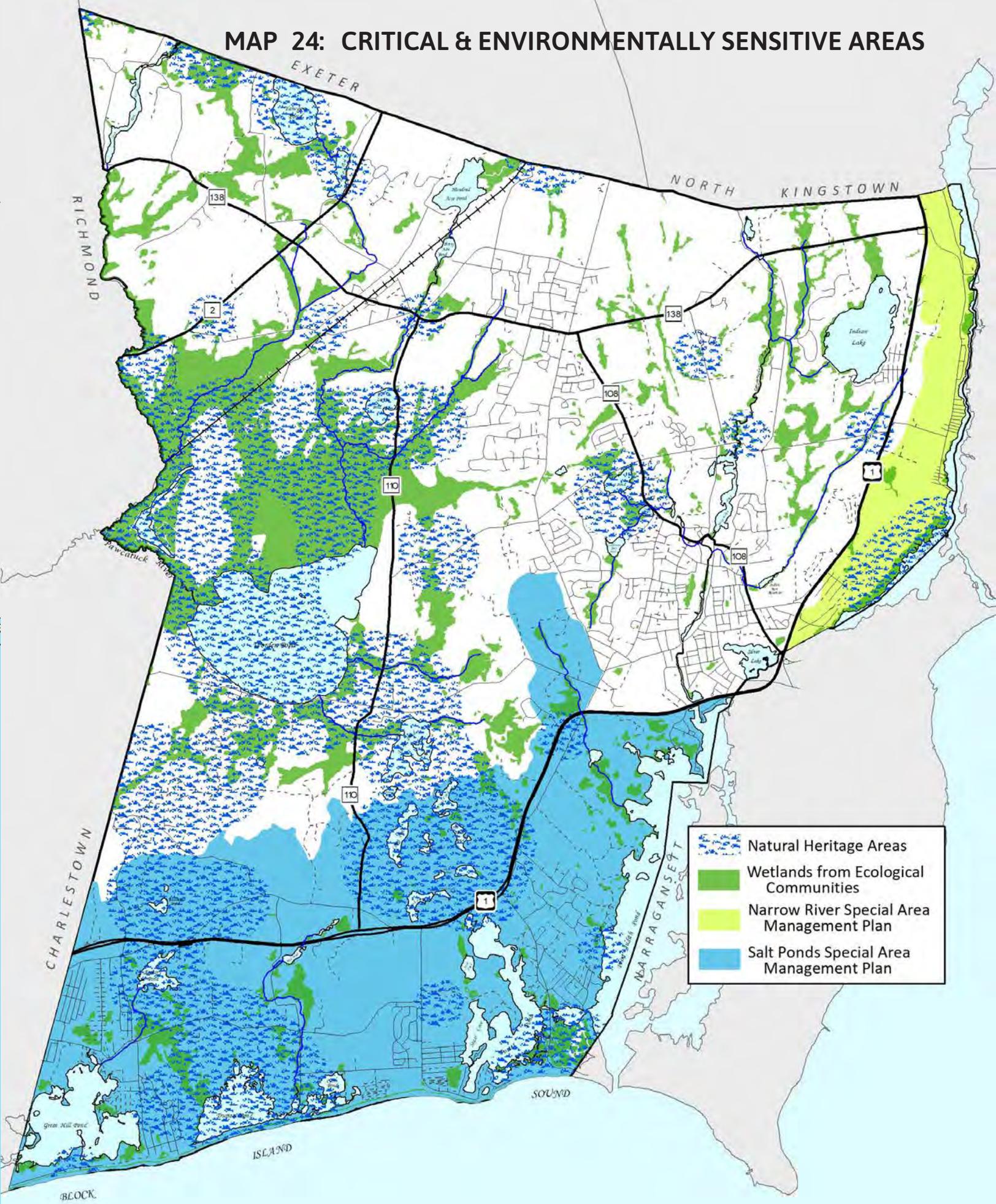


- Emergent Marsh
- Salt Marsh
- Forested Swamp
- Shrub Swamp
- Modified/Managed Marsh
- Peatlands
- Tidal Creek
- Intertidal Shore

MAP 23: WATERSHEDS

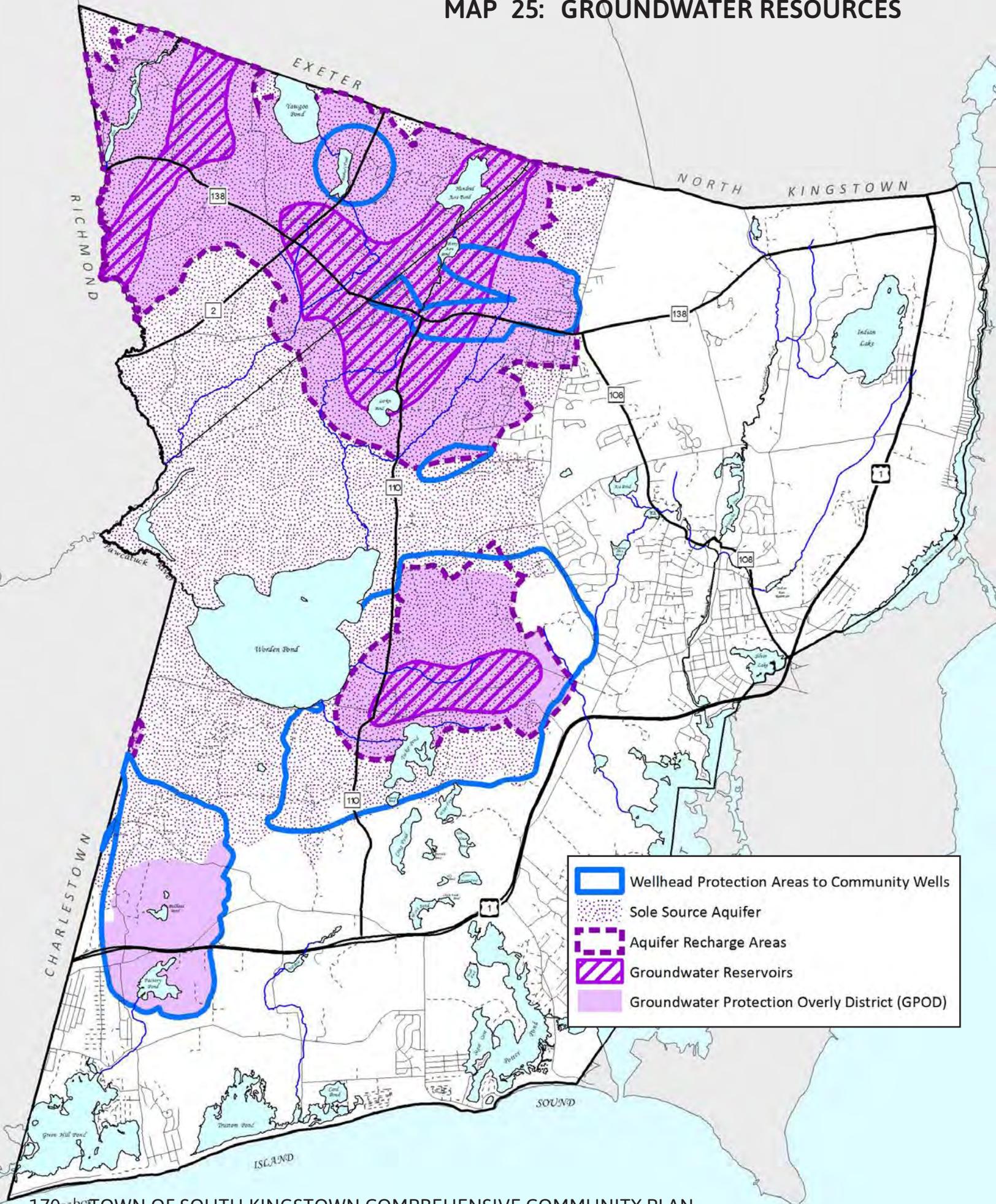


# MAP 24: CRITICAL & ENVIRONMENTALLY SENSITIVE AREAS

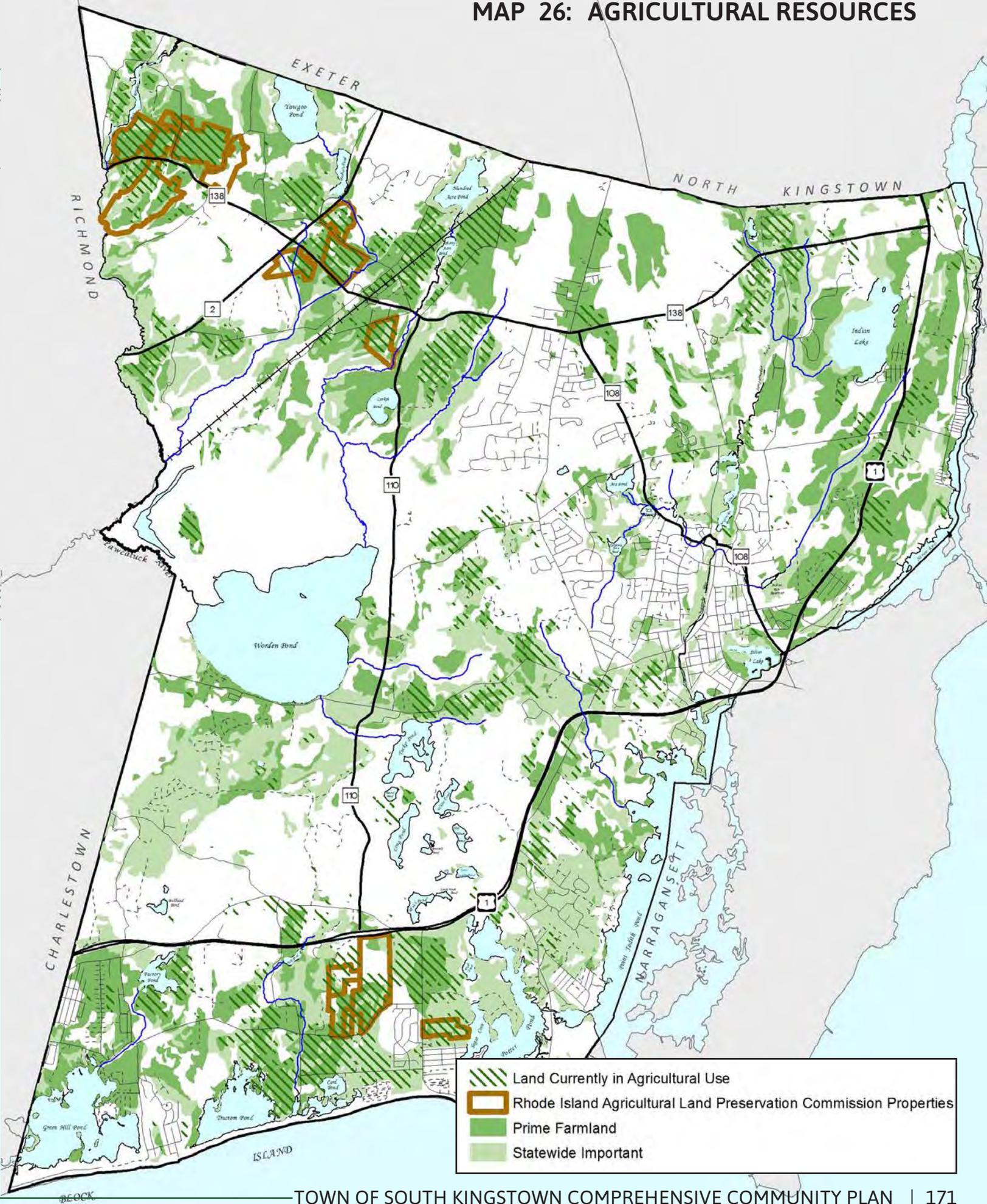


-  Natural Heritage Areas
-  Wetlands from Ecological Communities
-  Narrow River Special Area Management Plan
-  Salt Ponds Special Area Management Plan

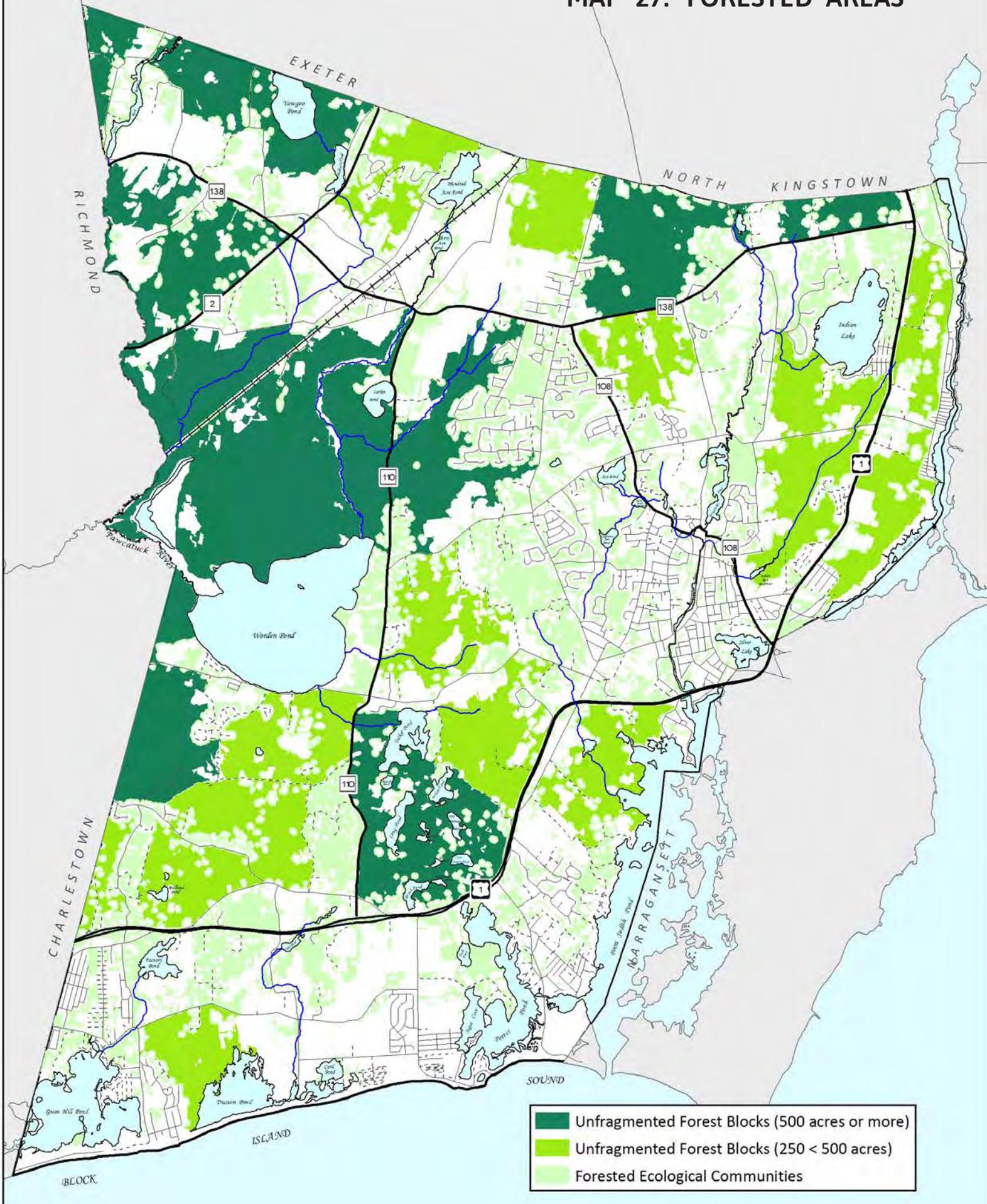
# MAP 25: GROUNDWATER RESOURCES



# MAP 26: AGRICULTURAL RESOURCES



# MAP 27: FORESTED AREAS





## WETLANDS

South Kingstown has over 9,500 acres of freshwater wetlands and approximately 2,000 acres of coastal wetlands, covering nearly 29 percent of the Town's land area. These wetlands provide countless benefits to South Kingstown including the provision of natural habitats, community resilience to both upland and coastal inundation, diverse and varied recreational opportunities, and tourism opportunities.

Coastal wetlands found in South Kingstown include salt marshes, estuarine scrub-shrub wetlands, beaches, and estuarine and tidal waters such as salt ponds and estuarine rivers. Approximately 363 acres of coastal wetlands are located in town, alongside 1,707 acres of salt ponds and estuarine rivers. Only 304 acres of salt marsh remain in South Kingstown. Five coastal ponds and one estuarine river line the coastal boundary of town, including the Pettaquamscutt River (Narrow River), Point Judith Pond, Potter Pond, Card Pond, Trustom Pond, and Green Hill Pond. Detailed information on each coastal feature listed above can be found in **Appendix 1: Natural Resources and Open Space Inventory**.

Freshwater wetlands in South Kingstown include wooded swamps, marshes, bogs, aquatic beds, wet meadows, lakes and ponds, and floodplains. Approximately 9,568 acres of freshwater wetland can be found in town, covering approximately 25 percent of South Kingstown's land area. Of these freshwater wetlands, over 60 percent are forested swamps. South Kingstown has 42 acres of river, and 2,314 acres of lakes. Worden Pond, the largest natural lake in Rhode Island, and the Great Swamp, the largest forested wetland in southern New England are located in South Kingstown.

## GROUNDWATER & WATERSHEDS

Three of the ten aquifers in the Pawcatuck Watershed lie within the boundaries of South Kingstown: the QueenUsquepaugh, the Chipuxet, and the Mink Brook aquifers and are part of the Pawcatuck Sole Source Aquifer.

South Kingstown relies on groundwater to provide all of its potable water. The groundwater found in Town is classified as "GAA" by RIDEM, a category of groundwater determined to provide exceptional quality drinking water. The classification of the Pawcatuck Aquifer as "sole source aquifer" means that the area obtains more than 51 percent of its drinking water from the aquifer and that no reasonable alternative source of potable water is present. For this reason, the protection of the aquifer is essential to the community, its residents, visitors and neighboring municipalities.

## UPLAND VEGETATION

The varied topography and soils of South Kingstown provide a diversity of vegetation types. The upland areas of the town support large oak forests with

limited under-story growth mainly composed of blueberries, rhododendrons, azaleas, and laurel. Acres of pine barrens are also present, and the dry, sandy soils present in this habitat support several rare and endangered species. Historically, much of the forested land in the state was cleared for human use in agriculture and timber harvesting. Areas once cleared for such uses now provide a habitat for specimens such as gray birch, red cedar, white pine, sumac, juniper and dogwood. Each forest type provides a unique habitat able to support a diversity of plant and animal life.

### STATE & FEDERAL LANDS

South Kingstown is home to two National Wildlife Refuges: Trustom Pond National Wildlife Refuge (787 acres) and , John H. Chafee National Wildlife Refuge (550 acres). In addition, approximately 2,600 acres of land are conserved by the State of Rhode Island, including the 3,500 acres located in the Great Swamp Management Area.

### AGRICULTURAL LAND

Prime agricultural land is an important natural resource which needs to be preserved. Since the early 1980's Rhode Island has recognized the importance of land suitable for food production and supported the conservation of this resource. However, a large percentage of farmland has been lost to development in South Kingstown and will continue to be under pressure from development.

Protection of farmland maintains the rural character and cultural history of the Town, contributes to economic activity, and provides a tax base without the required services that are needed for residential development. It also provides a local source of food for residents.

### AREAS OF CRITICAL CONCERN

Areas of critical concern are those areas which contain such important natural resources as habitat for rare and endangered species, groundwater reservoirs and recharge areas, barrier beaches, threatened agricultural lands, and wetlands in danger of destruction or which provide important ecological or pollution mitigation value. There are over 2,773 acres of land designated as Natural Heritage areas in South Kingstown.

### FLOOD ZONES

Flood zones are those areas 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. These flood zone areas are geographically dispersed in South Kingstown and include areas with both riverine and coastal features. Flood zones are designated and mapped by the Federal Emergency Management Agency



(FEMA) by category. South Kingstown contains both “A” flood zones and “V” flood zones. “A” zones are those areas subject to a 1% annual chance of flooding, while “V” or velocity zones are those areas in which wave and storm surge action and are located along the Town’s south shore coastal region.

## MUNICIPAL NATURAL RESOURCE PROTECTION

### REGULATORY PROTECTION

South Kingstown has established several regulatory overlay districts intended to formalize the consideration of natural resources in the development review process and to reduce the impact of development on critical areas and resources within the town. **Table 23: Natural Resource-Related Zoning Overlay Districts** provides information on the Overlay Districts that exist within the Town’s Zoning Ordinance that relate to natural resource protection.

### OPEN SPACE ACQUISITION

A well-planned open space program allows a community to prioritize those critical areas most in need of protection through the purchase of development rights, the establishment of conservation easements, and the acquisition of land. Open space protection remains an ongoing effort for the town, with the Planning Department serving as the Town’s lead. The Town of South Kingstown works collaboratively with a variety of partners, including the various members of the Community Partnership, to protect natural resources through State and Federal programs and the Town’s Open Space Acquisition program. The Partnership works to address the needs of a growing population by evaluating opportunities for open space acquisition based on availability of property, fiscal resources, and potential value added to the community. The community has experienced a steady increase in protected open space over the past decade and the Partnership continues to identify opportunities to meet the community’s needs in the future. Open space protects functioning tree canopy for the health of citizens and improves climate resilience.

### RESIDENTIAL DEVELOPMENT

In addition to traditional forms of open space protection, the Town works with developers to set aside open space, development by development, through the use of Flexible Design Residential Project (FDRP) regulations. The Town’s FDRP regulations require developers of some residential subdivisions to provide a minimum percentage of land as permanently protected open space within the area being developed. The FDRP regulations encourage a thoughtful consideration of open space within residential subdivisions or developments and guide a developer to minimize the impact of new development on surrounding properties, habitats, and natural resources.



**TABLE 23: NATURAL RESOURCE-RELATED ZONING OVERLAY DISTRICTS**

OVERLAY DISTRICT	PURPOSE
Groundwater Protection Overlay District (GPOD)	To protect, preserve, and maintain the quality and supply of certain groundwater reservoirs in South Kingstown through regulation of land use and certain activities in the areas over the groundwater reservoirs and critical portions of their groundwater recharge area.
Carrying Capacity Overlay District	Identify areas in Town that have been determined to be developed beyond their carrying capacity in the Town’s Special Area Management Plans for the Salt Ponds Region, and the Narrow River to ensure adequate review of future development within the district by the municipality and CRMC.
Coastal Community Overlay District (CCOD)	Acknowledge the projected impacts of sea level rise (SLR) and climate change and encourage building and engineering practices that promote adaptation to the impacts these environmental trends will have on the subject properties.
Special Flood Hazard Area Overlay District (SFHA OD)	
Coastal Resiliency Overlay District (CROD)	



**TABLE 24: SOUTH KINGSTOWN OPEN SPACE ACREAGE (2018)**

OWNER	2009	2010	2011	2012	2013
Agricultural Land Preservation Commission	972	972	972	956.4	956.4
Audubon Society of RI	659.2	659.2	659.2	659.1	659.1
Cluster/Private	949.3	949.3	988.0	1,019.4	1,193.3
U.S. Fish & Wildlife Services	798.2	798.2	798.2	798.2	799.2
Girl Scouts of RI	185.9	185.9	185.9	185.9	185.9
Narrow River Land Trust	107.9	107.9	107.9	107.9	107.9
South Kingstown Land Trust	2,172.0	2,172.2	2,182.7	2,247.8	2,306.1
State of Rhode Island	3,642.6	3,642.6	3,642.6	3,642.6	3,642.6
The Nature Conservancy	527.3	635.5	635.5	635.5	635.5
Town of South Kingstown	979.9	992.9	992.9	992.9	992.9
<b>TOTAL ACRES</b>	<b>10,994.4</b>	<b>11,115.8</b>	<b>11,165.0</b>	<b>11,214.3</b>	<b>11,305.0</b>
<i>% of Town Land Area</i>	<i>30.23%</i>	<i>30.56%</i>	<i>30.70%</i>	<i>30.83%</i>	<i>31.08%</i>

OWNER	2014	2015	2016	2017	2018
Agricultural Land Preservation Commission	956.4	956.4	956.4	956.4	956.4
Audubon Society of RI	659.1	659.1	659.1	659.1	659.1
Cluster/Private	1,193.3	1,183.3	1,183.3	1,202.4	1,183.8
U.S. Fish & Wildlife Services	799.2	799.2	799.2	799.2	799.2
Girl Scouts of RI	186.4	186.4	186.4	186.4	186.4
Narrow River Land Trust	107.9	107.9	107.9	107.9	107.9
South Kingstown Land Trust	2,312.1	2,327.3	2,396.9	2,453.3	2,493.8
State of Rhode Island	3,652.4	3,655.2	3,655.2	3,655.2	3,655.2
The Nature Conservancy	587.0	593.1	593.1	593.1	593.1
Town of South Kingstown	992.9	992.9	992.9	999.2	1,005.0
<b>TOTAL ACRES</b>	<b>11,446.7</b>	<b>11,460.8</b>	<b>11,530.4</b>	<b>11,612.3</b>	<b>11,639.9</b>
<i>% of Town Land Area</i>	<i>31.47%</i>	<i>31.51%</i>	<i>31.70%</i>	<i>31.93%</i>	<i>32.00%</i>

## PROTECTED OPEN SPACE LAND

South Kingstown has a significant percentage of its land area, both publicly and privately held, that is protected from future development. All sites are classified into one of four jurisdictions including Town, State, Federal and private. Detailed information for a series of open space inventories was gathered from several sources including the Town Recreation Department, Town Tax Assessor maps and ownership records, selective site visits and input from the local citizenry. **Table 24: South Kingstown Open Space Acreage (2018)** summarizes the open space acreages by ownership from July 2009 to 2018.

## NEEDS & OPPORTUNITIES

### THREATS TO NATURAL RESOURCES

Both the 2017 and 2014 Plan Updates and the 1992 Comprehensive Plan outline goals and policies for implementation to protect natural resources. Despite these efforts, unmanaged development may negatively impact our natural resources, many of which are irreplaceable. Some of the primary threats to the Town's natural resources include:

- ◆ Potential degradation of groundwater supplies and draw down of the aquifer;
- ◆ Development adjacent to wetlands that has the potential to impair surface and groundwater quality;
- ◆ Loss of natural wildlife corridors for indigenous species, including species that are federally protected and/or recognized by the RI Natural Heritage Program;
- ◆ Loss of natural ecosystems and wildlife habitat due to sea level rise, including marsh loss or migration.

### OPPORTUNITIES FOR ENHANCEMENT

The town is also in a position to take advantage of several opportunities to maintain and enhance its natural resources. Such opportunities include:

- ◆ Continuation of an Open Space Acquisition Program targeting the Town's most sensitive natural resources with a priority focus on protecting groundwater supplies, providing adequate land for marsh migration, and mitigating impacts caused by coastal erosion;
- ◆ The ongoing development of new regulations to better address the protection of wetland resources;



- ◆ Participate in educational opportunities to expand the knowledge base of town staff, board /commission members in an effort to better understand and address the impacts of development on natural resources within the development review process; and
- ◆ Further promotion of sustainable development techniques with a specific focus on Low Impact Development (LID), infill development, renewable energy development, and energy conservation.

One thing South Kingstown has been struggling with over the years is how best to prioritize limited resources for the acquisition of additional conservation land. One state-level tool for evaluating and prioritizing lands for future conservation is found in the 2015 Rhode Island Wildlife Action Plan, a product of RIDEM and The Nature Conservancy that seeks to protect critical fish and wildlife habitat throughout the State. This plan includes mapping of “Conservation Opportunity Areas” or COAs. COAs can serve as a guide for prioritizing future conservation of South Kingstown’s key habitats. COAs contain and highlight locations with significant existing or potential wildlife and habitat resources. Although conservation actions taken throughout the Town can help fish and wildlife, focusing investments on priority landscapes can increase the likelihood of long-term success over larger areas, improve funding efficiency, and promote cooperative efforts across ownership boundaries. COAs are landscapes where broad conservation goals can best be met. By working in these landscapes, South Kingstown has an opportunity to increase the effectiveness of its conservation actions. These maps may be referenced by the Town in determining how particular parcels of land align with the criteria for South Kingstown’s Open Space Acquisition program.



## SPOTLIGHT ON AGRICULTURE & THE FOOD SYSTEM

As noted in “A Vision for Rhode Island Agriculture: Five-Year Strategic Plan and South Kingstown: Designing a Healthier Community,” there are many exciting opportunities for agriculture throughout the State and within South Kingstown. That said, there are also a number of needs that must be met for these opportunities to be fully realized. Below is a summary of the opportunities and needs described in these two documents, as well as some local resources that can help.

### FOOD SYSTEM OPPORTUNITIES

- ◆ Consumer demand for fresh, local foods has increased markedly, and South Kingstown farms can benefit from this.
- ◆ South Kingstown is the home of the University of Rhode Island, a Land Grant Institution, with more than 16,000 students and a history of volunteerism that can be utilized.



S O C I A L  
R E S I L I E N C E

- ◆ Environmental remediation and green infrastructure hold promise for the State’s horticultural sector. Horticulture plays a significant role in South Kingstown’s economy, and these businesses have the opportunity to use their expertise to expand into these new fields.
- ◆ Direct-to-consumer sales are improving farm profits, particularly for small farmers with less access to large wholesale markets.
- ◆ RI farmers are finding new and profitable ways to aggregate their farm products and brand and market products as locally grown. A prime example is Rhody Fresh, a collective of farms, including several in South Kingstown, producing milk, butter, cheese, and other dairy products.
- ◆ Institutional purchases of RI-grown farm products are also on the rise, including at local schools and hospitals.
- ◆ Programs that make local produce more affordable for low-income residents and senior citizens through local farmers markets have expanded access to healthy foods while also expanding the market for local farmers.
- ◆ One of the newest areas of farming in South Kingstown is aquaculture. Commercial raising and harvesting of shellfish and seaweed has opportunity for expansion.
- ◆ Land availability and affordability are significant obstacles to expanding or starting farm operations, and this is especially true in South Kingstown.
- ◆ Regulatory issues challenge farm profitability. Clarifying local, state, and federal regulations and permitting processes is a high priority for the state’s farmers, just as it is for other small businesses.



S O C I A L  
R E S I L I E N C E

- ◆ Lack of processing, marketing and distribution equipment and infrastructure limits the ability of RI’s farms to meet the demand for their products.
- ◆ Insufficient business and technical support challenge the stability and growth of RI agriculture. Close to home, South Kingstown would benefit should the University of Rhode Island further invest in and support its agricultural research and extension activities.
- ◆ Access to healthy local foods for low-income Rhode islanders remains a problem, in spite of efforts to expand access through local farmers markets. In South Kingstown, the Jonnycake Center’s list of families registered for services, including food, clothing, and basic necessity assistance, often tops 2,000.



FIGURE 40: SOUTH KINGSTOWN FOOD OPPORTUNITIES – 2016



### RESOURCES

The Rhode Island Agricultural Partnership maintains a website ([www.RhodyAg.com](http://www.RhodyAg.com)) that provides a range of resources that can be of assistance to South Kingstown farmers, including:

- ◆ A Directory of Support Resources

- ◆ Guidance on developing a Business Plan
- ◆ Guidance on branding and marketing for farmers
- ◆ Guidance on Rhode Island farm-related regulations
- ◆ Strategies for advocating agriculture to local elected officials

South Kingstown’s food system’s opportunities and needs are also cataloged and translated into infographics by the Rhode Island Food Policy Council. The Council keeps “snapshots” of the food systems in each of Rhode Island’s municipalities. The most recent data for South Kingstown, compiled in 2016, can be found in the infographics below.

**FIGURE 41: SOUTH KINGSTOWN FOOD NEEDS – 2016**





## NATURAL RESOURCES & OPEN SPACE ACTION PLAN SUMMARY

Goal 1: The quality and quantity of the Town’s potable water supply will be protected and preserved.	
POLICIES	ACTIONS
<p><b>Policy 1.1</b> Implement strategies to preserve quality of ground and surface waters in an integrated manner to protect the Town’s Sole Source Aquifer, as ground and surface waters are interconnected.</p> 	<p><b>Action 1-1</b> Develop a management strategy for the regulation of groundwater withdrawal in coordination with neighboring towns and water suppliers.</p> 
<p><b>Policy 1.2</b> Recognize that the supply of potable water from the aquifers is limited. The Town will work toward protecting the quantity of potable water and will link growth management plans to the amount of water available for both residential and non-residential uses. The Town shall continue to work with the RI State Water Resources Board regarding water use allocation.</p> 	<p><b>Action 1-2</b> Take advantage of the annual Land &amp; Water Summit at URI to identify conservation priorities in coordination with conservation partners such as local land trusts and The Nature Conservancy.</p> 
<p><b>Policy 1.3</b> Prioritize the use of potable water for drinking water supply and incentivize the re-use of non-potable water when applicable.</p> 	<p><b>Action 1-3</b> Work with the State to implement salting practices which minimize degradation of ground and surface waters in GAA watershed areas (areas in which water is known or presumed to be suitable for drinking use without treatment).</p> 
<p><b>Policy 1.4</b> Recognize that a watershed management approach to resource protection and utilization is necessary. It is therefore necessary to plan on both a town-wide and regional basis based upon watershed boundaries to coordinate resource management issues. It also means that such programs as erosion and sediment control, stormwater management, aquifer use and protection, and Open Space Acquisition need to be planned on both a town-wide and inter-town (regional) basis.</p> 	<p><b>Action 1-4</b> Implement ordinances on underground storage tanks to address the issues of tank monitoring strategies, tank removal, and tank prohibitions.</p> 
	<p><b>Action 1-5</b> Implement recommendations for best management practices included within the DEM Stormwater Design and Installation Standards Manual (2011), as amended.</p> 



**Goal 2:** Freshwater and coastal wetland resources, which serve many important ecological and economic functions, will be protected, preserved, and well-managed.

**POLICIES**

**Policy 2.1** Protect the integrity of the Town’s varied wetlands. Protection efforts will be directed toward swamps, marshes, bogs, floodplains, rivers, streams, ponds, wet meadows, aquatic beds, beaches, and all other wetlands as defined by DEM Freshwater Wetlands Act, April 1998, as amended. The Town will pursue both regulatory and non-regulatory options for ensuring the protection of these resources, including changes to land use regulations.



**Policy 2.2** Recognize that irreplaceable coastal resources need comprehensive protection. The Town will take a regional watershed approach, critical to preserving these fragile resources, to address land use, stormwater runoff, and all point and non-point source pollution. The Town will pursue management strategies consistent with the CRMC’s Special Area Management Plan for the Salt Ponds (1999) and the Special Area Management Plan for the Narrow River (1999).



**Policy 2.3** Actively communicate with CRMC about local land use goals, policies and regulations for areas with CRMC Special Area Management Plans (SAMP) to ensure that its policies are informed by this Comprehensive Plan.



**Policy 2.4** Work toward developing corridors of open space throughout the Town to ensure the protection of rivers, streams, wetlands, agricultural lands, scenic features, groundwater reservoirs and recharge areas, and wildlife habitat.



*(continued on next page)*

**ACTIONS**

**Action 2-1** Implement recommendations of its RI Pollutant Discharge Elimination System (RIPDES) Phase II Stormwater Management Plan.



**Action 2-2** Collect baseline data to document the current conditions of all freshwater bodies within South Kingstown, to include a comprehensive analysis of issues impacting each, and identify what regulations are currently in place to protect them. The Town shall identify partner organizations to support in the study of individual water bodies within South Kingstown, including paid professionals and volunteers.

**Action 2-3** Prioritize and implement structural BMPs designed to improve the quality of impaired water bodies within the Town, in order to comply with the Total Maximum Daily Load requirements promulgated by the RI Department of Environmental Management.



**Action 2-4** Develop maps and assess pertinent data regarding protection mechanisms in place for all waterbodies within the Town to develop a comprehensive evaluation of issues related to water quality, scenic nature, and wildlife habitat, utilizing best practices from a range of state and local documents relative to water protection. The Town may find assistance in these efforts from organizations such as RI DEM, CRMC, local Land Trusts, the URI College of Environmental Sciences, and regional watershed associations.



**Action 2-5** Develop zoning strategies for the protection of undeveloped barrier beaches in South Kingstown, specifically, Green Hill, Browning, and Moonstone beaches. The Town shall develop zoning strategies to minimize development on developed barrier beaches and to ensure that any construction is done in a way which minimizes environmental impact and considers the future implications of climate change and sea-level rise.



*(continued on next page)*



**Goal 2:** Freshwater and coastal wetland resources, which serve many important ecological and economic functions, will be protected, preserved, and well-managed.

POLICIES	ACTIONS
<p><b>Policy 2.5</b> Recognize the importance of wetland continuity for water quality and habitat connectivity.</p>	<p><b>Action 2-6</b> Review and update the 2001 South Kingstown Greenways Master Plan to identify and prioritize areas for corridor zoning to protect and build upon greenways along selected rivers and non-motorized transportation corridors within the Town in order to maintain the rural character of the Town, and to protect river resources and contiguous wildlife corridors.</p> 

**Goal 3:** Agricultural land within the Town will be protected, preserved and maintained for the future health, character, and economy of the community.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> Support the preservation of farmland for farming activities and encourage a local healthy food system by providing opportunities for local farmers to sell their products locally.</p>  <p><b>Policy 3.2</b> Utilize a combination of regulatory techniques and amendments (zoning), public and private funding resources (land trusts, easements, purchase of development rights), and economic strategies (providing opportunities to sell/purchase locally grown products) to achieve the necessary protection of farmland and encouragement of farming activities.</p> <p><b>Policy 3.3</b> Recognize that there is a significant amount of agricultural activity in South Kingstown and that there is the potential for ground and surface water degradation from fertilizers, pesticides, stormwater, and soil erosion.</p>  <p><i>(continued on next page)</i></p>	<p><b>Action 3-1</b> Review the Zoning Ordinance use code table to determine if changes are necessary to allow for food processing and distribution facilities for local products.</p> <p><b>Action 3-2</b> Actively communicate to local farmers how they can take advantage of URI's agricultural research and extension activities.</p> <p><b>Action 3-3</b> Work with the South Kingstown School District to increase vocational agriculture education within South Kingstown schools, including the Pathways program at South Kingstown High School.</p>  <p><b>Action 3-4</b> Explore regulatory allowances for locally grown agricultural products as accessory uses in commercial and mixed-use development in established village centers.</p>  <p><b>Action 3-5</b> Explore and determine the feasibility of community gardens on existing Town-owned lands located near village centers, population clusters, low and moderate income neighborhoods, and other disadvantaged people, and with new major subdivisions.</p>  <p><i>(continued on next page)</i></p>



**Goal 3:** Agricultural land within the Town will be protected, preserved and maintained for the future health, character, and economy of the community.

POLICIES	ACTIONS
<p><b>Policy 3.4</b> Support efforts to raise awareness among landowners about the variety of protection options, environmentally sound management practices, and opportunities to support the local food system, including sustainable local agriculture and aquaculture activities.</p>  	<p><b>Action 3-6</b> Develop regulatory allowances for food-based resources such as community gardens and small-scale agriculture within major residential land development projects and subdivisions.</p>   <p><b>Action 3-7</b> Provide continued and new participation in the State’s Farm, Forest and Open Space Program (FFOS). Promotional efforts should include education of the public and potential participants about the value of the program and active communication with existing participants about the benefits of continuing the program.</p>   <p><b>Action 3-8</b> Consider developing a farmland overlay district based on prime agricultural soils, existing and historic farm usage, character of the surrounding area, and open space. Development shall be guided to appropriate areas on the property through site plan and review.</p>   <p><b>Action 3-9</b> Consider developing a Transfer of Development Rights Program through either an intra-municipal or inter-municipal program for the purpose of protecting open space and agricultural resources in town by connecting them with areas in the core as a receiving zone.</p>   <p><b>Action 3-10</b> Explore developing facilities that would allow community composting at community gardens and the Town transfer station.</p>  <p><b>Action 3-11</b> Work with appropriate agencies and implement current best management practices to mitigate the potential contamination of the water resources from these activities.</p> 



**Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

POLICIES	ACTIONS
<p><b>Policy 4.1</b> Support the protection of native species of trees and forests as a major natural resource in the Town, which provide abatement for noise, water, air, and land pollution, and contribute to the rural character of the Town.</p> 	<p><b>Action 4-1</b> Inventory the indigenous habitat types using RI Geographic Information Systems (RIGIS) and identify areas which need protection. The protection program shall be coordinated with State and non-profit conservation organization programs.</p>
<p><b>Policy 4.2</b> Recognize the importance of inventorying, maintaining, and protecting biodiversity as a critical component of the Town's natural resources.</p> 	<p><b>Action 4-2</b> Review and update Subdivision and Land Development Regulations to provide better tree protection standards for public and private construction and standards for planting and maintenance of required street trees. Estimate the economic value of preserving existing tree canopy.</p> 
<p><b>Policy 4.3</b> Recognize that natural resource preservation and conservation will be realized more effectively if protection efforts are coordinated with other towns, state and federal agencies, and private conservation groups.</p> 	<p><b>Action 4-3</b> Develop an inventory of significant specimen trees within the village areas and establish a long-term strategy for tree management and maintenance within these areas. This strategy will explore sources of funding for implementation, such as the America the Beautiful Grant program, and the tree planting programs of RI DEM's Division of Forestry.</p> 
<p><b>Policy 4.4</b> Recognize that a litter control program, coordinated with DEM, is needed to improve the aesthetics of the Town.</p> 	<p><b>Action 4-4</b> Update the South Kingstown tree inventory with the cooperation of potential partners such as the RI Natural History Survey and others and pursue development of an overall forest management plan for Town-owned trees..</p> 
<p><b>Policy 4.5</b> Continue to preserve land which is primarily undeveloped and which consists of open, agricultural, or littoral property, including existing and future well fields and aquifer recharge areas, fresh and saltwater marshes and marsh migration areas, barrier beaches, wildlife habitats, land providing access to or views of the ocean, harbors and ponds, areas of contiguous forest cover, land for unpaved bicycling and hiking paths, future passive recreational use, and agricultural use.</p>   <p>(continued on next page)</p>	<p><b>Action 4-5</b> Strengthen the Conservation Commission's advisory role in the following areas:</p> <ul style="list-style-type: none"> <li>• Helping identify lands having significant conservation value as priorities for Town acquisition.</li> <li>• Advising the Town on ways to improve the value of these lands for conservation or passive recreation</li> <li>• Advising the Town Council on advocacy strategies for environmental legislation at the state and local level</li> <li>• Developing public education and information programs</li> </ul>   <p>(continued on next page)</p>



**Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

**POLICIES**

**Policy 4.6** Create a system of greenways throughout town to protect and preserve open space and natural resources, to ensure the connectivity of these resources, and to increase accessibility for all residents.



**Policy 4.7** Support preservation of open space within its villages areas, recognizing that smaller parcels are valuable for preserving habitat, supporting a healthy environment, and improving the quality of life of village residents.



**Policy 4.8** Coordinate with the Rhode Island Department of Environmental Management to ensure natural resource data sets, including the Natural Heritage Areas, are up to date.



**Policy 4.9** Support the protection and preservation of species and habitats as assessed and studied in the Rhode Island Wildlife Action Plan.

**Policy 4.10** Avoid use of invasive species of grass, shrubs and trees in Town construction activities including horticultural installations. Promote and use native species in Town activities..

**ACTIONS**

**Action 4-6** Alter the criteria for the Town’s Open Space Acquisition program to prioritize the following types of properties:

- Open space that preserves unique historic and cultural features
- Agricultural lands
- Areas of anticipated sea level marsh migration
- Areas abutting bodies of fresh and salt water
- Critical and environmentally sensitive areas, including habitat corridors
- Unfragmented forest blocks
- Groundwater resources and headwater wetlands
- Areas of small green space within village centers and densely developed areas (Pocket Parks)
- Scenic vistas and landscapes
- Public access points
- Areas abutting existing permanently protected open space
- Areas located on barrier beaches



**Action 4-7** Explore ways to develop incentives for regulatory and non-regulatory protection strategies, such as grants and tax incentives, to result in more permanent protection in cooperation with the South Kingstown Land Trust.



**Action 4-8** Implement a litter control program, in partnership with local schools and organizations, to improve the appearance of the Town’s streets, sidewalks, parks, and other public places and to support a pedestrian-friendly environment. Potential partner organizations may include Save the Bay, Clean Ocean Access, RI DEM, and various neighborhood and commercial organizations.



(continued on next page)



**Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

POLICIES	ACTIONS
	<p><b>Action 4-9</b> Develop a system for documenting the ecosystem services impacts of open space acquisition, in addition to the economic impact analysis already used to review acquisitions. Such services might include positive impacts on air and water quality, habitat corridors, and more.</p> <p> </p> <p><b>Action 4-10</b> Amend regulations to encourage new development to set aside green space that is well-designed in terms of pedestrian compatibility and functionality and, where possible, strengthens the Town’s existing greenways network.</p> <p> </p> <p><b>Action 4-11</b> Amend the Open Space Project Funding Policy to include smaller parcels in its criteria.</p> <p> </p> <p><b>Action 4-12</b> Actively pursue the establishment of “pocket parks” and landscaped areas in the villages where appropriate.</p> <p> </p> <p><b>Action 4-13</b> Investigate means to provide open space buffers between current commercial and residential uses, identifying specific parcels abutting existing commercial uses that may be used as a buffer and exploring the options to purchase or conserve the land for open space or recreational uses.</p> <p> </p> <p><b>Action 4-14</b> Identify, map, and publicize all Town-owned public rights of way to area ponds, rivers, beaches, and other such natural resources.</p> <p> </p> <p><i>(continued on next page)</i></p>



**Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

POLICIES	ACTIONS
	<p><b>Action 4-15</b> Revise the Subdivision and Land Development Regulations to adopt standards to retain and enhance tree canopy coverage in the village areas.</p> <p> </p> <p><b>Action 4-16</b> Enact a Town-wide policy and plan for the sustainable management of the Town’s public and private forests.</p> <p></p> <p><b>Action 4-17</b> Actively pursue funding for master planning and engineering work relative to creating a park system along the Saugatucket River, including enhanced connections to Main Street.</p> <p>  </p>

**Goal 5:** Beach areas will be protected to allow for pedestrian-based recreation, to preserve the open-space character of the shore-front, and to protect the fragile ecology of the dunes.

POLICIES	ACTIONS
<p><b>Policy 5.1</b> Continue to manage beaches under its jurisdiction for the benefit of the community.</p> <p><b>Policy 5.2</b> Support public access and preservation of natural habitat for beaches not under its jurisdiction.</p>	<p><b>Action 5-1</b> Place controls or other obstacles to motor vehicular traffic along the access-ways of ocean beaches which are under town control.</p> <p><b>Action 5-2</b> Work to improve pedestrian and bicycle access to ocean beaches and ponds.</p> <p></p> <p><b>Action 5-3</b> Improve parking, wherever feasible, at public access points to ponds.</p>





# CULTURAL & HISTORIC RESOURCES

---

## VISION

The Town's Native American historic legacy will continue to enrich the quality of life, providing a historic context to locations important to the Narragansett Indian Tribe's cycle of life. The Town's colonial and industrial legacy, now visible in the context of stone walls, homes, factories, and cemeteries, will be protected for future generations. The Town shall continue to preserve, protect and enhance its cultural resources through expanding local measures for historic preservation, flexible design incentives, support for arts and cultural institutions, and education of Town staff, board and commission members, and citizens regarding these resources.

---



## CULTURAL & HISTORIC RESOURCES GOAL

**Goal 1:** The measures available for **protecting** cultural and historic resources will be expanded to provide **maximum protection** to South Kingstown’s historic resources and **visibility and viability** of its arts and cultural institutions.

### GUIDING PRINCIPLES

- ◆ It is the desire of the Town to focus development in and around the existing villages, in an effort to maintain the rural nature of outlying areas.
- ◆ The recommendations of South Kingstown’s Village Plans remain valid mechanisms for enhancing the unique cultural identities of each village and protecting their cultural and historic resources. Where appropriate, these recommendations have been incorporated into this Plan.
- ◆ The recommendations contained within the document entitled, “South Kingstown: Designing a Healthier Community,” support healthy village environments and cultural resources, and have been incorporated into this Plan as appropriate.
- ◆ The Town utilizes the Town’s website and other communication vehicles to provide information and increase awareness about the cultural and historic resources of the community, including information about programs and options to protect and enhance these resources, and ways to participate in cultural events and attractions.
- ◆ Placement of historic buildings on the National Register of Historic Places is a valuable tool for maintaining South Kingstown’s historic fabric and qualifying for State and Federal funding and investment tax credits.
- ◆ The installation of public art in the village center enhances the character of streetscapes, neighborhoods, and mixed-use areas.
- ◆ The Historic District Commission is a valuable resource for the Planning Board in determining the Town-wide needs of historic and culturally significant buildings.
- ◆ Agricultural land areas along the shoreline that contribute to the historic and cultural context of the Town are priority areas for preservation mechanisms.





## CURRENT PRACTICE

- The Historic District Commission is a resource for local historic preservation efforts, focused on helping owners of historic homes with their questions and concerns, and provides education and information to residents and business owners regarding South Kingstown's historic resources.
- The Town celebrates the high-quality preservation work occurring within the municipality through the Historic District Commission's annual historic preservation acknowledgment program.
- The Historic District Commission's how-to booklet of do-it-yourself guidelines for restoration of historic structures remains a valuable tool for historic home owners.
- The Town utilizes the National Trust's Main Street Center, Community Development Block Grants, and other available funding sources for preservation and cultural development.

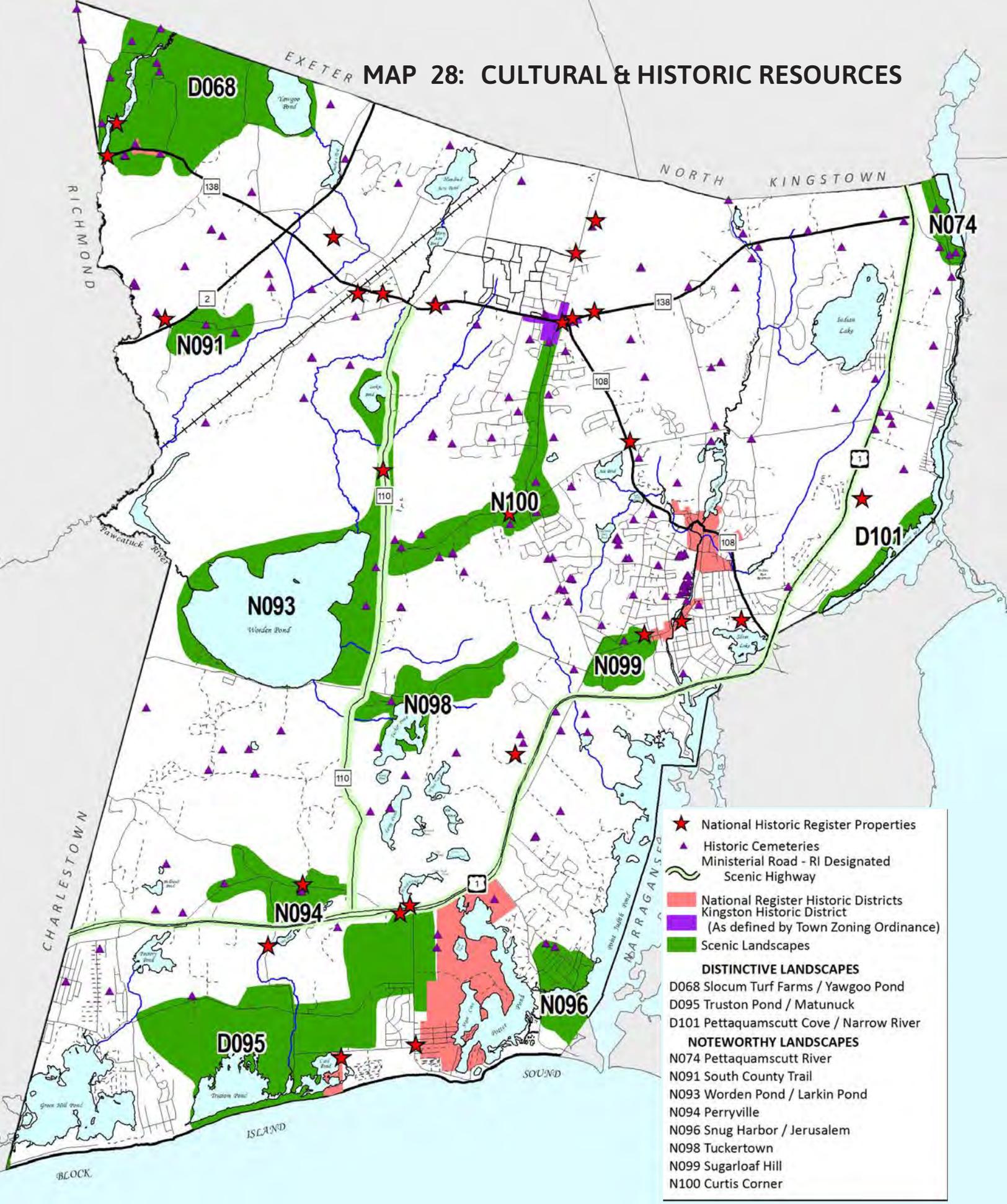
## BASELINE INFORMATION

Cultural and historic resources help define the identity of a town by providing continuity of time and place. The cumulative effects of circumstances unique to each place cultivate, over time, a locale-specific character. This character is embodied in the historic buildings, structures, and sites, as well as the prehistoric sites that comprise the Town. **Map 28: Cultural & Historic Resources** illustrates the Town's inventory of cultural and historic resources.

Since the passage of the National Historic Preservation Act (NHPA) in 1966, awareness of local cultural and historic resources has grown, and tremendous strides have been made toward preserving the buildings, structures, and sites that reflect the unique history and individual character of a town. The Town of South Kingstown, with its rich and varied history, has long recognized the importance of preserving the cultural features that contribute to its singular identity.

More detailed information on the Cultural and Historic Resources Inventory is contained within **Appendix 3**. However, this inventory was last compiled in 1984, and there are potentially many more properties that have become eligible for historic designation since that time.

# MAP 28: CULTURAL & HISTORIC RESOURCES



- ★ National Historic Register Properties
  - ▲ Historic Cemeteries
  - Ministerial Road - RI Designated
  - ~ Scenic Highway
  - Red National Register Historic Districts
  - Purple Kingston Historic District
  - Green Scenic Landscapes
- DISTINCTIVE LANDSCAPES**
- D068 Slocum Turf Farms / Yawgoo Pond
  - D095 Truston Pond / Matunuck
  - D101 Pettaquamscutt Cove / Narrow River
- NOTEWORTHY LANDSCAPES**
- N074 Pettaquamscutt River
  - N091 South County Trail
  - N093 Worden Pond / Larkin Pond
  - N094 Perryville
  - N096 Snug Harbor / Jerusalem
  - N098 Tuckertown
  - N099 Sugarloaf Hill
  - N100 Curtis Corner



Cultural and historic resources of South Kingstown mirror both the heritage of the Narragansett Indian Tribe and the historic settlement patterns of the colonists and later industrialization. Today, properties on or eligible for the National Register of Historic Places, stone mills, historic homes, stone walls, and a heritage of Narragansett (Native American) place names help to define the cultural context of the Town. A local historic district and flexible design incentives to preserve historic buildings help strengthen and protect these finite resources. Agricultural and aquacultural activities also define an important component of South Kingstown's cultural landscape and the Town continues to take measures to protect and enhance these resources (see **Map 26: Agricultural Resources**).

Beyond the historic fabric of the community, South Kingstown is teeming with cultural institutions such as the Courthouse Center for the Arts, the South County Arts Association, the Kingston Chamber Music Festival, the Contemporary Theater Company, the Peace Dale Museum of Art and Culture (formerly the Museum of Primitive Art & Culture), the South County History Center, many art galleries, and all of the arts and cultural resources centered at the University of Rhode Island and the Town's public and private primary and secondary schools. The cultural offerings in South Kingstown are tremendous for a small town and should not be taken for granted.

The Palisades Mill Complex,  
Village of Peace Dale





Among the properties on the inventory of historic sites, few are currently protected through zoning, easements, historic districting or other measures. Sites which have been approved for the National Register have limited protection and may be eligible for certain tax benefits and for federally funded matching grants-in-aid.

Shifts in regional and local economies transformed parts of South Kingstown from a farming community to one dominated by manufacturing. Later changes in the national economy resulted in a geographic shift of manufacturing industries to states in the south, leaving many of the mills in South Kingstown vacant and many of the once prominent villages underused and neglected. Residential development is the most recent prevailing growth to occur in town, which has often been a positive for historic preservation, in terms of the renovation of existing historic homes in the village centers and elsewhere in town.

## NEEDS & OPPORTUNITIES

The Town of South Kingstown, as the owner of many historically important buildings, structures, and landscapes, can lead by example when it comes to historic preservation. By maintaining our historic buildings to a high level of preservation, the Town can provide good, highly visible examples to be emulated while also building practical preservation knowledge and skills to share with local property owners.

One of South Kingstown's greatest needs in terms of historic and cultural preservation is the development of objective criteria to identify future inventories of its historic and cultural resources. These criteria may include building age, architectural style, building type, condition, and thematic associations. No one criterion is paramount. A structure not conforming to one criterion could still be listed if it was found to have significant merit under other criteria. However, such criteria are critical for differentiating historic resources from those that are merely old.

The age criterion should be the fifty-year limit used by the National Register of Historic Places. With certain exceptions, the Register will not consider for listing structures that are less than fifty years old. Another criterion is architectural style. Structures that have been included in the inventory in many cases are representative of a specific architectural style or local/regional building tradition. The condition criterion comes into play when assessing a structure's architectural style. Alterations to a structure that substantially mask or destroy a structure's architectural integrity could preclude its listing in the inventory.

Thematic associations can refer to a structure's historical associations or to its contribution to an historic district's overall theme. In the case of the former, a structure could be included in the inventory if it was owned,



occupied or built by an individual or organization notable in national, state or local history. In the case of the latter, a structure could be included in the inventory if it contributes to the overall theme of an identified historic area.

While most of the town's historic mill buildings have already been renovated and adaptively reused, and many historic homes have been lovingly restored by their owners, the work of preservation is never done. The Town needs to remain vigilant, as many of its restored historic resources could be threatened again by shifts in the economy and development patterns that could lead to disinvestment and neglect. A number of important historical structures have been demolished or allowed to decay to a point beyond saving. Threatened and potentially threatened resources fall into the following general categories:

1. Village Centers
2. Large mill complexes and associated mill housing
3. Individual or isolated structures scattered throughout South Kingstown
4. Cemeteries and graveyards
5. Historic landscapes and farms

While it is not difficult to see how historic buildings and landscapes can be threatened, it is often easy to take cultural institutions, such as museums, theaters, galleries, and related educational centers, for granted. These institutions are often run on tight budgets, grants, and the efforts of countless volunteers. The Town has an opportunity to serve as a “hub” of information for visitors and residents alike in marketing these resources and making it easier for people to find and enjoy them.



**Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

**POLICIES**

**ACTIONS**

**Policy 1.1** Preserve the unique cultural and historic resources of the villages that comprise South Kingstown, as well as those that identify the Town as a whole.



**Policy 1.2** Continue to expand the Town’s inventory of: a) historic buildings and structures; and, b) historic and prehistoric archaeological sites, ensuring that all aspects and periods of South Kingstown’s history are identified and preserved where appropriate.

**Policy 1.3** Support educating residents, as well as visitors, to the importance of preserving and supporting cultural resources and of the intrinsic value of preservations, arts, and culture in South Kingstown.



**Policy 1.4** Research and promote the economic benefits of preservation, arts, and culture.



**Policy 1.5** Expand the measures available for maximizing the protection of South Kingstown’s historic and prehistoric resources.

*(continued on next page)*

**Action 1-1** Seek funding and volunteer assistance for conducting an update to South Kingstown’s Cultural Resource Inventory.

**Action 1-2** Maintain a copy of its historic resource inventory on file with the Peace Dale Library to be available to the general public for research and reference needs. Maintain/ update digitized inventory posted on the Town’s website annually. Other repositories which could be investigated include RI Department of Transportation (RIDOT)’s repository at the Woonsocket Depot.

**Action 1-3** Pursue expansion of the Wakefield National Historic District, per the results of a historic resources report commissioned by the Town’s Historic District Commission, based upon available funding and resources.

**Action 1-4** Review the underlying zoning for each property on the historic resource inventory and assess what resources are most at risk for subdivision or other development pressures that might threaten them.

**Action 1-5** Revise the Subdivision & Land Development Regulations to require that applications be reviewed in consultation with a professional archaeologist or historic preservation specialist when a historic and/or prehistoric resource is located on site. Such specialist will be hired by the town, funded by the applicant, and shall develop an alternative plan or appropriate mitigative action.

**Action 1-6** Review and revise where applicable all existing policies and regulations for protecting historic resources within the planning and development review process.

**Action 1-7** Amend the Historic District Ordinance to include the elements of the current enabling legislation.

*(continued on next page)*



**Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

**POLICIES**

**Policy 1.6** Pro-actively communicate with the public about resources available for the continued use and adaptive reuse of historic buildings and the Town’s many cultural institutions.



**ACTIONS**

**Action 1-8** Research and report on the feasibility of an ordinance requiring a waiting period when an historic building is proposed for demolition. The waiting period would permit alternatives to demolition to be fully explored before any structure is razed.

**Action 1-9** Review the South Kingstown Residential Design Manual and the Historic Overlay District (see Zoning Ordinance Section 600) and revise as necessary to ensure the protection of cultural resources, including historic buildings, structures, landscape features, and archaeological sites, from adverse impacts of development activities.



**Action 1-10** Develop amendments to the Subdivision and Land Development Regulations to encourage preservation of existing stone walls on parcels proposed for development and/or redevelopment.

**Action 1-11** Regularly review the regulatory framework, including the Use Regulations Table in the Zoning Ordinance, to ensure the continued flexibility and successful adaptive reuse of historic mill buildings and other historic structures to provide incentive for reuse.



**Action 1-12** Establish regular protocol for the Town’s Historic District Commission and Economic Development Commission to work more closely with each other so that economic development and historic preservation policies are shaped toward the same end goals.



**Action 1-13** Promote Federal, State, and local programs which provide resources including “how-to” guidance and potential financial incentives for owners of historic properties by including links to and information regarding such programs on the Town’s website.



*(continued on next page)*



**Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

**POLICIES**

**ACTIONS**

**Action 1-14** Establish a plaque system to identify historic homes and buildings throughout South Kingstown.

**Action 1-15** Reach out to owners of historic properties annually to alert them to the various resources available to them, including historic tax credits and technical assistance from the Town’s Historic District Commission.

**Action 1-16** Serve as a hub for residents and visitors related to cultural and historic resources, including: guidelines for historic preservation of individual homes; locations and resources of local museums, theaters, and galleries; educational programs and events; guides to visiting resources; videos and media; etc.



**Action 1-17** Serve as a hub for information developed by the Town and/or other local or regional organizations to increase awareness among the Town’s citizens about the benefits and economic returns on investment of preservation, arts, and culture. The Town shall lead by example by promoting its own historic restoration work on town buildings and structures. At a minimum, such work will be detailed in the biennial plan and highlighted on the Town’s website.

**Action 1-18** Devise a policy and standards to govern the installation of identification and wayfinding signage for historic districts, properties and sites and arts and cultural institutions.

**Action 1-19** Explore and report on the local economic benefits of investing in historic preservation, arts, and culture, including:

- Influences on tourism
- Benefits of skilled employment for historic renovation
- Impacts on property values



*(continued on next page)*



**Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

POLICIES	ACTIONS
	<p><b>Action 1-20</b> Use the findings of the report on the local economic benefits of investing in historic preservation, arts, and culture to advocate for an increased and regular budget allocation for historic preservation and cultural investments. Explore the feasibility of providing a local town match for federal historic preservation dollars, or a tax rebate for homeowners who follow Historic District Commission guidance.</p> <p><b>Action 1-21</b> Pursue partnerships with local educational institutions such as, URI, Brown University, and Roger Williams University in order to utilize student efforts by submitting applications for programs such as the RWU Community Partnership Center Program.</p> <p><b>Action 1-22</b> Explore the possibility of providing assistance to establish a local or regional “arts council” that may coordinate local arts activities.</p> <p></p> <p><b>Action 1-23</b> Identify funding sources and potential locations for the installation of public art.</p> <p></p> <p><b>Action 1-24</b> Enact a process by which development proposals with the potential to impact historic resources are reviewed in consultation with a professional archaeologist or historic preservation specialist who can recommend mitigative actions.</p>



# RECREATION

---



## VISION

### To provide:

- ◆ Various opportunities to participate in formal and informal recreational activities designed to **meet the needs of all residents** of South Kingstown regardless of **interest, age, or location**; and
- ◆ **Well maintained and diverse** facilities and programs throughout the community.

The Town will provide active recreation opportunities to promote the health and wellbeing of all of its residents. Recreational facilities and programs will grow and change to meet the needs of our population and demographic changes over time. Recreational facilities will be distributed throughout the community to provide a diverse range of recreational opportunities that build upon the unique resources of South Kingstown's natural environments and its citizenry.

---

## RECREATION GOALS

**Goal 1:** Land acquisitions for expanding active and passive recreational services will be based upon a current needs assessment.

**Goal 2:** Publicly-owned and controlled open space and natural and cultural resources will be accessible to all citizens, and all current and historic rights-of-way which ensure access to these areas will be protected.

**Goal 3:** The changing recreational needs of the community will be met, in accordance with Town, State and Federal standards.

**Goal 4:** Active recreation areas and other properties under the Parks and Recreation Department jurisdiction will be maintained to meet the needs of all users.

**Goal 5:** The public will be fully aware of recreation programs and there will be a means of providing for citizen and stakeholder input on recreation policy.



CHANGING  
POPULATION



SOCIAL  
RESILIENCE



HEALTHY  
COMMUNITIES

## GUIDING PRINCIPLES

- ◆ The Town regularly pursues available grant funding for recreational land acquisition and development through such State and Federal sources as the Rhode Island Department of Environmental Management (RIDEM), the Rhode Island Water Resources Board, and the Federal Highway Administration.
- ◆ The South Kingstown Parks and Recreation Division, along with other community recreation providers, offer financial aid and scholarship opportunities for recreational programming.
- ◆ The Town works regularly with the Coastal Resources Management Council (CRMC) to identify and protect rights-of-way to coastal areas.
- ◆ The School Department and the Parks and Recreation Division coordinate activities, especially related to construction of new school facilities, so that they may be designed to maximize land utilization and minimize required municipal financial resources for maximum recreational benefit to the community.
- ◆ The Parks and Recreation Division partners with other community recreation providers to assess and improve programming for the community and address community needs.



- ◆ The Town regularly assesses and inventories its existing recreational sites and facilities to evaluate whether upgrades and/or expansions are necessary.
- ◆ The Town Council may, and frequently does, appoint special committees to assist in the preparation of development plans for proposed park and recreational facilities.
- ◆ It is critical that the Town raise awareness of existing recreational resources to increase public accessibility and usage.
- ◆ The Town's Fair Share Development Fee (collected at the time a building permit is issued) remains an important tool for the provision of recreational opportunities throughout Town.

## BASELINE INFORMATION

### OVERVIEW

The Town is responsible for providing recreational opportunities for all citizens regardless of age, interest, or ability. As the community grows and the demographics of its residents change, the demand for additional facilities increases and different recreational opportunities must be provided to meet the changing needs of the community. The provision of public recreational activities and facilities benefit not only individuals by providing a sense of participation and accomplishment and promoting an active lifestyle, but also improving a feeling of community that is utilizing South Kingstown's rich social and natural capital.



The unique recreational amenities of South Kingstown play a significant role in the local tourism economy. Tourism is the fourth largest industry in the State of Rhode Island (6.8 billion-dollar impact in 2008 according to the RI Commerce Corporation). Due to the abundant natural attractions present and facilities available for visitors, Washington County and South Kingstown contribute significantly to this sector of the Rhode Island economy. In South Kingstown, the arts and entertainment, and accommodation and food service sectors provided employment for nearly 1,800 individuals in 2016. This represents approximately 13% of the jobs in the community and these sectors continue to show signs of growth. The seasonal tourism economy in the community has in recent years extended into the shoulder seasons (spring and fall), increasing its positive impact on the community. In addition, lodging and meals tax receipts, which are shared proportionately with the Town, provide an increasing share of local revenues helping to lessen the property tax burden on residents.

The Town's efforts to provide enriching recreational activities and exceptional quality facilities are overseen by the Department of Parks and Recreation.



*“We will improve the health of our citizens through programs that encourage staying active and fit. We will connect all citizens to our community by offering programs that encourage inclusion and participation. Finally, we will provide a wide variety of activities that encourage all segments of our population to use their free time both positively and productively, and promote life-long learning through recreational and cultural programs.”*

Parks & Recreation Division Vision Statement

In South Kingstown, town-owned recreation facilities are complemented by a wide range of facilities owned and operated by local not for profits, State and Federal institutions, and others such as the South Kingstown Land Trust, YMCA, The University of Rhode Island, and private educational institutions. Within recent years, the Parks and Recreation Department has developed partnerships with the local YMCA and two private schools operated by the Diocese of Providence. Through the cooperative sharing of recreational resources such as outdoor athletic facilities and indoor gymnasiums, the recreational needs of the community are addressed more effectively.

South Kingstown is committed to protecting and improving public access to the community’s wide array of recreational resources, including its oceanfront beaches, salt ponds, freshwater bodies, walking trails, playing fields, and indoor recreational spaces. These resources offer a wide array of recreational activities for the health and wellbeing of residents and visitors.

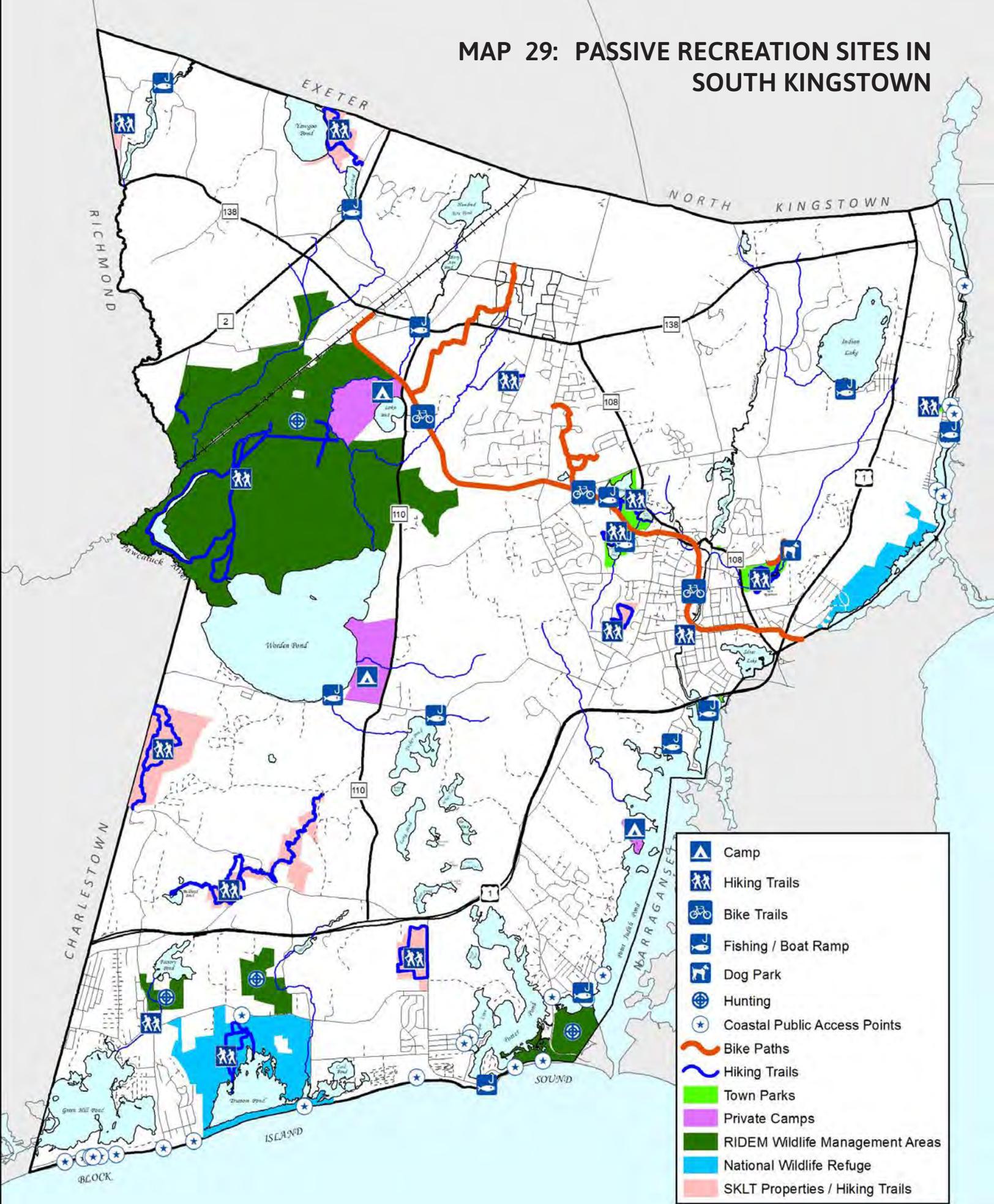
## PARKS & RECREATION INVENTORY

**Map 29: Passive Recreation Sites in South Kingstown** and **Map 30: Active Recreation Sites in South Kingstown** show all of the recreational facilities in South Kingstown. **Table 25: South Kingstown-Owned Facilities Inventory, Conditions & Summary** lists municipally-owned recreation sites in South Kingstown and provides individual site characteristics and amenities.

The overall condition of the majority of public recreation sites and facilities can be characterized as ‘Good’ to ‘Excellent’, with several sites/facilities characterized as ‘Fair’ – although most of these sites/facilities are scheduled for planned upgrades as part of the “Pay as You Go” element of the Town’s Capital Improvement Plan.

Sites available for public use include sites that are either free or that charge a fee, including parks, beaches, and campgrounds. **Table 26: Inventory of Other Recreational Facilities In South Kingstown** provides an overview of other recreational facilities within South Kingstown that are not municipally-owned. **Table 27: Summary of Recreational Facilities In South Kingstown** totals both municipal and non-municipal facilities.

# MAP 29: PASSIVE RECREATION SITES IN SOUTH KINGSTOWN







**TABLE 25: SOUTH KINGSTOWN-OWNED FACILITIES INVENTORY, CONDITIONS & SUMMARY**

Source: South Kingstown Parks & Recreation Division

TOWN PARKS	ACRES	Baseball Fields	Softball Fields	Basketball Courts	Paths (miles)	Picnic Area	Playground	Tennis Courts	Volleyball Court	Soccer Fields	Inline Rink	Skate Park	Dog Park	Stage Area
<b>NEIGHBORHOOD PARKS</b>														
Abbie Perry	2.5			1-F			1-F							
Brousseau	5	1-G		1-F			1-G	2-G		1-G				
Fagan	1.5			1-G		1-F	1-G							
Green Hill	20			1-E		1-E	1-E	2-E	1-F					
Saugatucket	4			1-F										1-G
Town Farm	3	1-G					1-F							
Treaty Rock	8			1-F	0.25-F		1-G							
Village Green	6.5						1-G	2-E						1-F
<b>COMMUNITY PARKS</b>														
Curtis Corner MS	53	1-G	1-G		0.5-G		1-G	5-G		2-G				
Old Mountain Field	60	1-G	1-G	2-G	1.5-G	1-F	1-G	4-F			1-F	1-G		
Tuckertown	65	2-G		2-F*	0.5-F	2-E	1-G	2-F*		3-G				
West Kingston	12		2-E	2-E		1-E	1-E	2-G	2-E					
Broad Rock Playfields	151	2-G	1-G	1-G				6-E		2-G			1-E	
<b>SPECIAL USE PARKS</b>														
Hazard Garden	1				.25-F									
Marina Park	12				0.5-E	1-G								1-E
Town Beach	20					2-E	1-F*		1-E					
Tri-Pond	99				15.5-G	1-F								
Bike Path	15				7-G									
Domenic Savio Property	13									1-F				
<b>TOTAL</b>	<b>551.5</b>	<b>8</b>	<b>5</b>	<b>12</b>	<b>13</b>	<b>10</b>	<b>12</b>	<b>25</b>	<b>4</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>



**TABLE 26: INVENTORY OF OTHER RECREATIONAL FACILITIES IN SOUTH KINGSTOWN**

Source: South Kingstown Parks & Recreation Division

NON-MUNICIPAL PARKS	ACRES	Baseball Fields	Softball Fields	Basketball Courts	Swimming Pools	Paths (miles)	Picnic Area	Playground	Tennis Courts	Volleyball Court	Soccer Fields	Inline Rink	Skate Park	Dog Park	Stage Area
University of Rhode Island					2				12						
Prout School		1	1						6		1				
Potter Woods		1		1		0.5	1	1							
YMCA of South County				2	1										
School Department				5				5			5				
Matunuck Community Center				1											
<b>TOTAL</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>3</b>	<b>0.5</b>	<b>1</b>	<b>6</b>	<b>18</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**TABLE 27: SUMMARY OF RECREATIONAL FACILITIES IN SOUTH KINGSTOWN**

Source: South Kingstown Parks & Recreation Division

	ACRES	Baseball Fields	Softball Fields	Basketball Courts	Paths (miles)	Picnic Area	Playground	Tennis Courts	Volleyball Court	Soccer Fields	Inline Rink	Skate Park	Dog Park	Stage Area
Municipal	551.5	8	5	12	13	10	12	25	4	9	1	1	1	3
Non-Municipal	-	2	1	9	0.5	1	6	18	0	9	0	0	0	0
<b>TOTAL</b>	<b>551.5</b>	<b>10</b>	<b>6</b>	<b>21</b>	<b>13.5</b>	<b>11</b>	<b>18</b>	<b>43</b>	<b>4</b>	<b>18</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>


**TABLE 28: NRPA PARK TYPE STANDARDS**

Source: National Recreation and Park Association (NRPA) Standards

USE	SERVICE AREA	DESIRABLE SIZE	POPULATION-BASED NEED	DESIRABLE SITE CHARACTERISTICS
<b>MINI PARK</b>				
Specialized facilities that serve a concentrated or limited population or specific group such as young children or senior citizens	Less than 1/4 mile radius	1 acre or less	0.25 to 0.5 acres per 1,000 persons	Within neighborhoods and in close proximity to apartment complexes, townhouse development or housing for the elderly.
<b>PLAYGROUND</b>				
Primarily for children aged 5-12. Includes an apparatus area for older children and generally a field area for games and informal play, a passive area for older children and an area for court games. Smaller than a neighborhood park but containing similar facilities.	1/4 mile to 1/2 mile	2 to 10 acres	0.5 to 1.5 acres per 1,000 persons	Suited for intense development. Easily accessible to neighborhood population - geographically centered with safe walking/biking access. May be developed as a school park facility.
<b>NEIGHBORHOOD PARK</b>				
Area for intense recreational activities such as field games, court games, crafts, playground apparatus area, skating, picnicking, wading pools, etc.	1/4 mile to 1/2 mile to serve a population up to 5,000	15+ acres	1.0 to 2.0 acres per 1,000 persons	Suited for intense development. Easily accessible to neighborhood population - geographically centered with safe walking/biking access. May be developed as a school park facility.
<b>COMMUNITY PARK</b>				
Area of diverse environmental quality. May include areas suited for intense recreational facilities such as athletic complexes, large swimming pools. May be an area of natural quality for outdoor recreation such as walking, viewing, sitting, and picnicking. May be any combination of the above depending upon site suitability and community need.	Several neighborhoods, 1 to 2 mile radius	25+ acres	5.0 to 8.0 acres per 1,000 persons	May include natural features such as water bodies and areas suited for intense development. Easily accessible to neighborhood served.

**TABLE 29: SOUTH KINGSTOWN STANDARDS FOR FACILITY OFFERINGS**

ACTIVITY	SERVICE RADIUS	# NEEDED PER POPULATION
<b>Basketball</b>	1/4 to 1/2 mile	1 per 5,000 (indoor) 2 per 2,000 (outdoor)
<b>Tennis</b>	1/4 to 1/2 mile	1 court per 2,000
<b>Volleyball</b>	1/4 to 1/2 mile	1 court per 5,000
<b>Baseball</b>	1/4 to 1/2 mile	1 per 4,000 1 per 30,000 (lighted)
<b>Soccer</b>	1 to 2 miles	1 per 2,000
<b>Softball</b>	1/4 to 1/2 mile	1 per 3,000
<b>Multi-Purpose (basketball, volleyball, tennis)</b>	1 to 2 miles	1 per 1,000

**TABLE 30: ADDITIONAL SOUTH KINGSTOWN PARK TYPE STANDARDS**

Source: South Kingstown Parks & Recreation Division

USE	DESIRABLE SITE CHARACTERISTICS
<b>LINEAR PARK</b>	
Area developed for one or more varying modes of recreational travel such as hiking, biking, snowmobiling, horseback riding, cross-country skiing, canoeing and pleasure driving. May include active play areas.	Built or natural corridors such as utility rights-of-way, bluff lines, vegetation and roads that link other components of the recreation system or community facilities.
<b>CONSERVATION AREAS</b>	
Protection and management of the natural/cultural environment with recreation use as a secondary objective. Includes Open Space and undeveloped lands not elsewhere classified.	Variable depending on the resource being protected.
<b>SPECIAL-USE: BEACH</b>	
Area for waterfront recreational activities such as field games, court games, crafts, playground apparatus area, skating, picnicking, wading pools, etc.	Waterfront area supporting activities such as sun-bathing and swimming.
<b>SPECIAL-USE: SALT &amp; FRESH WATER ACCESS</b>	
Area for waterfront recreational activities such as field games, court games, crafts, playground apparatus area, skating, picnicking, wading pools, etc.	Areas providing other physical or visual access to the water. Includes fishing areas, boat access, scenic overlooks, access strips, etc.



**TABLE 31: COMPARISON OF TOWN-OWNED PARKS & COMMUNITY NEEDS**

SITE TYPE	TOWN-OWNED ACREAGE	TOTAL ACREAGE (including Town, State, Federal & private)	ACTIVE RECREATION NEED IN ACRES (range of low-high standards)	PROGRESS TOWARD NEED
<b>Mini Park</b>	5.1	5.6	7.7 - 15.4	<b>Need: 2.1 acres</b>
<b>Playground</b>	33.9	57.7	15.4 - 46.1	Exceeded
<b>Neighborhood Park</b>	46.16	46.16	30.7 - 61.4	Met
<b>Community Park</b>	259.9	289.9	153.6 - 245.7	Exceeded
<b>Linear Park</b>	11.1	17.9		
<b>Special-Use</b>				
Beach	19.2	47		
Saltwater Access	2.28	15.12		
Freshwater Access	2.6	27.33		

Many sites includes various facilities such as baseball fields, basketball courts, and tennis courts. The Town of South Kingstown recently completed the construction of the South Kingstown Community Recreation Center on Broad Rock Road. This indoor facility provides an indoor track, indoor basketball courts, locker rooms, indoor batting cages, multi-purpose rooms, and a small exercise room. This space is frequently used for sporting events, practice, and open use by residents of all ages. This facility adds to the indoor recreational spaces available at the Neighborhood Guild and within the properties owned by the school department.

The data of previous inventories has been updated and added to, using survey data collected by University of Rhode Island (URI) students for the Parks and Recreation Division in 2017, and community engagement efforts such as the Healthy Place by Design project of 2014. This inventory provides updated data utilizing the methodology for the 1992 Comprehensive Plan's Open Space/Recreation Needs Analysis as supported by the Town's Local Recreation Conservation and Open Space Plan (1990). This plan was prepared within the guidelines of the Standards for Local Recreation,

Conservation and Open Space Plans (Rhode Island State Planning Council, Recreation Resources Review Committee, June 1989).

## NEEDS & OPPORTUNITIES

### METHODOLOGY FOR ASSESSING NEEDS

To properly assess the existing conditions of recreational facilities, a community must consider:

- ◆ the amount of land available for recreation as compared to the population;
- ◆ the geographic distribution of facilities, to ensure all areas of the municipality have access to appropriate facilities;
- ◆ the type of facilities offered relative to community demographics; and
- ◆ the quality of the existing facilities.

The existing conditions section provided data on the location, size, use and condition of recreational facilities which serve the residents of South Kingstown. In developing the needs and opportunities analysis, the Town used, to the extent possible, accepted standards and quantitative data. These data, along with input solicited from members of the community, help to identify the community's needs and opportunities to improve recreational facilities.

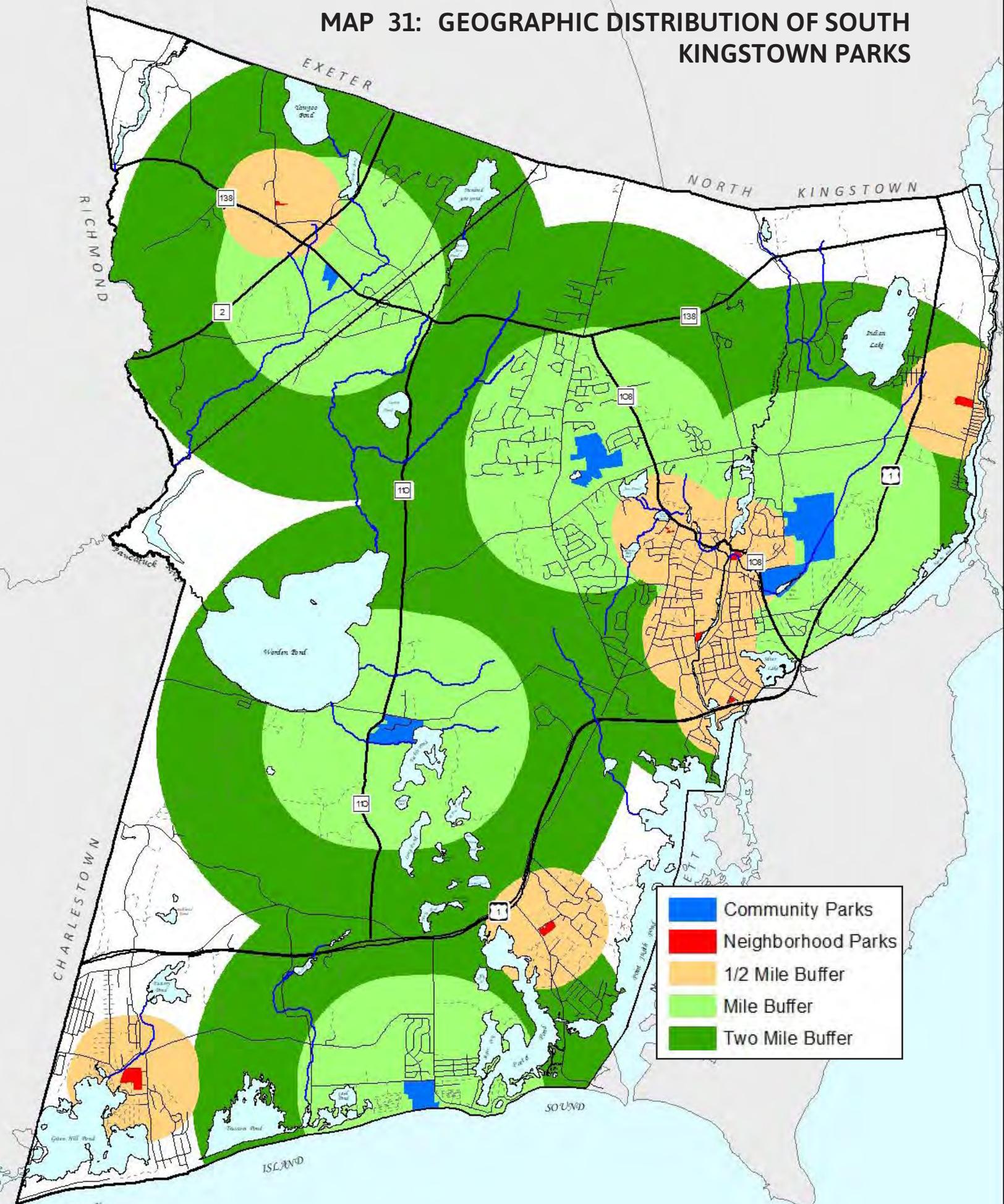


The National Recreation and Park Association (NRPA) has established standards for service area, size, and population needs relative to park type, as outlined in **Table 28: NRPA Park Type Standards**. The facility standards presented in **Table 29: South Kingstown Standards for Facility Offerings** have been adopted by the Town. These standards are based upon recommendations of the NRPA with some local variations, including minor deviations in activity classification or setting higher service standards. In addition, there are other facilities for which the Town has not adopted any standards for, such as trails, volleyball courts, and other field sports.

**Table 31: Comparison of Town-Owned Parks & Community Needs** provides an assessment of the parks provided by the Town, by type, relative to the community's need for active recreation facilities. Existing conditions indicate that an additional 2.1 acres of "mini park" area should be established to meet the minimum needs of the community.

To assess the geographic distribution of outdoor recreational facilities, a mapping analysis was completed. **Map 31: Geographic Distribution of South Kingstown Parks** depicts the location of existing parks and provides

# MAP 31: GEOGRAPHIC DISTRIBUTION OF SOUTH KINGSTOWN PARKS



the service area associated with each park as established in **Table 29: South Kingstown Standards for Facility Offerings**.

## FINDINGS OF 2017 SURVEY

In 2017, students at the University of Rhode Island conducted a survey to evaluate the recreation trends of the Town. Over 359 respondents participated, 78% of respondents were female, 79% were married, and 39% had children at home. More detailed information on the survey can be found by contacting the Parks and Recreation Division. Key findings of the survey relevant to community recreational needs are provided below:

- The William O’Neill Bike Path, Old Mountain Field and the Town Beach are the most popular sites.
- Over 90% of respondents found the Town’s recreation offerings “good” or “excellent”
- Art classes, fitness classes, and nature programs were the three most requested areas for expanded programming
- Restroom improvements at Old Mountain Field were most commonly identified as a facility need.

## FINDINGS OF THE HEALTHY PLACES BY DESIGN PROJECT

The Healthy Places by Design project (August 2011 to June 2012) engaged the community to understand the challenges and opportunities related to public health and the built environment. The major focal points of the Healthy Places by Design process were to increase walkability and bikeability, increase access to recreation, address design of villages and neighborhoods, and increase access to healthy foods. This process also touched on many overlapping issues, such as: planning for villages, multi-modal transportation, public transit, open space preservation, agricultural protection, improving services and facilities, collaboration with URI, and other related topics. Major findings and recommendations of the Healthy Places by Design process include:

- Increase safety and connections of pedestrian and bicycle networks
- Promote street design that is safe, attractive and efficient for pedestrians, bicyclists and transit riders
- Plan and implement strategies for a greenways network that is accessible by all users
- Plan for and implement strategies to raise awareness of resources and design/redesign existing and future facilities to be safe and functional for all users



**TABLE 32: FUTURE (2026) ACTIVE RECREATIONAL FACILITY NEEDS**

Source: Town of South Kingstown Parks and Recreation Division

FACILITY TYPE	# PER POPULATION	# OF EXISTING FACILITIES	ANTICIPATED # NEEDED IN 2026	FUTURE NEED GAP
<b>Basketball Courts</b>	1 per 2,000	21	20	0
<b>Tennis Courts</b>	1 per 2,000	43	20	0
<b>Baseball Fields</b>	1 per 4,000	10	10	0
<b>Soccer Fields</b>	1 per 2,000	18	20	2
<b>Softball Fields</b>	1 per 3,000	6	14	8

Notes: (Based on Town Standards and 2017 Population of 30,712 and projected 2026 population of 40,660).

## LAND AREA & POPULATION-BASED NEEDS

This section includes a review and summary of the condition of existing sites and facilities, the current maintenance program and future needs, available existing lands for active recreation, space or site type needs based upon minimum NRPA/Town standards, facility needs based upon minimum NRPA/Town standards, and other identified space or site needs. This information is based upon the future build-out scenario discussed in the Land Use element.

Plans for the development of a greenway network throughout the community continue. In 2017, URI students conducted a studio project to identify potential, conceptual improvements to the Saugatucket Park on High Street. The Town continues to invest in ongoing improvements to raise awareness of resources, and to improve existing and planned facilities to meet the needs of the community. Discussion of street design and circulation findings are discussed in the circulation section of this plan.

## FACILITY NEEDS FOR ACTIVE RECREATION

Currently, the Town has a minor shortage of mini park areas as noted in **Table 31: Comparison of Town-Owned Parks & Community Needs**. As South Kingstown's population grows, additional small park areas (known as mini parks), located close to densely developed areas, may be needed. Additional neighborhood parks, which customarily include sports fields and other intensive recreational uses, may also be needed.

To establish facility needs for 2017 (Baseline) and 2026, it is necessary to apply Town standards to existing and potential inventory in light of



current and anticipated population changes. These needs are expressed in **Table 32: Future (2026) Active Recreational Facility Needs.**

Currently, as noted in the Existing Conditions analysis, the community may have a need for an additional four (4) softball fields based upon the Town adopted standards. In the future, as South Kingstown's population increases additional needs for more soccer fields, baseball fields, and softball fields may exist. The Town must monitor the usage of existing resources to determine if this analysis is supported by the field usage rates throughout the Town.



## MAINTENANCE

Responsibility for maintenance of recreation sites and facilities is shared between the Parks and Recreation Division and the Public Services Departments. The Parks and Recreation Division performs the broadest scope of tasks related to the maintenance and upkeep of the Town's varied inventory of active and passive recreation facilities, including turf maintenance (fertilization, aeration, disease and pest control, irrigation, and mowing), facilities repair, trash/litter pick up and care of special plantings. The Parks and Recreation Division has primary responsibility for mowing at most recreational sites. The Town has established an Adopt-a-Park program to engage outside entities in maintenance and improvement projects at Town-owned recreational sites. Currently, 20 organizations participate in this program.

Addressing community need for recreation facilities and programs is a high priority for the Town and is administered through the Town's annual Capital Improvement Program (CIP). Town staff continues to monitor the condition of facilities as they age and experience wear and tear in order to determine necessary maintenance and improvements. The CIP forecasts over a 6-year time frame and currently identifies an additional \$2,635,000 of investment into South Kingstown's parks in the coming years. Town staff also continues to evaluate recreational program offerings on an annual basis in an attempt to address the evolving needs of the community. During fiscal year 2017-2018, over 1,060 programs in sports, fitness, community education, and arts were offered for preschool through senior citizens.

## CHANGING DEMOGRAPHICS & IMPACT ON FACILITIES

As South Kingstown's population demographics continue to change, we anticipate an increase the number of Town residents aged 55 and over. As the population ages it is necessary for the Town to continue to evaluate the age-based recreational needs of the community. Ongoing monitoring of program usages and continued improvement to the accessibility of Town-owned recreation facilities are of the utmost importance. This focus also aids



## RECREATION ACTION PLAN SUMMARY

Goal 1: Provide active and passive recreational services to support a healthy environment and to meet town, state, and federal requirements.	
POLICIES	ACTIONS
<p><b>Policy 1.1</b> Land acquisitions for expanding active and passive recreational services will be based upon a current needs assessment.</p>	<p><b>Action 1.1</b> Reassess recreation needs of the town in accordance with National Recreation and Park Association guidance to use local conditions and unique characteristics of the town to set Park Metrics to determine need.</p>

Goal 2: Publicly-owned and controlled open space and all important public natural and cultural resources will be accessible to all citizens, and all current and historic rights-of-way which ensure access to these areas will be protected.	
POLICIES	ACTIONS
<p><b>Policy 2.1</b> Protect all current and historic rights of way to natural and cultural resources.</p>	<p><b>Action 2-1</b> Educate adjacent landowners about public access to the shore via paper streets and other deeded access ways in proximity to their properties and ensure signage remains intact.</p>

Goal 3: The changing recreational needs of the community will be met, in accordance with town, state and federal standards.	
POLICIES	ACTIONS
<p><b>Policy 3.1</b> Continue to use existing vacant and/or underutilized town-owned lands to meet recreation and open space needs.</p> <p><b>Policy 3.2</b> Continue to use school properties to provide recreation space within the limits of safety, maintenance, security and contractual issues.</p> <p><i>(continued on next page)</i></p>	<p><b>Action 3-1</b> The Town shall identify specific town-owned lands for the potential conversion to recreation and open space facilities.</p> <p><b>Action 3-2</b> To service the northeast area of South Kingstown, the Town will investigate the development of community park facilities within the reclaimed areas at the Rose Hill Transfer Station.</p> <p><b>Action 3-3</b> Explore and determine the feasibility of expanding the use of the Peace Dale Office Building for providing community recreation services. The expanded facilities may include an art studio, additional art performance space, and general programming areas.</p> <p><i>(continued on next page)</i></p>



**Goal 3:** The changing recreational needs of the community will be met, in accordance with town, state and federal standards.

POLICIES	ACTIONS
<p><b>Policy 3.3</b> Develop additional indoor recreation space for community activities.</p> <p><b>Policy 3.4</b> The Parks and Recreation Department shall continue to expand recreational opportunities and programming efforts for both youth and teens and South Kingstown’s aging population.</p>  <p><b>Policy 3.5</b> The Town will assess the potential construction of recreational facilities on the Rose Hill Superfund Solid Waste Area.</p>  <p><b>Policy 3.6.</b> Explore oportunities for reuse of underutilized spaces to host more art classes, fitness and nature programs.</p>	<p><b>Action 3-4</b> Research the establishment of additional indoor ice facilities in South Kingstown.</p> <p><b>Action 3-5</b> Evaluate and implement new methods for communicating financial aid opportunities for youth and teen recreation programming.</p> <p><b>Action 3-6</b> Pursue revenue generating opportunities and activities to offset operation costs associated with the provision of community recreational program and facilities.</p>

**Goal 4:** Active recreation areas and other properties under the Parks and Recreation Department jurisdiction will be maintained to meet the needs of all users.

POLICIES	ACTIONS
<p><b>Policy 4.1</b> Continue to provide an active maintenance and rehabilitation program to maintain and upgrade existing sites and facilities to ensure a safe and high-quality experience for all users.</p> <p><b>Policy 4.2</b> Improve recreational facilities to meet the current and projected needs of all users.</p>  <p><b>Policy 4.3</b> The Parks and Recreation Department will explore funding opportunities for improvements to and protection of the Town Beach.</p>  <p><i>(continued on next page)</i></p>	<p><b>Action 4-1</b> Explore opportunities for community groups and agencies to take on a more direct role and involvement in maintenance and service functions.</p>  <p><b>Action 4-2</b> Outsource maintenance of a majority of non-park facilities as outlined in the CIP to provide town maintenance crews with additional capacity to absorb the new facilities.</p> <p><b>Action 4-3</b> Improve the accessibility of the town-owned recreation facilities, where appropriate, to ensure Americans with Disabilities Act (ADA) accessibility to Parks and Recreation Department activities in connection with planned improvements.</p>   <p><i>(continued on next page)</i></p>



**Goal 4:** Active recreation areas and other properties under the Parks and Recreation Department jurisdiction will be maintained to meet the needs of all users.

POLICIES	ACTIONS
<p><b>Policy 4.4</b> Prioritize projects that build on existing infrastructure, ensuring that new recreational resources are well-connected to existing bike paths, foot paths, parks, open spaces, and other facilities.</p>   <p><b>Policy 4.5</b> Replace outdoor lighting at recreation facilities with dark-sky complaint fixtures in locations where they are not currently used.</p>	<p><b>Action 4-4</b> Assess options for offering on-line registration/reservation capabilities to the public as a more streamlined and efficient customer service function; and select the most appropriate and cost-effective tool.</p> <p><b>Action 4-5</b> Develop the Noyes Farm property as a recreational amenity to be operated and maintained by the Department of Parks and Recreation.</p> <p><b>Action 4-6</b> Evaluate opportunities to provide youth and teens positive alternatives for their free time, with a focus on providing activities between 2 p.m. and 6 p.m. on weekdays, and on Friday and Saturday nights.</p>  

**Goal 5:** The public will be fully aware of recreation programs and there will be a means of providing for citizen and stakeholder input on recreation policy.

POLICIES	ACTIONS
<p><b>Policy 5.1</b> Continue to sponsor public workshops, seminars, and other outreach tools to help inform its citizenry of recreation programs and provide a means for citizen and stakeholder input.</p>  <p><b>Policy 5.2</b> Encourage and support improved coordination amongst local businesses, recreation providers, and the Parks and Recreation Division.</p> 	<p><b>Action 5-1</b> Develop and regularly update an interactive web-based map that will provide citizens with a mix of visual and narrative information regarding recreation resources.</p> 



# SERVICES & FACILITIES

---



## VISION

To provide the Town with basic public services and facilities in a **prompt** and **efficient** manner.

Through implementation of the Services and Facilities Element the Town will continue to provide services compatible with its village and rural tradition, within the constraints of limited fiscal resources. The Town recognizes that public participation is critical to validating town governance. The Town will improve the quality of public education for all its citizens. The Town will continue to manage and protect its public water supply system and groundwater resources and will work with public water suppliers to ensure that the quality and quantity of water for current and future residents are adequate. The density of development allowed in environmentally sensitive areas will be based upon protection and stewardship of environmental resources and not by technology advancements in wastewater disposal system. The Town will continue its long-term stormwater management program to protect surface and groundwater resources. The Town will implement the Services and Facilities element of the Comprehensive Plan through the Capital Improvement Program.

---



## SERVICES & FACILITIES GOALS

**Goal 1:** The Town will continue to provide high quality municipal services in a cost-effective manner, as required to serve an expanding community and to integrate the Town’s growth strategies program with long-range utility plans.



**Goal 2:** The Town will continue to provide effective wastewater management through a variety of strategies designed to protect public health and the natural environment.



**Goal 3:** Existing water resources will be managed and protected for present and future residential and non-residential use in accordance with growth management strategies developed by the Town.

**Goal 4:** The Town will continue to a solid waste management strategy which focuses on waste reduction, litter control and recycling, and waste management programs which are cost-effective and self-sufficient to the greatest extent possible.

**Goal 5:** The Town will continue an effective public works program which recognizes the importance of the maintenance and construction of safe and efficient roads, bridges, sidewalks, bike paths, storm drains, and parks to serve its residents.



**Goal 6:** A long-range program of effective stormwater management will be in place, designed to protect its residents from flooding, to control erosion and sedimentation, and to maintain both surface and groundwater quality and quantity.

**Goal 7:** The Town’s professional police force, dedicated to upholding the law, ensuring the safety and best welfare of the town’s residents, and respecting the rights of all citizens, will continue to be fully supported.

**Goal 8:** The Town’s volunteer fire departments will continue to be supported and assisted in their efforts to provide protective services.

**Goal 9:** Town residents will continue to be provided with the opportunity for a quality education and superior school facilities.

**Goal 10:** The diverse needs of our citizens will be met through expanded and improved public library services and facilities.

**Goal 11:** The Town will continue to provide the citizens of the town with a wide range of effective human service programs and facilities, in cooperation with other public, private and non-profit agencies and groups.





**Goal 12:** The South Kingstown Parks and Recreation and Senior Services Divisions will continue serve the community by providing enriching recreation experiences and quality facilities to support a healthy environment.

**Goal 13:** The Town will continue an emergency management response program that recognizes the importance of providing protection to citizens and property through public education, municipal preparedness plans and adequate training of key personnel.

## GUIDING PRINCIPLES



- ◆ Development of properties depicted on **Map 2: Sewer Service Areas** as within the area depicted as either “Existing Connection Available” or “Sewer Main Extension Required” are considered the “Existing and/or Future Sewer Service Area,” as referenced in Section 19-115 of the Town Code of Ordinances. Section 19-115 establishes the criteria for development of properties within the “Existing and/or Future Sewer Service Area.” Pursuant to Section 19-115, extension of sewer service outside of the area defined as “Sewer Main Extension Required” shall require amendment of **Map 2: Sewer Service Areas**.
- ◆ Development parcels not serviced by sanitary sewers, whether existing or proposed, are not to be developed at high densities.
- ◆ The Town discourages proposals to extend sewer service outside of the Future Sewer Service Area shown on **Map 2: Sewer Service Areas**, except in circumstances where high density development is proposed adjacent to or within the core village areas.
- ◆ Inclusion of infrastructure upgrades and enhancements in the Town’s CIP is essential to support the economic development needs of the local business community.
- ◆ It is critical that infrastructure upgrades and enhancements consider the changing climate and are designed and implemented with long-term resiliency in mind.
- ◆ The local fire districts provide a critical public safety function for the community.
- ◆ Protection of groundwater quality is considered when evaluating requests for funding through the Town’s Open Space Acquisition program.
- ◆ The Senior Services Department’s goal is to bring various senior service groups and organizations together to coordinate their activities and integrate their work.





## CURRENT PRACTICE

### GENERAL

- Annually, the Town Manager submits the Capital Improvement Program (CIP) to the Town Council. This document addresses capital improvement funding within the current year and extends out with a 5-year funding projection.
- The current six-year CIP identifies funding allocated each year for total maximum daily load (TMDL) within impaired wasterheds. Implementation of stormwater BMPs for all TMDLs in South Kingstown will likely take in excess of thirty years to design and construct.
- The intent of the CIP is:
  - To provide a comprehensive community needs statement;
  - To develop a prioritized implementation schedule for meeting the identified community's needs; and
  - To provide financial data relative to the community's ability to manage and finance the costs associated with meeting the identified needs.
- The Town evaluates Public Services Department staffing and equipment needs in light of accomplishing the proposed work programs outlined in the CIP.
- Equipment purchases are made in conformance with the Town's 6-year CIP.
- The Town supports the identification of critical resource areas that may warrant additional consideration by RIDEM in their wetland permit review process, as the Town understands such a local identification process has been proposed by RIDEM.

### WASTEWATER INFRASTRUCTURE

- The Town comprehensively re-evaluates the adequacy of the wastewater treatment facility every five years when its license is renewed. An annual review shall also be undertaken.
- Local collection system and pump station improvements are made in accordance with the recommendations set forth within the Capital Improvement Program.
- The Town administers the On-site Wastewater Management Ordinance, requiring inspection of on-site wastewater treatment system inspections in prioritized districts.





SUSTAINABILITY

## DRINKING WATER INFRASTRUCTURE

- The Planning Department coordinates the policies of area water suppliers with wastewater management needs.
- The Town utilizes its utility planning documents, such as the Water Supply System Management Plans, in guiding long-range planning of Town services and facilities.
- The Town's Groundwater Protection Overlay District contains regulations intended to protect the quality and quantity of potable water produced from sole-source aquifers.
- The Town applies water conservation measures in its municipal facilities and through its South Shore and Middlebridge water systems during periods of drought or high system demand, including bans on outdoor water usage and water rationing.
- The Town's Public Services Department conducts an annual evaluation and a 5-year comprehensive evaluation of compliance with potable water system standards. Any necessary improvements are then addressed in the Town's annual operating budget and 6-year Capital Improvement Program (CIP).
- The Town works with the Rhode Island Water Resources Board, Suez Water, URI, and Kingston Water to ensure that emergency water supply is available.

## STORMWATER MANAGEMENT INFRASTRUCTURE

- The Town actively maintains the stormwater management infrastructure associated with Town-owned public rights-of-way.



SUSTAINABILITY

## SOLID WASTE MANAGEMENT & RECYCLING

- The Town manages its community recycling program through the "bag and tag" program at the Rose Hill Transfer Station.
- The Town promotes special waste collection at the Rose Hill Regional Transfer Station (rigid plastic, used cooking oil).
- The Town is responsible for implementing the long-term monitoring plans for the closed landfills at the Rose Hill Solid Waste Area and the West Kingston Solid Waste Area.
- The Town continues to follow the terms of the January 3, 2003 Consent Decree for the Rose Hill Solid Waste Area, with U.S. Environmental Protection Agency (EPA) and RI Department of Environmental Management (RIDEM) as required.



- Funding and construction of improvements to State rights-of-way is the responsibility of the State of Rhode Island, and funding of such improvements is outlined in the State Transportation Improvement Program. When solicited by the State, the Town submits applications for improvements to State rights-of-way intended to meet the needs of the community.

### POLICE & EMERGENCY MEDICAL SERVICES FACILITIES

- The Police Department conducts an annual analysis of existing and future needs in coordination with the writing of the Town operation budget and CIP, and a more comprehensive needs analysis every 5-years.
- Annually, the Police Department collects data to assist in assessing performance and determining if additional resources are necessary, including data related to service calls, crime rate and type, and vehicular accidents.
- Town staff regularly assesses emergency medical service program needs to ensure that appropriate levels of service are met.
- The Police Department maintains an ongoing emergency management response program with the Rhode Island Emergency Management Agency and the Federal Emergency Management Agency.
- The Town offers both on- and off-site training and education for emergency services staff, to keep everyone well-informed of the latest programs, protocol, techniques and methods.



### FIRE DEPARTMENTS

- The Town evaluates the fire districts' compliance with ISO standards annually to coincide with the annual budgets.

### SCHOOL FACILITIES

- The South Kingstown School District regularly considers and evaluates new educational programs.

### LIBRARY FACILITIES

- The Library Department annually assesses its needs according to internal standards of performance based on actual usage and coordinates the assessments with the Town's operating and capital budgets and grant requirements. A more comprehensive review of needs is conducted every 5-years.



CHANGING  
POPULATION

## SENIOR SERVICES

- The Senior Services Center program manages the operation and expansion of services, including advocacy and technical assistance, particularly through the Hospital Elder Liaison Program with South County Hospital, Southern Rhode Island Volunteers, and other ongoing programs.

## BASELINE INFORMATION

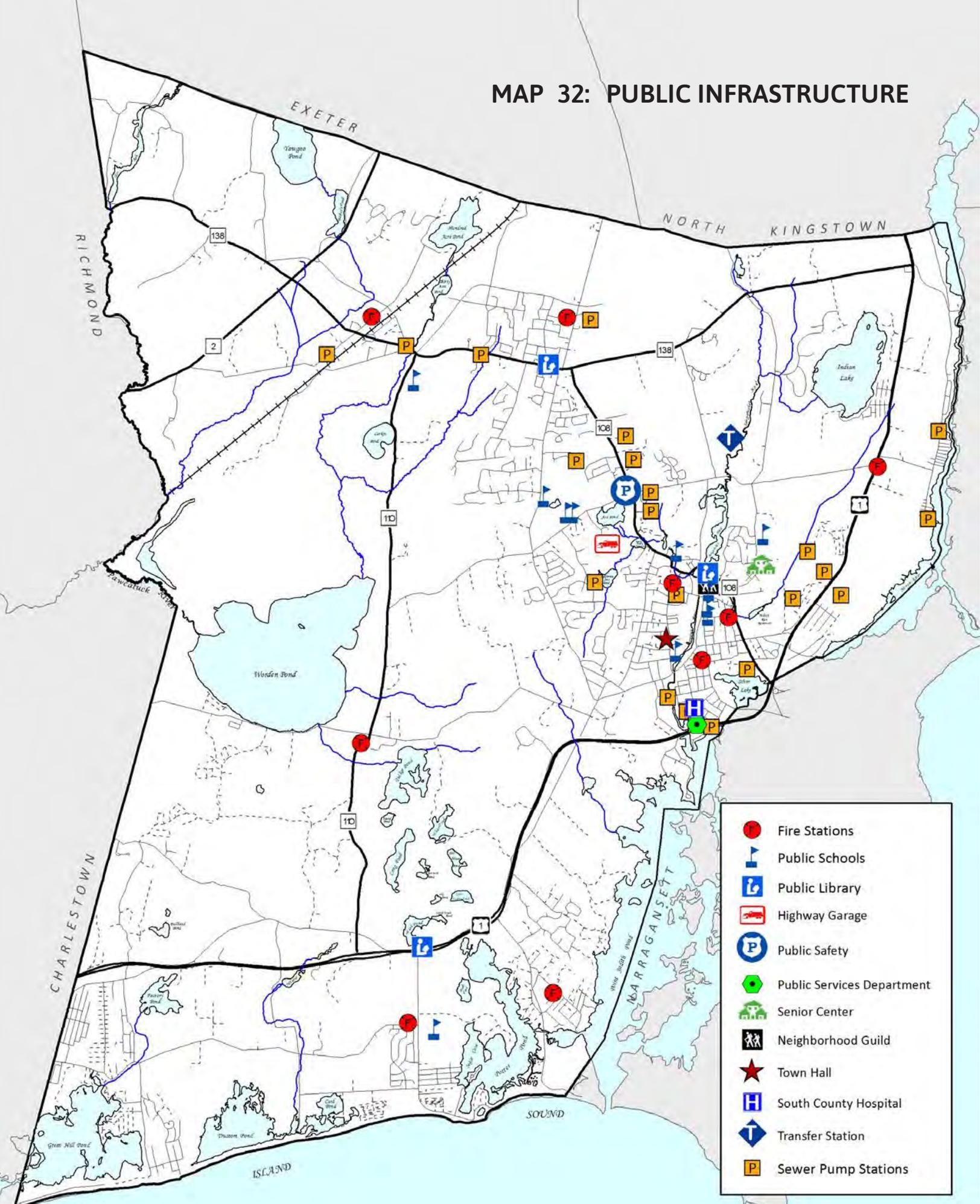
### OVERVIEW

**Map 32: Public Infrastructure** shows the public facilities and major infrastructure within South Kingstown. The Services and Facilities Element considers municipal services provided by the Town of South Kingstown's Department of Public Services, the Police Department, the School Department, the Senior Services Department and the Library Department. It also addresses services of private water and fire districts within the Town. The ability of the Town to provide these services within the existing municipal budget is increasingly challenging, given recent increases in the school budget, funding cuts from the state level, and other factors associated with the difficult economic climate.

In the tradition of a rural community, the Town does not provide typical services that are considered basic in more urbanized areas (i.e., paid trash removal, paid fire and emergency services). Part of the "small town" character of the community comes from supporting the volunteer fire districts, taking household trash to the transfer station, and viewing the night sky without the glare of streetlights. In particular, the tradition of volunteer fire companies within the Town provides the community with essential public safety services at a fraction of the cost to the taxpayers that would be incurred if the Town were to take over these functions. With increasing development and relocation of people from more metropolitan areas of the state or from out of state, the level of expectation of municipal services is increasing.

Various municipal departments are directly charged with protecting the quality of life so important to the citizens of South Kingstown. In particular, the Public Services Department is responsible for services and facilities related to: drinking water; wastewater; town roadway maintenance, repairs and construction; stormwater maintenance; engineering services; solid waste removal; and the Town's Tree Program. The Public Services Department also manages the Town's sewer service and wastewater treatment at the regional plant in Narragansett - actions that positively affect the groundwater and surface water quality of sewered areas. Sewer service allows for a higher density of development as compared to on-site wastewater treatment systems (OWTS), and this creates several growth management implications.

# MAP 32: PUBLIC INFRASTRUCTURE





The Town has defined a boundary for the Sewer Service Area as shown in **Map 2: Sewer Service Areas** in the Land Use Chapter. A higher density of development (with potentially more affordable homes) is possible in sewerred areas because the setback requirements between OWTS and wells can be avoided. Sewer service also has the potential to enable open space or conservation zoning where houses are built on smaller lots and a portion of the subdivision is retained for common open space (with no net increase in the number of allowable houses). Sewer extensions also enable development of industrial land use within critical groundwater aquifer recharge zones.

In an effort to provide administrative and cost efficiencies the Parks and Recreation and the Senior Services Divisions were consolidated in terms of administration under the Director of Leisure Services, a position created in 2009. While both entities retain their respective identities and generalized functional programmatic responsibilities, this consolidation has achieved the goals of cost efficiency and administrative continuity envisioned with the consolidation. Although administered by a single entity, for the purposes of this plan, the Parks and Recreation Division is addressed under the Recreation Element, whereas Senior Services will be discussed separately in this element.

## INFRASTRUCTURE INVENTORY

An infrastructure inventory enables a community to assess the capacities of its public systems and to balance this against future demands. Thus, it allows a community to recognize, far in advance, the types of major public investments it will need to make in infrastructure, or the restrictions it will have to impose on the timing and location of growth. When existing capacity thresholds of infrastructure are reached, new capacity must be created, for example, through the addition of new sewer lines. When a threshold is reached, capital improvements need to be planned and funded to create the needed capacity. Thus, the provisions of public infrastructure, services, and facilities are closely tied to the Town's Capital Improvement Program.

### WASTEWATER INFRASTRUCTURE

Approximately 10 percent of South Kingstown's land area, which includes approximately 40 percent of the number of dwellings in Town, is served by public sewers. The remaining 60 percent of residents utilize OWTS for sanitary waste disposal. (See **Map 2: Sewer Service Areas - page 34**).

The Town is served by two sewer systems: 1) the Town-owned system (under the Public Services Department) which serves Wakefield, Peace Dale, Kingston, and Middlebridge; and, 2) the State's University of Rhode Island (URI) system, which primarily serves University-owned properties. Areas served are all interconnected, with URI sewage flowing into the



Town system at the Kingston pump station. Combined South Kingstown and URI sewage is pumped to the South Kingstown wastewater treatment plant in Narragansett near the South Kingstown border via the Silver Lake pump station. It is a regional facility serving South Kingstown, URI and Narragansett. It is a secondary treatment plant with an ocean outfall into Narragansett Bay. Capacity allotment and actual use of the treatment plant are shown in **Table 33: Sewage Treatment Plant Capacity**.

**Map 2: Sewer Service Areas** indicates certain areas in the central part of Town as being within a Future Sewer Service Area. This area is the general area of the Town where public sewer service should be considered for any significant new development. Individual developments must be reviewed on a case-by-case basis in order to determine if it is feasible to extend public sewers. The Town’s Wastewater Management Ordinance should be amended to provide connection policies for land within this area. Generally, it is the policy of the Town to encourage public sewer service to these areas in order to mitigate contamination to ground and surface waters which may result from the cumulative impacts of septic systems in high density areas. Greater emphasis for mandatory sanitary sewer connection is placed upon protection of environmental resources and wastewater disposal via sanitary sewer in the future sewer service area than economic feasibility of sanitary sewer expansion by developers undertaking land development projects.

Sewer extensions occur locally through Town Council and Planning Board approval as a Comprehensive Plan amendment, then through the State, as the wastewater authority. Areas where there is evidence of failing septic systems causing significant threat to environmentally sensitive areas may be provided with public sewers, at the expense of the property owners who

**TABLE 33: SEWAGE TREATMENT PLANT CAPACITY**

Source: Town of South Kingstown

Plant	Original Capacity %	Original MGD	Current Capacity %	Original (with 1990 expansion) MGD	2017-2018 Fiscal Year Actual MGD
<b>South Kingstown</b>	41%	1.6933	39%	2.1283	1.0222
<b>URI</b>	40%	1.6520	17%	1.6520	0.4625
<b>Narragansett</b>	19%	0.7847	44%	1.2197	1.1677
<b>Total</b>	100%	4.13	100%	5.00	2.6524

Note: 0.87 MGD constructed in 1990



receive the specific benefit, if such extension will not result in a change in the land use pattern of the area and the plant has sufficient capacity.

### WATER SUPPLY INFRASTRUCTURE

Approximately 80 percent of the Town's land area is served by private wells. The remaining 20 percent of the land area is served by one of the water systems listed below, as depicted on **Map 33: Public Water Service Areas**. These areas are business districts, fire district supplies, the University of Rhode Island, denser residential areas, and a few septic system problem areas (see **Table 34: Water Systems Facts**). It is noted that approximately 89 percent of Narragansett's water comes from sources in South Kingstown. This water serves virtually 100 percent of the residential population of Narragansett. There are several water systems in South Kingstown including one (1) Town-owned and operated system. The executive summaries from each of the water systems are attached to this Plan as **Appendix 4**.

The Town of South Kingstown South Shore water district is the only municipal water district in South Kingstown. In 2018 system improvements to reduce environmental vulnerability were made in Matunuck. During installation of the Matunuck Beach Road seawall approximately 300 feet of ductile iron water main replaced the existing water main to improve durability.

### STORMWATER MANAGEMENT INFRASTRUCTURE

The Town's storm drainage system is installed and managed by the Highway Division of the South Kingstown Public Works Department. Storm drainage systems are scattered all over South Kingstown, and the Town actively is expanding the system on an annual basis. Drainage systems tend to follow streets and are discussed briefly in the Circulation Element. Certain areas along the Saugatucket and Narrow Rivers, and coastal areas are prone to flooding.

The Town's Highway Division is responsible for inspecting and maintaining approximately 54 miles of stormwater drainage collection system, 2,712 catch basins, 358 stormwater manholes, and 361 outfalls. Drainage systems are typically localized and interconnected based upon topographical needs. Most systems are small, with four to eight catch basins and 2,000 - 3,000 feet of pipe. Most are enclosed piping systems, but natural drainage ways are used whenever possible. Discharges are to catchment basins, detention/retention ponds, streams and ponds, wooded swamps, overland flows and small ocean outfalls. There are no discharges into the sanitary sewer system. For 2011 on, all new drainage improvements are predicated on RIDEM's Low Impact Development (LID) Stormwater Guidelines. Closed drainage systems with point discharges are avoided whenever possible. An inventory of stormwater structures within the Town of South Kingstown is provided in **Table 35: Stormwater Structures in South Kingstown as of**



### TABLE 34: WATER SYSTEMS FACTS

Source: 1) Water-Supply System Management Plan, United Water, 2017; 2) Water-Supply System Management Plan, University of Rhode Island, 2018; 3) Water-Supply System Management Plan, South Kingstown Water Division, 2018; 4) Kingston Water District, District Manager, Henry Meyer, 2019

	South Kingstown	Suez Rhode Island	Kingston	URI
<b>Ownership</b>	<b>Public</b>	<b>Private</b>	<b>Public</b>	<b>State</b>
<b>Legal Jurisdiction</b>	South Shore & Middlebridge	Entire town jurisdiction	Kingston	URI-owned properties
<b>Personnel</b>	2.7	10	5	1 (system manager, 3 licensed operators)
<b># of wells in use*</b>	3 (back-up well, service water provided from Suez)	7	3	3
<b>Total Pumping Design Capacity**</b>	1.15 MGD	9.5 MGD	2.49 MGD	2.5 MGD
<b>Total Actual Use</b>	0.37 MGD	2.72 MGD	0.31 MGD	0.49 MGD
<b>Disinfection</b>	Yes, by Suez	Yes	No	Yes
<b>pH Correction***</b>	Yes, by Suez	Yes	Yes	Yes
<b>Water Quality Problems?****</b>	Iron present in the Factory Pond wells of the South Shore system prevent use at this time	No	No	No
<b>Service Area Extension Plans in the near Future?</b>	No	No	No	No

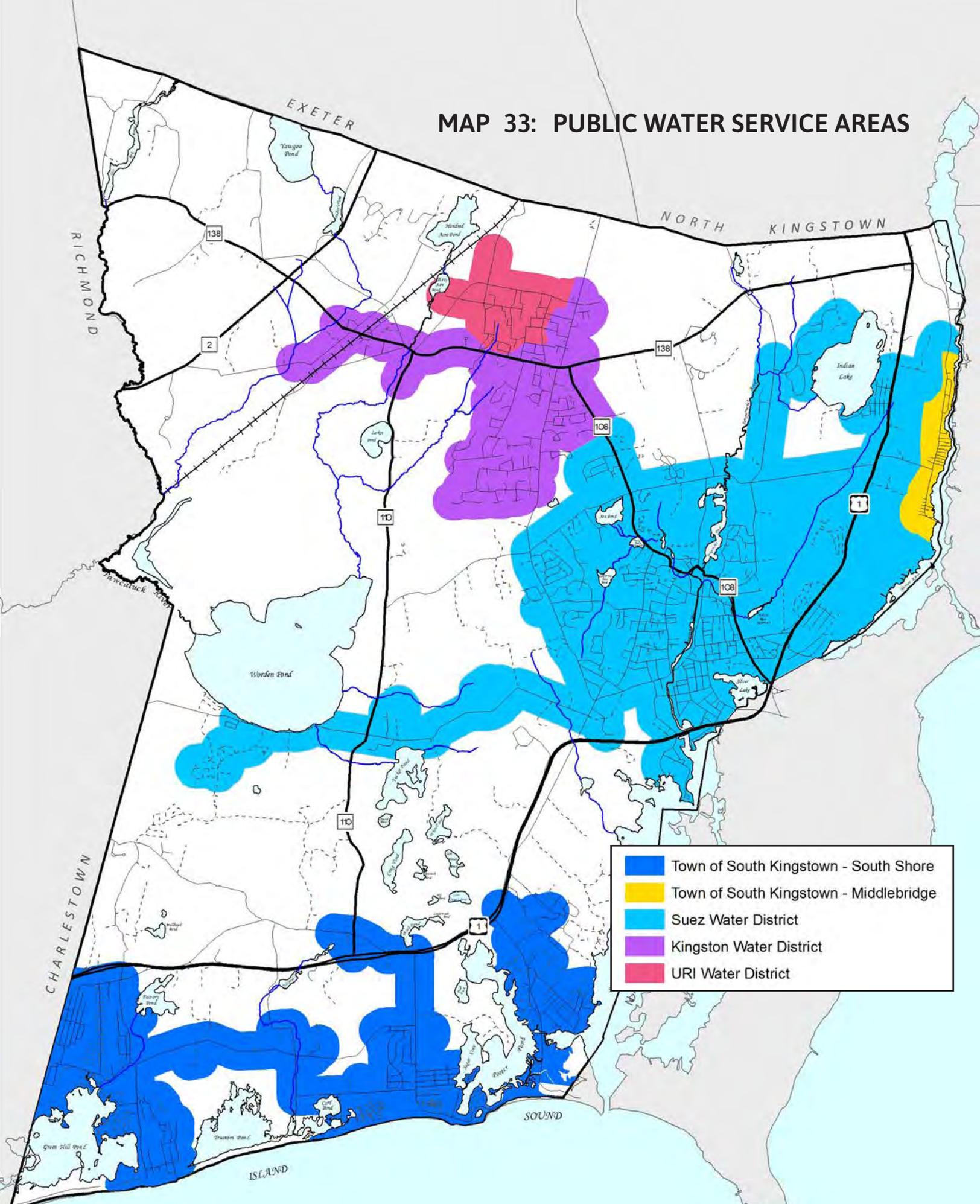
\* Wholesale water purchase from Suez Water for the South Shore and Middlebridge water systems continues at this time.

\*\* This is design capacity and does not consider safe yield (see Natural Resources Element)

\*\*\* Base chemical is added to raise the pH in order to reduce pipe corrosion.

\*\*\*\* All water officials verified that their systems meet current EPA standards.

# MAP 33: PUBLIC WATER SERVICE AREAS



<span style="color: blue;">■</span>	Town of South Kingstown - South Shore
<span style="color: yellow;">■</span>	Town of South Kingstown - Middlebridge
<span style="color: lightblue;">■</span>	Suez Water District
<span style="color: purple;">■</span>	Kingston Water District
<span style="color: pink;">■</span>	URI Water District



**March 2019.** The inventory includes infrastructure owned by the Town, the State, and private developments.

**SOLID WASTE MANAGEMENT & RECYCLING**

The Solid Waste and Recycling Division of the South Kingstown Public Services Department has been working to reduce municipal solid waste, increase recycling rates and promote overall waste stream reduction. In May 2008, the Town enacted general revisions to Chapter 15 of the Code, Solid Waste Management to align with State regulatory policy and planning requirements concerning solid waste management and recycling. Since that time South Kingstown has improved overall diversion rates to exceed the State’s RIGL 23-19-13(e)(3) recycling goal of 35% and associated 50% diversion rate for solid waste. During Fiscal Year 2017-2018 the Town had a recycling diversion rate of 49.3%. The most recent data available from RIRRC (RI Resource Recovery Corporation) indicates that for 2017 municipal waste management for South Kingstown shows that MRF (Materials Recycling Facility) recycling rates of approximately 41.5%, Mandatory Recycling Rate of 49.3% and overall Materials Diverted from the Landfill at 51.3%.

The Town operates the Rose Hill Regional Transfer Station under contract with Waste Haulers, Inc. to provide solid waste and recycling management for South Kingstown and neighboring Narragansett. For Fiscal 2017-2018 the Town sent 7,987 tons of municipal solid waste to RIRRC. The total of residential recyclables sent to RIRCC was 5,279 tons. In terms of recycling, the Rose Hill Transfer Station is a “single stream” program, whereby all recyclables are co-mingled into a single recycling container. It is felt this system will bolster our community recycling rate percentage. In cooperation

**TABLE 35: STORMWATER STRUCTURES IN SOUTH KINGSTOWN AS OF MARCH 2019**

Source: South Kingstown GIS Division

Type	Ownership			Total
	Town	State	Private	
<b>Catch Basins</b>	2,712	320	42	<b>3,074</b>
<b>Stormwater Pipe Miles</b>	54.57	4.09	0.28	<b>58.9</b>
<b>Inlets</b>	141	22	5	<b>168</b>
<b>Outlets</b>	361	76	15	<b>452</b>
<b>Detention Ponds</b>	19	-	51	<b>70</b>
<b>Manholes</b>	358	151	5	<b>514</b>



with the RI Resource Recovery Corporation the Town has also hosted annual “Hazardous Waste Collection Days”. This program has been very effective in providing safe and convenient disposal of hazardous materials for Town residents.

Current population statistics show that there are over 10,000 households eligible for recycling activities throughout South Kingstown. At present approximately 3,500 households receive curbside solid waste and recycling services from licensed haulers. About two-thirds of these curbside subscribers utilize the Town’s 64 gallon rolling totes. A specific long term goal is to provide all households in the Town of South Kingstown with a minimum of one 64 gallon rolling tote which will enable them to recycle more effectively.

### POLICE FACILITIES & EMERGENCY MEDICAL SERVICES

The South Kingstown Police Department consists of 54 sworn officers and associated support staff. In the 2017-2018 fiscal year the department continued efforts toward accreditation from the Rhode Island Police Accreditation Commission. Within the year officers on the force completed 2,500 hours of professional training and the Department continued the School Resource Officer program, a partnership program between the Police and School Departments. The Department and various other municipal radio user groups, such as fire districts, work together to review and plan for future communication resources and system development.

Emergency Medical Services (EMS) are housed within South Kingstown’s Police Department. In recent years South Kingstown EMS has seen an increase in the percentage of calls that are billed to Medicare. This increase demonstrates that a higher percentage of calls received are from South Kingstown’s older residents. As the population continues to age, this trend is expected to continue. In 2017, over 55% of calls were billed to Medicare based upon charge data provided by EMS staff.



### FIRE DISTRICTS

South Kingstown is served by a dedicated force of volunteer fire fighters. The Union Fire District and the Kingston Fire District provide fire service through the municipality.

### SCHOOL FACILITIES

South Kingstown’s schools consist of four (4) elementary schools, two (2) middle schools, and one (1) high school. Schools are located throughout South Kingstown and vary in enrollment, age of structure, size of property and features of the property. In 2017 a Demographic Report was completed for the school district. In coming years school enrollment is expected to decline as the demographics of the community change. **Table 25** is a



chart from the South Kingstown RI Demographic Study Report completed by Cropper GIS and McKibben Demographics describing the South Kingstown School District’s 10-year enrollment projections.

### LIBRARY FACILITIES

South Kingstown has robust system of public libraries which work to meet the diverse needs of its residents. South Kingstown public libraries consist of the Peace Dale Library, the Kingston Free Library, and the Robert Beverly Hale Library. Each of these facilities has a unique set of offerings. Each building is a historic structure located within the heart of the villages of Peace Dale and Kingston, and overlooking scenic route 1 in Matunuck. Physical improvements to library facilities will continue to strengthen these unique resources as gathering places for residents of all ages, income abilities and needs within the community.

### SENIOR SERVICES

The Senior Services program is dedicated to serving the needs of the Town’s older residents. The department is responsible for identifying and documenting elderly service needs, managing direct services programs, coordinating with other programs, and various other services. The Senior Center provides a 10,000 square foot facility designed for older residents. The building contains space for a wide array of classes and activities including eating areas, health rooms, and an internet café. In fiscal year 2017-2018 there were over 1,690 registered members, plus hundreds of other residents who attended events without registering.

The Senior Transportation Program provided rides to seniors for a nominal cost in order to reach grocery stores, doctor’s appointments, banking, and other everyday needs. During Fiscal Year 2017-2018 over 5,800 rides were provided to approximately 82 individuals, totaling over 16,000 miles driven.

## NEEDS & OPPORTUNITIES

Each component of South Kingstown’s services and facilities discussed in this element have specific and targeted maintenance activities, operations, funding procedures, and service specific planning efforts. As discussed in this Plan, the Town’s service and facility needs which relate to the Town’s land use are considered. Level of service and program planning activities are assessed separately from this Plan.

### WASTEWATER INFRASTRUCTURE

As the community considers changes in the mixes of uses allowed in some portions of Town and as strategies are pursued to increase levels of infill development, comprehensive analysis of South Kingstown’s wastewater



S O C I A L  
R E S I L I E N C E



C H A N G I N G  
P O P U L A T I O N

**TABLE 36: SOUTH KINGSTOWN SCHOOL DISTRICT TOTAL ENROLLMENT, ACTUAL & PROJECTIONS**

Source: South Kingstown School District

Grade	Historic Data										Projections													
	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	
<b>PK</b>	88	106	110	110	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
<b>K</b>	210	200	202	197	185	185	184	183	182	180	177	174	171	169	179	183	182	180	177	174	171	169	179	179
<b>1</b>	227	228	195	211	197	190	191	190	189	186	184	181	178	175	173	190	189	186	184	181	178	175	173	173
<b>2</b>	238	235	233	196	220	201	194	195	197	196	192	190	187	187	184	197	197	196	192	190	187	187	187	184
<b>3</b>	250	243	237	235	201	223	204	197	202	204	203	199	196	194	194	197	202	204	203	199	196	194	194	194
<b>4</b>	241	260	240	241	234	207	230	210	205	210	212	211	207	206	204	210	205	210	212	211	207	206	206	204
<b>Total</b>	1,254	1,272	1,217	1,190	1,129	1,098	1,095	1,067	1,067	1,068	1,060	1,047	1,031	1,023	1,026	1,067	1,067	1,068	1,060	1,047	1,031	1,023	1,023	1,026
<b>change</b>	-	18	-55	-27	-61	-31	-3	-28	0	1	-8	-13	-16	-8	3	-28	0	1	-8	-13	-16	-8	-8	3
<b>change %</b>	-	1.4%	-4.3%	-2.2%	-5.1%	-2.7%	-0.3%	-2.6%	0.0%	0.1%	-0.7%	-1.2%	-1.5%	-0.8%	0.3%	-2.6%	0.0%	0.1%	-0.7%	-1.2%	-1.5%	-0.8%	-0.8%	0.3%
<b>Grade 5</b>	243	251	273	247	237	238	210	233	214	209	214	216	215	212	211	233	214	209	214	216	215	212	212	211
<b>Grade 6</b>	249	259	247	279	264	246	248	218	243	224	218	224	226	226	223	218	243	224	218	224	226	226	226	223
<b>Total</b>	492	510	520	526	501	484	458	451	457	433	432	440	441	438	434	451	457	433	432	440	441	438	438	434
<b>change</b>	-	18	10	6	-25	-17	-26	-7	6	-24	-1	8	1	-3	-4	-7	6	-24	-1	8	1	-3	-3	-4
<b>change %</b>	-	3.7%	2.0%	1.2%	-4.8%	-3.4%	-5.4%	-1.5%	1.3%	-5.3%	-0.2%	1.9%	0.2%	-0.7%	-0.9%	-1.5%	1.3%	-5.3%	-0.2%	1.9%	0.2%	-0.7%	-0.7%	-0.9%



**TABLE 37: SOUTH KINGSTOWN SCHOOL DISTRICT TOTAL ENROLLMENT, ACTUAL & PROJECTIONS (CONTINUED)**

Source: South Kingstown School District

Grade	Historic Data										Projections						
	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027		
<b>7</b>	270	257	265	249	270	267	248	250	221	247	227	221	227	231	231		
<b>8</b>	273	263	258	263	246	266	263	244	248	219	245	225	219	226	230		
<b>Total</b>	543	520	523	512	516	533	511	494	469	466	472	446	446	457	461		
change	-	-23	3	-11	4	17	-22	-17	-25	-3	6	-26	0	11	4		
change %	-	-4.2%	0.6%	-2.1%	0.8%	3.3%	-4.1%	-3.3%	-5.1%	-0.6%	1.3%	-5.5%	0.0%	2.5%	0.9%		

<b>9</b>	290	260	237	238	245	230	249	246	229	233	206	230	212	207	214
<b>10</b>	249	285	250	223	232	239	224	243	240	223	227	201	224	207	202
<b>11</b>	258	255	295	241	215	231	238	223	242	239	222	226	200	223	206
<b>12</b>	296	273	260	305	258	227	244	251	235	255	252	234	238	211	235
<b>Total</b>	1,093	1,073	1,042	1,007	950	927	955	963	946	950	907	891	874	878	857
change	-	-20	-31	-35	-57	-23	28	2	-17	4	-43	-16	-17	-26	9
change %	-	-1.8%	-2.9%	-3.4%	-5.7%	-2.4%	3.0%	0.8%	-1.8%	0.4%	-4.5%	-1.8%	-1.9%	-3.0%	1.1%

<b>District Total</b>	3,382	3,375	3,302	3,235	3,096	3,042	3,019	2,975	2,939	2,917	2,871	2,824	2,792	2,766	2,778
change	-	-7	-73	-67	-139	-54	-23	-44	-36	-22	-46	-47	-32	-26	12
change %	-	-0.2%	-2.2%	-2.0%	-4.3%	-1.7%	-0.8%	-1.5%	-1.2%	-0.7%	-1.6%	-1.6%	-1.1%	-0.9%	0.4%



systems should be used to identify areas most suitable for development and potential municipal wastewater system improvements.

## WATER SUPPLY INFRASTRUCTURE



VILLAGE-CENTERED DEVELOPMENT

Cooperation and coordination with other local water supply districts is essential for proper management of the Town's water supply. With multiple water supply districts owned by private, state, and local entities, coordination of the different water management plans and priorities can be a challenge. During dry summer months proactive measures are put into place by Town-owned water supply districts; however, a unified and consistent set of restrictions and policies such as outdoor water restrictions could benefit the community's water resources on the whole. Efforts to reduce water loss within the municipal system must be continued, and efforts to reduce vulnerability to natural hazards should be pursued.

## STORMWATER INFRASTRUCTURE

Improvements to stormwater inspection systems should be pursued, such as development of a GPS collector application to be used for real-time data collection and entry when inspecting or performing maintenance of system components. Technological improvements and in-field efficiencies improve record keeping and promote continuous improvement of municipal infrastructure. With nine (9) TMDLs identified within South Kingstown, projects to engineer, design and install best management practices (BMPs) are essential. However, it is important to note that while BMPs will reduce pollutant loading to impaired surface water bodies, it is highly unlikely that said waterbodies will meet water quality standards (fishable, swimmable) once BMPs are constructed and operable.

TMDL Impaired Waterbodies	Impairment
■ Saugatucket River	■ Fecal Coliform
■ Green Hill Pond	■ Fecal Coliform
■ Narrow River	■ Fecal Coliform
■ Indian Run Brook	■ Fecal Coliform, Cu, Pb
■ Mitchell Brook	■ Fecal Coliform
■ Rocky Brook	■ Fecal Coliform
■ Mumford Brook	■ Fecal Coliform
■ Yawgoo Pond	■ Phosphorus
■ Barbers Pond	■ Phosphorus
■ White Horn Brook	■ Enterococcus



BMPs to address TMDLs include strategies such as increasing infiltration of stormwater runoff, reductions in impervious surface coverage rates, and utilization of low-impact development strategies. .

### POLICE FACILITIES & EMERGENCY MEDICAL SERVICES

As the community’s total population and demographics change, ensuring adequate police coverage, including coverage for Emergency Medical Services (EMS) which is a component of the Police Department, is essential. As the population increases and ages, additional demand on South Kingstown’s paramedics can be expected. Improvements to the EMS headquarters at the South Station of the Public Services Building may be needed to provide for 24-hour service.

### FIRE DISTRICTS

The volunteer fire forces of the Union Fire District and Kingston Fire District serve the needs of the community. Municipal efforts to assist and support the Fire Districts are essential to ensure that an adequate supply of volunteer fire fighters exists and is retained in South Kingstown. Continued discussion is needed relative to attracting and retaining volunteer fire fighters, including municipal participation to ensure fire fighters and their families have affordable housing opportunities in South Kingstown.

### SCHOOL FACILITIES

The South Kingstown School Department enrollment forecasts predict decreases to the overall enrollment in South Kingstown in general, and specific decreases in enrollment for each school. The municipality will support the school system in planning for future anticipated enrollment and associated facility changes as identified by the South Kingstown School Committee and district leadership. South Kingstown will continue to support the exceptional programs of its schools.

### LIBRARY FACILITIES

South Kingstown’s libraries are important resources for information, education, and social gatherings. Improvements to library facilities which are designed to increase access to the libraries by members of the public are important to the continued health, popularity and use of these facilities. As the way people access information changes over time, South Kingstown’s library facilities must remain current and must provide a unique environment for gatherings and information sharing. Improvements to modernize the facilities, adjust spaces within the buildings to meet current needs, and improve group gathering and meeting space are opportunities for the Town.



CHANGING POPULATION



SOCIAL RESILIENCE



CHANGING POPULATION



## SENIOR SERVICES

The Senior Services program is expected to see increased rates of use as South Kingstown's population ages. Continued improvements to the ride share program, including expansion of existing resources to support this program, may be necessary and must be monitored by the program's leaders. Improvements to reduce vulnerability, improve energy efficiency and improve access to the Senior Center are important as demand for the programs offered increases over time.



## SERVICES & FACILITIES ACTION PLAN SUMMARY

**Goal 1:** The Town will continue to provide high quality municipal services in a cost-effective manner, as required to serve an expanding community and to integrate the Town’s growth management program with long-range utility plans.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> Continue to provide a high level of administrative functions.</p> <p><b>Policy 1.2</b> Promote a long-range planning effort to address the cumulative impacts of development.</p> 	<p><b>Action 1-1</b> Review the adequacy of municipal government administration services in accordance with internal standards, and in conformance with modern management practice.</p> <p><b>Action 1-2</b> Initiate a process by which the proposed Capital Improvement Program is reviewed for consistency with this Plan.</p>

**Goal 2:** The Town will continue to provide effective wastewater management through a variety of strategies designed to protect public health and the natural environment.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> Support an adequately sized wastewater treatment plant which operates in full compliance with all state and federal standards.</p>  <p><b>Policy 2.2</b> Future sewer extensions will follow the recommendations of the Land Use Element and will be consistent with the Town’s growth management program and the provisions of the Salt Pond Regions Special Area Management Plan.</p>   <p><b>Policy 2.3</b> Address issues regarding on-site wastewater treatment in a manner that is cost effective, environmentally sound, and ensures the safety of its residents.</p>   <p><i>(continued on next page)</i></p>	<p><b>Action 2-1</b> Expand the centralized sewage treatment facility in an established time frame, based on improvements in technology and the relative needs and fiscal capacity of each user group (South Kingstown, Narragansett and URI).</p> <p><b>Action 2-2</b> Work with the RIDEM to identify critical natural resource areas that may warrant additional consideration by RIDEM in their wetland permit review process.</p>  <p><b>Action 2-3</b> Amend the Zoning Ordinance and Subdivision and Land Development Regulations to allow only low-density development in unsewered areas with severe septic limitations.</p>   <p><b>Action 2-4</b> Explore development of objective criteria to inform requirements for mandatory sewer connection and main extension required within the future sewer service area.</p> <p><i>(continued on next page)</i></p>



**Goal 2:** The Town will continue to provide effective wastewater management through a variety of strategies designed to protect public health and the natural environment.

POLICIES	ACTIONS
<p><b>Policy 2.4</b> Integrate wastewater management into water supply decisions.</p>	<p><b>Action 2-5</b> Amend the Zoning Ordinance and Subdivision and Land Development Regulations to allow high density development only in areas where public sewer and water are available, or will be extended to become available, at the time of development.</p> <p></p> <p><b>Action 2-6</b> Conduct an assessment of the costs and benefits associated with public financing of extension of the public sewer system in village areas where higher density development is appropriate.</p> <p></p>

**Goal 3:** Existing water resources will be managed and protected for present and future residential and non-residential use in accordance with growth plans for the Town.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> Support an overall water supply management policy and plan that is integrated with the growth management program and long-range utilities plan for the Town.</p> <p><b>Policy 3.2</b> Advocate for the protection of a safe drinking water supply as a major priority for South Kingstown. The Town is committed to the establishment of programs for aquifer protection and groundwater resource management.</p> <p></p> <p><b>Policy 3.3</b> Recognize the need to prioritize water uses (e.g: residential vs. nonresidential).</p> <p><i>(continued on next page)</i></p>	<p><b>Action 3-1</b> Pursue legislation on either a town-wide or regional basis to regulate priority of water use (see discussion in Natural Resources &amp; Open Space Element).</p> <p><b>Action 3-2</b> Develop drought planning measures in accordance with Rhode Island Water 2030, State Guide Plan Element 721. Such measures shall go beyond simply providing interconnections between the Town’s public water suppliers and is particularly relevant as the Town receives water via Suez from the Chipuxet sub-basin. Water suppliers should continue to implement water conservation and education measures during the high-demand summer months.</p> <p><b>Action 3-3</b> Work with local water suppliers to identify opportunities to construct interconnections between water services to ensure a continual supply of potable water during low flow periods and to address emergency spill response.</p>



**Goal 3:** Existing water resources will be managed and protected for present and future residential and non-residential use in accordance with growth plans for the Town.

POLICIES	ACTIONS
<p><b>Policy 3.4</b> Evaluate future drinking water extension proposals with regard to the location of existing and proposed water and sewer lines, problem areas, and the overall growth pattern endorsed by the Comprehensive Plan and Land Use 2025.</p>  <p><b>Policy 3.5</b> Give priority to waterline extension for areas with contamination of well water. Drinking water contamination caused by constituents for which there are federal standards also will be given priority consideration.</p>  <p><b>Policy 3.6</b> Continue to comply with the Rhode Island Department of Health rules pertaining to public drinking water.</p>  <p><b>Policy 3.7</b> Support measures to provide a sustainable, uninterrupted supply of potable water to its residents.</p>	

**Goal 4:** The Town will continue a solid waste management strategy which focuses on waste reduction, litter control and recycling, and waste management programs which are cost-effective and self-sufficient to the greatest extent possible.

POLICIES	ACTIONS
<p><b>Policy 4.1</b> Maintain or exceed the State’s minimum goals of 35% recycling rate and 50% solid waste diversion rate.</p>  <p><b>Policy 4.2</b> Participate in the monitoring of landfills to maintain public health and safety.</p> 	<p><b>Action 4-1</b> Work with the Rhode Island Resource Recovery program to determine if residents are following applicable rules regarding recycling and develop a strategy to improve such if necessary.</p>  <p><i>(continued on next page)</i></p>



**Goal 4:** The Town will continue a solid waste management strategy which focuses on waste reduction, litter control and recycling, and waste management programs which are cost-effective and self-sufficient to the greatest extent possible.

POLICIES	ACTIONS
<p><b>Policy 4.3</b> Continue to evaluate greater efficiencies in curbside refuse and recycling to enhance recycling rates for commercial and residential uses.</p>	<p><b>Action 4-2</b> Explore and determine the feasibility of developing a food waste composting facility in South Kingstown.</p> <p></p> <p><b>Action 4-3</b> Increase special waste collection at the Rose Hill Regional Transfer Station to include scrap metal and other possible recyclable material.</p> <p></p>

**Goal 5:** The Town will continue an effective public works program which recognizes the importance of the maintenance and construction of safe and efficient roads, bridges, sidewalks, bike paths, storm drains, and parks to serve its residents.

POLICIES	ACTIONS
<p><b>Policy 5.1</b> Continue long-range programs for improvements to roads, bridges, sidewalks, bike paths, storm drains, and parks in conformance with the recommendations of the Comprehensive Plan.</p> <p></p> <p><b>Policy 5.2</b> Maintain an adequately staffed and equipped Public Services Department.</p>	<p><b>Action 5-1</b> Revise zoning and subdivision regulations to require appropriate setbacks and buffers to utility easements to protect residential development and allow for the proper functioning of the utility.</p> <p></p>



**Goal 6:** A long-range program of effective stormwater management will be in place, designed to protect Town residents from flooding, to control erosion and sedimentation, and to maintain both surface and groundwater quality and quantity.

**POLICIES**

**ACTIONS**

**Policy 6.1** Recognize the importance of promoting high standards of design for stormwater management systems.



**Policy 6.2** Support implementation of the DEM’s Rhode Island Pollutant Discharge Elimination System (RIPDES) Phase II Stormwater Management program.



**Policy 6.3** Require appropriate management, control, and treatment of stormwater from land development and infrastructure projects to increase stormwater management capacity.

**Policy 6.4** Protect and improve the health of South Kingstown’s water bodies through the implementation of BMPs to improve TMDLs and other innovative strategies, as BMPs are only part of the solutions necessary.

**Policy 6.5** Increase the frequency of street sweeping as much as possible to improve water quality.



**Action 6-1** Explore implementing innovative standards for drainage design utilizing such techniques as LID (low impact development) and flexible paving surface requirements to promote on-site treatment and infiltration where appropriate.



**Action 6-2** Explore improvements to stormwater management systems based on recommendations included in the “South Kingstown Village Study: Villages of Wakefield and Peace Dale.”



**Action 6-3** Establish standards for minimum rights of way in subdivisions that will accommodate the installation of stormwater management systems and utilities while requiring that pavement widths be the minimum necessary for functional requirements.



**Action 6-4** Comply with RIPDES Phase II requirements for stormwater management in municipal separate storm sewer systems. This program is intended to improve the quality of receiving waters by reducing the quantity of pollutants discharged during storm events. RIPDES Phase II stormwater regulations also require the inventory of existing municipal stormwater facilities.



**Action 6-5** Increase education to property owner and municipal departments regarding improvements that can be made on private and public property in order to improve water quality..



**Goal 7:** The Town’s professional police force, dedicated to upholding the law, ensuring the safety and best welfare of the Town’s residents, and respecting the rights of all citizens, will continue to be fully supported.

POLICIES	ACTIONS
<p><b>Policy 7.1</b> Maintain an appropriate level of service through the professional law enforcement staff.</p> <p><b>Policy 7.2</b> Assess the adequacy of police facilities and equipment, including the need to increase off-road patrols.</p> <p><b>Policy 7.3</b> Maintain a level of police performance which meets the Police Chiefs’ Association standards.</p> <p><b>Policy 7.4</b> Maintain a police presence in the public schools to strengthen relationships between the police department, school staff, and students, and to enforce security, as necessary.</p> 	<p><b>Action 7-1</b> Explore and determine the feasibility of the construction of a separate storage building for evidence processing and evidence storage. This building should be secure, have sophisticated air handling, and include a garage space with a lift.</p>

**Goal 8:** The Town’s volunteer fire departments will continue to be supported and assisted in their efforts to provide protective services.

POLICIES	ACTIONS
<p><b>Policy 8.1</b> Recognize the need for an adequate number of well-trained volunteers for the Union Fire District and Kingston Fire Districts.</p> <p><b>Policy 8.2</b> Encourage and support participation by the local fire districts in training programs required to meet state mandates.</p> <p><b>Policy 8.3</b> Support the efforts of the fire districts to improve their International Organization for Standardization (ISO) ratings and general level of operation.</p>	<p><b>Action 8-1</b> In cooperation with the Union and Kingston Fire Districts, explore the development of a recruitment and incentive-based program to attract and retain volunteers for these organizations.</p> <p><b>Action 8-2</b> The “Improvements Statements” written for the Fire Districts by the Insurance Services Office shall be reviewed by the Union and Kingston Fire District administrations to determine if there are cost-effective ways to improve their respective district ratings, which are based on fire suppression capabilities. These reports shall be included in their long-term plans.</p> <p><b>Action 8-3</b> Consider preparing a ten-year implementation plan as that is the time interval for ISO evaluation and classification.</p> <p><b>Action 8-4</b> The fire districts shall use the compliance standards to develop their own internal evaluation criteria, to be used annually, for the purpose of assessing existing and future needs.</p>



**Goal 9:** Town residents will continue to be provided with the opportunity for a quality education, and superior school facilities.

POLICIES	ACTIONS
<p><b>Policy 9.1</b> To maintain and continually improve the high quality of South Kingstown’s education program.</p>  <p><b>Policy 9.2</b> Support development or retirement of school facilities to keep pace with changes within the school age population and with the defined educational programs of the school system.</p> 	<p><b>Action 9-1</b> The School Department shall conduct more comprehensive five-year evaluation increments of the Rhode Island Basic Education Program.</p>

**Goal 10:** The diverse needs of our citizens will be met through expanded and improved public library services and facilities.

POLICIES	ACTIONS
<p><b>Policy 10.1</b> To meet the community needs for library services, the Town will expand and renovate library facilities and parking areas.</p> <p><b>Policy 10.2</b> Ensure the Town Library System continues to comply with the Office of Library &amp; Information Service standards in order to continue to receive state funding.</p>	<p><b>Action 10-1</b> Explore and determine the most cost effective methods for expanding the public service and non-public service areas of the main library in Peace Dale, in order to meet the needs of the town-wide system. Unmet system needs to research may include a larger youth services room, increased book stack capacity, increased space for public access computers, quiet study rooms, and a new public meeting room with a larger seating capacity.</p>  <p><b>Action 10-2</b> The Library Board will explore and determine the most cost effective methods for expanding parking options at the Peace Dale and Kingston library branches.</p>



**Goal 11:** The South Kingstown Senior Services Department will continue serve the community by providing enriching recreation experiences and quality facilities to support a healthy environment.

POLICIES	ACTIONS
<p><b>Policy 11.1</b> The Senior Services Department will address the need for alternative transportation for programs.</p> <p><b>Policy 11.2</b> The South Kingstown Senior Services Department shall coordinate and centralize senior citizen programs and facilities to offer community-based, rather than institutional services.</p> 	<p><b>Action 11-1</b> The Senior Services Department shall investigate opportunities to reduce reliance on private transportation through attempting to secure additional use of Senior Services buses and seek funding opportunities to purchase a twenty passenger van for the Department's use.</p> <p><b>Action 11-2</b> The Department, in collaboration with the Information Technology Division, will assess service-specific data management applications based on the unique needs of the Department and select the most appropriate and cost effective tool for effectively managing data and offering on line registration services to the public.</p> <p><b>Action 11-3</b> The Senior Services Department shall expand the Adult Day Services Facility in order to better accomodate the special needs of its senior participants.</p> 



**Goal 12:** The Town will continue an emergency management response program that recognizes the importance of providing protection to citizens and property through public education, municipal preparedness plans and adequate training of key personnel.

POLICIES	ACTIONS
<p><b>Policy 12.1</b> As issues relating to Homeland Security arise, the Town shall respond in accordance with federal and state protocols.</p> <p><b>Policy 12.2</b> The Town will ensure that police officers and other key emergency management personnel receive proper training.</p> <p><b>Policy 12.3</b> The Town will encourage development of programs and policies that foster preventative measures that mitigate potential natural disaster damage.</p> 	<p><b>Action 12-1</b> The Town shall re-examine the existing tree trimming program, and institute appropriate measures to reduce potential storm damage caused by windblown trees by focusing on preventative maintenance in areas more likely to suffer storm damage, particularly coastal areas.</p>  <p><b>Action 12-2</b> The Town shall examine its present guidelines and regulations to see where possible measures can be instituted and encouraged to reduce storm damage potential.</p> 



# ENERGY

---



## VISION

To establish a **diverse, resilient, and environmentally conscious** energy action plan that considers energy consumption as well as production and seeks to encourage renewable energy generation, **reduce environmental impacts**, and **reduce the financial cost** of municipal energy consumption associated with heating and cooling, transportation, and electricity usage.

The town will continue to pursue methods for reducing energy consumption in municipal facilities, improving the efficiency of our equipment, and moving toward more sustainable energy sources where possible. The town will encourage the responsible and well-planned development of energy production, including renewable energy systems. Through the integration and development of renewable energy production for town facilities, and the promotion of clear standards and guidelines for private development, renewable energy systems will grow. South Kingstown will reduce our levels of energy consumption through a process of continuous and incremental improvements to municipal energy usage including: the heating and cooling systems of buildings, municipally-owned vehicles and equipment, and electricity consumption. Continuing to improve energy policies and decisions will provide economic savings, reduce environmental impacts, and improve the resilience of the community as a whole.

---



## ENERGY GOALS

**Goal 1:** Well-planned, diverse and economically viable renewable energy production facilities will exist in appropriate areas of Town.

**Goal 2:** The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.

**Goal 3:** The understanding of Town staff and community members on energy efficient practices and renewable energy development will be increased.

## GUIDING PRINCIPLES

- ◆ Energy impacts nearly all aspects of our daily lives.
- ◆ We depend on energy to travel, to heat and cool our buildings, and to power everything from street lights to smartphones and medical equipment.
- ◆ Today, as the environmental and financial costs of energy rise, the need to produce and consume energy responsibly is clear.
- ◆ The thoughtful development of energy policies will provide a multitude of benefits to all residents.
- ◆ Energy production and generation are impacted by our land use decisions, economic development strategies, and the development of our transportation systems.

## BASELINE INFORMATION

### OVERVIEW

While this section of the South Kingstown Comprehensive Plan is focused on exploring energy efficiency and promoting renewable energy development, the policies and goals developed here have the potential to strengthen much more than the energy systems in our community. In return, the goals and policies established in other elements of this plan will impact our energy generation and consumption. In this section, energy is categorized into three different primary uses: energy used for transportation, for heating and cooling buildings, and for the generation of electricity.

### ENERGY USE

Rhode Island spends more than 3.5 billion dollars on electricity and fuel annually. The majority of that purchased energy comes from fossil fuel-based



energy production facilities located outside of the State, and introduces an estimated 11 million tons of greenhouse gases into the atmosphere. Increasing energy efficiency and generating more of our power from renewable energy sources are two key ways to reduce the economic and environmental costs of energy consumption.

To begin reducing energy consumption it is essential that we understand how much energy we currently use. Since 2013, the RI Office of Energy Resources has partnered with the University of Rhode Island Extension to collect energy usage data for all publicly owned buildings in the State. These data are used to establish baseline energy consumption information for each municipality. This effort provided the Town with baseline energy data and an energy profile for each municipal building in South Kingstown which addresses both electricity use and heating fuel costs. South Kingstown has had relatively stable energy consumption rates since 2010. **Figure 42: Municipal Building Energy Usage** provides a comparison of baseline and current energy use intensity for all sixteen municipal facilities within Town. In 2016, eleven of our municipal facilities had energy use intensities (EUI) below the baseline average.

The five structures with the highest energy consumption rates are:

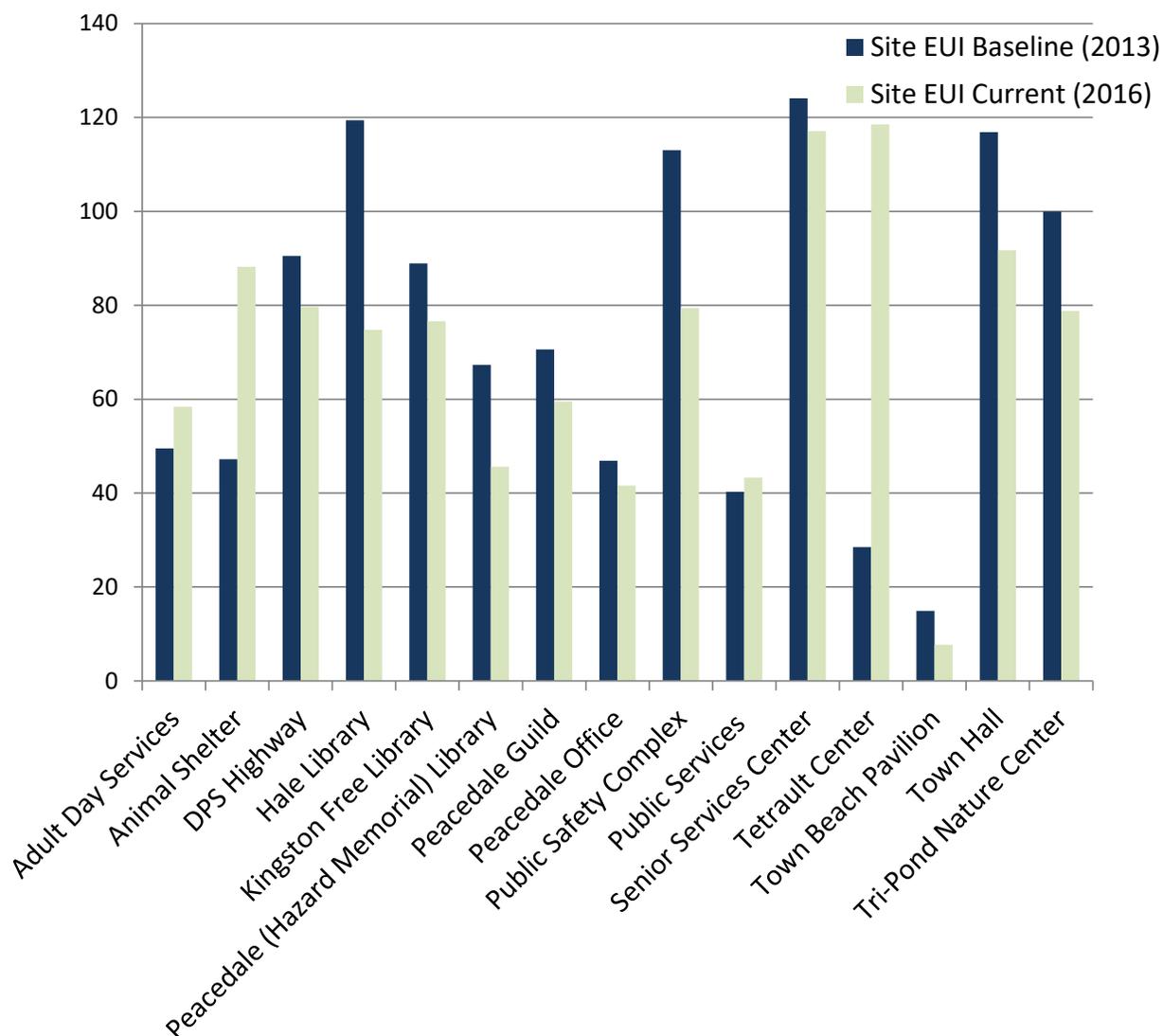
1. Senior Services Center
2. Animal Shelter
3. Tetreault Center (increasing trend in energy use)
4. Town Hall
5. Public Safety Complex (decreasing trend in energy use)

## ENERGY EFFICIENCY

Energy efficiency reduces the amount of power that must be generated to meet our energy needs. The State of Rhode Island energy plan, Energy 2035, identified increased efficiency as the best tool to available to ensure we are able to meet energy needs. By simply reducing the amount of energy it takes to power our systems we can ensure that the energy we produce goes further. South Kingstown supports the goals for energy efficiency presented in Energy 2035. The Town is committed to completing energy efficiency improvements to Town facilities and encouraging private property owners to pursue efficiency improvements of their own. Many steps can be taken to improve energy efficiency in our buildings; for instance, replacing older windows with newer energy efficient models can reduce heating costs in the winter and cooling costs in the summer. Even efforts as simple as replacing conventional light bulbs with LED models and turning off lights when leaving a room significantly reduce energy consumption. Energy efficiency improvements come at a wide variety of costs, ranging from no- and low-



**FIGURE 42: MUNICIPAL BUILDING ENERGY USAGE**



cost solutions to more extensive upgrades; however, some degree of energy efficiency improvements are within the reach of all property owners and residents of our community.

### ENERGY UPGRADES

South Kingstown has made significant efforts to increase energy efficiency associated with municipal services and facilities. The paragraphs below provide summaries of the major improvements made in the recent past. The wastewater division is the highest energy consumer in South Kingstown. As such, particular attention has been focused on improving the efficiency of its equipment and facilities.



SUSTAINABILITY



## WASTEWATER TREATMENT FACILITY

- Ultra-fine aeration diffuser panels were installed in 1990 to replace an existing coarse bubble diffuser. This retrofit was funded in part by a \$186,000 National Grid grant to reduce the wastewater treatment facility (WWTF) energy consumption
- The installation of a belt filter press in 1989 significantly reduced electrical consumption by replacing inefficient vacuum filter pumps. This project also reduced landfill disposal costs by increasing the sludge cake percentage by approximately 15%.
- Two high energy efficiency replacement blowers were installed in 2010, creating an estimated annual WWTF electrical consumption savings of approximately 30% per year. The cost of this \$200,000 project was partially funded by a \$140,000 grant from National Grid.
- Interior and exterior light fixtures were replaced at the WWTF in 2010 at a cost of \$93,000. This initiative was partially funded through a \$33,000 incentive from National Grid. The remaining cost was paid by a monthly electric utility bill credit with a 0% interest rate over a 24 month period.
- In 2017, the main Wastewater Treatment Plant buildings membrane flat roof and low strength concrete substrate were replaced with a new single-ply “ethylene propylene diene monomer” (EPDM) rubber roofing system with rigid polyisocyanurate foam insulation substrate, which increases the efficiency of the building by improving the insulation.

## SILVER LAKE & KINGSTON PUMP STATIONS

- Energy efficient motors and variable frequency drives have been installed on two pumps at the Silver Lake pump station. Additionally, soft start, energy efficient motors were installed for the three pumps used at the Kingston pump station.
- In 2012, high efficiency gas-fired condensing boilers were installed at both pump stations. The cost of these improvements was covered through two Energy Efficiency Conservation Grants provided by the Rhode Island Office of Energy Resources.
- In 2010 two variable frequency drives (VFDs) were installed for two plant wash water pumps. This effort was funded in part by a \$4,800 rebate from National Grid.
- Four VFDs were installed in the early 1990s, as well as two return activated sludge pumps, and two waste activated sludge pumps,



which worked to improve the efficiency of the pump systems. These improvements were also funded in part by National Grid incentives.

### HIGHWAY BUILDING

- ◆ The Town's fuel farm canopy was retrofitted with an LED lighting system with the capability to dim automatically after five minutes of motion sensor inactivity and turn off completely after one hour of inactivity. These highly efficient, motion sensor activated lights provide a substantial energy reduction at the facility.

### TOWN HALL

- ◆ High efficiency gas-fired-modulating condensing hot water boilers and a gas fired furnace were installed in Town Hall in 2012. This project cost \$106,300 and included the removal of two underground fuel storage containers.

### PUBLIC SERVICES BUILDING

- ◆ New exterior doors and double paned windows were installed in the Public Services administrative office building in 2012 to increase the efficiency of heating and cooling.

### PEACE DALE LIBRARY

- ◆ In 2012 a high efficiency, gas-fired, condensing boiler was installed in the Peace Dale Library. This project also included the removal of two underground storage tanks on the property. The improvements completed at the Peace Dale Library, the Public Services Building, and Town Hall were funded by two Energy Efficiency Conservation Grants from the RI Office of Energy Resources in the amount of \$291,757.50 that was secured by the Planning Department in 2010.

## RENEWABLE ENERGY

### SOLAR ENERGY

Solar energy is collected from sunlight and converted to electricity through the use of solar panels. Solar energy systems can be incorporated on the roofs of existing structures or be placed on the ground. If adequate sun exposure is present on a property, solar energy systems can easily capture and generate enough power to meet the energy needs of a building or provide significant amounts of renewable energy production to be sold on the electric grid.

The South Kingstown Town Council, Planning Board, and staff worked collaboratively to amend the Town's solar energy siting regulations in the spring of 2017. The purpose of these regulations is to provide standards for the placement, design, construction, operation, monitoring, modification



SUSTAINABILITY

and removal of these systems. The standards presented are intended to ensure that solar energy systems are compatible with the surrounding area, provide for public safety, and minimize the impacts on natural and historic resources. The regulations provide requirements for solar energy systems in two specific categories: accessory solar and principal solar.

- ◆ Accessory solar energy systems are systems that are designed and located to provide energy to an existing building or use located on the property. South Kingstown encourages the development of accessory solar energy systems where appropriate and allows the systems in any zoning district in town.
- ◆ Principal solar energy systems are systems that are the principal or only use on a parcel of land. These solar energy generating facilities are designed to collect and produce electricity to be used off-site. South Kingstown permits these systems in a number of zoning districts depending on the physical size of the system proposed. **Map 34: Small-Scale Solar Energy Systems, Map 35: Medium-Scale Solar Energy Systems, and Map 36: Large-Scale Solar Energy Systems** depict the areas where principal solar energy systems are allowed by allowance type and size.

In addition to these regulatory efforts, the Town in a public private partnership, which included a private energy developer, URI and the Town of Narragansett developed a large-scale solar energy systems on the former Rose Hill Landfill and West Kingston Town Dump. The development of these systems was at no cost to the Town and provides a valuable re-use for the sites. Approximately 9.3 Megawatts of solar arrays provide over 11.5 Million kWhs of clean renewable energy power to the grid yearly, and based on South Kingstown's share a large majority of the Town's energy consumption need is off-set.

## WIND ENERGY

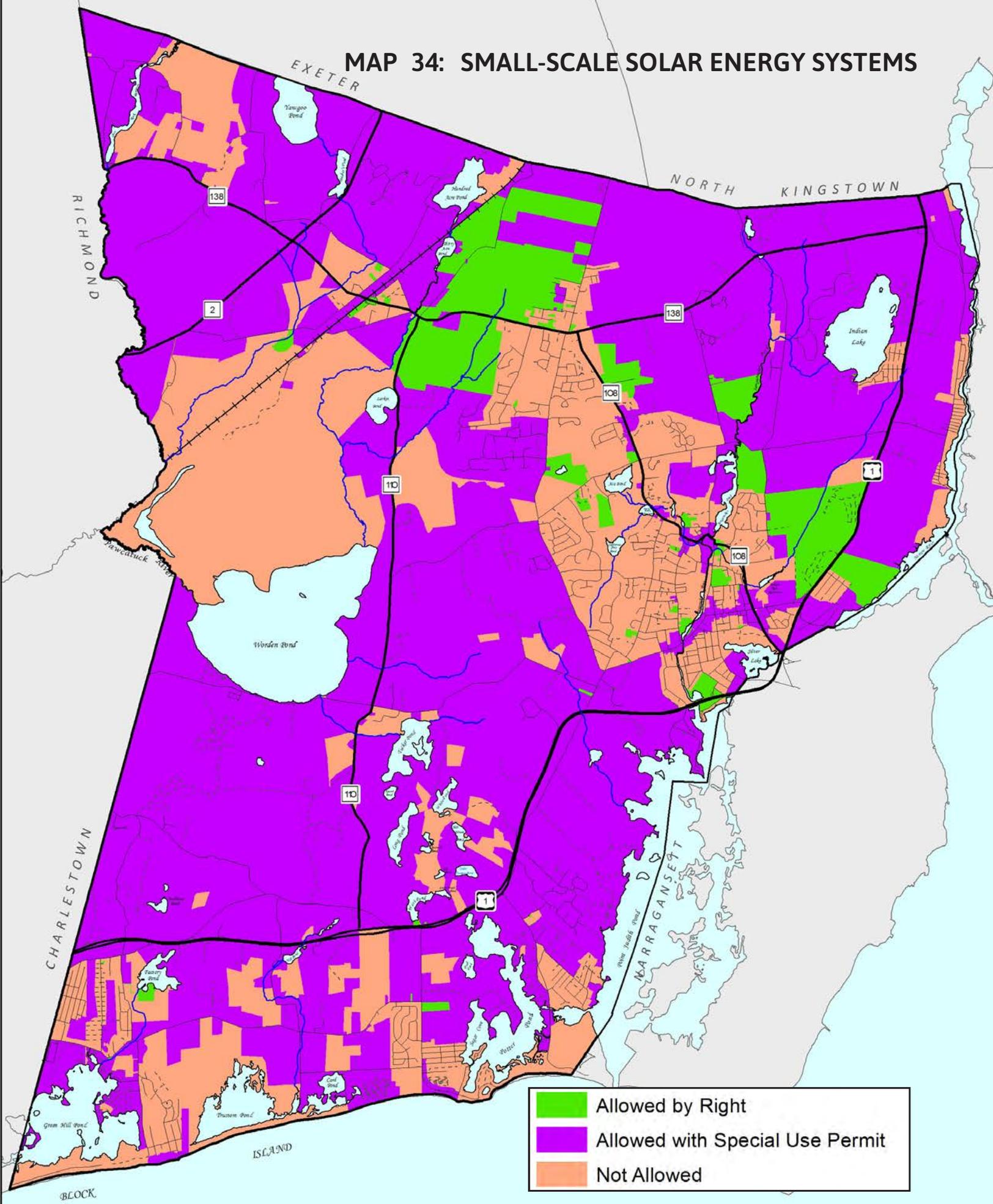
Wind power is energy generated with the use of wind energy conversion systems, most commonly in the form of wind turbines. Conversion systems convert the kinetic energy of the wind into electric energy for consumption. Wind power can be located on land or off-shore. According to the Wind Siting Guidelines developed by the Rhode Island Office of Energy Resources, a typical 1.5 MW onshore wind turbine in Rhode Island can power approximately 440 homes and offset an estimated 870 metric tons of carbon dioxide (CO<sup>2</sup>) annually. This CO<sup>2</sup> offset is equivalent to the average annual emission of approximately 180 vehicles.

South Kingstown has yet to develop siting regulations for the potential development of land-based wind energy systems. Wind projects may have the potential to diversify the Town's renewable energy supply portfolio and should be thoughtfully considered using the guidelines developed by the



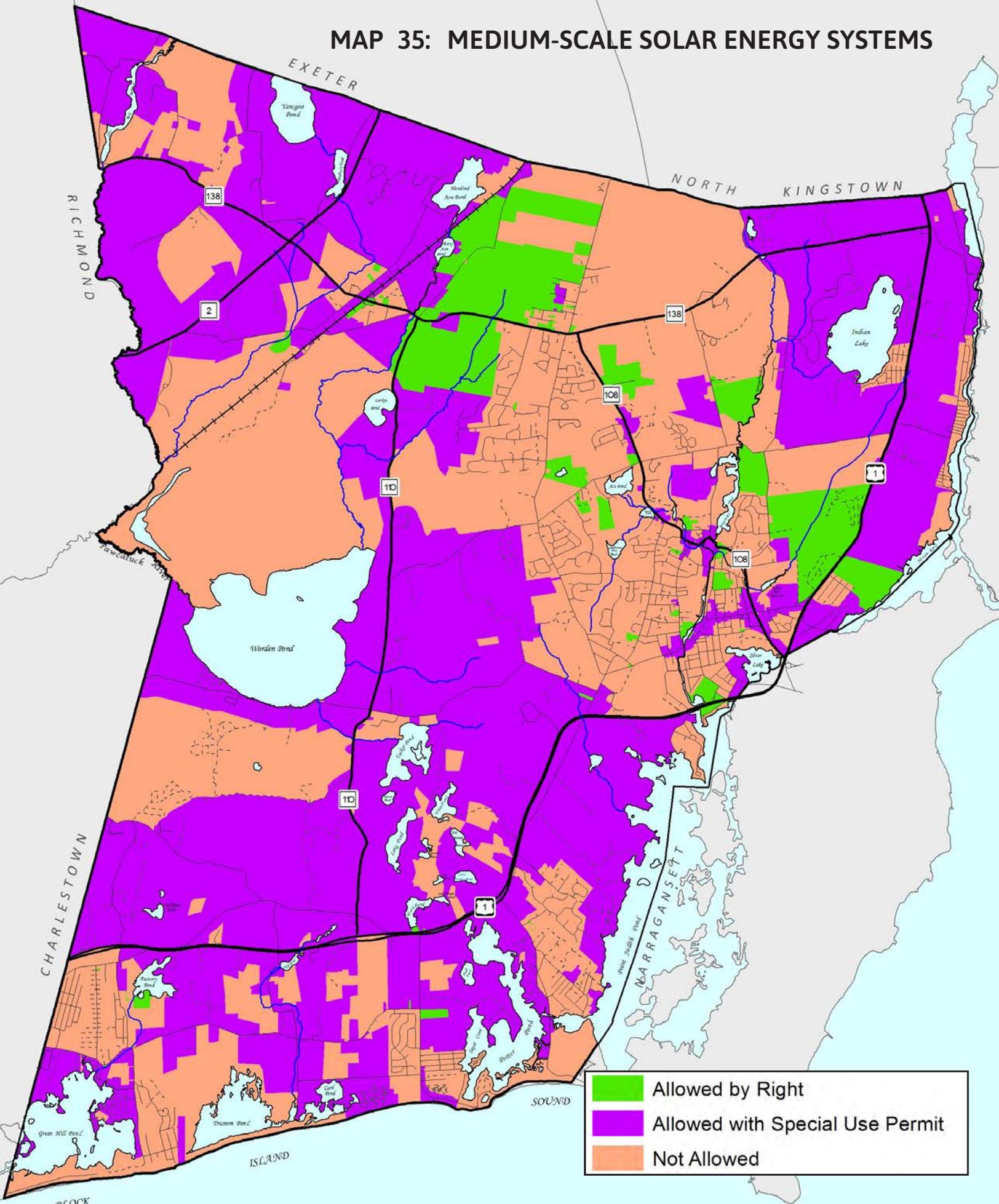
SUSTAINABILITY

# MAP 34: SMALL-SCALE SOLAR ENERGY SYSTEMS



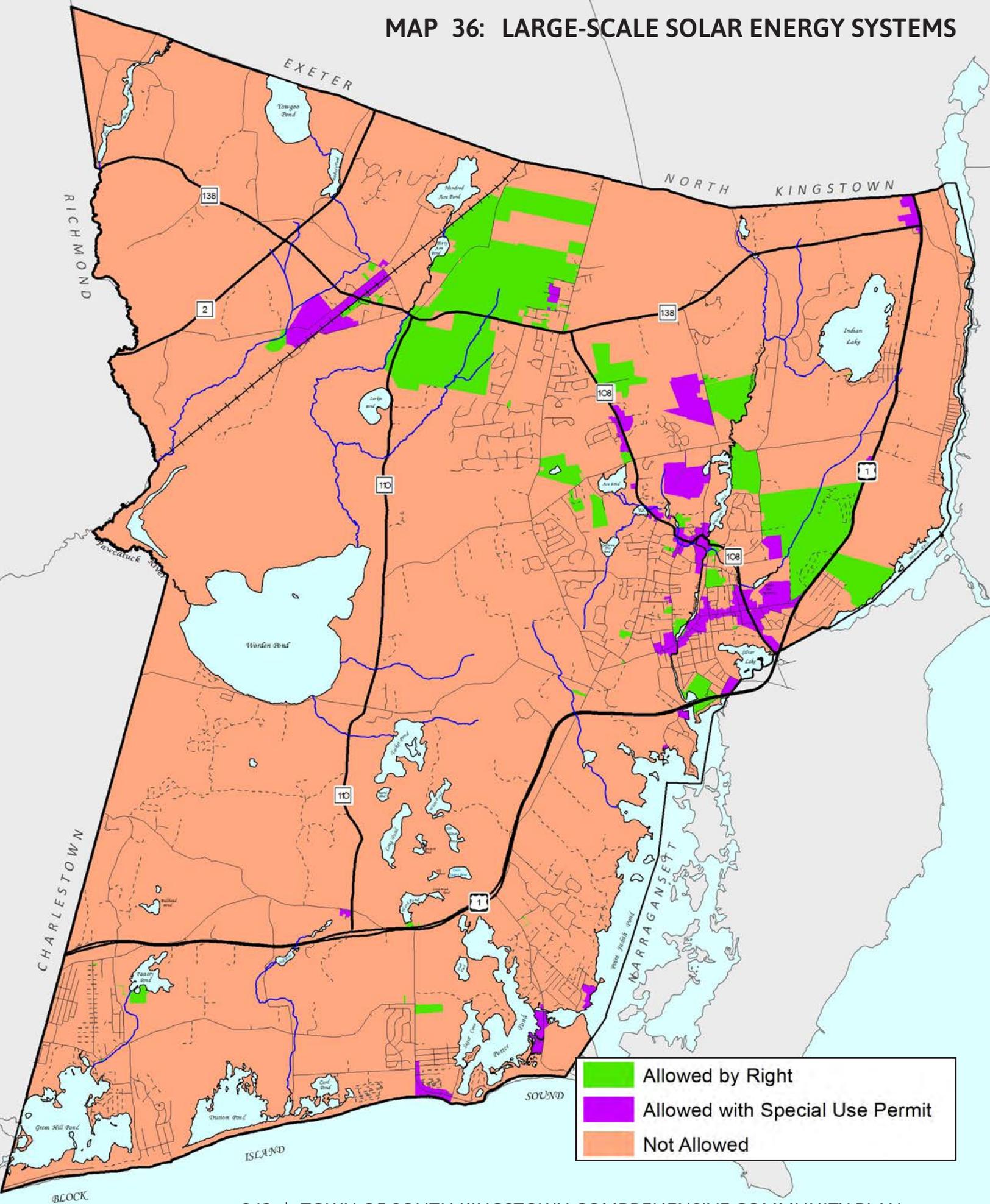
	Allowed by Right
	Allowed with Special Use Permit
	Not Allowed

# MAP 35: MEDIUM-SCALE SOLAR ENERGY SYSTEMS



	Allowed by Right
	Allowed with Special Use Permit
	Not Allowed

# MAP 36: LARGE-SCALE SOLAR ENERGY SYSTEMS





Rhode Island Office of Energy Resources and Division of Planning. Proper consideration of which zoning districts could accommodate wind power and what siting standards are applicable are essential to properly planning for increased renewable energy production in South Kingstown.

## NEEDS & OPPORTUNITIES

### PROGRAMS & RESOURCES



SUSTAINABILITY

Rhode Island offers a number of programs designed to support energy efficiency and renewable energy upgrades to buildings. From single-family homes to commercial and industrial structures and municipally owned buildings, programs are available to aid in financing and provide support. Energy efficiency upgrades can come at a wide variety of costs. Some efforts, like replacing light bulbs with new higher efficiency models, come at a nominal cost. However, when a property owner faces higher cost improvements such as upgrades to heating and cooling systems or the installation of renewable energy systems, the cost of those improvements can at times become prohibitive. The programs discussed below each provide opportunities to assist property owners in securing the knowledge and funding necessary to lower their energy costs and reduce environmental impact.

#### SOLARIZE RHODE ISLAND

Solarize Rhode Island supports and assists private property owners, both residential and commercial, to install solar energy systems in connection with their existing homes and businesses. This program conducts outreach in communities to gather a critical mass of property owners who are interested in installing solar energy systems on their property. Solarize Rhode Island then uses pre-selected installers to help the group of property owners receive more competitive pricing for their individual energy systems. In 2016, the Town of South Kingstown worked with Solarize Rhode Island to bring this program to property owners around town, and 52 individual projects were completed. The Town of South Kingstown recognizes the need to continue to promote and provide cost-effective opportunities for renewable energy development on private property through this tool.

#### C-PACE

The Rhode Island Commercial Property Assessed Clean Energy (C-PACE) program is designed to support energy efficiency improvements and upgrades for owners of eligible commercial and industrial buildings around the State. The program is operated by the Rhode Island Infrastructure Bank (RIIB) and provides financing for the full cost of energy efficiency upgrades and renewable energy improvements. C-PACE provides long-term



repayment schedules of up to 25 years to help property owners find the funding to make these cost-saving improvements.

### R-PACE

Similar to the C-PACE program, Rhode Island Residential Assessed Clean Energy (R-PACE) program assists homeowners in financing eligible energy efficiency and renewable energy improvements to their property. Financing is often a barrier to investments in renewable energy and energy efficiency improvements, so this program helps property owners stretch the cost of the improvements over as long as 20 years.

### RHODE ISLAND EFFICIENT BUILDINGS FUND

The Rhode Island efficient building fund is a revolving loan fund specifically for municipally owned buildings and school facilities. The efficient building fund aids municipalities in making cost saving improvements in energy efficiency and to develop renewable energy projects.

### RENEWABLE ENERGY SITING

South Kingstown recognizes the need for a diverse system of energy production. To be able to meet energy demand, renewable energy has the potential to play a key role while reducing the negative environmental and social cost of traditional fossil-fuel based energy production. The responsible and thoughtful development of a variety of renewable energy production methods is an opportunity to address this need in South Kingstown.

### ENERGY CONSERVATION

As discussed throughout this element, energy efficiency and conservation are essential to meeting the need for consistent and reliable energy. Efforts to reduce the amount of energy required to power our existing systems and infrastructure will allow the energy we produce to go further in meeting our needs. A variety of opportunities to increase efficiency are present for our heating and cooling systems, transportation, and electricity use.



## ENERGY ACTION PLAN SUMMARY

**Goal 1:** Well-planned, diverse and economically viable renewable energy production facilities will exist in appropriate areas of Town.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> The Town supports appropriate development of renewable energy production facilities within South Kingstown.</p> 	<p><b>Action 1-1</b> Town Boards, Committees and staff shall work together to evaluate and determine which renewable energy sources are appropriate in South Kingstown and develop clear and comprehensive zoning requirements and siting standards to support diverse renewable energy development in appropriate areas with minimal impact on surrounding land uses.</p> 
<p><b>Policy 1.2</b> The Town encourages the development of accessory solar energy systems on municipally owned and operated buildings.</p> 	<p><b>Action 1-2</b> The Town shall study the Rhode Island Land-Based Wind Siting Guidelines published by the Office of Energy Resources and explore the opportunities for wind energy generation in South Kingstown.</p> 
<p><b>Policy 1.3</b> The Town supports the continued presence of programs designed to support the use of renewable energy systems for private property owners such as Solarize Rhode Island and Commercial Property Assessed Clean Energy (C-PACE).</p> 	<p><b>Action 1-3</b> The Town will evaluate the potential for accessory solar energy system siting in connection with proposed construction of, or major renovations to, municipally owned and operated buildings.</p> 

**Goal 2:** The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> The Town shall pursue measures to improve the energy efficiency of municipal buildings.</p> 	<p><b>Action 2-1</b> The Town will monitor energy use of municipal buildings through the Energy Star Portfolio Manager program annually.</p> 
<p><b>Policy 2.2</b> The Town will give preference to energy efficient fleet vehicles and equipment when replacement is required.</p> 	<p><b>Action 2-2</b> The Town shall pursue energy efficiency retrofits for the municipal buildings with the highest documented energy use intensity (EUI) to reduce heating and cooling costs and/or electricity usage.</p>  <p><i>(continued on next page)</i></p>



**Goal 2:** The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.

POLICIES	ACTIONS
	<p><b>Action 2-3</b> The Town shall replace end-of-life municipal vehicles with high fuel efficiency and/or electric vehicles.</p> 

**Goal 3:** To increase the understanding of Town staff and community members on energy efficient practices and renewable energy development.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> The Town will encourage the education of civic leaders and residents on issues on renewable energy and energy efficiency.</p>  	<p><b>Action 3-1</b> Town staff shall remain aware of and participate in local, statewide and national initiatives to promote the increased use of renewable energy.</p>  <p><b>Action 3-2</b> The Town Council, Planning Board, Sustainability Committee, and staff shall develop materials and disseminate information to the public and municipal staff regarding energy efficiency programs and financing opportunities.</p>  



# CIRCULATION

---



## VISION

To integrate **safe transportation modes** in the Town without disrupting the aesthetic, environmental and cultural values of the community.

The Town recognizes that an efficient, safe, and multi-modal transportation system improves the quality of life and health of citizens and provides connections between neighborhoods, villages, shopping areas, and community facilities including schools, community centers, and beaches. Despite our dependence on the private automobile, by providing attractive and safe bike paths, greenway connections, sidewalks, commuter rail service, and improved public transit service, the traffic burden on local roadways may be reduced. The Town encourages the “Village Model” approach to shaping future land use patterns in a way that is complementary to this diverse set of circulation options. Paved shoulders should be considered in many roadway construction and upgrade projects to facilitate bicycle travel in areas with higher levels of automobile traffic. The Town recognizes its partnership with the Rhode Island Department of Transportation (RIDOT), the Rhode Island Public Transit Authority (RIPTA), the Rhode Island Department of Environmental Management (RIDEM), the University of Rhode Island (URI) as well as environmental (Audubon Society, Sierra Club for example) and health based (RI Lung Association) non-profit organizations in many circulation initiatives and will continue to work with them to improve safety and accessibility for residents, visitors, and students.

---



## CIRCULATION GOALS

**Goal 1:** Multi-modal transportation opportunities for people and goods will exist throughout town to support a healthy, equitable transportation system for all residents including seniors, youth and low-income populations who may not have equal access to personal car transport.

**Goal 2:** Streets will be safe, inviting, attractive, and supportive of healthy, active modes of transportation.

**Goal 3:** Circulation improvements will protect the quality of life in the community.

**Goal 4:** State and federal agencies will recognize the importance of improving safety and accessibility for residents, visitors, and students.

## GUIDING PRINCIPLES

- ◆ RIPTA, RIDOT and Amtrak are all important partners with the Town in encouraging public transportation usage by residents, businesses, visitors and URI staff and students.
- ◆ Coordinate vehicular access with adjacent properties to limit the number of driveways and curb cuts, improving traffic safety, enhancing overall design, and supporting pedestrian activity.

## CURRENT PRACTICE

- The Town promotes the phasing out of existing billboards along all roadways in the Town, with maximum application of the legal powers it may have to do so.
- The Town reviews URI's procedures for traffic management during all campus events, including those at the Ryan Center. The Town will identify any additional support needed, including from the South Kingstown Police Department, and work with URI to update the procedures accordingly, with the goal of minimizing traffic disruption to the community.
- The Town shall require that URI implement traffic reduction programs and traffic management practices to mitigate traffic congestions on local roads.



William C. O'Neill Bike Path in the Village of Peace Dale



Raised crossing median along Main Street in the Village of Wakefield



The Town has continued to promote a "Village Model" approach to growth management in order to support the continuation of a pedestrian-scaled development pattern. Through the development of Village Plans, such as the "South Kingstown Village Study: Villages of Wakefield and Peace Dale", the Town continues to prioritize pedestrian improvements in its Villages to maintain their economic and cultural vitality. One of the primary objectives of these Village Plans is to identify areas of opportunity for enhancing the pedestrian, bike, and public transit networks to support a multi-modal approach to transportation and provide an appealing pedestrian environment. This objective is achieved through understanding each

## BASELINE INFORMATION

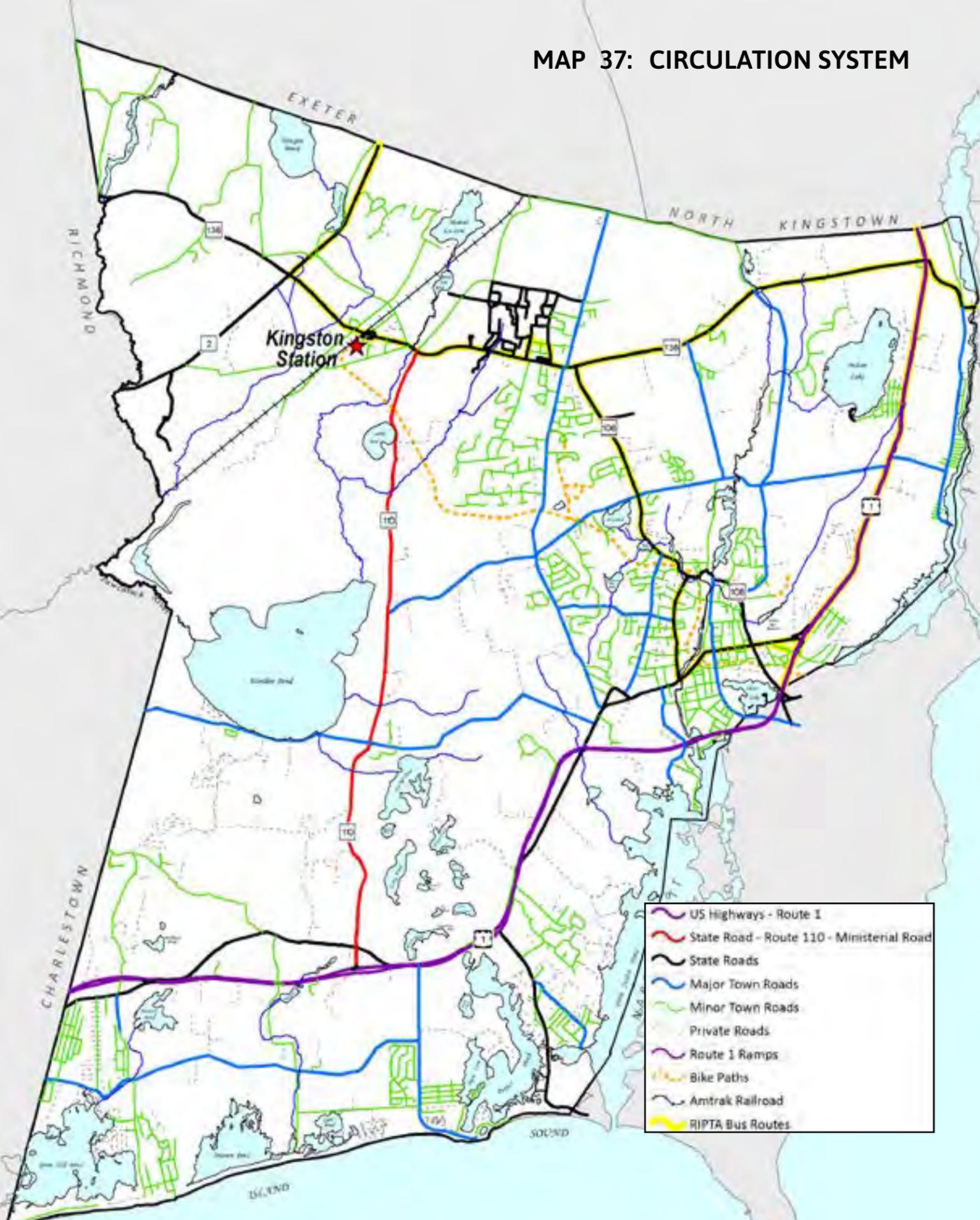
### OVERVIEW

The Circulation Element encompasses all modes of transportation: vehicular, public transit with bus and rail, bicycles and pedestrians, as well as associated parking. The Town's circulation system is depicted on [Map 37: Circulation System](#). The Town's general objective for the Circulation Element is to provide safe and efficient access within and through the Town for all modes in a balanced fashion while maintaining the Town's rural qualities and scenic aesthetics. Excessive traffic volumes and congestion are key components that may diminish the quality of life in South Kingstown and continue to be of great concern to residents. Traffic volumes in town reflect not only population growth in the community but increases in traffic generated by the University of Rhode Island (URI) and by summer beach traffic.

"The South Kingstown Greenways Master Plan", completed in 2001, identified corridors of protected open space managed for conservation, recreation, and/or transportation purposes. The Greenways Master Plan was developed to capitalize on opportunities to provide walking/biking/hiking connections to the Town's schools, parks, conservation areas, historic structures, business districts, and neighborhoods. Under the guidance of this Plan, the Town continues to identify and preserve greenway areas to create a system of green trails and guide the future growth of the Town.



### MAP 37: CIRCULATION SYSTEM



Village’s unique existing conditions and prioritizing improvements and investments appropriately.

This analysis of transportation conditions within South Kingstown encompasses all modes of transportation: vehicular, public transit with bus and rail, bicycles and pedestrians, and associated parking.

#### ROADWAYS

The Town of South Kingstown is served by a varied network of interstate, State (69.5 miles), Town (148.63 miles), and private (66.81 miles) roads. The town enjoys two state designated scenic highways, Route 1 and Ministerial Road. While the Town of South Kingstown does not have an interstate road within its boundaries, US Route 1 does provide a link between Massachusetts and Connecticut. US Route 1 runs along the sea coast of Rhode Island Sound at the tip of Narragansett Bay and continues along Block Island Sound providing access to the coastal pond areas of Town. Routes 108 and 110 serve north-south directional travel, while Route 138 (as well as portions of Route 2 between Charlestown and Exeter) serves east-west travel. Route 138 has a connection to Interstate 95 in Richmond to the west, and continues across Narragansett Bay via the Jamestown and Newport Bridges to Newport in the east. Within **Appendix 5** there is a summary of the RIDOT highway functional classification system, as well as Federal Aid Highway Program eligibility for roads in South Kingstown. RIDOT’s highway functional classification is used in developing long-range transportation plans and in determining federal aid funding categories. The Federal Aid Highway Program is a federally assisted, State-administered partnership which makes funds available to RIDOT and works with local officials to decide which projects get developed. Information on roads vulnerable to natural hazards can be found in the Natural Hazards & Climate Change element (see Tables 20, 22 & Map 11).

#### CAR OWNERSHIP

The Town has a relatively low percentage of residents without access to a private vehicle compared with Rhode Island as a whole, and only slightly more than the Washington County estimate of 2.4% (see **Table 37: Private Vehicle Access**).

**TABLE 37: PRIVATE VEHICLE ACCESS**

Source: American Community Survey, 2011-2015

	SOUTH KINGSTOWN	RHODE ISLAND
<b>Total Workers in Households</b>	15,317	474,100
<b>Workers Without Access to a Private Vehicle</b>	387 (2.5%)	15,764 (3.3%)



### COMMUTING PATTERNS

Of the 14,183 workers living in South Kingstown from 2011 – 2015, 93.2 percent worked in Rhode Island (6.8 percent worked outside the state), 63.7 percent worked in Washington County, and 29.5% worked elsewhere in Rhode Island (American Community Survey 2011 - 2015). The mean travel time to work was 24.4 minutes for 2011 – 2015, up slightly from 2000 (22.8 minutes). Since 2000, public transit use by commuters has increased significantly, but is still low over all (see **Table 38: Commuting Patterns**). It is somewhat disappointing to see that the number of people walking or biking to work has decreased since 2000, both in aggregate numbers and as a percentage of the workforce. This decrease is strictly due to a decrease in walkers. The number of people biking to work has increased a bit, but still represents a minuscule percentage of total commuters (0.15 percent in 2000 vs. 0.30 percent in 2011-2015).

**TABLE 38: COMMUTING PATTERNS**

Source: American Community Survey, 2011-2015

COMMUTE TRANSPORTATION MODE	2000	2017
Public Transit	85 (0.6%)	238 (1.7%)
Walk or Bike	1,386 (10.3%)	1,041 (7.3%)

### PUBLIC TRANSPORTATION

Public transportation within South Kingstown is provided by the Rhode Island Public Transit Authority (RIPTA), with routes along the major roadways of Routes 1, 108, and 138. These routes primarily serve local travel Monday through Saturday. RIPTA maintains two bus routes with service to South Kingstown:

- ◆ Route 64 Kingston Railroad Station – URI – Jamestown – Newport Gateway Center
- ◆ Route 66 Galilee – Narragansett – Wakefield – URI – Kingston Railroad Station – Providence

RIPTA also provides Flexible Service (Flex Service), a program designed to help serve the unmet mobility needs of communities across Rhode Island, within the area of URI. Flex Service offers passengers the option of calling a ride or picking up the Flex Vehicle within a geographically limited zone known as a Flex Zone (a suburban or rural area that has little or no fixed-route service), and connecting to a fixed-route bus service for travel outside the zone. The Kingston Flex Service ‘210’ provides service for the URI graduate



village and campus-wide by reservation, while the Kingston Connection Flex Service ‘211’ provides weekday service campus-wide and connections to the URI Bay Campus, “Down the Line” in Narragansett, Kingston Railroad Station, Newport, Providence, Warwick and Westerly. The University Pass Program (UPASS) established between URI and RIPTA provides free access for students (with valid ID) and faculty/staff (with valid Kingston Connection key tag) to flex services.



The South Kingstown Senior Transportation Service is available to South Kingstown residents 60 years of age or older, free of charge, for non-medical purposes. This municipal service is also available to disabled South Kingstown residents, regardless of age, for participation in the federally assisted lunch program provided at the Senior Center.

Amtrak provides Northeast Corridor (Boston to Washington, DC) service from the Kingston train station. Fifty miles of the Northeast Corridor is located in Rhode Island, with approximately four and one-half miles in South Kingstown. Amtrak currently serves three stations in Rhode Island: Providence, Kingston, and Westerly. Travel from Kingston Station to Providence via Amtrak is only 27 miles and takes approximately 20 minutes; however, the pricing and schedules do not make Amtrak travel convenient for commuters living in South Kingstown and working in Providence or other points north. Amtrak is generally used by locals for longer trips. Improvements to the Kingston Station were completed in 2018, which were intended to reawaken commuter rail service in the South Kingstown area and could result in a significant shift in multi-modal transportation opportunities in the Town.

### PEDESTRIAN/BICYCLE PATHS

Until recent years, there had been no meaningful effort to expand the existing sidewalk network in the Town since the W.P.A. Programs of the early 1930’s. There is a serious need now to extend sidewalks to provide off-road, all-season access to schools, commercial, and recreational areas. While crosswalks are provided at the intersections of major roads, the Town has identified the need to further emphasize the rights of the pedestrian. Such work is needed to help stem the decrease in commuters walking to work, and to make walking a safe and desirable choice for residents of all ages.



Bicycles are excellent sport and recreation vehicles but also offer a serious mode of transportation for many. Bicycling is also an ideal way to appreciate the New England landscape. Currently, three phases of the William C. O’Neill Bike Path have been completed connecting the West Kingston/URI area to Peace Dale, Wakefield, and neighboring Narragansett. A spur off the bike path to the University of Rhode Island is currently under construction, with planned completion in 2019. This path will serve as an important link in the



multi-modal system when complete, as it will connect URI to Peace Dale and Wakefield.

### FREIGHT

Rhode Island’s freight plan, “Freight Forward: State of Rhode Island Freight and Goods Movement Plan” was designed to ensure that the freight transportation system in Rhode Island supports and enhances trade and economic growth, while maintaining operational efficiency, safety, and connectivity for the state’s residents and businesses. The goals of the plan, broadly speaking, are to: improve operational efficiency for the existing freight system; expand economic growth and competitiveness; and reduce congestion and increase connectivity among the state’s roadways and its rail, marine, air, and intermodal systems. South Kingstown recognizes the importance of this freight system for the overall economic development of Rhode Island and supports the State’s efforts in implementing this plan. That said, the freight infrastructure is limited in South Kingstown, and is likely to remain so. Below are the freight resources in South Kingstown identified by the State’s freight plan.

#### ACTIVE FREIGHT RAIL LINES

As of January 2017, the P&W rail company is a part of the Genesee & Wyoming (G&W) company. On top of serving rail passengers via the Kingston Station, Amtrak leases trackage rights along the Northeast Corridor to P&W, allowing it to run freight through this corridor. According to the RI State Rail Plan (2014), the major commodities carried by the P&W are automobiles, construction aggregates, iron and steel products, chemicals and plastics, lumber, scrap materials, plastic resins, cement, coal, construction and demolition debris, and processed foods. These trains do not stop in South Kingstown, but pass through on their way to and from New London/Groton, CT and the Ports of Davisville and Providence, RI.

#### PRIMARY HIGHWAYS

The state’s freight plan identifies two “primary highways” that run through South Kingstown. These include the entire lengths of Route 1 and Route 138 through the Town. These two roads are the major routes for truck freight into, out of, and through South Kingstown, and the state has a priority for keeping traffic flowing through them. According to the State Long Range Transportation Plan (2017), Route 1 between Route 108 and the border with North Kingstown is an area prone to bottlenecks, and the largest priority for improvement in South Kingstown from the perspective of freight movement.

#### PORTS & TERMINALS

The State-owned port of Galilee is the largest fishing port in the state and one of the largest commercial fishing ports on the East Coast, providing fish



and lobster to national and international markets. The fish and shellfish hauled into Galilee is processed at the port and distributed via truck. While not located in South Kingstown, trucks from the port generally head north on Route 108 through Narragansett, and then north or south along Route 1 through South Kingstown. Route 1 is therefore a critical link for getting Galilee’s catch to market.

#### STATE PRIORITY FREIGHT PROJECTS

The freight plan identifies three priority freight projects in South Kingstown. Two have been completed and one is currently on hold, though it has been identified in the State Transportation Improvement Program as having a time frame in the near future (see **Table 39: State Priority Freight Projects**).

**TABLE 39: STATE PRIORITY FREIGHT PROJECTS**

Source: “Freight Forward: State of Rhode Island Freight and Goods Movement Plan”

PROJECT	TYPE	TIME FRAME
<b>Kingston Station Railroad Bridge @ Route 138</b>	Major Rehabilitation	FY 20-21
<b>Route 1 South Bound @ Silver Spring Cove</b>	Major Rehabilitation	completed
<b>Route 1 North Bound @ Silver Spring Cove</b>	Major Rehabilitation	completed

#### MAJOR TRAFFIC GENERATORS

South Kingstown’s major traffic generators tend to be fairly obvious. The University of Rhode Island is a major draw every day for faculty, staff, and commuter students, as well as visitors for educational, cultural, and sporting events. The management of day to day traffic as well as special event traffic is an ongoing effort between the Town and the University.

Route 1 and Route 138 are traffic generators in and of themselves, as through traffic uses these routes to connect with Route 4, Route 2 and I-95, all of which connect to major job and tourist centers around the state. As noted above, Route 1 from Route 108 north to the border of North Kingstown is one of the most consistently backed up roadways in town.

In the summer months, the town’s outdoor recreation assets, and its beaches in particular, are a major generator of traffic. Day to day traffic is generated by the commercial uses along Route 1 in downtown Wakefield, as these shops and service type businesses serve not only South Kingstown residents,



but residents all over southern Rhode Island including visitors outside the region.

## NEEDS & OPPORTUNITIES

### BICYCLE & PEDESTRIAN

The Town’s Bicycle-Pedestrian Advisory Committee (BPAC) is an “ad hoc” body of the Town whose mission is to promote walking and biking across the community. This includes but is not limited to incorporating the consideration of the needs of cyclists and pedestrians in the Town’s circulation system and infrastructure through education and outreach efforts involving town officials, residents and commercial entities. The Committee evaluates and makes recommendations to the Town Council regarding general bikeability and walkability initiatives.

The primary goals and initial work items for the BPAC include:

- ◆ Promoting a systematic method for ongoing citizen input into the development of important circulation policies, plans, and projects
- ◆ Reviewing and giving input on relevant policy and planning documents
- ◆ Investigating how making South Kingstown a safer place for pedestrians, cyclists and wheelchair users can increase our residents’ health, safety, and well-being while benefiting our local economy by increasing bicycle tourism.

The BPAC is also charged with developing a comprehensive bicycle and pedestrian master plan. This plan will identify funding options for the implementation of the recommended bicycle and pedestrian projects and establish clear criteria for prioritizing investments. This master plan should include the findings of “South Kingstown: Designing a Healthier Community” (2012) in regard to existing barriers to walking and biking in town. The master plan should also include strategies for actively encouraging more people to walk and bike in town, considering what motivates or incentivizes people to make use of existing pedestrian and bicycle infrastructure. This could include ideas such as Town-sponsored events on National Bike to Work Day and National Walk to Work Day, or incorporating into wayfinding signage the estimated walk and bike times to a particular point of interest.

### SIDEWALK MAINTENANCE

On top of prioritizing new investments in pedestrian and bicycle infrastructure, the Town needs to tackle the issue of sidewalk maintenance, particularly snow removal. During the public engagement for this plan, many residents made it clear that walking or biking in the winter time, including to bus stops, can be treacherous for able bodied adults, but even more so for



the elderly, young children, and people with mobility challenges. Clearing streets of snow is the first priority, but the plows often end up covering the sidewalks with additional snow or blocking safe access to bus stops. The Town currently lacks the equipment and manpower to clear the sidewalks, bike paths, and crossing areas. This is a common challenge throughout New England, but one that South Kingstown needs to think seriously about if it truly wants to increase walking and biking.

In Fall of 2018, the Town enacted an ordinance making adjacent property owners responsible for clearing sidewalks within a certain amount of time after a storm. Additionally, overgrown trees and other plants can be problematic for narrow sidewalks, sometimes forcing people to walk off the curb and into the vehicle travel lane. Maintenance of foliage needs a solution just as much as snow removal does.

### LINKAGES

South Kingstown has made strides in recent years in linking the various modes of transportation throughout town. The William C. O’Neill Bike Path, for example, now links the Amtrak Station in Kingston, through Peace Dale and downtown Wakefield, across to Narragansett. The Kingston Station is also served by RIPTA buses 62, 64 and 66, providing linkages from rail by bus to URI, downtown Wakefield, the URI Bay Campus, Newport, and points beyond, including the two Park & Ride facilities in South Kingstown with express bus service to Providence. The express bus and the 62 and 66 buses also link to the Massachusetts Bay Transportation Authority (MBTA) station at Wickford Junction.

Intermodal linkages will need to be improved in the long run by bringing MBTA or other commuter rail service south into Town, continuing to expand the bicycle network including secure bicycle storage facilities at Park & Ride lots, and connecting bus and rail to any local trolley service.



# CIRCULATION ACTION PLAN SUMMARY

**Goal 1:** Multi-modal transportation opportunities for people and goods will exist throughout town to support a healthy, equitable transportation system for all residents including seniors, youth and low-income populations who may not have equal access to personal car transport.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> The Town shall make every effort to encourage the viability of public transit use as an alternative to the single-occupant vehicle as a means of transportation.</p>	<p><b>Action 1-1</b> The Town shall actively work with RIPTA to develop a plan to provide consistent FLEX or regularly scheduled service to social service and mental health offices in South Kingstown, Charlestown, and Narragansett. This is especially important for local residents who are transit dependent.</p>
<p><b>Policy 1.2</b> The Town shall prepare for the possibility of commuter rail service to Kingston Station to augment Amtrak service.</p>	<p><b>Action 1-2</b> Explore and report on the costs and benefits of suspending town-run ride services and instead contracting such services through RIPTA.</p>
<p><b>Policy 1.3</b> The Town shall facilitate pedestrian improvements throughout the community to encourage walking as a healthier, more sustainable option to the single occupant vehicle.</p>	<p><b>Action 1-3</b> The South Kingstown Economic Development Committee, and "Trolley Program" providers will develop an analysis of the strengths and weaknesses of the current system and a strategy for making improvements, as well as assess the feasibility of new routes for trolley service based on recommendations and outreach outcomes defined in "South Kingstown: Designing a Healthier Community" (2012).</p>
<p><b>Policy 1.4</b> The Town shall facilitate bicycle improvements throughout the community to encourage biking as a healthier, more sustainable option to the single-occupant vehicle.</p>	<p><b>Action 1-4</b> The Town shall actively work with RIPTA to explore and report on the feasibility of developing a state-funded trolley service in Wakefield, to improve mobility and support downtown revitalization. This study shall include research into the costs and benefits of providing attractively designed bus shelters at popular bus stops.</p>
<p><b>Policy 1.5</b> The Town shall continue to implement improvements on municipally owned roadways and bridges to improve safety and capacity.</p>	<p><b>Action 1-5</b> The Town shall actively work with RIPTA to develop a plan and implementation schedule for the improvement and long-term maintenance of bus shelters in South Kingstown, as well as alterations to bus routes and stops through town (such as through the Wakefield Mall) to make them better match where riders most need them.</p>

(continued on next page)



**Goal 1:** Multi-modal transportation opportunities for people and goods will exist throughout town to support a healthy, equitable transportation system for all residents including seniors, youth and low-income populations who may not have equal access to personal car transport.

POLICIES	ACTIONS
<p><b>Policy 1.6</b> The Town shall engender close relations with transportation advocacy groups, such as Grow Smart RI and the Sierra Club, and neighboring cities and towns who can advocate together for Federal, State, and private grant funding for transportation and transit investments.</p>	<p><b>Action 1-6</b> The Town shall review use of MBTA commuter rail service at Wickford Junction by town residents and assist RIDOT in assessing the demand for the possible extension of commuter rail service to Kingston.</p>
<p><b>Policy 1.7</b> The Town shall support the movement of freight throughout South Kingstown.</p>	<p><b>Action 1-7</b> The Town shall solicit technical assistance from the Statewide Planning Program relative to the analysis of land use regulations in West Kingstown given the potential for commuter rail service to Kingston Station.</p>
	<p><b>Action 1-8</b> The Town shall work with RIDOT to determine the potential demand for commuter rail service to points south of town, (Westerly, RI and New London, CT).</p>
	<p><b>Action 1-9</b> The Town will actively reach out to ride-share companies such as ZIP Car, and other ride alternative companies such as Uber and Lyft, to see how they can partner to increase service availability within South Kingstown.</p>
	<p><b>Action 1-10</b> The Town's Bicycle-Pedestrian Advisory Committee (BPAC) will assess current bicycle and pedestrian infrastructure through evaluation of existing GIS information and site reconnaissance for public rights-of-way. Ultimately, this work will be used to map and sign additional pedestrian and bicycle routes.</p>
	<p><b>Action 1-11</b> BPAC will identify and prioritize specific areas and corridors to conduct walk-audits and handlebar surveys with outside organizations and community groups invested in health, safety, and welfare of a multi-modal transportation system.</p>

(continued on next page)



**Goal 1:** Multi-modal transportation opportunities for people and goods will exist throughout town to support a healthy, equitable transportation system for all residents including seniors, youth and low-income populations who may not have equal access to personal car transport.

POLICIES	ACTIONS
	<p><b>Action 1-12</b> The BPAC will develop a Bicycle-Pedestrian Master Plan that includes a methodology for prioritizing locations for future bicycle-pedestrian infrastructure investments. Topics to explore in this plan shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Developing a network of on- and off-street bicycle and pedestrian facilities to encourage alternative transportation modes in the central areas of town and to recreational resources including, but not limited to, the William C. O’Neill Bicycle Path, local beaches, and significant parks.</li> <li>• Developing an inventory of existing bicycle racks for public facilities, commercial hubs, open spaces, and the William C. O’Neill Bicycle Path and developing a strategy to augment this system using town budget resources, sponsorships/donations, new developments and redevelopments, and grant funding mechanisms.</li> <li>• Identifying and prioritizing appropriate bicycle and pedestrian treatments for multi-modal corridors in the town and additional infrastructure improvements as necessary to promote safe walking and biking.</li> <li>• Educational opportunities to promote use and awareness of alternative modes of transportation including, but not limited to, targeted educational events designed to increase awareness of the rights and rules associated with non-motorized roadways users, and installation of “share the road signage.”</li> <li>• Enforcement best practices, developed collaborative with local law enforcement, designed to improve overall bicycle and pedestrian safety through the best available technologies such as speed monitoring cameras.</li> </ul> <p></p> <p><b>Action 1-13</b> The Town shall amend regulations to require the installation of attractive bicycle facilities for residential developments of six units or greater or for any commercial development requiring development plan review at a scale commensurate with the size and location of the development.</p> <p></p> <p><i>(continued on next page)</i></p>



**Goal 1:** Multi-modal transportation opportunities for people and goods will exist throughout town to support a healthy, equitable transportation system for all residents including seniors, youth and low-income populations who may not have equal access to personal car transport.

POLICIES	ACTIONS
	<p><b>Action 1-14</b> The Town shall evaluate transportation needs and potential improvements relative to emergency response (See the Natural Hazards &amp; Climate Change element).</p> <p></p> <p><b>Action 1-15</b> The Town shall evaluate transportation needs and potential improvements relative to truck freight along Route 1 and Route 138.</p>

**Goal 2:** Streets will be safe, inviting, attractive, and supportive of healthy, active modes of transportation.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> The Town recognizes that street design must account for all users in order to provide a safe and balanced transportation system.</p> <p></p> <p><b>Policy 2.2</b> – The Town of South Kingstown recognizes the importance of proper street lighting for public safety.</p> <p><b>Policy 2.3</b> – The Town of South Kingstown will actively update the stewardship plans for its scenic highways including Ministerial Road and Route 1 to ensure the plans remain relevant and adequately identify threats and opportunities for the resources.</p>	<p><b>Action 2-1</b> The Town shall explore and determine the viability of adopting a “Green and Complete Streets” ordinance to enforce the South Kingstown Town Council Resolution on Complete Streets utilizing the best available resources, publications and multi-modal transportation practices. The Town will develop and apply to the fullest extent possible Complete Street standards appropriate for rural roads, subdivisions, and village center roads.</p> <p></p> <p><b>Action 2-2</b> The Town shall coordinate with RIDOT to encourage the Complete Streets concept as the basis for street design on state transportation and infrastructure related projects as appropriate.</p> <p></p> <p><i>(continued on next page)</i></p>



**Goal 2:** Streets will be safe, inviting, attractive, and supportive of healthy, active modes of transportation.

POLICIES	ACTIONS
	<p><b>Action 2-3</b> The Town shall work with RIDOT to evaluate improvements along Old Tower Hill Road between Route 1 and Dale Carlia Corner, including sections of Route 108 and adjacent densely developed residential areas to support a safe, attractive, human-scaled environment that encourages pedestrian and bicycle connectivity and a unique sense of place within the area through high quality design.</p> <p>  </p> <p><b>Action 2-4</b> The Town shall work with RIDOT to explore and report on the feasibility, costs, and benefits of constructing a pedestrian and bike path that either bridges over or tunnels under Route 1.</p> <p> </p> <p><b>Action 2-5</b> The BPAC will explore and report on the feasibility of basing the location of new street signs on population density as opposed to accident.</p> <p><b>Action 2-6</b> The BPAC will develop standards for prioritizing the placement of new street lighting in certain areas. Street lighting in these areas will be designed to minimize glare in the night sky, and will be discouraged altogether in other areas. Priority areas for street lighting will include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Locations with a relatively high accident rate;</li> <li>• Locations with a relatively high crime rate;</li> <li>• Locations with a concentration of senior citizens or handicapped residents such as elderly housing projects or nursing homes; and,</li> <li>• Areas of special or unusual character (e.g. village centers, community centers, churches or schools).</li> </ul>



**Goal 3:** Circulation improvements will protect the quality of life in the community.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> The Town will periodically review its Zoning Ordinance and Subdivision Regulations to ensure that the circulation goals and policies are reflected.</p> <p><b>Policy 3.2</b> The Town shall promote the highest aesthetic and “green infrastructure” standards for roadway design and visual quality along major roads.</p> <p></p>	<p><b>Action 3-1</b> The Town shall amend its Zoning Ordinance to provide for shared parking areas in appropriate districts and to permit parking on adjacent or nearby land.</p> <p></p> <p><b>Action 3-2</b> The Town shall catalogue all public parking opportunities in South Kingstown, and develop signage, on line information, and hard copy guidance for residents and visitors explaining where this parking is and what it can be used to access.</p> <p><b>Action 3-3</b> The Town shall establish flexible standards for road-way/driveway construction, including widths and type of material, in an effort to minimize the extent of impervious surfaces, reduce construction costs and encourage energy conservation.</p> <p></p> <p><b>Action 3-4</b> The Town shall explore amending its Subdivision and Land Development Regulations to incorporate innovative standards for low impact development in roadway design and stormwater management practices.</p> <p></p> <p><b>Action 3-5</b> The Town shall develop mechanisms for measuring and accounting for the cumulative impacts of development regarding transportation improvements and addressing these impacts within the development review process. The Town shall formalize this metric within regulations that will specify new requirements for applicants and provide clear decision criteria for review authorities.</p> <p><b>Action 3-6</b> The Town shall review the need to establish a maximum length of road with a cul-de-sac.</p> <p><b>Action 3-7</b> The Town shall explore amending regulations to incorporate standards for increasing pedestrian and bicycle access and connectivity between adjoining commercial properties and between commercial properties and surrounding residential neighborhoods in a coordinated manner.</p> <p> </p> <p><i>(continued on next page)</i></p>



**Goal 3:** Circulation improvements will protect the quality of life in the community.

POLICIES	ACTIONS
	<p><b>Action 3-8</b> The Town shall actively work with RIDOT to reach an agreement about reducing the amount of salt and oil added to state roads in South Kingstown. The Town shall leverage any TMDLs, water quality statistics, and RIDOT's requirements under the 2017 consent decree to advocate for this agreement.</p> <p></p> <p><b>Action 3-9</b> The Town shall promote the phasing out of existing billboards along all roadways in the Town, with maximum application of the legal powers it may have to do so.</p> <p><b>Action 3-10</b> The Town shall develop criteria for identifying targeted locations for underground utilities on new or reconstructed state or local streets or highways, and explore and report on potential sources of funding for implementation. Explore the possibility of providing local matching funds for federal dollars, or Americans with Disabilities Act funding where the burying of utilities would improve sidewalk accessibility.</p>

**Goal 4:** State and federal agencies will recognize the importance of improving safety and accessibility for residents, visitors, and students.

POLICIES	ACTIONS
<p><b>Policy 4.1</b> The Town will continue to improve its policy of coordination with RIDOT on state transportation projects, by maintaining contact with RIDOT during all phases of planning, design and construction. The Town will strongly encourage RIDOT to utilize flexible road design standards that provide an appropriate fit to the community.</p> <p><b>Policy 4.2</b> The Town shall continue to solicit state assistance for transportation improvements through Statewide Planning Program's Transportation Improvement Program.</p> <p><b>Policy 4.3</b> The Town shall work with URI to continue and expand transportation opportunities for students and staff to access local commercial and service areas.</p>	<p><b>Action 4-1</b> The Town shall research potential state/federal resources to fund the realignment of Matunuck Beach Road to protect the South Shore Water System's 12-inch main and to maintain the primary evacuation route for residents.</p> <p></p> <p><b>Action 4-2</b> The Town shall support URI's plans to promote Plains Road and Route 138 east from Route 2 as a means to access the campus and mitigate traffic congestion in Kingston Village.</p> <p></p>





# UNIVERSITY OF RHODE ISLAND

---



## VISION

The Town recognizes the **historical, cultural, recreational** and **economic importance** of the **University of Rhode Island** to the community as a whole and is committed to working with the University in a **proactive partnership** that **maintains** and **strengthens** this relationship for the **betterment** of the Town and the University.

The Town of South Kingstown and the University of Rhode Island will work collaboratively to address matters of mutual concern such as traffic flow, circulation, and housing. A strong and dynamic relationship will exist between the two entities, which promotes open and continuous communication and collaboration. The rich resources of the University, including the faculty, staff, and students, bring additional energy, enthusiasm and information to the Town. The Town and University function as partners in planning for future development and studying topics which affect the residents of our shared community.

---

## URI GOALS

**Goal 1:** Host-community/institutional relationships and joint strategic planning will be strengthened.

**Goal 2:** Transportation, traffic, public safety and infrastructure system linkages will be enhanced.

**Goal 3:** On-campus housing resources and affordable housing opportunities will be improved.

**Goal 4:** URI will continue to provide for a sustainable campus environment with enhanced natural systems protection.

## GUIDING PRINCIPLES

- ◆ The University of Rhode Island (URI) is important to the local and regional economy.
- ◆ The Town recognizes the University's importance as a historic, cultural, recreational, and employment resource, as an economic development partner
- ◆ The presence of URI in South Kingstown has an impact on the adjacent neighborhoods, including the historic village of Kingston.
- ◆ URI is an asset to the community in that it brings academic, cultural, and recreational programs, it stimulates critical and progressive thinking regarding many municipal issues, and it has allowed productive partnerships and collaborations to form.
- ◆ URI and the Town are integral to one another, particularly in the context of community planning.
- ◆ The Town and University share many common interests relating to preserving and enhancing both communities' quality of life, sense of place, provision of adequate services and infrastructure, environmental protection and respect for history and of each other.
- ◆ A balancing of the interests and needs of South Kingstown, as the host community, and the University, as the State's principal higher education and research institution, is a desirable ongoing goal requiring cooperation, communication and the coordination of land use and infrastructure planning.



## CURRENT PRACTICE

- ◆ Through active participation in the State TIP (Transportation Improvement Program) and in the development of the local CIP (Capital Improvement Program), the Town assesses transportation system adequacy, and advocates and plans for infrastructure improvements that will appropriately handle existing traffic and expected future volume conditions on State and Town roads in proximity to the University.
- ◆ The Town works with RIDOT and URI to review and define area infrastructure capacities and limitations in relation to University expansion, capital facilities planning, and background community growth. As part of this cooperative effort, options to address deficiencies and capacity limits are researched and implemented, as appropriate.
- ◆ To assist the University's Campus Master Plan development process, the Director of Planning sits on the Campus Master Plan Review Team, and Town staff, boards and commissions share resource information and expertise with the University concerning open space in proximity to the campus, as well as wetlands data and other information pertinent to shared environmental resources.
- ◆ The Town takes an active role in the University's land use and conservation planning efforts for all URI properties within South Kingstown's borders.

## BASELINE INFORMATION

### OVERVIEW

The main Kingston campus is bounded on all sides by the Town. South and east of the campus lies historic Kingston Village, small scale commercial services and residential neighborhoods; north of the traditional campus are University holdings, environmentally sensitive settings and less dense residential areas; west of the campus are open spaces and agricultural areas and the Village of West Kingston, which, given the presence of major state roadways and Kingston Station, may provide an opportunity to enhance the west approach to campus as a more significant gateway to the University.

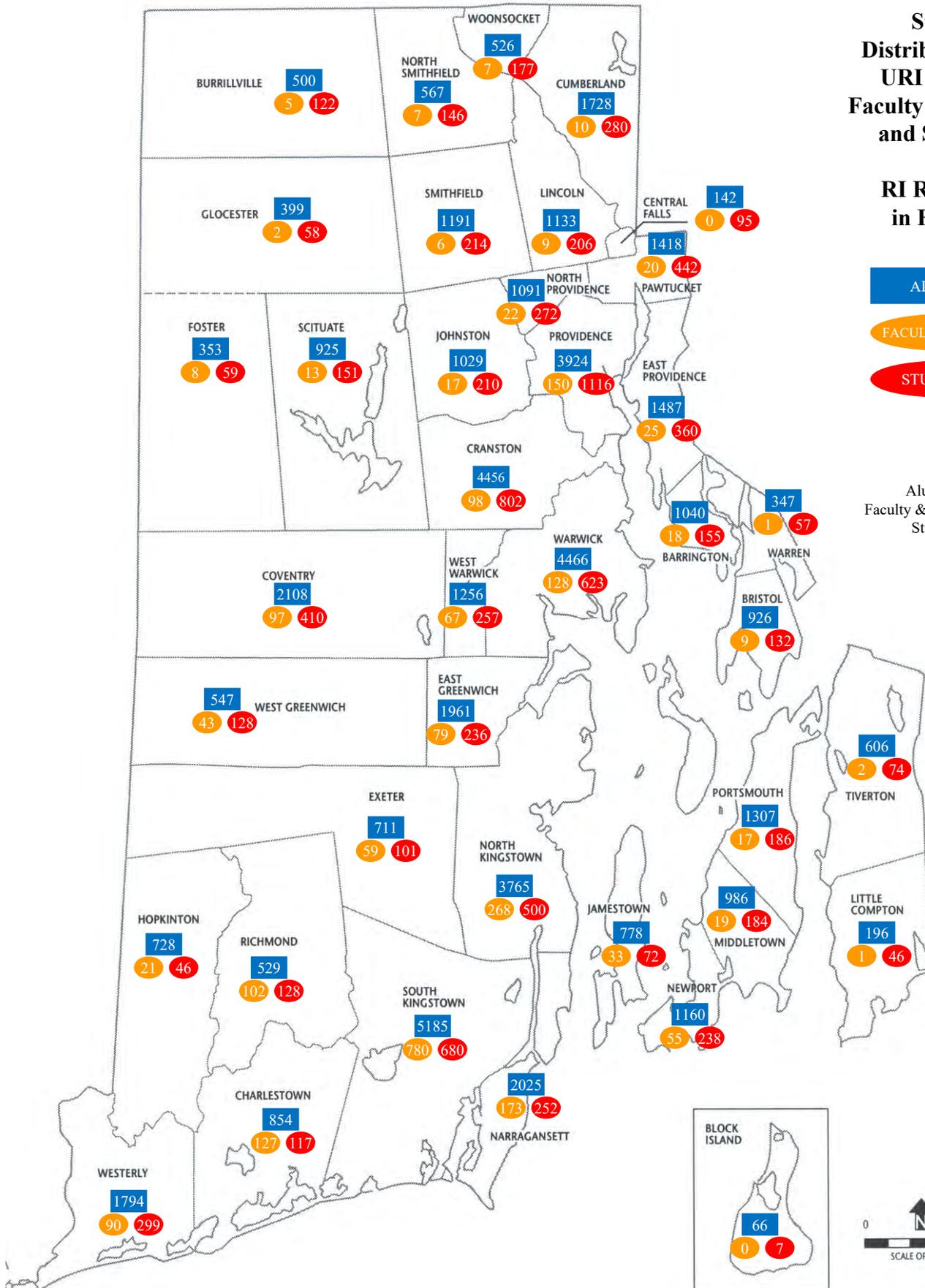
Planned growth for the University must include parallel capital improvements to the area's road system, in a manner that is respectful to the residential nature, historical context and environment characteristics of South Kingstown. University-funded road construction and improvement projects, major commitments to the growth of on-campus housing facilities, as well as initiatives that have effectively stimulated greater utilization

# MAP 38: DISTRIBUTION OF URI ALUMNI, FACULTY & STAFF (2018)

## Statewide Distribution of URI Alumni, Faculty & Staff, and Students who are RI Residents in Fall 2018



**Total**  
 Alumni: 54,210  
 Faculty & Staff: 2,589  
 Students: 9,639





of public transportation, demonstrate the University's cognizance of and commitment to planned growth and sensitivity to community interests. Growth without addressing such considerations will result in conditions adverse to the interests of the Town and University. The Town welcomes URI as a community planning partner with the knowledge that pursuing our respective interests in a balanced and open process will result in positive institutional development and enhancement of the community.

## ENROLLMENT

Over the past decade, the University has seen a steady increase in enrollment. **Table 41: URI Undergraduate On-Campus Residence** compares enrollment figures for undergraduate and graduate students since 2007.

## ON-CAMPUS RESIDENTS

According to the University, undergraduate on-campus residence has also increased steadily over the past 10 years, as outlined in **Table 40: URI Enrollment**.

## OFF-CAMPUS RESIDENTS IN SOUTH KINGSTOWN

Historic data relative to off-campus students living in South Kingstown is unavailable; however, the University has published **Map 38: Distribution of URI Alumni, Faculty & Staff (2018)**, which estimates the number of students living in South Kingstown, off-campus at 680. This figure represents approximately 7% of the off-campus student population.

**TABLE 40: URI ENROLLMENT**

Source: URI website

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Undergraduate	13,086	13,369	13,234	13,094	13,219	13,398	13,354	13,589	13,641	14,801	15,092
Graduate	2,564	2,535	3,158	3,200	3,098	3,053	3,033	2,982	2,972	3,033	3,006
<b>TOTAL</b>	<b>15,650</b>	<b>15,904</b>	<b>16,392</b>	<b>16,294</b>	<b>16,317</b>	<b>16,451</b>	<b>16,387</b>	<b>16,571</b>	<b>16,613</b>	<b>17,834</b>	<b>18,098</b>
change		254	488	-98	23	134	-64	184	42	1,221	264

**TABLE 41: URI UNDERGRADUATE ON-CAMPUS RESIDENCE**

Source: URI Email communication from URI staff

1970	1980	1990	2000	2010	2016
4,154	3,737	4,047	3,798	5,001	5,709

## FACULTY & STAFF

URI is the Town's largest employer, with a total faculty and staff of 2,589. Approximately 30% of the University's employees, or 780 persons, live in South Kingstown, as shown in **Map 38: Distribution of URI Alumni, Faculty & Staff (2018)**.

According to the Office of Academic Affairs, during academic year 2016-2017 URI employed 892.5 faculty full-time employees. Historic full-time employee figures are shown in **Table 42: URI Faculty, Full-Time Employees**. Fiscal Year 2016 the University began hiring for 60 new tenure-track faculty, a process that will be completed in Fiscal Year 2019.

### TABLE 42: URI FACULTY, FULL-TIME EMPLOYEES

Source: Email communication from URI staff

ACADEMIC YEAR	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
FTES	775.1	779.4	801.3	803.0	892.5

## UNIVERSITY BUDGET & PLANNED GROWTH

### BUDGET & INVESTMENTS

The University's total budget for the 2017-2018 year was \$790 million. Based on information from the Director of Capital Planning and Real Estate Development, the University has invested, or is in the process of investing, close to \$900 million in capital improvements since 2006, investing \$85 million in construction during the 2017-2018 academic year.

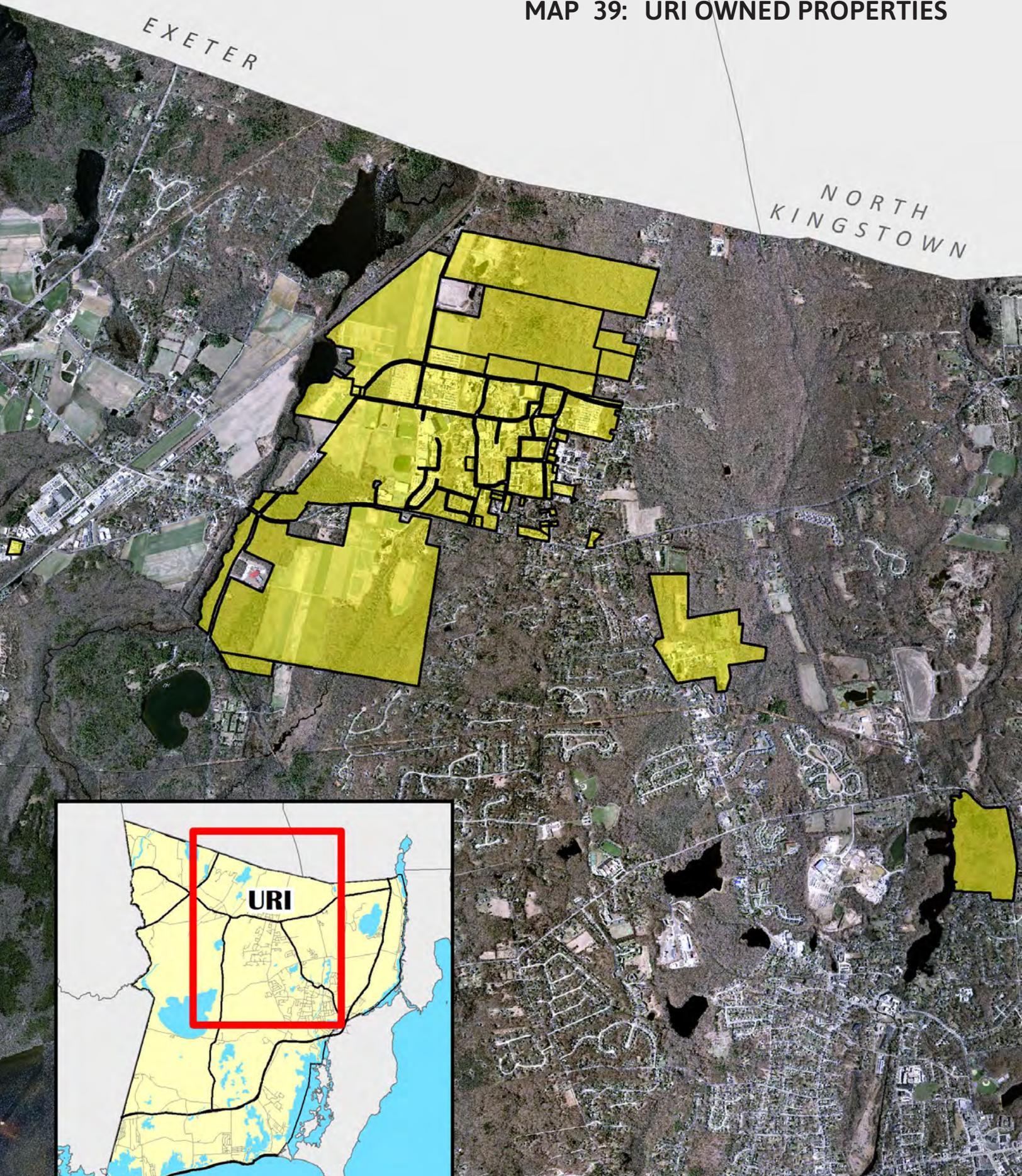
At the University, capital project development has continued over the past year. Based on information found in URI's Capital Improvement Program for FY 19-23, the University anticipates investing over \$550 million in capital projects in the next eight (8) years.

### PROPERTY & PLANNING

**Map 39: URI Owned Properties** indicates all properties currently owned by the University.

In 2007, the University completed a feasibility study on the development of a Research and Technology Park. The proposed Research and Technology park represents the first proposal that expands outside of the current boundary at Flagg Road into undeveloped campus holdings. The initial Conceptual Master Plan for the Research and Technology Park proposed utilization of 30 acres of land to host six, 4-story buildings containing a total

MAP 39: URI OWNED PROPERTIES



of 320,000 square feet of space. The Park would include two, 4-story parking garages containing 1,000 parking spaces. A 10-year build-out was projected. The Town, as a participant throughout the feasibility study process, has maintained a posture of general support of the concept, tempered with a number of host community concerns. This proposal has been placed on hold pending further investigation.

Also in 2007, the University engaged a consulting firm to conduct a real estate study entitled, “Real Estate Feasibility Development Plan,” with the aim of evaluating the feasibility of establishing a number of new land uses in the North Woods area or on other portions of campus. Among the uses analyzed were:

- ◆ Faculty/staff housing
- ◆ Alumni condominiums
- ◆ Small-scale “boutique” hotel and conference center
- ◆ Student housing built under contract with a private development entity
- ◆ A PGA certified golf learning center
- ◆ Retail uses
- ◆ Parking garages

In 2011, the University engaged a consulting firm to review the viability of developing a research park in proximity to the life sciences academic cluster on campus.

In 2017, the University adopted the Campus Sustainability Strategic Plan, which provides recommendations to make the campus more sustainable. Also in 2017, the University completed a Landscape Master Plan, which analyzes the current condition of the campus landscape and ensures consistent standards for landscape elements that are needed to create a more inviting, unified and aesthetically-pleasing campus.

In 2018, the University completed a Transportation and Parking Master Plan, which establishes a strategy for campus growth while enhancing mobility, efficiency and sustainability. The Plan offers both short- and long-term recommendations to form an efficient and regionally connected transportation system.

#### FY 2018-2023 CAPITAL IMPROVEMENT PLAN

The University’s Fiscal Year 2018-2023 Capital Improvement Plan includes over \$853.1 million in capital projects, as shown in **Table 43: URI FY-2018-2023 Capital Improvements**. Note: The CIP includes projects for all of URI’s campuses, not only Kingston.

**TABLE 43: URI FY-2018-2023 CAPITAL IMPROVEMENTS**

Source: Office of the Post-Secondary Education Commissioner

PROJECT	TOTAL EXPENSE	PROJECTED FISCAL YEARS
College of Pharmacy Building	\$70,529,14,	2018
Chemistry Building	\$76,863,755	2018
Electric Utility Substation Replacement	\$7,000,000	2018
Fire Safety & Protection, Academic & Administrative	\$25,848,356	2018
Fire Safety, Auxiliary Enterprises	\$18,205,000	2018-2019
Nursing Education Center	\$12,389,393	2018
Repaving & Road Construction	\$14,400,680	2018-2019
Fraternity Circle Infrastructure	\$5,430,506	2018-2020
Gateway to URI (Welcome Center)	\$7,626,041	2018-2019
Energy Conservation/Performance Phase II	\$12,600,000	2018-2019
<b>Engineering Building Renovations</b>	<b>\$131,106,756</b>	<b>2018-2020</b>
Upper College Road Multi-use Development	\$1,350,000	2018-2019
Biological Resources Lab	\$5,898,386	2018-2020
White Horn Brook Apartments	\$94,337,000	2018-2020
Engineering Building Renovations Phase II	\$25,500,000	2018-2020
Fine Arts Center Renovation & Addition	\$68,700,000	2018-2022
Energy Conservation/Performance Phase III	\$11,600,000	2018-2020
Athletic & Recreation Facilities Advanced Planning	\$250,000	2018
Agricultural Innovation District	\$5,200,000	2019-2020
Fogarty Hall - Core Infrastructure	\$6,300,000	2019-2021
Utility Infrastructure Upgrade Phase I	\$6,500,000	2019-2020
White Hall Renovations	\$3,625,000	2018-2019
Repaving, Hardscape & Landscape	\$11,000,000	2019-2021
Combined Health & Counseling Center	\$32,900,000	2019-2021
Fire Protection, Academic Phase 2	\$7,700,000	2019-2021
Fire Protection, Auxiliary Phase 2	\$2,300,000	2019-2021
Ranger Hall Phase 2	\$3,500,000	2019-2021
Hope Commons Expansion	\$2,200,000	2019-2020

**TABLE 43: URI FY-2018-2023 CAPITAL IMPROVEMENTS (CONTINUED)**

Source: Office of the Post-Secondary Education Commissioner

PROJECT	TOTAL EXPENSE	PROJECTED FISCAL YEARS
Narragansett Bay Campus Renewal Phase I	\$95,000,000	2020-2023
Edwards Hall Renovation	\$4,200,000	2020-2021
Rhode Island State Crime Lab	\$5,000,000	2020-2022
Fraternity Circle Master Plan Implementation	\$3,200,000	2020-2021
Utility Infrastructure Upgrade, Phase II	\$18,382,500	2021-2023
Public Safety Building	\$8,200,000	2021-2023
Facilities Services Sector Upgrade	\$11,800,000	2021-2023+
Stormwater Management	\$7,800,000	2022-2023
Morrill Hall Renovation	\$28,500,000	2022-2023+
<b>TOTAL</b>		<b>\$853,122,517</b>

## POTENTIAL ISSUES

URI's growth has placed an increased loading on the area's existing infrastructure (state highways, local roads, utilities, etc.) and affects all of these facilities, sometimes disproportionately. As such, land use and capital improvement planning efforts of the University, the Town of South Kingstown, and the State of Rhode Island must be coordinated to ensure that negative impacts to the safety, welfare, and convenience of the public are addressed and environmental degradation does not result.

A primary focus of the Town is to make certain that increased loading on area roads and highways does not overwhelm the capacity of these facilities, creating public safety response issues for the University or the community at large. The Town is also concerned that institutional growth should not occur or be viewed in isolation, particularly with regard to transportation impacts. The University administration has recognized that institutional expansion on the Kingston campus has the potential to affect the Town, its neighborhoods and its residents, both positively and negatively. The planning process for institutional growth and expanded or new facilities must consider and be coordinated with "host community" perspectives and interests. Continuous communication and an open dialogue with the Town's administration and neighborhoods in proximity to URI must be a theme running through the University's land use planning efforts. Such expansions of enrollment or facilities must occur in a balanced fashion that fully considers quality of



life issues of the host community, particularly for the historic villages of Kingston and West Kingston.

University growth also has the potential to adversely impact service requirements and costs for the Town, particularly in the areas of public safety (police, fire and EMS) response needs. The requirements for expansion of municipal or fire district service requirements attributable to institutional growth or expansion need to be carefully considered and may require agreements to define service responsibilities and/or the assignment of cost requirements. The Town is cognizant that the University provides direct support for its needs in the areas of public safety and utility systems. Examples include but are not limited to: URI Police Force, EMS (emergency medical services), majority financial support to the Kingston Fire District and the URI water system which also hosts well sites for the Kingston Water District, with interconnections between both for mutual benefit. URI also manages its own solid waste and recycling program and is an active partner in the Regional Waste Water Treatment System serving the University and the Towns of Narragansett and South Kingstown. These activities notwithstanding, many University systems and programs related to public safety and infrastructure are augmented by Town resources which have staffing and fiscal limitations. Institutional growth that is not fully supported by University service resources and thereby strains town facilities or programs related to public safety and utility infrastructure is not seen as a sustainable model. It is important that the planning process for institutional growth at URI fully consider and acknowledge the limitations of Town facilities or programs related to public safety response and utility infrastructure capacities.

Town schools are also adversely impacted by the University when children residing on tax-exempt, University-owned properties attend South Kingstown schools. These education costs should be tracked each year to document the impact of these students on the Town's school budget. These costs can be significant to the Town especially since, at present, there is no mechanism to mitigate or off-set this impact. Between the 2003-04 and 2008-09 academic years a total of 58 children residing in Graduate Village at URI attended South Kingstown public schools. Over this time period the average number of students attending South Kingstown schools from University housing is 9.7 per academic year. Calendar year 2003 represents a high point with 17 students enrolled in local schools from University housing. For the 2010-11 school year only 2 students from University housing (Graduate Village and other University housing) attended Town schools.

## NEEDS & OPPORTUNITIES

### SOUTH KINGSTOWN/URI RELATIONSHIP

The Town collaborates with the University of Rhode Island on a variety of issues. This is illustrated by the Town's ongoing participation in the Campus Master Planning Process and the annual Town/Gown meetings. In support of the formal Town/Gown meeting process, frequent meetings between senior University administrative staff and the Town's administration have occurred over the past few years. This overall process has been well-received, productive and has significantly improved communication, awareness and sensitivity among the participants. The Town and URI worked together on the Route 138 Project Advisory Committee (PAC) in the development of the improvement plan for rebuilding Route 138 between Route 2 and Route 108. Further, Town staff and the University administration have worked cooperatively on the closure of the former URI landfill in Kingston, in the planning and construction of a URI bike path spur from the South Kingstown Bicycle Path through Peckham Farm and extending into the main Kingston Campus, and on the development of the solar arrays on the three closed landfills. The Town has also acted as a partner, both financially and as a member of the client group, in the conduct of the study for the proposed Research and Technology Park. The University has participated in the Town's development and updates of its Comprehensive Community Plan.

Given current conditions and the variety of issues facing the University and the Town, improving communication and collaboration on matters of mutual interest will become more critical. Moving forward, it is apparent that a more structured approach to Town/Gown issues would provide mutual benefits to both the Town and University. Historically, the approach toward addressing issues of mutual concern has been relatively informal and based on an issue-specific or as-needed basis. However, in the future such an approach may not ensure equal access by or consideration of all stakeholder groups.

Accordingly, the Town has suggested that a Host Community/University cooperative agreement be forged to provide a process and structure to address areas where our and URI's interests intersect. This type of agreement is seen as a means for cooperating in the development of the Research Park and other University holdings north of Flagg Road. Such agreements are becoming more commonplace between universities and host communities nationwide to address general campus planning, community development, and non-traditional (entrepreneurial) campus activities, such as the proposed Research and Technology Park. Moreover, these agreements often create a framework to address impacts to the quality of life in neighborhoods, local environmental systems, area historic resources, local and state roads, and other conflicts, concerns or opportunities. These benefits notwithstanding,



the University administration has expressed its preference to persist with a more informal communication and cooperation structure as opposed to the type of agreement the Town advocates. It is the Town's intention, however, to continue to urge URI to enter into a more formal agreement that more effectively addresses the needs of all stakeholders.

The "Host Community/University cooperative agreement" the Town advocates could serve as the framework to address many of the Town's concerns.

## **OPPORTUNITIES FOR IMPROVEMENT**

Based on the potential impact of new development at the University, the Town would like to see the University implement/conduct the following:

- ◆ A University land use plan for all school holdings north of Flagg Road and the incorporation of these concepts into the URI Campus Master Plan.
- ◆ Consideration of and consistency with the goals and policies of the South Kingstown Comprehensive Community Plan for campus land use planning.
- ◆ Consistency in University planning for the Research Park and adjoining land with the state land use policies articulated in "Land Use 2025, Rhode Island's Land Use and Policies Plan, State Guide Plan Element 121", State Guide Plan Element 611, "Transportation 2030" and the State Transportation Improvement Program (TIP).
- ◆ An inventory and analysis of general environmental impacts resulting from the development of the Research and Technology Park in a sensitive environmental setting (to include review of habitat areas, wetlands, groundwater impacts and drainage management).
- ◆ A review of the impact of non-University related land uses on the campus regarding public safety services (including Police, EMS and the Kingston Fire District).
- ◆ Provide an annual assessment of the impact of University faculty and graduate level housing on Town school system enrollments (e.g., track enrollment of children from faculty and graduate housing in town schools)
- ◆ Establish base line data to define the capacities, levels of service, and limitations (due to right-of-way constraints or other factors) for the existing road network, both on the campus and for Town and State roads.

- ◆ Conduct data collection to gauge the impact of URI related traffic on neighborhood areas and resident commuting patterns. In addition to assessing normal institutional activities during the academic year, this effort should include consideration of special events such as graduation, sporting events, concerts, etc.
- ◆ Analyze and project traffic flows from planned residential development expansion in the vicinity of the Kingston Campus, particularly Old North Road, and their quantified impact on traffic flow through the Campus, i.e., Upper College, Lower College, Flag, and Plains Roads.
- ◆ Assess the effects of the trend of increased transit service and use as well as increased on-campus residence capacity on commuter traffic flows associated with the Kingston Campus.
- ◆ A parallel, coordinated capital improvement planning process (to the Research Park development) to address any upgrade and improvements requirements to South Kingstown and State roadway connections to the University. The schedule for this plan must be coordinated with development of the Research Park and adjoining land holdings.
- ◆ Develop definitions for allowed uses, density and design standards for the Research Park and vicinity. This process must consider the context of this land in relation to Town neighborhoods and the local road network and should also include a public process of engagement to assess/consider the perspectives and concerns of area residents.
- ◆ Develop clear guidelines associated with Taxation and/or Payment in Lieu of Taxes (PILOT) in order to remove any issues between the University and the Town of South Kingstown as it relates to uses that are non-University related or proprietary in nature.
- ◆ Consideration of host community issues and concerns in legislative proposals from the University regarding the development and operation of the Research and Technology Park.

## PLANNING MUNICIPAL INITIATIVES

The Town plans to undertake or support initiatives in two areas to assist in the planning and capital improvement process concerning the Research Park and other college related growth issues.

First, the Town has requested that RIDOT (with the support of the University administration) engage a traffic consulting engineering firm to conduct a capacity analysis and define the improvement limitations of the current connecting road and highway system. This initial request for analysis is in relation to the Route 138 Reconstruction Project and is focused upon



the interface of local and University roads with the state highway. The Town would recommend that the analysis be expanded to also address institutional and local growth impacts to Old North Road, Plains Road and the Kingston and West Kingston Village areas generally. It is noted that RIDOT did review the Old North Road intersection with Route 138 and determined that returning the road to two way traffic was not warranted.

Secondly, the Town plans to review the potential impact of institutional growth on public safety response capacities including fire services (Kingston Fire District), police/public safety (South Kingstown and campus) and emergency medical services (EMS). This review will be conducted in cooperation with the University and the Kingston Fire District.

## URI ACTION PLAN SUMMARY

**Goal 1:** Host-community/institutional relationships and joint strategic planning will be strengthened.

POLICIES	ACTIONS
<p><b>Policy 1.1</b> The Town will maintain effective and ongoing communications with the University by continuing to participate in the URI Master Plan Review Team process.</p> <p><b>Policy 1.2</b> The Town will be pro-active with the University on transportation planning, traffic management, traffic calming and infrastructure related issues, particularly in relation to the Rhode Island Department of Administration, Division of Planning’s Transportation Improvement Program (TIP).</p> <p><b>Policy 1.3</b> The University intends to revise its Campus Master Plan to include land holdings north of the traditional Campus boundary at Flagg Road prior to any development in this area. The town encourages URI to seek substantial involvement from the Town as the “host community”.</p>	<p><b>Action 1-1</b> The University and the Town will work toward the development of a “Host Community/University” cooperative agreement to provide a process and structure to address areas where common interests intersect and matters of concern arise.</p> <p><b>Action 1-2</b> The Town will work with the University and RIDOT to define and develop appropriately scaled infrastructure upgrades and the use of traffic calming techniques and management strategies in the Kingston and West Kingston vicinities to address existing and proposed institutional development and general community growth.</p> <p><b>Action 1-3</b> The Town will track municipal costs attributable to the University, particularly with regard to school children in local schools from on-campus graduate student and/or faculty housing. This database will form the basis of discussions with URI regarding a potential Payment in Lieu of Taxes (PILOT) program to address these costs.</p> <p><b>Action 1-4</b> The Town shall work with URI to support research expansion and potential spin off of new businesses, utilizing the State of Rhode Island’s incentives for research and development.</p>



## Goal 2: Transportation, traffic, public safety and infrastructure system linkages will be enhanced.

POLICIES	ACTIONS
<p><b>Policy 2.1</b> The Town supports and strongly encourages University efforts and programs to utilize and promote innovative and alternative forms of transportation for commuters and staff, particularly in relation to underutilized RIPTA programs and linkage to the use of the Kingston Station multi-modal transportation capabilities. Such linkages may also include consideration of off-campus state properties (i.e. Scarborough Beach Parking lot) to serve as satellite parking facilities for RIPTA service to and from the campus.</p>  <p><b>Policy 2.2</b> The Town supports and encourages the University's efforts to promote active, healthy modes of transportation in future improvement projects to increase pedestrian safety, support the health of students and faculty, and reduce automobile dependency.</p>   <p><b>Policy 2.3</b> The Town supports the use of the South County Bike Path as an alternative means of commuter access for “down the line” commuting to the University and will continue to work in concert with URI and RIDOT to improve linkages from the existing path to the institution.</p>   <p><i>(continued on next page)</i></p>	<p><b>Action 2-1</b> The Town shall continue to implement the recommendations of “South Kingstown: Designing a Healthier Community” as they relate to the University and surrounding neighborhoods.</p>  <p><b>Action 2-2</b> The Town will research, consider, and institute, as appropriate, traffic calming techniques on town roads in proximity to the University to manage traffic flow and promote safety. The Town will urge the State of RI and the University to continue to utilize such techniques on state roads and the campus road system (e.g., the 138 Improvement Project) and University actions with regard to its internal road systems (e.g., eliminating parking on Flagg Road north side and from Heathman Road to Upper College on the south side, increased cross walk markings and elevated cross walks, and added three and four-way stops at key intersections).</p> <p><b>Action 2-3</b> In cooperation with URI, the Town will review the potential impacts of institutional growth at the University on public safety response capacities (including South Kingstown EMS, Kingston Fire District, Kingston Water District and Police).</p> 

**Goal 2:** Transportation, traffic, public safety and infrastructure system linkages will be enhanced.

POLICIES	ACTIONS
<p><b>Policy 2.4</b> The Town strongly supports University programs and policies to decrease commuter traffic to and within the Campus, particularly with regard to promoting the use of high occupancy vehicles, public transit (RIPTA) and shuttle buses to access the multi-modal facility at the Kingston Railroad Station. Student, staff, and faculty utilization of the commuter rail facility at Wickford Junction should be encouraged.</p>  <p><b>Policy 2.5</b> The Town supports and encourages the University to implement policies and programs to lessen resident student use of automobiles on campus. This effort may include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Increased fees for parking,</li> <li>• Parking lot restrictions and prohibitions of resident underclassman parking/auto use (particularly for the freshman class),</li> <li>• Expand shuttle service both on and off the campus and other means to promote efficient access to and within the campus environs. Promote policies that discourage vehicle movements of resident student cars on the campus during the academic day.</li> <li>• Establish/enhance programs that promote a healthy, walkable, bikeable campus environment.</li> <li>• Consider the establishment of a complete streets policy for all campus infrastructure improvement projects.</li> </ul>   <p><i>(continued on next page)</i></p>	



**Goal 2:** Transportation, traffic, public safety and infrastructure system linkages will be enhanced.

POLICIES	ACTIONS
<p><b>Policy 2.6</b> To adequately support and mitigate the impact of new or expanded campus facilities, the town encourages the University to develop a parallel, coordinated capital improvement planning process to address any upgrade and improvements requirements to South Kingstown and state roadway connections to the University.</p> <p><b>Policy 2.7</b> In cooperation with RIDOT and the University, the Town will support and participate in research efforts and studies as appropriate to define infrastructure and service provision capacities/limitations as well as to identify capital improvement needs for addressing such deficiencies along with requirements for upgrades and improvements in response to institutional and general community growth.</p> <p><b>Policy 2.8</b> The Town strongly supports the University’s efforts to promote the health of its students and faculty through providing active modes of transportation to and within campus, access to recreational resources, and access to healthy food on campus.</p>  <p><b>Policy 2.9</b> The Town of South Kingstown should invite the University and RIDOT to participate in a planning process to promote balanced multi-modal access to and within the Campus by faculty, staff, students, commuters, and visitors. This effort would include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Development of a program to promote/enhance Plains Road as an entry point to the school</li> <li>• Consider the feasibility of establishing a link to Route 2 from the northwest corner of the Campus (via Wolf Rock Road)</li> </ul> <p><i>(continued on next page)</i></p>	

**Goal 2:** Transportation, traffic, public safety and infrastructure system linkages will be enhanced.

POLICIES	ACTIONS
<ul style="list-style-type: none"> <li>Review and identify improvements needs for the pedestrian and bicycle system connecting to and within the campus</li> <li>Promote/improve mass transit linkages to surrounding communities and within the Campus environment itself</li> </ul>	

**Goal 3:** On-campus housing resources and affordable housing opportunities will be improved.

POLICIES	ACTIONS
<p><b>Policy 3.1</b> The Town will generally support the University’s plans for expansion of on-campus student housing, provided such expansion is supported adequately through the provision of appropriate infrastructure and facilities.</p> <p><b>Policy 3.2</b> The Town supports efforts by the University to house a greater percentage of the student body on campus to lessen demand on rental housing within the Town and region and to mitigate commuter traffic to the campus.</p>  <p><b>Policy 3.3</b> The Town encourages URI to ensure any initiated or sponsored projects to provide faculty, staff or alumni/retiree housing include affordable components consistent with the goals of the “Rhode Island Low and Moderate Income Housing Act RIGL 45-53” and South Kingstown Comprehensive Community Plan’s Affordable Housing Production Plan. This type of capital planning will benefit the University and the Town by increasing the affordable housing resources across the entire community.</p> 	<p>(none)</p>



**Goal 4:** URI will continue to provide for a sustainable campus environment with enhanced natural systems protection.

**POLICIES**

**ACTIONS**

**Policy 4.1** To protect wetlands and surface and groundwater resources associated with the Chipuxet Aquifer, the Town supports, encourages, and expects that the University will utilize best management practices for drainage handling and soil and sedimentation control for all capital improvement projects, campus renovations, and infrastructure management.



**Policy 4.2** Consistent with the heritage of the University as a “Land Grant College” and “Agricultural Experiment Station,” the Town strongly encourages URI to identify, consider, preserve, and protect sensitive natural areas and features in all capital improvement projects and infrastructure upgrades. Preservation of the open space character and agricultural legacy of the Kingston Campus must be a guiding principle in the master plan revisions considered for all campus facility expansion north of Flagg Road.



**Policy 4.3** The Town representative on the URI Master Plan Committee should also ask URI to address future uses and/or conservation-based management of “outlying” agricultural and open space properties such as Peckham Farm, East Farm, the Hazard property, and any other tracts outside the main campus environs. These outlying parcels are located in sensitive environmental settings that help to support the University legacy as a land grant college and are important in defining the rural and open space characteristics of the Town and URI.



*(continued on next page)*

**Action 4-1** The Town shall work collaboratively with the University to inventory all existing healthy food resources on campus such as food outlets, food gardens, sites available for small-scale agriculture, accessible kitchen space, and compost facilities. This inventory shall be made available to students, faculty, and, where appropriate, the community at large to increase awareness of healthy food resources.



**Action 4-2** The Town shall work with the University to increase the availability of healthy food resources on campus and increase the capacity for the sustainable composting program and other food waste practices.



**Action 4-3** The Town Council shall consider a resolution stating that the Town and the University will work collaboratively together to support a locally-based food system that includes sustainable local agriculture and aquaculture activities.



**Action 4-4** The Town shall work collaboratively with the University and state legislators to identify and address any barriers to utilizing the University’s purchasing power to increase the procurement of local food products from farmers and growers in town.



**Goal 4:** URI will continue to provide for a sustainable campus environment with enhanced natural systems protection.

POLICIES	ACTIONS
<p><b>Policy 4.4</b> The Town supports the University’s recent focus at promoting a sustainable campus environment, as evidenced by the school’s LEED certification program for new facilities and the document entitled: “URI Climate Action Plan” November 2010.</p>  <p><b>Policy 4.5</b> The Town shall work collaboratively with the University to inventory all existing healthy food resources on campus and promote these resources to students, faculty, and where appropriate, the community at large.</p>  <p><b>Policy 4.6</b> The Town highly encourages the University to adopt purchasing practices already employed by many other Rhode Island colleges to increase the procurement of local food products from farmers and growers in town and nearby communities.</p> 	





# IMPLEMENTATION

The following is a schedule for implementation of the South Kingstown Comprehensive Community Plan. It identifies the Implementation Actions of each element, the responsible party in its implementation and the time frame it is estimated that it will be completed:

**Short-Term = 1 to 5 years**

**Mid-Term = 6 to 10 years**

**Long-Term = 11 to 20 years**

<b>LAND USE ACTION PLAN .....</b>	<b>312</b>
<b>HOUSING ACTION PLAN .....</b>	<b>319</b>
<b>ECONOMIC DEVELOPMENT ACTION PLAN .....</b>	<b>325</b>
<b>NATURAL HAZARDS &amp; CLIMATE CHANGE ACTION PLAN .....</b>	<b>332</b>
<b>NATURAL RESOURCES &amp; OPEN SPACE ACTION PLAN .....</b>	<b>335</b>
<b>CULTURAL &amp; HISTORIC RESOURCES ACTION PLAN .....</b>	<b>342</b>
<b>RECREATION ACTION PLAN .....</b>	<b>346</b>
<b>SERVICES &amp; FACILITIES ACTION PLAN .....</b>	<b>349</b>
<b>ENERGY ACTION PLAN .....</b>	<b>355</b>
<b>CIRCULATION ACTION PLAN .....</b>	<b>357</b>
<b>URI ACTION PLAN .....</b>	<b>364</b>



In accordance with the State of Rhode Island Comprehensive Plan Guidelines, those individual implementation actions which require amendment of the Zoning Ordinance in order to bring consistency with this Comprehensive Plan are listed below in 2-year increments. The six (6) actions listed here can also be found within the Land Use Action Plan.

### **YEARS 1 & 2:**

1. Pursue a Zoning Map amendment for portions of three residential parcels adjacent to the Rose Hill landfill from Governmental and Institutional (GI) to Medium Density Residential (R40) as depicted on the Future Land Use Map. [\(Land Use Action 1-8\)](#)
2. The Town shall pursue a Zoning Map amendment for the residentially zoned parcel owned by the University of Rhode Island adjacent to the URI campus from Medium Density Residential (R40) to Government and Institutional (GI) as depicted on the Future Land Use Map. [\(Land Use Action 1-9\)](#)
3. Explore development of a special management district to include the Commercial Neighborhood zoning district at the intersection of Route 1 and Route 138 to recognize this area as a gateway to South Kingstown. Such a special management district may establish design standards and opportunities for appropriately sized expansion of commercial uses based upon clear performance standards. [\(Land Use Action 3-13\)](#)

### **YEARS 3 & 4:**

1. Pursue Zoning Map amendments to rezone parcels located along Kingstown Road in West Kingstown from R20 (Medium High Density Residential) to Commercial Neighborhood as depicted on the Future Land Use Map. [\(Land Use Action 4-4\)](#)
2. Pursue Zoning Map amendments to rezone residentially zoned parcels located to the south of Old Tower Hill Road between Route 108 and Route 1 to Commercial Neighborhood as depicted on the Future Land Use map. [\(Land Use Action 4-6\)](#)

### **YEARS 5 & 6:**

1. Pursue Zoning Map amendments to rezone residentially zoned parcels located to the south of Kersey Road in Peace Dale to Commercial Downtown as depicted on the Future Land Use Map. [\(Land Use Action 4-5\)](#).



## LAND USE ACTION PLAN

**Land Use Goal 1:** Land use policies will be consistent with “Land Use 2025: Rhode Island’s Land Use Policies and Plan”, and to maintain continuity with the 1992 South Kingstown Comprehensive Plan and previous Plan updates.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Amend the Comprehensive Plan in accordance with state level requirements or in accordance with the needs of the community.	Planning Board, Planning Department, Town Council	Long-Term
<b>Action 1-2</b> Establish procedures to ensure that the goals of each element of this Plan are implemented and that any modification to goals or policies is evaluated for its conformity with the balance of the Plan.	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 1-3</b> Evaluate and implement appropriate measures to foster better communication and information sharing on planning issues and the general land use planning function within the community. Such measures may include: a departmental brochure, outreach efforts to community groups, and improved use of the town website and social media as a means to educate and inform interested parties.	Planning Board, Planning Department	Short-Term
<b>Action 1-4</b> Utilize the Town website and other modern communication vehicles to provide information and increase awareness about the natural, cultural, and recreational resources of the community, and the programs and options available for protecting and enhancing these important community features.	Planning Board, Planning Department	Short-Term
<b>Action 1-5</b> Review and revise the South Kingstown Zoning Ordinance, Subdivision and Land Development Regulations, and the Residential Design Manual Standards to improve implementation and to avoid ambiguity	Planning Board, Planning Department, Town Council	Mid-Term
<b>Action 1-6</b> Consider an agreement with URI to work cooperatively to support a locally-based food system in South Kingstown through coordinating available resources and expertise.	Town Manager’s Office, Planning Department	Short-Term
<b>Action 1-7</b> Use a Build Out Analysis, completed once every five years, to evaluate current development trends and identify appropriate growth management strategies.	Planning Board, Planning Department, Town Council	Mid-Term



**Land Use Goal 1:** Land use policies will be consistent with “Land Use 2025: Rhode Island’s Land Use Policies and Plan”, and to maintain continuity with the 1992 South Kingstown Comprehensive Plan and previous Plan updates.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-8</b> Pursue a Zoning Map amendment for portions of three residential parcels adjacent to the Rose Hill landfill from Governmental and Institutional (GI) to Medium Density Residential (R40) as depicted on the Future Land Use Map.	Planning Board, Town Council	Short-Term
<b>Action 1-9</b> Pursue a Zoning Map amendment for the residential zoned parcel owned by the University of Rhode Island adjacent to the URI campus from Medium Density Residential (R40) to Government and Institutional (GI) as depicted on the Future Land Use Map.	Planning Board, Town Council	Short-Term

**Land Use Goal 2:** A sustainable rate of development will be maintained, which is consistent with the ability of the Town to provide essential services, to achieve a stable tax rate, to protect environmental, historic, and cultural resources, and to provide a healthy environment.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> Develop mechanisms to measure and account for the cumulative impacts of development and address these impacts within the development review process. The Town shall formalize these metrics within regulations that will specify new requirements for applicants and provide clear criteria for decision-making authorities.	Planning Department, Planning Board	Short-Term
<b>Action 2-2</b> Require multi-modal trip generation analysis for major subdivisions and land development projects.	Planning Department, Planning Board	Short-Term

(continued on next page)



**Land Use Goal 2:** A sustainable rate of development will be maintained, which is consistent with the ability of the Town to provide essential services, to achieve a stable tax rate, to protect environmental, historic, and cultural resources, and to provide a healthy environment.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-3</b> Amend regulations to incorporate design standards for infrastructure improvements containing pedestrian and bicycle circulation for on-site facilities and connection to adjoining multi-modal networks, neighborhoods and villages.	Planning Department, Planning Board, Town Council	Short-Term
<b>Action 2-4</b> Explore developing limits on impervious cover in areas where watershed and/or aquifer protection issues have been identified.	Planning Department, Planning Board, Town Council, Conservation Commission	Mid-Term
<b>Action 2-5</b> Review the existing zoning regulations on the “upper Main Street corridor” (Columbia Corners to the Dale Carlia intersection) and explore opportunities to increase mixed-use development while retaining the residential character of the area. This area serves as a transition/buffer zone between Wakefield’s historic Main Street and the large scale commercial development along Old Tower Hill Road.	Planning Department, Planning Board	Mid-Term

**Land Use Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> Support a Low Impact Development (LID) approach to development and redevelopment by revising regulations to provide innovative standards for resource protection and site design.	Planning Department, Planning Board, Department of Public Services	Short-Term
<b>Action 3-2</b> Evaluate expanding Historic District Overlays within the Zoning Map and the use of additional regulatory tools for the purpose of historic preservation planning.	Historic District Commission, Planning Board, Town Council	Long-Term
<b>Action 3-3</b> Evaluate and implement appropriate measures to preserve, protect and enhance the infrastructure, land uses and scenic characteristics of the southwestern approach (gateway) into Wakefield Village via Post Road/ Main Street corridor which provide historic, scenic and cultural value.	Planning Board, Planning Department, Town Council	Mid-Term

(continued on next page)



**Land Use Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 3-4</b> Adopt regulations that will require landowners, builders, and developers to minimize adverse impacts on the local community. These regulations shall specify requirements for applicants to explain and address local community impacts within their proposals and plans and provide review authorities with clear decision-making criteria.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 3-5</b> Adopt regulations that will require applicants to account for, consider, and address impacts on pedestrians and bicyclists.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 3-6</b> Provide the Planning Board with training opportunities to expand the capacity of its members to review potential development impacts and determine defensible findings of fact and appropriate conditions within their decisions.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 3-7</b> Assist and improve the development review process by amending regulations to expand existing requirements for professional peer review to apply to major residential, commercial or industrial land development projects or redevelopment proposals, Comprehensive Permits, and Special Use Permits, where appropriate.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 3-8</b> Amend the regulations for the Commercial Highway, Commercial Downtown, and Commercial Neighborhood Districts to address standards for mixed-use development, building scale, architectural elements, pedestrian access and connectivity, signage, landscaping, and design guidelines.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 3-9</b> Explore ordinance and regulatory amendments for the Central Core villages and adjacent commercial areas to encourage innovative commercial design, such as form-based codes, commercial design standards, and/or a commercial development design manual to support pedestrian-oriented building design, the integration of a mix of uses, and the reuse of underutilized or vacant structures and parcels.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>

(continued on next page)



**Land Use Goal 3:** High standards of development will be required to preserve and enhance the quality of life, to encourage a sense of community, to support a healthy, walkable environment and to protect the natural resources of the Town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 3-10</b> Explore, evaluate and pursue revisions to parking requirements in Commercial Downtown and Commercial Highway zoning districts to reduce the amount of impervious surface on development sites, promote an activated street front, and reduce regulatory barriers to appropriate commercial development.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 3-11</b> Review allowed uses and dimensional regulations in commercial zoned areas of the Town to determine if changes to the mix of uses allowed and scale of structures is in keeping with the vision established by the Comprehensive Plan.</p>	<p>Town Council, Department of Public Services</p>	<p>Long-Term</p>
<p><b>Action 3-12</b> Explore and pursue regulatory strategies, such as development of a floating zone, to effectively direct future reuse of parcels within the Government and Institutional zoning district, including but not limited school facilities planned for closure.</p>	<p>Planning Board, Planning Department, Town Council, Town Manager’s Office</p>	<p>Short-Term</p>
<p><b>Action 3-13</b> Explore development of a special management district to include the Commercial Neighborhood zoning district at the intersection of Route 1 and Route 138 to recognize this area as a gateway to South Kingstown. Such a special management district may establish design standards and opportunities for appropriately sized expansion of commercial uses based upon clear performance standards.</p>	<p>Planning Board, Planning Department, Town Council, Economic Development Committee</p>	<p>Mid-Term</p>



**Land Use Goal 4:** The integrity of the Town’s villages will be intact, and the village-centric approach to development, which recognizes each village’s unique objectives, will be strengthened.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 4-1</b> Review and revise the Zoning Ordinance and regulations relating to villages to ensure that development and redevelopment will be complementary to the character of existing villages. This may include, but is not limited to, allowing for an appropriate mix of uses, revising standards controlling the size, shape, massing, scale and location of buildings and lots, and revising requirements for pedestrian access and connectivity, open space, parking signage, landscaping, and street widths and exploring design guidelines for commercial and residential development.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 4-2</b> Consider incentives for encouraging food outlets such as grocery stores, small markets, and other healthy food outlets to locate within village areas. Such incentives may take the form of reduced licensing fees for businesses providing healthy food and regulatory incentives such as increasing allowances for roadside stands and allowing small-scale grocery stores as accessory uses in commercial and mixed-use developments.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 4-3</b> Review and revise regulations to ensure that there are opportunities to locate a range of housing types and sizes within the villages.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 4-4</b> Pursue Zoning Map amendments to rezone parcels located along Kingstown Road in West Kingston from R20 (Medium High Density Residential) to Commercial Neighborhood as depicted on the Future Land Use Map.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 4-5</b> Pursue Zoning Map amendments to rezone residentially zoned parcels located to the south of Kersey Road in Peace Dale to Commercial Downtown as depicted on the Future Land Use Map</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Long-Term</p>



**Land Use Goal 5:** To protect and preserve a diversity of landscapes within the Town that builds upon the unique natural, cultural, and historic resources of the Town as described in the Natural Resources & Open Space and Cultural & Historic Resources elements of this plan.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 5-1</b> Conduct an audit of existing policies and land use ordinances regarding agricultural activities for consistency with the Rhode Island Agricultural Partnership’s Five Year Strategic Plan and recommendations from “South Kingstown: designing a Healthier Community” to ensure the viability of farming activities and to support a local food system.	Planning Board, Planning Department	Short-Term
<b>Action 5-2</b> Expand the measures available for protecting cultural resources to provide maximum protection to South Kingstown’s historic resources.	Historic District Commission	Mid-Term
<b>Action 5-3</b> Explore and determine the feasibility of regulatory revisions to allow for reduced public improvement standards for very low-density subdivisions outside of village areas.	Planning Board, Planning Department, Conservation Commission	Mid-Term
<b>Action 5-4</b> Explore and adopt amendments to the Groundwater Protection Overlay District (GPOD) aimed at reducing impervious surfaces in areas of groundwater recharge, and to ensure no adverse impact upon the quality or supply of drinking water from new development within the district.	Planning Board; Conservation Commission	Mid-Term



## HOUSING ACTION PLAN

<b>Housing Goal 1:</b> The valued sense of place and community represented in South Kingstown's existing housing stock and traditional village development patterns will be enhanced.		
<b>ACTION</b>	<b>RESPONSIBLE PARTY</b>	<b>IMPLEMENTATION HORIZON</b>
<b>Action 1-1</b> Conduct public forums/working meetings that address local housing needs.	Affordable Housing Collaborative, Planning Department, Planning Board	Short-Term
<b>Action 1-2</b> Maintain an updated database of local housing, including the number and type of new housing starts each year, the number of LMI units both permitted and constructed (including those developed through Inclusionary Zoning), the number of age-restricted housing units, etc.	Planning Department, Building and Zoning Department	Mid-Term
<b>Action 1-3</b> Update the "South Kingstown Residential Design Manual" and the regulations for Flexible Design Residential Projects to improve standards for flexible frontage, landscaping and transportation improvements.	Planning Board, Planning Department	Short-Term
<b>Action 1-4</b> Review regulations with the intention of formally integrating green building design standards and sustainable development practices within regulations for development and redevelopment projects.	Planning Board, Planning Department, Sustainability Committee	Mid-Term
<b>Action 1-5</b> Actively partner with programs (whether federal, state, local, institutional, or community-based) designed to help make existing and new homes more resilient and energy efficient (e.g. financing or incentives for solar panels, innovative septic systems, LID strategies, etc.).	Affordable Housing Collaborative, Town Manager's Office, Planning Department	Mid-Term
<b>Action 1-6</b> Conduct a massing and scale study for the development and redevelopment of multi-family homes, with the goal of developing new design standards that help make multi-family homes more compatible with their surroundings.	Planning Board, Planning Department	Short-Term
<b>Action 1-7</b> Consider developing context sensitive design guidelines for 'tear-downs' and reconstruction to assure new residential construction reflects and is compatible with the existing neighborhood context, in terms of massing and scale.	Planning Board, Planning Department, Town Council	Mid-Term

(continued on next page)



**Housing Goal 1:** The valued sense of place and community represented in South Kingstown’s existing housing stock and traditional village development patterns will be enhanced.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 1-8</b> Review regulations with the intention of achieving ‘green’ housing development/redevelopment throughout the community by integrating Low Impact Design (LID) techniques, energy conservation/efficiency, and the use of innovative building technologies within the Town’s regulations.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Long-Term</p>
<p><b>Action 1-9</b> Develop standards for reviewing the mix of residential uses into mixed use districts where appropriate in order to provide more sustainable housing choices and to support retail business.</p>	<p>Planning Board, Planning Department</p>	<p>Mid-Term</p>
<p><b>Action 1-10</b> Identify a source of information and training to educate town residents and property owners on appropriate techniques for residential property maintenance, rehabilitation, historic preservation, and energy and water conservation (Preserve RI, Grow Smart and RIHPHC).</p>	<p>Building and Zoning Department, Planning Department</p>	<p>Mid-Term</p>
<p><b>Action 1-11</b> Identify opportunities where public improvements (e.g., streetscape improvements and/or publicly funded project improvements to signage, entryways, pedestrian connectivity, and façades) can aid in the integration of infill housing developments.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 1-12</b> Conduct a study of new ways to finance the renovation of existing market rate homes, with a particular emphasis on the Town’s older and historic housing (i.e. housing over 50 years old).</p>	<p>Affordable Housing Collaborative, Historic District Commission, Planning Department</p>	<p>Long-Term</p>
<p><b>Action 1-13</b> Review and revise the regulations of the Industrial-1 zoning district, in which the Town’s historic mill complexes are located, to allow small-footprint housing units as a complementary use to the permitted office and manufacturing uses.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>



**Housing Goal 2:** LMI Housing development will occur throughout the community in a manner that is reflective of South Kingstown residents' physical, social, and financial limitations and resources, with the goal of achieving 10% of the year-round housing stock as deed-restricted for low- and moderate-income households.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> Define, support and incorporate the concept of 'work force' housing into the more general category of 'affordable' housing.	Affordable Housing Collaborative, Planning Department, Planning Board, Town Council	Short-Term
<b>Action 2-2</b> Develop a Cottage Housing Ordinance using the language provided in the "South Kingstown Village Study, Villages of Wakefield and Peace Dale" as a starting point.	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 2-3</b> Conduct outreach to local financial institutions to improve public awareness of and access to opportunities and programs that will reduce the cost burden of housing (e.g., first time home buyers, down payment assistance, closing costs, rental assistance, etc.).	Affordable Housing Collaborative	Short-Term
<b>Action 2-4</b> Look for opportunities to expand starter home opportunities (e.g., RI Housing reduced rate mortgage programs and Targeted Assistance Program).	Affordable Housing Collaborative, Planning Board, Town Council	Mid-Term
<b>Action 2-5</b> Utilize Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds to create a program that provides down payments and closing cost assistance for affordable housing buyers.	Affordable Housing Collaborative, Planning Department, Town Manager's Office, Town Council	Long-Term
<b>Action 2-6</b> Explore alternatives to the U.S. Department of Housing and Urban Development's Section 811 Program to fund the development of LMI housing and accessible market rate affordable housing for South Kingstown's disabled and special needs population, including through private financing and local requirements for physically accessible first-floor homes in multi-family developments.	Affordable Housing Collaborative, Planning Department, Town Manager's Office, Town Council	Mid-Term
<b>Action 2-7</b> Actively engage the South Kingstown Housing Authority (SKHA) and other non-profit organizations to utilize Federal 202 funds and USDA funds to create additional elderly housing units.	Affordable Housing Collaborative, South Kingstown Housing Authority	Mid-Term

(continued on next page)



**Housing Goal 2:** LMI Housing development will occur throughout the community in a manner that is reflective of South Kingstown residents’ physical, social, and financial limitations and resources, with the goal of achieving 10% of the year-round housing stock as deed-restricted for low- and moderate-income households.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 2-8</b> Engage state officials in an active dialogue concerning the trend of comprehensive permit applicants attempting to seek broad relief from local planning requirements that contribute to good design and quality of residential projects. Such dialogue will attempt to identify opportunities to amend state and local plans, statutes, ordinances and regulations to better achieve our shared goal of encouraging quality developments that provide affordable housing.</p>	<p>Town Council, Town Manager’s Office, Planning Board, Planning Department</p>	<p>Mid-Term</p>
<p><b>Action 2-9</b> Establish standards for granting density bonuses relative to comprehensive permit applications that are directly related to suitability of the land to support development without adverse environmental impacts (ensure high quality development with safe water supply, reliable wastewater treatment, and proper stormwater management).</p>	<p>Planning Department, Planning Board, Town Council</p>	<p>Short-Term</p>
<p><b>Action 2-10</b> Review the inventory of Town-owned land to determine the potential for development of low- and moderate-income housing on such lands.</p>	<p>Town Council, Town Manager’s Office, Affordable Housing Collaborative</p>	<p>Mid-Term</p>

**Housing Goal 3:** A wide range of affordable and LMI Housing options will exist, developed through a combination of innovative regulatory mechanisms, public and private initiatives, and joint public and private partnerships to maintain residential diversity and to assure that local shops and offices will have a sufficient employment pool.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 3-1</b> Investigate whether the Town can and should build LMI Housing itself.</p>	<p>Affordable Housing Collaborative, Town Manager’s Office, Planning Department, Planning Board, Town Council</p>	<p>Long-Term</p>

(continued on next page)



**Housing Goal 3:** A wide range of affordable and LMI Housing options will exist, developed through a combination of innovative regulatory mechanisms, public and private initiatives, and joint public and private partnerships to maintain residential diversity and to assure that local shops and offices will have a sufficient employment pool.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-2</b> Evaluate potential means to provide a steady source of income for its Housing Fund.	Town Council	Short-Term
<b>Action 3-3</b> Look to support a coalition on non-profit developers to develop affordable housing in South Kingstown.	Affordable Housing Collaborative, Town Manger's Office, Planning Department	Long-Term
<b>Action 3-4</b> Connect and encourage discussions between housing developers, both for profit and non-profit, in order to facilitate LMI Housing construction. For example, if a for profit developer wants to deed land for LMI Housing development but does not want to develop the housing itself, the Town may broker a partnership with another for profit or non profit developer to build the homes.	Planning Department, Planning Board	Short-Term
<b>Action 3-5</b> Actively engage non-profit housing developers and local/regional community development corporations (e.g., South County Habitat for Humanity) to better understand their siting needs/criteria, in order to refine the Town's geographical prioritizing of investments and incentives for LMI Housing.	Planning Board, Affordable Housing Collaborative	Short-Term
<b>Action 3-6</b> Financially support the efforts of the South Kingstown Housing Authority (SKHA) in the maintenance and stewardship of existing SKHA properties, to make sure these homes remain safe and healthy for years to come.	Planning Department, Town Council	Short-Term
<b>Action 3-7</b> Work with the South Kingstown Housing Authority to develop educational campaign materials to share with all residents and managers of rental LMI Housing that encourage pride of place, proper maintenance, and good stewardship of these homes.	Planning Department, Affordable Housing Collaborative, South Kingstown Housing Authority	Mid-Term
<b>Action 3-8</b> Annually review and, where appropriate, revise the mandatory Inclusionary Zoning Ordinance to ensure it is producing the number of units intended.	Planning Department, Planning Board, Affordable Housing Collaborative	Short-Term

(continued on next page)



**Housing Goal 3:** A wide range of affordable and LMI Housing options will exist, developed through a combination of innovative regulatory mechanisms, public and private initiatives, and joint public and private partnerships to maintain residential diversity and to assure that local shops and offices will have a sufficient employment pool.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-9</b> Monitor the growing trend of age-restricted LMI Housing development proposals, in comparison to the family unit needs identified in the Comprehensive Plan, in an effort to make sure that the total number of age-restricted and family appropriate LMI Housing units is roughly equivalent.	Planning Department, Planning Board, Affordable Housing Collaborative	Short-Term
<b>Action 3-10</b> Review current policies that allow age-restricted housing in parts of town where other LMI Housing is not currently allowed. Such areas may help increase the availability of parcels where family appropriate LMI Housing may be built.	Planning Department, Planning Board, Affordable Housing Collaborative	Short-Term
<b>Action 3-11</b> Evaluate and implement appropriate measures to foster better communication and information regarding affordable housing opportunities within the community. Such measures may include a departmental planning procedure and outreach efforts to community groups.	Planning Department, Planning Board, Affordable Housing Collaborative	Short-Term



## ECONOMIC DEVELOPMENT ACTION PLAN

Economic Development Goal 1: The local economy will provide opportunities for a diverse collection of business and industry.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Develop a biennial strategic economic development work plan that focuses on light industry/maker spaces, research/development and commercial offices, as well as skills and training needed for residents to find employment in these fields.	Economic Development Committee, Town Manager's Office	Mid-Term
<b>Action 1-2</b> Review existing commercial and mixed-use zoning districts to make sure they can accommodate maker spaces and similar "clean" light industrial uses that are compatible neighbors of traditional commercial uses.	Economic Development Committee, Planning Board, Planning Department	Mid-Term
<b>Action 1-3</b> Invite URI administration and faculty to an annual meeting to identify specific initiatives for which URI can serve as a resource for the Town and engage the University in an effort to implement these initiatives.	Town Manager's Office, Planning Department	Short-Term
<b>Action 1-4</b> Improve communication with and provide supportive services to the local business community and institutions such as the Southern Rhode Island Chamber of Commerce, URI, South County Hospital, and others.	Town Manager's Office	Short-Term
<b>Action 1-5</b> Identify a specific department to regularly research potential economic development funding and training opportunities at the State and national level, whether through government, banks, or philanthropy.	Town Manager's Office	Mid-Term
<b>Action 1-6</b> Actively engage local businesses and employers to better understand the housing needs of their employees, in order to gain evidence of the types and price points of housing most needed to support the local work force.	Economic Development Committee, Affordable Housing Collaborative	Short-Term
<b>Action 1-7</b> Work with URI to support research expansion and potential spin off of new businesses, utilizing the State of Rhode Island's incentives for research and development.	Town Manager's Office	Short-Term
<b>Action 1-8</b> Work with URI to promote local mill complexes as potential business incubators for small business startups that evolve out of the University.	Planning Department, Town Manager's Office	Mid-Term

(continued on next page)



**Economic Development Goal 1:** The local economy will provide opportunities for a diverse collection of business and industry.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-9</b> Explore the potential for the URI Cooperative Extension Service to provide programs, services, and resources that will enhance the skill and knowledge levels of the local workforce to better prepare them to be competitive for jobs in growing industries and fields.	Planning Department, Town Manager’s Office	Short-Term

**Economic Development Goal 2:** Local economic development assets will be identified that the Town, local boards and commissions, the local business community, and/or future investors can build upon together.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> Research and pursue funding to assess drainage problems that regularly occur during heavy rain events.	Planning Department, Department of Public Services, Town Manager’s Office	Short-Term
<b>Action 2-2</b> Explore the redevelopment of a summer “Trolley Program” by assessing the potential economic, transportation, and social benefits to be gained, and evaluating the amount of municipal support necessary, as informed by the experiences of Narragansett and Westerly.	Economic Development Committee	Mid-Term
<b>Action 2-3</b> Explore and determine the costs and benefits of establishing a revolving loan fund for owners of historic commercial and residential buildings, and actively reach out to owners to encourage them to take advantage of this and all other financial and technical assistance available to them to keep their properties well maintained.	Historic District Commission, Town Council	Mid-Term
<b>Action 2-4</b> Assess the build-out capacity of local and State infrastructure (roads, drainage systems, water, sewer, stormwater, etc.), to determine current economic development and growth capacity.	Department of Public Services, Planning Department	Long-Term
<b>Action 2-5</b> Compile and maintain an inventory of agricultural operations in South Kingstown.	Town Clerk’s Office, Planning Department	Short-Term



**Economic Development Goal 3:** Economic development within our existing villages that contributes to a high quality of life and a resilient future will be actively supported.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> Explore and report on the costs and benefits of installing green infrastructure within the public rights-of-way and on public lands in and near its commercial centers to mitigate the impacts of stormwater, such as infiltrating tree boxes, bioswales, rain gardens, and green roofs.	Department of Public Services, Planning Department	Long-Term
<b>Action 3-2</b> Work with the University of Rhode Island and other institutions to help grow the economic opportunities of emerging resilience-based industries and explore and report on the viability of providing support, such as tax credits and other financial incentives, to facilitate the growth of this new industry.	Town Manager's Office, Town Council	Long-Term
<b>Action 3-3</b> Meet with investors, property owners, and business owners on a regular basis to discuss opportunities for supporting redevelopment within the villages, and specifically relative to redevelopment of the historic mill complexes.	Planning Department, Economic Development Committee, Town Manager's Office	Short-Term

**Economic Development Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-1</b> Maintain a current inventory of any commercial and industrial buildings or properties that are underutilized or vacant. This inventory should be available to potential developers or business interests.	Town Council, Planning Department, Planning Board	Short-Term
<b>Action 4-2</b> Engage the community to define a vision for Old Tower Hill Road and Dale Carlia Corner. This effort will focus on strategies for increasing pedestrian access and improving building and site design aesthetics as well as opportunities for providing incentives for the redevelopment of commercial property and infrastructure improvements within the existing state right-of-way.	Town Council, Planning Department, Planning Board	Short-Term
<b>Action 4-3</b> Evaluate, prioritize, and implement findings of all of its Village Plans to promote appropriate economic growth within each unique village.	Planning Board, Planning Department, Town Council	Short-Term

(continued on next page)



**Economic Development Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-4</b> Conduct an audit of the Kingstown Road Special Management District to determine if changes are needed to accommodate appropriate business growth and development.	Planning Department, Planning Board, Economic Development Committee	Long-Term
<b>Action 4-5</b> Explore any necessary modification of the zoning ordinance needed to implement the recommendations of the “Palisades Mill Reuse Feasibility Study.”	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 4-6</b> Develop a policy initiative to actively promote the use of its ‘Tax Treaty’ program as a means to attract new business uses and expansion of existing businesses.	Town Council, Economic Development Committee, Town Manager’s Office	Short-Term
<b>Action 4-7</b> Evaluate and consider amendments to the Scedule of Use Regulations Table in the South Kingstown Zoning Ordinance that will modernize existing language and provide increased flexibility and utility of the ordinance from an economic development perspective.	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 4-8</b> Review the feasibility of expansion of limited commercial zoning (office and service type uses) in the Old Tower Hill Road corridor (between Old Tower Hill Road and Narragansett Avenue West).	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 4-9</b> Develop a system and standards for reviewing and analyzing existing regulations for clarity and ease of use.	Planning Department	Short-Term
<b>Action 4-10</b> Review the Town’s permitting processes for clarity and efficiency and develop clear guidance for applicants on how to navigate the process.	Planning Department	Short-Term
<b>Action 4-11</b> Assign one or more current Town staff charged with coordinating all Town efforts related to economic development and facilitating competing interests.	Town Manager’s Office	Mid-Term
<b>Action 4-12</b> Complete revision to the Subdivision and Land Development Regulations with the intent of clarifying the standards and reducing complexity of use.	Planning Board, Planning Department	Short-Term

(continued on next page)



**Economic Development Goal 4:** The business community will be provided with a clear regulatory framework for maintaining, building, occupying and expanding operations in town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-13</b> Revise the Zoning Ordinance to permit “clean” industrial and manufacturing uses with compatibility standards where appropriate	Economic Development Committee, Planning Board, Planning Department	Mid-Term

**Economic Development Goal 5:** Commercial development will be held to a high standard of quality design.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 5-1</b> Develop a commercial development design manual for commercial development in all areas of town. This manual may be used to develop design guidelines or standards for different districts or neighborhoods within the community to ensure a proper fit of commercial/industrial uses in the surrounding community and provide an efficient and effective permitting process..	Planning Board, Planning Department, Town Council	Mid-Term
<p><b>Action 5-2</b> Revise the parking requirements in the Zoning Ordinance and the Subdivision &amp; Land Development Regulations for commercial and industrial projects to:</p> <ul style="list-style-type: none"> <li>• Maintain appropriate parking ratios;</li> <li>• Promote the use of green infrastructure to manage runoff and flooding;</li> <li>• Minimize the use of impervious surfaces;</li> <li>• Require buffering and landscaping of parking areas; and</li> <li>• Include provisions for street trees.</li> </ul>	Planning Board, Planning Department, Town Council	Short-Term

(continued on next page)



**Economic Development Goal 5:** Commercial development will be held to a high standard of quality design.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 5-3</b> Revise standards for parking, setbacks, use and other essential Zoning Ordinance elements to address the unique purpose of each commercial and industrial district. Specific issues to address may include but not be limited to:</p> <ul style="list-style-type: none"> <li>Standards for shared parking;</li> <li>Reduction of parking standards in village centers; and</li> <li>More flexible standards for renovations of existing and historic buildings.</li> </ul>	<p>Planning Board, Planning Department, Town Council</p>	<p>Short-Term</p>
<p><b>Action 5-4</b> Review regulatory standards that apply to transitional areas between commercial, industrial, and mixed-use zoning districts and adjoining residential neighborhoods and identify design and performance standards that will ensure compatibility between these uses across district lines.</p>	<p>Planning Board, Planning Department</p>	<p>Short-Term</p>
<p><b>Action 5-5</b> Amend the regulations for the Commercial Highway, Commercial Downtown, and Commercial Neighborhood Districts to address standards for building scale, architectural elements, pedestrian access and connectivity, signage, landscaping, and street trees.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 5-6</b> Amend the zoning ordinance to encourage the clustering/village concept and scale for commercial development to prevent commercial strip design.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 5-7</b> Review the zoning ordinance to better nurture and promote business orientation to and access from the William C. O'Neill Bicycle Path.</p>	<p>Planning Board, Planning Department</p>	<p>Short-Term</p>
<p><b>Action 5-8</b> Amend regulations to require the installation of attractive bicycle parking facilities for any commercial development requiring development plan review.</p>	<p>Planning Board, Planning Department</p>	<p>Short-Term</p>



**Economic Development Goal 6:** Business models that help to define South Kingstown’s unique character and history will be identified and fostered.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 6-1</b> Work collaboratively to prioritize and implement recommendations of the Saugatucket River study.	Economic Development Committee, Town Council	Mid-Term
<b>Action 6-2</b> Assess the feasibility of using Transfer of Development Rights (TDR) as a regulatory tool for protecting agricultural lands.	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 6-3</b> Review local codes to ensure that arts-based commerce and “craft” industries, including “maker spaces”, breweries/distilleries, prepared food production, etc., and supporting uses are appropriately allowed in the community.	Economic Development Committee, Planning Board, Planning Department	Short-Term
<b>Action 6-4</b> Explore the possibility of providing financial incentives to artist operations such as “tax free” districts that allow artists to sell their wares without a sales tax or assistance to establish a local or regional “arts council” that may coordinate local arts activities.	Town Council, Planning Department, Planning Board	Mid-Term



## NATURAL HAZARDS & CLIMATE CHANGE ACTION PLAN

Natural Hazards & Climate Change Goal 1: South Kingstown will be resilient to the impacts of natural hazards and climate change.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Pursue amendments to the Zoning Ordinance and Subdivision and Land Development Regulations relative to parking requirements and design standards to promote reduction of impervious surfaces and utilization of Low Impact Development strategies and best management practices (BMPs).	Planning Board, Planning Department, Town Council	Short-Term
<b>Action 1-2</b> Pursue participation in the National Flood Insurance Programs (NFIP) Community Rating System (CRS).	Planning Board, Planning Department, Town Council, Building and Zoning Department	Mid-Term
<b>Action 1-3</b> Conduct a comprehensive analysis of consideration of commercial and residential properties vulnerable to various scenarios of sea level rise to determine appropriate adaptation strategies, including protection, accommodation, and/or retreat for each area of the town.	Planning Board, Planning Department, Town Council, Tax Assessor’s Office, Department of Public Services	Mid-Term
<b>Action 1-4</b> Develop criteria for establishing adaptation zones and appropriate adaptation strategies utilizing the best available data and mapping resources.	Planning Board, Planning Department, Town Council	Mid-Term
<b>Action 1-5</b> Explore and determine appropriate regulatory revisions for development in flood-prone and coastal areas based upon adaptation zones.	Planning Board, Planning Department, Town Council	Mid-Term
<b>Action 1-6</b> Evaluate roadway infrastructure vulnerable to coastal erosion and inundation from various scenarios of sea level rise and storm surge to determine appropriate adaptation strategies for each asset.	Department of Public Services, Town Manager’s Office, Town Council	Short-Term
<b>Action 1-7</b> Explore adoption of a policy requiring investments in roadway and bridge infrastructure which are vulnerable to sea level rise to consider design modifications as may be necessary based upon the anticipated life of the infrastructure asset.	Town Council, Town Manager’s Office, Department of Public Services, Planning Department	Short-Term
<b>Action 1-8</b> Work with Save the Bay to identify specific rights-of-way abutting coastal features and the Narrow River to pursue pavement removal and incorporate best management practices for stormwater runoff.	Planning Department, Department of Public Services	Short-Term

(continued on next page)



## Natural Hazards & Climate Change Goal 1: South Kingstown will be resilient to the impacts of natural hazards and climate change.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-9</b> Coordinate with National Grid to identify the location of critical electrical lines and substations to develop appropriate protection measures and opportunities for burying critical utility lines.	Department of Public Services	Mid-Term
<b>Action 1-10</b> Coordinate with RIEMA and neighboring municipalities to revise existing evacuation routes in order to avoid road segments and associated infrastructure vulnerable to inundation such as Ministerial Road, Route 108, and sections of Route 138.	Planning Department	Short-Term
<b>Action 1-11</b> Pursue structural improvements to road segments and associated infrastructure along evacuation routes where revision of the routes is not practical.	Department of Public Services, Town Manager's Office, Town Council	Mid-Term
<b>Action 1-12</b> Develop an inventory of programs and resources available to assist and educate owners of property significantly impacted by natural hazards, including but not limited to, CRMC, RIEMA, Rhode Island Infrastructure Bank, URI Sea Grant, and the Army Corps of Engineers.	Planning Department, Planning Board	Short-Term
<b>Action 1-13</b> Identify publicly-owned land and facilities to evaluate opportunities for improved stormwater management systems.	Department of Public Services	Short-Term
<b>Action 1-14</b> Engage with known vulnerable neighborhoods in the community, such as Matunuck and Green Hill, to build capacity for resilience through education and basic emergency preparedness measures.	Planning Board, Planning Department	Mid-Term



**Natural Hazards & Climate Change Goal 2:** Carbon emissions generated within the municipality will be reduced through reduced energy consumption associated with heating, cooling and transportation.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 2-1</b> Evaluate revision to the South Kingstown Zoning Ordinance and Subdivision and Land Development Regulations to allow more mixed-use development in appropriate districts of the Town to reduce dependence on automobiles for access to services and reduce total vehicle miles traveled.</p>	<p>Planning Board, Planning Department, Town Council</p>	<p>Mid-Term</p>
<p><b>Action 2-2</b> Evaluate the development of a robust tree planting program designed to offset the loss of trees with a focus on proper tree selection and location, to provide the right tree in the right place. Such a succession program may provide environmental benefits such as carbon sequestration, improved stormwater infiltration, air quality, and cooling benefits.</p>	<p>Conservation Commission, Town Council</p>	<p>Short-Term</p>
<p><b>Action 2-3</b> Preserve existing tree canopy within the built environment and reduce pressure to build in undeveloped areas by using developed land more efficiently and creating value for forest habitat.</p>	<p>Planning Board, Town Council</p>	<p>Short-Term</p>



## NATURAL RESOURCES & OPEN SPACE ACTION PLAN

**Natural Resources & Open Space Goal 1:** The quality and quantity of the Town's potable water supply will be protected and preserved.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Develop a management strategy for the regulation of groundwater withdrawal in coordination with neighboring towns and water suppliers.	Department of Public Services	Mid-Term
<b>Action 1-2</b> Take advantage of the annual Land & Water Summit at URI to identify conservation priorities in coordination with conservation partners such as local land trusts and The Nature Conservancy.	Conservation Commission, Planning Board, Town Council	Short-Term
<b>Action 1-3</b> Work with the State to implement salting practices which minimize degradation of ground and surface waters in GAA watershed areas (areas in which water is known or presumed to be suitable for drinking use without treatment).	Town Manager's Office, Department of Public Services, Planning Department	Short-Term
<b>Action 1-4</b> Implement ordinances on underground storage tanks to address the issues of tank monitoring strategies, tank removal, and tank prohibitions.	Planning Department, Conservation Commission, Planning Board, Town Council	Short-Term
<b>Action 1-5</b> Implement recommendations for best management practices included within the DEM Stormwater Design and Installation Standards Manual (2011), as amended.	Department of Public Services	Short-Term

**Natural Resources & Open Space Goal 2:** Freshwater and coastal wetland resources, which serve many important ecological and economic functions, will be protected, preserved, and well-managed.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> Implement recommendations of its RI Pollutant Discharge Elimination System (RIPDES) Phase II Stormwater Management Plan.	Department of Public Services, Town Manager's Office	Short-Term
<b>Action 2-2</b> Collect baseline data to document the current conditions of all freshwater bodies within South Kingstown, to include a comprehensive analysis of issues impacting each, and what regulations are currently in place to protect them. The Town shall identify partner organizations to support in the study of individual water bodies within South Kingstown, both financially and through soliciting volunteers.	Planning Department, Conservation Commission	Mid-Term

(continued on next page)



**Natural Resources & Open Space Goal 2:** Freshwater and coastal wetland resources, which serve many important ecological and economic functions, will be protected, preserved, and well-managed.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 2-3</b> Prioritize and implement structural BMPs designed to improve the quality of impaired water bodies within the Town, in order to comply with the Total Maximum Daily Load requirements promulgated by the RI Department of Environmental Management.</p>	<p>Department of Public Services, Town Manager’s Office</p>	<p>Mid-Term</p>
<p><b>Action 2-4</b> Develop maps and assess pertinent data regarding protection mechanisms in place for all water bodies within the Town to develop a comprehensive evaluation of issues related to water quality, scenic nature, and wildlife habitat, utilizing best practices from a range of state and local documents relative to water protection. The Town may find assistance in these efforts from organizations such as Rhode Island Department of Environmental Management (DEM) and Coastal Resource Management Commission (CRMC), local Land Trusts, the URI College of Environmental Sciences, and regional watershed associations.</p>	<p>Planning Department, Conservation Commission</p>	<p>Mid-Term</p>
<p><b>Action 2-5</b> Develop zoning strategies for the protection of undeveloped barrier beaches in South Kingstown, specifically, Green Hill, Browning, and Moonstone beaches. The Town shall develop zoning strategies to minimize development on developed barrier beaches and to ensure that any construction is done in a way which minimizes environmental impact and considers the future implications of climate change and sea-level rise.</p>	<p>Planning Department, Planning Board, Town Council</p>	<p>Short-Term</p>
<p><b>Action 2-6</b> Review and update the 2001 South Kingstown Greenways Master Plan to identify and prioritize areas for corridor zoning to protect and build upon greenways along selected rivers and non-motorized transportation corridors within the Town in order to maintain the rural character of the Town, and to protect river resources and contiguous wildlife corridors.</p>	<p>Planning Department, Planning Board, Conservation Commission</p>	<p>Mid-Term</p>



**Natural Resources & Open Space Goal 3:** Agricultural land within the Town will be protected, preserved and maintained for the future health, character, and economy of the community.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> Review the Zoning Ordinance use code table to determine if changes are necessary to allow for food processing and distribution facilities for local products.	Planning Board, Planning Department, Sustainability Committee	Mid-Term
<b>Action 3-2</b> Actively communicate to local farmers how they can take advantage of URI's agricultural research and extension activities.	Planning Department	Short-Term
<b>Action 3-3</b> Work with the South Kingstown School District to increase vocational agriculture education within South Kingstown schools, including the Pathways program at South Kingstown High School.	School Department, Planning Department	Long-Term
<b>Action 3-4</b> Explore regulatory allowances for locally grown agricultural products as accessory uses in commercial and mixed-use development in established village centers.	Planning Board, Planning Department, Town Council	Mid-Term
<b>Action 3-5</b> Explore and determine the feasibility of community gardens on existing Town-owned lands located near village centers, population clusters, low and moderate income neighborhoods, and other disadvantaged people, and with new major subdivisions	Town Manager's Office, Town Council, Parks & Recreation Division	Long-Term
<b>Action 3-6</b> Develop regulatory allowances for food-based resources such as community gardens and small-scale agriculture within major residential land development projects and subdivisions.	Planning Department, Planning Board	Short-Term
<b>Action 3-7</b> Provide continued and new participation in the State's Farm, Forest and Open Space Program (FFOS). Promotion efforts will include education of the public and potential participants about the value of the program and active communication with existing participants about the benefits of continuing the program.	Planning Department, Tax Assessor's Office, Planning Board, Town Council	Short-Term
<b>Action 3-8</b> Consider developing a farmland overlay district based on prime agricultural soils, existing and historic farm usage, character of the surrounding area, and open space. Development shall be guided to appropriate areas on the property through site plan and review.	Planning Board, Planning Department, Town Council	Mid-Term

(continued on next page)



**Natural Resources & Open Space Goal 3:** Agricultural land within the Town will be protected, preserved and maintained for the future health, character, and economy of the community.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-9</b> Consider developing a Transfer of Development Rights Program through either an intra-municipal or inter-municipal program for the purpose of protecting open space and agricultural resources in town by connecting them with areas in the core as a receiving zone.	Planning Board, Planning Department, Town Council	Long-Term
<b>Action 3-10</b> Explore developing facilities that would allow community composting at community gardens and the Town transfer station.	Department of Public Services, Town Council	Short-Term

**Natural Resources & Open Space Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-1</b> Inventory the indigenous habitat types using RI Geographic Information Systems (RIGIS) and identify areas which need protection. The protection program shall be coordinated with State and non-profit conservation organization programs.	Conservation Commission	Long-Term
<b>Action 4-2</b> Review and update Subdivision and Land Development Regulations to provide better tree protection standards for public and private construction and standards for planting and maintenance of required street trees. Estimate the economic value of preserving existing tree canopy..	Planning Board, Planning Department	Mid-Term
<b>Action 4-3</b> Develop an inventory of significant specimen trees within the village areas and establish a long-term strategy for tree management and maintenance within these areas. This strategy will explore sources of funding for implementation, such as the America the Beautiful Grant program, and the tree planting programs of RI DEM’s Division of Forestry.	Conservation Commission	Mid-Term
<b>Action 4-4</b> Update the South Kingstown tree inventory with the cooperation of potential partners such as the RI Natural History Survey and others.	Conservation Commission	Mid-Term

*(continued on next page)*



**Natural Resources & Open Space Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 4-5</b> Strengthen the Conservation Commission’s advisory role in the following areas:</p> <ul style="list-style-type: none"> <li>• Helping identify lands having significant conservation value as priorities for Town acquisition.</li> <li>• Advising the Town on ways to improve the value of these lands for conservation or passive recreation</li> <li>• Advising the Town Council on advocacy strategies for environmental legislation at the state and local level</li> <li>• Developing public education and information program</li> </ul>	<p>Conservation Commission</p>	<p>Mid-Term</p>
<p><b>Action 4-6</b> Alter the criteria for the Town’s Open Space Acquisition program to prioritize the following types of properties:</p> <ul style="list-style-type: none"> <li>• Open space that preserves unique historic and cultural features</li> <li>• Agricultural lands</li> <li>• Areas of anticipated sea level marsh migration</li> <li>• Areas abutting bodies of fresh and salt water</li> <li>• Critical and environmentally sensitive areas, including habitat corridors</li> <li>• Unfragmented forest blocks</li> <li>• Groundwater resources and headwater wetlands</li> <li>• Areas of small green space within village centers and densely developed areas (Pocket Parks)</li> <li>• Scenic vistas and landscapes</li> <li>• Public access points</li> <li>• Areas abutting existing permanently protected open space</li> <li>• Areas located on barrier beaches</li> </ul>	<p>Conservation Commission, Town Council, Planning Department</p>	<p>Mid-Term</p>
<p><b>Action 4-7</b> Explore ways to develop incentives for regulatory and non-regulatory protection strategies, such as grants and tax incentives, to result in more permanent protection in cooperation with the South Kingstown Land Trust.</p>	<p>Conservation Commission, Town Council, Planning Board, Planning Department</p>	<p>Mid-Term</p>

(continued on next page)



**Natural Resources & Open Space Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 4-8</b> Implement a litter control program, in partnership with local schools and organizations, to improve the appearance of the Town’s streets, sidewalks, parks, and other public places and to support a pedestrian-friendly environment. Potential partner organizations may include Save the Bay, Clean Ocean Access, RI DEM, and various neighborhood and commercial organizations.</p>	<p>Town Manager’s Office, Planning Department</p>	<p>Short-Term</p>
<p><b>Action 4-9</b> Develop a system for documenting the ecosystem services impacts of open space acquisition, in addition to the economic impact analysis already used to review acquisitions. Such services might include positive impacts on air and water quality, habitat corridors, and more.</p>	<p>Conservation Commission, Town Council, Planning Department</p>	<p>Mid-Term</p>
<p><b>Action 4-10</b> Amend regulations to encourage new development to set aside green space that is well-designed in terms of pedestrian compatibility and functionality and, where possible, strengthens the Town’s existing greenways network.</p>	<p>Planning Department, Planning Board</p>	<p>Short-Term</p>
<p><b>Action 4-11</b> Amend the Open Space Project Funding Policy to include smaller parcels in its criteria.</p>	<p>Conservation Commission, Town Council, Planning Department</p>	<p>Mid-Term</p>
<p><b>Action 4-12</b> Actively pursue the establishment of “pocket parks” and landscaped areas in the villages where appropriate.</p>	<p>Parks &amp; Recreation Division, Town Council, Town Manager’s Office, Planning Department</p>	<p>Long-Term</p>
<p><b>Action 4-13</b> Investigate means to provide open space buffers between current commercial and residential uses, identifying specific parcels abutting existing commercial uses that may be used as a buffer and exploring the options to purchase or conserve the land for open space or recreational uses.</p>	<p>Parks &amp; Recreation Division, Town Council, Town Manager’s Office, Planning Department</p>	<p>Long-Term</p>
<p><b>Action 4-14</b> Identify, map, and publicize all Town-owned public rights of way to area ponds, rivers, beaches, and other such natural resources.</p>	<p>Planning Department, Parks &amp; Recreation Division</p>	<p>Short-Term</p>

(continued on next page)



**Natural Resources & Open Space Goal 4:** Valuable natural resource areas will be protected, preserved, and maintained in order to promote ecological resilience and rural character, and acknowledge the value the community places on these resources.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-15</b> Revise the Subdivision and Land Development Regulations to adopt standards to retain and enhance tree canopy coverage in the village areas.	Planning Board, Planning Department	Short-Term
<b>Action 4-16</b> Enact a Town-wide policy and plan for the sustainable management of the Town's public and private forests.	Planning Board, Conservation Commission, Parks & Recreation Division, Town Manager's Office	Mid-Term
<b>Action 4-17</b> Actively pursue funding for master planning and engineering work relative to creating a park system along the Saugatucket River, including enhanced connections to Main Street.	Planning Department, Conservation Commission, Parks & Recreation Division	Mid-Term

**Natural Resources & Open Space Goal 5:** Beach areas will be protected to allow for pedestrian-based recreation, to preserve the open-space character of the shore-front, and to protect the fragile ecology of the dunes.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 5-1</b> Place controls or other obstacles to motor vehicular traffic along the access-ways of ocean beaches which are under town control.	Town Manager's Office, Police Department	Short-Term
<b>Action 5-2</b> Work to improve pedestrian and bicycle access to ocean beaches and ponds.	Town Manager's Office, Planning Department, Parks & Recreation Division	Long-Term
<b>Action 5-3</b> Improve parking, wherever feasible, at public access points to ponds	Town Manager's Office, Department of Public Services, Parks & Recreation Division	Mid-Term



## CULTURAL & HISTORIC RESOURCES ACTION PLAN

**Cultural & Historic Resources Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Seek funding and volunteer assistance for conducting an update to South Kingstown’s Cultural Resource Inventory.	Historic District Commission	Mid-Term
<b>Action 1-2</b> Keep a copy of its historic resource inventory on file with the Peace Dale Library to be available to the general public for research and reference needs. The inventory shall also be digitized and posted on the Town’s website. Other repositories which could be investigated include RI Department of Transportation (RIDOT)’s repository at the Woonsocket Depot.	Historic District Commission, Planning Department	Short-Term
<b>Action 1-3</b> Pursue expansion of the Wakefield National Historic District, per the results of a historic resources report commissioned by the Town’s Historic District Commission, based upon available funding and resources.	Historic District Commission, Planning Department	Short-Term
<b>Action 1-4</b> Review the underlying zoning for each property on the historic resource inventory and assess what resources are most at risk for subdivision or other development pressures that might threaten them.	Historic District Commission	Mid-Term
<b>Action 1-5</b> Revise the Subdivision & Land Development Regulations to require that applications be reviewed in consultation with a professional archaeologist or historic preservation specialist when a historic or prehistoric resource is located on site. Such specialist will be hired by the town, funded by the applicant, and shall develop an alternative plan or appropriate mitigative action.	Planning Board, Planning Department	Mid-Term
<b>Action 1-6</b> Review and revise where applicable all existing policies and regulations for protecting historic resources within the planning and development review process.	Planning Board, Historic District Commission, Planning Department	Short-Term
<b>Action 1-7</b> Amend the Historic District Ordinance to include the elements of the current enabling legislation.	Historic District Commission, Planning Board, Town Council	Short-Term

(continued on next page)



**Cultural & Historic Resources Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-8</b> Research and report on the feasibility of the establishment of an ordinance requiring a waiting period when an historic building is proposed for demolition. The waiting period would permit alternatives to demolition to be fully explored before any structure is razed.	Historic District Commission	Mid-Term
<b>Action 1-9</b> Review the South Kingstown Residential Design Manual and the Historic Overlay District (see Zoning Ordinance Section 600) and revise as necessary to ensure the protection of cultural resources, including historic buildings, structures, and landscape features, and archaeological sites, from adverse impacts of development activities.	Historic District Commission, Planning Board, Town Council	Mid-Term
<b>Action 1-10</b> Develop amendments to the Subdivision and Land Development Regulations to encourage preservation of existing stone walls on parcels proposed for development and/or redevelopment.	Planning Board	Short-Term
<b>Action 1-11</b> Regularly review the regulatory framework, including the Schedule of Use Regulations Table in the Zoning Ordinance, to ensure the continued flexibility and successful adaptive reuse of historic mill buildings and other historic structures to provide incentive for reuse.	Economic Development Committee, Planning Board, Town Council	Mid-Term
<b>Action 1-12</b> Establish regular protocol for the Town’s Historic District Commission and Economic Development Commission to work more closely with each other so that economic development and historic preservation policies are shaped toward the same end goals.	Planning Department, Town Manager’s Office	Short-Term
<b>Action 1-13</b> Promote Federal, State, and local programs which provide resources including “how-to” guidance and potential financial incentives for owners of historic properties by including links to and information regarding such programs on the Town’s website.	Historic District Commission, Planning Department	Mid-Term
<b>Action 1-14</b> Establish a plaque system to identify historic homes and buildings throughout South Kingstown.	Historic District Commission	Mid-Term

(continued on next page)



**Cultural & Historic Resources Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 1-15</b> Reach out to owners of historic properties annually to alert them to the various resources available to them, including historic tax credits and technical assistance from the Town’s Historic District Commission.</p>	<p>Historic District Commission</p>	<p>Short-Term</p>
<p><b>Action 1-16</b> Serve as a hub for residents and visitors related to cultural and historic resources, including: guidelines for historic preservation of individual homes; locations and resources of local museums, theaters, and galleries; educational programs and events; guides to visiting resources; videos and media; etc.</p>	<p>Historic District Commission, Planning Department</p>	<p>Long-Term</p>
<p><b>Action 1-17</b> Serve as a hub for information developed by the Town and/or other local or regional organizations to increase awareness among the Town’s citizens about the benefits and economic returns on investment of preservation, arts, and culture. The Town shall lead by example by promoting its own historic restoration work on town buildings and structures. At a minimum, such work will be detailed in the biennial plan and highlighted on the Town’s website.</p>	<p>Town Manager’s Office, Economic Development Committee, Historic District Commission</p>	<p>Short-Term</p>
<p><b>Action 1-18</b> Devise a policy and standards to govern the installation of identification and wayfinding signage for historic districts, properties and sites and arts and cultural institutions.</p>	<p>Historic District Commission, Bicycle &amp; Pedestrian Advisory Committee</p>	<p>Mid-Term</p>
<p><b>Action 1-19</b> Explore and report on the local economic benefits of investing in historic preservation, arts, and culture, including:</p> <ul style="list-style-type: none"> <li>• Influences on tourism</li> <li>• Benefits of skilled employment for historic renovation</li> <li>• Impacts on property values</li> </ul>	<p>Historic District Commission, Economic Development Committee</p>	<p>Mid-Term</p>

(continued on next page)



**Cultural & Historic Resources Goal 1:** The measures available for protecting cultural and historic resources will be expanded to provide maximum protection to South Kingstown’s historic and prehistoric resources and visibility and viability of its arts and cultural institutions.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 1-20</b> Use the findings of the report on the local economic benefits of investing in historic preservation, arts, and culture to advocate for an increase in and regular budget allocations for historic preservation and cultural investments. Explore the feasibility of providing a local town match for federal historic preservation dollars, or a tax rebate for homeowners who follow Historic District Commission guidance.</p>	<p>Historic District Commission, Town Manager’s Office</p>	<p>Long-Term</p>
<p><b>Action 1-21</b> Pursue partnerships with local educational institutions such as URI, Brown University, and Roger Williams University in order to utilize student efforts by submitting applications for programs such as the RWU Community Partnership Center Program.</p>	<p>Historic District Commission</p>	<p>Short-Term</p>



## RECREATION ACTION PLAN

**Recreation Goal 1: Provide active and passive recreational services to support a healthy environment and to meet town, state, and federal requirements.**

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1.1</b> Reassess recreation needs of the town in accordance with National Recreation and Park Association guidance to use local conditions and unique characteristics of the town to set Park Metrics to determine need.	Recreation Department, Recreation Commission.	Short-Term

**Recreation Goal 2:** Publicly-owned and controlled open space and all important public natural and cultural resources will be accessible to all citizens, and all current and historic rights-of-way which ensure access to

ACTION	PARTY	HORIZON
<b>Action 2-1</b> Educate adjacent landowners about public access to the shore via paper streets and other deeded access ways in proximity to their properties and ensure signage remains intact.	Town Manager’s Office, Planning Department	Short-Term

*\*Recreation Goal 1 has no associated actions, only policies.*



**Recreation Goal 3:** Publicly-owned and controlled open space and all important public natural and cultural resources will be accessible to all citizens, and all current and historic rights-of-way which ensure access to these areas will be protected.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> The Town shall identify specific town-owned lands for the potential conversion to recreation and open space facilities.	Town Manager's Office, Parks & Recreation Division, Planning Department	Long-Term
<b>Action 3-2</b> To service the northeast area of South Kingstown, the Town will investigate the development of community park facilities within the reclaimed areas at the Rose Hill Transfer Station.	Town Manager's Office, Parks & Recreation Division, Department of Public Services	Long-Term
<b>Action 3-3</b> Explore and determine the feasibility of expanding the use of the Peace Dale Office Building for providing community recreation services. The expanded facilities may include an art studio, additional art performance space, and general programming areas.	Town Manager's Office, Parks & Recreation Division	Short-Term
<b>Action 3-4</b> Research the establishment of additional indoor ice facilities in South Kingstown.	Parks & Recreation Division, School Department	Short-Term
<b>Action 3-5</b> Evaluate and implement new methods for communicating financial aid opportunities for youth and teen recreation programming.	Parks & Recreation Division	Short-Term

**Recreation Goal 3:** Publicly-owned and controlled open space and all important public natural and cultural resources will be accessible to all citizens, and all current and historic rights-of-way which ensure access to these areas will be protected.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-6</b> Pursue revenue generating opportunities and activities to offset operational costs associated with the provision of community recreational program and facilities.	Parks & Recreation Division	Mid-Term



**Recreation Goal 4:** Active recreation areas and other properties under the Parks and Recreation Department jurisdiction will be maintained to meet the needs of all users.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-1</b> Explore opportunities for community groups and agencies to take on a more direct role and involvement in maintenance and service functions.	Town Manager’s Office, Parks & Recreation Division	Short-Term
<b>Action 4-2</b> Outsource maintenance of a majority of non-park facilities as outlined in the CIP to provide town maintenance crews with additional capacity to absorb the new facilities.	Town Manager’s Office, Parks & Recreation Division	Short-Term
<b>Action 4-3</b> Improve the accessibility of the town-owned recreation facilities, where appropriate, to ensure Americans with Disabilities Act (ADA) accessibility to Parks and Recreation Department activities in connection with planned improvements.	Town Manager’s Office, Parks & Recreation Division	Mid-Term
<b>Action 4-4</b> Assess options for offering on-line registration/reservation capabilities to the public as a more streamlined and efficient customer service function; and select the most appropriate and cost-effective tool.	Parks & Recreation Division, Information Technology Department	Mid-Term
<b>Action 4-5</b> Develop the Noyes Farm property as a recreational amenity to be operated and maintained by the Department of Parks and Recreation.	Town Manager’s Office, Parks & Recreation Division, Planning Department	Mid-Term
<b>Action 4-6</b> Evaluate opportunities to provide youth and teens positive alternatives for their free time, with a focus on providing activities between 2 p.m. and 6 p.m. on weekdays, and on Friday and Saturday nights.	Town Manager’s Office, Parks & Recreation Division, Police Department	Short-Term

**Recreation Goal 5:** Publicly-owned and controlled open space and all important public natural and cultural resources will be accessible to all citizens, and all current and historic rights-of-way which ensure access to these areas will be protected.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 5-1</b> Develop and regularly update an interactive web-based map that will provide citizens with a mix of visual and narrative information regarding recreation resources	Parks & Recreation Division, Planning Department	Mid-Term



## SERVICES & FACILITIES ACTION PLAN

**Services & Facilities Goal 1:** The Town will continue to provide high quality municipal services in a cost-effective manner, as required to serve an expanding community and to integrate the Town's growth management program with long-range utility plans.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Review the adequacy of municipal government administration services in accordance with internal standards, and in conformance with modern management practice.	Town Council, Town Manager's Office	Short-Term
<b>Action 1-2</b> Initiate a process by which the proposed Capital Improvement Program is reviewed for consistency with this Plan.	Town Council, Town Manager's Office, Planning Department, Planning Board	Short-Term

**Services & Facilities Goal 2:** The Town will continue to provide effective wastewater management through a variety of strategies designed to protect public health and the natural environment.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> Expand the centralized sewage treatment facility in an established time frame, based on improvements in technology and the relative needs and fiscal capacity of each user group (South Kingstown, Narragansett and URI).	Town Council, Town Manager's Office, Public Services Department	Long-Term
<b>Action 2-2</b> Work with the RIDEM to identify critical natural resource areas that may warrant additional consideration by RIDEM in their wetland permit review process.	Conservation Commission	Short-Term
<b>Action 2-3</b> Amend the Zoning Ordinance and Subdivision and Land Development Regulations to allow only low-density development in unsewered areas with severe septic limitations.	Planning Department, Planning Board, Town Council	Mid-Term
<b>Action 2-4</b> Explore development of objective criteria to inform requirements for mandatory sewer connection and main extension required within the future sewer service area	Public Services Department, Town Council	Mid-Term
<b>Action 2-5</b> Amend the Zoning Ordinance and Subdivision and Land Development Regulations to allow high density development only in areas where public sewer and water are available, or will be extended to become available, at the time of development.	Planning Department, Planning Board, Town Council	Mid-Term



**Services & Facilities Goal 2:** The Town will continue to provide effective wastewater management through a variety of strategies designed to protect public health and the natural environment.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-6</b> Conduct an assessment of the costs and benefits associated with public financing of extension of the public sewer system in village areas where higher density development is appropriate.	Department of Public Services, Town Council	Long-Term

**Services & Facilities Goal 3:** Existing water resources will be managed and protected for present and future residential and non-residential use in accordance with growth plans for the Town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> Pursue legislation on either a town-wide or regional basis to regulate priority of water use (see discussion in Natural Resources & Open Space Element).	Department of Public Services, Town Council, Town Manager's Office	Mid-Term
<b>Action 3-2</b> Develop drought planning measures in accordance with Rhode Island Water 2030, State Guide Plan Element 721. Such measures shall go beyond simply providing interconnections between the Town's public water suppliers and is particularly relevant as the Town receives water via Suez from the Chipuxet sub-basin.	Department of Public Services	Short-Term

**Services & Facilities Goal 4:** The Town will continue a solid waste management strategy which focuses on waste reduction, litter control and recycling, and waste management programs which are cost-effective and self-sufficient to the greatest extent possible.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 4-1</b> Work with the Rhode Island Resource Recovery program to determine if residents are following applicable rules regarding recycling and develop a strategy to improve such if necessary.	Department of Public Services, Sustainability Committee	Short-Term
<b>Action 4-2</b> Explore and determine the feasibility of developing a food waste composting facility at the Rose Hill Regional Transfer Station.	Town Manager's Office, Department of Public Services	Short-Term
<b>Action 4-3</b> Increase special waste collection at the Rose Hill Regional Transfer Station to include scrap metal and other possible recyclable material.	Town Manager's Office, Department of Public Services	Mid-Term



**Services & Facilities Goal 5:** The Town will continue an effective public works program which recognizes the importance of the maintenance and construction of safe and efficient roads, bridges, sidewalks, bike paths, storm drains, and parks to serve its residents.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 5-1</b> Revise zoning and subdivision regulations to require appropriate setbacks and buffers to utility easements to protect residential development and allow for the proper functioning of the utility.	Planning Board, Planning Department	Mid-Term

**Services & Facilities Goal 6:** A long-range program of effective stormwater management will be in place, designed to protect its residents from flooding, to control erosion and sedimentation, and to maintain both surface and groundwater quality and quantity.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 6-1</b> Explore implementing innovative standards for drainage design utilizing such techniques as LID (low impact development) and flexible paving surface requirements to promote on-site treatment and infiltration where appropriate.	Department of Public Services, Planning Department, Planning Board	Short-Term
<b>Action 6-2</b> Explore improvements to stormwater management systems based on recommendations included in the "South Kingstown Village Study: Villages of Wakefield and Peace Dale."	Department of Public Services, Planning Department, Town Council	Short-Term
<b>Action 6-3</b> Consider the establishment of standards for minimum rights of way in subdivisions that will accommodate the installation of stormwater management systems and utilities while requiring that pavement widths be the minimum necessary for functional requirements.	Department of Public Services, Planning Department, Planning Board	Short-Term
<b>Action 6-4</b> Comply with RIPDES Phase II requirements for stormwater management in municipal separate storm sewer systems. This program is intended to improve the quality of receiving waters by reducing the quantity of pollutants discharged during storm events. RIPDES Phase II stormwater regulations also require the inventory of existing municipal stormwater facilities.	Department of Public Services, Town Council	Short-Term
<b>Action 6-5</b> Increase education to property owner and municipal departments regarding improvements that can be made on private and public property in order to improve water quality..	Conservation Commission, Planning Board	Mid-Term



**Services & Facilities Goal 7:** The Town’s professional police force, dedicated to upholding the law, ensuring the safety and best welfare of the Town’s residents, and respecting the rights of all citizens, will continue to be fully supported

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 7-1</b> Explore and determine the feasibility of the construction of a separate storage building for evidence processing and evidence storage. This building should be secure, have sophisticated air handling, and include a garage space with lift.	Town Council, Police Department, Town Manager’s Office	Short-Term

**Services & Facilities Goal 8:** The Town’s volunteer fire departments will continue to be supported and assisted in their efforts to provide protective services.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 8-1</b> In cooperation with the Union and Kingston Fire Districts, explore the development of a recruitment and incentive-based program to attract and retain volunteers for these organizations.	Town Manager’s Office	Mid-Term
<b>Action 8-2</b> The “Improvements Statements” written for the Fire Districts by the Insurance Services Office shall be reviewed by the Union and Kingston Fire District administrations to determine if there are cost-effective ways to improve their respective district ratings, which are based on fire suppression capabilities. These re-ports shall be included in their long-term plans.	Town Manager’s Office	Short-Term
<b>Action 8-3</b> Consider preparing a ten-year implementation plan as that is the time interval for ISO evaluation and classification.	Town Manager’s Office	Short-Term
<b>Action 8-4</b> The fire districts shall use the compliance standards to develop their own internal evaluation criteria, to be used annually, for the purpose of assessing existing and future needs.	Town Manager’s Office	Short-Term



**Services & Facilities Goal 9:** Town residents will continue to be provided with the opportunity for a quality education, and superior school facilities.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 9-1</b> The School Department shall conduct more comprehensive five-year evaluation increments of the Rhode Island Basic Education Program.	School Department, School Committee	Short-Term

**Services & Facilities Goal 10:** The diverse needs of our citizens will be met through expanded and improved public library services and facilities.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 10-1</b> Explore and determine the most cost effective methods for expanding the public service and non-public service areas of the main library in Peace Dale, in order to meet the needs of the town-wide system. Unmet system needs to research may include a larger youth services room, increased book stack capacity, increased space for public access computers, quiet study rooms, and a new public meeting room with a larger seating capacity.	Town Council, Town Manager's Office, Library Board of Trustees	Long-Term
<b>Action 10-2</b> The Library Board will explore and determine the most cost effective methods for expanding parking options at the Peace Dale and Kingston library branches.	Town Council, Town Manager's Office, Library Board of Trustees	Short-Term



**Services & Facilities Goal 11:** The South Kingstown Department of Senior Services will continue serve the community by providing enriching recreation experiences and quality facilities to support a healthy environment.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 11-1</b> The Senior Services Department shall investigate opportunities to reduce reliance on private transportation through attempting to secure additional use of Senior Services buses and seek funding opportunities to purchase a twenty passenger van for the Department’s use.	Town Council, Town Manager’s Office, Director of Senior Services	Short-Term
<b>Action 11-2</b> The Department, in collaboration with the Information Technology Division, will assess service-specific data management applications based on the unique needs of the Department and select the most appropriate and cost effective tool for effectively managing data and offering on line registration services to the public.	Department of Senior Services, Information Technology Department	Short-Term

**Services & Facilities Goal 12:** The Town will continue an emergency management response program that recognizes the importance of providing protection to citizens and property through public education, municipal preparedness plans and adequate training of key personnel.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 12-1</b> The Town shall re-examine the existing tree trimming program, and institute appropriate measures to reduce potential storm damage caused by windblown trees, by focusing on preventative maintenance in areas more likely to suffer storm damage, particularly coastal areas.	Town Manager’s Office, Department of Public Services	Short-Term
<b>Action 12-2</b> The Town shall examine its present guidelines and regulations to see where possible measures can be instituted and encouraged to reduce storm damage potential.	Planning Department	Short-Term



## ENERGY ACTION PLAN

**Energy Goal 1:** Well-planned, diverse and economically viable renewable energy production facilities will exist in appropriate areas of Town.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> Town Boards, Committees and staff shall work together to evaluate and determine which renewable energy sources are appropriate in South Kingstown and develop clear and comprehensive zoning requirements and siting standards to support diverse renewable energy development in appropriate areas with minimal impact on surrounding land uses.	Sustainability Committee, Planning Board, Town Council	Short-Term
<b>Action 1-2</b> The Town shall study the Rhode Island Land-Based Wind Siting Guidelines published by the Office of Energy Resources and explore the opportunities for wind energy generation in South Kingstown.	Sustainability Committee, Planning Department	Short-Term
<b>Action 1-3</b> The Town will evaluate the potential for accessory solar energy system siting in connection with proposed construction of, or major renovations to, municipally owned and operated buildings.	Sustainability Committee	Short-Term

**Energy Goal 2:** The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> The Town will monitor energy use of municipal buildings through the Energy Star Portfolio Manager program annually.	Town Manager's Office	Short-Term
<b>Action 2-2</b> The Town shall pursue energy efficiency retrofits for the municipal buildings with the highest documented energy use intensity (EUI) to reduce heating and cooling costs and/or electricity usage.	Town Manager's Office	Short-Term
<b>Action 2-3</b> The Town shall replace end-of-life municipal vehicles with high fuel efficiency and/or electric vehicles.	Town Manager's Office	Mid-Term



**Energy Goal 3:** The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> Town staff shall remain aware of and participate in local, statewide and national initiatives to promote the increased use of renewable energy.	Town Manager’s Office, Department of Public Services, Planning Department,	Short-Term
<b>Action 3-2</b> The Town Council, Planning Board, Sustainability Committee, and staff shall develop materials and disseminate information to the public and municipal staff regarding energy efficiency programs and financing opportunities.	Sustainability Committee, Planning Department, Planning Board, Town Council	Short-Term



## CIRCULATION ACTION PLAN

Circulation Goal 1: The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> The Town shall actively work with RIPTA to develop a plan to provide consistent FLEX or regularly scheduled service to social service and mental health offices in South Kingstown, Charlestown, and Narragansett. This is especially important for local residents who are transit dependent.	Planning Department	Short-Term
<b>Action 1-2</b> Explore and report on the costs and benefits of suspending town-run ride services and instead contracting such services through RIPTA.	Senior Services Department	Mid-Term
<b>Action 1-3</b> The South Kingstown Economic Development Committee, and “Trolley Program” providers will develop an analysis of the strengths and weaknesses of the current system and a strategy for making improvements, as well as assess the feasibility of new routes for trolley service based on recommendations and outreach outcomes defined in “South Kingstown: Designing a Healthier Community” (2012).	Economic Development Committee	Mid-Term
<b>Action 1-4</b> The Town shall actively work with RIPTA to explore and report on the feasibility of developing a state-funded trolley service in Wakefield, to improve mobility and support downtown revitalization. This study shall include research into the costs and benefits of providing attractively designed bus shelters at popular bus stops.	Economic Development Committee, Town Manager’s Office, Town Council	Mid-Term
<b>Action 1-5</b> The Town shall actively work with RIPTA to develop a plan and implementation schedule for the improvement and long-term maintenance of bus shelters in South Kingstown, as well as alterations to bus routes and stops through town (such as through the Wakefield Mall) to make them better match where riders most need them.	Planning Department	Mid-Term
<b>Action 1-6</b> The Town shall review use of MBTA commuter rail service at Wickford Junction by town residents and assist RIDOT in assessing the demand for the possible extension of commuter rail service to Kingston.	Planning Department, Planning Board	Mid-Term

(continued on next page)



**Circulation Goal 1:** The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-7</b> The Town shall solicit technical assistance from the Statewide Planning Program relative to the analysis of land use regulations in West Kingstown given the potential for commuter rail service to Kingston Station.	Planning Department, Planning Board, Town Manager's Office	Short-Term
<b>Action 1-8</b> The Town shall work with RIDOT to determine the potential demand for commuter rail service to points south of town, (Westerly, RI and New London, CT).	Planning Department, Town Manager's Office	Mid-Term
<b>Action 1-9</b> The Town will actively reach out to ride-share companies such as ZIP Car, and other ride alternative companies such as Uber and Lyft, to see how they can partner to increase service availability within South Kingstown.	Planning Department, Economic Development Committee, Town Manager's Office	Short-Term
<b>Action 1-10</b> The Town's Bicycle-Pedestrian Advisory Committee (BPAC) will assess current bicycle and pedestrian infrastructure through evaluation of existing GIS information and site reconnaissance for public rights-of-way. Ultimately, this work will be used to map and sign additional pedestrian and bicycle routes.	Bicycle Pedestrian Advisory Committee	Short-Term
<b>Action 1-11</b> BPAC will identify and prioritize specific areas and corridors to conduct walk-audits and handlebar surveys with outside organizations and community groups invested in health, safety, and welfare of a multi-modal transportation system	Bicycle Pedestrian Advisory Committee	Short-Term

(continued on next page)



Circulation Goal 1: The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 1-12</b> The BPAC will develop a Bicycle-Pedestrian Master Plan that includes a methodology for prioritizing locations for future bicycle-pedestrian infrastructure investments. Topics to explore in this plan shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Developing a network of on- and off-street bicycle and pedestrian facilities to encourage alternative transportation modes in the central areas of town and to recreational resources including, but not limited to, the William C. O'Neill Bicycle Path, local beaches, and significant parks.</li> <li>• Developing an inventory of existing bicycle racks for public facilities, commercial hubs, open spaces, and the William C. O'Neill Bicycle Path and developing a strategy to augment this system using town budget resources, sponsorships/donations, new developments and redevelopments, and grant funding mechanisms.</li> <li>• Identifying and prioritizing appropriate bicycle and pedestrian treatments for multi-modal corridors in the town and additional infrastructure improvements as necessary to promote safe walking and biking.</li> <li>• Educational opportunities to promote use and awareness of alternative modes of transportation including, but not limited to, targeted educational events designed to increase awareness of the rights and rules associated with non-motorized roadways users, and installation of "share the road signage."</li> <li>• Enforcement best practices, developed collaborative with local law enforcement, designed to improve overall bicycle and pedestrian safety through the best available technologies such as speed monitoring cameras.</li> </ul>	Bicycle Pedestrian Advisory Committee	Mid-Term
<p><b>Action 1-13</b> The Town shall amend regulations to require the installation of attractive bicycle facilities for residential developments of six units or greater or for any commercial development requiring development plan review at a scale commensurate with the size and location of the development.</p>	Planning Board, Planning Department	Short-Term

(continued on next page)



Circulation Goal 1: The energy consumption of municipal buildings, vehicles and equipment in South Kingstown will be reduced.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-14</b> The Town shall evaluate transportation needs and potential improvements relative to emergency response (See the Natural Hazards & Climate Change element).	Department of Public Services, Police Department, Planning Department, Emergency Medical Services Department	Mid-Term
<b>Action 1-15</b> The Town shall evaluate transportation needs and potential improvements relative to truck freight along Route 1 and Route 138.	Planning Department, Department of Public Services, Economic Development Committee	Mid-Term

Circulation Goal 2: Streets will be safe, inviting, attractive, and supportive of healthy, active modes of transportation.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> The Town shall explore and determine the viability of adopting a “Green and Complete Streets” ordinance to enforce the South Kingstown Town Council Resolution on Complete Streets utilizing the best available resources, publications and multi-modal transportation practices. The Town will develop and apply to the fullest extent possible Complete Street standards appropriate for rural roads, subdivisions, and village center roads.	Bicycle Pedestrian Advisory Committee	Mid-Term
<b>Action 2-2</b> The Town shall coordinate with RIDOT to encourage the Complete Streets concept as the basis for street design on state transportation and infrastructure related projects as appropriate.	Bicycle Pedestrian Advisory Committee	Mid-Term
<b>Action 2-3</b> The Town shall work with RIDOT to evaluate improvements along Old Tower Hill Road between Route 1 and Dale Carlia Corner, including sections of Route 108 and adjacent densely developed residential areas to support a safe, attractive, human-scaled environment that encourages pedestrian and bicycle connectivity and a unique sense of place within the area through high quality design.	Bicycle Pedestrian Advisory Committee, Department of Public Services	Long-Term

(continued on next page)



**Circulation Goal 2:** Streets will be safe, inviting, attractive, and supportive of healthy, active modes of transportation.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 2-4</b> The Town shall work with RIDOT to explore and report on the feasibility, costs, and benefits of constructing a pedestrian and bike path that either bridges over or tunnels under Route 1.</p>	<p>Bicycle Pedestrian Advisory Committee, Department of Public Services</p>	<p>Long-Term</p>
<p><b>Action 2-5</b> The BPAC will explore and report on the feasibility of basing the location of new street signs on population density as opposed to accident.</p>	<p>Bicycle Pedestrian Advisory Committee</p>	<p>Short-Term</p>
<p><b>Action 2-6</b> The BPAC will develop standards for prioritizing the placement of new street lighting in certain areas. Street lighting in these areas will be designed to minimize glare in the night sky, and will be discouraged altogether in other areas. Priority areas for street lighting will include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Locations with a relatively high accident rate;</li> <li>• Locations with a relatively high crime rate;</li> <li>• Locations with a concentration of senior citizens or handicapped residents such as elderly housing projects or nursing homes; and,</li> <li>• Areas of special or unusual character (e.g. village centers, community centers, churches or schools).</li> </ul>	<p>Bicycle Pedestrian Advisory Committee</p>	<p>Short-Term</p>



**Circulation Goal 3:** Circulation improvements will protect the quality of life in the community.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 3-1</b> The Town shall amend its Zoning Ordinance to provide for shared parking areas in appropriate districts and to permit parking on adjacent or nearby land.	Planning Board, Town Council	Short-Term
<b>Action 3-2</b> The Town shall catalogue all public parking opportunities in South Kingstown, and develop signage, on line information, and hard copy guidance for residents and visitors explaining where this parking is and what it can be used to access.	Economic Development Committee	Mid-Term
<b>Action 3-3</b> The Town shall establish flexible standards for road-way/driveway construction, including widths and type of material, in an effort to minimize the extent of impervious surfaces, reduce construction costs and encourage energy conservation.	Planning Board, Planning Department, Department of Public Services	Short-Term
<b>Action 3-4</b> The Town shall explore amending its Subdivision and Land Development Regulations to incorporate innovative standards for low impact development in roadway design and stormwater management practices.	Planning Board, Planning Department, Department of Public Services	Short-Term
<b>Action 3-5</b> The Town shall develop mechanisms for measuring and accounting for the cumulative impacts of development regarding transportation improvements and addressing these impacts within the development review process. The Town shall formalize this metric within regulations that will specify new requirements for applicants and provide clear decision criteria for review authorities.	Planning Board, Planning Department	Mid-Term
<b>Action 3-6</b> The Town shall review the need to establish a maximum length of road with a cul-de-sac.	Planning Board, Planning Department, Department of Public Services	Short-Term
<b>Action 3-7</b> The Town shall explore amending regulations to incorporate standards for increasing pedestrian and bicycle access and connectivity between adjoining commercial properties and between commercial properties and surrounding residential neighborhoods in a coordinated manner.	Planning Board, Planning Department, Bicycle Pedestrian Advisory Committee	Short-Term

(continued on next page)



### Circulation Goal 3: Circulation improvements will protect the quality of life in the community.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 3-8</b> The Town shall actively work with RIDOT to reach an agreement about reducing the amount of salt and oil added to state roads in South Kingstown. The Town shall leverage any TMDLs, water quality statistics, and RIDOT's requirements under the 2017 consent decree to advocate for this agreement.</p>	<p>Department of Public Services, Conservation Commission</p>	<p>Mid-Term</p>
<p><b>Action 3-9</b> The Town shall promote the phasing out of existing billboards along all roadways in the Town, with maximum application of the legal powers it may have to do so.</p>	<p>Building &amp; Zoning Department</p>	<p>Short-Term</p>
<p><b>Action 3-10</b> The Town shall develop criteria for identifying targeted locations for underground utilities on new or reconstructed state or local streets or highways, and explore and report on potential sources of funding for implementation. Explore the possibility of providing local matching funds for federal dollars, or Americans with Disabilities Act funding where the burying of utilities would improve sidewalk accessibility.</p>	<p>Department of Public Services, Planning Department, Town Manager's Office</p>	<p>Mid-Term</p>

### Circulation Goal 4: State and federal agencies will recognize the importance of improving safety and accessibility for residents, visitors, and students.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 4-1</b> The Town shall research potential state/federal resources to fund the realignment of Matunuck Beach Road to protect the South Shore Water System's 12-inch main and to maintain the primary evacuation route for residents.</p>	<p>Department of Public Services</p>	<p>Short-Term</p>
<p><b>Action 4-2</b> The Town shall support URI's plans to promote Plains Road and Route 138 east from Route 2 as a means to access the campus and mitigate traffic congestion in Kingston Village.</p>	<p>Town Manager's Office, Department of Public Services</p>	<p>Short-Term</p>



## URI ACTION PLAN

URI Goal 1: Host-community/institutional relationships and joint strategic planning will be strengthened.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 1-1</b> The University and the Town will work toward the development of a “Host Community/University” cooperative agreement to provide a process and structure to address areas where common interests intersect and matters of concern arise.	Town Manager’s Office, Town Council	Mid-Term
<b>Action 1-2</b> The Town will work with the University and RIDOT to define and develop appropriately scaled infrastructure upgrades and the use of traffic calming techniques and management strategies in the Kingston and West Kingston vicinities to address existing and proposed institutional development and general community growth.	Town Council, Town Manager’s Office, Department of Public Services, Bicycle Pedestrian Advisory Committee	Mid-Term
<b>Action 1-3</b> The Town will track municipal costs attributable to the University, particularly with regard to school children in local schools from on-campus graduate student and/or faculty housing. This database will form the basis of discussions with URI regarding a potential Payment in Lieu of Taxes (PILOT) program to address these costs.	Town Manager’s Office, School Department	Short-Term
<b>Action 1-4</b> The Town shall work with URI to support research expansion and potential spin off of new businesses, utilizing the State of Rhode Island’s incentives for research and development.	Town Manager’s Office, Planning Department, Planning Board	Short-Term

URI Goal 2: Transportation, traffic, public safety and infrastructure system linkages will be enhanced.		
ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<b>Action 2-1</b> The Town shall continue to implement the recommendations of “South Kingstown: Designing a Healthier Community” as they relate to the University and surrounding neighborhoods.  	Planning Department, Planning Board, Town Council	Short-Term

(continued on next page)



## URI Goal 2: Transportation, traffic, public safety and infrastructure system linkages will be enhanced.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 2-2</b> The Town will research, consider, and institute, as appropriate, traffic calming techniques on town roads in proximity to the University to manage traffic flow and promote safety. The Town will urge the State of RI and the University to continue to utilize such techniques on state roads and the campus road system (e.g., the 138 Improvement Project) and University actions with regard to its internal road systems (e.g., eliminating parking on Flagg Road north side and from Heathman Road to Upper College on the south side, increased cross walk markings and elevated cross walks, and added three and four-way stops at key intersections).</p>	<p>URI, Planning Department, Planning Board</p>	<p>Short-Term</p>
<p><b>Action 2-3</b> In cooperation with URI, the Town will review the potential impacts of institutional growth at the University on public safety response capacities (including South Kingstown EMS, Kingston Fire District, Kingston Water District and Police).</p>	<p>Planning Department, Planning Board, Town Manager's Office, Department of Public Services, Police Department, Emergency Medical Services Department</p>	<p>Short-Term</p>

## URI Goal 4: URI will continue to provide for a sustainable campus environment with enhanced natural systems protection.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 4-1</b> The Town shall work collaboratively with the University to inventory all existing healthy food resources on campus such as food outlets, food gardens, sites available for small-scale agriculture, accessible kitchen space, and compost facilities. This inventory shall be made available to students, faculty, and, where appropriate, the community at large to increase awareness of healthy food resources.</p>	<p>Planning Department</p>	<p>Short-Term</p>
<p><b>Action 4-2</b> The Town shall work with the University to increase the availability of healthy food resources on campus and increase the capacity for the sustainable composting program and other food waste practices.</p>	<p>Planning Department, Planning Board</p>	<p>Short-Term</p>

\*URI Goal 3 has no associated actions, only policies.



**URI Goal 4:** URI will continue to provide for a sustainable campus environment with enhanced natural systems protection.

ACTION	RESPONSIBLE PARTY	IMPLEMENTATION HORIZON
<p><b>Action 4-3</b> The Town Council shall consider a resolution stating that the Town and the University will work collaboratively together to support a locally-based food system that includes sustainable local agriculture and aquaculture activities.</p>	<p>Town Manager’s Office, Town Council</p>	<p>Short-Term</p>
<p><b>Action 4-4</b> The Town shall work collaboratively with the University and state legislators to identify and address any barriers to utilizing the University’s purchasing power to increase the procurement of local food products from farmers and growers in town.</p>	<p>Town Manager’s Office, Town Council</p>	<p>Short-Term</p>

## Natural Resources & Open Space Inventory

### Introduction

The purpose of the natural resources inventory is to provide a baseline of information to develop management and protection strategies for these resources. The primary goal of this inventory is to provide necessary information for environmental protection. A secondary goal is to promote a broader public consciousness of the issues. Public support and understanding are critical to establishing an effective policy framework for protecting natural resources.

For corresponding maps of natural resources and open space, please refer to the following located within the Comprehensive Plan:

- Map 21: Protected Open Spaces
- Map 22: Wetlands
- Map 23: Watersheds
- Map 24: Critical & Environmentally Sensitive Areas
- Map 25: Groundwater Resources
- Map 26: Agricultural Resources

### Natural Resources Inventory

#### *Geology*

- a) **Bedrock Geology** - Both igneous and metamorphic rock formations are the predominant bedrock in the area. They range in age from the Precambrian to the Pennsylvanian or younger (Moore, 1964). The northern half of the Town is underlain by gneisses of the Mississippian (or older) age, and the southern half of the Town is underlain by Pennsylvanian (or younger) age granite that reaches into Connecticut on the west and into Narragansett Bay on the east. The southeastern section of Town lies in the Narragansett Basin, a structural basin which stretches from the mouth of the Narragansett Bay into Massachusetts. Most of the basin is underlain with a sedimentary rock, but in South Kingstown the basin was found to be the Pennsylvanian granite.
- b) **Surficial Geology** - With the exception of some shoreline features and the organic accumulations in wetlands, all of the topography in South Kingstown is attributable to the forces of glacial erosion and deposition (Quinn, 1979). One of the most apparent effects of the glacier was a disruption of the drainage patterns, causing formation of extensive marshes and other wetlands. Worden's Pond, and the adjacent Great Swamp area, is an example of a partially filled glacial depression. The southern boundary of this lake basin is the belt of low hills and ridges called the Charlestown Moraine, which is one of the best-formed end moraines in New England (Kaye, 1960). The Moraine is between one and two miles wide and as high as 150 feet in places. In South Kingstown, the Charlestown Moraine (located just north of Route 1) is the result of rocks and soil left by the glacier as it retreated. This blocked the drainage and created many wetlands to the north. Worden's Pond and the Great Swamp are the direct result of the blocked drainage. These areas are believed to be the former site of glacial Lake Worden, which at one time occupied all of Worden's Pond and the Great Swamp. The area to the south of the Moraine is mostly low lying, relatively flat outwash plains. Another result of the glacial action is the diversity of soil types found here. Our water-rich deposits of sands and gravels (aquifers), rich agricultural soils, numerous kettle ponds (formed by blocks of ice which depressed the landscape), and rocky uplands are all a direct result of glacial action.

## Natural Resources & Open Space Inventory

- c) Coastal Geology - The Rhode Island shoreline also is a result of previous glacial action and the forces of erosion and deposition. These two forces create a constantly changing coastline, filled with such dynamic features as marshes, bays, estuaries, barrier beaches, spits, sand dunes, and salt ponds. The combination of wind and wave action causes these features to move and to change continually. In addition, the impacts of human activity can exert powerful and sometimes undesirable changes on the natural features.

Normally, a beach face is made of sand, deposited by the waves. However, when a beach intersects a deposit of glacial gravels, the result can be a cobbled beach front formed as the waves wash away the sand. South Kingstown has a number of these beaches, including sections of Green Hill, Browning, Moonstone, and the Matunuck beaches.

### *Soils*

The Soil Survey of Rhode Island has identified 134 soil types within South Kingstown (NRCS 2012). Soils have different characteristics depending on such factors as the clay/silt/sand ratio and the structure of the soil. These characteristics determine the soil properties, a key in considering the soil suitability for land uses. Such characteristics as permeability, bearing capacity, erosivity, depth to water table, and depth to bedrock are important considerations in effective land use planning.

The Soil Survey of Rhode Island defines certain use limitations for each soil type. For example, a soil may have severe limitations for septic systems because of high water table or rapid permeability. In South Kingstown, almost 50 percent of the unsewered residentially zoned land under 2 acres has severe, moderate to severe, or slight to severe septic system limitations. In such areas, careful consideration must be given to the allowable land use because of the danger of failing septic systems and the resulting ground and surface water contamination. Because some soils are susceptible to erosion, careful erosion and sediment control precautions must be taken before, during, and after construction. In some cases, development on an unsuitable soil may lead to permanent loss or degradation of a natural resource. Flood hazards can be increased, as can the amount of standing water which serves as mosquito breeding sites. Prime agricultural lands may be lost to highways, shopping centers, and housing developments. Planning land use with a knowledge of soil characteristics will ensure that construction problems are minimized and that valuable natural resources are protected.

### *Wetlands*

South Kingstown has 9,568 acres of freshwater wetlands and 2,071 acres of coastal wetlands, which represents approximately 29 percent of the total land area in the Town.

- a) Definition and Function - Because of its glacial geology and coastal location, South Kingstown has many acres and classes of wetland. The term wetland usually brings to mind a swamp, a bog, or a marsh. The common characteristic of a wetland is that the area be at least periodically saturated or covered with water. Wetlands can be defined by soil characteristics (hydric soils), vegetation, or hydrology (Army Corps of Engineers, 1989).
- b) Freshwater Wetlands - Freshwater wetlands include wooded swamps, marshes, bogs, aquatic beds, wet meadows, lakes and ponds, and floodplains. Descriptions of wetland types can be found in Cowardin, et al, 1979. Bogs, fens and open water areas are described in Golet and Davis, 1982. South Kingstown has a total of 9,568 acres of freshwater wetlands, which comprise approximately 25 percent of the Town (RIGIS, 1990). Approximately 66 percent of the freshwater wetlands are forested (swamps), while marshes and wet meadows make up only one percent. South Kingstown has only 42 acres of rivers, as contrasted with 2,314 acres of lakes (1,075 acres are in Worden's Pond). Bogs and fens comprise less than 0.01 percent of the freshwater wetlands in the Town.

Worden's Pond (1,075 acres) is the largest natural lake in the State, and the Great Swamp is the

## Natural Resources & Open Space Inventory

largest forested wetland in southern New England (Guthrie and Stolgitis, 1977). Many small ponds and streams are found throughout the Town, remnants of the past glacial action -- ice carving out valleys and altering drainage patterns. A 1,200 acre area east of Ministerial Road has 10 kettlehole ponds and is an important site for rare and endangered species (person. Comm, Joanne Michaud, RIDEM, 1990). The Chipuxet River winds south from Hundred Acre and Thirty Acre Pond, emptying into Worden's Pond. The Queen River, in the northwestern corner of Town, feeds Glen Rock Reservoir, which then forms the western boundary of the Town, the Usquepaugh River. Many brooks flow through large wetland areas in the northern section of Town --Chickasheen, Genessee, White Horn, and Mink brooks are a few. In the eastern section of Town, Asa Pond, Rocky Brook Reservoir, Peace Dale Reservoir, and Indian Lake are the larger surface water bodies. In the northeastern section of Town, the Saugatucket Pond feeds the Saugatucket River which runs through the center of Wakefield before emptying into Point Judith Pond to the south.

- c) Coastal Wetlands - Coastal wetlands include salt marshes, estuarine scrub shrub wetlands, beaches (unconsolidated shores, rocky shores), and estuarine and tidal waters (salt ponds and estuarine rivers). A description of these wetland classes is found in Cowardin, et al, 1979. The Town has maintained a Harbor Management Plan (2011) to identify and to address issues related to Town tidal waters. Such issues as moorings, public access, current uses, water quality, and a resource inventory are included. A copy of this Plan is on file in the Planning Department and available on the Town of South Kingstown website; [www.southkingstownri.com](http://www.southkingstownri.com).

South Kingstown has approximately 363 acres of coastal wetlands, with an additional 1,707 acres of salt ponds and estuarine rivers. There are only 304 acres of salt marsh remaining in South Kingstown. Additionally, there are relatively few acres of the remaining wetland classes (beaches, riverine, and scrub shrub). The Town of South Kingstown has over four miles of undeveloped barrier beaches and over one mile of developed barrier beaches, as designated by the Rhode Island Coastal Resources Management Program. Construction is prohibited on an undeveloped barrier beach, except where the primary purpose of the project is protection, maintenance, restoration or improvement of the feature as a conservation area or natural storm buffer (Olsen and Seavey, 1983).

The coastal boundaries of South Kingstown include five coastal ponds and one estuarine river (Figure 7). The water bodies are, from east to west, the Pettaquamscutt River (or Narrow River), Point Judith Pond, Potter Pond, Card Pond, Trustom Pond, and Green Hill Pond. South Kingstown is bounded on the west by the Town of Charlestown, which claims the most westerly portion of Green Hill Pond. South Kingstown shares a significant portion of its coastal resources with the Town of Narragansett, as the eastern Town boundary splits both Point Judith and the Narrow River.

	Acreage	Average Depth (feet)
Green Hill	412	2.5
Potter	350	2
Point Judith	571	6*
Trustom	154	1.5
Card	49	1.5
Narrow River	148	4**

\* many areas less than 3 feet in main channel

\*\* at MLW; and 2 northern basins of 50 foot depth  
(NOAA Charts #13218; 13219; and 13221)

Point Judith and Potter Ponds - Point Judith Pond receives a major water input from the Saugatucket River to the north, while the southern portion of the pond is open to Block Island

## Natural Resources & Open Space Inventory

Sound. The construction of a permanent channel in the early 1900's resulted in a marked change in the physical, chemical and biological nature of the pond. For the past ten years, the Rhode Island Marine Fisheries Council has designated Point Judith, Green Hill, and Potter Ponds as Shellfish Management Areas. There are three commercially harvested species of shellfish in the Pond: the soft shell clam, the bay scallop, and the quahog. In addition, hundreds of recreational fishermen use the pond. Such species as flounder, perch, and eels have been harvested. However, in 1991, the State prohibited the harvesting of winter flounder in the salt ponds. Point Judith and Potter Pond also support small operations for shellfish hatchery aquaculture. In addition, in 1990, the State stocked the area with 100,000 bay scallops and oysters continue to be farmed by local aquaculture operations. Because of its greater depth and predominantly soft bottom, Potter Pond supports a limited recreational shellfishery, primarily being used by residents who live around the pond.

Green Hill Pond - In 1962 a channel was constructed to connect Green Hill Pond to Ninigret Pond in Charlestown. This has resulted in the decrease of several important fish species. Fresh water input is from groundwater, Factory Pond Brook and surface water runoff. The major resource of the pond is the oyster, which may be harvested in October after the State lifts the pollution closure imposed during the summer.

Narrow (Pettaquamscutt) River - The Narrow River is actually a tidal inlet and an estuary, an area where fresh and salt water mix. The area contains floodplains and salt marshes which are valuable habitat to a diversity of wildlife, including a number of rare and endangered species. Shellfish resources remain plentiful in the river. Prior to the water quality degradation and closure by RIDEM, the Narrow River supported a substantial recreational and seasonal commercial shellfishery (Howard-Strobel, 1987). In October 1988, Congress passed legislation authorizing the creation of the Pettaquamscutt Cove National Wildlife Refuge. As of July 2012, the U.S. Fish & Wildlife Service had purchased 10 tracts of land totaling 130 acres within the boundaries.

### *Groundwater*

As a result of previous glacial activity, numerous outwash deposits (sands and gravels) which yield high quantities of groundwater are found in South Kingstown, The Rhode Island Department of Environmental Management (RIDEM) has designated large areas as GAA, the highest quality rating for drinking water. The major part of the GAA area is the critical portion of the recharge area to the groundwater reservoirs. South Kingstown relies solely on groundwater for its potable water. In 1988, the aquifers in the Town were designated by the United States Environmental Protection Agency as the Pawcatuck Sole Source Aquifer. These aquifers are part of the ten interconnected aquifers in the Pawcatuck Basin Watershed. A Sole Source Aquifer means that the area obtains more than 51 percent of its drinking water from an aquifer, and that there is no reasonable alternate source of potable water. The Pawcatuck Basin Sole Source Aquifer includes all or portions of ten Rhode Island towns and sections of four Connecticut towns.

It should be noted that these ten aquifers in the Pawcatuck Sole Source Aquifer are not separated by any major groundwater divide. Therefore, the Mink, the Queen, and the Chipuxet aquifers in South Kingstown are considered to be a part of this large single aquifer system. Another important consideration in developing a groundwater protection strategy is that, because of the geology of the region, the groundwater is closely connected to the surface water bodies. This means that contamination of a surface water body probably will affect the quality of the groundwater. The watersheds (the land basin which drains all the streams and rainfall to a common outlet) for the groundwater resources must be protected.

- a) Groundwater Reservoirs and Recharge Areas - South Kingstown has three groundwater reservoirs, as delineated by the Rhode Island Department of Environmental Management (RIDEM): the Chipuxet, the Mink, and the Queen/Usquepaug. The RIDEM defines a groundwater reservoir as

## Natural Resources & Open Space Inventory

having a saturated thickness of 40 feet and a transmissivity of 4,000 feet squared per day. The critical portions of the recharge areas for the groundwater reservoirs and the Factory Pond outwash region also have been delineated by RIDEM. The Groundwater Section of the RIDEM has defined the critical portion of the recharge areas for the ground-water reservoirs as: a) the aquifer areas (groundwater reservoirs and portions of the surrounding stratified drift); and, b) the adjacent areas (areas of till and bedrock from which water that percolates to the water table flows through the subsurface to the aquifer area without first discharging to a perennial stream). Details on the delineation method are noted in the South Kingstown Water Quality Protection Plan (Draft, 1991).

The Chipuxet groundwater reservoir is approximately 3.1 square miles, with the majority falling within South Kingstown and the northern end falling in Exeter. The Queen groundwater reservoir is approximately 0.9 square miles, and lies within both South Kingstown and Exeter. The Queen and the Chipuxet share a critical recharge area, the total being approximately 11.2 square miles. The Chipuxet recharge area extends into both Exeter and North Kingstown. The Mink groundwater reservoir is approximately 0.7 square miles. The Mink and the Factory Pond recharge areas each cover approximately 2.6 square miles (RIGIS, 1990) and both lie completely within South Kingstown. A small section of approximately 17 acres, of the Beaver recharge area also lies within the Town (a groundwater reservoir in Richmond).

### *Watersheds*

No matter where you are on land, you are in a watershed. A watershed is a land basin which drains all the streams and rainfall to a common outlet (think of a bathtub). The hills and valleys in the landscape define the boundary by determining the size and shape of the basin. South Kingstown has several major watersheds to consider. The largest is the Pawcatuck watershed, which includes portions of ten Rhode Island towns (about one-third of our State) and four Connecticut towns (see Map 5.2). The outlet for the Pawcatuck Watershed is Little Narragansett Bay. In this watershed, the surface and groundwater watersheds are coincident in most places (the Sole Source Aquifer boundary follows the surface watershed).

Another major watershed is the Frontal Block Island Sound watershed, which is bounded on the east by Route 108, on the north by Route 1 in Narragansett and along Tuckertown Road and the Narragansett Trail into Charlestown. This watershed drains into the Block Island Sound. A third major watershed in the town, is the Pettaquamscutt (Narrow) River Watershed which is shared with both North Kingstown and Narragansett. The Watershed drains into the Pettaquamscutt (Narrow) River which then empties into the southern end of Narragansett Bay.

Within these larger watersheds are sub-watersheds (or sub-basins), marked by the hills and valleys in the landscape. As defined by RIDEM and the RIGIS watershed boundary set, there are 7 sub-watersheds in South Kingstown: Southwest Coastal Waters, Point Judith Pond, Pettaquamscutt (Narrow) River, Chickasheen, Queen, Saugatucket, and Upper Pawcatuck River sub-basins. As can be seen from Map 5.2, most are shared with other towns.

### *Upland Vegetation*

The Town of South Kingstown has a diversity of vegetation types because of the varied topography and soils. The uplands support large oak forests, the forest type which dominates southern New England. Oaks are found primarily on the warmer, southerly exposed slopes. Because the soils in these areas tend to be acidic and oak leaves are slow to decompose, the understory in these forests is limited to mostly blueberries, rhododendrons, azaleas, and laurel.

Stands of white pine (*Pinus strobus*) also are found, yet because the trees are not shade tolerant and

## Natural Resources & Open Space Inventory

seedlings do not germinate well in organic soils, white pines are not found in mature forests (as are the oaks). White pines may live to be 400 years old, but have been a heavily exploited tree, being cut and sold for ship masts. Another vegetative cover is pitch pine (*Pinus rigida*), found in the sandy outwash soils. Many acres of pine barrens are found in South Kingstown. The pine barren habitat -- dry, sandy soils, supports several rare and endangered species. Hemlocks (*Tsuga canadensis*) and Beech (*Fagus grandifolia*) often are found on the northerly, cooler slopes, as they are more shade tolerant trees and not resistant to fire.

Much of the forest land in Rhode Island was cleared at one time for grazing, farming, or timber. The post-agricultural fields are marked by stands of gray birch, red cedar, white pine, sumac, juniper, and dogwood, to name a few species. Each forest type represents a distinct habitat which provides homes for a diversity of plants and animals.

### *Rare and Endangered Species*

South Kingstown is the single most important town in Rhode Island for rare species and natural communities (pers. comm., Joanne Michaud, RIDEM, 1990). The Rhode Island Department of Environmental Management's Natural Heritage Program (RINHP) has mapped the areas of critical habitat for these species of ecological significance. Individuals interested further information on rare and endangered species are encouraged to review RINHP mapping resources.

### *State and Federal Land*

This category of natural resources includes all State and federally-owned land. Additional information on the area is given in the Open Space and Recreation Element and in the Harbor Management Plan, 1990.

- a) National Wildlife Refuges - Trustom Pond and Pettaquamscutt Cove are the two National Wildlife Refuges in South Kingstown.

Trustom Pond National Wildlife Refuge – This refuge contains 130 acres in South Kingstown and was established in 1974 for the primary purpose of providing nesting, resting, and feeding habitat for migratory birds. Its secondary purpose is to provide quality wildlife-oriented recreation opportunities. It includes 1.5 miles of barrier beach (Moonstone Beach) and Card and Trustom Ponds. The habitats on the refuge include: fields, marshes, mudflats, freshwater pond and wooded swamps, brackish pond, shrubland, barrier beach and dune systems, and croplands. Waterfowl hunting is allowed on some lands, which are separate from the 3 miles of trails.

John H. Chafee National Wildlife Refuge - In 1988, legislation was passed to establish the Pettaquamscutt Cove (Narrow River) National Wildlife Refuge. The Fish and Wildlife Service is in the process of acquiring land within the boundary which includes the Cove, associated salt marshes and tidal flats, and a buffer of forested upland habitat. The refuge currently has 317 acres of land in South Kingstown and they are hoping to expand to over 800 acres.

- b) State - There are approximately 3,642 acres of State land dedicated to conservation in the Town (see Open Space and Recreation Element). The largest parcel is 3,050 acres in the Great Swamp Management Area.

### *Open Space*

An open space plan can serve as a major organizing component in the overall pattern of development. Open space is a valuable part of a community plan for its diverse benefits to the residents. Recreation areas, wildlife habitats, scenic areas, pollution abatement, and buffers are some of the benefits of open space. Open space can be used to preserve and to protect groundwater resources, agricultural lands, and significant natural features.

## Natural Resources & Open Space Inventory

In addition, lands which could pose a danger to humans if developed can be set aside as open space. Dangers from flooding, erosion and coastal storms can be minimized by incorporating these lands into an open space plan. The open space network within the Town should contain agricultural areas, groundwater reservoir and recharge areas, wetlands, nature study educational areas, parks and wildlife habitats. The Town should strive to create a pattern of open space which serves to maximize the effect of each protected parcel of land. The plan should create a pattern of open space and recreation areas which are linked in a corridor or network. This approach could be enhanced by joining private, quasi-public and public open space into a continuous linear system.

See Plan Introduction and Open Space and Recreation Element for additional information.

### *Agricultural Land*

The agricultural landscape has long been a part of New England history. Much of Rhode Island was at one time cleared for farming purposes as indicated by the many stonewalls which wind through fields and second growth forests (areas where trees have grown in abandoned fields or areas that were once logged). The State has recognized that prime agricultural land is an important natural resource which needs to be preserved. In 1981, the Governor's Task Force of Agricultural Preservation reported that, "Certain agricultural land should be preserved because it is best suited to that use, and adequate land is available elsewhere for other activities." The Task Force also recommended that the northeastern region of the country strive to become less agriculturally dependent on the rest of the nation.

In 1982, the State passed the Farmland Preservation Act (RI GL 42-82-1) which states that:

*The general assembly recognizes that land suitable for food production in the State has become extremely scarce and valuable resource... that agriculture is an important part of the state's economy, environment, and quality of life, and that local food production will become increasingly important to the people of the State...*

Subsequent to the passage of this Act, the voters in the State have approved bond issues for the purchase of farm development rights (see following section). Yet much farmland has been lost to commercial and residential development or abandoned. Only 24 percent of the farmland in the State in 1945 exists today -- a decrease from 300,000 acres to 73,000 acres (USDA, 1988). In South Kingstown, over half of the farmland has been lost. In 1937, 26 percent of the Town was in pastures and haylands (or 9,767 acres), and in 1988, only 13 percent of the land was in pastures and haylands (or 5,051 acres) (USDA, 1979 and RIGIS, 1988). Such uses as housing, commercial buildings, and roadways threaten the agricultural lands with irreversible destruction. Land which has been protected for agricultural preservation is shown on Map 5.4.

There are many reasons to protect our farmland areas:

- Farmlands contribute to our open space and, therefore, help to maintain the rural character of the Town which makes it attractive as both a place to live and to visit.
- Farmlands contribute to the economic activity of the Town. It has been noted that Rhode Island farmers contribute substantial economic activity for the size of the State (Smith, 1987). Additionally, the Town's tourism industry is strengthened by its rural character.
- Farmlands provide a tax base for the Town, without the attendant services expenditures involved with residential development.
- Farmland preservation efforts can be incorporated with affordable housing initiatives. In 1990, the RI General Assembly established the RI Housing and Conservation Trust Fund. When this program receives funding, it may be possible to combine affordable housing with the purchase of

## Natural Resources & Open Space Inventory

conservation areas or development rights to farms. The approach has been successful in other states.

### *Areas of Critical Concern*

These are areas which represent such important natural resources as habitats for rare and endangered species, groundwater reservoirs and recharge areas to drinking water supplies, barrier beaches, representative wetland classes which are in danger of destruction, wetlands with important wildlife, educational, and pollution mitigation value, and threatened agricultural lands.

Through RIGIS mapping efforts, many of these areas have been identified. There are approximately 4,837 acres in Town in which Natural Heritage boundaries for rare and endangered species overlap with groundwater reservoirs and recharge areas. Approximately 11,436 acres of these lands are wetlands. Another area of concern is the Salt Pond and Narrow River Special Management areas. There are over 2,773 acres of land designated as Natural Heritage areas for rare and endangered species (3,600 acres of land and water) which fall within these boundaries.

### *Flood Zones*

Flood zones are defined herein as those areas where there is a 1% chance of a flood occurrence in a given year. These areas subject to flooding are geographically dispersed throughout South Kingstown with the largest areas associated with coastal, riverine and estuarine features. Both 'A' flood zones and 'V' flood zones are present in South Kingstown. These particular flood zones are designated by the Federal Emergency Management Agency and are identified on the applicable Flood Insurance Rate Maps distributed by that agency. Flood elevations where related wave and storm surge action occurs are designated as 'V' (velocity) zones and impact those lands contiguous to the shoreline along the South Shore coastal region. These 'V zone' areas are predominantly located from the shoreline inland to the furthest extent of the salt ponds.

Activities in flood zones within South Kingstown are regulated under both the Zoning Ordinance and the Subdivision and Land Development Regulations. Article 12 of the Zoning Ordinance establishes a High Flood Danger District (HFD) that incorporates the areas between the ocean and the coastal ponds. Construction of new residential structures within the HFD is allowed only by -special use permit.

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
<p><b>Flood Prone Drainage Systems/Streets, and Infrastructure</b></p>	<ul style="list-style-type: none"> <li>• <b>Card’s Pond Rd.</b> beginning at Moonstone Beach Rd., thence easterly for approximately 4500 feet.</li> <li>• <b>Beach Dr.</b> ** from Maple Dr. south to terminus</li> <li>• <b>Charlestown Beach Road</b></li> <li>• <b>Green Hill Ocean Drive</b></li> <li>• <b>Kingstown Road</b> at Chipuxet</li> <li>• <b>Matunuck Beach Rd.</b> ** from Card’s Pond south to Ocean Ave.</li> <li>• <b>Middlebridge Rd.</b> contiguous properties along eastern side of road are within 100-year floodplain</li> <li>• <b>Ministerial Rd.</b> three segments along roadway within Zone ‘A’</li> <li>• <b>Moonstone Beach Rd.</b> from southerly end of Matunuck School House Rd. to terminus</li> <li>• <b>Moorsefield Rd.</b> various segments between Broad Rock Rd. and Rt. 1</li> <li>• <b>Prospect Road at Potters Pond culvert</b></li> <li>• <b>Quagnut Rd.</b></li> <li>• <b>Saugatucket Road- Saugatucket River Culvert</b></li> <li>• <b>Succotash Rd.</b> ** from Stedman Rd. southerly to terminus</li> <li>• <b>Succotash and Victoria – Localized flooding</b></li> <li>• <b>Winchester Dr.</b> from Quagnut Dr. southerly to terminus</li> <li>• <b>Worden’s Pond Rd.</b> ¾ mile section proximal to Worden Pond</li> <li>• <b>Private Roads</b></li> </ul> <p>**roadways designated by RIEMA and Town of South Kingstown as hurricane evacuation routes</p>	<p>Flooding due to ground saturation, and coastal flooding. Storm surge and SLR</p>	<ol style="list-style-type: none"> <li>1. Phase 2 of hard armor shoreline along Matunuck Beach Road.</li> <li>2. Develop a property acquisition plan.</li> <li>3. Look at Army Corps Assessment (Pawcatuck River Coastal Storm Risk Management Study) for floodproofing and elevation opportunities.</li> <li>4. Investigate options for funding future repairs and/or relocation of damaged/vulnerable infrastructure.</li> <li>5. Incorporate higher flood design standard into stormwater infrastructure standards within the Subdivision and Land Development Regulations where appropriate.</li> <li>6. Relocation of coastal Charlestown Beach Road and Matunuck Beach Road.</li> </ol>
<p><b>Bridges</b></p>	<p>Middlebridge Road Bridgetown Road Succotash Road Silver Lake Avenue Columbia Street Spring Street Dugway Bridge</p>	<p>High wind Emergency Water Supply Line Evacuation Routes</p> <p>Storm surge and SLR</p>	<ol style="list-style-type: none"> <li>7. Request that RIDOT incorporate resiliency into bridge projects, especially those included in the STIP</li> <li>8. Reduce Spring/Columbia flooding.</li> </ol>

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
<b>Wastewater</b>	Middlebridge pump station Silver Lake pump stations Onsite Wastewater Treatment Systems (OWTS)	Loss of power from severe storms	<p><b>9.</b> Expand sewer area.</p> <p><b>10.</b> Incorporate vulnerability of OWTS into sewer feasibility study criteria.</p> <p><b>11.</b> Elevate and /or protect the pre-cast concrete pump station at Middlebridge from flooding.</p> <p><b>12.</b> Require new pump stations to be elevated above BFE, floodproofed, or located outside of vulnerable area.</p>
<b>Water Supply Systems</b>	<p><u>South Shore/Middlebridge Water:</u> Ocean Ridge, Perryville, Green Hill, Matunuck, East Matunuck, Snug Harbor, and Middlebridge Middlebridge Road @ Narrow River (elevation restraints) Potter Pond Bridge in Snug Harbor and East Matunuck Water main between East Matunuck State Beach and Ocean Avenue is 4’ below existing barrier beach</p> <p><u>Kingston Water District:</u> Kingston and portions of West Kingston</p> <p><u>SUEZ Rhode Island:</u> Peace Dale and center of Wakefield</p> <p><u>URI Water District</u> Water main along Matunuck Beach Road is connected w Suez, Kingston</p>	<p>Drought</p> <p>Hazardous material contamination</p> <p>Loss of power from other hazards</p> <p>Extreme temperatures</p>	<p><b>13.</b> Maintain and protect public water distribution system.</p>
<b>Electric Utilities</b>	National Grid substations (3) URI substation owned by State Solar power	High winds, hurricane	<b>37.</b> Develop Community Forest Asset Management Plan.
<b>Trash Services</b>	Rose Hill Transfer Station Rose Hill	Power outages due to fallen trees and tree limbs.	<b>14.</b> Purchase and install a generator for Rose Hill Transfer Station.
<b>Communication Towers</b>	<p>Communication Towers</p> <ul style="list-style-type: none"> <li>• 430 Chestnut Hill (Teft Hill)</li> <li>• 1790 Kingstown Road</li> <li>• Matunuck Road water tank</li> <li>• Victoria Lane water tank</li> <li>• Liberty Lane Tower</li> </ul>	<p>Wind</p> <p>Lightning</p>	<p><b>15.</b> Migrate to microwave links from copper wire lines to reduce holes in telephone communication network and make it more redundant.</p> <p><b>16.</b> Migrate to a multi-site simulcast system.</p>

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
	<ul style="list-style-type: none"> <li>509 Commodore O.H. Perry Highway (Route 1), public services building</li> <li>Flagg Road</li> </ul> AT&T Tower Transcontinental cable to Portugal		
<b>Dams</b>	Asa Pond (high hazard- Town) Glen Rock Reservoir (significant hazard- Private) Hefler Farm Pond (high hazard- Private) Indian Run Reservoir (significant hazard-Town) Peace Dale Pond (high hazard-Private) Rocky Brook Reservoir (significant hazard- Town) Wakefield Pond (high hazard- Town) Reservoir +17 Low Hazard Dams	Severe storms- flooding upstream and downstream	<b>17.</b> Complete Glen Rock Dam EAP.  <b>18.</b> Map inundation areas for low hazard dams and restrict development in inundation areas.
<b>Marinas/Docks</b>	13 Marinas 2 yacht clubs 421 private docks 151 private moorings 189 public moorings (leased by Town) Harbor of Refuge- boats coming inshore. Salt Pond Road Marinas and businesses Snug Harbor Pond Street E. Matunuck Marina Park Ramp	Storm surge, coastal flooding and erosion	<b>19.</b> Identify alternate take out locations (Marina Park parking lot storage) by boat types. <b>20.</b> Rehabilitate Marina Park boat ramp. <b>21.</b> Update Harbor Management Plan.
<b>Critical Municipal Hazard Response Facilities</b>	South County Hospital Town Hall, 180 High Street South Kingstown High School (Red Cross Shelter) Broad Rock Middle School (Red Cross Shelter) Curtis Corner Middle School (Red Cross Shelter) South Kingstown Senior Center (Red Cross Shelter eligible) University of Rhode Island (URI) Matunuck Elementary for MEDPods Police Departments <ul style="list-style-type: none"> <li>URI Public Safety, 85 Briar Lane</li> <li>South Kingstown Police Department, 1790 Kingstown Rd.</li> </ul>	All hazards.	<b>22.</b> Improve communication with URI for sheltering needs/capabilities. <b>23.</b> Develop a Long-Term Recovery Plan <b>24.</b> Develop a CERT team <b>25.</b> Conduct a fire response assessment. <b>26.</b> Create a list of vendors for dismountable solar panels. <b>27.</b> Bring Union Fire District station on Matunuck School House Road up to code on

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
	<ul style="list-style-type: none"> <li>• Washington County Sheriff’s Office, 4800 Tower Hill Road</li> <li>• EMS North and South Station</li> </ul> <p>Fire Stations</p> <ul style="list-style-type: none"> <li>• West Kingston Fire Department, 390 Fairgrounds Rd.</li> <li>• Kingston Fire District, 35 Bills Rd.</li> <li>• Tower Hill Fire Department, 4124 Tower Hill Road- building renovations soon (check timing)</li> <li>• Peace Dale Fire Department, 460 High Street</li> <li>• South Kingstown Forest Fire Department, 36 School Street</li> <li>• Wakefield Fire Department, 197 Robinson Street</li> <li>• Tuckertown Fire Department, 1116 Ministerial Road</li> <li>• Snug Harbor Volunteer Fire Department, 17 Bliss Road</li> <li>• Matunuck Volunteer Fire Department, 49 Matunuck School House Road- Union Fire not up to wind loads- build new</li> </ul> <p>DPW garage at Asa Pond Transfer Station on Rose Hill Rd. Funeral Home privately owned, Hospital</p>		<p>wind load requirements.</p> <p><b>28.</b> Install radio tower at Tower Hill Fire Station.</p>
<p><b>Populations</b></p>	<p>All residents</p> <p>Tourists Evacuees Students 2<sup>nd</sup> Home Owners Older communities Wheelchair ramps Low-Income residents Residents in SFHA</p> <p>South of Route 1 Middlebridge Area Pond Street Usquepaugh- remote and aged</p>	<p>All hazards</p>	<p><b>29.</b> Build participation in Special Needs Registry.</p> <p><b>30.</b> Enroll and participate in the National Flood Insurance Program Community Rating System.</p> <p><b>31.</b> Distribute public information and outreach for builders, homeowners, realtors, rental agencies, and hotels.</p> <p><b>32.</b> Crosstrain Town employees and volunteers to run MEDPODS.</p> <p><b>33.</b> Prepare for managing different needs populations during and immediately after an event.</p> <p><b>34.</b> Increase and promote resiliency in new</p>

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
	<p>Peace Dale Wakefield Chupuxet River areas Wardens Pond Road Saugatucket River areas</p> <p><u>Group Homes</u> -MHRH -Welcome House -Stonehenge -South Road -Liberty Lane -Moonstone -Peaked Rock Rd. -Route 108</p> <p><u>Nursing Homes</u> -Scallop Shell -SK Nursing and Rehab -South Bay Manor</p> <p><u>Assisted Living</u> -Brightview AL and NH</p> <p><u>Public/Subsidized Housing</u> -LaCassa -Champagne Heights -Fournier Estates -Meadowbrook -Garden Village -Town wide Section 8</p> <p><u>Shelters</u> South Kingstown High School (Red Cross Shelter) Broad Rock Middle School (Red Cross Shelter) Senior Center as a backup shelter</p>		<p>and existing developments</p>

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
	<p>Library and Guild open only during regular hours</p> <p><u>Schools</u>                      URI                      Hazard School                      South Kingstown HS                      Broad Rock MS                      Curtis Corner MS</p> <p>West Kingston Elementary                      Wakefield Elementary                      Matunuck Elementary                      Peace Dale Elementary</p> <p>Compass School                      Kingston Hill Academy                      Prout School                      Monsignor Clark School                      Bradley School                      Immaculate Conception Academy</p> <p><u>Campgrounds</u>                      Wardens Pond                      Camp Fuller                      Camp Hoffman                      Jorie                      Aquapog                      Kingston’s Camp (day)                      Tent city behind Old Mountain Field</p>		
<b>Buildings</b>	Town-wide	All hazards	<b>2.</b> Develop a property acquisition plan.
<b>Businesses</b>	Rocky Brook/Route 108 Saugatucket River /Main Street Salt Pond Road Matunuck Beach Road Succotash Road Commercial Area	Severe Storms Blizzards Wind	<b>2.</b> Develop a property acquisition plan.  <b>35.</b> Consider lease language for Salt Pond businesses.  <b>31.</b> Distribute public information and outreach

South Kingstown Critical Infrastructure/Community Assets

At Risk	Location	Hazard/Problem	Mitigation Actions
	East of Gooseberry Road on Point Judith Pond South County Commons Mill buildings- Peace Dale Technical Industries- hazmat on Saugatuck River Kingston Emporium South County Ortho RiverBend Spa Mosaic (429 Main St) Peace Dale Office Building Whalers Liberty Rental Peace Dale rotary businesses Marina businesses		for builders, homeowners, realtors, rental agencies, and hotels.
<b>Schools</b>	(See above Populations) South Kingstown High School (Red Cross Shelter) Broad Rock Middle School (Red Cross Shelter) University of Rhode Island	Severe Storms Blizzards Wind Extreme Heat	
<b>Recreation Facilities</b>	4 public boat launching facilities Private facilities (See Town list of recreational facilities in Appendix D)	Erosion Severe storms	<b>36.</b> Improve recreation field safety during bad weather.
<b>Natural Resources</b>	Various. > Beaches > Salt Ponds > Surface water body systems and watersheds > Groundwater resources > Freshwater and shoreline ecosystems and habitats > Wetlands > Forests > Farmland		<b>37.</b> Develop Community Forest Asset Management Plan. <b>38.</b> Develop a Town Open Space Management Plan.
<b>Historic Resources</b>	Potter Pond Archeological District (SFHA) Brownings Beach Historic District (SFHA) Peace Dale Historic District (SFHA) Wakefield Historic District (SFHA)	Wind, Severe Storms	<b>30.</b> Distribute public information and outreach to builders and homeowners.

**South Kingstown Critical Infrastructure/Community Assets**

At Risk	Location	Hazard/Problem	Mitigation Actions
	Henry Marchand Farm (SFHA) Dewey Cottage Kingston Village- wind driven fire Municipal Buildings Neighborhood Guild Mills - Peace Dale and Palisades Libraries Tappan Site- Usquepaugh Road Bouchard Site- Usquepaugh Road Kenyon's Department Store		

## Cultural & Historic Resources Inventory

### Introduction

Cultural resources help define the identity of a town by providing continuity of time and place. The cumulative effects of circumstances unique to each place cultivate, over time, a locale-specific character. This character is embodied in the historic buildings, structures, and sites, as well as the prehistoric sites that comprise the town.

Since the passage of the National Historic Preservation Act (NHPA) in 1966, awareness of local cultural resources has grown and tremendous strides have been made toward preserving the buildings, structures, and sites that reflect the unique history and individual character of a town. The Town of South Kingstown, with its rich and varied history, has long recognized the importance of preserving the cultural features that contribute to its singular identity. This cultural resources inventory presents a baseline of information which South Kingstown will use to continue to protect the physical remains of its heritage as the Town moves into the future.

### Cultural Resources Inventory

The long history of South Kingstown is reflected in the assortment of historic buildings and structures, as well as historic and prehistoric archaeological sites, present throughout town. These existing features embody the diverse aspects of South Kingstown's past and create South Kingstown's unique personality. A preliminary survey published by the Rhode Island Historical Preservation and Heritage Commission (RIHPHC) in 1984 identified 337 historic buildings and structures in South Kingstown. Concentrations of resources were identified in the eastern portion of town, specifically in the villages of Wakefield, Peace Dale, and Kingston. These buildings reflect the architectural styles of the 17th century through the 20th century, as well as the various lifestyles and occupations of South Kingstown residents over the past 300 years.

The information within the RIHPHC 1984 survey and the 1992 Comprehensive Plan has been updated and streamlined within the cultural resources inventory below.

#### *Archaeological Resources*

The abundance of resources in South Kingstown has encouraged habitation of the area for thousands of years. The history of the various resident groups is contained in the archaeological record as well as the built environment. Prehistoric and historic archaeological sites contain valuable information about the land use and social history of South Kingstown.

- a) Prehistoric Sites - The combination of inland and coastal resources and a mild climate was conducive to prehistoric occupation. Evidence of prehistoric camps and villages is found throughout town, especially in the area of the Salt Ponds along Block Island Sound and Narragansett Bay. Ceramic fragments dating as far back as 3100 years were recovered from the Potter Pond Archaeological District located along the southern shore of South Kingstown. The district contains a variety of sites including household settlements and resource processing and disposal areas.
- b) Historic Sites - The locations of old mills, farmsteads, and residences comprise the majority of historic archaeological sites. All of these are important aids in understanding the settlement patterns and lifestyles of earlier residents.
- c) Underwater Sites - Many shipwrecks are known to have occurred off the coast of South Kingstown. The remains of these boats remain largely intact and undisturbed, capturing a moment of time inside. Among the wrecks is that of the John Paul, which went down off Green

## Cultural & Historic Resources Inventory

Hill on February 10, 1893.

### *Existing Historic Sites and Structures*

The type of historic buildings, structures and sites found in South Kingstown range from vernacular cottages and agricultural buildings to high-style, landed, estates. They represent architectural styles, cultural values, and modes of living from the late 17th century through the present. The development of South Kingstown is legible in the distribution of buildings, residential, commercial, and industrial, across the landscape.

In each pocket of settlement, the styles and type of buildings convey the history of that particular community within the larger town. These buildings, in addition to the buildings and features found across landscape, create a sense of place and contribute a dimension to the quality of life in South Kingstown.

- a.) Villages - The Town of South Kingstown contains many smaller, historically unique villages and hamlets. Each has its own traditional character reflecting the resources available at that location. The majority of the villages were founded around commercial or industrial ventures. Dwellings for workers followed, as did churches, schools, and commercial establishments to support the resident population.

Centers of Government - Kingston, originally known as Little Rest, was organized in the 1770's as the county seat of Washington County. The County Courthouse was among the first Town buildings to be constructed. The Federal style building was significantly remodeled in 1876 with the addition of a mansard roof and central pavilion when it was converted into the town library. Other government buildings include two granite block structures, a jail, constructed in 1792 and a records office, the first fireproof building in Rhode Island, built in 1857, and the current County Courthouse, constructed in the Romanesque Revival style circa 1900. This is one of the only nonindustrial villages in South Kingstown. Instead, artisans and other professionals settled in Little Rest. The establishment of a land grant college (later the University of Rhode Island) in 1889 solidified Kingston's position as the intellectual center of the community. Many of the extant early Federal and Greek Revival buildings, including a bank, several schools and taverns, are characteristic of Kingston in addition to the late 19th century and early 20th century buildings built following the formation of the college.

Mill Villages - Several villages and hamlets in South Kingstown (Peace Dale, Rocky Brook, Glen Rock, Usquepaug, Mooresfield, and Biscuit City) were settled around mills.

The largest and most formal of these is Peace Dale, which developed around the mills of Rowland Hazard, the first built in 1847. In addition to his mill complexes, Hazard designed the Peace Dale Congregational Church, the Town Hall, and several bridges. Residences of the mill owners and workers were built along with such requisite support facilities as schools, a post office, and a few commercial establishments.

The other hamlets evolved as a collection of residences and farmsteads around a mill or, what is today often, the former site of a mill. These communities also included schools and churches to serve the population, as well as a few commercial establishments. In the case of Biscuit City, the entire hamlet is now an archaeological site composed of mill ruins and house foundations.

Transportation Centers - The villages of West Kingston and Perryville grew around transportation facilities. West Kingston was founded in 1837 when the New York, Providence and Boston Railroad built a station there. Perryville originated as a cluster of farms around a stage coach stop in the early 18th century. Several houses and a store or church developed around each node. Today, Perryville is characterized by 18th century Georgian and Federal style houses, while the houses of West Kingston are primarily later, nineteenth century styles featuring bracketed eaves and

## Cultural & Historic Resources Inventory

mansard roofs.

**Commercial Centers** - Two South Kingstown villages served primarily as commercial districts: Wakefield and Fisk Flats. Fisk Flats, a small hamlet between Peace Dale and Rocky Brook, originally served as the commercial center of Peace Dale. Wakefield, founded around one of South Kingstown's many mills, grew into the main commercial center for the town. Both locations feature a variety of nineteenth and early twentieth century commercial blocks, in addition to residences and churches. Among these are a nineteenth century flat iron building and two early twentieth century diners.

**Summer Colonies** - Along the shores of Narragansett Bay and Block Island Sound, the communities of Green Hill, Matunuck Hills, and Matunuck Beach evolved to house the influx of summer residents to the area. The houses, built in a variety of late 19th century styles, range from group boarding houses to small, vernacular cottages to high style, shingled estates designed by the leading, turn-of-the-century architects, including Stanford White of the firm McKim, Mead and White.

- b.) **Farmsteads and Residences** - Scattered across the countryside are residential and agricultural structures dating from the late seventeenth century through the present. Perhaps the earliest extant house in South Kingstown, the Samuel Perry House, was reputedly constructed in 1696. Many of the earliest farms include residences within a complex of agricultural out-buildings and surrounding farm land. Remnants of farms, houses and an occasional outbuilding are visible, although commonly without the encompassing acreage as a result of ongoing development. However, a sense of the Town's settlement patterns can be gleaned by looking at the age and distribution of the farmhouses. In addition to vernacular 18th and 19th century houses which feature such stylistic details as fanlights above the doors, pedimented gables, and bracketed eaves, are the large, architect-designed houses from the estates of South Kingstown's leading families.
- c.) **Educational Facilities** - Schools in South Kingstown run the gamut in size and sophistication from 19th century, one-room schoolhouses to the Kingston Seminary (a coeducational academy opened in 1829), to the University of Rhode Island campus, established in 1889. The majority of historic schools continue to be used as educational facilities, while the smaller schools serve the elementary students in the various neighborhoods.
- d.) **Religious Facilities** - The numerous churches in South Kingstown attest to the cultural and ethnic diversity of South Kingstown's population. The buildings range stylistically from one-story, vernacular structures to classic, early-19th-century New England Meeting Houses to structures incorporating elements of the later-19th century Gothic and Shingle styles. Almost all still are used actively.
- e.) **Places of Assembly** -Several structures in South Kingstown were built specifically as meeting places. These include three granges (one constructed in the late nineteenth century and two built during the early twentieth century) and a 1903 Masonic hall.
- f.) **Recreational Facilities** - The second oldest youth camp in the world, Camp Fuller, is one of three, early twentieth century summer camps in South Kingstown. Camp Fuller is affiliated with the Y. M. C.A. while the other two, Camp Hoffman and Camp Aquapaug are affiliated with the Girl Scouts and Boy Scouts respectively. Structures dating from the 1930's are still in use at all three facilities. An important aspect to each camp is the landscape that has evolved over their tenure of recreational activity.
- g.) **Engineering Structures** -Historic bridges cross South Kingstown's many streams. These include

## Cultural & Historic Resources Inventory

arched stone bridges from the late nineteenth century; single arched, bridges of reinforced concrete built in the 1920's and 1930's; and, wooden decked, steel truss bridges. Other engineering structures in town include the mine shaft from the Cajoot Lead Mine, a source of graphite from prehistoric times to the mid-19th century which is still visible, although it has been filled in and an observation tower at Hannah Robinson Rock, built in 1936-1937, which served as a signal tower for the U.S. Army Signal Corps during World War II.

- h.) Cemeteries and Stone Walls -Stone walls and historic cemeteries are common features of the South Kingstown landscape. Numerous historic cemeteries in South Kingstown have been identified by the Rhode Island Veterans' Cemetery Office. These range from small family plots (the Rose Family Cemetery which contains 4550 stones within a walled enclosure and dates from the late 19th century to the early 20th century) to larger burial grounds, which may be associated with nearby churches (the Usquepaug Cemetery across from the Queen's River Baptist Church).
- i.) Monuments - A variety of commemorative monuments can be found around South Kingstown. These markers, generally of stone or concrete, commemorate various people and events in South Kingstown's history. These range from a 1906 monument commemorating the site of the 1675 Great Swamp Fight to the "Carter Killed Jackson" Monument, a granite marker inscribed with an account of the murder of William Jackson by Thomas Carter in 1751. More formal monuments are found in Peace Dale. One honors deceased members of Narragansett Engine Company #1, established in Peace Dale in 1867. Another, a dressed granite sculpture entitled The Weaver was created by Daniel Chester French in 1920 in memory of Rowland Hazard and his sons.

### Properties Listed on the National Register of Historic Places

The National Register of Historic Places was established in 1966 by the National Historic Preservation Act to identify publicly and privately owned cultural resources and to encourage maintenance and planning for compatible use of the designated properties. Properties nominated to the National Register must meet one of four criteria:

- Criteria A: Association with events that have made a significant contribution to the broad patterns of our history;
- Criteria B: Association with the lives of persons significant in our past;
- Criteria C: Embodiment of the distinctive characteristics of a type, period, or method of construction or representative of the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components may lack individual distinction; or
- Criteria D: Yielding, or likely to yield, information important in prehistory or history.

Properties listed in the National Register must meet at least one of the four above criteria and retain integrity of location, design, setting, materials, workmanship, feeling and association. Before any federally-funded, licensed, or regulated action can occur at or near a property listed on the National Register, the action must be reviewed by the State Historic Preservation Office (SHPO) in order to minimize and/or to mitigate any impact it will have on the historic site.

### Districts:

- Browning's Beach Historic District, Card's Pond Road (9/5/97)
- Kingston Village Historic District, both sides of Kingstown Road and Mooresfield Road between Little Rest Road on the west and Kingstown Road on the east; also, sections of adjacent South and North Roads and Potter Lane (5/1/74)

## Cultural & Historic Resources Inventory

- Peace Dale Historic District, Amos, Branch, Brown, Church, Columbia, Green, Kimball, Larkin, Railroad, School and Spring Streets and Broad Rock, Indian Run, Kersey, Kingstown, and North Roads (10/30/87)
- Potter Pond Archaeological District (12/10/87)
- Usquepaug Road Historic District, Usquepaug Road (10/30/87)
- Wakefield Historic District, roughly bounded by Main and High Street, and Wright Avenue (5/30/96)

### Individual Properties

- Theatre-by-the-Sea, Card Ponds Road (7/10/80)
- Hale House, 2625A Commander Oliver Hazard Perry Highway
- Willow Dell, 2700 Commander Oliver Hazard Perry Highway (11/21/96)
- R.R. Gardner House, 700 Curtis Corner Road (11/21/96)
- Fernwood Cemetery, (RI-702), Kingstown Road (9/12/85)
- Kingstown Railroad Station, Kingstown Road (4/26/78)
- Lambda Chi Site, (RI-704), Kingstown Road (11/1/84)
- Shadow Farm, Kingstown Road (2/7/86)
- Isaac Peace Rodman House, 1789 Kingstown Road (4/23/90)
- Washington County Courthouse, 3481 Kingstown Road (11/5/92)
- William Davis Miller House, 130 Main Street (3/21/85)
- Kenyon's Department Store, 344 Main Street (11/5/92)
- Admiral Dewey Inn/Dewey Cottage, 668 Matunuck Beach Road (5/7/92)
- Jireh Bull Blockhouse Historic Site, (RI-926), Middlebridge Road (11/2/83)
- Ministerial Road Archaeological Site, (RI-781), Ministerial Road (11/15/84)
- Perry/Carpenter Gristmill, Moonstone Beach Road (3/9/90)
- Tootell House, 1747 Mooresfield Road (5/26/00)
- Henry Eldred Farm, 368 Old North Road (11/18/91)
- Kingston Hill Farm, 549 Old North Road (5/7/93)
- Commodore Perry Farm, 184 Post Road (8/26/82)
- Red House, 2403 Post Road (11/21/96)
- Henry Marchant Farm, South County Trail (8/16/79)
- Bouchard Site, (RI-1025), Usquepaug Road (11/1/84)
- Fayerweather Blacksmith Site, (RI-701), Usquepaug Road (11/29/84)
- Tappan Site, (RI-795), Usquepaug Road (11/1/84)
- Cottrell House, 500 Waites Corner Road (11/21/96)

The locations of National Register historic properties and districts in South Kingstown can be found on Map 28: Cultural & Historic Resources within the Comprehensive Plan. The locations of archeological sites are not shown on the map to protect historic resources.

### Properties Which May Be Eligible for Listing in the National Register of Historic Places

- Matunuck Point Summer Colony, Peninsula Road

## Cultural & Historic Resources Inventory

- University of Rhode Island Quadrangle
- Hazard Holland House, Antique Road, off Matunuck Beach Road
- Dockray House, 2 Dockray Road
- Dry Stone Walls, Edgewater Road
- Kenyon Corn Meal Company, Glen Rock Road
- Wakefield Mill, 10 High Street
- The Wells Place, Littlefield Lane
- Watson House, 141 Main Street, Wakefield
- Green Farm/Windy Meadows, Matunuck Schoolhouse Road
- Samuel Perry House, 844 Matunuck Schoolhouse Road
- Browning Homestead Farm, off Matunuck Schoolhouse Road
- Pettaquamscutt Rock, off Middlebridge Road
- Tucker-Albro House, 155 Ministerial Road
- Palmer Gardner House, Mooresfield Road
- Henry Palmer House, 557 Old Succotash Road
- John Potter House/"Great House," Post Road, south of Succotash Road
- Jeremiah P. Robinson House, 145 Post Road
- William Congdon House/Brookfield, 159 Post Road
- The Watson Tract, Post Road
- House, 166 Post Road
- Rocky Meadows Farm, 205 Post Road
- George E. Rose, Jr. House, Rose Hill Road
- Watson House, Saugatucket Road
- Solomon Carpenter House, 144 South Road
- Mileage Marker, South Road
- Town Pound, South Road
- Great Swamp Fight Site, off South County Trail
- Kymbolde, Torry Road
- Hannah Robinson's Rock, Tower Hill Road
- Shadblow Farm, Tower Hill Road
- Dr. Nathan Knight Farmhouse, Usquepaug Road
- Larchwood Inn, Main Street

### [Historic Designed Landscapes Which May Be Eligible for Listing in the National Register of Historic Places](#)

- "The Glebe," Walmsley Lane off Bridgetown Road
- Henry Marchant House, South County Trail
- Shadow Farm
- Hazard Farm, Columbia Street

## Cultural & Historic Resources Inventory

- Hazard Homestead, East Street
- Potter Residence, North Road
- Shadblow Farm, Tower Hill Road
- "Little Rest," 1276 Kingston Road
- Larchwood Inn, 176 Main Street
- Isaac Peace Rodman House, 961 Kingstown Road
- George E. Rose Jr. House, Rose Hill Road
- University of Rhode Island
- Dr. R.R. Robinson Estate/Edgewood Farm/J.P. Robinson House, 99 Main Street and 145 Post Road
- Watson Tract, Post Road
- Welsh House, Torry Road
- "Kymbolde," Torry Road
- Hazard Memorial, Kingstown Road
- Saugatucket Park/Wakefield Grammar School, Main and High Streets
- "Shephard's Run," Tower Hill Road
- Robinson Spring and Spring House, off Tuckertown Road across from Stewart Nursery
- ENDALAR, Post Road, built by Stanford White (c. 1880's)
- Old Mill (stone ruins) about 100 yards beyond the spring
- Oliver Watson Home
- John Richmond House (formerly store and livery stable)
- Boisclair House
- Waites Corner itself (site of old church)
- Baptist Church, Wakefield
- Church of Ascension, Wakefield

## Water Systems Executive Summaries

### Overview of Water Supply System Executive Summaries

Rhode Island General Law § 46-15.3-5.1, Public Drinking Water Supply System Protection, requires that the executive summaries from the water supply system management plans of all water suppliers in Town be incorporated into the Comprehensive Plan. As referenced in Goal 3 of the Services and Facilities Element (page 247) of this Comprehensive Plan, the following executive summaries have been provided in their full length hereto in order to meet this R.I.G.L. requirement.

South Kingstown is home to four (4) water supply systems providing public drinking water in the Town: Town of South Kingstown Public Services Department, University of Rhode Island-Kingston Campus, United Water Rhode Island, and Kingston Water District. Approximate distribution figures for each of the water supply system as of January 2014 are provided below.

- The Town of South Kingstown, under the Public Services Department, Water Division owns and operates two separate water systems:
  - The South Shore system provides water to 2,479 service accounts
  - Middlebridge system provides water to 284 service accounts
- The University of Rhode Island-Kingston Campus system provides water to approximately 104 buildings on campus.
- The Suez Water Rhode Island system provides water to 7,252 service accounts
- The Kingston Water District system provides water to 1,058 service accounts

#### *Contact Information*

Town of South Kingstown  
Public Services Department  
509 Commodore Perry Highway  
Wakefield, RI 02879

University of Rhode Island-Kingston Campus  
Facilities Services-Sherman Building  
523 Plains Road  
Kingston, RI 02881

Suez Rhode Island  
10 High Street, Suite K  
South Kingstown, RI 02879

Kingston Water District  
P.O. BOX 216  
West Kingston, RI 02892

**WATER SUPPLY SYSTEM MANAGEMENT PLAN  
FOR  
SOUTH KINGSTOWN PUBLIC SERVICES DEPARTMENT**

**EXECUTIVE SUMMARY**



PREPARED FOR:

**TOWN OF SOUTH KINGSTOWN,  
RHODE ISLAND**  
509 COMMODORE PERRY HIGHWAY  
WAKEFIELD, RHODE ISLAND 02879

PREPARED BY:

**COMPREHENSIVE ENVIRONMENTAL INC.**  
41 MAIN STREET  
BOLTON, MASSACHUSETTS 01740

**SUBMITTED: July 31, 2018**  
**REVISED: January 22, 2019**

**APPROVED: \_\_\_\_\_**

# Executive Summary

## **Introduction**

This Water Supply System Management Plan (WSSMP) Executive Summary for the Town of South Kingstown, Public Services Department, Water Division (SKWD) has been developed in compliance with the regulatory and guidance documents pertaining to water supply planning, of the State of Rhode Island. The *Rules and Procedures for Water Supply System Management Planning, dated October 2002*, were promulgated pursuant to the requirements and provisions of Rhode Island (RI) General Laws Title 46 Waters & Navigation Chapter 46-15.3 Public Drinking Water Supply System Protection.

This WSSMP maintains consistency with the goals and policies of the Comprehensive Plan of the Town of South Kingstown, July 1992, as amended May 2005 and 2014. Additional plans that have been incorporated into the update include the following:

- Water Resources Board (WRB) 2012 Strategic Plan
- State Guide Plan Element 721, Report 115, Rhode Island Water 2030
- Rhode Island State Land Use Policies and Plan – Land Use 2025

Common goals expressed in these plans such as water source protection and control of land development, have been reviewed as part of the development of this WSSMP and the goal of this WSSMP is to comply with the provisions of the Water Supply Planning Regulations referenced previously, by developing a comprehensive water-supply management plan for the SKWD water-supply system. The report is also intended to achieve effective and efficient conservation, development, utilization, and protection of the water-system's resources. These objectives should be achieved in ways that satisfy the present and future needs of the SKWD customer base.

This WSSMP contains a detailed description of the water system and includes the policies and procedures related to the general function, operation, and management of the water system. Significant improvements completed since the prior WSSMP update include the addition of a supplemental chlorination system at the Mautucket Road Tank for increased public health protection and construction of an additional transmission main pipe loop within the South Shore System for improved system resiliency.

## **Background**

The Town of South Kingstown owns and operates two public water systems (PWS): the South Shore System PWS #1615623 and the Middlebridge System PWS #1000015. The South Shore system serves the southern area of Town south of US Route 1 from the Charlestown Town line to East Matunuck. This area includes Matunuck, East Matunuck, Snug Harbor, Green Hill, Ocean Ridge and a small portion of Perryville. The Middlebridge system consists of one major transmission main that extends along Middlebridge Road, south from Radial Drive, over the Middlebridge Bridge, and terminates in Narragansett. Water system management and operations are the responsibility of the Town of South Kingstown, Public Services Department, Water Division.

## **General System Information**

The SKWD owns and operates two (2) separate water systems: the South Shore System and the Middlebridge System. Both water systems service primarily residential water customers.

The South Shore system is comprised of approximately 48 miles of water transmission and distribution mains, hydrants, meters, a booster pump station, two (2) elevated water storage tanks, system interconnection, wells, and appurtenances that serve 2,530 service accounts (e.g. residential, commercial, and governmental) as of spring 2018.

The Middlebridge system is comprised of approximately 3.6 miles of water transmission and distribution main, hydrants, meters, system interconnection, and appurtenances that serve 288 service accounts (e.g. residential) as of spring 2018.

## **Water Supply**

Currently, water supply to the South Shore System and Middlebridge System is from interconnections with SUEZ Water Rhode Island (SUEZ), formerly United Water Rhode Island, formerly Wakefield Water Company.

The SKWD owns and operates three (3) wells located in the southern area of Town. The wells are currently exercised and maintained by the Town but not pumped into the water system due to elevated levels of iron and its associated aesthetic concerns. The RI Department of Health (Health) continues to sample the wells to maintain their active status to provide a standby source of water supply for the South Shore distribution system.

## **Water Storage**

### South Shore

The South Shore water system has two zones each controlled by the water elevation within its respective water storage tank. The overflow elevation at each of the water storage tanks is Elevation 210 feet Mean Sea Level (MSL). Water is received from the East Matunuck interconnection with SUEZ, which in turn fills the Victoria Lane storage tank. A SCADA system controls an altitude valve in the interconnection meter pit such that it is deactivated when the tank reaches overflow elevation and it is activated when the water drops to a preset level in the tank.

### Middlebridge

The Middlebridge system has water storage as provided through SUEZ's hydraulic gradient and water storage facilities.

## ***Booster Pumping***

### South Shore

An in-line booster pump station is located on Card's Pond Road which boosts service to the south-central and southwestern regions of SKWD. The booster pump station works on radio telemetry with the Mautucket Road storage tank and boosts water from the system to replenish this tank. The hydraulic grade of the South Shore system is maintained by the water level in the water storage facilities (i.e. 210 feet MSL).

### Middlebridge

There is no booster station for the Middlebridge system, which relies on SUEZ's hydraulic gradient to maintain adequate water pressure.

## ***Water Distribution***

### South Shore

The transmission and distribution system water mains range in size from 6 to 14 inches, with installation dates from the 1960s to the present. New and replacement mains consist predominantly of cement-lined ductile iron (DI) pipe. The majority of the transmission and distribution system at present is comprised of asbestos-cement water mains.

### Middlebridge

The Middlebridge water system was constructed in the mid-1970s and comprised of asbestos-cement pipe.

## ***Water Meters***

The water supply and distribution system are 100% metered. The Middlebridge master meters are located at the two (2) wholesale interconnections to SUEZ (Middlebridge Road and Torry Road). The South Shore master meter is located near the intersection of Post Road and Kettle Pond Drive. There is also a meter pit at the Narragansett / South Kingstown Town line interconnection. These meter 100% of the water purchased via wholesale interconnections. The master meter located downstream of the South Shore wells meters 100% of the SKWD water production whenever the well field is in use. Finally, every service connection within the water distribution system is metered at the point of sale, thus providing 100% distribution system metering. The master meter for SUEZ for the South Shore area is located off of Route 1 near the intersection with Kettle Pond Drive.

## **Recent System Improvements**

The SKWD maintains an ongoing Capital Improvements Program (CIP) in order to provide its customers with a safe and reliable supply of potable water. The following list identifies the major system improvements that have taken place in the years since the prior WSSMP update.

- Installation of chlorination system at the Mautucket Road Water Storage Tank for improved public health protection,
- Installation of a flow control valve at the Cards Pond Booster Pump Station for improved public health protection,
- Construction of a major water transmission main pipe loop between Matunuck and East Matunuck along US Route 1 for improved system resiliency.

## **Water Demand Projection**

Anticipated future demands were estimated based on anticipated population growth, historic water use trends, ongoing water conservation efforts and future intended use for the service area. **Table 1** presents the estimated future water demands for the South Shore and Middlebridge Systems.

**Table 1. Estimated Future Water Demands**

Year	South Shore System			Middlebridge System		
	Annual (MG)	Average Day (MGD)	Maximum Day (MGD)	Annual (MG)	Average Day (MGD)	Maximum Day (MGD)
Current 2017	121.718	0.333	0.867	15.904	0.0436	0.113
5-Year	124.143	0.340	0.884	16.105	0.0441	0.115
20-Year	130.725	0.358	0.931	16.651	0.0456	0.119

MG = Million Gallons

MGD = Million Gallons per Day

## **Water Availability**

The Rhode Island Water Resources Board (RIWRB) developed a Strategic Plan (2012) regarding its responsibility to regulate the proper development, protection, conservation and use of the water resources of the State. The Plan includes state-wide initiatives for meeting water needs given the available resources. The SKWD acknowledges the goals and initiatives outlined in this plan. An overall objective of the SKWD to ensure the availability of an adequate supply of potable water to meet the existing and future needs of its customers.

Water supply from SUEZ to the South Shore and Middlebridge systems is from groundwater. SUEZ developed their own WSSMP and in that plan state that demands are considered to be sustainable by the local ground-water resources.

The SKWD also maintains backup supply wells within the South Shore system. Groundwater underlying these sources is part of a sub-basin of the South Coastal Drainage Basin system.

Currently the South Shore System and Middlebridge System receive supply from SUEZ. The wholesale water purchase agreement for the South Shore System dated September 7, 2005 states that up to a maximum flow of 1.3 MGD would be provided. This is comfortably above the anticipated future maximum day demand of 0.931 MGD. The agreement established in 1975 for water supply to the Middlebridge System states that up to a maximum of 0.3 MGD would be provided. This value is well above the projected maximum day demand of 0.119 MGD.

Should the Town decide to implement iron removal treatment for the Factory Pond Wells, the treated water would also have the capacity to provide for the maximum day demand of the South Shore System since the wells can provide 1.15 MGD.

### ***Demand Management and Water Conservation***

Demand management and water conservation is a primary goal of the SKWD. The State of Rhode Island Water Use and Efficiency Act includes targets for public water suppliers to improve water efficiency and demand management. These targets include (1) a residential average annual water use of 65 gallons per capita per day (GPCD), (2) efficient outdoor water use, (3) efficient indoor water use, (4) full accounting of non-billed water, (5) leakage of no more than 10% of the withdrawals and/or purchased water measured as an annual average, and (6) accurate metering and billing to account for all water supplied.

The SKWD meters 100% of supply and consumption by customers. Wholesale interconnection supply meters are owned by SUEZ and tested/ calibrated annually on an as needed basis. Customer water meters for the South Shore and Middlebridge were replaced in 2008 with meters capable of data logging and remote reporting. Representative samplings of customer meters are tested for accuracy as they are replaced or questions on usage arise.

The residential per capita demands of both the South Shore and Middlebridge Systems are approximately 50 GPCD, well below the State's goal of 65 GPCD. Water saving conservation retrofit kits are available to water customers.

The unaccounted for water for the two systems fluctuates above and below the State's goal of 10% allowable leakage. The SKWD continues to work toward lowering the unaccounted for water to meet this goal. Leak detection and repair are conducted on an ongoing basis.

The Town has implemented a rate structure to encourage water conservation. The Town's Water Division adopted a conservation "tier-type" rate structure in 2014 and now issues water bills on a quarterly basis.

### ***Water Quality Protection***

The SKWD collects charges associated with the water quality protection program and issues them to the Rhode Island Water Resources Board as required in accordance with the Public Drinking Water Protection Program (RIGL 46-15.3). This program distributes funds that are used for land acquisitions and to purchase development rights within the supply watershed areas to help protect water quality.

The Town has ongoing strategies for protection of the Factory Pond Wells. The Town owns and controls a sufficient land area around each well to help minimize the potential for water contamination. The Town has a Wellhead Protection Program which has identified a well protection area around their well fields. The Rhode Island Department of Health's Drinking Water Assessment Results report indicates that the Town's wells have a Low Susceptibility to Contamination based on land use features and existing water quality.

SUEZ also owns and controls a sufficient land area around each of their wells to help minimize the potential for water contamination. SUEZ has a Wellhead Protection Program which has identified a well protection area around their well fields. The Rhode Island Department of Health's Drinking Water Assessment Results report indicates that the SUEZ wells have a Low Susceptibility to Contamination based on land use features and existing water quality.

Water quality within the South Shore and Middlebridge systems has been in compliance with required standards with the exception of periodic total coliform detections within the westerly end of the South Shore system. In response to this, a chlorination system was installed at the Mautucket Tank to provide supplemental chlorination.

### ***Emergency Management***

An updated Emergency Response Plan (ERP) was prepared as part of the WSSMP. The ERP establishes the responsibilities and authority within the SKWD for responding to most probable emergencies and outlines specific tasks for carrying out functional and constructive solutions based on a review of the potential emergencies and risks. The procedures outlined are consistent with the goals of the State Emergency Water Supply System Management Plan. It is also intended that this document provide guidance to ensure that the primary aspects of recovery from an emergency are addressed in an organized manner to aid in an efficient response and in maintaining drinking water quality and quantity.

**Coordination**

The SKWD maintains close working relationships with SUEZ and the Town of Narragansett in regards to the interconnections and the potential need for additional emergency supply, specifically in times of drought or seasonal, summertime high demand periods. The SKWD also coordinates with the Town of South Kingstown Fire Department on water use and reporting. This WSSMP was developed in conjunction with the Town of South Kingstown Comprehensive Community Plan and is consistent with the aspects of that plan.

**Financial Management and Capital Planning**

The SKWD continues to focus its efforts on supplying safe and reliable drinking water to its customers. The SKWD has a pro-active capital improvement plan that is updated on an annual basis. The current capital improvement plan includes water storage tank cleaning and maintenance, water supply management planning and maintenance, leak detection, water main replacement and general equipment maintenance. The SKWD currently operates as an Enterprise Fund on annual revenues and does not have any existing debt. A significant future capital project would be implementation of a water filtration facility at the Factory Pond Wells and a project of this magnitude would require special bonds and/or funding through State programs.



**SUEZ RHODE ISLAND  
WATER-SUPPLY SYSTEM MANAGEMENT PLAN  
EXECUTIVE SUMMARY**

January 2017  
Revised February 21, 2018

Prepared For:

SUEZ Rhode Island  
17 Arnold Street  
Wakefield, Rhode Island

Prepared By:

WSP USA INC.  
*Formerly, Leggette, Brashears & Graham, Inc.*  
4 Research Drive, Suite 204  
Shelton, CT 06484

**SUEZ RHODE ISLAND  
WATER-SUPPLY SYSTEM MANAGEMENT PLAN  
EXECUTIVE SUMMARY**

**1.0 INTRODUCTION**

This Executive Summary for the SUEZ Rhode Island (SUEZ, fka United Water Rhode Island) Water Supply System Management Plan (Plan) has been developed in compliance with the regulatory and guidance documents pertaining to water supply planning, of the State of Rhode Island. The Rules and Procedures for Water Supply System Management Planning, dated October 2002, were promulgated pursuant to the requirements and provisions of Rhode Island (RI) General Laws Title 46 Waters & Navigation Chapter 46-15.3 Public Drinking Water Supply System Protection.

This Plan maintains consistency with the goals and policies of the Comprehensive Plan of the Town of South Kingstown, July 1992, as amended May 2005 and 2014, and the Comprehensive Plan of the Town of Narragansett – Baseline Report Draft 2B, dated February 25, 2016. Additional plans that have been incorporated into the update include the following:

- Water Resources Board (WRB) 2012 Strategic Plan
- State Guide Plan Element 721, Report 115, Rhode Island Water 2030
- Rhode Island State Land Use Policies and Plan – Land Use 2025
- United Water (SUEZ) Rhode Island Demand Management Strategy, prepared by Pare Corporation December 2012.

Common goals expressed in these plans such as water source protection and control of land development, have been reviewed as part of the development of this Plan and the goal of this Plan is to comply with the provisions of the Water Supply Planning Regulations referenced previously, by developing a comprehensive water-supply management plan for the SUEZ Rhode Island water-supply system. The report is also intended to achieve effective and efficient conservation, development, utilization, and protection of the water-system's resources. These objectives should be achieved in ways that satisfy the present and future needs of the SUEZ Rhode Island customer base.

The goals of the South Kingstown Comprehensive Plan and the Narragansett Comprehensive Plan are to maintain the high quality of residential life within the subject service area, while controlling the future rate of growth. These goals are recognized herein and their contents are referenced in the development of future water demand projections. Additionally, the region has opportunities for economic development through areas in and around the special planning districts of both communities, as well as within other industrial and commercial zoned portions of the water supply service area.

## **2.0 BACKGROUND**

SUEZ is a utility located in Washington County, Rhode Island. SUEZ owns and operates a public water-supply and distribution system in a non-exclusive territory, serving portions of the Towns of South Kingstown, Narragansett, and the Village of Point Judith. Neighboring water purveyors located in the area include the Town of South Kingstown Utilities Department, the Town of Narragansett Water Division, the Town of North Kingstown Water Department, the Kingston Fire District, and the University of Rhode Island Utility system. SUEZ was incorporated in 1887 by George Alexander, Benjamin C. Mudge, George T. Lamphear, and Benjamin R. Curtis, with the intent of furnishing water to the Town of South Kingstown and neighboring communities.

SUEZ is organized as a Corporation under the Laws of the State of Rhode Island. SUEZ is a 100% subsidiary of the SUEZ Resources, Paramus, NJ, which is a wholly own subsidiary of SUEZ, Paris, France. The CEO of SUEZ is Jean-Louis Chaussade.

## **3.0 GENERAL SYSTEM DESCRIPTION**

The SUEZ water system consists of the following components:

- Two well fields (seven well total);
- Treatment facilities (at each well field);
- Six pump stations (one at each well field and four in the distribution system (two of the distribution system pump stations are out of service));
- Five storage facilities;
- Transmission system; and
- Seven system interconnections.

The system relies on all components functioning in concert. The two well fields produce finished water by utilizing pumps and treatment facilities. The well fields have storage capacity in the form of clear wells. The finished water is then pumped through the pump stations into the transmission system. The transmission system functions to distribute water to customers and to provide or draw water from the storage facilities in the transmission system. The three storage tanks in the transmission system serve to even out periods of low and high demand. If the aggregate customer demand exceeds the total finished water produced from the well fields, the tanks will provide the additional finished water to meet demand.

### **3.1 Water-Supply Sources**

The singular source of raw water supply for SUEZ water system is groundwater. Two well fields accommodate 100% of the service area demand. An emergency source of water is from interconnections with adjacent water systems. After treatment at the well fields, water is supplied either directly into the distribution system for consumption, or serves to augment storage volumes within the storage facilities.

Overall, the operation and productive capabilities of the system to meet the needs of the water service community have been efficient and capable, with the ability to supply potable water of good to superior quality to the service population being readily maintained.

### **3.2 Water Treatment Facilities**

Lime is added to provide for the adjustment of pH values for corrosion control, which in effect, raises the pH from an initial value of approximately 5.8 to approximately 7.6. Sodium hypochlorite is also injected into the water at both locations to provide for disinfection in such a manner as to maintain a 0.5 mg/l free chlorine residual. In addition, zinc orthophosphate is also added to the water for corrosion control and raw water is passed through an aerator for the removal of carbon dioxide. Full emergency power is available through an emergency generator at each well field.

### **3.3 Storage Facilities**

The SUEZ water system includes five storage facilities. The clear wells at the well fields function as storage facilities and there are three remaining storage facilities located

throughout the service area. All storage facilities are constructed of steel, with the distribution facilities of standpipe configuration, with the exception of one tank, and the clear wells of reservoir types. The status of all three-distribution storage facilities are continuously transmitted via telemetry to the control system which responds to changes in storage levels. The controls are set up in the form of a matrix which allows selection of the water level in any of the three distribution storage tanks to operate the booster pumps at either or both of the well fields. This remote transmission allows a continuous charting and digital display of facility water levels at the control location or can also be monitored via computer phone modem to the SUEZ office for management over view as well as for the Chief Plant Operator to monitor from his home or vehicle.

### **3.4 Pumping Stations**

The SUEZ water-supply system includes six booster pumping stations, one at each well field and four in the within the service area. The booster stations provide the means by which water from the well fields can be supplied to the system. Operation of the pump stations is automatically controlled by the water level in any of the three distribution storage facilities.

### **3.5 Raw Water and Finished Water Transmission Facilities**

The system's water transmission mains convey potable water between the well pumping stations, booster pumping stations, the water-supply service area, and the system storage facilities. The system employs a well dispersed and generally strong grid layout in an effort to provide and maintain satisfactory reliability and redundancy. The entire distribution system is fully interconnected. This allows the system to operate mostly as a single pressure zone. These components of the treatment and transmission facilities are routinely monitored, repaired and/or upgraded to maintain performance reliability.

SUEZ customer service representatives are also trained to be attentive and alert to possible leaks whenever in the vicinity of customer components (i.e., meter, curb stop, hydrant, valve). In addition, storage facilities, production records, and distribution system pressure are continuously monitored on a daily basis in an effort to detect unusual or abrupt changes in performance.

### **3.6 Distribution Facilities Including Low and High Service**

The entire distribution system is fully interconnected, with the overflow elevations of the distribution system storage tanks being designed to assist with the control pressure in their zones.

### **3.7 Planned Extensions**

There are presently no major planned extensions of the water distribution system.

### **3.8 Interconnections**

SUEZ currently maintains a total of seven system interconnections with neighboring water utilities. Four of the interconnections are maintained with Narragansett and the remaining three with South Kingston.

### **3.9 Population Served and Projections**

SUEZ supplies a significant portion of the Towns of Narragansett and South Kingstown, which includes a various array of structures (i.e. residential, commercial, industrial, governmental), that are serviced by SUEZ.

All undeveloped areas within the water service area are eligible to be served as the demand requires, and depending upon the circumstances involved, SUEZ or the property developer may extend existing water main lines and associated appurtenances necessary for the adequate supply of water into those areas. Extension of water distribution lines outside of the present service area is contingent upon formal approval of SUEZ, and is subject to the hydraulic feasibility of the current system to accommodate any such extensions. In either case, the new mains would become the property of SUEZ following satisfactory installation, testing and acceptance.

There continues to be a portion of the service area which depends primarily on private well systems. The majority of these private wells are associated with single family residences; however, some wells provide water to commercial and industrial facilities within the service area. These private well systems and their service population would also be eligible to be served by the SUEZ system; again, contingent upon formal approval of SUEZ.

Table 1 presents the current and projected services populations for the SUEZ water-supply system.

**Table 1**  
**Present and Projected Service Population**

2015	2020	2035
19,021	19,617	20,923

**3.10 Major Users**

In addition to its two wholesale customers, SUEZ supplies water to three other large users with a demand greater than 3 million gallons per year (South County Hospital, URI School of Oceanography and Meadow Brook Apartments). These major users are involved in a range of operations from residential, governmental and health services. The water consumed by the South County Hospital is the most significant of all the major users.

**3.11 Metering**

**3.11.1 Master Meters**

All of the water pumped from the SUEZ groundwater supply system is metered at each well field. These master meters provide for 100% source metering and are provided with corresponding transmitters which allow a continuous charting and digital display of well field production, at both sites. These meters are checked and calibrated annually.

**3.11.2 Distribution Meters**

Every residential, commercial, industrial and government customer serviced by SUEZ’s water-supply distribution system is metered, thus providing 100% distribution metering. Wholesale meters are read daily and billed on a monthly or quarterly basis. Residential users are read quarterly on a three month cycle, and billed quarterly. The majority of commercial, industrial, and seasonal users are read on the same three month cycle and billed quarterly. The larger users are read and billed monthly.

Meter testing and calibration is provided by SUEZ on a request (from Owner) basis, in the event of meter failure, or when owner use dramatically changes. Additionally, random

meter testing is performed by SUEZ personnel as manpower requirements dictate. Small user meters (less than 2") are tested and calibrated on a twenty year cycle or whenever the meter register rolls over, whichever occurs first. This testing is performed by an outside contractor. Maintenance of these meters is generally not performed unless it can be accomplished efficiently. Normally, due to the fact that SUEZ does not maintain a meter repair shop, the meters are simply replaced. Larger meters (2" and above) are tested and calibrated every two years. Wholesale meters are checked and calibrated annually. This work is performed by an outside contractor through competitive bidding. Typically, the same company performs necessary repairs in a timely manner.

### **3.12 Legal Agreement**

In addition to the implied legal obligations associated with the SUEZ corporate regulations defining the responsibility of SUEZ to furnish potable water to its customers, the company is also legally bound to provide water to its wholesale customers. The company maintains legal agreements with the Town of South Kingstown Utilities Department and the Town of Narragansett Water Division for the supply of water. While SUEZ is regulated as a public water supply, no additional specific legal obligations or contract agreements exist regulating the SUEZ's provision of water.

### **3.13 Unaccounted-For Water**

Unaccounted for water use consists of the difference in the sum of the volume of water metered at the point of supply and that recorded at all points of sale. This unaccounted for water typically consists of water consumed for both authorized and unauthorized uses. Authorized uses include water main/storm drain flushing, sewer/street cleaning, landscaping in public areas, construction sites, etc. It also includes water which is metered but not billed, and therefore is not reflected in the recorded volumes of water sold. Unauthorized uses typically include system leaks, malfunctioning meters, meter pit bypasses, water theft, other unmetered public use, etc. SUEZ's estimated percentage (%) of system unaccounted-for water has stabilized over the past three years, and is currently 4.0%, well in line with the desired State goal of 15%.

It should be noted, that SUEZ has several programs in existence which endeavor to promote the maximum efficiency of its water use and curtail even further the degree of unaccounted-for water.

### **3.14 Demand Management**

#### **3.14.1 General**

Demand Management consists of those conservation measures which achieve long-term water savings by providing incentives and technical assistance to consumers as a means of improving efficiency of water use and reducing waste. Such water conservation measures, whereby suppliers and/or local water utilities and government work to influence water consumption, is the most fundamental approach to water conservation, since the ability to conserve water lies primarily with the water user. Consequently, the success of these measures is highly dependent upon consumer participation and cooperation.

The demand management program proposed herein will therefore focus predominantly on those measures and approaches which achieve permanent long-term water savings without requiring major user habit changes. The five (5) basic demand management techniques are as follows:

- Installation of water conserving, low-flow plumbing devices (retrofit) and revision of plumbing code regulations.
- Promotion of water recycling and efficient use and reuse; provision of technical assistance to industrial, commercial and governmental users.
- Public education on water conservation and water supply issues.
- Appropriate use of fees, rates and charges.
- Water use regulations and restrictions.

The most effective measures are those that achieve long-term water savings without great expense, effort or inconvenience to water users (e.g. installation of water-saving devices and technologies, manufacturing process changes, or pressure reduction). In comparison, the effectiveness of water use restrictions and other methods that require intensive participation or habit changes are likely to diminish over time.

### 3.14.2 Goals

The demand management goals of SUEZ are divided into short-term and long-term goals, as follows:

#### *Short-Term Goals*

1. Minimize peak demand use requirements
2. Implement system-wide residential retrofit program

#### *Long-Term Goals*

1. Minimize average demand use requirements
2. Provide water-use audit services to all major users

One hundred percent (100%) of the water delivered to the SUEZ water system customers is metered.

### 3.15 Supply Management

The SUEZ system's historic water production volumes for the past five years (2010 - 2015) are presented below.

**Table 2**  
**Summary of Historic Water Production**  
**(million gallons)**

<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
1,128.9	1,079.9	1,130.9	1,044.5	1,013.9	1,035.3

### 3.16 Available Water

It is the overall objective of SUEZ to ensure the availability of an adequate supply of potable water to meet the existing and future needs of its customers. This section will focus on presenting the quantities of potable water available to the water supply system at present, and at the projected 5- and 20-year planning periods.

### **3.16.1 Aquifer Yield**

Currently available yearly production data from SUEZ indicates that to date, the peak demand year for its well fields that tap Mink Brook Aquifer (MBA) in the Mink Brook watershed occurred in 2012. Approximately 1,131 million gallons were pumped that year from the MBA (i.e., an average of 3.10 mgd). Given the historical ability of the SUEZ wells and MBA to sustain pumpage at about 3 mgd, and the current land-use and recharge characteristics of the hydraulically connected Chipuxet River watershed and associated glacial outwash deposits, the current and projected SUEZ demands are considered to be sustainable by the local ground-water resources.

Although the ability to calculate an exact aquifer yield value for the MBA and associated lower portion of the Chipuxet River watershed is limited due to the currently available site-specific hydrogeologic data, references indicate that at the 50th percentile, the estimated gross yield of the Chipuxet River watershed (from baseflow calculations) during the typical annual lowest-flow condition month of September is approximately 15.90 mgd. As previously discussed, available historic pumpage data for the SUEZ Wells during the peak demand summer months (including September) indicate that some portion of the 15.90 mgd annual low-flow yield in the Chipuxet River basin is available as recharge (either as direct inflow or as replenishable storage) to the MBA and is expected to continue to be available in order to meet the projected future average daily demand.

### **3.17 Safe Yield**

The capacity of the well or well field is evaluated to determine if adequate supply is available. In conformance with the Division guidelines, 90% of the well/well field capacity can be utilized towards determination of the system's available water.

### **3.18 Anticipated Future Demands**

#### **3.18.1 Future Demand Analysis**

It should be noted that the development of future projections assumed reasonable estimates for unaccounted-for water and would therefore, reflect the total amount of water supply needed (i.e. total pumping supply) to meet overall system demands. It is anticipated

that the present levels of available water will be more than sufficient to accommodate the expected growth in the system average and maximum day demands.

When developing these scenarios, no consideration was made for anticipated "water savings" other than reduction in the level of non-account water, therefore, allowing the demands to be evaluated on a worst case scenario. It is anticipated that a future water conservation target in the region of 10% will only help to further ensure an efficient and adequate supply of source water throughout the 5- and 20-year planning horizons. A more detailed explanation of the future demand is provided below and in Table 4.

### **3.18.2 Growth in Demand**

The intent of this section is to project the future water demands expected of the SUEZ water-supply system for the 5- and 20-year planning periods. To best project future water use, several factors must be considered and evaluated for both the Town of South Kingstown and Town of Narragansett portions of the service area; some of which include changes in population density, industrial and commercial water use and development, wholesale of water to adjacent systems, seasonal influx, economic development, changes in the service area, land use, water quality, water use rates, and conservation measures.

In an effort to quantify the likely growth expected in SUEZ demands during the planning horizons of this plan, the Narragansett and South Kingstown Community Comprehensive Plans, completed in recent years, were reviewed. These documents focus primarily on current and future trends in each Town, and allow a determination of the availability of opportunities for population and economic growth in both Towns. The potential impact that these opportunities will likely have on future growth of both wholesale users, as well as within SUEZ's own service area, have been analyzed.

### **3.18.3 Narragansett**

The Town of Narragansett Comprehensive Plan – Baseline Report Draft 2B, dated February 25, 2016, presents a preliminary build out projection that was used to estimate the current growth. The year 2010 US Census stated the population of 15,868 represents a decrease in population from the 2000 census of 16,361. Population projections prepared by the Rhode Island

Division of Planning (RIDP) were developed for the 5-year (2020) and 20-year (2035) planning periods. The RIDP estimates that the town population in 2020 and 2035 will be 15,988 and 16,411. This would amount to an approximate population increase of approximately 3 percent between 2010 and 2035. The impact to demand should be minimal over the short term as a result of this increase.

The majority of future growth in the Town is expected to consist of residential development which continues to be the Town's dominant land use. Economic development in the Town is not expected to increase significantly during the next 5- to 20-year periods due to limited availability of developable industrial land.

An analysis of current and future Town land use mapping indicates that much of the area served by the SUEZ distribution system in the Town is located in Low density, Moderate-Low density and High density developed areas, with small commercial and minimal industrial regions. The impact of expected growth in the SUEZ service area within the Town of Narragansett will largely result from expansion to its residential consumer base, with minimal growth expected in commercial and industrial sectors. The Narragansett Comprehensive Plan also indicates that an additional 1,009 year-round homes could be built on existing vacant or underutilized lots. When or if these homes will be constructed is uncertain. It is assumed that it will take 20 years for the Town to be fully built out, within the time frame of the Comprehensive Plan.

#### **3.18.4 South Kingstown**

A review of the South Kingstown Comprehensive Community Plan (Updated 2014) was completed to develop a basis for understanding current and anticipated land use practices in the Town. The plan indicates that 74% of all Town land are zoned residential and less than 1% is zoned commercial.

The plan indicated that population in the Town increased significantly between 1970 and 1990, with a 20.7% increase in each decade. Between 1990 and 2000, the population increased by 13.4% and between 2000 to 2010, the population increased by 10%.

The year 2010 US Census stated the population as 30,369. The Rhode Island Statewide Planning Program prepared population projection estimates for the 5-year (2020) and 20-year (2035) planning periods. The RIDP estimates that the population in 2020 and 2035 will be

32,756 and 36,734. This would amount to an approximate population increase of 9 percent between 2010 and 2020 and an approximate population increase of 9 percent between 2020 and 2035. This estimate is consistent with the slowing population growth trend over the last few decades. Similar to Narragansett, this gradual slow growth will be considered in the short term demand projections but will become more significant for the 20-year planning period.

Commercial growth in the Town was noted as growing at a rate of 1.05% during the 1990's. Given the limited availability of commercial space, special development districts have been established along Route 1, Main St., and Highway commercial areas in an effort to revitalize existing commercial space.

Industrial development in the Town has been very slow between 1990 and 2000 which is largely consistent with the trend in the State of Rhode Island and in the Northeast region. The plan concluded that the potential for future industrial growth in the Town will be a challenge in the decades to come.

A review of the Town land use mapping and comparison to the existing water supply service area indicates that the greatest impact on future growth of the SUEZ system will likely result from increased development of residential land within and adjacent to the current SUEZ service area.

#### SWRI Service Area

The impact that the development in both Towns has had on the growth of SUEZ's own service area can be evaluated by considering the increase in the system's number of services over the past 10 years. The annual number of services added to the system has been relatively constant and can be categorized as slow steady growth which is consistent with the previous decade as well. The average number of new system-wide services added annually over the past 10 years is 44.8. This *services growth rate* compares favorably with the preceding development growth rates discussed for both Towns. In light of that, it appears that the rate of growth of both wholesale user service areas closely correlates with that of SUEZ's own service area. It is, therefore, proposed that the ten year historic rate of growth in SUEZ system's production volumes be utilized as the methodology to predict the estimated future demands of the SUEZ system.

As the above discussion suggests, quantifying the effects of increased development on future water use demands on the SUEZ water-supply system is a complicated task due to the multitude of variables involved. Given the desirability of both the Town of South Kingstown and Narragansett as residential communities along with the availability of developable residential properties in both Towns, it is expected that the existing rate of growth in production volumes will likely continue for a number of years. It is expected that the major component of this growth will result from residential expansion, with minimal industrial, and small commercial growth expected.

The expected system demand for the 5- and 20- year planning periods and the current and future average and maximum day demands are presented in below.

**Table 3**  
**Summary of Projected Water Demand**  
**(Million Gallons)**

2015	2020	2035
1,035.3	1,150	1,247

**Table 4**  
**Summary of Current and Projected Demand**  
**(mgd)**

	2009	2010	2011	2012	2013	2014	2015	5-year	20-year
<b>ADD</b>	2.75	2.77	2.85	2.86	2.77	2.70	2.72	3.15	3.42
<b>MDD</b>	5.23	6.55	5.60	5.90	5.90	5.12	5.33	6.47	7.02

### 3.19 Capital Improvement

SUEZ continues to employ an aggressive pro-active Capital Improvement Program of water main replacement/rehabilitation which has been in effect for several years, with the intent of replacing existing low capacity mains and water meters, upgrading system storage facilities, and improving overall system reliability.

### **3.20 Rate Structure**

The current rate structure provides a separate rate structure for assessing charges to residential users, commercial, industrial and municipal users, among others. The rate structure for each consists of a combination of a *Customer Service Charge* (Flat Rate) plus a *Volume Charge* (Block Rate). The *Customer Service Charge* is applied based on the size of the customer's meter, with the *Volume Charge* computed based on the actual volume of metered consumption.

In the case of residential use the Volume Charge is computed on an inclining block rate structure, with the user paying more per unit of water as consumption enters a higher block. This type of rate structure encourages the conservation of water by rewarding the user who minimizes use. The same incentive is not provided to commercial, industrial or municipal users however, who are assessed at a fixed rate structure.

### **3.21 Financial Management**

SUEZ is a privately-held water utility, operating under the laws and regulations of the State of Rhode Island, and subject to regulation by the Rhode Island Public Utility Commission and SUEZ utilizes an accrual system for recording its financial transactions, and all books of record are kept in compliance with generally accepted accounting principles. It is the intent of SUEZ that the costs (expenses, including depreciation) of providing the services to its users on a continuing basis be financed or recovered fully through user charges.

SUEZ strives to meet the following objectives:

- a) to provide its customers with potable water of high quality and sufficient quantity to meet all of their needs, while simultaneously providing excellent customer service, all at a reasonable cost.
- b) to provide our employees with challenging opportunities in the water industry, with fair and reasonable compensation.
- c) to provide our stockholders a reasonable return on their investment.

All general operations of SUEZ are financed from water revenues in the form of user fees. Capital improvements to the water system are initially financed internally by generated

funds of SUEZ. Where sufficient funds are not available internally, a contribution to the equity of SUEZ is made by parent company.

### **3.22 Emergency Management**

SUEZ has an approved Emergency Management Plan. The plans established the responsibility and authority within SUEZ for responding to potential emergencies and outlines specific tasks for addressing such emergencies.

### **3.23 Water-Supply Source Protection**

SUEZ has prepared a Water Quality Protection Plan that includes the necessary components of the Rhode Island Wellhead Protection Program (WHPP). SUEZ has ongoing strategies to ensure the continued protection of SUEZ's water-supply sources. A primary goal of these strategies is to provide for the protection of raw water supplies in those areas subject to the influence of the groundwater wells. This protection is accomplished fundamentally by owning and controlling sufficient land area around each of these wells to preclude as much as possible the threat of raw water contamination. SUEZ's two well fields are both located on over 30 acre parcels of land owned by SUEZ. In addition, SUEZ has purchased 47 acres of land in the vicinity of one the well fields. Ownership of the property has been transferred to a land trust with SUEZ dictating permissible uses. A second parcel of 30 acres of land in the same vicinity has also been purchased and turned over to the land trust.

The RIDEM has delineated WHPA for all public wells in Rhode Island. The WHPA overlies the MBA and encompasses 100% of SUEZ's water. There have been no changes to factors affecting water quality in the SUEZ watershed since the 2003 Source Water Assessment.

### **3.24 General Policies**

The Plan is intended to be consistent with the goals and policies of the Town of South Kingstown and Narragansett Comprehensive Plans, as they pertain to water supply and management. Conversely SUEZ's Engineering and Water Operations personnel shall promote consistency between the contents of this Plan and the policies of these documents. For example, the cooperative efforts required with respect to source protection were noted earlier

in this plan, and such joint efforts should progress as appropriate. Also, at present, prior to any type of water main extension or new development being serviced, local planning board approval must be issued.

Future land uses, zoning requirements, growth projections and other areas of mutual interest, with regard to service area expansion, shall be consistent with the ability of the water supply system to accommodate the expected potable water requirements of the system.

In addition, SUEZ shall continue to pursue the accommodation of the current and future needs of its water supply system through the coordination of its efforts with those of its neighboring water supply utilities. SUEZ has relationships with the South Kingstown Utilities Department, the Town of Narragansett Water Division, and the North Kingstown Water Department. In the case of an emergency, joint efforts will be employed to allow each utility to help one another. Future endeavors shall include efforts in regard to regional cooperation with respect to aquifer protection with adjacent towns, and state and federal agencies, system interconnections, service area expansion, capabilities to assist in the response to water supply emergencies, the potential for regionalization, etc.

nv

February 21, 2018

H:\United Water Rhode Island\2017\Executive Summary - updated.docx



# WATER SUPPLY SYSTEM MANAGEMENT PLAN EXECUTIVE SUMMARY

## KINGSTON CAMPUS

Revised 2018

Prepared By

**Bob Bozikowski**  
Utilities Department  
Facilities Services  
University of Rhode Island

# **Executive Summary**

## **Introduction**

This planning document was prepared to comply with the requirements of the Water Supply System Management Planning Act and the Rules and Regulations for the Water Supply System Management Planning, October 2002 as promulgated by the Rhode Island Water Resource Board. This plan serves as a guide in the decision making process for the long term planning of the water supply utility serving the University.

## **Background**

The University of Rhode Island's primary goal is to operate an educational institution of higher learning. The University operates a water system for the benefit of and to meet the legitimate needs of the students, faculty, and staff of the University. The water system was installed around 1900, shortly after the start of the University, and has expanded over the years to meet the demands of the University.

## **General System Description**

### **Sources**

The water system is supplied by three gravel pack wells located in the Chipuxet Aquifer. These wells were installed between 1949 and 1974 and have seen various upgrades over the years to ensure reliability. Current total pump capacity is 2.5 MGD or 2300 gpm with well capacity capable of 28.1 MGD.

### **Treatment**

In June, 2000 the University began treatment for corrosion control and ph adjustment by adding hydrated lime to its water system. In 2010 the University voluntarily installed hypo-chlorination. A supervisory control and data acquisition (SCADA) system continuously monitors water quality and control of system operation.

### **Distribution and Storage**

The distribution system is composed of approximately 15 miles of pipe. Ninety percent of the pipe is less than 50 years old and constructed of lined ductile iron pipe. Water is stored in a 1 million gallon elevated storage tank. This tank is scheduled for painting in 2018.

## **Interconnections**

The University maintains three interconnections with Kingston Water District for emergency supply. Details of these connections are in the main report.

## **Population and Projections**

The boundaries of the service area include approximately 1,200 acres of area. The current water system serves a population of 19,354 during the academic school year. In the five year planning horizon we project construction of a new 500 bed dormitory and adding approximately 270,000 square feet. This equates to an increase in our annual demand of 17.5 million gallons per year. Beyond this construction the twenty year planning horizon sees numerous renovations of existing buildings that do not substantially add square footage, so any increase in demand is negligible.

## **Water Use**

URIKC-Water provides service to the university for all water needs including, residential, academic, research, irrigation and operations. On average the university supplies approximately 0.377 MGD. This average has decreased from a peak of 0.491 MGD over the past 15 years while the university has added substantially to the student body and building square footage.

Peak daily demand can reach 0.669 MGD, typically in September. The university is the only customer and the largest user is the boiler plant. The boiler plant can consume up to twenty percent of daily production, but average annual consumption is about eight percent. The URIKC-Water service area is limited to the Kingston campus of the university and surrounding area owned by the university and used for support and other facilities of the university. The boundaries of the service area include approximately 1,200 acres of area.

URI has a comprehensive campus wide conservation program where cost savings are used to fund additional improvements. This program has made vast improvements to URI's steam distribution system that has reduced make-up water demand. URIKC-Water regularly performs leak surveys, estimates un-accounted for water and conducts leak surveys if un-accounted for water exceeds 10%. Water use has decreased nearly 10% over the past ten years while at the same time the campus has added 500 beds and 425,000 square feet of academic space.

## **Metering**

Each production well is equipped with a venturi style water meter. These meters are continuously monitored and operators log daily measurements as well. The University supplies water only to itself. As the campus grew and buildings were

added, water meters were not installed. Starting in 2004 most new buildings included water meters in the design. As part of the University's Demand Management Strategy that was approved by the Water Resource Board staff in 2014, the University reads existing meters quarterly and uses these figures to estimate water use in non-metered buildings. The university then calculates non-accounted water. URI requires water meters in all new construction and significant building renovations.

### **Non-Account Water**

Non-accounted water is estimated from reading meters in existing buildings and calculating water use per bed or per square foot. These factors are then applied to non-metered buildings and water use is estimated by totaling water use for various user classes. Total estimated customer consumption is then compared to well production to determine non-accounted water.

### **Demand Management**

URIKC-Water has been active in utilizing various elements of demand management to encourage efficient use of water. Our 2015 average per capita usage was 20 gallons/person/day. We review quarterly meter readings and investigate buildings with abnormal use. URIKC is implementing the following actions to improve the efficient use of water:

- Assess the end use fixtures in all buildings
- Identify improvement actions for fixture replacement/upgrading
- Reduce/eliminate once through water use fixtures/equipment for air-conditioning, food preparation, etc.
- Improve boiler plant condensate return efficiency,
- Irrigation control using sensors and/or timers and
- Public education program to educate freshmen on conservation.

URIKC-Water monitors daily, monthly and annual water production and calculates water use for each building quarterly in accordance to the approved Demand Management Strategy. This information is then used to calculate unaccounted for water.

URIKC-Water performs triennial leak detection surveys to ensure water efficiency. Furthermore, if annual unaccounted water is greater than 10% a leak survey will be conducted in accordance with AWWA Manual 36.

### **Supply and Demand Management**

URI has taken active measures to protect its water supply wells and monitor and mitigate future contaminants of concern. Improvements to infrastructure and conservation measures has reduced annual demand below 1968 levels when the campus population was half what it is today. Current per capita usage is 20

gallons per day per person.

### **Available Water and Alternative Supplies**

The existing three wells that serve the university can pump 2.5 MGD or 912 MG per year. At the present time, URIKC-Water considers its current sources to be sufficient to meet future demands for the planning periods noted above. However, URIKC-Water recognizes that its current wells are located down gradient of campus, and that there is moderate risk to groundwater contamination from campus activities. As a result, URIKC-Water is seeking an alternate well site from the Rhode Island Water Resource Board located on Wolf Rock Road in Exeter, RI. This site draws from the Chipuxet aquifer but up stream of the university.

Kingston Water District draws from the Chipuxet aquifer from three shallow wells located downstream from the university. The university maintains three interconnections with KWD. KWD notes that they could provide water to the university on a long term basis, but upgrades to their treatment systems would be necessary.

### **Anticipated Future Demands**

Current annual demand is 137 MG. Based upon information from Campus Planning and Design, URIKC-Water expects water annual demand to increase to 156 MG by 2023 and 161 MG by 2034 or an increase of existing demand of approximately 64,109 gallons/day. Much of this added demand will occur in the next five years with the addition of a new 500 bed dormitory and expansion of existing buildings. URI will continue to make infrastructure improvements and conservation efforts to ensure system resiliency and efficiency.

### **Supply Augmentation Studies**

The university has been actively pursuing improvement to its existing supply wells including well rehabilitation, well redevelopment, new pumps and motors, new well stations, treatment system improvements, and installation of well field piping to allow blending and treatment of all sources. URIKC-Water maintains a library of reports and publications on the Chipuxet Aquifer that are used to support design and operation of the supply wells.

The university is seeking alternate remote well fields that could supply the university in the event the existing well field is contaminated. Lastly, URIKC-Water maintains three interconnections with Kingston Water District that can supply water to meet the demands of the university. Kingston Water District is pursuing interconnection with Suez of Wakefield that is interconnected with utilities that are supplied from outside the Chipuxet Aquifer.

## **Water Quality Protection**

URIKC-Water has developed a comprehensive Wellhead Protection Program to protect and maintain water quality. This plan targets and tracks emerging contaminants, develops construction standards and development restrictions within the wellhead protection area, develops road salt and fertilizer management programs, targets land for purchase or protection and coordinates with URI Planning and the Town of South Kingstown Planning Department. URIKC-Water has also developed a Groundwater Protection Policy that is currently being incorporated into the Campus Master Plan.

## **System Management**

Water is critical to the university achieving its educational mission. As a result the university provides the necessary resources to ensure the water system is resilient, compliant with state and federal requirements and is effectively operated and maintained. URIKC-Water performs proactive planning, maintenance and operational programs to ensure interruption-free service to the system users. URIKC-Water maintains an inventory of replacement parts and contracts for emergency service to make any necessary repairs.

## **Emergency Management**

URIKC-Water maintains an Emergency Response Plan that identifies and provides critical system personnel and emergency contacts, critical system information, damage assessment and response procedures and various forms for logging information during an emergency. This plan is prepared to be an operational guide during an emergency and is updated annually.

## **Drought Management**

The University, because of the academic calendar, requires 30% less water during the summer periods of a year when drought conditions would be most severe. Nevertheless, URIKC-Water monitors drought conditions and has established triggers that implement drought management strategies. Management strategies include adjustments to well pumping rates and cycles, issuing drought advisories and restrictions, restricting water use, RESTRICTING irrigation and vehicle washing.

## **Financial Management**

URIKC-Water operates as an organizational element of the Department of Business Services of the University of Rhode Island. All operations of URIKC-Water are financed from the operational budget of the University of Rhode Island. No specific charges or user fees are levied to users of the water system. The

budget for the water system is prepared to incorporate all the costs of operations and maintenance.

### **Coordination**

Facilities Services is involved in the planning for the University's growth. URIKC-Water has updated its wellhead protection plan and working to incorporate this plan in the University Master Plan. Implementation of this plan involves the University, Town of South Kingstown, Town of Exeter, the Water Resource Board and local organizations and land holders. The University works with these entities as needed to ensure the protection and viability of the Chipuxet Aquifer.

RIDOT Highway Functional Classification System

Route	Segment Name	Miles
<b>Principal Arterial (Rural)</b>		
138	Usquepaugh Road	2.05
<b>Minor Arterial (Rural)</b>		
2	South County Trail	2
<b>Major Collector (Rural)</b>		
110	Ministerial Road	5.89
<b>Minor Collector (Rural)*</b>		
	Worden's Pond Road	2.22
1A	Post Road	2.41
<i>Sub-Total</i>		<i>4.63</i>
<b>Freeways/Expressways (Urban)</b>		
1	Commodore Perry Highway	6.19
1	State Highway 1A	1.45
1	Tower Hill Road	4.12
1	US Highway 1	0.48
<i>Sub-Total</i>		<i>12.24</i>
<b>Principal Arterial (Urban)</b>		
108	Kersey Road	0.28
108	Kingstown Road	3.61
108	North Road	0.06
138	Kingstown Road	2.91
138	Mooresfield Road	3.68
2	South County Trail	1.55
<i>Sub-Total</i>		<i>12.09</i>
<b>Minor Arterial (Urban)</b>		
	Bridgetown Road	1.36
	Columbia Street	0.69
	Post Road	0.04
	Salt Pond Road	0.36
	Succotash Road	2.09
	Tower Hill Road	0.47
	Woodruff Avenue	0.74
1A	Main Street	1.32
1A	Post Road	0.77
<i>Sub-Total</i>		<i>7.84</i>
<b>Collector Urban</b>		
	Allen Avenue	1.15
	Broad Rock Road	3.21
	Coddington Way	0.02
	Curtis Corner Road	2.72

## RIDOT Highway Functional Classification System

	Flagg Road	0.91
	Gooseberry Road	0.55
	Green Hill Beach Road	2.3
	High Street	1.1
	Kingstown Road	0.37
	Matunuck Beach Road	2.24
	Matunuck Schoolhouse Road	3.86
	Middlebridge Road	2.24
	Ocean Avenue	0.32
	Old North Road	1.54
	Old Post Road	0.42
	Old Succotash Road	0.12
	Peninsula Road	0.07
	Plains Road	1.12
	Pond Street	0.62
	Post Road	0.19
	Rodman street	0.61
	Saugatucket Road	2.49
	South Road	3.47
	Torry Road	0.54
	Tuckertown Road	1.77
	Willard Avenue	0.8
	Worden's Pond Road	0.62
	Post Road	1.02
	<i>Sub-Total</i>	<i>36.39</i>
	<b>Total</b>	<b>83.13</b>