

**TOWN OF SULLIVAN’S ISLAND, SOUTH CAROLINA
COMPREHENSIVE PLAN STEERING COMMITTEE
MEETING MINUTES
Wednesday, May 9, 2018**

Meeting was held at 5:00PM, this date, at Town Hall, 2056 Middle Street, all requirements of the Freedom of Information Act satisfied. Present: Committee members Gary Visser (Chair), Vic-Chair Sydney Cook, Charlie Cole, Hal Currey and Carl Hubbard. Staff members: Zoning Administrator Henderson and Asst. to Administrator Darrow.

Call to Order. Chair Visser called the meeting to order, stated press and public were duly notified pursuant to state law and all Committee members present except Manda Poletti (excused absence) and Tim Watterson (recovering from medical illness); special guest Ryan McClure (Berkeley-Charleston-Dorchester County of Government aka BCD-COG); and six (6) audience members present (Mayor O’Neil, Councilmembers Clark, Langley, Howard and residents Wayne Guckenberger and Susan Middaugh); no media.

I. APPROVAL OF AGENDA – approved as presented

Commission reminded audience that any preliminary approval of Comprehensive Plan material would occur in the regular Planning Commission meetings and the series of Steering Committee meetings serve as workshops.

II. CORRESPONDENCE-PUBLIC FEEDBACK

Consultant McClure (BCD-COG) – Reported no specific correspondence received; noted survey feedback will be embedded in staff report of respective Plan elements.

III. ITEMS FOR REVIEW AND APPROVAL

- 1. Land Use Element: Consider preliminary approval of draft language for the *Land Use Element* language and goals and objectives**

Staff (Zoning Administrator Henderson) & Consultant McClure

Consultant McClure presented to Committee the Staff overview/report regarding revised Land Use Element/Needs & Goals (**Exhibit A**). Thereafter Committee reviewed, discussed and modified language on the draft Land Use Element/Needs & Goals (**Exhibit B**).

Committee Discussion/Public Questions & Comments:

Short-term rentals (Land Use Policy #1)

Committee discussed Town’s current enforcement efforts and limited “grandfathered” properties eligible to operate as a vacation rental. It was noted that residents on this small Island community assist with enforcement of illegal rentals.

Wayne Guckenberger (2105 Pettigrew Street, SI) asked if there was a desire for the Town to monetize demand for Sullivan’s Island vacation rentals by creating a lottery to allow five extra residents to purchase a vacation rental license.

Committee members supported continued regulatory oversight of existing nonconforming vacation rentals and to continue prohibiting, restricting and enforcing any new vacation rentals.

Historic Preservation & Property Historic Designation (Land Use Policy #2):

Zoning Administrator Henderson reviewed the process for a property owner to request determination whether his/her property is historically contributing to the Island. He then reviewed the Town's past initiatives to assess historic properties, noting the Town consultant last reviewed historic properties circa 2008/2009.

Committee suggested that since it has been ten years since the last historic survey, it might be appropriate and timely for the Town to conduct another historic property review.

Mr. Currey queried whether there was a minimum age for a residence to be deemed historic? Zoning Administrator Henderson noted there is no minimum age codified by Town ordinance; however, the South Carolina Department of Archives and History deems structures with historical, architectural or cultural significance that are 50 years old or older as historic.

Historic Commercial Structures & Adaptive Re-Use (Land Use Policy #5):

Committee discussed P5.1 that encourages adaptive reuse of historic commercial properties outside of the Community Commercial District. Committee asked how many properties would apply. Zoning Administrator Henderson noted there are many examples across the Island, and cited several examples: old movie theater, warehouse and the old Town Hall (1610 Middle Street). He reiterated that only single-family residential uses are allowed in the RS-District, as the Planning Commission and Town Council clearly determined in 2013 that multi-family uses are not appropriate in the RS-district.

Vice-Chair Cook noted there are a limited number of historically commercial properties outside the Community Commercial District. She expressed support for keeping the properties as residentially zoned/single-family land use, submitting people would purchase 1610 Middle Street, for example, if the Town would offer it for sale. She suggested the Town is trying to create a strategy to address a need that does not exist.

Mr. Hubbard stressed that these historic properties can already be used as residential single-family properties based upon current land use and zoning designations.

Chair Visser expressed no support for moving properties outside of residential single-family designation, noting this could open the door to multi-family use.

Zoning Administrator Henderson clarified that The Island Club and Fish Fry Shack are Town owned and operated uses in the RS-district.

Zoning Administrator Henderson asked if the Committee would like to retain the goal to incentivize restoration of historic commercial properties. He noted that the Design Review Board often has trouble approving the design/reuse of historic structures due to land development ordinance restrictions. He suggested Staff could clarify the allowance of adaptive reuse for single family residential use only but add some incentives that provide an owner flexibility for design.

Committee asked Staff to add historic related goals into the Cultural Resources Element for review and approval in June (see modification list to follow).

Land Use Needs & Goals Changes (see Exhibit B attached herein):

- **MODIFY P1.3 to read, “Continue to *restrict and enforce* the short-term rental market.” [change italicized for emphasis]**
- **MODIFY P2.2 to read, “Encourage research and documentation of historic structures and pursue *local and* National Historic Designation where appropriate.” [change italicized for emphasis]**
 - **MODIFY C1.3 of Cultural Resources to make Needs & Goals language identical to P2.2.**
- **ADD P2.3 to read “Continue to regularly re-evaluate and update Town surveys of historic structures.”**

Committee struck Land Use Policy #2: Protect and preserve the integrity of the historic elements of the Island policies P2.1 – P2.3 (above). Committee instructed Staff to move all this language to the Cultural Resources Element Needs & Goals

- **MOVE P3.4 to Cultural Resources Needs & Goals**
- **MODIFY P5.1 to read, “P5.1 Investigate methods to encourage single-family residential adaptive reuse of military era structures island-wide.”**
- **MODIFY P7.1 to read, “.....future construction is respectful to the Island’s traditional mass, height, scale, proportionality to lot size, neighborhood compatibility *and historic resources.*” [change italicized for emphasis]**

Committee instructed Staff to add duplicate language in P7.2 to Housing Element Needs & Goals.

Thereafter members of the public questioned the inclusion of public survey responses and comments that are made anonymously, questioning if anonymous comments could create an artificial sense of grassroots support/concern for a topic where it did not exist. Mr. Guckenberger (2105 Pettigrew) submitted comments should include a resident’s name and address.

Staff reviewed the methodology for vetting the survey and public comments, noting Staff has ensured all comments are from Island residents. Committee members generally supported status quo for public comments and surveys.

COMMITTEE CONSENS: Staff to return Land Use Element/Needs & Goals with aforementioned modifications for Committee consideration at June 13, 2018 Committee meeting.

2. **Natural Resources Element: Consider preliminary approval of draft language for the *Natural Resources Element* and goals and objectives**

Staff (Zoning Administrator Henderson) & Consultant McClure

Zoning Administrator presented to Committee the Staff overview/report regarding Natural Resources Element (**Exhibit C**). Thereafter Committee reviewed, discussed and modified language on the draft Transportation Element/Needs & Goals (**Exhibit D**).

Element Highlights:

- New section in Element dedicated to resiliency planning and sea level rise. Will Salter with SCDHEC consulted with Staff and working group of Planning Commissioners (Gary Visser and Hal Currey) and made the following recommendation: align Town action items such that Town can maximize success in obtaining state/local funding when availability. Needs & Goals for this strategy are crafted accordingly.

Committee discussion regarding value of emphasizing collaboration with regional/state/national partners as sea level rise impacts more than Sullivan’s Island. Zoning Administrator noted Needs & Goals, to be discussed shortly, stress collaboration.

Needs & Goals Discussion:

Mark Howard (1820 Central Avenue, SI) expressed desire to see strong focus in Needs & Goals on back-island marshes and waterways, along with front beach and oceanfront.

Susan Middaugh (2420 Raven Drive, SI) suggested adding language to address marsh access and rights-of-ways.

Zoning Administrator Henderson noted that a block of Natural Resources Needs & Goals (section 5) addresses the back-island marshes and waterways, and, Transportation Needs & Goals address access to the back marsh and waterway.

Committee discussed erosion and stormwater run-off on the Island and discussed merits of addressing pervious/impervious surfaces in the Plan. New Needs & Goals NR 5.5 (below) stemmed from this discussion.

Natural Resources Element Changes:

- **Page 14 (Resilience Planning and Adaptation to Sea-level Rise)**
 - **MODIFY Paragraph 2 to read, “.....adaptation actions that will produce two overarching goals: 1.) develop mitigation strategies, *prioritizing nature-based solutions*, to prepare for future hazards....” [change italicized for emphasis]**

Natural Resources Needs & Goals Changes (see Exhibit D attached herein)

- **MODIFY NR2.3 to read, “*Seek methods to mitigate erosion problems.*”**
- **MODIFY NR3.1 to read, “.....Accreted Land Management Plan, with the broadest possible community participation and input, *as an integral part of the Town of Sullivan’s Island resiliency plan.*” [change italicized for emphasis]**
- **MODIFY NR3.3 to read, “Continue to encourage conservation easements, *to protect open space on the Island*, and conservation structures *as a part of the policy of retreat from beachfront development.* [change italicized for emphasis]**
- **CORRECT numbering for NR5.4 and NR5.5 (existing policies currently both number NR5.3)**
- **ADD NR5.6 to read, “*Continue to evaluate Zoning Regulations pertaining to maximum allowed impervious surface coverage for development.*” [change italicized for emphasis]**
- **MODIFY NR6.2 to read, “Encourage and support community participation to protect turtle and *bird* habitats.” [change italicized for emphasis]**
- **STAFF REWORK 7.1 and 7.2 language to focus on how strategies for the back-island waterways contribute to stormwater drainage and Island resiliency.**
- **MODIFY NR9.3 to read, “*Develop a comprehensive sea level rise....*” [change italicized for emphasis]**
- **MODIFY NR9.4 to read, “.....track to improve eligibility for state and federal opportunities, *prioritizing nature-based solutions, as an integral part of the Town of Sullivan’s Island resiliency plan.*” [change italicized for emphasis]**

COMMITTEE CONSENS: Staff to return Natural Resources Element/Needs & Goals with aforementioned modifications for Committee consideration at June 13, 2018 Committee meeting.

IV. NEXT MEETING: Wednesday, June 13, 2018

Committee to review following documents for potential preliminary approval:

1. Land Use Element/Needs & Goals (revised per this meeting's minutes)
2. Natural Resources Element/Needs & Goals (revised per this meeting's minutes)
3. Priority Investment Element/Needs & Goals (initial review)

There being no further business, the meeting adjourned at approximately 7:24PM.

Respectfully submitted,
Lisa Darrow
Asst. to Administrator

Approved at the June 13, 2018 Planning Commission Meeting



LAND USE ELEMENT

Town of Sullivan's Island
Comprehensive Plan Steering Committee
May 9th, 2018

Land Use Element

Public Input

Throughout the planning process there have been public comments provided by the citizens through emails, an open house, and online surveys. Here are some of the comments that have been used to inform the writing of the Transportation Element.

1. “We need to Preserve the land we have left and take better care of our beaches including beach paths. Trash cans should be accessible for the residents and the hundreds of tourists we have ever year. Beautification of our community is lacking . Especially where all the businesses are.”
2. “PLEASE PLEASE PLEASE dont ever expand Bayonne. The island does not need and can not handle more streets! WE have a lovely island and we can not let greed and the opportunity for a few people to make money, to overtake the rights and responsibilities of others. NO MORE BUILDING! Renovation on an exisitng property or even replacement of a current property is difficult enough to watch, but taking a natural space and crowding more people on it is so depressing.”

Online Survey - <https://bcdcog.com/publicinput/>

Website - <https://bcdcog.com/sullivans-island-comprehensive-plan/>

Land Use Element

Review Changes Requested by Steering Committee

The Steering Committee has reviewed the Land Use Element and requested the following changes and or instigated dialogue regarding different aspects of the chapter. The following items represent the committees work on the plan.

1. Land Use Element Edits: All corrections requests have been completed, such as: Explanation of the 20-year horizon, basic text edits, pictures added for the both the commercial district text and the commercial district itself, new churches are only allowed in RS district as a Special Exception, adjusted the quote within the document, added a pie chart for land use by percent, increased content and information for the cc districts, and added information regarding the creation of a new institutional/government land use (this is not every change within the document, but a very large sample of it).
2. Examples-

CCOLs #1 and #2 has a defined area along Jasper Boulevard and Middle Street, between the blocks of Station 22 ½ and 2019 Middle Street. CCOL #1 consists of lots between Middle Street and Jasper Boulevard, from Station 22 ½ to Station 22. CCOL #2 consists of lots between L'Or Avenue and Middle Street from Station 22-2019 Middles Street (currently Sullivan's Restaurant and other businesses) to 2120 Middle Street.



Historic District Overlays

In 2003, the Town of Sullivan's Island established three (3) historic overlay districts in the Town. The three districts are: Moultrieville Historic District, Sullivan's Island Historic District and the Atlanticville Historic District. As previously mentioned in the Residential Section, these three distinct, separate areas comply with the Zoning Ordinance defining the district as, "architecturally, archaeologically, culturally, or historically significant to the Town of Sullivan's Island. Keeping oversight of the district is the Design Review Board, which guides new construction, alteration, demolition, moving and removal of structures within the historic overlay districts.



Land Use Goals & Objectives

The purpose of Sullivan’s Island land use planning efforts is to ensure that the Town maintains its small-town character and controls the land uses currently present on the Island, as well as maintain future growth. The following objective and policies are a guiding framework to achieve these ends:

Land Use Goals:			
	Objectives	Responsible Parties	Timeframe
<i>Land Use Policy 1: Preserve the single-family residential character of the Island</i>			
	P1.1 Keep housing density low through maintaining half-acre lot sizes and other regulations	Town Council; Planning Commission	Ongoing
	P1.2 Continue to prohibit multifamily development	Town Council; Planning Commission	Ongoing
	P1.3 Continue to control the short-term rental market <u>Any appetite to create a second short-term rental market designation (i.e. keep long-term rentals min 6 or 12 month consecutive, and, designate rentals over 28 days but less than 6 or 12 months as short-term rental 2 (ST-2)?</u> -against altering shorter term rentals because it would it could potentially allow more	Town Council; Town Administration	Ongoing
<i>Land Use Policy 2: Protect and preserve the integrity of the historic elements of the Island</i>			
	P2.1 Continue to support Design Review Board oversight of the historic overlay districts, other historic structures and, through Town ordinances, protect historic properties on the Island.	Town Council; Town Administration	Ongoing
	P2.2 <u>Encourage</u> research and documentation of historic structures and pursue National Historic Designation when appropriate. <u>Is P2.1 supposed to address need to “pursue pulling historically contributing structures, perhaps those gaining NH designation, into one of 3 Town historic overlays” (getting extra land development/zoning controls over properties?)</u>	Town Administration	Ongoing
<i>Land Use Policy 3: Preserve and maintain the eclectic nature of the Island architecture</i>			
	P3.1 Continue to implement policies and encourage building options that prevent demolition of structures that contribute to the historic fabric and	Town Council; Town Administration; Design	Ongoing

Land Use Goals and Objectives Continued

	eclectic sense of place.	Review Board	
	P3.2 Encourage training and certification of board members and staff involved with historic review.	Town Council; Town Administration	Ongoing
	P3.3 Explore advantages of tax incentives in historic preservation efforts.	Town Council; Town Administration	Ongoing
	P3.4 Review the demolition criteria used by the Design Review Board to ensure homes being demolished are not contributory to the eclectic nature of the Island, specifically as to size, era and styles of home, including homes not currently protected by historic designation.	Town Council; Town Administration; Design Review Board	Ongoing
<i>Land Use Policy 4: Balance the viability of the commercial district with the residential nature of the Island.</i>			
	P4.1 Support the implementation of a Master Community Commercial District Plan that addresses concerns such as on-street parking, street trees, design, landscaping, site placement of structures and parking.	Town Council; Town Administration; Planning Commission	Ongoing
<i>Land Use Policy 5: Discourage loss of historic commercial structures not located within the commercial district due to inability to use the structures because of zoning restrictions and maintenance requirements.</i>			
	P5.1 Investigate methods to allow and encourage adaptive reuse of historic commercial structures not located within the commercial district. <i>This is a reference to heading off potential demolition by neglect trend, right?</i>	Town Council; Town Administration; Planning Commission	Ongoing
<i>Land Use Policy 6: Enhance and increase public and protected open space whenever possible.</i>			
	P6.1 Encourage the transformation of Town-owned property into public protected open space.	Town Council; Town Administration	Ongoing
	P6.2 Investigate protection, such as a conservation easement, on the designated conservation recreation space.	Town Council; Town Administration	Ongoing
<i>Land Use Policy 7: Address neighborhood and community design concerns regarding sense of place on the Island.</i>			
	P7.1 Establish a task force that will revise land use regulations by review of the existing Zoning Ordinance to ensure that future construction is respectful of the Island's traditional mass, height, scale, proportionality to lot size and neighborhood compatibility.	Town Council; Planning Commission	Ongoing
	P7.2 Conduct an evaluation of residential design guidelines to ensure consistency with the Island's open and informal character as it relates to	Town Council; Town Administration; Planning Commission	Ongoing

Comment [JH1]: What is this? Let's be more specific (i.e. what is historic in years?) Should 50 years be the new threshold for being considered historic? HC

Good point. The National Register of Historic Places states that generally, the subject property should be at least 50 years old.

Comment [JH2]: Do we still want to encourage adaptive reuse after the 2014 discussion regarding adaptive reuse? HC

Unaware of the 2014 discussion. This discussion should certainly be taken into consideration.

	landscape design, fences, site design, and other architectural elements.	Commission	
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Comment [RDM3]: Add to Housing Element?

How we plan ahead...

Introduction

In the Land Use Element, existing growth and land use patterns are researched and analyzed in order to guide the Town through the 20-year planning horizon established by the comprehensive plan. Even though the plan is required to be updated every five years, the 20-year planning horizon sets a standard for casting visionary goals and objectives, as well as sound projections. Analysis of the current land use patterns are conducted by developing existing and future land use maps. These maps are created to show any predicted changes, within the Town.

Town Character

The planning process identified four major points that define the character of Sullivan's Island. These are:

- Informality
- Openness of the landscape
- Residential and family oriented in scale and nature
- Small commercial area as a community focus.

The importance of the informality of the Town has long been recognized by residents as well as Town officials. Some homes have a subtle landscape that utilizes native vegetation and wildflowers. The streetscape is informal, and there are only a few roads with curbs and sidewalks. In many areas of the Island, houses are set informally on large lots. In some areas, houses do not line up along a common setback.

Related to this informality is the openness of the landscape on the Island. Many yards do not have tall hedges or tall fences common in some other island communities. The Island exhibits a park-like appearance with expansive views and openness. In the past, the Sullivan's Island's landscape has been characterized by large expanses of spring and summer wildflowers on both public and private land. This feature added substantially to the concept of Sullivan's Island's special sense of place and informality.

Sullivan's Island features a strong residential character. The Island's activities and mainly single-family housing create a family-oriented



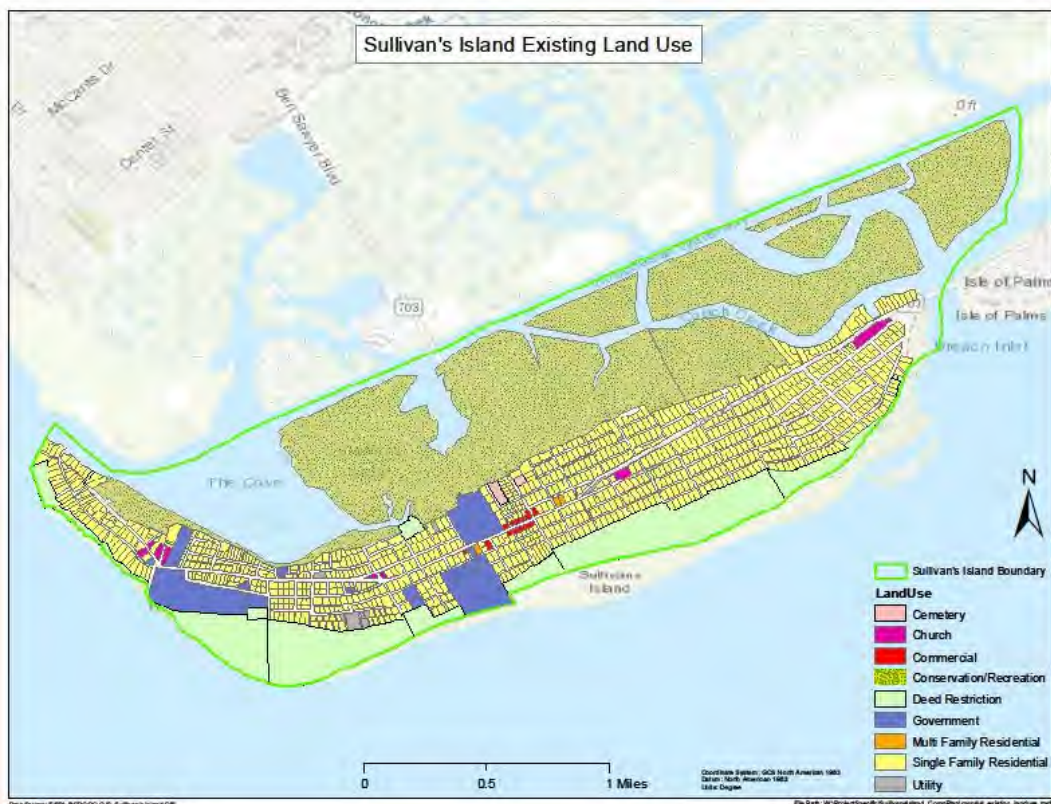
SOURCE: CHARLESTON MAGAZINE

atmosphere. The small commercial district is built at a pedestrian scale that does not diminish the residential atmosphere of the Island. In addition, Sullivan's Island has protected itself from the development of hotels, including bed and breakfast businesses that would detract from the residential nature of the Island.

The small commercial district and the adjacent Sullivan's Island Community Park acts as a primary community focus. The commercial area is centrally located near the Ben Sawyer Bridge entrance to the Island. The Sullivan's Island Community Park is the location for many community events, as well as a nice recreational facility where residents can come together and visit with each other.

Land Use

Existing Land Use



Since its transition from a military base to a residential island community more than sixty years ago, the evolution of Sullivan's Island's various land uses have changed very little. The current existing land uses on the Island include (in alphabetical order): cemetery, church, commercial, conservation, conservation/recreation, deed restriction, government, multifamily residential,

single-family residential and utility. Below is a breakdown of the land uses and what constitutes each use:

Cemetery: There are two properties on Sullivan's Island that are cemeteries.

Church: Land that is used for religious activities, including a sanctuary and parish hall. Additionally, new churches are only allowed as a RS district special exception, per the Town Zoning Ordinance.

Commercial: Commercial property is land designated for office, retail or service businesses in the defined Community Commercial District (CCD). These uses continue to be restricted mainly to the business district located on Middle Street, between Station 20 ½ and Station 22 ½. The CCD consists of two Community Commercial Overlay Districts (1 & 2) that benefit Sullivan's Island by: (1) recognizing the unique nature of particular areas in the CCD; (2) allows the Town to be very specific with regard to construction, design and other criteria; (3) clearly differentiate the areas from the balance of the Island with regard to subdivision and development.

Conservation: Town marsh that cannot be improved and should be maintained in its natural state.

Recreation/Conservation: Recognizes limited use of land for recreational purposes (i.e. docks where otherwise permitted by applicable laws and regulations), but otherwise envisions long-term preservation of the land without commercial activity or subdivision, with minimal impact on the view corridor. This land use pertains to both marsh and ocean front areas (RC1 and RC2).

Deed Restriction: Property owned by the Town of Sullivan's Island and is subject to conservation easement.

Institutional/Government: Institutional/government property covers a broad range of government and public uses.

Single-Family Residential: Residential land uses are defined as locations intended for occupants to live together as a single house-keeping unit. Single-family residential property is defined as one residentially zoned parcel with no more than one dwelling unit.

Multifamily Residential: Multifamily residential land use is defined as more than one dwelling unit located in the same building or structure as a non-conforming use.

Utility: Property that is classified as utility is property with infrastructure uses on it. These include power substations and water.

More information pertaining to these terms can be found within the [Town's Zoning Ordinances](#).

“Provide a zoning designation for Town-owned, non-residential property, as in front of Poe Library, Battery Gadsden, and maybe Stith Park, that provides for public areas to include non-profit fundraising, etc. with Town permit.”

– Anonymous resident (providing feedback at the November Open House)

In order to form the Existing Land Use Map, percentages of land used are determined in order to give a clear idea on how the Island is developing. Table 6.1 shows the breakdown, by percentage, of how much each land use takes up. The percentages have been compared with the 2013 Comprehensive Plan update below. Overall, the majority of the land uses experienced little to no growth. There were only two land uses that experienced decreases, which include government/institutional and vacant. Part of this decrease was under the government/institutional land use because of the Town’s sale of six (6) RS properties in the past five years.

Figure 6.1: Land Use by Percent (2018)

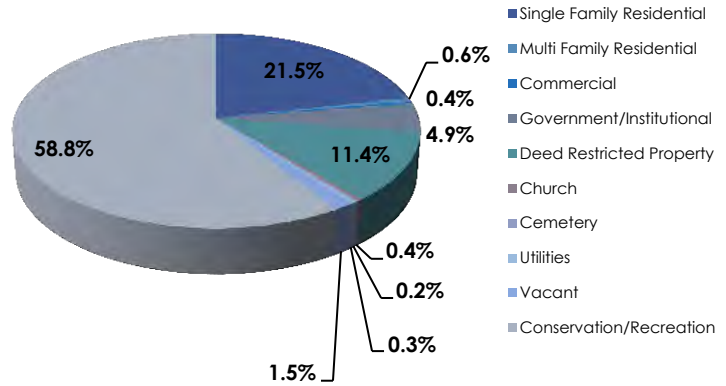


Table 6.1: Land Use by Percent

	2013	2018	% Change
Single Family Residential	21.4%	21.5%	0.5%
Multifamily Residential	0.6%	0.6%	0.0%
Commercial	0.3%	0.4%	33.3%
Government/Institutional	5.0%	4.9%	-2.0%
Deed Restricted Property	11.4%	11.4%	0.0%
Church	0.4%	0.4%	0.0%
Cemetery	0.1%	0.2%	100.0%
Utilities	0.3%	0.3%	0.0%
Vacant	1.6%	1.5%	-6.3%
Conservation/Recreation	58.8%	58.8%	0.0%

Commercial District

The commercial land uses of the Town are relegated to a small area on the Island. This area, which runs along Middle Street, consists of commercial businesses and office space primarily for the benefit of Sullivan's Island residents.

In 2008, the Town of Sullivan's Island and a team of consultants (Seamon Whiteside + Associates, LS3P Associates Ltd, and Kimley-Horn and Associates, Inc.) drafted and adopted the *Sullivan's Island Master Plan: Community Commercial District*. As stated in the plan, the final goal statement is to "develop a master plan that promotes sustainable commercial activity while protecting the safety of residents and visitors, minimizing the impact of that activity on the surrounding residential neighborhoods and retaining the vernacular of island architecture."

As a result of the planning process, the plan proposed recommendations for the commercial district. These included:

- Create a Commercial Area Overlay Zone District
- Allow parking on one side of I'On Street only
- Resident/Guest parking permits only on I'On, Jasper, Atlantic, and Myrtle after 8 p.m. (or other reasonable time)
- Consider cabaret ordinance similar to the City of Charleston
- Require shared parking provisions for off-street parking at office/retail businesses
- Institute a "Livability Court" to handle issues of litter, lack of maintenance, etc.
- Develop guidelines for commercial parking, lot subdivision, height, massing and scale, and setbacks with Overlay District
- Modify split zoning to allow parking to support existing businesses while limiting expansion of current commercial uses
- Explore options for increasing police presence/code enforcement in the commercial area

The master plan was set up to be a "conceptual design study," which means that the design is very "broad brush" and all concepts would be subject to further design exploration at a later time. However, the master plan does reflect, in a purely illustrative manner, how the main tenets of design approach could be achieved.

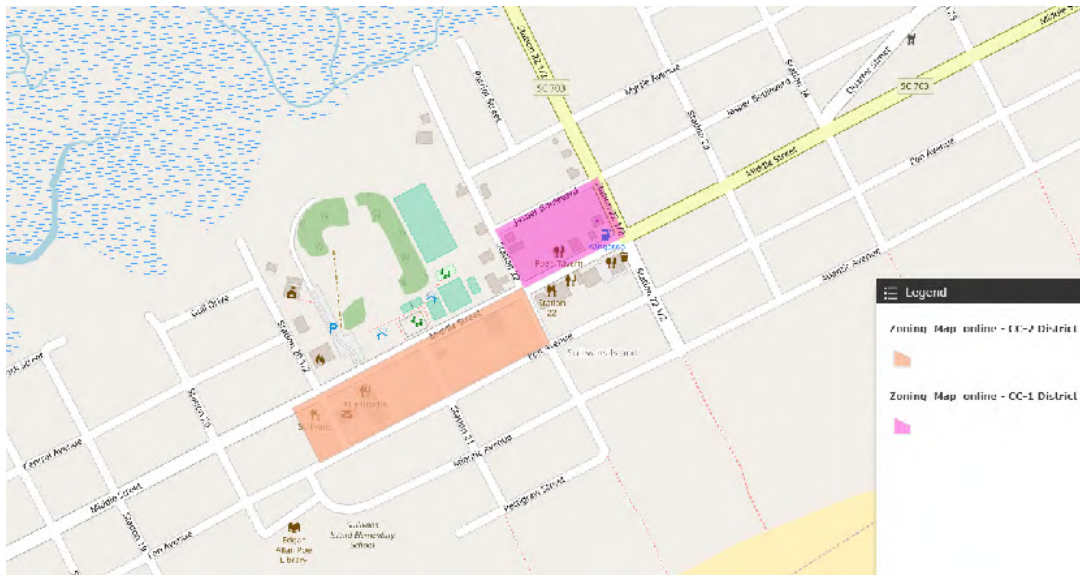


For more detailed information, the CCD plan is available on the Town's website.

Community Commercial Overlay Districts (CCOL)

As a result from the recommendations from the Commercial District Master Plan, two Community Commercial Overlay districts were created. An overlay district is a regulatory tool that creates a special zoning district, which identifies special regulations and guidelines that are applied in addition to or above and beyond those in the underlying base zoning district(s). Where differences in regulations exist between base zones and the overlay zones, the regulations on the overlay zone prevail.

CCOLs #1 and #2 has a defined area along Jasper Boulevard and Middle Street, between the blocks of Station 22 ½ and 2019 Middle Street. CCOL #1 consists of lots between Middle Street and Jasper Boulevard, from Station 22 ½ to Station 22. CCOL #2 consists of lots between I'On Avenue and Middle Street from Station 22-2019 Middles Street (currently Sullivan's Restaurant and other businesses) to 2120 Middle Street.



Residential District

The Town is a residential island as most of the houses are single-family dwellings, despite the potential resort nature of the Island, there is an increasing year-round population living in the houses on the Island. In an effort to preserve the residential character of the Town, the Residential District (RS) uses are limited to the following:

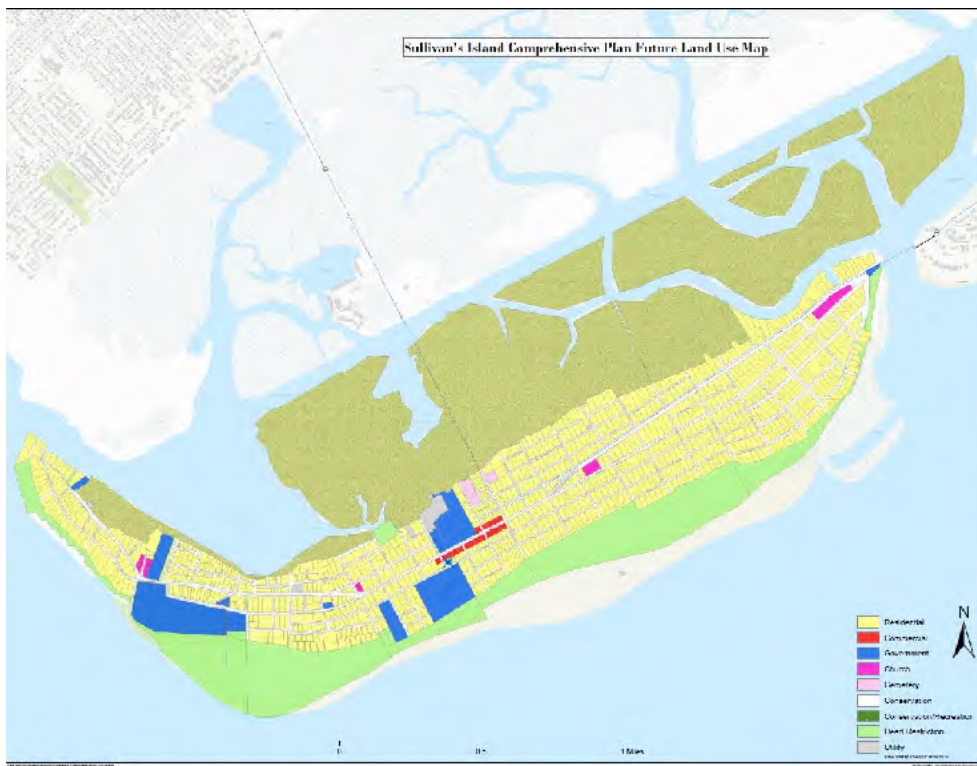
- One single-family detached dwelling (other than manufactured homes such as trailers and mobile homes or industrialized facilities) per lot
- Publicly-owned facility or land
- Non-commercial horticulture or agriculture, but not including the keeping of poultry or animals other than for family use or as ordinary pets.

- Customary home occupation
- Accessory uses such as garages or tool sheds area allowed as a conditional use
- Churches, private kindergartens, public utility substations are allowed as a special exception in the Residential District
- Rental of rooms is not allowed in either the residential or commercial zoning districts

Given the layers of history that cover the Island, there are various structures that still remain within the Residential District, such as old churches or fortifications. Some of these have been adaptively reused for housing or other types of spaces. In 2004, a review of the Zoning Ordinance led to the creation of historic preservation overlay districts to protect properties that have been determined to be architecturally, archeologically, culturally and historically significant to the Town.

Future Land Use

Given the Island's desired character and geographical constraints, existing land uses for the foreseeable future will undergo incremental and small changes, as are necessary. Therefore, the Future Land Use map (below), illustrates a continuation of the established land uses set forth in the previous comprehensive plan.



Land Use and Development Standards

Zoning Ordinance

The Sullivan's Island Zoning Ordinance, last amended August, 15, 2017, aims to provide "a comfortable home at the beach, safe and friendly, where individuality and diversity are celebrated, neighborhoods are respected, island resources are appreciated, history intertwined, and families and neighbors seek to thrive." This ordinance was a result of a substantial process of public involvement during 2002-2004, in response to residents' growing concerns over the increasing amount of residential construction that was incompatible in scale and mass with existing island development. The Town's original ordinance was enacted in 1977.

Changes to the Zoning Ordinance occur as needed through a public process. One future change that should be examined is adding a zoning classification for Government uses that preserve and protect the historical institutions on the island.

Parking Plan/Ordinance

In an effort to promote public safety for Island residents and visitors alike, the Town of Sullivan's Island created a new Parking Plan. This newly enacted plan allows vehicular parking on only one side of the street, which will allow a clear and unobstructed path to homes and beach access for emergency vehicles. The fine for violating the rule is \$50.

Historic District Overlays

In 2003, the Town of Sullivan's Island established three (3) historic overlay districts in the Town. The three districts are: Moultrieville Historic District, Sullivan's Island Historic District and the Atlanticville Historic District. As previously mentioned in the Residential Section, these three distinct, separate areas comply with the Zoning Ordinance defining the district as, "architecturally, archaeologically, culturally, or historically significant to the Town of Sullivan's Island." Keeping oversight of the district is the Design Review Board, which guides new construction, alteration, demolition, moving and removal of structures within the historic overlay districts.



Land Use Goals and Objectives

The purpose of Sullivan’s Island land use planning efforts is to ensure that the Town maintains its small-town character and controls the land uses currently present on the Island, as well as maintain future growth. The following objective and policies are a guiding framework to achieve these ends:

Land Use Goals:			
	Objectives	Responsible Parties	Timeframe
<i>Land Use Policy 1: Preserve the single-family residential character of the Island</i>			
	P1.1 Keep housing density low through maintaining half-acre lot sizes and other regulations	Town Council; Planning Commission	Ongoing
	P1.2 Continue to prohibit multifamily development	Town Council; Planning Commission	Ongoing
	P1.3 Continue to control the short-term rental market <u>Any appetite to create a second short-term rental market designation (i.e. keep long-term rentals min 6 or 12 month consecutive, and, designate rentals over 28 days but less than 6 or 12 months as short-term rental 2 (ST-2)?</u> -against altering shorter term rentals because it would it could potentially allow more	Town Council; Town Administration	Ongoing
<i>Land Use Policy 2: Protect and preserve the integrity of the historic elements of the Island</i>			
	P2.1 Continue to support Design Review Board oversight of the historic overlay districts, other historic structures and, through Town ordinances, protect historic properties on the Island.	Town Council; Town Administration	Ongoing
	P2.2 Encourage research and documentation of historic structures and pursue National Historic Designation when appropriate. <u>Is P2.1 supposed to address need to “pursue pulling historically contributing structures, perhaps those gaining NH designation, into one of 3 Town historic overlays” (getting extra land development/zoning controls over properties?)</u>	Town Administration	Ongoing
<i>Land Use Policy 3: Preserve and maintain the eclectic nature of the Island architecture</i>			
	P3.1 Continue to implement policies and encourage building options that prevent demolition of structures that contribute to the historic fabric and	Town Council; Town Administration; Design	Ongoing

	eclectic sense of place.	Review Board	
	P3.2 Encourage training and certification of board members and staff involved with historic review.	Town Council; Town Administration	Ongoing
	P3.3 Explore advantages of tax incentives in historic preservation efforts.	Town Council; Town Administration	Ongoing
	P3.4 Review the demolition criteria used by the Design Review Board to ensure homes being demolished are not contributory to the eclectic nature of the Island, specifically as to size, era and styles of home, including homes not currently protected by historic designation.	Town Council; Town Administration; Design Review Board	Ongoing
<i>Land Use Policy 4: Balance the viability of the commercial district with the residential nature of the Island.</i>			
	P4.1 Support the implementation of a Master Community Commercial District Plan that addresses concerns such as on-street parking, street trees, design, landscaping, site placement of structures and parking.	Town Council; Town Administration; Planning Commission	Ongoing
<i>Land Use Policy 5: Discourage loss of historic commercial structures not located within the commercial district due to inability to use the structures because of zoning restrictions and maintenance requirements.</i>			
	P5.1 Investigate methods to allow and encourage adaptive reuse of historic commercial structures not located within the commercial district. <i>This is a reference to heading off potential demolition by neglect trend, right?</i>	Town Council; Town Administration; Planning Commission	Ongoing
<i>Land Use Policy 6: Enhance and increase public and protected open space whenever possible.</i>			
	P6.1 Encourage the transformation of Town-owned property into public protected open space.	Town Council; Town Administration	Ongoing
	P6.2 Investigate protection, such as a conservation easement, on the designated conservation recreation space.	Town Council; Town Administration	Ongoing
<i>Land Use Policy 7: Address neighborhood and community design concerns regarding sense of place on the Island.</i>			
	P7.1 Establish a task force that will revise land use regulations by review of the existing Zoning Ordinance to ensure that future construction is respectful of the Island's traditional mass, height, scale, proportionality to lot size and neighborhood compatibility.	Town Council; Planning Commission	Ongoing
	P7.2 Conduct an evaluation of residential design guidelines to ensure consistency with the Island's open and informal character as it relates to	Town Council; Town Administration; Planning	Ongoing

Comment [JH1]: What is this? Let's be more specific (i.e. what is historic in years?) Should 60 years be the new threshold for being considered historic? HC

Good point. The National Register of Historic Places states that generally, the subject property should be at least 50 years old.

Comment [JH2]: Do we still want to encourage adaptive reuse after the 2014 discussion regarding adaptive reuse? HC

Unaware of the 2014 discussion. This discussion should certainly be taken into consideration.

	landscape design, fences, site design, and other architectural elements.	Commission	
--	--	------------	--

Comment [RDM3]: Add to Housing Element?

DRAFT



NATURAL RESOURCES ELEMENT

Town of Sullivan's Island
Comprehensive Plan Steering Committee
May 9, 2018

<https://bcdcog.com/2018-comprehensive-plan/>

Natural Resources Element

Public Comments – Survey & open house (November 8, 2017)

- “consider science on rising sea levels and ask what strategies could be employed to offer resilience to residents and the Island in the face of rising sea levels.”
- “The Station 16 Nature trail is great! We need more so we can further enjoy the forest.”
- “Explore protection of the Protected Land Trust area – add teeth to the penalties – plant 2 trees for every 1 tree illegally removed. The value of the protected land should be in public knowledge via regular publication, etc. No new residents – especially front beach should be without awareness of this valuable asset. Nor should they be without knowledge of their Property lines.”
- “Is it possible to apply for grants to re-nourish the beach? Perhaps special tax districts.”
- Continue with the development of the Proposed Management Plan for the Town of Sullivan’s. Proceed with implementing the plan for Management of Transition Zone Within the Sullivan’s Island Protected Land established by Town Council”

Major Changes from 2013 Plan

- More detail on barrier island characteristics
- Tree preservation
- Wildlife and endangered species
- Soils, hydrology, geology (few changes)
- Plans, policies and initiatives
- Conservation easements
- Resiliency and sea level rise

Natural Resources Element

Committee changes to Proposed Draft

- See highlighted sections

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

Natural Resources Policy 1: The Town will ensure local ordinances, administrative policies and plans preserve these natural resources.

Strategies	Responsible Parties	Timeframe
NR1.1 Identify existing public accesses needing constructed walkovers that include appropriate access and parking for handicapped visitors. Pursue funding through gifts and grants to construct and maintain beach accesses.	Town Administration Town Council	Ongoing
NR1.2 Inventory and evaluate each beach access to determine ways to limit damage and mitigate environmental impacts.	Town Administration Town Council	Ongoing
NR1.3 Town should install and maintain sufficient and appropriate signs at beach accesses to inform visitors of ordinances that protect natural dunes and beach resources	Town Administration Town Council	Ongoing
NR1.4 Continue to provide for adequate animal waste, refuse and recycling resources at beach access paths.	Town Administration Town Council	Ongoing
NR1.5 Update the Town's Beachfront Management Plan. Incorporate a program to stabilize, maintain and enlarge the dunes. Enforce ordinances pertaining to walking or climbing on the dunes.	Town Administration Town Council	Ongoing

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

Natural Resources Policy 2: *The Town recognizes the need to protect the areas of the Island vulnerable to ~~flooding and erosion and sea level rise~~ that may jeopardize public infrastructure and private property.*

Strategies	Responsible Parties	Timeframe
NR2.1 Identify and pursue funding sources, including but not limited to public and private grants	Town Administration Town Council	Ongoing
NR2.2 Determine if "best practices" to control erosion are being utilized and, if not, seek to have best practices identified and implemented	Planning Commission Town Council	Short-term
NR2.3 Determine if current actions or conditions are exacerbating the erosion problem and, if so, seek methods to mitigate the erosion problem	Planning Commission Town Council	Ongoing
NR2.4 Consider creation of a comprehensive sea level adaptation and resilience plan	Town Council Planning Commission Town Administration	Ongoing
NR2.5 Collaborate with SCDOT, Charleston County, and DHEC-OCRM to establish and improve stormwater drainage island-wide and improvements of all marsh outfalls. Where appropriate, use Town staff to facilitate and implement all improvement projects.	Town Council Town Administration	Ongoing

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

Natural Resources Policy 3: ~~Complete the Sullivan's Island Accreted Land Management Plan with the broadest possible community participation and input.~~ *The Town will identify and implement strategies that create and enhance green spaces and passive parks within the community.*

	Strategies	Responsible Parties	Timeframe
	NR3.1 Complete the Sullivan's Island Accreted Land Management Plan with the broadest possible community participation and input.	Town Council, Town Administration	Ongoing
	NR3.2 Consider other opportunities for "pocket" parks, scenic overlooks and other passive recreational areas. Preserve public access to all natural resources community-wide	Town Council, Town Administration	Ongoing
	NR3.3 Continue to encourage conservation easements and conservation easement structures	Town Council, Town Administration	Ongoing

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

Natural Resources Policy 4 Encourage the use of native vegetation and protection of existing trees on public and private property.		
Strategies	Responsible Parties	Timeframe
NR4.1 Maintain existing ordinances to maximize the opportunities for the use of native vegetation.	Tree Commission Town Council Town Administration	Ongoing
NR4.2 Continue to set an example by planting native plants in public areas.	Planning Commission Town Council	Ongoing
NR4.3 Review and update, as required, the existing tree protection ordinance.	Tree Commission Town Council Town Administration	Ongoing
NR4.4 Consider adopting policies and programs to keep the Tree City USA designation	Tree Commission Town Council Administration	Ongoing

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

Natural Resources Policy 5		Continue to recognize that the marshes, beaches and waterways on, and adjacent to the Island, are critical habitats that require special protection	
Strategies		Responsible Parties	Timeframe
NR5.1	Continue supporting efforts to protect these areas, not only for the wildlife habitat that exists there but also for the enjoyment and safety of the residents of the Town.	Town Council	Short-term
NR5.2	Continue to participate in the ocean water quality monitoring program	Planning Commission Town Council	Mid-term
NR5.3	Continue to participate in the ocean and marsh water quality monitoring program	Town Council	Short-term
NR5.3	Continue partnership with Charleston County to ensure full compliance with NPDES Phase II requirements and take any other steps necessary for timely permitting of stormwater systems.	Town Council Town Administration	Ongoing
NR5.3	Continue to encourage the use of pervious surfaces on private and public lands where hardstand is required. with all public and private development.	Town Council Town Administration	Ongoing

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

<i>Natural Resources Policy 6 The Town recognizes that Sullivan's Island is a major nesting and hatching site for migratory sea turtles and birds, and thus special protection efforts are required.</i>			
	Strategies	Responsible Parties	Timeframe
	NR6.1 The Town will continue to enforce existing ordinances that will support the protection of seasonal turtle nesting and seabird nesting areas.	Town Council	Short-term
	NR6.2 Encourage and support community participation to protect turtle and seabird habitats.	Planning Commission Town Council	Mid-term
<i>Natural Resources Policy 7 Monitor silting in the waterways on or adjacent to the Island and determine what if any actions should be taken to preserve the waterways.</i>			
	Strategies	Responsible Parties	Timeframe
	NR7.1 Recognize the reality that the silting in, in recent years, of waterways on the marsh side of the Island, specifically Cove Creek, has dramatically accelerated and take action to see the creek and marsh are preserved as a vital habitat for birds and other marine life and a resource to be used and enjoyed by Island residents and other visitors to the Island.	Town Council Town Administration	Ongoing
	NR7.2 Explore potential grant and other funding options (ie TIF) to accomplish regular, reliable, effective dredging of the Intercoastal Waterway, Cove Creek and other waterway areas.	Town Council Town Administration	Ongoing

Goal: Protect all of the Island's natural resources, including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.

Natural Resources Policy 9 (SLR) and king tides.

Sullivan's Island must be prepared to adapt to the effects of sea level rise

Strategies	Responsible Parties	Timeframe
<p>NR9.1 Coordinate with the Charleston Resilience Network, DHEC-OCRM, the City of Charleston, Sea Grant Consortium, NOAA, and other public and private organizations to consider policies that encourage resiliency towards the impacts of flooding and high water.</p>	<p>Town Council Town Administration</p>	<p>Ongoing</p>
<p>NR9.2 Continue participation in FEMA's Community Rating System (CRS) to reduce flood risk on Sullivan's Island and decrease flood insurance costs. Collaborate with the DHEC-OCRM working group.</p>	<p>Town Council Town Administration</p>	<p>Ongoing</p>
<p>NR9.3 Consider a comprehensive sea level rise adaptation strategy that explains high water impacts and identifies a goal, needs, and strategies to ensure Sullivan's Island is resilient to flooding and high-water impacts in the future.</p>	<p>Town Council Town Administration</p>	<p>Ongoing</p>
<p>NR9.4 Ensure Comprehensive Plan SLR adaptation strategies and any future resilience and SLR adaptation plan corresponds with all state and county plans. Ensure goals and strategies are updated and tracked to improve eligibility for state and federal grant opportunities.</p>	<p>Town Council Town Administration</p>	<p>Ongoing</p>

Timeline

January

- Vision Statement and Guiding Principals
- Presentation of OLD Goals & Objectives (Pop. and Comm. Facilities)

February (approve Vision Statement)

- **Population**
- Presentation of OLD Goals & Objectives (for Housing and Cultural Res.)

March (approve previous month elements w/goals and objectives)

- **Community Facilities**
- **Housing**
- Presentation of OLD Goals & Objectives (for Economic and Trans)

April (approve previous month elements w/goals and objectives)

- **Cultural Resources**
- **Economic**
- **Transportation**
- Presentation of OLD Goals & Objectives (for Land Use and Natural Resources)

May (approve previous month elements w/goals and objectives)

- **Land Use**
- **Natural Resources**
- Presentation of OLD Goals & Objectives (for Priority Investment)

June (approve Priority Investment & Goals & Objectives)“

- **Priority Investments**

NATURAL RESOURCES ELEMENT

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How we sustain...

How we sustain...

Introduction

The term natural resource refers to living and non-living things that exist independently from human intervention. Residents of Sullivan's Island have long held that recognizing and preserving its rich diversity of natural resources is one of the central components of developing the Town's Comprehensive Plan.

This element will describe not only the Island's physical and natural characteristics, but also consider various environmental challenges of life on a barrier island. Additionally, this element will strive to develop a policy framework to ensure future development on the Island remains sustainable and resilient in the face of impending adverse environmental conditions. Achieving this goal will require a multifaceted planning effort between community stakeholders and Town elected officials with collaboration of the Town's administration.

In developing the goals and objectives for the Natural Resources element, sustainability and resiliency were two key concepts used by the Planning Commission and Steering Committee.

These terms are broadly defined as...

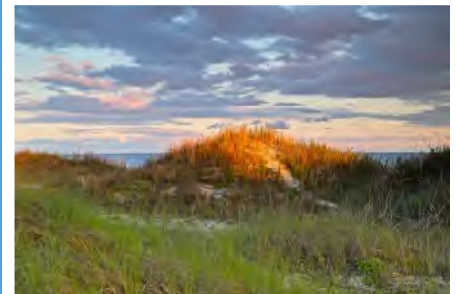
Sustainability "meeting the needs of the present without compromising the ability of future generations to meet their own needs."¹

~*Our Common Future*

Community Resilience "the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events."²

~*Urban Land Institute*

By maintaining the core values of sustainability and community resilience, the goals and objectives of this plan can help in preparing Sullivan's Island when facing future storm events and the stark realities of sea-level rise.



Scenes of Sullivan's Island

-Photos Courtesy of Mark Howard

¹ Brundtland Report Commission in 1987

² Urban Land Institute: Building the Resilient City: <https://uli.org/wp-content/uploads/ULI-Documents/BuildingtheResilientCity.pdf>

Barrier Island Characteristics

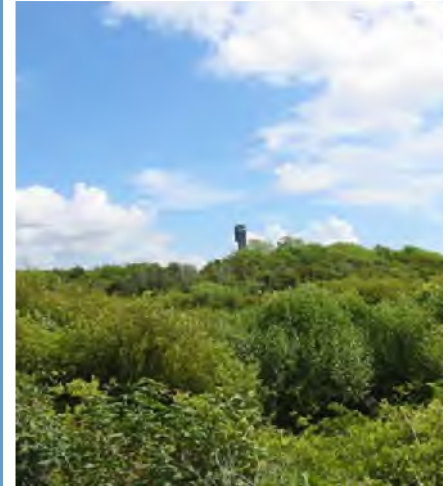
Sullivan's Island is a 3.8-mile-long barrier island located in the outer coastal plain, a geographically unique feature of the southeastern coastline. As a barrier island, it maintains an unusual orientation with most of its southern shoreline facing the Atlantic Ocean and its northern shoreline facing the Intercoastal waterway and saltwater marsh.

In geographic terms, the Island is rather young, having formed within the past 5,000 years.³ Sullivan's Island is characterized by a beach and dune ridge system to its southern side, and tidal marsh along its northern side. There are approximately 190 acres of Town owned property that divides the residential areas of the island from the active beaches that is most commonly referred to as the "accreted" or "protected" land.

When comparing Sullivan's Island to other barrier islands in Charleston County, we see that Sullivan's Island has a unique orientation from east to west instead of north to south. It is because of this unusual orientation that the Island has accumulated sand and has grown seaward along most of its shoreline. In contrast, Folly Beach, Isle of Palms and Edisto Island have experienced higher rates of erosion along their eastern facing beaches. The underlying process responsible for Sullivan's Island's accretion is largely a result of sediment bypassing the Isle of Palms across Breach Inlet. This creates a resultant sand flow atypical of other coastal barrier islands. More sand reaches Sullivan's Island along its east end than leaves at the west end. Some sand trapping by the Charleston Harbor north jetty may have contributed to accretion a century ago, however, this structure is currently buried and nonfunctional, no longer contributing to the build-up of sand bars along the Island's beaches.⁴

The eastern end of the Island at Breach Inlet is experiencing regular rates of erosion while the middle and western end is stable and experiences regular accretion.⁵ The southwest facing end of the island is stabilized by the engineered structures, which would be experiencing erosion if the structures and accreted lands were not in place.

A comparison of Figure 1.1 (mosaiced aerial photographs from 1941) and Figure 1.2 (2017 aerial photographs) show the Island's dramatic accretion over the past 75 years. The two highlighted areas in yellow show the western end (from Station 16 to Station 18) and central portion (from the Station 20 to Station 28) which in some areas has accreted more than 1,500 feet seaward.⁶



The effect of salt spray in on the Town's Protected land



Eastern end of Sullivan's Island at Breach Inlet



Western end: View of Star of the West and the Protected Land

³ Accreted Land Management Plan, Town of Sullivan's Island (2010): 24.

⁴ Accreted Land Management Plan, Town of Sullivan's Island (2010): 41-42.

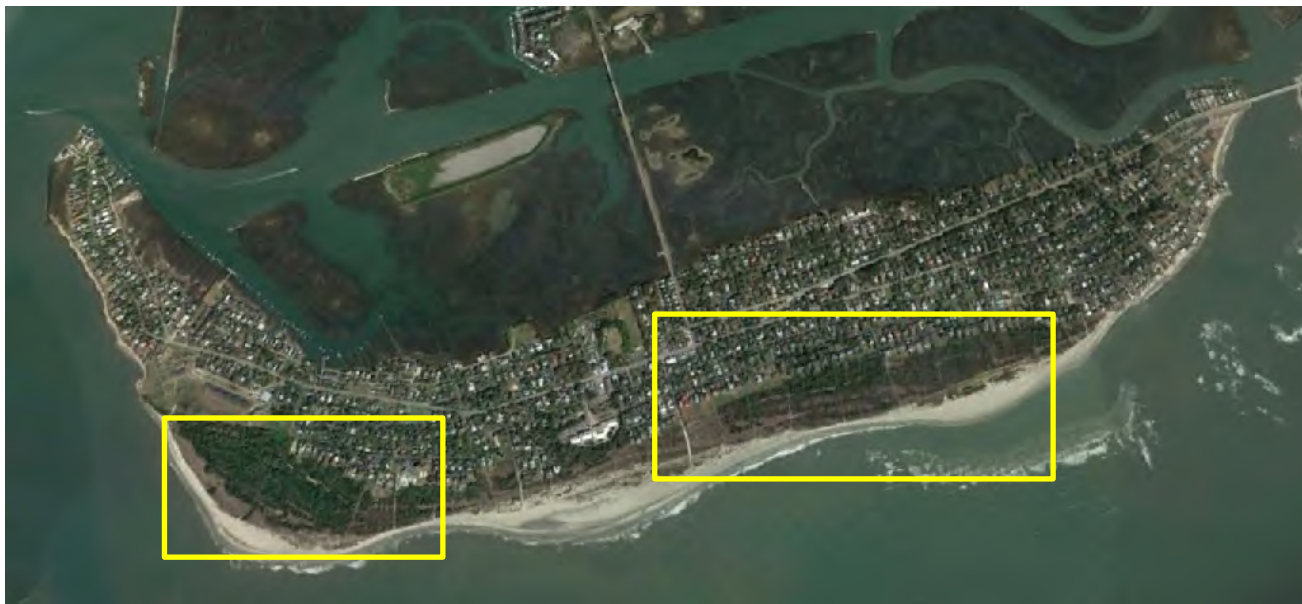
⁵ Norm Levine, "Sullivan's Island Maritime Forest Conservation Study," College of Charleston 2006: 23.

⁶ Accreted Land Management Plan, Town of Sullivan's Island (2010): 3.

Figure 1.1: Sullivan’s Island, 1941 Mosaic⁷



Figure 1.2: 2017 Aerial Photograph: Google Earth⁸



⁷ Norm Levine, “Sullivan’s Island Maritime Forest Conservation Study,” College of Charleston 2006: 6.

⁸ Google Earth: 2017

This sand accretion has led to the formation of new dune ridges, which have gained significant elevation. Vegetation in this area is naturally adapted to poor soils, salt spray, and occasional flooding which is followed over time by a succession of land stabilization and other pioneering plant species. This dune development has ultimately given way to a maritime forest. A diverse set of grass, shrub, and forest communities coexist within the accreted land and interior areas of Sullivan's Island, providing ecological niches attractive to a wide range of plant and animal species.⁹

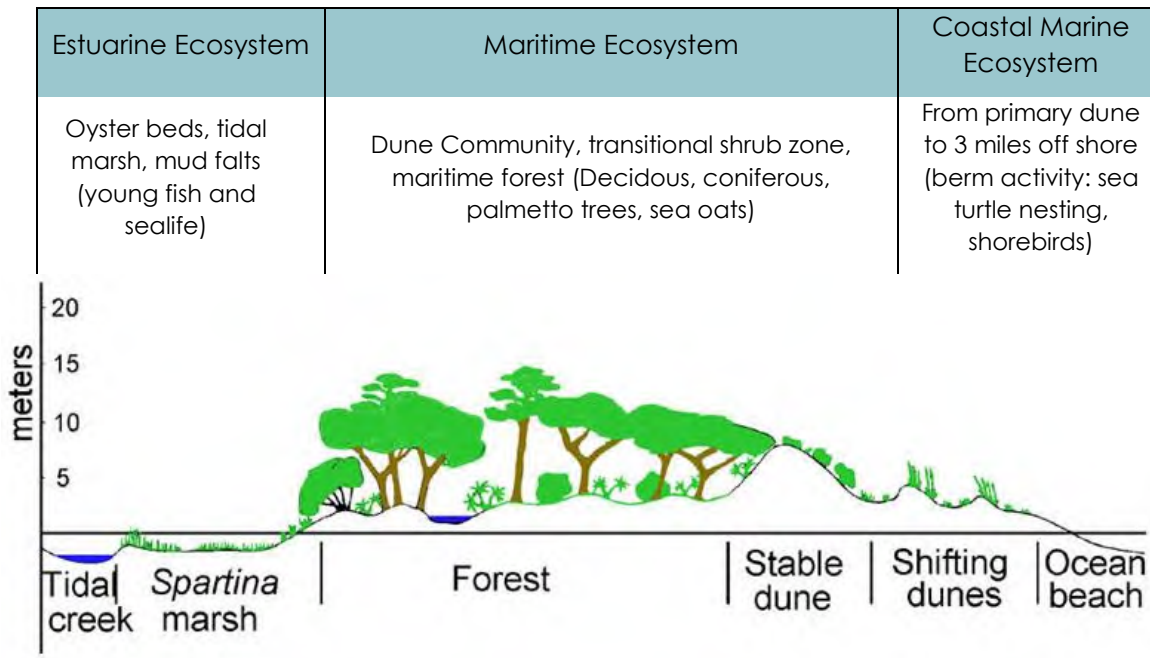
Beach and Marsh Ecological Habitats

Sullivan's Island has three distinct ecosystems, which are described below: (1) coastal marine, (2) maritime, and (3) estuarine.¹⁰ Distinct geological, biological and botanical features characterize each ecosystem type. Factors such as wind, salt, tides, currents and soil nutrients control their geographic position across the Island. Figure 1.3 is a hypothetical transect of a barrier island and how each ecosystem transitions by physical characteristics and its vegetative and wildlife activity.



A green heron pictured above. A variety of wildlife can be found in the Maritime Ecosystem, which constitutes most of Sullivan's Island.

Figure 1.3: Cross-section of a Barrier Island Transect



⁹ Norm Levine, "Sullivan's Island Maritime Forest Conservation Study," College of Charleston 2006: 33.

¹⁰ Accreted Land Management Plan, Town of Sullivan's Island (2010): 44.

Coastal Marine Ecosystem

The coastal marine ecosystem extends from the seaward side of the primary dune to 3 miles offshore. Due to the physical factors characterizing this harsh environment (winds, currents, salt, tides, etc.), this area supports few terrestrial plants. Although this habitat provides a harsh environment for terrestrial vegetation, many faunal species are known to inhabit the area. Sea turtles use the dune area for nesting while feeding and mating occurs offshore. In addition, many birds (such as terns, skimmers, ducks, pelicans, gulls, and shorebirds) exploit the area's food resources.¹¹

Maritime Ecosystem

The Island's residential areas and protected land occurs within this ecosystem and is bound by the primary oceanfront sand dune (primary dune) on the seaward side and extends to the mean high-tide mark on the bay side of the Island. The center of a barrier island is usually characterized by the presence of a dense forest made up of a mixture of pine, palmetto, and deciduous trees. As a result of tree preservation and residential property development, a mature urban forest has developed over the years.

The maritime ecosystem on Sullivan's Island type is generally divided into three distinct sections: dune community, transitional shrub zone, and maritime forest, which each contain a range of flora and fauna species.¹²

- The dune community is found from the primary dune to the transitional shrub zone. This area typically contains a variety of salt and wind tolerant species such as dune grasses and forbs, which account for the majority of primary productivity in this area. Avian species are the main fauna found here.
- The transitional shrub zone occurs between the dune community and the maritime forest. Due to the vegetation structure in this community, a high number of avian, mammalian and herpetofauna species can be found. Specific vegetation communities documented at Sullivan's Island within the transitional shrub zone are maritime shrubland and manipulated maritime shrubland.



Primary Dune



Wax myrtles within the transitional shrub zone of the Town's Protected Land.



Freshwater wetlands are scattered throughout the maritime forest.

¹¹ Accreted Land Management Plan, Town of Sullivan's Island (2010): 45.

¹² U.S. Fish and Wildlife Service; Endangered Species. <https://www.fws.gov/endangered/species/us-species.html>

- The maritime forest occurs inland of the transitional shrub zone and extends across the barrier island to the transitional shrub zone which fronts the marsh.¹³

Estuarine Ecosystem

This ecosystem occurs between the upper reaches of saltwater influence on the bay side of the barrier island and the upper reaches of saltwater influence on the mainland.¹⁴ The importance of the back of the Island cannot be overlooked. Tidal salt marshes are very productive places, **however are often the most vulnerable to sea level rise**. They are the nursery for young fish and sea life, they assimilate runoff from the upland, and they assist in controlling flooding. These marshes accomplish these services due to the vegetation such as Spartina grasses and the micro-organisms that grow in these marshes.¹⁵

Wildlife and Vegetation

The Island serves as a critical habitat to a variety of animal and plant species. The flora of the Island has adapted physiologically to thrive under the harsh conditions. For example, many salt-tolerant plants possess small, waxy, flexible leaves to resist the damaging effects of salt spray and wind conditions. In addition, many grass species have the ability to produce asexually by means of rhizomes or root runners, which is a characteristic of the ubiquitous wax myrtle found throughout the Town protected land. This vegetation also serves to stabilize and trap sand in oceanfront dunes, particularly where dunes are fronted by a dry sand beach.

Tree Preservation

The Island's first tree preservation ordinance was created in the early 1990s following the catastrophic loss of trees during Hurricane Hugo. Its purpose was to preserve the natural landscape by enhancing tree mass and canopy area throughout Island. The tree preservation ordinance is codified in the Town's Zoning Ordinance and is regulated by the Tree Commission and Town staff.

In addition to protecting their natural beauty, the ordinance protects trees to improve surface drainage and water quality and to prevent erosion, wind damage and to minimize flooding. Trees



Made famous by Edgar Allan Poe's short story, the "Gold Bug Tree" on Raven Drive is protected by the Town's Tree Preservation Ordinance.

Table 6.1

Common Name	Federal Status	State Status
Bald Eagle	Recovered	Recovered
Wood Stork	Endangered	Endangered
Kirtland's Warbler	Endangered	Endangered
Least Tern	Not Listed	Threatened
Wilson's Plover	Not Listed	Threatened
Piping Plover	Threatened	Threatened
Rafinesque's Big-eared Bat	Not Listed	Endangered
Red Knot	Threatened	Threatened
Kemp's Ridley Sea Turtle	Endangered	Endangered
Leatherback Sea Turtle	Endangered	Endangered
Loggerhead Sea Turtle	Threatened	Threatened
Green Sea Turtle	Threatened	Threatened
Shortnose Sturgeon	Endangered	Endangered

Animal and plant species having federal and state legal protection

¹³ Accreted Land Management Plan, Town of Sullivan's Island (2010): 46.
¹⁴ Norm Levine, "Sullivan's Island Maritime Forest Conservation Study," College of Charleston 2006: 33.
¹⁵ Accreted Land Management Plan, Town of Sullivan's Island (2010): 46.

also serve to improve air quality, lessen air pollution, protect wildlife, and help to sustain property values island-wide.¹⁶

Birds

The dispersed wetlands and marshes provide a transition area which is an ideal habitat for resting and roosting for many types of birds. Near-arctic migrant birds also use Sullivan's Island as a resting and feeding point during their annual migration routes.

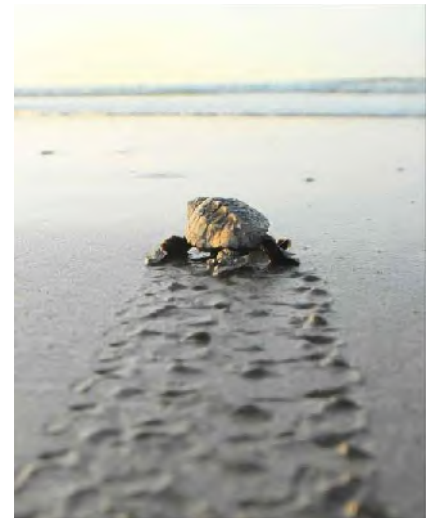
Table 6.2 presents a list of animal and plant species that have state or federal legal protection and are known to reside on Sullivan's Island.¹⁷

Sea Turtles

Sullivan's Island is a nesting ground to a varying population of sea turtles each year. The nesting statistics in Table 6.2 was generated from a centralized database which works to aggregate data from multiple sea turtle conservation organizations. Additionally, the *South Carolina Department of Natural Resources Marine Turtle Conservation Program* provides research, monitoring and education for all sea turtles along the coast. The Town also supports the "Turtle Team," a dedicated group of Sullivan's Island and Isle of Palms volunteers who monitor the critical habitat and nesting of loggerhead turtles. They regularly provide advocacy services and outreach materials along with nesting information on their website.

	2010	2011	2012	2013	2014	2015	2016	2017
Number of Nests	2	4	6	3	6	5	15	8
In Situ (not moved)	0	3	1	1	2	3	5	3
Nest Relocated	2	1	5	2	4	2	10	5
False Crawls	1	---	3	9	9	5	18	3
Estimated Eggs	155	335	730	408	642	252	1305	865
Eggs Lost	2	3	7	3	7	99	23	9
Hatched Eggs	113	201	657	377	602	---	901	766
Emerged Hatchlings	108	190	616	350	576	---	825	738

Table 6.2 Sea Turtle Nesting on Sullivan's Island 2010-2017¹⁸



Turtle Team members of Sullivan's Island and IOP partner with the SC DNR biologists to track and document annual nesting trends.

¹⁶ Town of Sullivan's Island Zoning Ordinance, "Tree Commission" Article 17. 80.

¹⁷ U.S. Fish and Wildlife Service; Endangered Species. <https://www.fws.gov/endangered/species/us-species.html>

¹⁸ South Carolina Department of Natural Resources: Marine Turtle Conservation Program, 2018 http://www.dnr.sc.gov/news/2017/may/may1_turtle.html

Physiography and Topography

Geology

There are three types of geologic deposits located in the Town of Sullivan's Island (Map 6.1). The newest deposit is artificial fill covering the center of the Island, made of sand and clay sand that is of diverse origin and ranges in depth from 3 to 10 feet. The original deposit of the Island is beach and barrier island sands from the Holocene period made of quartz sand, which is very light gray, fine grained, well-sorted, shelly, and abundant with minerals. The deposits are less than ten thousand years old, and those on the surface are probably less than one thousand years old and range in depth from zero to 35 feet.

Portions of the Island are made up of tidal marsh deposits from the Holocene period, which are composed of clay and soft, organically-rich sand colored gray to black, dominated primarily by the mineral kaolinite. The deposits are zero to 10 feet thick and support marsh grasses. These deposits are most likely less than five thousand years old.

Soils

Soil information given here is not for use on a site-specific basis and should only be used for planning on a community scale. Soil suitability assessments for individual sites require an independent, detailed soil survey.

While Sullivan's Island's soils are mainly classified as tidal marsh association soils, six different soil series have been identified. Since artificial fill is the predominant geologic formation on the island, 'made land' is the dominant soil series. Made land consists of variable amounts of sand, silt, and clay, or mixtures of these materials. New suitability assessments are important for this series because of the wide range of variation that can occur over time.

A small area located on the south side of the Island is characterized by the Capers series. Formed on tidal flats that are inundated with sea water once or more each month, these soils are very poorly drained and are saturated with salt water. The Capers series is well-suited for wildlife, and normally supports marsh grasses, but if drained, the soil becomes very acidic and can no longer support plant life. Coastal beaches and dune land make up the shoreline and dunes of Sullivan's Island. The shoreline areas are nearly-level, fine sand beaches that are flooded twice daily by the tidal currents. The dunes formed by the wind are mounded areas of dry, loose, very pale brown to yellow sand. The sand is dry and there is sparse protective ground cover, leading to wind erosion of the dunes. The loss of this sand is a constant problem on the South Carolina coast, especially on the eastern end of Sullivan's Island, which is battling natural erosional forces while the western end continues to accrete. In an effort to combat wind erosion, wind breaks of American Beach Grass and Sea Oats can be used to stabilize the dunes. Because of their instability, coastal beaches and dune lands are generally poorly suited for most kinds of development, though much of this area on Sullivan's Island is zoned for recreation and conservation (RC-1) in an effort to restrict development in the area. Across most of the accreted lands, healthy dune ecosystems thrive with the bare sandy dunes beginning at the ocean and progressing to hearty vegetation such as wax myrtles that grow as large as many trees.

The eastern portion of the Island is made up of the Crevasse-Dawhoo soil complex. These soils occupy a ridge-and-trough landscape bordering the Atlantic Ocean. Crevasse soils are excessively-drained, sandy soils along the length of the long, narrow ridges, while Dawhoo soils are very poorly-drained, sandy soils that occupy the troughs between the ridges. Both soils have rapid infiltration and permeability, low

available water capacity, low organic matter content, and low levels of inherent fertility, with the main difference between these two soils being that the Dawhoo soil has a high-water table for at least part of the year. Though much of this area is forested, neither of these soils is rich in nutrients, nor does either support cultivation.

The soil in the marsh is classified as tidal marsh, soft. This is a miscellaneous land type occurring on the coast and along tidal streams and rivers between the ocean and the uplands. It is in broad, level tidal flats that are covered by 6 to 24 inches of salt water at high tide.



Map 6.1: Sullivan's Island Soils and Assets¹⁹

¹⁹ "Connected Land Conservation Plan of the East Cooper Region of South Carolina." (2016). 23-34.

Water Quality (Hydrology)

Sullivan's Island is located in the Ashley-Cooper Watershed, which is part of the larger Catawba-Santee Watershed Basin.

The Intracoastal Waterway (ICW) passes behind Sullivan's Island, and maintains views of The Cove, Cove Creek, Inlet Creek, Swinton Creek, and Conch Creek. The Cove and Cove Creek feed into the Charleston Harbor, while Inlet Creek, Swinton Creek, and Conch Creek drain into the Atlantic Ocean through Breach Inlet. These creeks are all listed as shellfish harvestable waters (SFH). This is a designation given by the state that reflects the natural water quality and their level of protection.

Some of the waters surrounding Sullivan's Island are approved for shellfish harvesting, some offer restricted harvesting and some areas are closed to harvesting. SCDHEC regulates these areas depending on a host of factors pertaining to safety, seasonal conditions, and shellfish management. Current information on shellfish harvesting is available from [SCDHEC](#).

Urban runoff appears to have a significant impact on the lower portion of the watershed. A series of ditches carry stormwater directly into the ICW, together with spoil from containment areas, which discharge into the ICW and its tributaries (Conch Creek, Inlet Creek, and Swinton Creek) during storm events.

In order to implement a comprehensive and economical approach to prevent and control water resource impacts from non-point source pollution, the Town of Sullivan's Island in 2007 partnered with Charleston County and other local jurisdictions. This partnership focuses on water monitoring, developing best management practices, education, public participation and implementing solutions. The result of this program will ensure compliance with the Clean Water Act and provisions of the NPDES Phase II requirements for the Town.

Climate and Precipitation

Sullivan's Island has a year-round temperate climate that appeals to both visitors and residents alike. Monthly average temperatures range from 89 degrees (F) in July to 48 degrees F in January. The Town's average annual precipitation (rainfall) is 49.79 inches, however, for several years extreme rain events have skewed this figure.

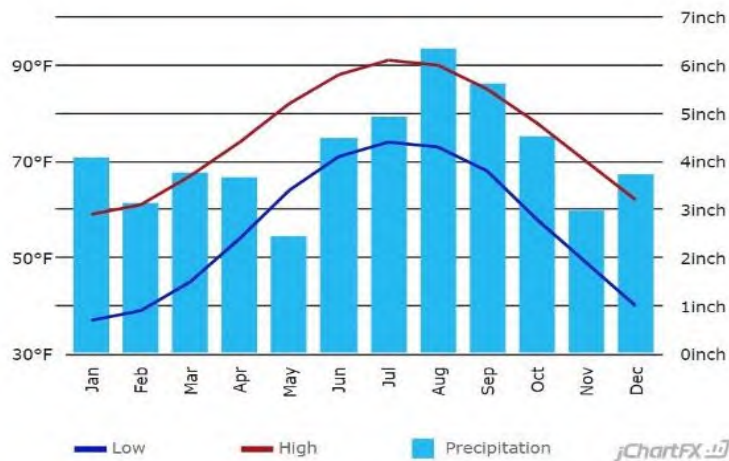


Table 6.3

Because of the Island's proximity to the Atlantic Ocean, average monthly temperatures are mild in the summer and winter. Table 6.3 illustrates the highest rate of rain fall corresponds with the hottest summer months.²⁰

Previous Plans, Policies and Initiatives

Over the years the Town has developed multiple standalone plans that are intended to provide long-range and short-range policy guidance for the protection and preservation of natural resources, conservation, public access and Town owned property. Some of these plans are listed below and are accessible on the Town's website at <http://www.sullivanisland-sc.com/government/CURRENTTOWNPROJECTS.aspx>.

Town Protected Land Management Plan

A comprehensive land management plan was initiated by Town Council in 2007 to address the ongoing protection and maintenance of the 190 acres of oceanfront property (accreted land) located seaward of the Town's residential district. This property has been protected by deed restrictions since 1991 when the Low Country Open Land Trust established prohibitions to commercial or residential development on the property.

This acreage includes beach, dunes, interdunal wetlands, shrublands, early successional maritime forest and maritime hardwood depression. Town Council regularly conducts public meetings to develop the long-term strategy for maintenance of the Town's protected land. Recent modifications to the plan have included a strategy for active maintenance of vegetation within 100-foot wide transition zones between the residential areas and most densely vegetated areas of the property.

TOSI Local Comprehensive Beach Management Plan

In accordance with the South Carolina Beachfront Management Act, the Town has maintained a local comprehensive beach management plan since 1992. This plan provides information relating to current beach profile data, structure inventory, and establishes a beach assess management strategy. The plan also outlines that zoning regulations, stormwater drainage and land use planning patterns are consistent with the Act. This Plan is reviewed and approved by SCDHEC-OCRM.

Green Infrastructure and Connected Conservation Plan

In 2016 the Town collaborated with the East Cooper Land Trust and area municipalities to adopt a "green infrastructure" plan that identifies and maps connected natural systems, wildlife habitats, and passive recreational assets of the greater Charleston area. The goal of the plan was to identify core habitats (sensitive tracts of land) by using an ArcGIS data model, which was



The Sullivan's Island Nature Trail was constructed in 2015 and is part of the management strategy for the Town's Protected Land.



Windswept native live oaks of the Town's Protected Land are protected by way of zoning and deed restrictions.

20

then used to encourage connectivity of various regional pedestrian trails and local recreational assets. An online GIS web application was **created** for use by the individual municipalities. <http://eastcooperland.org/conserved-land/#map>

The maps created as part of the *Green Infrastructure and Connected Conservation Plan* have been used in the production of this Comprehensive Plan and are also used on a regular basis for day-to-day planning by Town staff.

Conservation Easements and Deed Restricted Properties

Conservation Easements on Single-family Residential Properties

In October of 2015, the Planning Commission developed a Zoning Ordinance regulation that proactively incentivizes shoreline retreat from beachfront development by encouraging the removal of single-family homes from buildable Island properties. Approvable only as a special land use exception, the “*conservation easement uses and structures*” ordinance recognizes that all properties on Sullivan’s Island are part of a dynamic and ever-changing barrier island environment, which are predisposed to erosion, loss of critical dune vegetation and potential structural damage.

By creating the new ordinance, the Town has provided an incentive to preserve environmentally sensitive properties zoned for residential purposes. A property owner (grantor) now may now establish a permanent conservation easement on a beachfront parcel while still maintaining certain recreational uses and structures upon the property. These non-residential uses may include construction of a beach-side cabana, or other recreational use structure, with an agreement to retain and protect the natural or open-space values of the property. Specific development standards were created to ensure a low-scale and low-impact structure is built on the property. Currently, there is one conservation easement structure located on Marshall Boulevard.

Sullivan’s Island is the first beachfront municipality or community ever to provide this type of incentive to actively retreat from the beachfront area.

Trolley Bridge and Dump Properties

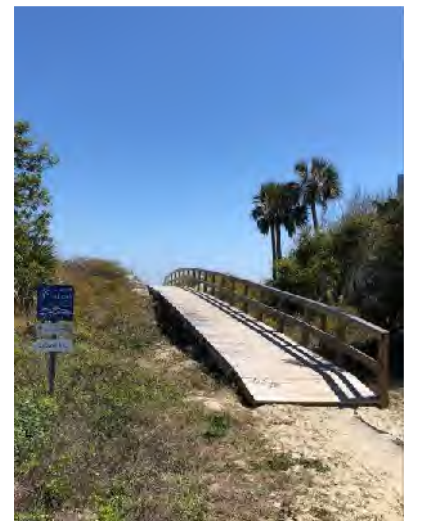
Both the trolley bridge and dump properties are held in a perpetual conservation easement through the East Cooper Land Trust. Both areas are open to the public as a scenic overlook and kayak and canoe launching site. Detailed pictures and access maps can be found at the East Cooper Land Trust Website at <http://eastcooperland.org/conserved-land/>.

Town Protected (Accreted) Land

Described above in the Protected Land Management Plan.



Conservation easement structure on Marshall Boulevard



Beach access is key feature of the Town’s Local Comprehensive Beach Management Plan

Resilience Planning and Adaptation to Sea-level Rise

Since the adoption of the 2008 Comprehensive Plan, Sullivan's Island has taken great strides in promoting sustainable planning initiatives as a means of protecting its natural resources and the quality of life of residents and visitors. The Town began considering local impacts of sea level rise in the summer of 2010 by participating in a series of discussions with the intent of identifying management challenges associated with adopting hazard mitigation policy. Although few local policy decisions were made, these discussions brought together a collaborative group of organizations and Town decision makers, including National Oceanic and Atmospheric Administration (NOAA), SC Sea Grant, the Social Environmental Research Institute (SERI).

This section of the Comprehensive Plan is intended to revive a robust public engagement process to develop a series of adaptation actions that will produce two overarching goals; **1)** develop mitigation strategies to prepare for future hazards associated with sea level rise; and, **2)** align these strategies with existing local and regional plans to enable eligibility of future federal and state grant opportunities for large scale capital improvement projects (drainage, water/ sewer, renourishment).

It is important to note that these recommendations and actions are not intended to produce a complete vulnerability and risk assessment for Sullivan's Island, or contain an exhaustive list of all potential risks. Instead, it is geared toward providing an initial strategy and guiding framework for producing a future comprehensive sea-level rise adaptation plan. These recommendations will also provide a planning projection for accommodating a 2-foot sea level rise within the next fifty years and provide a process for prioritizing these mitigation actions.

RESILIENCY PLANNING...

- *Collaboration*
- *Coordination*
- *Community engagement*

Sustainability- "meeting the needs of the present without compromising the ability of future generations to meet their own needs."¹

~*Our Common Future*

Community Resilience- "the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events."¹

~*Urban Land Institute*

The first step in the development of this framework is to conduct a preliminary mapping assessment to identify "focus areas," or those areas most vulnerable to localized flooding related to king tides. The NOAA "Sea Level Rise Viewer" application is capable of depicting 2-foot sea-level rise within the Town's limits. Secondly, a prioritized list of adaptation actions will encourage ongoing stormwater drainage infrastructure improvements and regulatory compliance. Finally, a list of goals, objectives and policies will highlight suggestions for future development of a sea level rise adaptation plan and collaboration among regional agencies and community stakeholders.

Local Challenges

Sea level rise can impact not only our homes and private property but also local streets, public utilities, beaches, wetlands, and community facilities, potentially increasing risk to the public's health and safety. Since 2015, there have been several major weather events that have caused severe and prolonged island-wide flooding. Each of these events has served as a stark reminder of the low-lying topography of the Island and the imminent dangers of sea-level rise. These events include the extreme rain event from the remnants of Hurricane Juquin in October 2015; Hurricane Matthew in September 2016; and, Hurricane Irma in October 2017.

Damage assessments conducted after these events estimated private property impacts of just under \$3 million dollars. In addition to the impacts of private property owners, local roads, stormwater infrastructure, water and sewer utilities and public open spaces were affected. Some of these impacts included:

- o Tidal backup of stormwater drainage systems in low-lying areas; saltwater intrusion and flooding of neighborhoods, roads and yards;
- o Increased coastal erosion in the Marshall Boulevard area, however major erosion in all areas of the active beach;
- o Hurricane Irma's peak wind speeds occurred at high tide creating saltwater intrusion on the western portion of the Island from Station 18 and Thompson Avenue to Star of the

OCTOBER 2015 RAIN EVENT (HURRICANE JUAQUIN)



HURRICANE MATTHEW 2016



HURRICANE IRMA 2017



- West. Massive amounts of debris washed across the western 1/3 of the Island;
- o Roads flooded and were impassable in areas most severely affected.

Sullivan’s Island Needs Assessment

Figure 6.4 reflects NOAA’s observed record from 1920 to 2015 (orange bars), and the projected exponential increase of these changes (blue bars) through 2100.²¹

According to the City of Charleston Sea Level Rise Strategy, tidal flooding in the Charleston area averaged two (2) times per year in the 1970s and increased to eleven (11) times per year in the 2000s. This number has increased exponentially to 50 tidal floods in 2015. The NOAA report also describes that these observed and projected increases of nuisance flooding, are reliable indicators of local sea level rise.

NOAA also makes the startling projection that up to 180 tidal floods per year will occur within the Charleston area by 2045. Additionally, long-range scientific predictions indicate that “sea level may rise 2 to 7 feet in the next 100 years.”²²

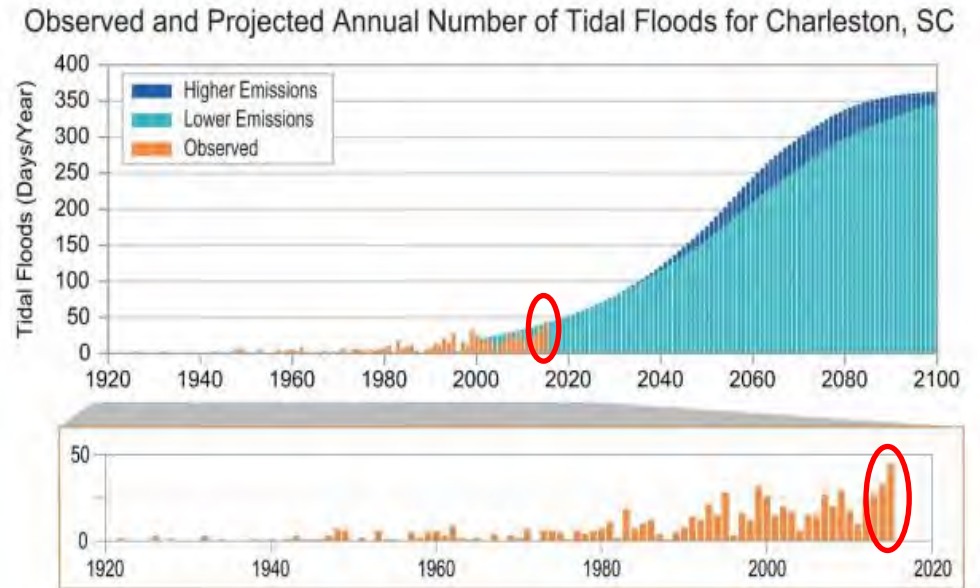


Figure 6.4

²¹ Folly Beach Sea Level Rise Adaptation Report, March 2017: 6. NOAA, Sea Level Rise and Nuisance Flood Frequency Changes around the US, Technical Report NOS CO-OPS 073. 2014

²² “City of Charleston Sea Level Rise Strategy” (2015): 1-5.

Historic homes were commonly elevated to avoid rising waters from king tides and storm events.



New construction is required to be elevated over the flood elevation.

Mapping Sea Level Rise

It is clear that sea level rise increases the potential damage to stormwater systems, the wastewater system, public streets and private property. Sullivan's Island maintains an average upland elevation of 7.9 feet (mean high water) with multiple manmade earthen structures that exceed well over 30 feet in height, according to current GIS topographical data.²³ Because of the Island's low-lying elevation and its proximity to the ocean and marsh, homes and nonresidential structures of the Island have historically adapted to the rising waters of major storm events and king tides by elevating their first stories 2 to 4 feet from natural grade as depicted in the photographs to the left.

Today, FEMA base flood elevation mapping regulations require homes to be elevated, on average, 6 to 10 feet from grade. However, a sole reliance on elevating homes cannot be the Town's only strategy for addressing sea level rise.

A multifaceted approach should be taken when preparing for long-term rising sea levels inclusive of home design (regulatory compliance), public and private stormwater improvements, and right-of-way improvements.

²³ FEMA's CRS Data: Provided in GIS format: <https://www.fema.gov/faq-details/GIS-Data>

NOAA's Sea level Rise Viewer application allows the depiction of various scenarios of rising water levels, which can then be used to conduct a visual assessment of areas on the Island that may be impacted by king tides and localized flooding.

Figure 6.5 shows a potential tidal flood impact under a 2-foot sea level rise. This model would severely damage private properties, public roads and pump stations on all marsh and fronting streets and along Marshall Boulevard. Severe saltwater inundation would also be felt across much of the western portion of the Island; from Middle Street to Osceola Avenue, from Star of the West to Station 13.

Figure 6.5: 2' foot scenario



Adaptation Strategy

Building a resilience framework for Sullivan's Island should be coordinated, planned and integrated among all Town Departments and across other agencies, and communities in the region.²⁴ A multifaceted strategy should include the following adaptation actions for addressing rising waters:

- **Action 1:** Stormwater infrastructure improvements
- **Action 2:** Drainage outfall improvements
- **Action 3:** Regulatory compliance with SI Floodplain Ordinance
 - Residential stormwater plans (SWP)
 - Deed restrictions – Non-conversion Agreements
- **Action 4:** Outreach and community engagement (Community Rating System)

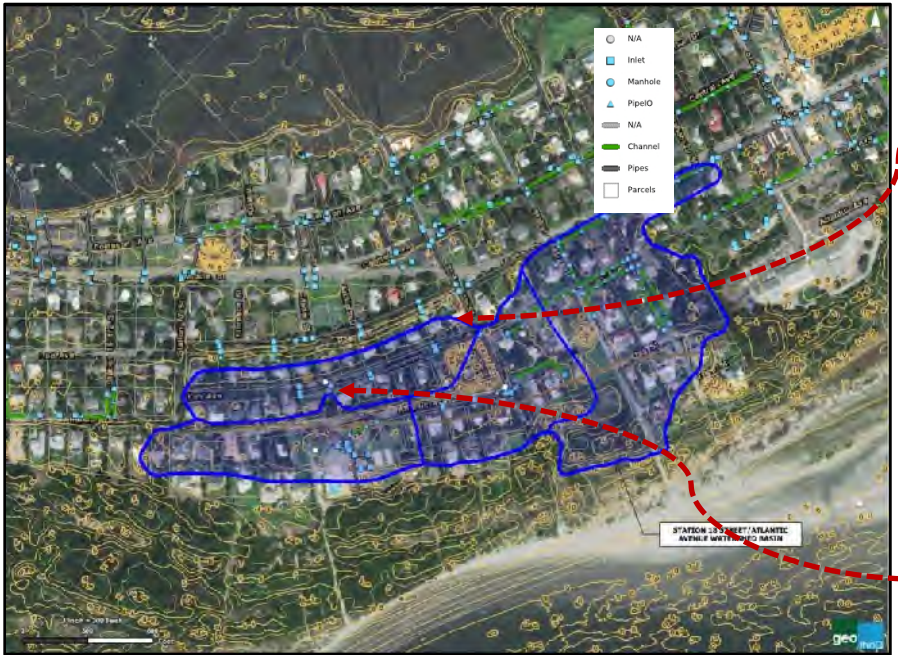
Action 1: Stormwater Infrastructure Improvements

One of most effective strategies for community resilience will involve investment and planning in physical infrastructure improvements. In the next fifty years the Town should commit to prioritizing stormwater drainage improvement projects to enhance drainage and protect against sea-level rise and flooding. Town has begun the process of identifying where these island-wide stormwater collection deficiencies are located by **consulting** with a local engineering firm. This civil engineering project is intended to identify critical areas of the Island that experience decreased stormwater drainage for lack of maintenance or a complete lack stormwater conveyance facilities. Major areas identified are the facilities and outfall of the Station 18 watershed basin and the Station 28 watershed basin.

²⁴ City of Charleston, Sea Level Rise Strategy December 2015

South Basin Improvement: Station 17 to 20 watershed: This project will study the available conveyance system from Station 17 to 20, and between Middle Street and Atlantic Avenue. Severe flooding frequently occurs between Atlantic Avenue and Middle Street during all major flooding events since 2015.

Map 6.1



North Basin Drainage Improvement: This project will capture the Station 28 ½ to Station 32 water shed, which falls between Middle Street and Marshall Boulevard. Severe flooding has occurred in this area for each of the above-mentioned storm events and very little drainage is currently available. Map 6.1 and 6.2 depict the major watershed areas of the Island, which is now being considered under FEMA grant.

Map 6.2



Action 2: Drainage Outfall Improvements:

Most of the Island's surface drainage has long relied upon the major outfalls adjacent to the marsh. The two major watershed basins drain water from highland areas through reinforced concrete pipes (RCP), open ditches and surface sheet-flow. The Town should encourage SCDOT and County to improve all pipes, ditches, and outfall junction devices to prevent leakages; and, retrofit pipes with backflow prevention devices to prevent the counter flow of stormwater drainage during king tides, storm surge and rising sea levels.



Map 6.3



Stormwater outfalls-

A damaged and cracked pipe on the right is located well below the water level creating problems with drainage.

Open ditches-

Unmaintained ditches can obstruct water flow and overall functionality of the storm drainage system.



Action 3: Enforcement of Local Regulations

Non-conversion Agreements: Another Town strategy for ensuring newly constructed projects remain in compliance with local regulations is through the mandated signing of non-conversion agreements prior to allowing use of a new building. This document serves as a deed restriction on the property that confirms no modifications or conversion of enclosed space will occur below the FEMA Base Flood Elev.

Stormwater plans: In 2016 the Town began requiring property-wide stormwater management plans for any new development proposing an impervious surface(s) of 625 square feet or more. Most new home construction projects and additions select from a variety of best management practices which may be designed as part of their overall building permit application. A professional civil engineer or registered landscape architect must certify these plans are constructed correctly and maintained.

Action 4: Community Outreach Strategies (Community Rating System)

In addition to taking action on Island-wide drainage projects, the Town participates in the National Flood Insurance Program (NFIP). As part of its longtime participation, the Town enforces regulations and building codes that require flood resistant construction and requirements for stormwater quality and control.

The Town has adopted a “freeboard” requirement that mandates all new structures and those considered as “substantial improvements” to be built an additional one foot above the designated base flood elevation (BFE). Nearly all of Sullivan’s Island is located within the floodplain or Special Flood Hazard Area (SFHA), so compliance with these standards is of the utmost importance. The Town is also a member of the NFIP Community Rating System (CRS). This program recognizes community outreach practices that make properties more resistant to flood damage and aware of the impacts of sea level rise. The Town recently received an improvement in its ISO flood class rating from a 6 to a 5. This class 5 rating lowers the cost of flood insurance for all citizens and businesses by 25%. In June 2016, the Federal Emergency Management Agency (FEMA) released a draft of the new FIRM data indicating substantial changes to the Island’s SFHAs. Town staff anticipates adoption of this new data in early 2019.

As described in the Charleston SLR Strategy, “Part of resilience is knowing one can’t plan for everything that may occur but instead being able to deal with and adapt to unexpected situations.” The above noted actions will improve the Town’s “response to, communication during, and management of flooding and related events to minimize service disruptions and to ensure public safety and quality of life. Resilience is not only about reacting to events but identifying how one can be ready.”²⁵

²⁵ City of Charleston, Sea Level Rise Strategy December 2015

Natural Resource Goals and Policies

As a low-lying barrier island, the Town of Sullivan’s Island faces many benefits and challenges involved with living in such a dynamic ecosystem. This element strives to retain and preserve the Island’s natural resources and also protect the community’s health and quality of life. As such, the Town has adopted the following goal, policies and strategies:

<p>1. Natural Resources Goal: In an effort to protect the dunes and the dune vegetation, best management practices should be employed. Protect all of the Island’s natural resources including dunes, dune vegetation, tree canopy and wildlife of front and back beaches through best management practices and public services.</p>			
<p><i>Natural Resources Policy 1: The Town will ensure local ordinances, administrative policies and plans preserve these natural resources.</i></p>			
	Strategies	Responsible Parties	Timeframe
	NR1.1 Identify existing public accesses needing constructed walkovers that include appropriate access and parking for handicapped visitors. Pursue funding through gifts and grants to construct and maintain beach accesses.	Town Administration Town Council	Ongoing
	NR1.2 Inventory and evaluate each beach access to determine ways to limit damage and mitigate environmental impacts.	Town Administration Town Council	Ongoing
	NR1.3 Town should install and maintain sufficient and appropriate signs at beach accesses to inform visitors of ordinances that protect natural dunes and beach resources	Town Administration Town Council	Ongoing
	NR1.4 Continue to provide for adequate animal waste, refuse and recycling resources at beach access paths.	Town Administration Town Council	Ongoing
	NR1.5 Update and Incorporate in the Town’s Beachfront Management Plan a program to stabilize, maintain and enlarge the dunes. Enforce ordinances pertaining to walking or climbing on the dunes.	Town Administration Town Council	Ongoing
<p><i>Natural Resources Policy 2: The Town recognizes the need to protect the areas of the Island vulnerable to flooding and erosion and sea-level rise that may jeopardize public infrastructure and private property.</i></p>			
	Strategies	Responsible Parties	Timeframe
	NR2.1 Identify and pursue funding sources, including but not limited to public and private grants	Town Administration Town Council	Ongoing

Natural Resources Element

	NR2.2 Determine if “best practices” to control erosion are being utilized and, if not, seek to have best practices identified and implemented	Planning Commission Town Council	Short-term
	NR2.3 Determine if current actions or conditions are exacerbating the erosion problem and, if so, seek methods to mitigate the erosion problem	Planning Commission Town Council	Ongoing
	NR2.4 Consider creation of a comprehensive sea level adaptation and resilience plan	Town Council Planning Commission Town Administration	Ongoing
	NR2.5 Collaborate with SCDOT, Charleston County, and DHEC-OCRM to establish and improve stormwater drainage improvements island-wide and improvements of all marsh outfalls. Where appropriate, use Town staff to facilitate and implement all improvement projects.	Town Council Town Administration	Ongoing
<p><i>Natural Resources Policy 3: Complete the Sullivan’s Island Accreted Land Management Plan with the broadest possible community participation and input. The Town will identify and implement strategies that create and enhance green spaces and passive parks within the community.</i></p>			
	Strategies	Responsible Parties	Timeframe
	NR3.1 Complete the Sullivan’s Island Accreted Land Management Plan with the broadest possible community participation and input.	Town Council, Town Administration	Ongoing
	NR3.2 Consider other opportunities for “pocket” parks, scenic overlooks and other passive recreational areas. Preserve public access to all natural resources community-wide	Town Council, Town Administration	Ongoing
	NR3.3 Continue to encourage conservation easements and conservation easement structures	Town Council, Town Administration	Ongoing
<p><i>Natural Resources Policy 4 Encourage the use of native vegetation and protection of existing trees on public and private property.</i></p>			
	Strategies	Responsible Parties	Timeframe
	NR4.1 Maintain existing ordinances to maximize the opportunities for the use of native vegetation.	Tree Commission Town Council Town Administration	Ongoing
	NR4.2 Continue to set an example by planting native plants in public areas.	Planning Commission Town Council	Ongoing
	NR4.3 Review and update, as required, the existing tree protection ordinance.	Tree Commission Town Council Town Administration	Ongoing

	NR4.4 Consider adopting policies and programs to keep the Tree City USA designation	Tree Commission Town Council Administration	Ongoing
<i>Natural Resources Policy 5 Continue to recognize that the marshes, beaches and waterways on and adjacent to the Island are critical habitats that require special protection</i>			
	Strategies	Responsible Parties	Timeframe
	NR5.1 Continue supporting efforts to protect these areas, not only for the wildlife habitat that exists there but also for the enjoyment and safety of the residents of the Town.	Town Council	Short-term
	NR5.2 Continue to participate in the ocean water quality monitoring program	Planning Commission Town Council	Mid-term
	NR5.3 Continue to participate in the ocean and marsh water quality monitoring program	Town Council	Short-term
	NR5.3 Continue partnership with Charleston County to ensure full compliance with NPDES Phase II requirements and take any other steps necessary for timely permitting of stormwater systems.	Town Council Town Administration	Ongoing
	NR5.3 Continue to encourage the use of pervious surfaces on private and public lands where hardstand is required. with all public and private development.	Town Council Town Administration	Ongoing
<i>Natural Resources Policy 6 The Town recognizes that Sullivan’s Island is a major nesting and hatching site for migratory sea turtles and birds, and thus special protection efforts are required.</i>			
	Strategies	Responsible Parties	Timeframe
	NR6.1 The Town will continue to enforce existing ordinances that will support the protection of seasonal turtle nesting and seabird nesting areas.	Town Council	Short-term
	NR6.2 Encourage and support community participation to protect turtle and seabird habitats.	Planning Commission Town Council	Mid-term
<i>Natural Resources Policy 7 Monitor silting in the waterways on or adjacent to the Island and determine what if any actions should be taken to preserve the waterways.</i>			
	Strategies	Responsible Parties	Timeframe
	NR7.1 Recognize the reality that the silting in, in recent years, of waterways on the marsh side of the Island, specifically Cove Creek, has dramatically accelerated and take action to see the	Town Council Town Administration	Ongoing

Natural Resources Element

	creek and marsh are preserved as a vital habitat for birds and other marine life and a resource to be used and enjoyed by Island residents and other visitors to the Island.		
	NR7.2 Explore potential grant and other funding options (ie TIF) to accomplish regular, reliable, effective dredging of the Intercoastal Waterway, Cove Creek and other waterway areas.	Town Council Town Administration	Ongoing
<i>Natural Resources Policy 8 Improve Island-wide mosquito abatement and educational outreach.</i>			
	Strategies	Responsible Parties	Timeframe
	NR8.1 Coordinate with County agencies to ensure regular, effective mosquito abatement treatment, and, useful public outreach to educate the general public on mosquito control.	Town Council Town Administration	Ongoing
<i>Natural Resources Policy 9 Sullivan’s Island must be prepared to adapt to the effects of sea level rise (SLR) and king tides.</i>			
	Strategies	Responsible Parties	Timeframe
	NR9.1 Coordinate with the Charleston Resilience Network, DHEC-OCRM, the City of Charleston, Sea Grant Consortium, NOAA, and other public and private organizations to consider policies that encourage resiliency towards the impacts of flooding and high water	Town Council Town Administration	Ongoing
	NR9.2 Continue participation in FEMA’s Community Rating System (CRS) to reduce flood risk on Sullivan’s Island and decrease flood insurance costs. Collaborate with the DHEC-OCRM working group	Town Council Town Administration	Ongoing
	NR9.3 Consider a comprehensive sea level rise adaptation strategy that explains high water impacts and identifies a goal, needs, and strategies to ensure Sullivan’s Island is resilient to flooding and high-water impacts in the future.	Town Council Town Administration	Ongoing
	NR9.4 Ensure Comprehensive Plan SLR adaptation strategies and any future resilience and SLR adaptation plan corresponds with all state and county plans. Ensure goals and strategies are updated and tracked to improve eligibility for state and federal grant opportunities.	Town Council Town Administration	Ongoing