

AGENDA

PLANNING/ PUBLIC WORKS COMMITTEE

2/4/2020

Teddie E. Pryor, Chairman
Henry E. Darby
Jenny Costa Honeycutt
Anna B. Johnson
Brantley Moody
Vic Rawl
Herb Sass
Dickie Schweers
Elliott Summey

AGENDA
PLANNING/PUBLIC WORKS COMMITTEE
February 4, 2020
6:30 PM

1. MINUTES OF NOVEMBER 21, 2019 - Request to Consider
2. COMPREHENSIVE PLAN – ADD RESILIENCE ELEMENT - Request to Consider
Tuten/Melocik
3. KIAWAH RIVER DEVELOPMENT AGREEMENT AND PD143-A - Request to Consider
Tuten/Melocik

1.

MINUTES

CHARLESTON COUNTY COUNCIL

MEMORANDUM

TO: Members of Planning/Public Works Committee

FROM: Kristen Salisbury, Clerk of Council

DATE: January 23, 2020

SUBJECT: Planning/Public Works Committee Minutes

At the Planning/Public Works Committee meeting of February 4, 2020, the draft minutes of the November 21, 2019, Planning/Public Works Committee meeting will be presented for approval.

2.

**COMPREHENSIVE
PLAN – ADD
RESILIENCE
ELEMENT**

Post & Courier

CHARLESTON COUNTY COUNCIL PUBLIC HEARING
Tuesday, January 21, 2020 at 6:30 PM

Charleston County Council will hold a public hearing at 6:30 pm on January 21, 2020, in County Council Chambers (second floor of Lonnie Hamilton, III Public Services Building, 4045 Bridge View Drive, N. Charleston, SC 29405) on a proposed amendment to the Comprehensive Plan to add a Resilience Element.

For more details, visit www.charlestoncounty.org or contact the Charleston County Planning Department at (843) 202-7200. This Public Notice is in accordance with Section 6-29-760 of the Code of Laws of South Carolina.

Kristen L. Salisbury
Clerk of Council

CHARLESTON COUNTY COMPREHENSIVE PLAN: PROPOSED AMENDMENTS TO INCORPORATE A RESILIENCE ELEMENT

- **Case History**
- **Presentation**
- **Resilience Element Draft**
- **Letter of Support**

Charleston County Comprehensive Plan: Proposed Amendments to Incorporate the Resilience Element

Case History

Planning Commission: June 10, 2019
Planning Commission: July 8, 2019
Planning Commission: October 14, 2019
Public Hearing: January 21, 2020
Planning and Public Works Committee Meeting: February 4, 2020
1st Reading: February 4, 2020
2nd Reading: February 25, 2020
3rd Reading: March 10, 2020

PROPOSED AMENDMENTS

These amendments are proposed to incorporate the Resilience Element into the Charleston County Comprehensive Plan as the eleventh element. The Resilience element has been recommended for approval both by the Resilience Committee and the Planning Commission. It implements Comprehensive Plan strategy number NR 19, which states “*Create a new element of this Plan that explains high water impacts and identifies a goal, needs, and strategies to ensure Charleston County is resilient to flooding and high water impacts in the future.*” This strategy was incorporated as part of the Comprehensive Plan Ten-Year Update adopted by County Council on October 9, 2018. The strategies and action items included in the proposed Element were coordinated with adjacent jurisdictions to promote resilience through enhanced planning and building practices, implementation of higher regulatory standards, and increased public awareness and educational efforts. A copy of the recommended Resilience Element is included in this packet.

HISTORY OF PROPOSED AMENDMENTS

The draft Resilience Element is the culmination of a multi-year effort by the Planning Commission to address flooding issues in Charleston County:

Late Summer 2018: The Planning Commission created a Resilience Committee made up of 20 community representatives including three Planning Commissioners members (Mr. Paulatos, Committee Chair, Mrs. Floyd, and Ms. Chavis); representatives from the City of North Charleston, City of Charleston, Town of Mt. Pleasant, and Town of James Island; County departmental representatives from Budgeting, Facilities, and Public Works/Stormwater; representatives from the fields of property management, real estate, engineering, and home building; and representatives from The Nature Conservancy, Coastal Conservation League, the Medical District; and a concerned citizen from Edisto Island.

September 2018 to May 2019: The Resilience Committee met monthly from September 2018 to May 2019. Presentations from different subject matter experts were given at each meeting. Some of the information presented included: case studies from the Netherlands, the City of Norfolk, VA, and the City of Ft. Lauderdale, FL; the Community Rating System program; County stormwater and related requirements and programs; County Emergency Management Preparedness; and municipal emergency management programs and efforts towards resilience. In addition to the subject matter presentations, drafts of the Element were developed, reviewed and commented on monthly, culminating in the final proposed Resilience Element, which was unanimously recommended by the Committee for approval at their May 14, 2019 meeting. All meetings were open to the public and were noticed in compliance with the Freedom of Information Act.

PUBLIC INPUT

Correspondence received is included in the packet.

CHARLESTON COUNTY RESILIENCE ELEMENT COMMITTEE MEETING: MAY 14, 2019

Recommendation: Approval of the proposed Resilience Element (vote: 13-0, with 7 absent).

PLANNING COMMISSION MEETING: JUNE 10, 2019

Recommendation: Work with Commissioner Warwick Jones to address his concerns regarding the element and present the updated version, along with the version recommended by the Resilience Element Committee, at the July 8 Planning Commission meeting.

Notifications:

661 notification letters were sent to individuals on the ZLDR/Comprehensive Plan Interested Parties List on May 24, 2019. Additionally, this request was noticed in the *Post & Courier* on May 24, 2019.

PLANNING COMMISSION MEETING: JULY 8, 2019

Recommendation: Approval of the version recommended by the Resilience Committee (6-0, with 3 absent)

Notifications:

661 notification letters were sent to individuals on the ZLDR/Comprehensive Plan Interested Parties List on June 21, 2019. Additionally, this request was noticed in the *Post & Courier* on June 21, 2019.

PLANNING COMMISSION MEETING: AUGUST 12, 2019

Request for Consideration: Commissioner Jones requested that the Planning Commission reconsider their July 8th vote to recommend approval of the version of the Resilience Element recommended by the Resilience Committee over the version that contained his proposed edits. None of the members who voted in favor of the July 8th meeting recommendation made any motions; therefore, the vote from the July 8, 2019 Planning Commission meeting stands.

PUBLIC HEARING: SEPTEMBER 24, 2019 (POSTPONED)

Following the July 8th Planning Commission recommendation of approval regarding the Resilience Element, staff scheduled and advertised the September 24th public hearing. However, that public hearing was postponed to a future date because, prior to the 3rd reading of the updated flood ordinance, the County received a great deal of pushback on some of the proposed revisions. This was after Planning Commission approved the Resilience Element, but before it went to Council, and because the two go hand in hand, Staff decided to review the Resilience Element again in light of concerns raised about the proposed flood ordinance. Staff incorporated a few minor edits, mostly grammatical and also incorporated sources to substantiate details in the Element. The revised Resilience Element was placed back on the October Planning Commission agenda.

Notifications:

661 notification letters were sent to individuals on the ZLDR/Comprehensive Plan Interested Parties List on August 23, 2019. Additionally, the request was noticed in the *Post & Courier* on August 23, 2019. On August 29, another ad ran in the *Post & Courier* notifying that the Public Hearing was postponed to a later date.

On August 27, 2019, 661 notification letters were sent to individuals on the ZLDR/Comprehensive Plan Interested Parties List informing that the Public Hearing was postponed.

The request was removed from the Post & Courier ad section before it ran on August 23, 2019.

PLANNING COMMISSION MEETING: OCTOBER 14, 2019

Recommendation: Approval of the version recommended by the Resilience Committee, with the edits made in preparation for the September 24th public hearing (addition of citations and clerical errors) (vote 8-0, with 1 absent).

Notifications:

661 notification letters were sent to individuals on the ZLDR/Comprehensive Plan Interested Parties List on September 27, 2019. Additionally, this request was noticed in the *Post & Courier* on September 27, 2019.

PUBLIC HEARING: JANUARY 21, 2020

Notifications:

661 notification letters were sent to individuals on the ZLDR/Comprehensive Plan Interested Parties List on December 16, 2019. Additionally, this request was noticed in the *Post & Courier* on December 20, 2019.

Public Input: A letter of support was received from Kelly and Pam Skinner of Wadmalaw.

Speakers: Three individuals spoke in support in support of the Resilience Element, including Jason Crowley and Betsy Laforce from the Coastal Conservation League, as well as Pete Paulatos of the Charleston County Planning Commission and Chair of the Resilience Committee.

Zoning &
Planning

RESILIENCE

Building
Inspections

Public
Works

RESILIENCE ELEMENT

County Council Public Hearing
January 21, 2020

RESILIENCE....

- **Defined:** The ability of a community to respond, adapt, and thrive under changing conditions, including, but not limited to, recurrent burdens and sudden disasters.
 - Efforts can be made to strengthen community resilience through different County departments, and in reference to different aspects of a community depending on the needs.
 - Because every community is different, strategies must be explored and investigated to find the perfect “suite” of tools that can help make a community more resilient to whatever issues they face.
- In reference to Charleston County’s ability to become a community more resilient to **flooding**, the first step is to adopt a new Comprehensive Plan Element, which will act as a **foundation** helping to guide the County in implementing ordinances and standards that will help make the community more resilient to the effects of flooding in the future.
- Interdepartmental coordination of efforts between **Zoning & Planning, Public Works, and Building Inspection Services** is essential.

CHARLESTON COUNTY COMPREHENSIVE PLAN

- Adopted by County Council by ordinance after extensive public outreach and public meetings.
 - Originally adopted on April 20, 1999.
 - Five-year reviews, 10-year updates, intermediate amendments.
- County has the authority to incorporate additional elements into the Plan as changing needs arise.
 - Charleston County adopted a 10th Element (Energy Element) in 2010.
- Last 10-Year Update was adopted in 2018.
 - Citizen input from the 2018 update resulted in **Strategy NR 19**: “Create a new element of this Plan that explains high water impacts and identifies a goal, needs, and strategies to ensure Charleston County is resilient to flooding and high water issues in the future.”

RESILIENCE ELEMENT TIMELINE

Sept. 2018: PC Resilience Committee began meeting (27 members; industry professionals, local government representatives, local interest groups)



Sept. 2018 – May 2019: Committee met monthly to hear from subject matter experts and draft the Element



May 14, 2019: Resilience Committee unanimously recommended the proposed Element to the PC



July 8, 2019: PC recommended approval (6-0 with 3 absent)



August 12, 2019: A PC member requested the PC reconsider their approval to include his proposed edits; no motion was made and the July 8 recommendation stood



October 14, 2019: PC recommended approval of the version recommended by the Resilience Committee, including clerical edits (8 – 0 with 1 absent)



November 21, 2019: Resilience update to Council (Planning, Building Inspections, Public Works)

RESILIENCE COMMITTEE MISSION

Create a Resilience Element for incorporation into the Charleston County Comprehensive Plan that explains high water impacts and other resilience related issues, is coordinated with the efforts of other jurisdictions, and identifies a goal, needs, and strategies to ensure Charleston County is resilient in the future.

Implements Comprehensive Plan strategy NR 19 (Charleston County Comprehensive Plan Ten-Year Update (adopted October 9, 2018), page 69)

RESILIENCE ELEMENT COMMITTEE

Planning Commission Members:

- Pete Paulatos, Committee Chair
- Cindy Floyd, Committee Vice-Chair
- Sussan Chavis

Industry:

- Donna Brashier, *The Beach Company*
- Patrick Arnold, *Charleston Homebuilders Association*
- Jared Bramblett, *Davis & Floyd*
- Edward Oswald, *Oswald Cooke*
- Josh Dix, *Charleston Trident Association of Realtors*
- Dennis Frazier, *Medical District/MUSC*

Special Interests:

- Liz Fly, *The Nature Conservancy*
- Betsy LaForce & Jason Crowley, *Coastal Conservation League*
- Fred Palm, *Citizen*

Government Representation:

- Steven Julka, *City of Charleston*
- Charles Drayton, *City of North Charleston*
- Rob Rogerson, *Town of Mt. Pleasant*
- Kristen Crane, *Town of James Island*

Charleston County Staff:

- Mack Gile, *Budget*
- Chris Wannamaker, *Public Works/Stormwater*
- Stacy Miller, *Facilities*
- Joel Evans, *Planning*
- Andrea Melocik, *Planning*
- Niki Grimball, *Planning*
- Emily Pigott, *Planning*
- Ryan Petersen, *Planning*

MEETING TOPICS

- Norfolk, VA Case Study, 100 Resilient Cities
- Ft. Lauderdale, FL Resilience Planning Efforts
- Charleston County: Stormwater and Community Rating System
- Town of Mt. Pleasant: Business Resilience
- City of Charleston, City of North Charleston and Charleston Resilience Network Initiatives
- The Nature Conservancy: Nature-Based Solutions for Flood Mitigation
- Charleston County Emergency Management Department Activities

CHAPTER 3.11 RESILIENCE ELEMENT

The Resilience Element contains the following sections:

- **3.11.1 Overview:** Describes the significance of resilience and the purpose and intent of the Resilience Element.
- **3.11.2 *Background and Inventory of Existing Conditions:*** Provides detailed information about the topography and geography of the area, hazards, tools, and existing protective measures.
- **3.11.3 *Resilience Element Goal and Needs:*** Describes the intent and overarching needs related to resilience.
- **3.11.4 *Resilience Element Strategies, Action Items and Time Frames:*** Detailed strategies, supported by specific action items, that the County can use as tools to address resilience issues.

3.11.3: RESILIENCE ELEMENT GOAL AND NEEDS

- **GOAL:** *Charleston County will prioritize resilience in all County plans, policies, and regulations.*
- **NEEDS:**
 - Improving the County's ability to handle and recover from sudden emergencies, as well as more persistent issues.
 - Determining areas that are of the highest risk, evaluating development intensity regulations for these areas, and prioritizing projects in these areas.
 - Strengthening partnerships with surrounding jurisdictions to combat issues that cross jurisdictional boundaries.
 - Educating the public about their role in building resilience and how to recover.
 - Review and consolidate resilience-related efforts detailed in other Elements of this Plan during the next five-year update, which may include, but not be limited to, advanced study and audit of existing facilities and programs.

3.11.4: RESILIENCE ELEMENT STRATEGIES, ACTION ITEMS AND TIME FRAMES

RE.1 Coordinate resilience-related efforts within the County and across jurisdictional boundaries.

RE.2 Develop, adopt, and implement a Drainage Master Plan and sea level rise strategies that are coordinated with adjacent jurisdictions.

STRATEGIES AND ACTION ITEMS

RE. I COORDINATE RESILIENCE-RELATED EFFORTS WITHIN THE COUNTY AND ACROSS JURISDICTIONAL BOUNDARIES.

- **Action Item:** Identify a Resilience Officer and resources to implement strategies, administer programs, pursue funding opportunities, and provide standards to coordinate resilience-related efforts of County Departments, municipalities and adjacent jurisdictions, applicable regulatory agencies, and regional partners.
- **Action Item:** Identify and pursue amendments to existing County policies and regulations including, but not limited to, the Floodplain Management Program, Hazard Mitigation Plan, Stormwater Ordinance, Building Ordinance, and Zoning and Land Development Regulations Ordinance, to improve the County's resilience towards long-term stresses and acute disasters, using the best data available to inform decisions.

STRATEGIES AND ACTION ITEMS

RE. I COORDINATE RESILIENCE-RELATED EFFORTS WITHIN THE COUNTY AND ACROSS JURISDICTIONAL BOUNDARIES.

Action Item: Amend applicable County ordinances to address the Community Rating System (CRS) standards not currently addressed by the County, including, but not limited to:

- Requiring low-impact development design Best Management Practices such as non-structural flood protection techniques that can mimic natural hydro-logic runoff characteristics and minimize the impact of land development on water resources in applicable areas;
- Increasing the freeboard in Special Flood Hazard Areas;
- Implementing freeboard requirements in X Zones;
- Increasing minimum lot size requirements in low density zoning districts (in the Rural Area);
- Prohibiting filling of land where determined to create or exacerbate flooding, whether the land is in a flood zone or not;
- Increasing OCRM Critical Line buffer requirements;
- Requiring additional review of flood hazards during the Site Plan Review process;
- Enacting transfer and/or purchase of development rights programs through Intergovernmental Agreements with other jurisdictions to provide incentives for low levels of development within the Special Flood Hazard Areas; and
- Requiring compensatory storage of stormwater in new development/redevelopment, where applicable.

STRATEGIES AND ACTION ITEMS

RE.1 COORDINATE RESILIENCE-RELATED EFFORTS WITHIN THE COUNTY AND ACROSS JURISDICTIONAL BOUNDARIES.

Action Item: Work with adjacent jurisdictions to secure funding to perform a regional vulnerability, risk, and resilience assessment and watershed assessment, both of which should include implementation strategies.

Action Item: Amend County regulations and policies to implement the strategies of the regional vulnerability and watershed assessments.

Action Item: Create, implement, maintain and assist in public information programs in order to educate citizens about resilience practices including, but not limited to, assisting business owners with developing Continuity of Operations Plans; educating the public, including children, about contributing factors related to flood risks, sea level rise, and ways to reduce environmental impacts; creating targeted messaging that is understood at all educational levels, ages and nationalities, so that the public can be better informed; and incorporating K-12 educational efforts to promote resilience, mitigation and disaster preparedness at the school-aged level.

Action Item: Continually monitor local, state, federal, and private initiatives and recommendations regarding resilience.

Action Item: Coordinate with municipalities to reduce waste and duplication of efforts, and investigate diversion strategies in order to limit impacts on the environment.

STRATEGIES AND ACTION ITEMS

RE.2 DEVELOP, ADOPT, AND IMPLEMENT A DRAINAGE MASTER PLAN AND SEA LEVEL RISE STRATEGIES THAT ARE COORDINATED WITH ADJACENT JURISDICTIONS.

Action Item: Create an asset management plan to identify existing drainage easements and structures, including ownership, and ensure their maintenance and longevity.

Action Item: Identify additional Best Management Practices to be utilized in areas as specified by the Drainage Master Plan.

Action Item: Identify where drainage easements and/or structures are needed and coordinate with property owners and/or jurisdictions to obtain the easements, construct the improvements, and maintain the improvements.

Action Item: Develop, adopt, and implement resilience strategies for capital expenditures for existing and new infrastructure.

IF ADOPTED, WHAT DOES THE RESILIENCE ELEMENT DO?

- The Resilience Element **DOES**:

- Provide a **roadmap** for the County to use as a starting point for integrating potential changes to ordinances or standards.
- Provide a **framework** of strategies that should be explored and evaluated for their effects on the community, to learn the good and bad consequences of any changes.
- Recognize conditions and **trends** in the area that can add to the overall impacts that flooding has on the community.
- Provide **assistance** to departments when looking towards updating ordinances in terms of resilience strategies.

- The Resilience Element **DOES NOT**:

- **DOES NOT change** existing adopted ordinances, codes, regulations, or other standards already in effect.
- **DOES NOT impose** action items or strategies making them legally binding.
- **DOES NOT change** existing or add new ordinances or regulations before evaluating the effects that any changes can or will have on the community.

PLANNING COMMISSION RECOMMENDATION

Approval
(Vote: 8 – 0 with 1 absent)

NOTIFICATIONS AND PUBLIC INPUT

- Each Resilience Element Committee Meeting was open to the public and advertised in compliance with the Freedom of Information Act.
- 661 notifications were mailed and emailed to the Comp Plan/ZLDR IP List for five Planning Commission meetings and Public Hearings (May 24, June 21, August 23, August 29 (cancelation of public hearing), and December 20, 2019).
- Ad was placed in the Post & Courier noticing two Planning Commission meetings and the Public Hearing (May 24, June 21, August 23, August 29 (cancelation of Public Hearing), and December 20, 2019).
- One letter in support of the Resilience Element has been received from the organization Fix Flooding First.

Zoning &
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RESILIENCE ELEMENT

County Council Public Hearing
January 21, 2020

Chapter 3.11 Resilience Element

Element Goal

Charleston County will prioritize resilience in all County plans, policies, and regulations.

3.11.1: OVERVIEW

Resilience is the ability of a community to respond, adapt, and thrive under changing conditions, including, but not limited to, recurrent burdens and sudden disasters.

In light of flooding events over the past three years, along with annual hurricane threats, the existence of a major fault line, and unprecedented growth creating stresses on essential services, infrastructure, development, and the environment, it has become overwhelmingly apparent that Charleston County and surrounding areas need to plan and proactively approach resilience now to be prepared for changes in the future. By committing time, effort, and funding now we can research, assess, and implement projects to protect our citizens and community for future generations.

The need for a Resilience Element (Element) to be added to the Comprehensive Plan was identified after the 2015 flood event when Planning Commission saw the need for study and action, and wrote a letter to County Council about their concerns. This need was further demonstrated after flood events in 2016 and again in 2017. Planning Commission then determined that it would form a subcommittee containing different faces of the community so that several perspectives could sit at the same table. The end result is the formation of this Element, which contains goals and strategies to improve Charleston County's resilience, including, but not limited to, coordinated efforts with the

jurisdictions within the County. The subcommittee worked for nine months to develop this Element, and then recommended it to the Planning Commission for approval. The Planning Commission reviewed it and recommended it to County Council for approval on October 14, 2019, and County Council adopted it as part of the Comprehensive Plan on [date].

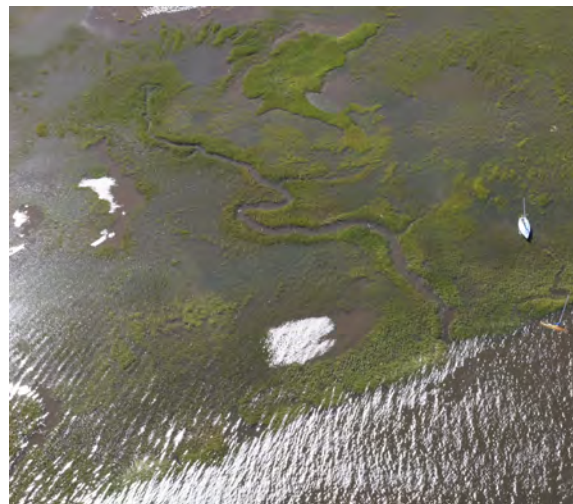


PHOTO: CHAS COUNTY PUBLIC INFORMATION OFFICE

Purpose and Intent

The primary purpose of the Resilience Element is to identify strategies to make the County more resilient. Although flooding is a major concern and addressed throughout the Element, other areas of concern are

also discussed, and Charleston County is dedicated to taking an all-hazards approach to resilience planning. This means when planning for resilience, the County is not planning around specific events, but rather taking a big-picture approach towards risk mitigation. Another purpose of the Resilience Element is to clarify the roles that government, the private sector, and individuals hold in regards to improving resilience.

3.11.2: BACKGROUND AND INVENTORY OF EXISTING CONDITIONS

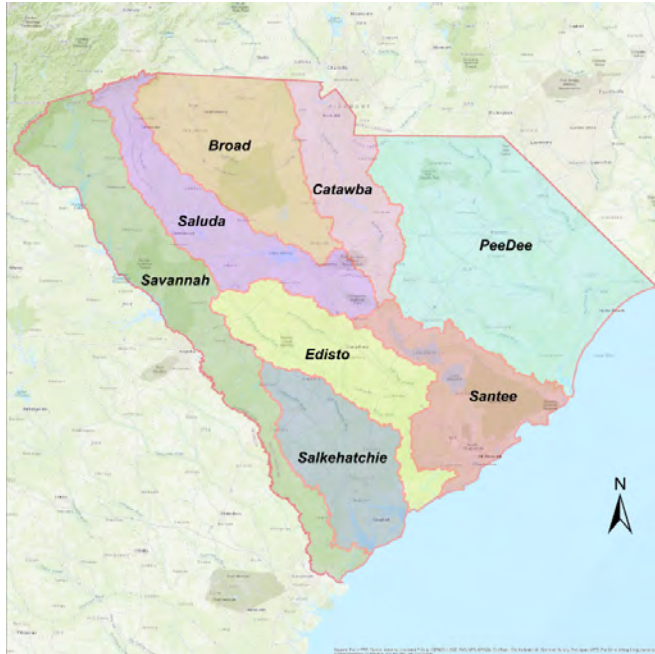
TOPOGRAPHY AND GEOGRAPHY

Charleston County's geography is first and foremost defined by water. Here, the Cooper River, Ashley River, Edisto River, Wadmalaw River, Stono River, and Wando River converge and meet the Atlantic Ocean.

In 1972, the United States Government began granting states funding to better manage its water quality. The Federal Water Pollution Control Act Amendments (US Public Law 92-500) prompted the state of South Carolina to launch its first watershed planning activities, and statewide planning activities were completed in the 1970s. Managed by the SC Department of Health and Environment Control (DHEC), the state created eight major regions, along hydrologic lines, known as river basins (Broad, Catawba, Edisto, Salkahatchie, Saluda, Santee, Savannah and Pee Dee). The majority

of Charleston County falls within the Santee River Basin; however, a portion of the southern/western County is located in the Edisto River Basin (see Map 3.11.1).

MAP 3.11.1: SOUTH CAROLINA WATERSHEDS (SCDNR)



The Santee River Basin encompasses 11 watersheds and 1,280 square miles. The Santee River originates in the Upper Coastal Plain region, giving way to the Lower Coastal Plain and Coastal Zone regions. The Santee River Basin includes nearly one million acres. There are a total of 976 stream miles, 94,668 acres of lake waters, and 5,276 acres of estuarine areas in the Santee River Basin. The Santee River is formed from the confluence of the Congaree and Wateree Rivers and flows through Lake Marion. It is diverted in lower Lake Marion, and either flows out of the Santee Dam to eventually drain into the Atlantic Ocean via the South Santee River and the North Santee River, or is channeled along a 7.5-mile diversion canal to fill Lake Moultrie.

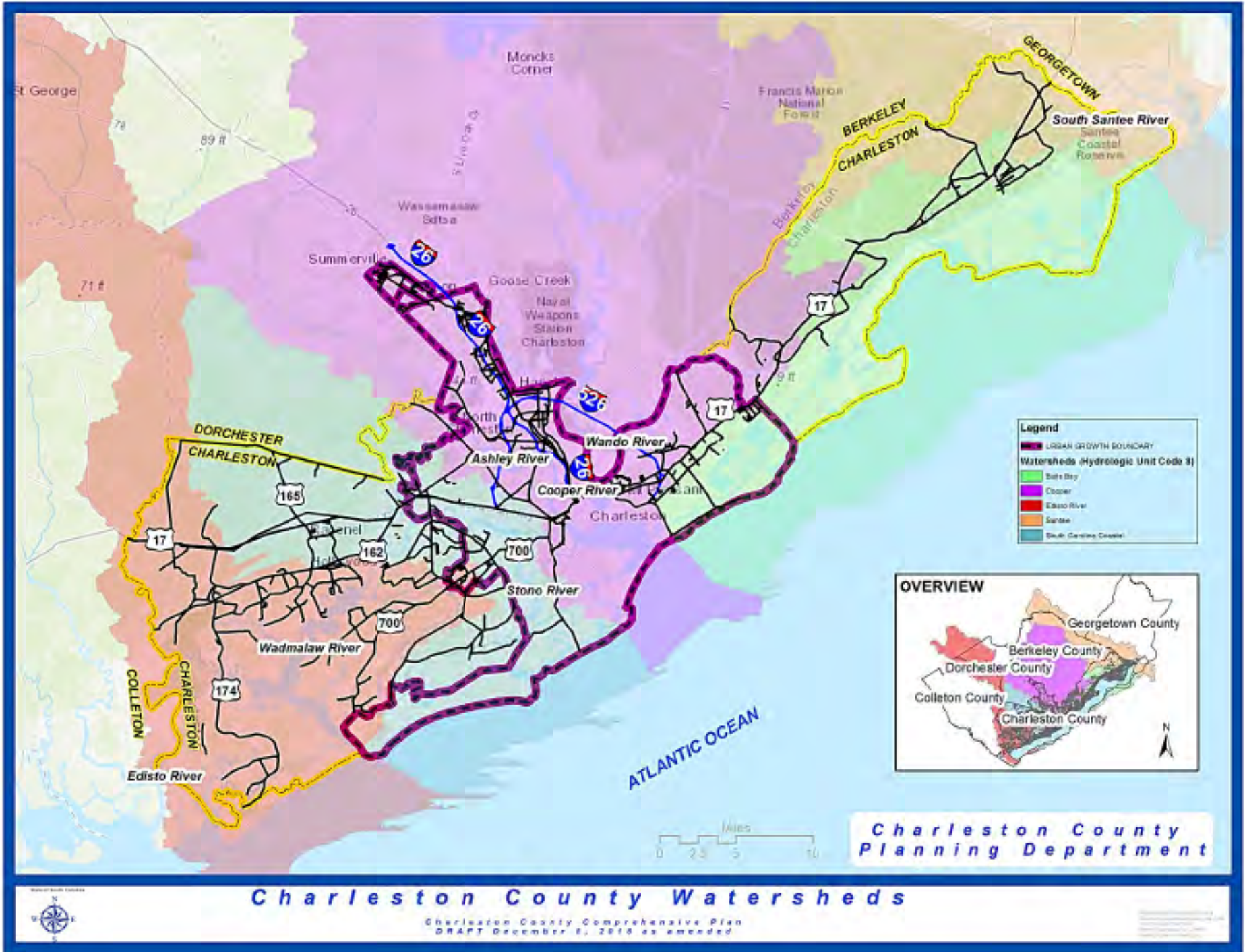
The Edisto River Basin originates in the South Carolina Sandhills region and flows through the Upper and Lower Coastal Plain Regions and into the Coastal Zone region. It encompasses 30 watersheds and some two million acres of the State. There are a total of 2,780 stream miles, 8,402 acres of lake waters, and 20,284 acres (31.7 square miles) of estuarine areas in the Edisto River Basin. The confluence of Chinquapin

Creek and Lightwood Knot Creek form the North Fork Edisto River, which is joined downstream by Black Creek, Bull Swamp Creek, and Caw Caw Swamp. The South Fork Edisto River accepts drainage from Shaw Creek, Dean Swamp Creek, Goodland Creek, and Roberts Swamp before merging with the North Fork Edisto River to form the Edisto River. Downstream from the confluence, the Edisto River is joined by Cattle Creek, Indian Field Swamp, and Four Hole Swamp. Prior to joining the Edisto River, Four Hole Swamp accepts drainage from Cow Castle Creek, Providence Swamp, Horse Range Swamp, and Dean Swamp. Downstream from the Four Hole Swamp, the Dawho River enters the Edisto River, and their confluence forms the South Edisto River and the North Edisto River, which both drain to the Atlantic Ocean.

Each of these river basins are further subdivided into specific regional watersheds, which are geographic areas into which the surrounding waters, sediments, and dissolved materials drain, and whose boundaries extend along surrounding topographic ridges. Each watershed or "unit" has a unique hydrologic unit code (HUC). Hydrologic unit codes are a United States Geological Survey (USGS) cataloging system that arranges watersheds from the largest area or region (2 digits - 03) to the smallest (12 digits - 030502020101). Charleston County includes five HUC-8 watersheds: Edisto River, Santee River, Cooper River, Bulls Bay, and South Carolina Coastal as shown on Map 3.11.2. HUC-8 maps show us the sub-basin level, which corresponds to medium-sized river basins. These watersheds can be even further divided into HUC-10 watersheds, of which Charleston County has eight: Edisto River, North Edisto River, Rantowles Creek, Stono River, Ashley River, Cooper River, Wando River, and Bulls Bay. DHEC produces a Watershed Water Quality Assessment (WWQA) for each watershed every five years.

The Cooper River Basin spans 843 square miles and the Ashley River Basin covers 894 square miles. The Charleston Harbor Watershed, a combined area also known as the Ashley/Cooper River Basin, continues inland 45 miles, and incorporates three freshwater lakes: Lake Moultrie, Bushy Park Reservoir, and Goose Creek Reservoir. The watersheds in Charleston County have been greatly influenced by time and increasing human interaction. Rice cultivation changed the shape of tidal rivers as farmers learned to control the water. Later, the practice of filling in wetlands added more land area, and as industry grew, pollutants entered the watershed. In 1939, as population and industry grew, the Santee-Cooper Hydroelectric Project formed Lake Moultrie, by damming the headwaters of the Cooper River. Because Lake Moultrie is connected to Lake Marion, on the Santee River, drainage from the Santee River Basin combined with the Ashley/Cooper River Basin, which increased the size of the watershed to 15,600 square miles.

MAP 3.11.2: CHARLESTON COUNTY HUC-8 WATERSHEDS



HAZARDS

Flooding

According to NOAA, flooding is an overflowing of water onto land that is normally dry. Flooding can be further classified, defined, and forecasted depending on several factors including cause, duration, and extent. Flooding is the most frequent and costly natural hazard in the United States. In Charleston County, the most common types of flooding are rain events, tidal flooding, and storm surges. Other issues that enhance the effects and extent of flooding are sea level rise and climate change. Because about 68% of the County lies within the floodplain, a proactive approach to flooding is necessary to protect the community and make it more resilient.

Sea Level Rise

Sea level rise is the result of two major causes: the thermal expansion caused by warming of the ocean and increased melting of land-based ice (NOAA). The current global rate of rise is about one-eighth of an inch per year, but could be measured at a rate higher or lower depending on other factors locally. Scientists are confident that that the global mean sea level will rise 8 inches to 6.6 feet by the year 2100 (NOAA, Climate.gov). Global sea level trends and local sea level trends are different measurements. Just as the surface of the Earth is not flat, the surface of the ocean is also not flat—in other words, the sea level is not changing at the same rate globally. Sea level rise at specific locations may be more or less than the global average due to many local factors such as land subsidence from natural processes and withdrawal of groundwater and fossil fuels, upstream flood control, erosion, changes in regional ocean currents, variations in land height, and whether the land is still rebounding from the compressive weight of Ice Age glaciers.

There has been a more than one foot rise in sea level in the Charleston Harbor over the past 80 years. NOAA estimates the rate at which sea level is rising in South Carolina has been increasing, and is now around one inch of rise every two years. NOAA's predictions for sea level rise in Charleston can be seen in Figure 3.11.1, and includes six potential scenarios. The intermediate scenario suggests Charleston could see a four foot increase in sea level by 2100. The City of Charleston currently plans their Sea Level Rise Strategy around a 2 to 3-foot increase in sea level over the next fifty years.

In urban settings, rising seas threaten infrastructure necessary for local jobs and regional industries. Roads, bridges, subways, water supplies, oil and gas wells, power plants, sewage treatment plants, landfills—virtually all human infrastructure—is at risk from sea level rise.

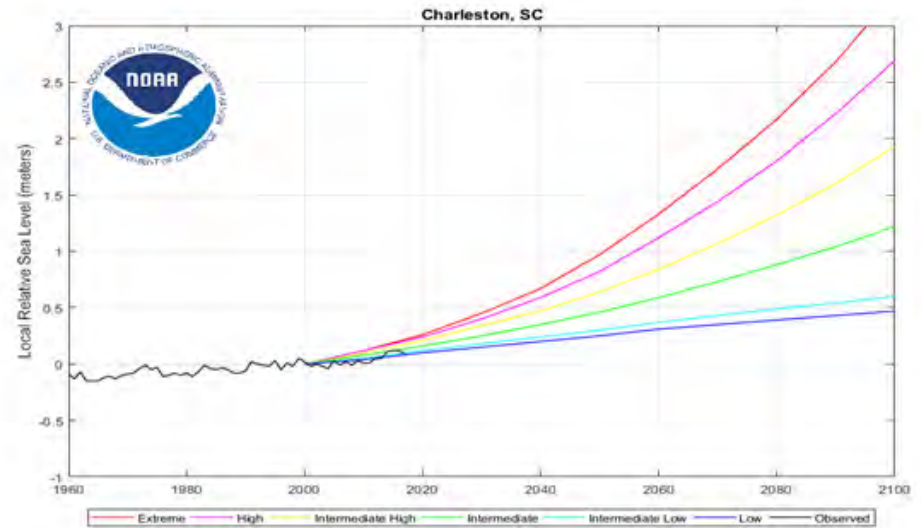


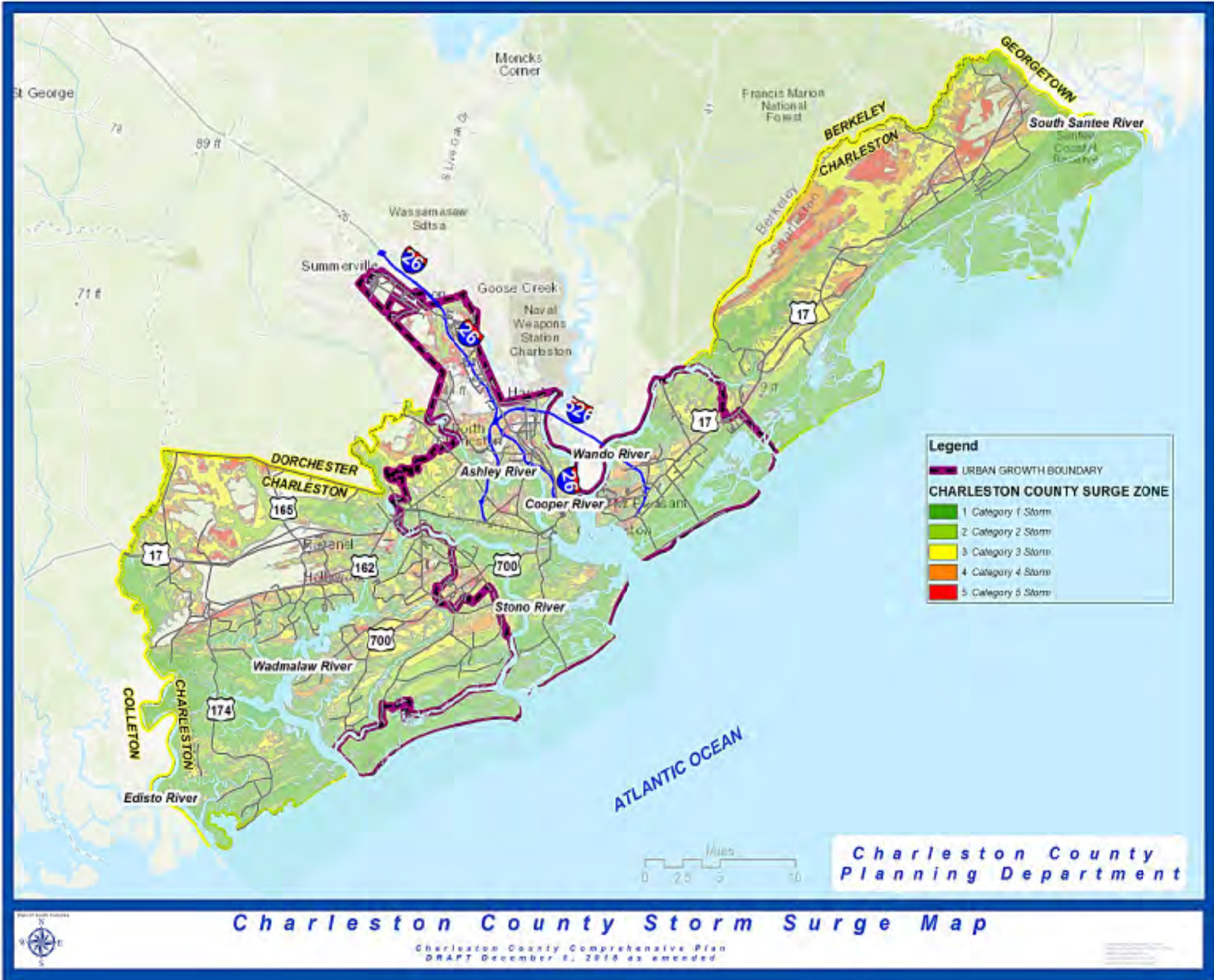
FIGURE 3.11.1 NOAA SEA LEVEL RISE PREDICTIONS

Rain Event Flooding

Rain event flooding can be classified by severe rain events, whether associated with tropical weather or not, that cause major flooding in areas that may not have experienced flooding in prior years. Like tidal flooding, these big rain events are exacerbated by a combination of several factors that result in widespread flooding, including king tides, sea level rise, drainage issues and storm surges. Charleston County experienced flooding as a result of continual rain lasting several days in 2015 that caused extensive damage and shut down the County for days. The storm drainage systems could not handle the amount of rain that fell in the area during those days, and because there was no break in the rain, the drainage systems had no time to recover. In addition, high tides peaked which added more struggle to the already aggravated system.

In 2016, the area was hit by Hurricane Matthew which made landfall near McClellanville, SC as a Category 1 Hurricane. The storm dumped nearly a foot of rain on parts of the County, and the combination of a six-foot storm surge and strong winds led to extensive damage along the coast, despite hitting the area during a relatively low tide. Matthew resulted in water levels three to five feet higher than normal astronomical tides. In 2017, Charleston County felt the effects of Hurricane Irma, which had weakened to a tropical storm before Charleston felt its effects. Tropical Storm Irma swept through Charleston during an extremely high tide, resulting in a peak storm tide recorded at almost 10 feet, the third highest on record in Charleston County. The greatest storm surge during Tropical Storm Irma was recorded at just under five feet. Additionally, four tornados were confirmed in Charleston County in association with this storm.

MAP 3.11.3 CHARLESTON COUNTY STORM SURGE MAP



Overall, rain events that have impacted the Charleston area since 2015 have brought the issue of flooding to the forefront. The purpose of this Element is to address these issues and pave the way for future planning to combat the problem.

Hurricanes

Records dating back to the 1600s indicate there were about 43 tropical cyclones before official records were kept in 1851. Since then, there have been an additional 41 tropical systems (25 hurricanes, 10 tropical storms and six tropical depressions) that have hit or affected the Charleston region (NOAA). The region will remain vulnerable to hurricanes and tropical weather and this threat may increase with climate change and warming seas. Hurricanes pose many threats to the area, including wind, rainfall, and storm surge. In addition, tides can also have a major effect on the extent of hurricane-related flooding.

Storm Surge

Storm surge is the rise of water level that occurs as a result of high winds pushing onto the coast due to tropical conditions. In combination with regular tides, storm surge can cause significant flooding in coastal areas, and is exasperated depending on the intensity of the storm. Some problems that storm surges cause include inland flooding, flooding in advance of a storm, dangerous debris carried by waves, severe beach erosion, and significant property damage.

Advancements in mapping have provided flood inundation maps to inform citizens of potential flood impacts during different categories of storm events where a citizen can simply type in their address on a webpage and have a visual reference of where flooding can occur around them (NOAA). These tools are very helpful when planning and preparing for an event and determining the amount of storm preparation that would be required in advance.

Map 3.11.3 shows storm surge projections for Charleston County. The Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Model was used to generate Map 3.11.3 and estimates storm surge heights, considering atmospheric pressure, size, forward speed, and track data to model the wind field, which generates storm surge. The model was developed by the National Weather Service and is a computerized numerical model that can be applied to a specific region's coastline. The SLOSH Model can be used to predict storm surge heights resulting from historical, hypothetical, or forecasted hurricanes. The SLOSH model does not include breaking waves/wave run-up, astronomical tide, or normal river flow and rain. However, the model does consider coastal reflection; overtopping of barrier systems, levees, and roads; inland inundation; deep passes between bodies of water; and flow through barriers, gaps, and passes. The SLOSH Model, like most storm surge models, is heavily reliant on the accuracy of meteorological input. Additionally, it is important to note that storm

surge is merely one element of total water level rise, with tides, waves, and freshwater flow making up the other components.

Tidal Flooding

The beauty and character of Charleston County lies in its breadth of winding tidal creeks and hidden reaches of waterfront property. With this beauty comes the risks associated with tidal flooding, also called nuisance flooding, because of the inconveniences caused during unusually high tides. Many factors contribute to this "perfect storm" of problems that can shutdown areas of Charleston County for hours or days.

Sea level rise is one contributing problem to tidal flooding in many areas within the County. Rising seas means higher tides, and more frequent king tides, which are now an issue to formerly non-flood-prone areas. In areas like Downtown Charleston that were built centuries ago on fill dirt, the land has subsided over time and is simply not high enough to avoid this flooding. Also because it was built on fill dirt, areas have further settled over time, leaving some parts of the City lower, and more affected than others.

Frequent road closures, property damage, loss of business, and potentially hazardous conditions leave areas affected by tidal flooding in a state of uncertainty. Sea level rise will continue to be a more frequent issue for all coastal areas within the County. Time is of the essence to study and make modifications to alleviate some of the effects that sea level rise will have on communities in the County. This not only affects area residents from being able to get to and from their homes, but also has a large impact on continuity of services for business operations, safety services, including access to area hospitals, and the general functioning of the area and its residents on a normal day-to-day level.

A recent example of how king tides can majorly affect Charleston occurred in November 2018 when the County was affected by the sixth highest record tide. This resulted in several road closures and flooding on a perfectly sunny day. Instances like these are becoming more and more common, and the County needs to plan for ways to protect and prepare the community.

Impacts to Groundwater

Groundwater aquifers are sponge-like, interconnected layers saturated slowly over time with water that comes from the surface water supply. Groundwater resources are of concern when considering resilience because when aquifers are depleted of groundwater, surface water sinks to replace it. The surface water supply is where most residents obtain drinking water, thus the depletion of this resource is of great concern. Additionally, due to its very dynamic nature beneath the earth's surface,



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groundwater resources are not easily quantified, making it difficult to determine exactly how much groundwater exists and where it is located. The Charleston Aquifer runs under most of the South Carolina Coastal Plain, beginning at the boundary of the Piedmont and Coastal Plains (the Fall Line) and deepening and thickening as it gets closer to the ocean. As a result of groundwater being pumped from the Charleston Aquifer since the late 1800s to fuel development and industry, Charleston County now experiences regional declines in groundwater levels. Because of these declines, Charleston, Berkeley, and Dorchester Counties were designated as the Trident Capacity Use Area (CUA) in August of 2002. There are currently four CUAs in South Carolina, each within the Coastal Plain. In these areas, groundwater withdrawals in excess of three million gallons per month must be permitted by SCDHEC. During the year 2016, Charleston County reported a total of approximately 2.44 billion gallons of water withdrawn from groundwater. In the County, the number one use for this water is for the public water supply, followed by golf course irrigation, and then industrial use.

Drought

Drought, the lack of precipitation over an extended period of time, is another stressor that Charleston County may face. South Carolina experiences significant variability in rainfall and this makes it hard to pinpoint the start or end of a drought. The Coastal Plain of South Carolina receives around 48 to 56 inches of precipitation annually, although there is some variation. Charleston County is at risk for a drought during any season, and it can be brought about by factors such as changes in pressure, storm tracks, and the jet stream, as well as extreme heat, wind, and evapotranspiration rates. In the 2018 Charleston County Emergency Operations Plan, drought was listed as a moderate probability threat for the area, and is considered a serious economic threat to the County because of how severely it can adversely affect agricultural industries.

Earthquakes

Earthquakes regularly occur in South Carolina. An earthquake hit the City of Charleston with an estimated magnitude of 7.0 on August 31, 1886, and it changed the face of the City killing approximately 60 people.

The entire County of Charleston lies within a "high potential for liquefaction" area (South Carolina Department of Natural Resources). This issue needs additional study and evaluation as it is definitely an issue of concern. The County needs to address ways to protect against additional damage in the event of an earthquake beyond what is regulated through building codes.

Liquefaction is the transformation of loosely packed sediment or cohesionless soil to a liquid state as a result of increased porefluid pressure and reduced effective stress. Liquefaction is caused by the ground shaking during an earthquake. Soil-liquefaction potential is based on the interpretation of thick, cohesionless material (mostly sand) combined with a high water table (SCDNR).

Although no major damaging earthquake occurred in the County since 1886, there have been several small scale earthquakes, mainly clustered around the Summerville area. Charleston County should prepare for the impacts of an earthquake now so that it can be ready. Because we have regularly occurring issues like flooding, earthquake resilience is often overlooked or set aside in order to address more regularly occurring issues, but the threat is imminent on a day-to-day basis.

Winter Weather

Although a rare occurrence, Charleston County can be affected by winter weather. In January 2018, Charleston County experienced a variety of wintry precipitation including snow, sleet and freezing rain. The Charleston Airport measured 5.3 inches of snow, the third greatest snowfall on record. Due to the continued cold air in place after the storm, the snow and ice remained on the ground for many days, causing significant disruptions to day-to-day life throughout the County.

Just four years earlier in February 2014, Charleston experienced a winter storm event leaving about one quarter of an inch of ice throughout Charleston County. Most of Charleston County escaped the amount of accumulation to cause serious damage, but the surrounding counties of Berkeley, Dorchester and Colleton had significant damage to trees and power lines caused by ice. Although not as crippling as the 2018 storm, Charleston was not able to bounce back from this event quickly, having roads and business closures County-wide.

Because of the irregularity of winter weather in Charleston County, the area is not

typically prepared to handle such events. There are few, if any, salt trucks and snow plows available. The County must rely on outside resources to assist or just wait out the weather and shut down for several days creating disruptions in essential services, safety concerns, and financial hardships. Building resilience and planning for winter weather is definitely necessary for future events to limit the economic impact.

OTHER RESILIENCE ISSUES

Transportation Infrastructure

Transportation is essential for a community to function. Flooding can interrupt or detrimentally affect transportation. According to the Centers for Disease Control and Prevention, over half of all flood-related deaths occur when a vehicle is driven into hazardous flood water. The next highest percentage of flood related deaths is due to walking into or near flood waters. People continue to drive or walk through flood waters to get to work and school, and if they are not able to, this indicates a need to increase the County's economic resilience, as laid out later in this Element. Critical infrastructure, such as bridges, roads, ports, clinics and hospitals are the foundation upon which the County functions, and are essential elements in getting the community back up and running after an event.

Considering the unique topographical nature of Charleston County, including islands, peninsulas, and inland property, the County is reliant on its infrastructure to tie transportation facilities together. Of large importance are bridges, which are something that nearly every citizen of Charleston County must cross on a daily basis. Since many areas of the County are only accessible via bridges, bridge closures can prevent many of our citizens from being able to get to and from their home, work, or school, potentially creating vast negative economic consequences. Bridge closures are not typically associated with flooding, but other influential impacts on the area such as ice storms and strong winds can completely shut down access to and from work, home, and school.

Accessibility is also key to the functionality of a community. If specific areas are not accessible due to flooding, the economics of that area and those working there can be affected, and also cause major issues in terms of safety. Recently during a rain event, the hospitals in Downtown Charleston were not accessible, creating a hazard for caregivers, patients, and visitors.

Health Resilience

Charleston's climate makes it susceptible to the transmission of vector-borne diseases, those spread by the bite of an insect such as a mosquito. The 2018 National Climate Assessment, a federally mandated report, asserts that climate change will modify the

seasonality and prevalence of vector-borne diseases. Currently, Charleston's climate is suitable for the *Aedes aegypti* mosquito, that can spread several diseases including Zika, dengue fever, and chikungunya, from July through September. If temperatures were to increase in Charleston County, that active season could potentially lengthen, leading to increased disease risk. Additionally, the 2018 National Climate Assessment predicts an increase in labor hours lost from heat-related illnesses, as climate change contributes to higher temperatures. These stresses would be felt strongly in the labor-intensive agricultural, timber, and manufacturing sectors.

Economic Resilience

In Charleston County, we face frequent flooding and other events that impact our local economy by making it harder for employees to get to work, as well as affecting the County's ability to provide services to its citizens. In 2018, Charleston County offices were closed due to flooding, winter, and tropical storm events for several business days. Additionally, when there is a mandatory evacuation order for Charleston County, it adds to families' financial stresses, as they budget and plan for an extended stay away from home. Increasing our economic resilience, therefore, must include ways to reduce the number of down days due to such events.

The Charleston County Emergency Operations Plan (Operations Plan) includes the County's Continuity of Operations Program (COOP), the purpose of which is to ensure the continuity of mission essential emergency functions under all circumstances. The Operations Plan also encourages all County agencies to have a viable COOP in place. In Charleston County, several departments have a COOP which instructs departments on how to function in the event of an emergency. FEMA provides a course in Continuity of Operations, and also has templates and other resources available online for businesses and government entities to begin developing their own COOPs. Additionally, the Charleston County Emergency Management Department encourages local business owners to form disaster plans and COOPs of their own, and offers support for those looking to develop emergency operations plans. A collection of governmental and private sector business and industry leaders hold an annual workshop to assist businesses with the formation of these emergency operations plans.

Energy Resilience

The 2018 National Climate Assessment predicts that the southeast region will experience the highest costs in the United States associated with meeting increased electricity demands in a warmer world. Therefore, energy becomes an essential consideration when creating a resilient community. The Energy Element of the Comprehensive Plan already addresses some issues of energy resilience. It outlines planning and zoning techniques such as the establishment of an Urban Growth Boundary, Infill Development, and Transit-Oriented Development as tools for building sustainable

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and resilient communities. Additionally, the Energy Element Strategies support goals for resilience including, but not limited to: promoting green building code standards and sustainable landscaping that aid in energy conservation; supporting tax incentives for properties that install/utilize alternative energy sources; and amending the Zoning and Land Development Regulations Ordinance to encourage local renewable energy generation and green building design, and providing standards for solar collectors and wind generators as accessory uses.

Food

The 2018 National Climate Assessment predicts climate change to have a negative impact on agricultural productivity, because changes in temperature can change the conditions for crops and livestock. All livestock are susceptible to heat stress, making it vital for Charleston County to consider new or enhanced adaptive care strategies. Additionally, climate change has the potential to impact local food sources, including regionally important crops. As the County experiences warmer temperatures during the winter months, the harvesting of corn, soybeans, rice, peaches, and many other crops are affected. However, for freeze-sensitive plants, including oranges, papayas, and mangoes, the increasing temperature has the potential to allow these crops to thrive in our region. An additional threat to food resilience is the impact of drought on crops and livestock. One of the most immediate effects of drought is a decrease in crop production. There are also other less obvious consequences of drought including poor soil quality and increased spending on feed and water for livestock, which impact our local food supply. These factors can all lead to higher food costs.

TOOLS AND EXISTING PROTECTIVE MEASURES

Charleston County Zoning and Land Development Regulations Ordinance

Strategic land use can bolster a county's resilience by shaping where, what, and how land can be developed. There are several regulations centered on the County's current Zoning and Land Development Regulations that contribute to resilience. One item that makes the County stand out is the required vegetated buffers from saltwater wetlands, waterways, and Ocean and Coastal Resource Management (OCRM) Critical Lines. These buffers provide a visual, spatial, and ecological transition zone between development and the County's saltwater wetlands and waterways, and to protect water quality and wildlife habitat. Additionally, Charleston County requires larger minimum lot sizes and widths for properties that contain or abut an OCRM Critical Line, in order to maintain a lower density along the waterfront. The Charleston County Zoning & Planning Department also works in close coordination with the County's Stormwater Management Division when property is being developed or redeveloped.

Charleston County Stormwater Manual

Charleston County developed both a manual and Charleston County Ordinance #1518 to protect, maintain, and enhance the water quality and the environment of the County, as well as to improve the short-term and long-term public health, safety, and general welfare of its citizens. This Manual is for stormwater management purposes only, and the requirements are specific to Charleston County.

The Charleston County Stormwater Permitting Standards and Procedures Manual (Manual) describes the policies and procedures used by the Public Works Department to implement the Ordinance and the County's Stormwater Management Plan (SWMP). These standards and procedures describe the requirements of construction activity applications and the approval process as it relates to stormwater management; convey the technical design standards to the engineering community, to include standards which address runoff flow rates, volumes, and pollutant load/concentration, as well as specific standards during construction, and post-construction for long-term performance; provide information on avenues to improve water quality, prevent illicit discharges, and minimize stormwater runoff impacts due to development and re-development; convey other protection provisions related to stormwater discharges such as wetlands and watercourse conservation.

Charleston Regional Hazard Mitigation Plan

In compliance with the Federal Emergency Management Agency's (FEMA) requirements to receive federal disaster funding, Charleston County, jurisdictions and community stakeholders and partners (i.e. Charleston County Parks & Recreation Commission, Roper St. Francis Hospital, Charleston County School District, individual water and sewer districts, etc.) have adopted a Hazard Mitigation Plan that is updated annually, with a full review every five years as required. The purpose of the Hazard Mitigation Plan is to continue guiding hazard mitigation efforts to better protect the people and property in the County from the effects of hazard events. This Hazard Mitigation Plan demonstrates the community's commitment to reducing risks from hazards, and serves as a tool to help decision makers direct mitigation activities and resources. This Hazard Mitigation Plan was also developed to ensure Charleston County and participating stakeholders and partners also earns points for the National Flood Insurance Program's Community Rating System (CRS), which provides for lower flood insurance premiums in CRS communities as described later in this Element.

Charleston County employs feedback from all jurisdictions within Charleston County and participation in planning the document is required. Public input is also obtained through surveys and open meetings. After updates, suggested edits and refocusing on the community's current hazard needs, the plan goes through a full

adoption process every five years. Adoption of the plan is required for all participating jurisdictions, stakeholders, and partners.



The Charleston Regional Hazard Mitigation Plan is incorporated into this Comprehensive Plan.

Community Rating System

Charleston County has participated in the Community Rating System (CRS) program since 1995. The purpose of the CRS is to support the National Flood Insurance Program (NFIP) by working to minimize flood losses nationwide. This can be accomplished by encouraging communities to reduce the exposure of existing building to flood damage, protect new buildings from known and future flood hazards, and encourage implementation of higher regulatory standards from the minimum NFIP requirements. It is a point-based system that once all efforts are tallied, CRS will issue a rating. This rating is associated with a discount that is assessed to all residents owning flood insurance policies within a participating jurisdiction. For those jurisdictions in Charleston County that have opted to allow the County to administer their floodplain management regulations, the rating they are currently assessed upon is a 30% discount in flood insurance premiums. This 30% means that Charleston County has accumulated enough points to be rated as a Class 4 community (ranging on a scale of 1-10 with Class 1 being the highest). Several County departments work with Building Inspection Services to either provide information for the required documentation or they work to implement higher regulatory standards. Although the County currently covers many of the sections in the CRS manual, there are a few sections that could be covered to implemented to make the community more resilient.

The Community Rating System program consists of nineteen creditable activities under four categories, including public information, mapping and regulations, flood damage reduction, and warning and response activities. The County participates in all four categories and most of the creditable activities contained within the categories. Some examples of the County activities include: raising the freeboard (the required

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height at which buildings must be built) from one foot above base flood elevation to two feet above; digitizing and providing complimentary review and public access to elevation certificates; providing a Public Information Plan characterized by the County's activities to provide flood protection information to the public; designating and mapping open space preservation areas; assessing and mapping repetitive loss properties; providing notification of special flood hazard area information; and participating in annual drills, among many others. Other activities that the County can potentially participate in to increase its CRS rating will be detailed in the Strategies section of this element.

Beachfront Management Plan

The State of South Carolina requires that ocean beachfront counties and municipalities prepare local comprehensive beach management plans in coordination with the Department of Health and Environmental Control, Office of Coastal Resource Management (DHEC-OCRM). The plan must include a minimum of ten elements, be adopted by the community, and then submitted to DHEC for review and state approval. These plans provide guidance to state and federal agencies on local policies, regulations, and procedures related to beachfront management plans. Similar to the County's Comprehensive Plan, the Beachfront Management Plan must be reviewed every five years and updated every ten years.

The required elements include the following:

1. Inventory of beach profile data and historic erosion rate data for each standard erosion zone and inlet erosion zone under the local jurisdiction;
2. Inventory of public beach accesses along with a plan for enhancing public access and parking;
3. Inventory of all structures located in the area seaward of the setback line;
4. Inventory of turtle nesting and important habitats of the beach/dune system and a protection and restoration plan if necessary;
5. A conventional zoning and land use plan consistent with the purposes of the Act for the area seaward of the setback line;
6. Analysis of beach erosion control alternatives, including renourishment of the beach under the local government's jurisdiction;
7. Drainage plan for the area seaward of the setback zone;
8. Post disaster plan, including plans for cleanup, maintaining essential services, protecting public health, emergency building ordinances, and the establishment of priorities, all of which must be consistent with the Act;

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9. Detailed strategy for achieving the goals of this chapter by the end of the forty-year retreat period. Consideration must be given to relocating buildings, removal of erosion control structures, and relocation of utilities; and

10. Detailed strategy for achieving the goals of preservation of existing public access and the enhancement of public access to assure full enjoyment of the beach by all residents of this state.

The Charleston County Beachfront Management Plan is prepared in coordination with several departments including the Deputy Administrator for General Services, Building Inspection Services, Zoning & Planning, GIS/Technology Services, Stormwater/Public Works, and Emergency Management. It has been adopted as a part of the Comprehensive Plan and is due for a ten-year update in 2020. Because the next update is in the near future, this is a great opportunity to collaborate and work on strategies to support this Beachfront Management Plan.

Emergency Management Accreditation Program (EMAP)

The Charleston County Emergency Management Department maintains extensive emergency management plans and strategies, accreditations and resources that can be utilized in planning for a resilient community. The Department's vision is "to be recognized as an accomplished and innovative leader in emergency management that is known as ready, relevant, resilient and responsible." The County is recognized as being the only EMAP accredited community in the state of South Carolina. EMAP, the voluntary standards, assessment, and accreditation process for disaster preparedness programs throughout the country, fosters excellence and accountability in emergency management and homeland security programs, by establishing credible standards applied in a peer-review accreditation process. EMAP was created by a group of national organizations to foster continuous improvement in emergency management capabilities. It provides emergency management programs the opportunity to be recognized for compliance with industry standards, to demonstrate accountability, and to focus attention on areas and issues where resources are needed.

Strategic Plan

Charleston County's Emergency Management Department utilizes strategic planning in an effort to maximize team members' ability to provide measurable projects and programs through preparedness, prevention, response, recovery, and mitigation. During the strategic planning process, goals and objectives are determined based on community need and the on-going changes in the field of emergency management. This Plan serves as the Strategic Plan for the entire Charleston County Emergency Management Program to include all municipalities and public services districts. As a result, the Emergency Management Department developed a comprehensive three-year plan to enhance the way Charleston County manages major events.

In collaboration with public, private, faith-based, and non-profit organizations; goals and objectives were developed that enhance the "whole community" approach to emergency management. The development of goals and objectives derives from strengths, opportunities for improvement, lessons learned, and best practices gathered from disaster events across the world. The 2016-2019 Strategic Plan aims to facilitate accountability of necessary goals and objectives by assigning action items and completion dates to measure achievements for the team throughout the planning process. The Emergency Management Department helps to coordinate the response among public, private, non-profit, and community organizations in order for Charleston County to remain resilient during major events.

The Emergency Management Department looks for opportunities to curb the trends of dwindling budgets, staffing shortages, availability of grants, and the overall decreasing volunteerism in order to build a resilient emergency management program. The team members seek new ways to better utilize existing resources and enhance their capability to respond and recover from large-scale events. The Emergency Management Department focuses on building community partnerships to help leverage the gaps analyzed as a result of the strategic plan. In doing so, organizations engage in exercises, trainings, and community meetings that promote a culture of preparedness. Research has shown that communities that train together, across all disciplines and jurisdictions, will ultimately build the resiliency needed to recover quickly from even the worst disaster to impact the community. These vital partnerships within our community allow Charleston County to maximize the utility of resources available to citizens after a major event.

The Emergency Management Department has several additional resources including the Redbook, the Emergency Operations Plan, and the Lowcountry CERT Program, among other training opportunities to keep County staff and volunteers current on training and documentation to prepare for most situations.

International Building Code Series

The State of South Carolina requires governing local entities to adopt, by ordinance, the state-approved versions of the International Building Code series. Currently the State approved Building Code in South Carolina is the 2015 International Building Code (IBC), and the 2009 Energy Code. The 2018 International Building Code is currently under review by the State, and will be required to be adopted by the local governing entities within six months after receiving notification of the approval.

The International Building Code series provides best practices to protect the public health, safety, and general welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings, structures, and certain equipment. In Charleston County, a series

of processes are in place that require a building plan review in order to check for compliance with the applicable building codes in effect. In addition, during this review, plans are also reviewed for compliance with FEMA standards for buildings located within the Special Flood Hazard Area, such as freeboard requirements, venting requirements and systems, wet or dry floodproofing, among others.

FEMA Flood Insurance Rate Maps (FIRM)

The Federal Government requires the adoption and maintenance of Flood Insurance Rate Maps (FIRM) by communities in order to participate in the National Flood Insurance Program (NFIP). These maps are tools for communities to not only identify the area's flood zones, but also provide information to citizens in evaluating their risks. These maps are updated periodically by either the introduction of new technology or due to the needs of a community. The process of updating these maps can be very costly, and for a community the size of Charleston, it is a lengthy process. After a private consultant prepares new map updates, the community is provided with a period of time to review the maps and submit any comments or appeals. The appeals can come from citizens or jurisdictions. If appeals are submitted, they are reviewed and will be further processed if the claim is based on quantifiable data. It is the responsibility of the property owner to either provide a survey or an engineering analysis if the claim is stating that the new data is inaccurate. After FEMA completes its review, the jurisdiction will receive a Letter of Final Determination, and is then required to adopt the new maps within six months to maintain the community's NFIP status. Charleston County has been in the process of updating the maps since September 2016. FEMA received comments and appeals, and has since been reviewing the data and working with the engineer that produced the maps. The County will likely adopt the new maps sometime in 2019.

Map 3.11.4 illustrates the County's flood zones according to the currently adopted 2004 maps. Most of the County lies within a flood zone, or about 68% of the land area. It is imperative that Charleston County as a whole works with other departments and jurisdictions to make floodplain management a collaborative effort so that systems and strategies compliment and support one another. Flood zones know no boundaries and by joining forces, the County can best serve its citizens. In addition, because a property is located in an X Flood Zone does not mean that the property does not have a risk of flooding because the flood zone designation is only associated with a potential for an annual chance of a flood. For example, properties located within the AE Flood Zone are identified as having a one-percent annual chance of flooding. X Zones are still considered to be areas of "moderate" risks as opposed to "high risk," therefore still have the potential to flood, just not as high of a chance as those zones within the Special Flood Hazard Areas. Public education is essential to inform citizens about what flood zones mean and how they can be affected by varying factors.

The Special Flood Hazard Area (SFHA) is the area that will be inundated by the flood event having a one-percent chance of being equaled or exceeded in any given year. This is also referred to as the "base flood" or "100-year flood." SFHA's are labeled as Zone A, AO, AH, A1-A30, AE, A99, AR, AR/AE, AR/AO, AR/A1-A30, AR/A, V, VE, and V2-V30. These are considered to be high hazard areas, and have additional building code and flood requirements. Moderate flood hazard areas are labeled B or Shaded X, and have a 0.2 percent annual chance of flood or also known as the 500-year flood. The area of minimal flood hazard, called Zone X, or C, are outside the SFHA and have a higher elevation than the 0.2 percent annual chance flood area.

Charleston County Building Ordinance

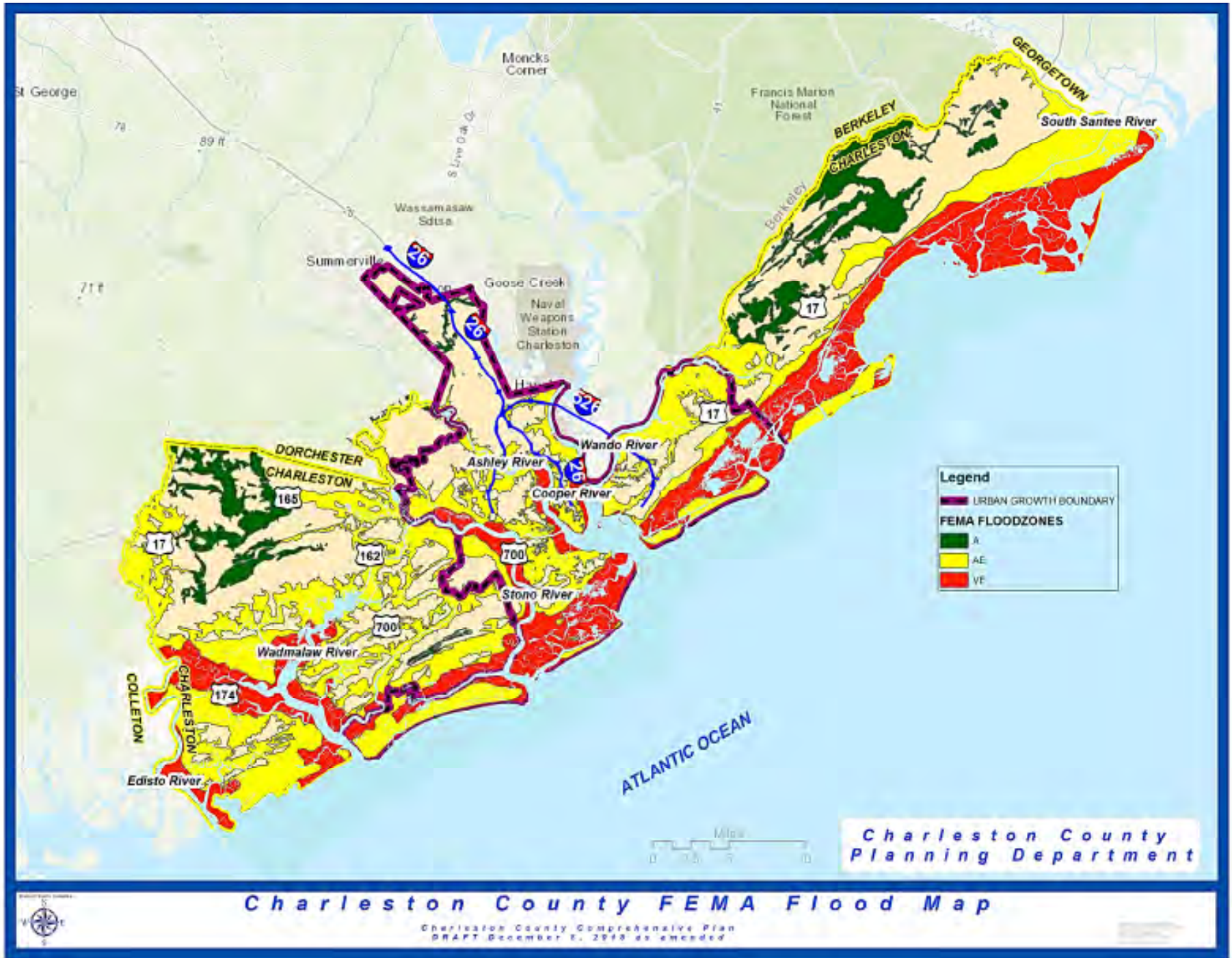
The Charleston County Building Inspection Services Department administers the County's Building Ordinance, which adopts the International Building Code (as required by the State of South Carolina), and sets out any additional standards above the minimum building code requirements that must be met to, and in the interest of, public health, safety, and welfare. There are several flood-related standards identified in the International Building Code, but the Code points to the FEMA regulatory standards when referencing requirements. The Charleston County Building Ordinance addresses all concerns regarding buildings, except flood requirements, which are found in the Charleston County Flood Damage and Prevention Ordinance.

Charleston County Flood Damage and Prevention Ordinance

One major step in ensuring compliance with FEMA flood regulations is in the adoption of a flood ordinance by local jurisdictions. It is required for communities to participate in the National Flood Insurance Program. The purposes of this Ordinance, also called the "Flood" Ordinance, is to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas. These provisions are designed to restrict or prohibit uses which are potentially in danger and vulnerable to water or erosion hazards, or which result in damaging increases in erosion or in flood heights and velocities. This ordinance also requires that structures vulnerable to flooding be protected against flood damage. Some examples of how the Ordinance can accomplish this is by implementing a minimum freeboard at which a building must be elevated or protected above the base flood elevation; requiring hydrostatic venting systems, dry or wet floodproofing techniques on commercial building, among several others.

Some ways that the Flood Ordinance ensures building protection against flood damage is by requiring building plans be reviewed for compliance with the Flood Ordinance prior to building permits being issued. During this review, the Department is looking for things such as breakaway wall certification from a design professional, elevation of mechanical systems, and reviewing the height at which the lowest floor is designed.

MAP 3.11.4 CHARLESTON COUNTY FEMA FLOOD MAP (ADOPTED 2004)



After a permit is issued and construction has begun, building inspectors will inspect the building to ensure that the requirements approved on the plans are also actually implemented during construction. All of the requirements must be met or corrected before a Certificate of Occupancy is issued.

Additional objectives of the ordinance help to minimize the expenditure of public money for costly flood control projects, minimize the need for rescue and relief efforts associated with flooding, minimize prolonged business interruptions, and to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such manner as to minimize flood blight areas. And finally, to ensure that potential homebuyers are notified that property is in a flood zone.

Just as the Building Ordinance requires some additional standards above those outlined in the International Building Code, the Flood Ordinance provides an avenue for the County to legally require flood protection measures above and beyond minimum standards as set forth by FEMA regulations. The County's Flood Ordinance is where any existing higher regulatory standards can be found, as well as where any additional regulations can be implemented; such as requiring an increased minimum freeboard, requiring minimum flood standards for properties located in the X Flood Zone, requiring additional site plan review, etc. The Flood Ordinance is expected to be updated next when the new FEMA flood maps go into effect sometime within the next year.

Repetitive Loss Properties

Repetitive loss properties are classified by FEMA as any insurable building for which two or more flood insurance claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year time period, since 1978. The property may or may not be currently insured by the NFIP. Structures that flood frequently strain the National Flood Insurance Fund, draining the funds needed to prepare for catastrophic events. The primary objective of the Repetitive Loss identification program is to eliminate or reduce the damage to property and the disruption to life caused by repeated flooding of the same properties. There have been a number of efforts aimed at reducing the risks, one of which is providing the FEMA post-disaster Hazard Mitigation Grant Program (HMGP) projects, which has funded the mitigation of nearly 3,000 properties nationwide. Also the Flood Mitigation Assistance (FMA) Program offers monetary assistance to homeowners that mitigate their properties to reduce the impacts of flooding. Once mitigation efforts have been completed, the property owner may request for the property to be removed from the list.

Severe repetitive loss properties are classified as properties having four or more claims of more than \$5,000 each or two or more separate claims where the total dollar amount of the payments exceeds the current value of the property. Both situations must have occurred within a ten-year period. Similar to the grants mentioned above, there are additional funding options for property owners to alleviate some of the mitigation costs.

Due to privacy restrictions, these lists are not available to the public and there are currently no requirements regarding disclosure when such properties are for sale to inform potential buyers of the known risks.

As of May 2018, there were 152 properties on the Repetitive Loss list in Unincorporated Charleston County and the following jurisdictions: Town of Awendaw, Town of Hollywood, Town of James Island, Town of Lincolnville, Town of Meggett, Town of Ravenel and Town of Seabrook Island. These jurisdictions are currently served by the County's floodplain management program through intergovernmental agreements.

CONCLUSION

The scope of resilience goes far beyond the topics covered in this Element, and the County will work to introduce additional areas of concern, causes, and potential solutions over time to help create a more resilient Charleston County. The topic of resilience is covered in other Elements of this Comprehensive Plan, and during the next scheduled review of the Comprehensive Plan in its entirety, these topics will be consolidated and evaluated.



PHOTO: CHARLESTON COUNTY PUBLIC INFORMATION OFFICE

3.11.3: RESILIENCE ELEMENT GOAL

Charleston County will prioritize resilience in all County plans, policies, and regulations.

Resilience Element Needs

Resilience Element needs include, but are not limited to, the following:

- Improving the County's ability to handle and recover from sudden emergencies, as well as more persistent issues.
- Determining areas that are of the highest risk, evaluating development intensity regulations for these areas, and prioritizing projects in these areas.
- Strengthening partnerships with surrounding jurisdictions to combat issues that cross jurisdictional boundaries.
- Educating the public about their role in building resilience and how to recover.
- Review and consolidate resilience-related efforts detailed in other Elements of this Plan during the next five-year update, which may include, but not be limited to, advanced study and audit of existing facilities and programs.



PHOTO: CHARLESTON COUNTY PUBLIC INFORMATION OFFICE

3.11.4: RESILIENCE ELEMENT STRATEGIES, ACTION ITEMS AND TIME FRAMES

The County should undertake the following strategic actions in support of the Vision and Goals of this Plan. These implementation strategies and action items will be reviewed a minimum of every five years and updated every ten years from the date of adoption of this Plan.

RE.1 Coordinate resilience-related efforts within the County and across jurisdictional boundaries.

ACTION ITEM: Identify a Resilience Officer and resources to implement strategies, administer programs, pursue funding opportunities, and provide standards to coordinate resilience-related efforts of County Departments, municipalities and adjacent jurisdictions, applicable regulatory agencies, and regional partners.

ACTION ITEM: Identify and pursue amendments to existing County policies and regulations including, but not limited to, the Floodplain Management Program, Hazard Mitigation Plan, Stormwater Ordinance, Building Ordinance, and Zoning and Land Development Regulations Ordinance, to improve the County's resilience towards long-term stresses and acute disasters, using the best data available to inform decisions.

ACTION ITEM: Amend applicable County ordinances to address the Community Rating System (CRS) standards not currently addressed by the County, including, but not limited to:

- Requiring low-impact development design Best Management Practices such as non-structural flood protection techniques that can mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources in applicable areas;
- Increasing the freeboard in Special Flood Hazard Areas;
- Implementing freeboard requirements in X Zones;
- Increasing minimum lot size requirements in low density zoning districts (in the Rural Area);
- Prohibiting filling of land where determined to create or exacerbate flooding, whether the land is in a flood zone or not;
- Increasing OCRM Critical Line buffer requirements;
- Requiring additional review of flood hazards during the Site Plan Review process;
- Enacting transfer and/or purchase of development rights programs through Intergovernmental Agreements with other jurisdictions to provide incentives for low levels of development within the Special Flood Hazard Areas; and
- Requiring compensatory storage of stormwater in new development/re-development, where applicable.

ACTION ITEM: Work with adjacent jurisdictions to secure funding to perform a regional vulnerability, risk, and resilience assessment and watershed assessment, both of which should include implementation strategies.

ACTION ITEM: Amend County regulations and policies to implement the strategies of the regional vulnerability and watershed assessments.

ACTION ITEM: Create, implement, maintain and assist in public information programs in order to educate citizens about resilience practices including, but not limited to, assisting business owners with developing Continuity of Operations Plans; educating the public, including children, about contributing factors related to flood risks, sea level rise, and ways to reduce environmental impacts; creating targeted messaging that is understood at all educational levels, ages and nationalities, so that the public can be better informed; and incorporating K-12 educational efforts to promote resilience, mitigation and disaster preparedness at the school-aged level.

ACTION ITEM: Continually monitor local, state, federal, and private initiatives and recommendations regarding resilience.

ACTION ITEM: Coordinate with municipalities to reduce waste and duplication of efforts, and investigate diversion strategies in order to limit impacts on the environment.

RE.2 Develop, adopt, and implement a Drainage Master Plan and sea level rise strategies that are coordinated with adjacent jurisdictions.

ACTION ITEM: Create an asset management plan to identify existing drainage easements and structures, including ownership, and ensure their maintenance and longevity.

ACTION ITEM: Identify additional Best Management Practices to be utilized in areas as specified by the Drainage Master Plan.

ACTION ITEM: Identify where drainage easements and/or structures are needed and coordinate with property owners and/or jurisdictions to obtain the easements, construct the improvements, and maintain the improvements.

ACTION ITEM: Develop, adopt, and implement resilience strategies for capital expenditures for existing and new infrastructure.

PUBLIC INPUT



June 4, 2019

Charleston County Planning Department
4045 Bridge View Drive
North Charleston, SC 29405

Re: Charleston County Comprehensive Plan Amendments to Incorporate the Resilience Element

Dear Charleston County Planning Commissioners,

Thank you for the opportunity to comment on the Charleston County Comprehensive Plan amendments to incorporate the Resilience Element. Fix Flooding First is a local, community-driven, grassroots movement advocating for solutions and funding to address flooding in Charleston County. We are focused on protecting our neighbors, coastal communities, homes, businesses, natural resources and quality of life from flood related issues.

We are pleased to provide the Fix Flooding First letter of support for the new element. The need for laser focus on resilience in Charleston County is now. The stated goal of the draft element is for Charleston County to prioritize resilience in all County plans, policies and regulations. Therefore we believe that by incorporating this element into the Comprehensive Plan, inclusive regional dialogue on solutions to address county flooding will increase, policies will be updated to protect the long-term health of our community with science based plans, responsible land use and zoning regulations will be applied to prevent destructive building practices, the citizenry will be better informed on the issues and solutions around flooding, and allocations of funding from federal, state, and local governments towards flood mitigation will increase.

The aforementioned stated goals are directly aligned with those of the Fix Flooding First coalition, and therefore we enthusiastically offer our support of the Resilience Element being incorporated into the Charleston County Comprehensive Plan. We commend Charleston County for advancing resilience measures in our community by calling for the creation of this element, and encourage the Planning Commission to vote in favor of amending the Comprehensive Plan to reflect these changes.

Sincerely,

AFRICAN AMERICAN SETTLEMENT COMMUNITY HISTORIC COMMISSION (AASCHC)
CHARLESTON WATERKEEPER
COASTAL CONSERVATION LEAGUE
CROSTOWNE CHURCH
GROUNDWELL!
EASTSIDE COMMUNITY DEVELOPMENT CORPORATION
HISTORIC CHARLESTON FOUNDATION



JOHNS ISLAND COMMUNITY ASSOCIATION
JOHNS ISLAND COUNCIL
LOWCOUNTRY LOCAL FIRST
MIDDLETON PLACE FOUNDATION
NATURAL RESOURCES DEFENSE COUNCIL (NRDC)
PRESERVATION SOCIETY OF CHARLESTON
SAVE JAMES ISLAND
SAVE SHEM CREEK
SOUTHERN ENVIRONMENTAL LAW CENTER

Proposed amendment to the Comprehensive Plan to add a Resilience Element

Dear Chairman Summey and Members of County Council,

We are Charleston County residents on Wadmalaw Island writing in support of and urging County Council to update the Comprehensive Plan taking into consideration the impact of extreme weather events and flooding on the Lowcountry, the livability and sustainability of our community.

Climate change regardless of the arguments on sources is a reality that we all face in this generation and the generations of our children. To ignore our responsibility as stewards of the land on which we live today is to ignore our responsibility to our children.

Living on Wadmalaw Island, we know the history and importance of Charleston County's Comprehensive Plan. The plan is a long-term view of appropriate land uses balancing the needs and wants of a diverse community; driving zoning ordinances and policies to execute that plan. **Amending the Comprehensive Plan to account for the impact of these significant environmental changes on the Lowcountry is entirely appropriate and "The Resilience Element" is a start in the right direction.**

Charleston's popularity is driving growth and expansion that can't be sustained and our current ordinances are enabling the exploitation of our natural resources. Large corporate developers from outside the region with large purses and no vested interest in the long-term livability or quality of life in the neighborhoods they build are buying up historical landmarks and farms, clear-cutting to the ground then filling and building hundreds of cookie-cutter tract homes leaving the community with flooding, increased traffic, decreasing patience, and increasingly short tempers. Our current laws and lack of controls are supporting these activities that are affecting our quality of life. We strongly support Council's responsible review and updating of the Comprehensive Plan to better safeguard our quality of life and protect our futures. We appreciate all the work and effort by the members of the Resiliency Task Force to come up with this proposed amendment.

Best Regards,
Kelly and Pam Skinner
Fairview Plantation Road
Wadmalaw Island, SC 29487

3.

**KIAWAH RIVER
DEVELOPMENT
AGREEMENT
AND
PD143-A**

DEVELOPMENT AGREEMENT AND PLANNED DEVELOPMENT AMENDMENT REQUESTS:

ZREZ-09-19-00107 & ZDA-09-19-00101

- Case History
- Presentation
- PD Documents
- Public Input

Post & Courier

CHARLESTON COUNTY COUNCIL PUBLIC HEARING
Tuesday, January 21, 2020 & Tuesday, February 4, 2020 at 6:30 PM

Charleston County Council will hold public hearings at 6:30 pm on January 21 and February 4, 2020, in County Council Chambers (second floor of Lonnie Hamilton, III Public Services Building, 4045 Bridge View Drive, N. Charleston, SC 29405) on proposed amendments to the Kiawah River Development Agreement and Planned Development (PD-143A).

For more details, visit www.charlestoncounty.org or contact the Charleston County Planning Department at (843) 202-7200. This Public Notice is in accordance with Section 6-29-760 of the Code of Laws of South Carolina.

Kristen L. Salisbury
Clerk of Council

**KIAWAH RIVER DEVELOPMENT AGREEMENT AMENDMENT REQUEST (ZDA-09-19-00101) &
PLANNED DEVELOPMENT (PD-143A) AMENDMENT REQUEST
(ZREZ-09-19-00107)
CASE HISTORY**

**Planning Commission Meeting #1: November 4, 2019
Planning Commission Workshop & Meeting #2: December 9, 2019
1st Public Hearing: January 21, 2020
PPW Committee: February 4, 2020
2nd Public Hearing & 1st Reading: February 4, 2020
2nd Reading: February 25, 2020
3rd Reading: March 10, 2020**

CASE INFORMATION

Location: 0 Bell Cove Rd; 600-6004 Bow Alley; 7900-7935 Flagship Ln; 9820-9844 Haven Loop; 2510-2588 Helmsman Rd; 8007 Jack Island Dr; 0-5815 Kiawah River Dr; 3305-3329 Knot Alley; and 1450-1482 Mizzen Alley

Parcel Identification (PID) Numbers: 212-00-00-001 and 212-00-00-005 through 212-00-00-103

Council Districts: 8 & 9

Property Size: 1,253.41 acres total (includes 240.91 acres of freshwater wetlands); 481.01 acres of OCRM Critical Line Area.

Application:

The applicant is requesting to amend the Kiawah River Development Agreement and Planned Development.

Comprehensive Plan and Zoning History:

Prior to 2009, the Development Agreement area was a single property that was split zoned. The majority of the property, approximately 810.22 acres of highland and freshwater wetland, was located in the Rural Area (zoned AG-8) and approximately 460.39 acres of highland and freshwater wetland was located in the Urban/Suburban Area (zoned R-4). However, the November 18, 2008 *Comprehensive Plan* assigned the entire parcel to the Rural Agricultural Future Land Use designation.

On December 22, 2009, County Council approved the Kiawah River Plantation Development Agreement ("Agreement") for PID# 212-00-00-001 (1,427.81 acres in size). The 25-year Agreement includes approval of a rezoning of the property from the Single Family Residential (R-4) District/Agricultural Preservation (AG-8) District to the Planned Development (PD-143) District. The Agreement, which was recorded on February 4, 2010, allows:

- A maximum of 1,285 dwelling units, of which up to 1,285 can be single family detached units (max. 227 on OCRM Critical Line), 320 can be single family attached units, and 320 can be multi-family units; up to 117 workforce housing units are required. Note that previous zoning would have allowed a gross density of up to 1,943 dwelling units.
- Up to 80,000 square feet of gross leasable area.
- Up to 450 guest rooms.
- A minimum of 635.31 acres of open space.
- Access to both Betsy Kerrison Pkwy and Mullet Hall Rd.

The Agreement requires annual reviews of the Agreement to ensure compliance, all of which have been completed since the 2009 adoption of the Agreement. It requires mitigation including paying "\$800,000 or the actual cost, whichever is lesser, towards the purchase of a ladder truck to service the *Real Property* for St. John's Fire District on or before obtaining a building permit for the construction of any building on the *Real Property* requiring a ladder truck according to the National Fire Prevention Association." The

Agreement also requires dedication of “three (3) highland acres of the *Real Property* at a mutually agreeable location(s)” for a substation(s) for the use of St. John’s Fire District, the Charleston County Sheriff’s Office, the Charleston County Magistrate’s Office, Charleston County EMS, and/or any other police, fire or EMS service which may acquire jurisdiction over the *Real Property*.

On January 6, 2015, County Council approved the *Comprehensive Plan Five-Year Review*. The approval included adjusting the Urban Growth Boundary through the subject property to follow the division between the areas approved in the Agreement for rural development intensities and the areas approved for suburban development intensities and assigning the subject property to the Planned Development Future Land Use category.

On May 24, 2018, the owner of the properties in the Development Agreement submitted applications to amend the Development Agreement and Planned Development. The proposed amendments, which are summarized below, were approved by County Council on October 9, 2018.

- Corrected the property owner information to reflect the acquisition of the property by Kiawah River Investment, LLC and the substitution of Kiawah River Investment, LLC as the Property owner as a result of the conveyance.
- Changed the community name from “Kiawah River Plantation” to “Kiawah River.”
- Updated the mailing addresses for the property owner and attorney.
- Revised the definitions of “Guest Room”, “Gross Leasable Area”, “Hotel”, “Inn”, “Lot Line, Front”, and “Plan”.
- Allowed the Property Owner to designate the Front and Rear Lot Lines when properties abut Open Space on one side and a Thoroughfare on the other and when properties have more than one Thoroughfare frontage.
- Revised the minimum front setbacks for accessory structures to change the requirement of “20’ + building setback” to “building setback” and correct table note reference numbers.
- Allowed one intrusion into the OCRM Critical Line setback and buffer (not to exceed 50’ in width) for an Open Space area as shown on proposed Exhibit 8.3, Village Green Conceptual Plan.
- Allowed the Property Owner to disturb and conduct activity within the OCRM Critical Line Buffer only as necessary to accomplish the saltwater wetlands mitigation approved by the US Army Corps of Engineers (USACOE). The USACOE approved impacting 0.79 acres of saltwater impoundments to facilitate necessary road footprints with a 2:1 ratio of mitigation (requires creation of 1.58 acres of saltwater resources by expanding an area within one of the on-site impoundment – Critical Pond 4).
- Clarified the application of the internal buffers.
- Added off-street parking requirements for “All Other Uses” (ARB to make the determination based upon the proposed criteria including, but not limited to, availability of on-street parking, non-vehicular access, etc.).
- Updated Exhibit 4.1, Framework Plan, to reflect revised conceptual plan.
- Deleted the requirement for Special Exception approval for Community Docks.

Parcel Information and Area Description:

Since the approval of the Agreement in 2009, the original parcel, PID# 212-00-00-001, has been subdivided into 99 parcels. The spine road and wastewater treatment facility have been constructed, as have numerous homes. Plans for a park/pavilion area, hotel, and swim club are currently being reviewed by staff.

Adjacent properties are zoned R-4, AG-8, AGR, and Planned Development. The subject property is surrounded by vacant parcels and parcels used for agriculture, residential, and institutional purposes. The southwestern portion of the subject property abuts the Kiawah River Estates subdivision (formerly known as Hope Plantation); the property to the north of the portion of the subject parcel that touches Betsy Kerrison Pkwy contains a church; and the property to the east of the subject property contains the Charleston County Equestrian Center. The Briar’s Creek subdivision is located to the east of the subject parcel.

Requested Amendments:

The applicant is requesting to amend the Agreement and associated exhibits and appendices, including the Planned Development, as follows:

- Allow up to 160 Retirement Housing Units in addition to the 1,285 Dwelling Units currently allowed. The Retirement Housing Units would be:
 - Located in the River Village (not in the Rural Residential or Bohicket Station).
 - In the form of single-family, multi-family, or townhomes.
 - Subject to the density limitations of the area in which they are placed.
 - Counted against the total number of Guest Rooms allowed (450 max.) based on the following formula: 1 Retirement Housing Unit = 0.5 Guest Rooms.
- Allow Accessory Uses (parking, etc.) for Hotels and Inns on other lots other than where the principal use is located.
- Exempt Sweet Gums, Laurel Oaks, and Water Oaks from the Grand Tree definition.
- Require inch per inch mitigation when healthy Laurel Oaks or Water Oaks are removed.
- Allow unlimited special events as accessory uses (without requiring zoning permits) when held on properties owned by the declarant under the Covenants, the ARB, a Hotel or Inn, and chapel.
 - Property owner shall provide special events calendars to safety services on a monthly basis.
 - Properties owned by other individuals would be subject to the requirements of ZLDR Art. 6.7, Special Events Use (added to the Development Agreement as Exhibit 4.2).
- Revise the Use Table to exclude Courts, Safety Services, Schools, Postal Service, and Amenity Center/Swim Club from the 80,000 SF cap on commercial space/gross leasable area.
- Provide that only 50% of the Gross Leasable Area of Self-Service Storage/Mini-Warehousing and Boat/RV Storage uses shall count against the 80,000 SF cap. These uses are exclusively for the use of the owners and tenants of the development.
- Allow variance applications to be submitted to the Board of Zoning Appeals for trees, setbacks, buffers, height, and maximum lot/building coverage. All other proposed changes or deviations require applications to amend the Development Agreement and Planned Development.
- Clarify the Waterfront Development Standards:
 - The 227 waterfront lots that are allowed include all types of residential lots/units and not just single-family detached units, but exclude Guest Rooms (Villas and Bed and Breakfasts).
 - A 35-foot average/15-foot minimum OCRM Critical Line Buffer is required for the development unless otherwise noted.
 - A 15-foot minimum OCRM Critical Line Buffer and 35-foot minimum OCRM Critical Line Setback is required for single-family detached development
 - The area formerly zoned AG-8 shall have a minimum 35-foot OCRM Critical Line Buffer and a 50-foot OCRM Critical Line Setback.
 - No OCRM Critical Line Buffer shall be required for the causeways on the property.
 - Installation of underground utilities shall be allowed subject to Site Plan Review approval, provided that the Property Owner submit a landscaping plan for the revegetation of the buffer along with a planting schedule for review and approval as part of the Site Plan Review process or Subdivision review process.
- Building Development Standards:
 - Allow application of the River Village Building Development Standards for single-family attached housing and duplexes in the Rural Residential area, subject to a cap of 175 such units in the Rural Residential Area.
 - Clarify that multi-family uses are not allowed in the Rural Residential Area.
 - Clarify that the front setback standards shall not apply to non-residential development in the River Village and Bohicket Station to allow more urban configurations.
 - Clarify that the respective per-acre maximum densities for Bohicket Station, River Village, and Rural Residential shall be calculated based on the total acreage of each area, not per subdivision plat or per lot.
- Require compliance with the right-of-way buffer regulations of the ZLDR only for the portion of the property that abuts Betsy Kerrison Pkwy.
- Internal Buffers:
 - Add instructions for application of Table 8.2, Internal Buffers.
 - Update and clarify table.
- Update the parking standards to include Retirement Housing and allow nearby on-street parking to be counted towards the off-street parking requirements for non-residential uses.
- Allow the ARB to create the architectural and landscaping requirements pursuant to the Architectural

Design Guidelines added to the Agreement in Exhibit 12.3.

- Clarify that the sign requirements of ZLDR Article 9.11 apply only to signs visible from Betsy Kerrison Pkwy and Mullet Hall Rd. All other signs shall be reviewed and approved by the ARB.
- Amend the definitions of: Accessory Use (as noted above), Grand Tree (as noted above), Retirement Housing, and Retirement Housing Unit.

Municipalities Notified/Response: The City of Charleston, Town of James Island, Town of Kiawah Island, City of North Charleston, and Town of Seabrook Island were notified of the request, but have not responded.

Public Input: No public input has been received at this stage.

STAFF RECOMMENDATION – NOVEMBER 4, 2019 PLANNING COMMISSION MEETING:
APPROVAL WITH CONDITIONS*

****Note: Prior to the December Planning Commission Workshop & Meeting, the applicant addressed all staff recommended conditions of approval in the Development Agreement and Planned Development documents; therefore, staff's recommendation changed to approval for the December 9, 2019 Planning Commission Workshop & Meeting.***

The proposed amendments to the Agreement comply with the requirements of the South Carolina Local Government Development Agreement Act and all development thus far is in compliance with the approved Agreement. The proposed amendments also comply with ZLDR Section §4.23.9 E (9), PD Development Plan Approval Criteria (may be approved only if County Council determines that the following criteria are met):

- A. The PD Development Plan complies with the standards contained in this Article;
The proposed amendments are consistent with the standards of the Planned Development Zoning District article. Therefore, this criterion is met.
- B. The development is consistent with the intent of the *Comprehensive Plan* and other adopted policy documents; and
The proposed amendments are consistent with the intent of the Comprehensive Plan and other adopted policy documents. No changes in open space requirements are proposed and the addition of the Retirement Housing Units is off-set by a reduction in the number of Guest Rooms. The amendments update and clarify the development standards to enable the Traditional Neighborhood Design always envisioned by the Property Owner, and provide the opportunity to create more open spaces. Therefore, this criterion is met.
- C. The County and other agencies will be able to provide necessary public services, facilities, and programs to serve the development proposed, at the time the property is developed.
The proposed amendments do not change level of public services, facilities or programs required by the original Agreement, which included letters of coordination from applicable service providers. In addition, the Property Owner must provide updated letters of coordination at the time of development of each phase. Therefore, this criterion is met.

CONDITIONS OF APPROVAL:

- Development Agreement and PD Table 5.1, Table of Proposed Land Uses: Specify that the 80,000 SF limitation for Commercial uses is 80,000 SF GLA
- PD table 6.1, Building Development Standards:
 - Add note 3 "(3)" next to "Lot Width"
 - Add note 4 "(4)" next to "Building Coverage"
- PD Sec. 9.B, Grand Trees:
 - Clarify if the last sentence of the last paragraph "If healthy laurel oaks or water oaks are removed, the *Property Owner* shall implement inch per caliper inch mitigation as directed or approved by the *Planning Director*", is intended for all healthy Laurel Oak and Water Oak trees or only those over a certain DBH (i.e., Protected Trees (8"+) or Grand Trees (24"+)).

- Add the following after the last sentence of the last paragraph “The health of the trees shall be determined by the *Planning Director*.”
- PD Sec. 12, Architectural and Landscaping Design Standards: Include a statement that the Architectural and Landscaping Design requirements of the ZLDR Redlines do not apply.
- ZLDR Redlines:
 - Sec. 4.27.9.C.1.a.xii: Delete the first sentence (show as a new redline) as it states variances do not apply to PDs (the applicant has requested variances to apply in specified cases).
 - Sec. 9.4.5, Tree Removal: Delete proposed sub-sections 5, 6, and 7 and clarify if the intent is to exempt development in the River Village, Bohicket Station, and Hotels from the requirements of this section.
 - Sec, 9.4.6, Tree Replacement:
 - Do not delete Sub-section B, Wooded Site with 160 Inches per Acre or More DBH; instead, clarify if the intent is to exempt only the River Village from this requirement.
 - Sub-Section D, Previously Cleared Sites: Clarify if the intent is to exempt only the River Village from this requirement.
 - Sec. 9.5.3, Parking, Loading, and Vehicular Use Area Landscaping:
 - Keep this entire section as written in the currently approved Redlines and state it applies to all areas except the River Village.
 - Write in the proposed changes as a new section with an explanation that they apply only to the River Village.
 - Sec. 9.5.6, Landscape Material Standards:
 - Include the following after the first sentence under the header: “The requirements of this section apply to all areas of the *Development* except the River Village. The *ARB* shall review and approval all landscape materials for the River Village and The *Property Owner* shall provide the *Planning Director* a copy of the *ARB* approval as part of each *Development* application.”
 - Delete “Except for River Village” in the Section title line and also delete Sub-section 6 (both are covered by the language above).

PLANNING COMMISSION MEETING: NOVEMBER 4, 2019

Recommendation: Deferred by the Planning Commission to be heard at the December Planning Commission Workshop (Vote 7 – 0, with 2 absent)

Notifications:

264 notification letters were sent to owners of property located within 500 feet of the boundaries of the subject parcel, and individuals on the Johns Island Interested Parties List on October 18, 2019. Additionally, this request was noticed in the *Post & Courier* on October 18, 2019.

Public Input: 1 letter was received from the Coastal Conservation League regarding the Nov. PC version of the document.

PLANNING COMMISSION WORKSHOP & MEETING: DECEMBER 9, 2019

Prior to the December Planning Commission Workshop & Meeting, the applicant addressed all staff recommended conditions of approval in the Development Agreement and Planned Development documents; therefore, staff recommends approval.

Recommendation: Recommend Approval with Conditions (from Planning Commission).

Conditions of Approval:

- Change all applicable sections to reflect that *Retirement Housing Units* shall count against the cap of 450 *Guest Rooms* at the equivalence of 1.0 *Retirement Housing Units* for each *Guest Room*.

- Include a statement(s) in the appropriate location(s) of the Agreement and PD indicating that *Retirement Housing* and *Retirement Housing Units* shall not be used as Short-Term Rental Properties, and add the following definition of Short-Term Rental Properties: “ A residential dwelling or any part thereof that is offered, advertised, or provided to Short-Term Rental Tenants (excluding family members), for a fee or any form of compensation, for intervals of 29 days or less during a calendar year.”
- Amend PD Sec. 4.3.4, Assemblies and Special Events, 3rd sentence, and all other applicable sections of the Agreement and PD to state: Such special events on the *Real Property* owned by the declarant under the *Covenants*, the *Association*, or a *Hotel* or *Inn*, or the owner of the chapel on the *Real Property* shall be considered an *Accessory Use* and shall not require a zoning permit, special exception, conditional use permit, or other further approval from the County nor have a cap on the number in a calendar year, **provided that daily event attendance shall be limited to 750 people.**
- Amend PD Sec. 9.B, Tree Removal, Replacement, Protection, Preservation and Mitigation, last sentence, and all other applicable sections of the Agreement and PD, to state: “The health of the trees shall be determined by the *Planning Director* **provided that the applicant shall pay the Grand Tree Variance application fee for each tree to be evaluated.**”

Notifications:

264 notification letters were sent to owners of property located within 500 feet of the boundaries of the subject parcel, and individuals on the Johns Island Interested Parties List on November 22, 2019. Additionally, this request was noticed in the *Post & Courier* on November 22, 2019.

Public Input: 1 letter in opposition has been received from the Johns Island Task Force.

1st Public Hearing: January 21, 2020

Notifications:

264 notification letters were sent to owners of property located within 500 feet of the boundaries of the subject parcel, and individuals on the Johns Island Interested Parties List on December 20, 2019. Additionally, this request was noticed in the *Post & Courier* on December 20, 2019.

Public Input: The letter of opposition from the Johns Island Task Force was replaced with a letter of support in response to the recommended conditions from the Charleston County Planning Commission.

Speakers: Two individuals spoke in support of the amendment (Tony Woody and Jason Crowley). One individual, a Johns Island resident, spoke in opposition to the amendment citing potential increases in traffic on Johns Island.



**Kiawah River Development Agreement
Amendment
(ZDA-09-19-00101) & Planned
Development (PD-143A) Amendment
Request
(ZREZ-09-19-00107)**

1st Public Hearing: January 21, 2020

PPW Committee: February 4, 2020

2nd Public Hearing & 1st Reading: February 4, 2020

2nd Reading: February 25, 2020

3rd Reading: March 10, 2020

Kiawah River Plantation Amendment Requests

- Johns Island: 0 Bell Cove Rd; 600-6004 Bow Alley; 7900-7935 Flagship Ln; 9820-9844 Haven Loop; 2510-2588 Helmsman Rd; 8007 Jack Island Dr; 0-5815 Kiawah River Dr; 3305-3329 Knot Alley; and 1450-1482 Mizzen Alley
- Parcel I.D.: 212-00-00-001 & 212-00-00-005 - 212-00-00-103
- Request to amend the Kiawah River Development Agreement and Planned Development
- Applicant: Kevin O'Neill, Beach Development
211 King St, Suite 300, Charleston, SC 29401
- Owner: Kiawah River Investment, LLC
211 King St, Suite 300, Charleston, SC, 29401
- Acreage: 1,253.41 acres total (includes 240.91 acres of freshwater wetlands); 481.01 acres of OCRM Critical Line Area
- Council Districts: 8 & 9

Comprehensive Plan & Zoning History

- Prior to 2009, the subject property was split zoned:
 - 810.22 acres of highland and freshwater wetland were located in the Rural Area (zoned AG-8)
 - 460.39 acres of highland and freshwater wetland were located in the Urban/Suburban Area (zoned R-4)
- December 22, 2009: County Council approved the Kiawah River Plantation Development Agreement (“Agreement”) for PID# 212-00-00-001 (1,427.81 acres in size)
 - 25-year Agreement
 - Includes rezoning the property from the Single Family Residential (R-4) District/Agricultural Preservation (AG-8) District to the Planned Development (PD-143) District
 - Recorded on February 4, 2010

2009 Kiawah River Plantation Development Agreement

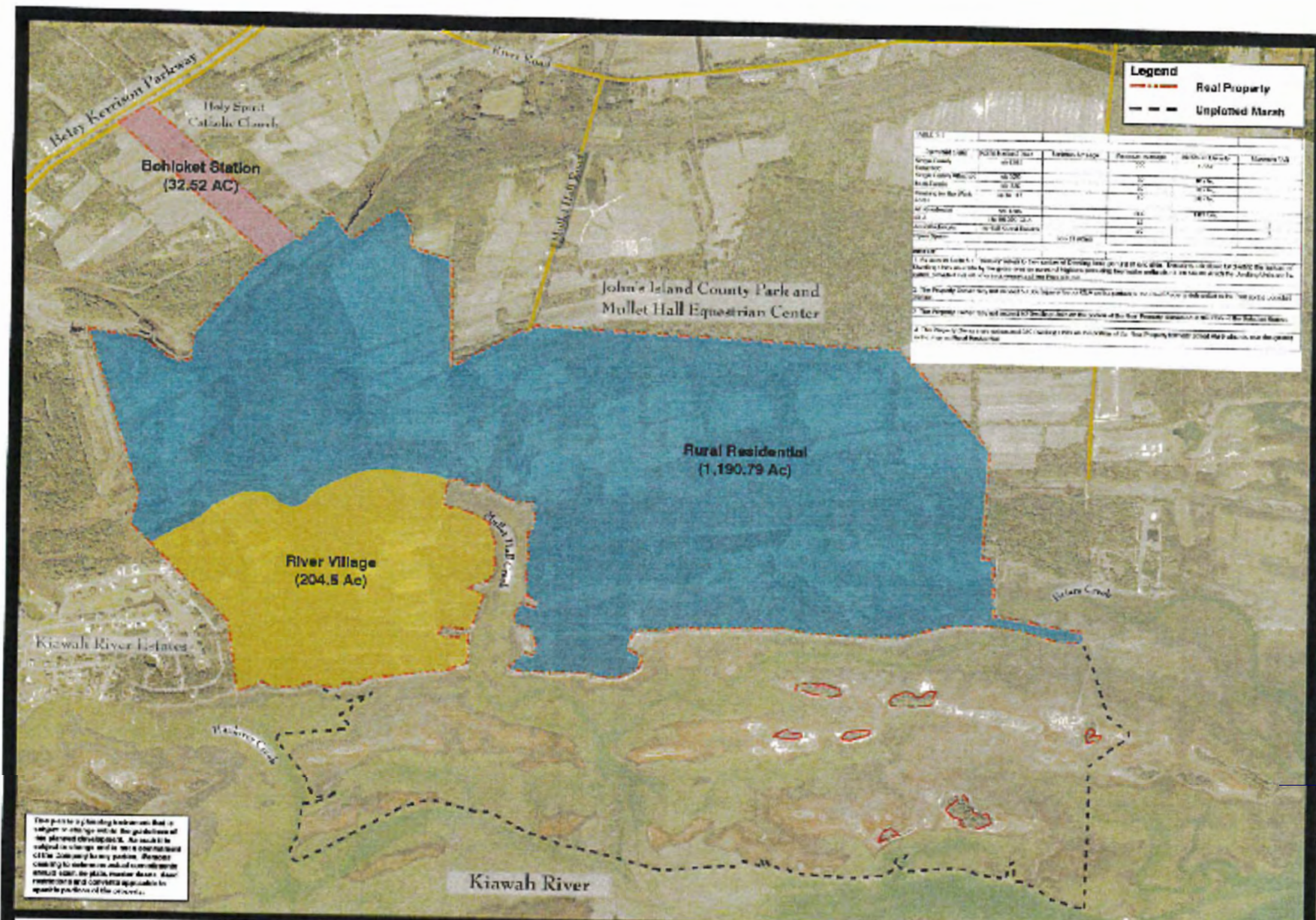
- Maximum of 1,285 dwelling units (previous zoning would have allowed a maximum of 1,943 dwelling units)
 - Not to exceed 1,285 single family detached units (max. 227 on OCRM Crit. Line)
 - Not to exceed 320 can be single family attached units
 - Not to exceed 320 multi-family units
 - Up to 117 workforce housing units
- Up to 80,000 square feet of gross leasable area
- Up to 450 guest rooms
- A minimum of 635.31 acres of open space
- Access to both Betsy Kerrison Pkwy and Mullet Hall Rd
- Required mitigation:
 - Land for an EMS/CCSO/Fire/Magistrate's Office
 - \$800,000 or the actual cost, whichever is lesser, towards the purchase of a ladder truck St. John's Fire District on or before obtaining a building permit for the construction of any building on the Real Property requiring a ladder truck according to the National Fire Prevention Association

Comprehensive Plan & Zoning History

- On January 6, 2015, County Council approved the Comprehensive Plan Five-Year Review
 - Adjusted the Urban Growth Boundary through the subject property to follow the division between the areas approved for rural development intensities and the areas approved for suburban development intensities
 - Assigned the subject property to the Planned Development Future Land Use category

10/9/18 Kiawah River Development Agreement Amendments

- Changed the community name from “Kiawah River Plantation” to “Kiawah River.”
- Revised the definitions of “Guest Room”, “Gross Leasable Area”, “Hotel”, “Inn”, “Lot Line, Front”, and “Plan”.
- Allowed the Property Owner to designate the Front and Rear Lot Lines when properties abut Open Space on one side and a Thoroughfare on the other and when properties have more than one Thoroughfare frontage.
- Revised the minimum front setbacks for accessory structures to change the requirement of “20’ + building setback” to “building setback”.
- Allowed one intrusion into the OCRM Critical Line setback and buffer (not to exceed 50’ in width) for an Open Space area.
- Allowed the Property Owner to disturb and conduct activity within the OCRM Critical Line Buffer only as necessary to accomplish the saltwater wetlands mitigation approved by the US Army Corps of Engineers (USACOE).
- Clarified the application of the internal buffers.
- Added off-street parking requirements for “All Other Uses” to be determined by the ARB.
- Updated Exhibit 4.1, Framework Plan, to reflect revised conceptual plan.
- Deleted the requirement for Special Exception approval for Community Docks.



Legend
 - - - - Real Property
 - - - - Unplanned Marsh

Category	Acres	Percentage	Notes
Real Property	1,417.81	100%	
Unplanned Marsh	1,213.29	85.5%	
Water	197.52	14.0%	
Other	0.46	0.03%	
Total	1,628.08	100%	

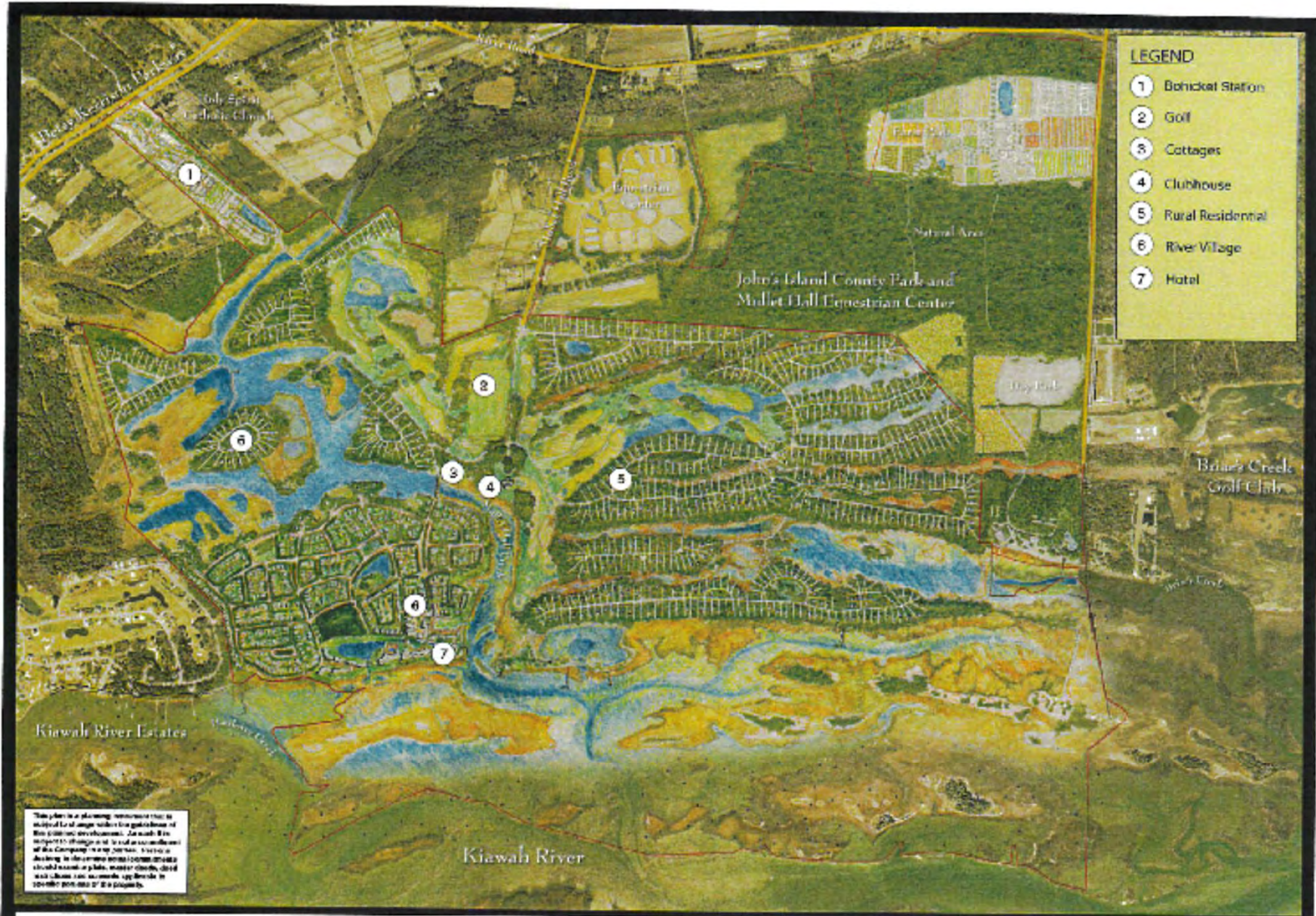
NOTES:
 1. The property shown on this map is the result of a survey conducted by the Kiawah River Plantation, LLC. The survey was conducted in accordance with the provisions of the South Carolina Code of Laws, Title 46, Chapter 15, Section 46-15-100.
 2. The property shown on this map is the result of a survey conducted by the Kiawah River Plantation, LLC. The survey was conducted in accordance with the provisions of the South Carolina Code of Laws, Title 46, Chapter 15, Section 46-15-100.
 3. The property shown on this map is the result of a survey conducted by the Kiawah River Plantation, LLC. The survey was conducted in accordance with the provisions of the South Carolina Code of Laws, Title 46, Chapter 15, Section 46-15-100.

This plan is a preliminary plan and is subject to change. The plan is not intended to be used as a legal document. The plan is not intended to be used as a legal document. The plan is not intended to be used as a legal document.



Kiawah River Plantation

EXHIBIT 5.1 - PROPOSED DEVELOPMENT PLAN



LEGEND

- 1 Bohicket Station
- 2 Golf
- 3 Cottages
- 4 Clubhouse
- 5 Rural Residential
- 6 River Village
- 7 Hotel

This plan is a planning document that is subject to change without the publication of this plan or development. It is not to be used as a basis for any legal action. All rights are reserved. In the event of any conflict between this plan and any other plan, this plan shall prevail. All other plans shall be void. All other plans shall be void. All other plans shall be void.



Kiawah River Plantation

EXHIBIT 1.2 - CONCEPTUAL LOT LINES

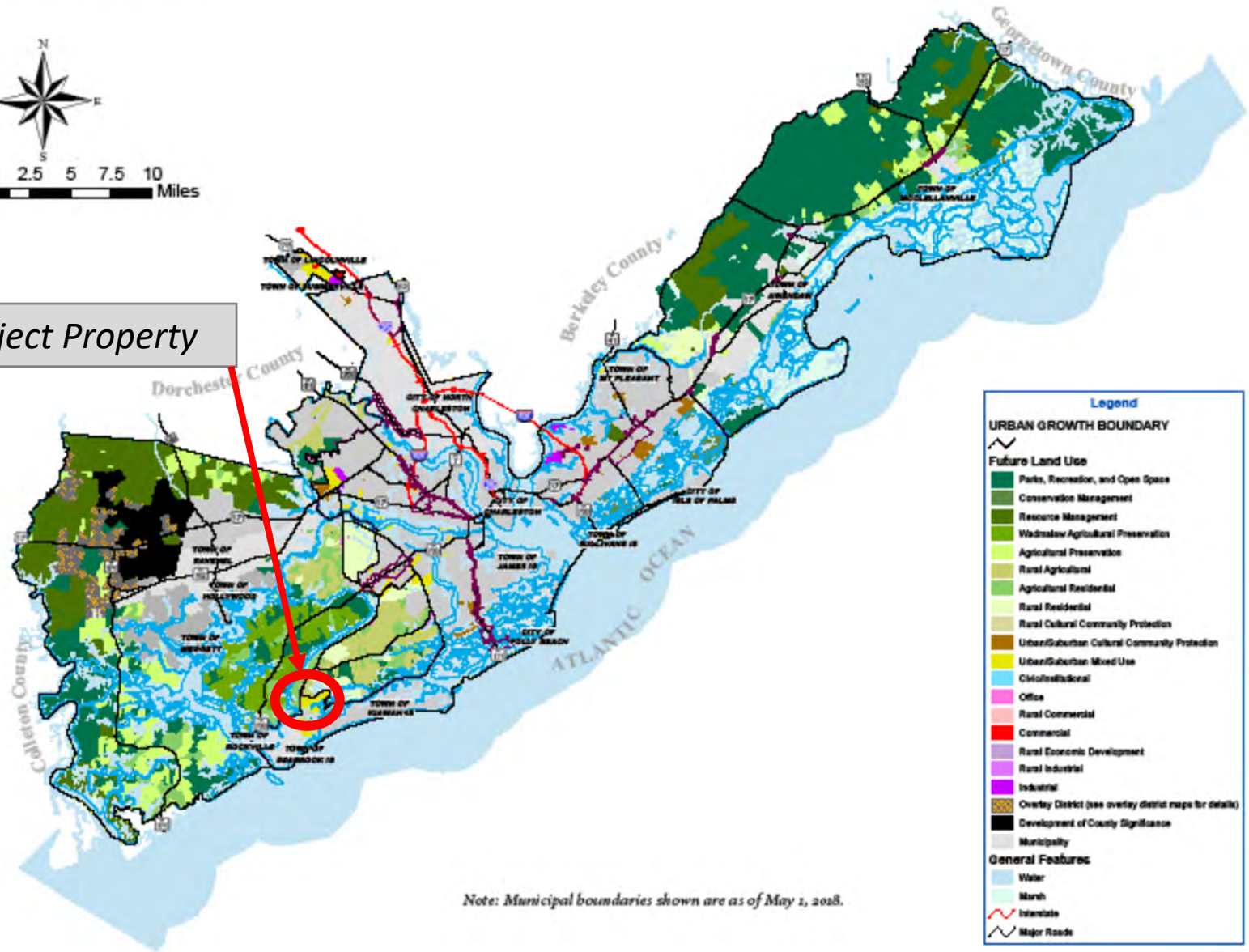
10/9/18 Comprehensive Plan

The 10-year review of the County's Comprehensive Plan was adopted on October 9, 2018. As part of that review, the future land use designation "PD" was changed to a more appropriate designation based on the history of the properties. The portion of Kiawah River in the Rural Area was designated Rural Agricultural and the portion in the Urban/Suburban Area was designated Urban/Suburban Mixed Use.

Future Land Use Recommendations Charleston County Comprehensive Plan (2018)



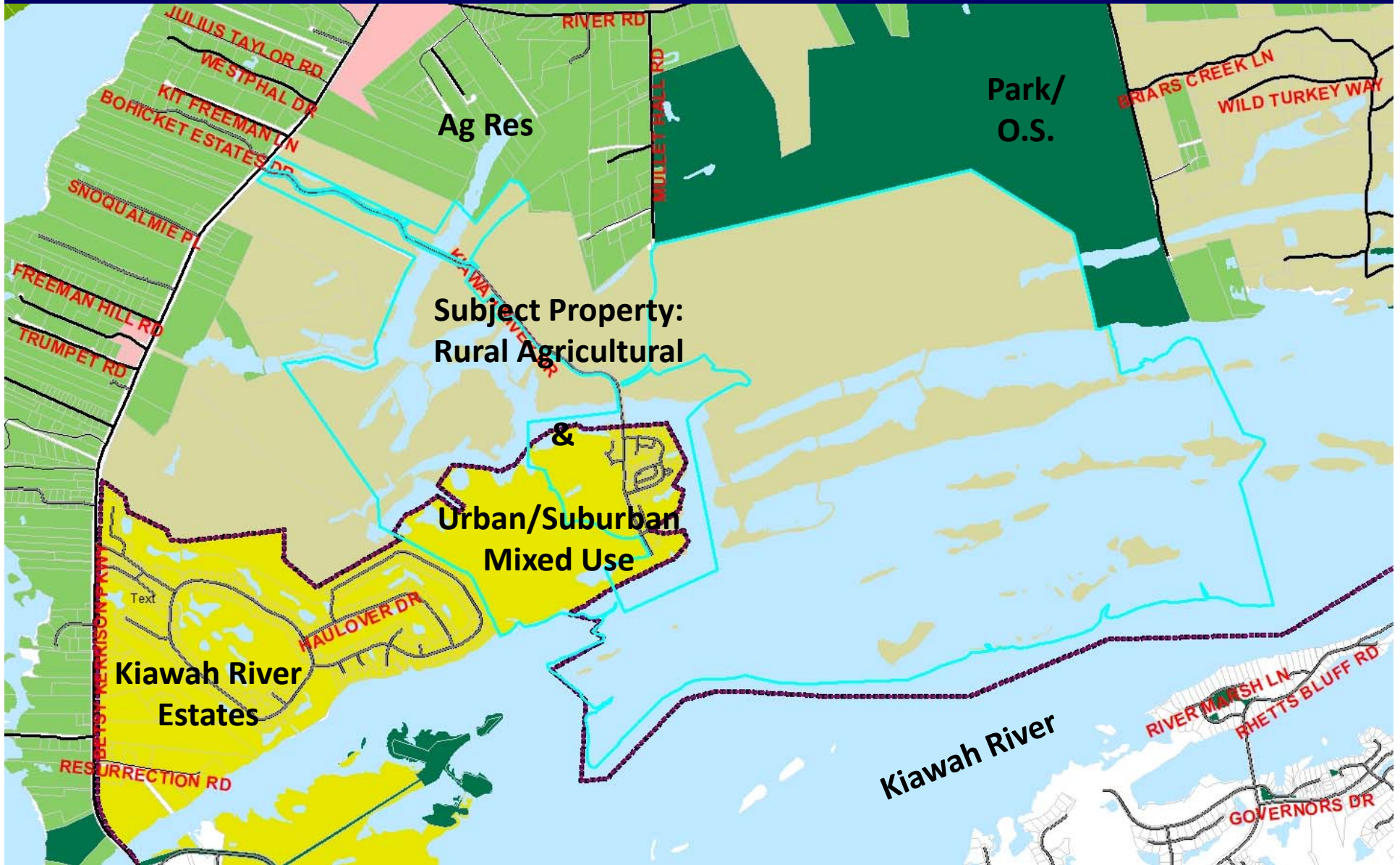
Subject Property

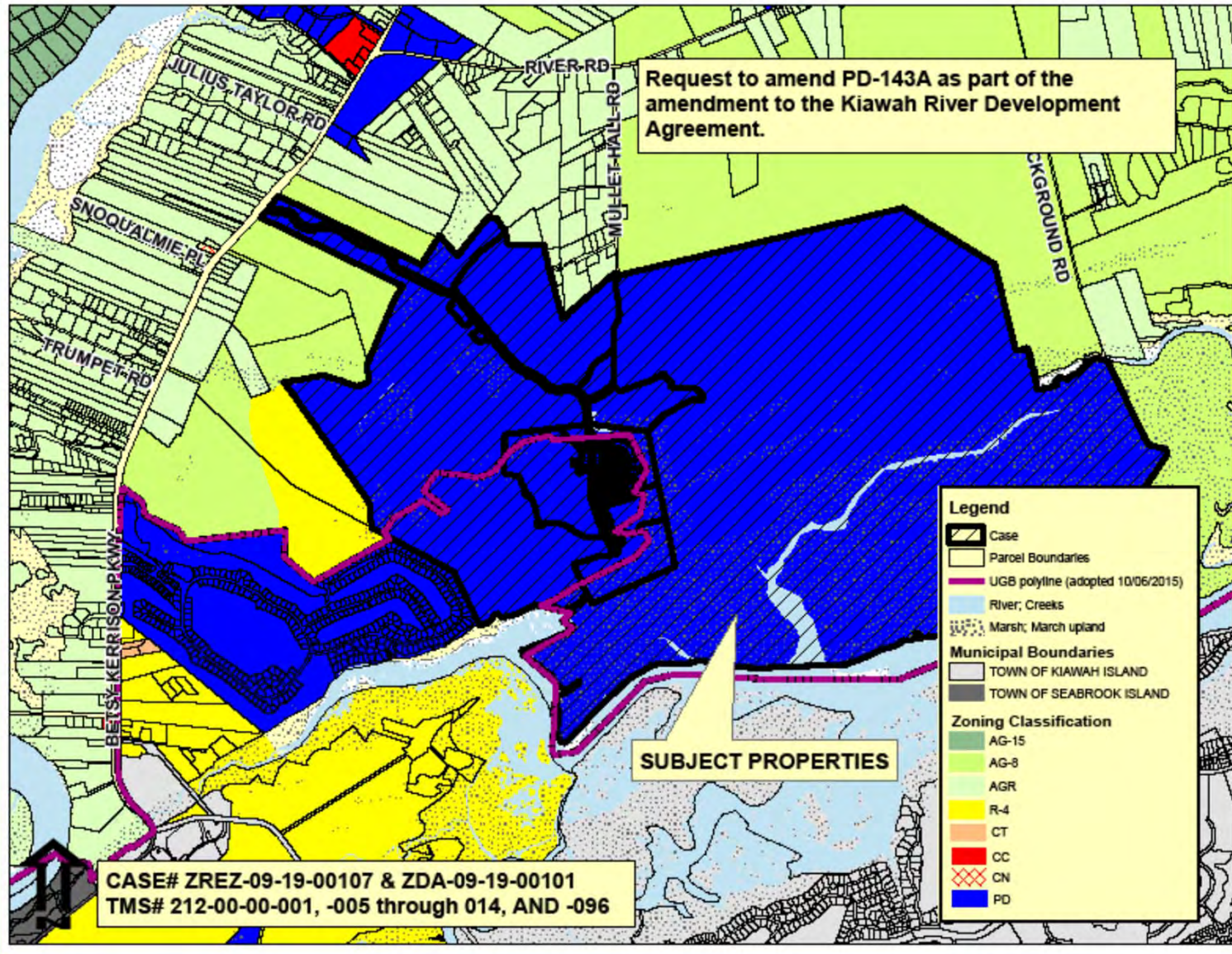


Legend	
URBAN GROWTH BOUNDARY	
	Urban Growth Boundary
Future Land Use	
	Parks, Recreation, and Open Space
	Conservation Management
	Resource Management
	Widespread Agricultural Preservation
	Agricultural Preservation
	Rural Agricultural
	Agricultural Residential
	Rural Residential
	Rural Cultural Community Protection
	Urban/Suburban Cultural Community Protection
	Urban/Suburban Mixed Use
	Civil/Institutional
	Office
	Rural Commercial
	Commercial
	Rural Economic Development
	Rural Industrial
	Industrial
	Overlay District (see overlay district maps for details)
	Development of County Significance
	Municipality
General Features	
	Water
	Marsh
	Interstate
	Major Roads

Note: Municipal boundaries shown are as of May 1, 2018.

Future Land Use Map: Kiawah River





Adjacent properties are zoned R-4, AG-8, AGR, and Planned Development. The subject property is surrounded by vacant parcels and parcels used for agriculture, residential, and institutional purposes. The southwestern portion of the subject property abuts the Kiawah River Estates subdivision (formerly known as Hope Plantation); the property to the north of the portion of the subject parcel that touches Betsy Kerrison Pkwy contains a church; and the property to the east of the subject property contains the Charleston County Equestrian Center. The Briar's Creek subdivision is located to the east of the subject parcel.

Property Development Since Dec. 2009

- The original parcel, PID# 212-00-00-001, has been subdivided into 99 parcels.
- The spine road and wastewater treatment facility have been constructed, as have numerous homes.
- Plans for a park/pavilion area, hotel, and swim club are currently being reviewed by staff.

2009 Aerial Map



2019 Aerial Map



Kiawah River Development

1 – Betsy Kerrison Pkwy Entrance & Improvements



2 – Mullet Hall Rd Entrance



Kiawah River Development

3 – Development on Jack Island



4 – Agricultural Uses



Requested Amendments

- Allow up to 160 Retirement Housing Units in addition to the 1,285 Dwelling Units currently allowed. The Retirement Housing Units would be:
 - Located in the River Village (not in the Rural Residential or Bohicket Station).
 - In the form of single-family, multi-family, or townhomes.
 - Subject to the density limitations of the area in which they are placed.
 - Counted against the total number of Guest Rooms allowed (450 max.) based on the following formula: 1 Retirement Housing Unit = 0.5 Guest Rooms.
- Allow Accessory Uses (parking, etc.) for Hotels and Inns on other lots other than where the principal use is located.
- Exempt Sweet Gums, Laurel Oaks, and Water Oaks from the Grand Tree definition.
- Require inch per inch mitigation when healthy Laurel Oaks or Water Oaks are removed.

Requested Amendments (cont'd)

- Allow unlimited special events as accessory uses (without requiring zoning permits) when held on properties owned by the declarant under the Covenants, the ARB, a Hotel or Inn, and chapel.
 - Property owner shall provide special events calendars to safety services on a monthly basis.
 - Properties owned by other individuals would be subject to the requirements of ZLDR Art. 6.7, Special Events Use (added to the Development Agreement as Exhibit 4.2).
- Revise the Use Table to exclude Courts, Safety Services, Schools, Postal Service, and Amenity Center/Swim Club from the 80,000 SF cap on commercial space/gross leasable area.
- Provide that only 50% of the Gross Leasable Area of Self-Service Storage/Mini-Warehousing and Boat/RV Storage uses shall count against the 80,000 SF cap. These uses are exclusively for the use of the owners and tenants of the development.
- Allow variance applications to be submitted to the Board of Zoning Appeals for trees, setbacks, buffers, height, and maximum lot/building coverage. All other proposed changes or deviations require applications to amend the Development Agreement and Planned Development.

Requested Amendments (cont'd)

- Clarify the Waterfront Development Standards:
 - The 227 waterfront lots that are allowed include all types of residential lots/units and not just single-family detached units, but exclude Guest Rooms (Villas and Bed and Breakfasts).
 - A 35-foot average/15-foot minimum OCRM Critical Line Buffer is required for the development unless otherwise noted.
 - A 15-foot minimum OCRM Critical Line Buffer and 35-foot minimum OCRM Critical Line Setback is required for single-family detached development
 - The area formerly zoned AG-8 shall have a minimum 35-foot OCRM Critical Line Buffer and a 50-foot OCRM Critical Line Setback.
 - No OCRM Critical Line Buffer shall be required for the causeways on the property.
 - Installation of underground utilities shall be allowed subject to Site Plan Review and approval, provided that the Property Owner submit a landscaping plan for the revegetation of the buffer along with a planting schedule for review and approval as part of the Site Plan Review process or Subdivision review process.

Requested Amendments (cont'd)

- Building Development Standards:
 - Allow application of the River Village Building Development Standards for single-family attached housing and duplexes in the Rural Residential area, subject to a cap of 175 such units in the Rural Residential Area.
 - Clarify that multi-family uses are not allowed in the Rural Residential Area.
 - Clarify that the front setback standards shall not apply to non-residential development in the River Village and Bohicket Station to allow more urban configurations.
 - Clarify that the respective per-acre maximum densities for Bohicket Station, River Village, and Rural Residential shall be calculated based on the total acreage of each area, not per subdivision plat or per lot.
- Require compliance with the right-of-way buffer regulations of the ZLDR only for the portion of the property that abuts Betsy Kerrison Pkwy.
- Internal Buffers:
 - Add instructions for application of Table 8.2, Internal Buffers.
 - Update and clarify table.

Requested Amendments (cont'd)

- Update the parking standards to include Retirement Housing and allow nearby on-street parking to be counted towards the off-street parking requirements for non-residential uses.
- Allow the ARB to create the architectural and landscaping requirements pursuant to the Architectural Design Guidelines added to the Agreement in Exhibit 12.3.
- Clarify that the sign requirements of ZLDR Article 9.11 apply only to signs visible from Betsy Kerrison Pkwy and Mullet Hall Rd. All other signs shall be reviewed and approved by the ARB.
- Amend the definitions of: Accessory Use (as noted above), Grand Tree (as noted above), Retirement Housing, and Retirement Housing Unit.

Approval Criteria

The proposed amendments to the Agreement comply with the requirements of the South Carolina Local Government Development Agreement Act and all development thus far is in compliance with the approved Agreement. The proposed amendments also comply with ZLDR Section §4.23.9 E (9), PD Development Plan Approval Criteria (may be approved only if County Council determines that the following criteria are met):

- A. The PD Development Plan complies with the standards contained in this Article;

The proposed amendments are consistent with the standards of the Planned Development Zoning District article. Therefore, this criterion is met.

- B. The development is consistent with the intent of the *Comprehensive Plan* and other adopted policy documents; and

The proposed amendments are consistent with the intent of the Comprehensive Plan and other adopted policy documents. No changes in open space requirements are proposed and the addition of the Retirement Housing Units is off-set by a reduction in the number of Guest Rooms. The amendments update and clarify the development standards to enable the Traditional Neighborhood Design always envisioned by the Property Owner, and provide the opportunity to create more open spaces. Therefore, this criterion is met.

- A. The County and other agencies will be able to provide necessary public services, facilities, and programs to serve the development proposed, at the time the property is developed.

The proposed amendments do not change level of public services, facilities or programs required by the original Agreement, which included letters of coordination from applicable service providers. In addition, the Property Owner must provide updated letters of coordination at the time of development of each phase. Therefore, this criterion is met.

Recommendation

- November 4, 2019 Planning Commission Meeting:
 - Staff Recommendation: Approval with Conditions
 - Planning Commission Recommendation: Deferral (7-0 with 2 absent)
 - defer the request to be heard at the December Planning Commission Workshop and Meeting
- December 9, 2019 Planning Commission Meeting:
 - Staff Recommendation: Approval (previous conditions have been met)
 - Planning Commission Recommendation:

Approval with Conditions (7-2)

Planning Commission Recommended Conditions:

- Change all applicable sections to reflect that *Retirement Housing Units* shall count against the cap of 450 *Guest Rooms* at the equivalence of 1.0 *Retirement Housing Units* for each *Guest Room*.
- Include a statement(s) in the appropriate location(s) of the Agreement and PD indicating that *Retirement Housing* and *Retirement Housing Units* shall not be used as Short-Term Rental Properties, and add the following definition of Short-Term Rental Properties: “ A residential dwelling or any part thereof that is offered, advertised, or provided to Short-Term Rental Tenants (excluding family members}, for a fee or any form of compensation, for intervals of 29 days or less during a calendar year.”
- Amend PD Sec. 4.3.4, Assemblies and Special Events, 3rd sentence, and all other applicable sections of the Agreement and PD to state: Such special events on the *Real Property* owned by the declarant under the *Covenants*, the *Association*, or a *Hotel or Inn*, or the owner of the chapel on the *Real Property* shall be considered an *Accessory Use* and shall not require a zoning permit, special exception, conditional use permit, or other further approval from the County nor have a cap on the number in a calendar year, **provided that daily event attendance shall be limited to 750 people.**
- Amend PD Sec. 9.B, Tree Removal, Replacement, Protection, Preservation and Mitigation, last sentence, and all other applicable sections of the Agreement and PD, to state: “The health of the trees shall be determined by the *Planning Director* **provided that the applicant shall pay the Grand Tree Variance application fee for each tree to be evaluated.**”

Notifications

- November 4, 2019 Planning Commission Meeting:
October 18, 2019:
 - 264 notifications were sent to owners of property located within 500 feet of the boundaries of the subject parcel and individuals on the Johns Island Interested Parties List
 - Ad ran in the *Post & Courier*
- December 9, 2019 Planning Commission Workshop & Meeting:
November 22, 2019:
 - 264 notifications were sent to owners of property located within 500 feet of the boundaries of the subject parcel and individuals on the Johns Island Interested Parties List
 - Ad ran in the *Post & Courier*
- January 21, 2019 1st Public Hearing & February 4, 2019 2nd Public Hearing:
December 20, 2019:
 - 264 notifications were sent to owners of property located within 500 feet of the boundaries of the subject parcel and individuals on the Johns Island Interested Parties List
 - Ad ran in the *Post & Courier*

Public Input

- 1 letter in opposition has been received from the Johns Island Task Force, but has since been replaced with a letter of support for Planning Commission's recommended conditions.
- 1 letter was received from the Coastal Conservation League regarding additional conditions.

A light green map of the Kiawah River area is overlaid on a dark blue background. The map shows the river's course and surrounding land. The text is centered over the map.

**Kiawah River Development Agreement
Amendment
(ZDA-09-19-00101) & Planned
Development (PD-143A) Amendment
Request
(ZREZ-09-19-00107)**

1st Public Hearing: January 21, 2020

PPW Committee: February 4, 2020

2nd Public Hearing & 1st Reading: February 4, 2020

2nd Reading: February 25, 2020

3rd Reading: March 10, 2020

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November 1, 2019

Charleston County Planning Commission
4045 Bridge View Drive
North Charleston, SC, 29405

**Re: Development Agreement Amendment Request ZDA-09-19-00101 Planned
Development Amendment Request ZREZ-09-19-00107**

Dear Charleston County Planning Commission Members,

Thank you for the opportunity to comment on the proposed Amendment Requests to the Kiawah River Planned Development (PD-143 A). The Coastal Conservation League is a nonprofit environmental advocacy organization in South Carolina.

The Conservation League has been working with the team at Kiawah River in an effort to better understand each other's respective goals and work towards compromises as necessary relating to the Development Agreement for the 1,253.41-acre parcel on rural Johns Island. Earlier this week, we sat down to discuss the few concerns we have around the proposed amendments to the Grand Tree Ordinance and OCRM Buffer requirements.

Regarding the request to exempt Laurel Oaks and Water Oaks from the Grand Tree definition in the Charleston County ZLDR, the League respectfully requests that the Planning Commission consider granting this request with the following amended conditions:

- Require that county staff be notified of intent to remove any 24" DBH or greater Laurel Oaks or Water Oaks on the property.
- County staff shall be provided documentation of current inventory of tree bank on the property, and specific mitigation plans for each tree removal. (For example, if a 24" DBH or greater Water or Laurel Oak is to be removed, then documentation shall be provided with mitigation plans for replacement with a healthy, mature grand tree from the existing tree bank on site).
- An up to date mitigation plan shall be maintained and provided to county staff as the on-site tree bank is depleted with each tree removal and replacement.
- County staff approval/sign off shall be required for every removal of a 24" DBH or greater Laurel Oak and Water oak, contingent upon the above mitigation plan and tree bank information being satisfied and documented.

The Conservation League is concerned about further degradation of the coastal forests and existing tree canopy on the subject parcel which provide critical ecosystem services such as flood

"Nature and Community in Balance"



mitigation. The proposed added language would help to ensure that if and when staff arborists and biologists for Kiawah River determine that an ‘unhealthy’ Laurel Oak or Water Oak need removal, that County staff remain engaged and the process stays on record to promote adequate maintenance of the onsite tree bank throughout all phases of development for this project.

Regarding the Waterfront Development Standards and Critical Line Buffer Requirements, we understand the need to exempt the causeways on the property that have existed since long before the acquisition of the land, as it is not be feasible to apply a 35’ buffer in certain areas of limited capacity. However, we respectfully request that the Planning Commission consider granting this request with a condition to require pervious paving on all causeways which are exempt from the Charleston County buffer requirements.

The Conservation League is strongly opposed to all other requests to reduce the required buffer amounts in the Waterfront Development Standards, and we encourage the Planning Commission to hold the line on requiring compliance with Charleston County regulations for all other Critical Line Buffers and Setbacks on the property. Protecting buffer requirements will help to ensure that surrounding wetlands and waterways are not degraded as a result of development activities.

Thank you for your thoughtful consideration of these comments and for your service to the citizens of Charleston County.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Betsy La Force', is written over a light blue horizontal line.

Betsy La Force
Communities and Transportation Project Manager
Coastal Conservation League



**Johns Island
Task Force**
Respect ■ Protect ■ Enhance

Mr. Eric Meyer
Chairman, Charleston County Planning Commission
Lonnie Hamilton, III Public Services Building
4045 Bridge View Drive
North Charleston, SC

Reference: Proposed Kiawah River Development Agreement and Planned Development (PD-143A)

Mr. Chairman,

The Johns Island Task Force is a coalition of community members, landowners and nonprofit organizations dedicated to promoting the welfare of the diverse and vibrant community of Johns Island by providing places dedicated to traditional land uses including culture, history, agriculture, forestry and outdoor recreation.

On behalf of the members of the Johns Island Task Force I respectfully submit for consideration our **opposition** to the proposed changes to PD-143A.

We base our opposition on five substantive proposed changes:

Waterfront Development Standards and Critical Line Buffer Requirements: Several years ago, the Kiawah River (Plantation) was originally presented by the developers as a model waterfront property that would have larger setback buffers to the South Carolina Department of Health and Environmental Control Office of Resource Management critical line, which protects South Carolina's coastal wetlands. The developers are now requesting that they be permitted to reduce the critical line setback buffer established by Charleston County. Since this greater setback was a key reason the PD was originally approved, we request that this change be **denied**.

Grand Trees: On 3 June 2019, representatives of the developer went before the Charleston County Board of Zoning Appeals (Case# BZA-01-19-00307) for the relocation of a grand tree for a proposed hotel on the property. The BZA **disapproved** the application. The BZA process with regards to grand tree works and is of minimum burden to developers. However, based upon this disapproval, the developer seems to want to eliminate the BZA process and have a blanket approval to remove certain grand trees. The proposed change would give the developer extraordinary rights to bypass the BZA. Since no landowner should have this spot-zoning right, we request that this change be **denied**.

Increase in density: If the developer desires to change the mix of housing units, then the change should be done on a 1:1 hotel-to-retirement housing basis. Their argument is that it should be 1:2 based on traffic impacts. This implies that the original PUD agreement on the total number of dwelling units allowed on the property was based solely on traffic. This was not the case. There was

much going back-and-forth on many issues to arrive at the final total number of dwelling units permitted. Therefore, we request that this change be **denied** unless the change is at a 1:1 basis.

Short-term rentals for retirement housing: It appears that there is nothing in the PD that restricts the retirement housing being used for short term rentals. One can envision that with a 1:2 hotel-to-retirement housing basis and no restriction on short term rentals that the number of “hotel rooms/short term rentals” could actually be greatly increased. Therefore, we request that the retirement housing **not be permitted** to provide short term rentals, regardless of the ratio basis.

Adding commercial square-footage: The developer proposes both excluding certain uses and factoring to 50% other uses from the cap on commercial space/gross leasable area. These changes can result in a large and undefined increase in the allowable square footage of commercial buildings. Again, this is not in keeping with the agreements that resulted in the original PUD. Therefore, we request that this change be **denied**.

When considering the proposed change, including those discussed above, we respectfully request that the Commission not just examine each change individually, but rather look at them holistically. For example:

- In aggregate, how much more traffic will there be?
- In aggregate, how many more dwelling units will there be?
- In aggregate, how much more land that was to be conserved can be developed due to the increase in commercial use, the decrease in the waterfront setback, the removal of trees, etc?

The proposed changes are another example of a Planned Development landowner negotiating with the local citizens and the County for a PD at one point in time, then coming back later and requesting the very items they negotiated away in the PD, hoping the collective memory has forgotten the original negotiations. We respectfully request that the Commission carefully review the proposed changes since they will have a significant impact on the previously approved PD.

Thank you for your consideration.

Sincere regards,



Michael G, McShane

Chair, Johns Island Task Force



**Johns Island
Task Force**
Respect ■ Protect ■ Enhance

Mr. Elliott Summey
Chairman, Charleston County Council

Reference: Proposed Kiawah River Development Agreement and Planned Development (PD-143A)

Mr. Chairman,

The Johns Island Task Force is a coalition of community members, landowners and nonprofit organizations dedicated to promoting the welfare of the diverse and vibrant community of Johns Island by providing places dedicated to traditional land uses including culture, history, agriculture, forestry and outdoor recreation.

On behalf of the member of the Johns Island Task Force I respectfully submit for consideration our **support of the Planning Commission on their approval with conditions**. There are additional items we thought should have been included, such as the PD adhering to the same water setbacks as the rest of the county, but we realize there are always tradeoffs when it comes to conservation and development.

We believe the 1:1 conversion rate for hotels rooms-to-dwellings for those no less than 55 years old is a well-considered approval condition from the Planning Commission. Without it, 80 more dwellings could be built on Johns Island where even the current infrastructure is insufficient to meet the needs of the residents.

Thank you for your consideration.

Sincere regards,


John R. Zlogar
Chair, Johns Island Task Force

Johns Island Task Force members include Johns Island landowners as well as individual from...

ACE Basin Task Force	Kiawah Island Community Association
Lowcountry Land Trust	South Carolina Conservation Bank
Open Space Institute	St Johns Water Company
Center for Heirs' Property Preservation	Town of Kiawah Island Council
SC Coastal Conservation League	Town of Seabrook Island Council
Johns Island Community Association	Wadmalaw Island Land Planning Committee
Kiawah Conservancy	Charleston City Council
Charleston City Planning Department	Charleston County Planning Commission